

Magmatic minerals of the eastern Sunda arc, Indonesia

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Submitted in partial fulfillment of the requirements for the degree of

Master of Science – Geology

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Thunder Bay, Ontario

2023

Abstract

The eastern Sunda arc is one of the most prospective Cu-Au magmatic belts in the world with four world class copper-gold porphyry deposits: Batu Hijau (1.64 Gt at 0.44% Cu, 0.35 g/t Au), Elang (2.42 Gt at 0.31% Cu, 0.33 g/t Au), Tumpangpitu (1.90 Gt at 0.45% Cu, 0.45 g/t Au) and Hu'u (1.70 Gt at 0.89% Cu, 0.49 g/t Au).

Magmatism along the belt spans the late Oligocene to Pliocene, with the majority of giant porphyry systems forming in the last 5 m.y. New geochronology confirms a consistent east-younging in central and eastern Java from Trenggalek (~15 Ma) through Salakan (~8.5 Ma) and Jember (~7 Ma), to the pre-mineralization phases (~6.5 Ma) and syn-mineralization phases (~4 Ma) at Tumpangpitu.). New ages on Lombok show a westward younging in SW Lombok from Kuta, Plambik and Lembar in the east (20-17.5 Ma) through Songkang (~10-8 Ma), Selodong (~7.5 Ma) and Brambang (~7 Ma). On Sumbawa, there is a general younging from west to east from Nangka (~6.5 Ma), Naga Emas (~5 and 3.5 Ma) to Batu Hijau (~4.5-3.5 Ma) and the Elang district (~3.0 to 2.5 Ma). Middle-Miocene intrusions on Lombok (Lembar, Plambik, Kuta) were previously unknown, and extend the limit of Middle-Miocene magmatism to Lombok.

All mid-Miocene and younger (< 15 Ma) intrusions in the eastern Sunda arc have a prospective zircon Eu/Eu^* and Ce/Ce^* signature related to high water content and oxidation state. These signatures are similar for all intrusions of this age, and do not significantly vary based on the known metal endowment. All Oligocene to mid-Miocene intrusions (> 15 Ma) have zircon Eu/Eu^* and Ce/Ce^* signature consistent with drier and less oxidized magmas that are less conducive to economic porphyry mineralization. The

pronounced change in zircon prospectivity signatures at approximately ~15 Ma likely marks a significant change in arc-scale geodynamics possibly related to initiation of subduction of the Roo Rise and demonstrates the potential of zircon as a regional discriminatory tool for evaluation of porphyry systems within the eastern Sunda arc. All east Java to Sumbawa sites have zircon Hf isotopes (average $\epsilon_{\text{Hf}}(t) \sim 14.5$) with a very depleted or juvenile melt source signature with minimal input from older lithosphere. This signature is in strong contrast to west Java, low-sulfidation epithermal-dominated regions that show strong crustal contamination negative $\epsilon_{\text{Hf}}(t)$ signatures.

Apatite textures and compositions are incredibly diverse. Elevated values of Cl and S in magmatic apatite have potential to be useful indicators for eastern Sunda arc porphyry prospectivity; however, those signatures are not ubiquitous to large, mineralized porphyry Cu-Au deposits within the region. Trace elements of both magmatic and hydrothermal apatites do not show systematic or consistent changes between strongly and poorly mineralized porphyry systems. Within the eastern Sunda arc, hydrothermal apatite compositions are strongly tied to primary magmatic composition, and are influenced, but not entirely a result of, hydrothermal fluid characteristics.

The majority of BSE-zoned rutile grains with high-W are associated with < 5 Ma world-class porphyry deposits at Elang, Batu Hijau, and Tumpangpitu. There is a transition from prevalent high-W, zoned rutile at large porphyry deposits, to low-W, unzoned rutile at sub-economic or small porphyry systems. Within the eastern Sunda arc, W-rich zoned rutile has the potential to be an effective proxy for porphyry-Cu mineralization, especially pertaining to regional exploration, such as in detrital stream sediment surveys.

Acknowledgements

I would like to thank Dr. Pete Hollings for his guidance, advice, and utmost patience throughout the completion of this project. I would also like to thank Dr. Ivan Belousov for his advice and helpful comments throughout the project, as well as his incredible commitment in helping with laser analyses. A huge thank-you to Adi Maryono, Irianto Rompo, Rachel Harrison and their team for spending several weeks in the field in 2020 gathering samples so this project could continue despite the pandemic. A similar thank-you for those at Merdeka and Amman Mineral for samples collected at Tujuh Bukit and Sumbawa sites. Thank-you to Karsten Goemann at the CSL for your unrelenting support while doing remote imaging and analyses at UTas. Thank-you to Dr. Marghaleray Amini (UBC) for your great help with remote analysis and data processing for Hf isotopes. As well a thank-you to Kristi Tavener and Dr. Jonas Valiunas (Lakehead University) for preparing my thin sections. The support of all the Amira P1202 sponsors is also gratefully acknowledged for funding this project, as well as Anglo American and the Society of Economic Geologists who provided me with a Graduate Student Fellowship. I would also like to extend a thank you to my family and friends for their support, encouragement, and putting up with me throughout this project and degree.

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List of Abbreviations

| | |
|---------|---|
| AA | advanced argillic |
| act | actinolite |
| alt | alteration |
| alu | alunite |
| AMICS | advanced mineral identification and characterization system |
| anh | anhydrite |
| az | azurite |
| Blbs | billion pounds |
| bn | bornite |
| brt | barite |
| BSE | backscattered electron |
| bt | biotite |
| cb | carbonate |
| ccp | chalcopyrite |
| cct | chalcocite |
| cg | coarse-grained |
| chl | chlorite |
| CL | cathodoluminescence |
| CODES | Centre of Excellence in Ore Deposits |
| cpx | clinopyroxene |
| CSL | Central Science Laboratory |
| czo | clinozoisite |
| dck | dickite |
| DEM | digital elevation map |
| diss | disseminated |
| dsp | diaspore |
| EMPA | electron microprobe analysis |
| en | enargite |
| ep | epidote |
| fg | fine-grained |
| g/t | grams per metric ton |
| gm | groundmass |
| Gt | billion tons |
| gth | goethite |
| hbl | hornblende |
| hem | hematite |
| HSE | high-sulfidation epithermal |
| IA | intermediate argillic |
| ICP-AES | inductively coupled plasma atomic emission spectroscopy |
| ICP-MS | inductively coupled plasma mass spectroscopy |
| ilt | illite |

| | |
|-----------|---|
| klm | kaolinite |
| LA-ICP-MS | laser ablation inductively coupled plasma mass spectroscopy |
| lm | limonite |
| LOI | loss on ignition |
| LSE | low-sulfidation epithermal |
| Ma | mega annum (millions of years before present) |
| mag | magnetite |
| mg | medium-grained |
| mlc | malachite |
| mod | moderate |
| Moz | million (troy) ounces |
| MSWD | mean squared weighted deviation |
| Mt | million tons |
| opx | ortho-pyroxene |
| phenos | phenocrysts |
| PIMs | porphyry indicator minerals |
| plag | plagioclase |
| prl | pyrophyllite |
| py | pyrite |
| qtz | quartz |
| REE | rare-earth element |
| SEM | scanning electron microscopy |
| sme | smectite |
| srp | serpentine |
| SRTM | Shuttle Radar Topography Mission data |
| st | strong |
| tr | trace |
| UTM | Universal Transverse Mercator |
| vfg | very fine-grained |
| wk | weak |
| Wt. % | weight percent |
| µm | micrometer |

Chapter 1: Introduction

1.1 – Objectives

This study was completed as part of Amira Global project P1202 “Far-field and near-mine footprints” sponsored by 14 mining and exploration companies that include: Anglo American, BHP, Boliden, Codelco, Fortescue, Freeport-McMoRan, Merdeka Copper Gold, Mount Isa Mines, Newcrest Mining, Newmont, Northparkes, Rio Tinto, Teck and Vale. The P1202 project expanded on and applied techniques developed in previous Amira Global programs (P1153, P1060, P765A, P765) that focused on, and were successful in developing mineral chemistry vectors within porphyry copper and epithermal environments.

The main objective of this study was to investigate magma fertility and prospectivity indicators in zircon, apatite, titanite and rutile (Porphyry Indicator Minerals or PIMs, e.g. Cooke et al., 2020) from several porphyry Cu-Au deposits and prospects along the eastern Sunda arc, Indonesia. The breadth of study sites within this study is unique in that it contains systems across a full spectrum of known mineralization; from untested prospects, through poorly endowed or sub-economic systems, to world-class deposits and their satellites. As such, it provided an excellent opportunity to investigate PIMs, or prospectivity indicators within a range of porphyry environments. A second objective was to contribute to the understanding of the tectonomagmatic evolution of this arc segment using U-Pb geochronology and zircon Hf isotopes.

1.2 – Study location

This study contains samples from 25 different localities throughout the Indonesian islands of Java, Lombok, and Sumbawa (Fig. 1.1). They include a mix of established exploration sites and mines with access to major roadways and proximity to cities as well as unexplored prospects with more limited access. Location details for individual samples are described further in Chapter 4 and sample location data and UTM co-ordinates are listed in Appendix A.

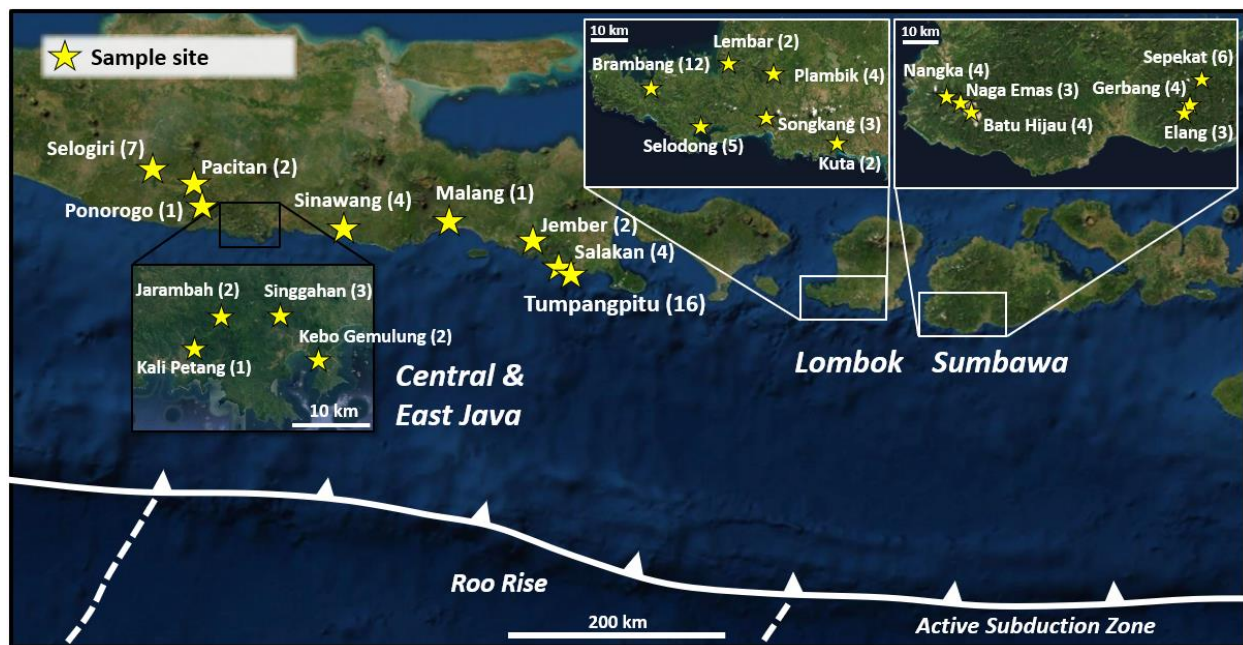


Figure 1.1: Sample sites within the eastern Sunda arc at central and east Java, Lombok, and Sumbawa. Satellite image obtained from Google Earth (Image © TerraMetrics, 2023).

Chapter 2: Regional Geology

2.1 – Introduction

The Sunda-Banda arc is approximately 3,900 km in length, stretching from Sumatra southeast through the islands of Java, Bali, Lombok, Sumbawa and continues east to the Flores and Damar islands (Carlile and Mitchell, 1994; Setijadji et al., 2006; Maryono et al., 2018; Fig. 2.1). The islands of Java, Lombok and Sumbawa are dominated by Oligocene to Quaternary volcanic and magmatic complexes, associated with porphyry Cu-Au and low-, intermediate- to high-sulfidation epithermal Ag-Au systems.

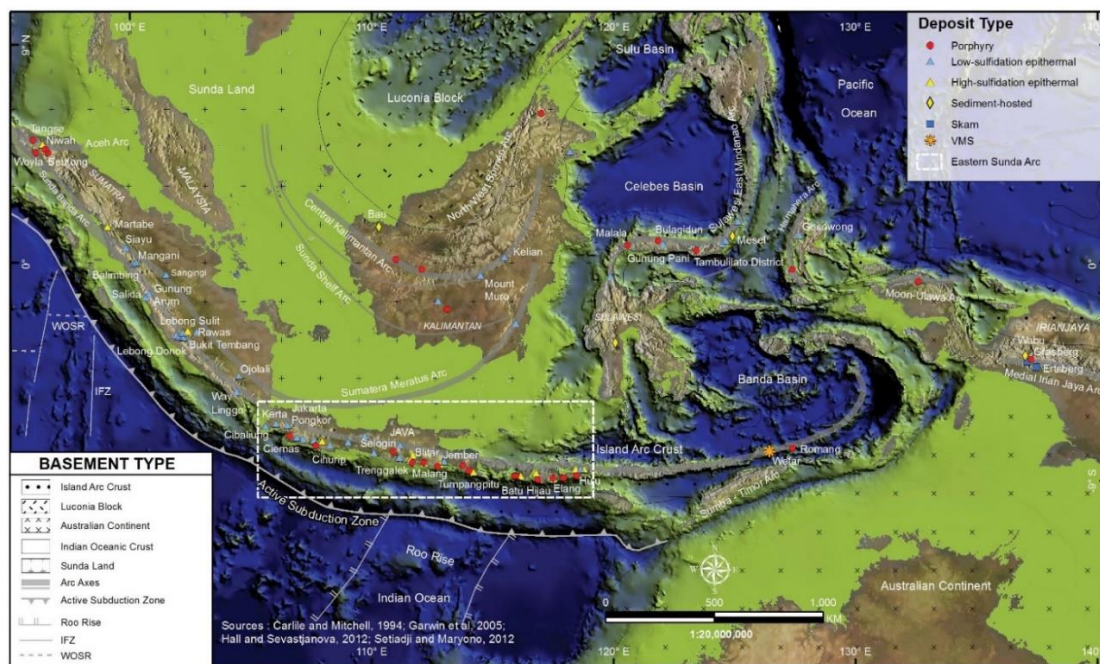


Figure 2.1: Distribution of major porphyry and epithermal deposits and prospects and tectonic features of the Sunda-Banda arc. The eastern Sunda arc (Java to Sumbawa) is highlighted in white. From Maryono et al. (2018).

2.2 – Regional setting

The eastern Sunda arc is one of the most prospective Cu-Au magmatic belts in the world (Maryono et al., 2018) with four world class copper-gold porphyry deposits: Batu

Hijau (19.9 Moz Au; 19.6 Blbs Cu; Clode et al., 1999), Elang (25.4 Moz Au; 16.3 Blbs Cu; Newmont, 2012), Tumpangpitu (29.9 Moz Au; 19 Blbs Cu; Intrepid Mines Ltd., 2012), and Hu'u (27 Moz Au; 30 Blbs Cu; Burrows et al., 2020) comprising the main Cu-Au resources within the region. West Java is host to several low-sulfidation epithermal and porphyry Au systems whereas east Java, Lombok, and Sumbawa are dominated by porphyry Cu-Au systems, a feature which has been attributed to differences in the underlying crust (Setijadji et al., 2006; Setijadji and Maryono, 2012).

The eastern Sunda arc (Java to Sumbawa) contains predominantly four east-west parallel magmatic belts of Paleocene to Eocene, Oligocene to Early Miocene, Late Miocene to Pliocene and Quaternary ages (Carlile and Mitchell, 1994; Garwin, 2000; Setijadji et al., 2006; Maryono et al., 2018; Fig. 2.2). The western portion of the eastern Sunda arc (west Java) developed on Sundaland continental crust, with the eastern portion on thinner oceanic crust (east Java to Sumbawa; Carlile and Mitchell, 1994; Hall, 2002; Setijadji et al., 2006). The magmatic belts cross the boundary between continental and oceanic crust basement, with central and east Java likely built on crust of a transitional character (Garwin, 2000). Smyth et al. (2007) found inherited Archean-Cenozoic zircons in Cenozoic rocks of east Java. Until recently, Cretaceous basement was thought to be restricted to western Java; however, Cretaceous zircons have been identified in samples from the Tanjung Jahe diatreme at Tujuh Bukit, suggesting that continental crust extends further east than previously thought (Harrison, 2017).

Subduction along the eastern Sunda arc is steeply north-dipping approximately 50 to 70 degrees, in contrast to shallower and oblique subduction within other sections of the

Sunda-Banda arc (Garwin, 2000; Garwin et al., 2005). The Roo Rise, an oceanic plateau constructed on Early Cretaceous oceanic crust, is inferred to have begun colliding in the Miocene-Pliocene (Garwin, 2002; Garwin et al., 2005). The arc contains a series of NE-trending transform faults coincident with the boundaries of the Roo Rise, which have been interpreted to be a result of subduction of this thickened oceanic crust (Garwin et al., 2005; Setijadji et al., 2006; Hall, 2009).

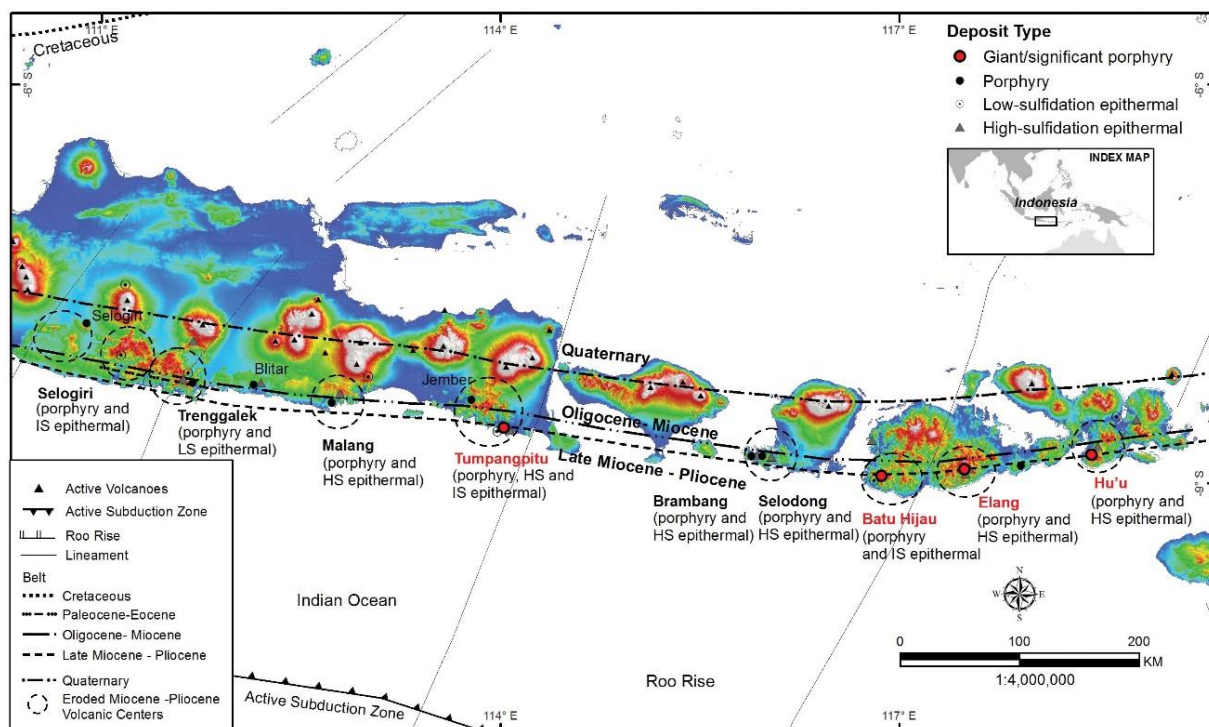


Figure 2.2: Digital elevation map (SRTM) of the eastern Sunda arc with epithermal Au and porphyry Cu-Au occurrences within remnant volcanic centres of Paleocene-Eocene, Oligocene-Miocene and Late Miocene-Pliocene age (Hamilton, 1979; Carlile and Mitchell, 1994; Hall, 2002; Setijadji et al., 2006). From Maryono et al., 2018.

Within the eastern Sunda arc, detailed studies of deposit geology, alteration, and mineralization have largely focused on Batu Hijau (Meldrum et al., 1994; Maula and Levet, 1996; Ali, 1997; Clode et al., 1999; Garwin 2000, 2002; Arif and Baker, 2004; Idrus et al., 2007; Fiorentini and Garwin, 2010; Large et al., 2020; Schirra et al., 2022). Publications are

limited for Tumpangpitu (Norris, 2011; Maryono et al., 2013; Harrison, 2017; Harrison et al., 2018), Elang (Maula and Levet, 1996; Maryono et al., 2005; Hoschke, 2012), Selogiri (Imai et al., 2007; Warmada et al., 2007; Sutarto et al., 2016), and Brambang (Maryono et al., unpub. report, 2013). Maryono et al. (2018) provides comprehensive descriptions of geology, alteration, geochronology and mineralization characteristics of Batu Hijau, Elang, Tumpangpitu, Brambang, Selodong and other significant porphyry Cu-Au systems throughout the eastern Sunda arc. Consequently they will not be discussed in detail here, with only key features highlighted.

The eastern Sunda arc mainly consists of Cenozoic low-K calc-alkaline andesitic volcanics and interbedded volcanoclastic rocks with minor clastic and carbonate sedimentary rocks that extend from Java to Sumbawa (Meldrum et al., 1994; Suratno, 1995; Maula and Levet, 1996; Garwin, 2000; Setijadji et al., 2006). In general, intrusive rocks young to the east, from Eocene to Pliocene (Maryono et al., 2018).

The eastern Sunda arc islands of Java, Lombok and Sumbawa are host to numerous variably endowed porphyry systems. These deposits and prospects share a number of characteristics, including association with remnant Miocene volcanic centres, low- to moderate-K calc-alkaline magmas, pre-mineralization equigranular felsic batholiths, formation in clusters at intersections of major structural corridors, Neogene magmatism associated with porphyry Cu-Au style mineralization, and the occurrence of low-, intermediate-, and high-sulfidation epithermal style mineralization (Meldrum et al., 1994; Garwin, 2000; Maryono et al., 2005, 2018; Harrison et al., 2018). These porphyry-epithermal districts are mainly hosted within andesitic volcanic complexes that comprise

the majority of exposed rock throughout the region. Mineralized porphyry systems within the Sunda arc consist of multiphase intrusive complexes, often occurring as clusters within districts and vary in scale from 0.16 to 0.64 km² (Maryono et al., 2018).

In broad terms, pre-mineralization intrusive units are generally Miocene in age and consist of microdiorites, diorites, or quartz diorites, often exhibiting low K₂O contents less than 0.8 wt. % (Meldrum et al., 1994; Clode et al., 1999; Maryono et al., 2005, 2018). These pre-mineralization intrusions generally form a large footprint of several square kilometers, for example the diorite at Tujuh Bukit that exceeds 10 km² in lateral extent at depth (Harrison, 2017). The units intrude the volcanic-sedimentary rock assemblages often within remnant volcanic-plutonic centres.

The mineralizing intrusive complexes generally consist of two to five phases such as those that have been well documented at Tumpangpitu (Harrison and Maryono, 2012; Harrison, 2017), Selodong (Rompo et al., 2012), Brambang (Maryono et al., 2013, 2018), Batu Hijau (Clode et al., 1999; Garwin, 2002; Maryono et al., 2018), and Elang (Maryono et al., 2005). The causative intrusions are generally quartz diorite to tonalite and dominated by plagioclase (>50 vol. %) and quartz (10-20 vol. %). These mineralized complexes are largely elongate and generally follow regional NW-trending structures, 200 m to 1,200 m in diameter with > 1 km vertical extent and comprise the cores of the Au-Cu porphyry orebodies (Maryono et al., 2018).

Several of the deposits host late, post-mineralization diatreme breccias that intersect porphyry mineralization. Diatreme breccias have been mapped at Elang (Maryono et al., 2005), Batu Hijau (Clode et al., 1999; Priowasono and Maryono, 2000),

Brambang and Selodong (Maryono et al., 2013), Tujuh Bukit (Harrison and Maryono, 2012; Harrison, 2017), Trenggalek (Arc Exploration Ltd, 2013), and Selogiri (Warmada et al., 2007). Diatremes within the region are often contain andesitic magma and occur as cone-shaped circular bodies with varying sizes, from 0.15 km² at Brambang to 7.0 km² at Tujuh Bukit (Maryono et al., 2013; Harrison, 2017). These diatremes generally post-date porphyry mineralization, but can host late-stage epithermal alteration, as at Tujuh Bukit. Tujuh Bukit is unique as it also contains a pre-mineralization diatreme breccia at Tanjung Jahe (Harrison, 2017).

Limited information is available for other smaller systems and prospects within the study region. There are minor, poorly endowed porphyry, low- and high-sulfidation systems in Java at Trenggalek, Tulungagung and Jember; Lombok at Songkang, Kuta, Plambik, and Lembar; and Sumbawa at Nangka, Naga Emas, Gerbang and Sepekat. Trenggalek district consists of a series of epithermal and porphyry Cu prospects, including Singgahan, Jerambah, Kali Petang, and Kebo Gemulung (PT Sumber Mineral Nusantara, 2019). Tulungagung contains a poorly-endowed porphyry/HSE system at Sinawang (Arc Exploration, 2013). Jember and Lombok prospects (Songkang, Kuta, Plambik, Lembar) have no mapping or detailed studies, but are samples from prospective, mineralized tonalite and quartz diorite outcrops. Sumbawa sites (Nangka, Naga Emas, Gerbang and Sepekat) are peripheral to deposits at Batu Hijau and Elang deposits, respectively, but have no formal studies or company reports available. Despite this, these prospects share similar geology and alteration features to the well-endowed systems mentioned previously.

Chapter 3: Methodology

3.1 Sample collection

Sampling within Indonesia was completed over the northern hemisphere summer of 2020, with various delays and complexities due to COVID-19 lockdowns within the region. PT Amman Mineral provided twenty-four samples from Sumbawa within the Batu Hijau district (Batu Hijau, Nangka, and Naga Emas) and Elang district (Elang, Gerbang, and Sepekat). Merdeka Copper Gold provided twenty samples from the Tujuh Bukit district in Eastern Java (Tumpangpitu and Salakan). PT J. Resources collected 29 samples from Brambang, Selodong, Songkang, Plambik, Kuta, and Lembar prospects on Lombok and 25 samples from Eastern Java sites, including Selogiri, Tulungagung, Trenggalek, Pacitan, Ponorogo, Malang, and Jember. In total, 97 samples were collected throughout Java, Lombok, and Sumbawa from 29 different deposits and prospects (Fig. 3.1). Fifty-seven samples are from drill-core and 40 samples are rock chip samples from outcrop or open-pit walls.

The objectives of sampling were to collect samples representative of magmatic minerals including zircon, apatite, and titanite as well as hydrothermal rutile rather than focusing on representative mineralization of the respective sites.

3.2 Whole-rock geochemistry

A total of 97 samples were analysed for their major and trace element whole-rock compositions. Sample sites are shown in Figure 3.1 and data provided in Appendix A. All

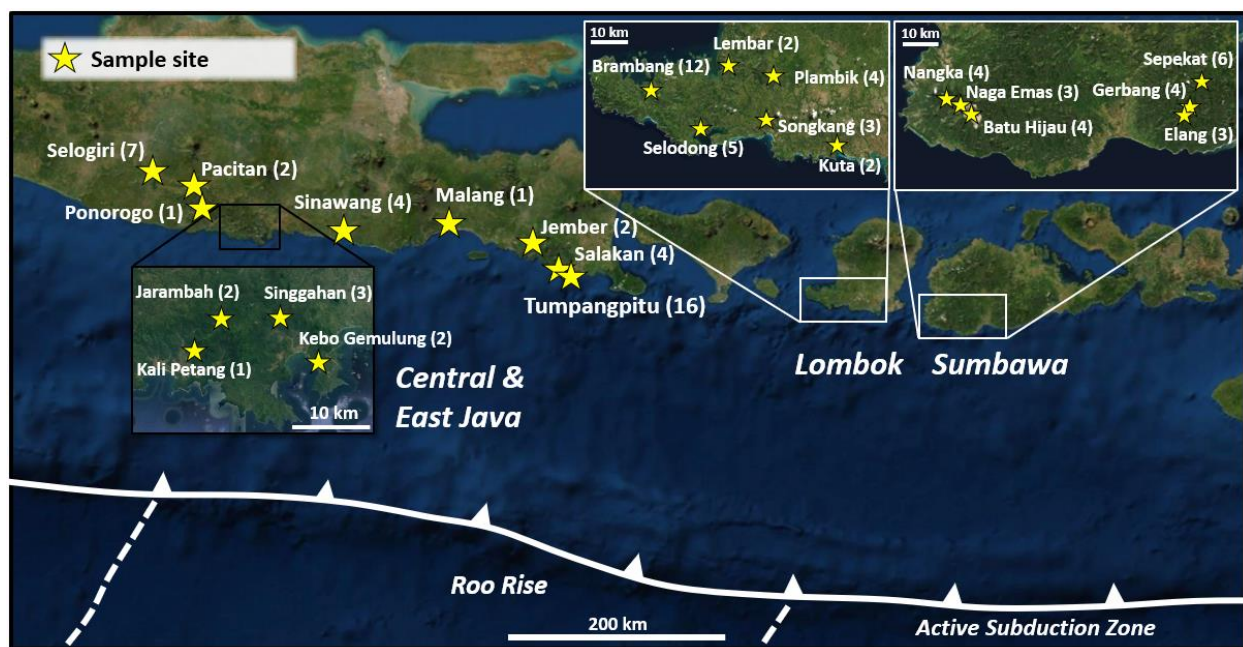


Figure 3.1: Sample sites within the eastern Sunda arc at central and east Java, Lombok, and Sumbawa. Satellite image obtained from Google Earth (Image © TerraMetrics, 2023).

samples selected for whole rock geochemistry are fragments of larger samples, the remainder of which was retained for petrographic analysis and mineral separation. Whole rock geochemical analyses were completed at ALS Canada Laboratories in Thunder Bay, Ontario, Canada. Samples were prepared for analysis by being weighed, dried, and crushed to 70% under 2 mm. Up to 250 g of the sample was then split and pulverized to 85% through a 75 μm mesh. Loss on ignition (LOI) was calculated from changes in sample weight before and after heating to 1,000°C. Major element oxides SiO_2 , Al_2O_3 , Fe_2O_3 , CaO , MgO , Na_2O , K_2O , Cr_2O_3 , TiO_2 , MnO , P_2O_5 , SrO and BaO (ME-ICP06) and trace elements Ba, Ce, Cr, Cs, Dy, Er, Eu, Ga, Gd, Ge, Hf, Ho, La, Lu, Nb, Nd, Pr, Rb, Sm, Sn, Sr, Ta, Tb, Th, Tm, U, V, W, Y, Yb, and Zr were analysed using lithium borate fusion package ME-ICP06/ME-MS81. Samples were prepared for analysis by taking 0.20 g of each sample and mixed with 0.90 g of a lithium borate flux and fusing at 1000°C. The melt was dissolved in a 100 mL aqueous

solution of 2% hydrochloric acid and 4% nitric acid. Inductively coupled plasma atomic emission spectroscopy (ICP-AES) was used to determine major element oxide concentrations and inductively coupled plasma mass spectrometry (ICP-MS) for trace and rare earth elements (REEs). During both major and trace element analysis reagent blanks, verification standards, and calibration standards were included in the sample sequence. Values for standards SY-4, OREAS 146, and AMIS0167 were less than 5% of reference values, often less than 2%. Other trace elements including chalcophile elements (As, Bi, Hg, In, Re, Sb, Se, Te, Tl, Ag, Cd, Co, Cu, Li, Mo, Ni, Pb, Sc, Zn) were analysed by aqua regia digestion with ICP-MS. Total sulphur and carbon concentrations were obtained by taking a 0.01 to 0.1 g portion of each sample and heating to approximately 1350°C in an induction furnace while oxygen was being passed through the sample. A Leco analyser was used to determine the amount of sulphur dioxide and carbon dioxide being released from each sample.

3.3 - Mineral separation

Samples were crushed at Lakehead University with a SPEX ShatterBox using a tungsten carbide grinding container. Approximately 1 kg samples were repeatedly sieved and crushed to a grain size passing a 250 micron mesh. Heavy mineral separations were performed at the Centre of Excellence in Ore Deposits (CODES), University of Tasmania, Australia. Heavy minerals were separated using a gold pan and magnetic minerals separated using a Fe-B-Nd magnet. The final concentrated fractions were placed on double-sided sticky tape and epoxy glue was then poured into a 2.5 cm diameter mould on top of the grains. Between two and four ~3 x 10 mm sample concentrations were mounted in

each epoxy puck. The mount was dried for 12 hours and polished using silica carbide sandpaper and a 0.3 micron alumina polishing lap. The sample mounts were then washed in distilled water in an ultrasonic bath.

3.4 – Advanced mineral identification and characterization system (AMICS)

All sample mounts were analysed at the Central Science laboratory, University of Tasmania, Australia using their FEI MLA 650 ESEM equipped with Bruker AMICS software package. The AMICS consists of fully automated energy-dispersive X-ray spectroscopy (EDS) that maps grain composition and matches with a database of over 2,000 mineral phases.

3.5 – Scanning electron microscopy (SEM) and imaging

Scanning electron microscopy was used for the acquisition of backscatter electron (BSE) and cathodoluminescence (CL) images and was conducted at the Central Science laboratory (CSL), University of Tasmania. All grains analysed in the study were BSE or CL imaged prior to analysis. Scanning electron microscopy work was conducted on polished blocks of mounted heavy mineral separates. A Hitachi SU-70 analytical field emission SEM was used for apatite imaging, equipped with a Gatan ChromaCL2 colour cathodoluminescence imaging system for simultaneous acquisition of SE, iBSE, and colour CL images for apatite grains. The Hitachi SU-70 had a beam current and accelerating voltage of 3 ± 0.3 nA and 20 kV, respectively. A FEI MLA 650 ESEM, equipped with a Gatan PanaCLF panchromatic CL detector was used for zircon CL imaging, and had a beam current and accelerating voltage of 2 ± 0.3 nA and 20 kV, respectively. Rutile and titanite

BSE imaging was acquired simultaneous with microprobe analysis on a JEOL JXA-8530F Plus field emission electron microprobe.

3.6 – Electron microprobe analysis (EMPA)

Electron microprobe analysis data for apatite, titanite, and rutile are presented in this study. All compositional analyses were acquired on a JEOL JXA-8530F Plus field emission electron microprobe equipped with 5 wavelength dispersive spectrometers at the Central Science Laboratory, University of Tasmania, Australia. EDS spectra were acquired and processed using a Thermo Pathfinder Pinnacle EDS system equipped with an UltraDry Extreme 30 mm² solid state detector.

3.6.1 – Apatite

Electron microprobe analyses of apatite were carried out with an accelerating voltage of 15 kV, a beam current of 10 nA, and a beam size of 10 µm. Apatites were analysed for Si, Al, La, Ce, Nd, Fe, Mn, Mg, Ca, Sr, Na, K, P, S, As, Cl, and F. Durango apatite (McDowell et al., 2005) was analysed and a commercial apatite standard used for Ca and P calibration (Fluor-Apatite P&H Developments, UK).

3.6.2 – Titanite

Electron microprobe analyses of titanite were carried out with an accelerating voltage of 20 kV, a beam current of 200 nA, and a beam size of 5 µm. Titanites were analysed for Si, Ca, Ti, Na, Mg, Al, V, Cr, Mn, Fe, Sr, Y, Zr, Nb, La, Ce, Nd, Sm, Gd, Dy, Er, Yb, and F. Five standards were analysed: Titanite OLT1 (Kennedy et al., 2010), Titanite YILT,

synthetic titanite from Memorial University, synthetic rutile from P&H Developments, UK; and Natural Wollastonite CaSiO_3 , University of Tasmania.

3.6.3 – Rutile

Electron microprobe analyses of rutile were carried out with an accelerating voltage of 20 kV, a beam current of 200 nA, and a beam size of 2 μm . Rutile were analysed for Al, Si, Ca, V, Cr, Mn, Fe, Cu, Zr, Nb, Mo, Sn, Ta, W, and Ti. Two standards were analysed: synthetic rutile from Geo Block MkII, P&H Developments, UK and Rutile R632 (Axelsson et al., 2018).

3.7 – Laser ablation inductively coupled plasma mass spectrometry (LA-ICP-MS)

Zircon, apatite, titanite, and rutile trace element compositions were determined by LA-ICP-MS at the CODES Analytical Laboratories, University of Tasmania, Australia. The analyses were performed with an Applied Spectra/ASI RESOLUTION S-155 ablation system with ATL ATLEX ArF excimer laser operating at a 193 nm wavelength and a pulse width of 5 ns. The laser system was coupled to an Agilent 7900 quadrupole ICP-MS. Ablation was performed in He atmosphere using carrier gas flow at a rate of 0.35 litres/minute which was mixed with Ar flowing at 1.05 litres/minute and N_2 flowing at 2.5 ml/minute which carried ablated particles to the plasma torch. The analysis time for all minerals and samples was 90s, with the initial 30s to measure gas background with laser turned off and remaining 60s of signal analysis with the laser switched on. Spot sizes used ranged between 20 and 30 μm with laser frequency of 5 Hz. For zircon, apatite and titanite laser beam fluence of 2.1 J/cm^2 was used, while for rutile 5 J/cm^2 was used (Jenkins et al., 2023). Isotopes measured for zircon included ^{31}P , ^{49}Ti , ^{56}Fe , ^{89}Y , ^{91}Zr , ^{93}Nb , ^{139}La , ^{140}Ce , ^{141}Pr , ^{146}Nd , ^{147}Sm , ^{153}Eu , ^{157}Gd , ^{159}Tb , ^{163}Dy , ^{165}Ho , ^{166}Er , ^{169}Tm , ^{172}Yb , ^{175}Lu , ^{178}Hf , ^{181}Ta , ^{202}Hg , ^{204}Pb ,

^{206}Pb , ^{207}Pb , ^{208}Pb , ^{232}Th , ^{235}U and ^{238}U with each element being measured every ~ 0.25 seconds. Isotopes measured for apatites included ^{23}Na , ^{31}P , ^{43}Ca , ^{51}V , ^{56}Fe , ^{88}Sr , ^{139}La , ^{140}Ce , ^{141}Pr , ^{146}Nd , ^{147}Sm , ^{153}Eu , ^{157}Gd , ^{159}Tb , ^{163}Dy , ^{165}Ho , ^{166}Er , ^{169}Tm , ^{172}Yb , ^{175}Lu , ^{202}Hg , ^{204}Pb , ^{206}Pb , ^{207}Pb , ^{208}Pb , ^{232}Th , ^{235}U and ^{238}U with each element being measured every ~ 0.22 seconds. Isotopes measured for titanite included ^{27}Al , ^{29}Si , ^{43}Ca , ^{49}Ti , ^{55}Mn , ^{56}Fe , ^{89}Y , ^{90}Zr , ^{93}Nb , ^{139}La , ^{140}Ce , ^{141}Pr , ^{146}Nd , ^{147}Sm , ^{153}Eu , ^{157}Gd , ^{159}Tb , ^{163}Dy , ^{165}Ho , ^{166}Er , ^{169}Tm , ^{172}Yb , ^{175}Lu , ^{178}Hf , ^{181}Ta , ^{202}Hg , ^{204}Pb , ^{206}Pb , ^{207}Pb , ^{208}Pb , ^{232}Th , ^{235}U and ^{238}U with each element being measured every ~ 0.24 seconds. Isotopes measured for rutile included ^{24}Mg , ^{27}Al , ^{29}Si , ^{43}Ca , ^{49}Ti , ^{51}V , ^{55}Mn , ^{57}Fe , ^{89}Y , ^{90}Zr , ^{93}Nb , ^{118}Sn , ^{140}Ce , ^{146}Nd , ^{147}Sm , ^{153}Eu , ^{157}Gd , ^{163}Dy , ^{166}Er , ^{172}Yb , ^{178}Hf , ^{181}Ta , ^{182}W , ^{202}Hg , ^{204}Pb , ^{206}Pb , ^{207}Pb , ^{208}Pb , ^{232}Th , ^{235}U and ^{238}U with each element being measured every ~ 0.24 seconds. Longer counting time was used on the U and Pb isotopes compared to the other elements. Trace element abundances are calibrated on the NIST610 glass using values of Jochum et al. 2011, using secondary standard corrections based on the compositions of glasses BCR-2G and GSD-1G (GeoReM preferred values; <http://georem.mpch-mainz.gwdg.de/>). Quantification was performed using ^{91}Zr (zircon), ^{43}Ca (apatite and titanite) and ^{49}Ti (rutile) as the internal standard elements, normalizing all measured cations to stoichiometric proportions. The standards were run at the beginning and end of each LA-ICP-MS session as well as hourly intervals during analysis. Up to approximately 30 spots were analysed in each sample (dependent on number of grains within each sample), with one laser spot per grain. The laser data was processed using the LADR software package (Norris Scientific). Data reduction was done by visually inspecting each analysis spectrum and screening out large variations or inclusions in the trace element chemistry to be not included in data integration.

3.8 – Rutile laser ablation inductively coupled plasma mass spectrometry imaging

Rutile imaging was carried out using the same instrument setup as was used for spot analyses. Whole area of the grain was covered by a raster of parallel lines. Due to relatively small grain size 4 μm square laser beam was used with 4 $\mu\text{m}/\text{sec}$ rastering speed along the lines. Because of small spot size the list of measured masses had to be shortened. For imaging method following masses were measured: 24Mg, 27Al, 29Si, 43Ca, 49Ti, 51V, 53Cr, 55Mn, 57Fe, 89Y, 90Zr, 93Nb, 118Sn, 178Hf, 181Ta, 182W and 238U. Total sweep time was equal to 0.24 second. Ablation was carried out using laser frequency of 10 Hz and laser beam energy density of approximately 5 J/cm². NIST610 was used as a primary standard, while GSD-1G and BCR-2G were used as secondary standards all analysed with 30 μm spot size and laser beam energy density of 3.5 J/cm². Straight nylon tubing 3 m long was used as an interface between laser ablation system and ICPMS. LADR software was used to determine cps/ppm conversion factors with final processing done with in-house developed python script.

3.9 – Uranium-lead geochronology

Uranium-Pb ages for zircon, apatite, titanite, and rutile samples were determined by LA-ICP-MS at the CODES Analytical Laboratories, University of Tasmania. Uranium and Pb isotopes were collected at the same time as the trace element geochemistry described in section 3.7.

The downhole fractionation, instrument drift and mass bias correction factors for Pb/U ratios were calculated using analyses of the 91500 zircon (Wiendenbeck et al, 1995) for zircon, OD306 apatite (Thompson et al, 2016) for apatite, 19686 titanite (in-house,

unpublished) for titanite and TB-1 rutile (Jenkins et al., 2023) for rutile. The instrument drift and mass bias correction factors for the $^{207}\text{Pb}/^{206}\text{Pb}$ ratio and $^{207}\text{Pb}/^{206}\text{Pb}$ -based ages were calculated using analyses of the NIST610 glass, using the Pb isotopic values of Baker et al. (2004). For each analysis, a subset of the data most closely matching a concordant composition have been selected for quantification.

Concordia diagrams of $^{207}\text{Pb}/^{206}\text{Pb}$ vs. $^{238}\text{U}/^{206}\text{Pb}$, regression intercepts and weighted averages were calculated with Isoplot (Ludwig, 2003). Ages presented in this study are weighted mean average of $^{206}\text{Pb}/^{238}\text{U}$. Full geochronology data are presented in Appendix B. Plesovice (Slama et al. 2008) and Temora (Black et al, 2003) zircon standards were used as check standards for zircon analyses; 401 apatite (Thompson et al, 2016), Durango (McDowell et al, 2005), and McClure (Schoene and Bowring, 2006) apatites were used for apatite analyses; 100606 (Best, 2012), FC-3 (Schmitz and Bowring, 2001), Mt Dromedary (Schoene et al, 2006) titanites were used for titanite analyses; R10 and R19 rutiles (Luvizotto et al, 2009) were used for rutile analyses. Check standards were analysed throughout the analytical session and treated as unknowns. Age standards, reference ages, and reproduced standard ages are provided in Appendix G.

3.10 – Hafnium isotopes

Hafnium isotopic ratios of zircon were measured by LA-MC-ICP-MS at the Pacific Centre for Isotopic and Geochemical Research, Vancouver, Canada. An NWR193UC laser ablation system was coupled to a Nu Plasma MC-ICP-MS for data collection. The Nu Plasma instrument allows for simultaneous collection of Lu, Yb, and Hf masses (171, 173, 175, 176, 177, 178, 179, and 180) allowing for Lu and Yb interference corrections on mass 176 and

mass-bias exponential corrections. Ablation spots ranged from 25 to 50 μm in diameter. Standards used for analyses include 91500 (Wiendenbeck et al., 1995), FC-1 (Coyner et al., 2004), Plesovice (Slama et al., 2008), and Temora (Black et al., 2003). The laser data was processed using Iolite. Data reduction was done by visually inspecting each analysis spectrum and screening out large variations or inclusions in the trace element chemistry which were not included in data integration.

Chapter 4: Sample and site descriptions

This chapter aims to characterize samples within each prospect and deposit included in this study. The descriptions are based on field observations and hand samples, as well as comparison with local geology maps, where available. Detail at each site varies greatly due to variations in the amount of previous work done. This chapter lists each of the 29 study sites from West to East, through Java, Lombok, and Sumbawa. Detailed sample locations and information are listed in Appendix A.

4.1 – Java

Thirteen different prospects and deposits were studied from Java (Fig. 4.1). These include Selogiri (Randu Kuning), Pacitan (Kasih and Gemaharjo), Ponorogo (Gandusari), Trenggalek (Jerambah, Singgahan, Kebo Gemulung, and Kali Petang), Tulungagung (Sinawang), Malang (Sinawang), Jember, and Tujuh Bukit (Tumpangpitu porphyry deposit and Salakan prospect).

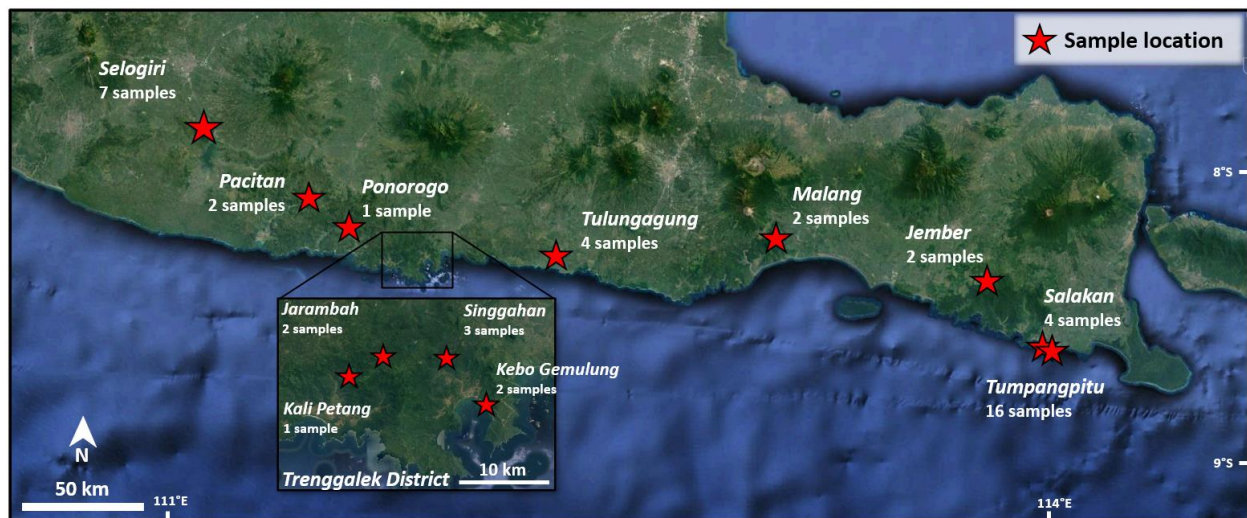


Figure 4.1: Map of sample locations within Java. Satellite image obtained from Google Earth (Image © TerraMetrics, 2023).

4.1.1 – Selogiri

Seven samples were collected from the Randu Kuning porphyry prospect at Selogiri, Java, including three from surface (SLG-01 to SLG-03) and four from drillcore (SEF-01 to SEF-04; Fig. 4.2). Sampled lithologies consist of diorite, quartz diorite, and hornblende diorite. Surface sample alteration is variable, with propylitic alteration in the outermost SLG-03 sample and advanced-argillic/intermediate-argillic illite-smectite-kaolinite ± pyrophyllite-alunite assemblages in SLG-01 and SLG-02 (Fig. 4.3). Drill hole samples (SEF-01 to SEF-04) are all diorite (± hornblende) with weak intermediate argillic alteration. Sample information and brief descriptions are in Table 4.1 and sample photographs in Figure 4.4.

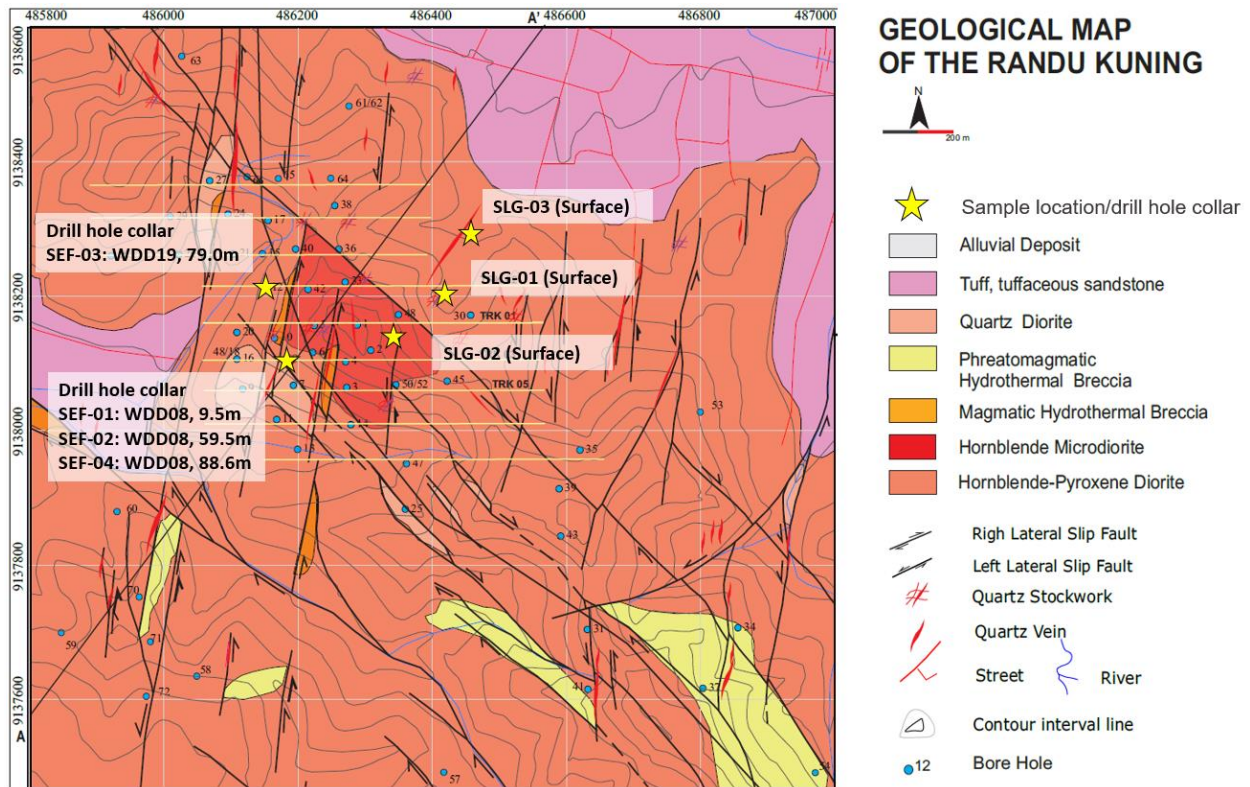


Figure 4.2: Geologic map of the Randu Kuning area (Selogiri). Stars indicate sample locations/drill hole collars. Coordinates are UTM zone 49S. Modified after Sutarto et al. (2015).

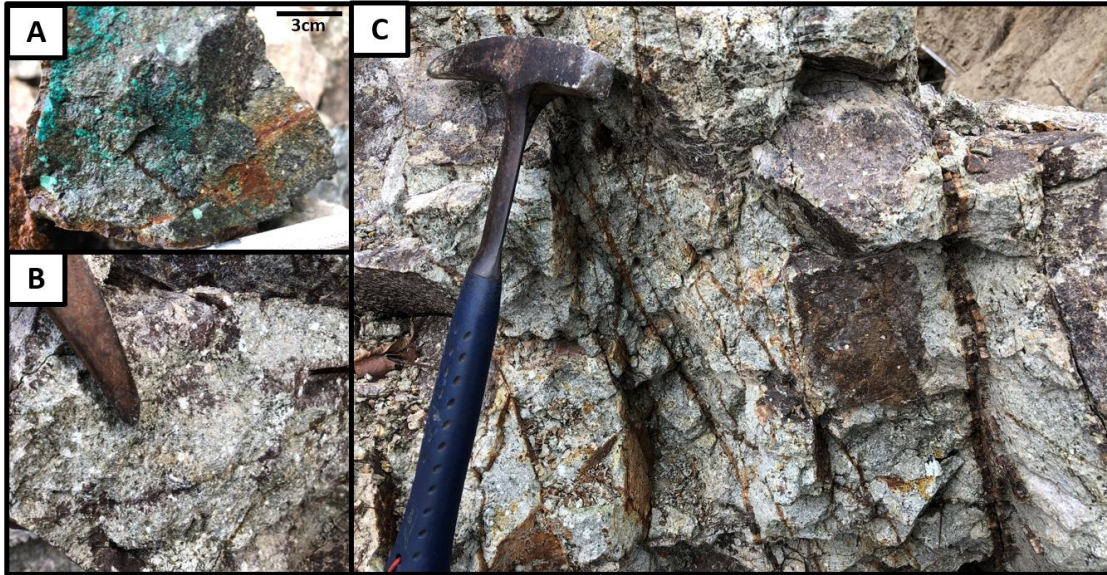


Figure 4.3: (a) Sample SLG-02 outcrop with malachite on weathered surfaces. (b-c) Strong intermediate argillic altered hornblende diorite porphyry at SLG-02, with oxidized quartz stockwork veining. Photos courtesy of Adi Maryono.



Figure 4.4: Photographs of Selogiri (Randu Kuning porphyry) samples. White scale bar is 1 cm.

Table 4.1: Descriptions for samples at Selogiri, Java (Randu Kuning porphyry).

| Sample | Sample Type | Drillcore ID | Rock Type | Alteration | Timing | Brief Description |
|--------|-------------|---------------|-----------------------------|-----------------------|--------|---|
| SLG-01 | Surface | | Quartz diorite porphyry | Advanced argillic | Syn- | Porphyritic, relict plag up to 3-4mm, st alt to ilt-sme/prl, tr dck. Fg qtz dominated gm (<0.02mm), minor patchy chl, cb. Partially oxidized, lm/hem veinlets throughout. |
| SLG-02 | Surface | | Hornblende diorite porphyry | Intermediate argillic | Syn- | Porphyritic, plag phenos range in size (~0.5-5mm), lesser hbl phenos often with diffuse grain boundaries. Plag alt to ilt-sme, minor dck. Patchy ilt-sme alt within fg qtz-plag gm (~0.05mm). Oxidized, qtz-lm stockworks, mlc on weathered surfaces. |
| SLG-03 | Surface | | Diorite | Propylitic | Post- | Sub-porphyritic, mostly interlocking plag laths (variable, <0.5-4mm). Relict mafic phenos up to ~3-5mm, completely alt to chl-mag-cb-clays, minor ep. |
| SEF-01 | Drill core | WDD08 - 9.5m | Hornblende diorite porphyry | Intermediate argillic | Syn- | Porphyritic, variable sized phenos, plag (0.5-4mm), hbl (0.5-10mm) set within aphanitic vfg qtz-plag gm. Hbl strongly poikilitic, with lathy plag phenos as inclusions. Patch chl-cb alt throughout, minor ilt, diss mag. |
| SEF-02 | Drill core | WDD08 - 59.5m | Hornblende diorite | Intermediate argillic | Syn- | Sub-porphyritic, ~65% interlocking variable sized plag (~0.5-2mm) with similar hbl, minor fg interstitial qtz-plag. Minor patchy cb-clay alt in interstitial fraction. Minor chl, opx, diss mag. |
| SEF-03 | Drill core | WDD19 - 79m | Diorite | Intermediate argillic | Syn- | Sub-porphyritic, ~0.5-2mm plag grains alt to ilt, diffuse boundaries within qtz dominated vfg gm. Patchy cb/ilt-sme alt throughout. Diss mag. |
| SEF-04 | Drill core | WDD08 - 88.6m | Diorite | Intermediate argillic | Syn- | Equigranular, ~0.05mm, patchy plag-qtz. cb-chl throughout, lesser clays - ilt-sme. Diss mag. |

4.1.2 – Pacitan and Ponorogo

Three samples were collected from near the villages of Kasihan (PCT-01), Gemaharjo (PCT-02), and Gandusari (PNG-01), within a region approximately 30 km north-east of the city of Pacitan (Table 4.2; Fig. 4.5).

Table 4.2: Descriptions for samples in the Kasihan (PCT-01), Gemaharjo (PCT-02) and Gandusari (PNG-01) regions, Java.

| Sample | Sample Type | Rock Type | Alteration | Timing | Brief Description |
|--------|-------------|-------------------|-----------------------|--------|---|
| PCT-01 | Surface | Dacitic tuff | Advanced argillic | | Volcaniclastic, variable-sized (~0.25-5mm) rounded clasts of alt diorite, angular qtz and plag fragments, vfg aphanitic groundmass, with ilt-sme/kln alt |
| PCT-02 | Surface | Andesite porphyry | Advanced argillic | | Porphyritic, 2-5mm euh plag phenos, w/ mod ilt/destructive clay AA alt. Interlocking bladed fg plag groundmass, minor qtz. Weak-mod ilt alteration throughout. |
| PNG-01 | Surface | Breccia | Intermediate argillic | | Monomictic mosaic breccia with interstitial qtz. Angular fragments vary greatly in size, completely altered to chl/ilt-sme and other clays, destroyed primary textures. 1% py, weakly oxidized. |



Figure 4.5: Photographs of Kasihan (PCT-01), Gemaharjo (PCT-02) and Gandusari (PNG-01) samples. White scale bar is 1 cm.

Kasihan – PCT-01

Sample PCT-01 was collected from a strongly weathered and oxidized pit near the village of Kasihan, Pacitan Regency, Java (Fig. 4.4). The outcrop consists of an advanced argillic altered dacite tuff with supergene chalcocite, malachite, and azurite.

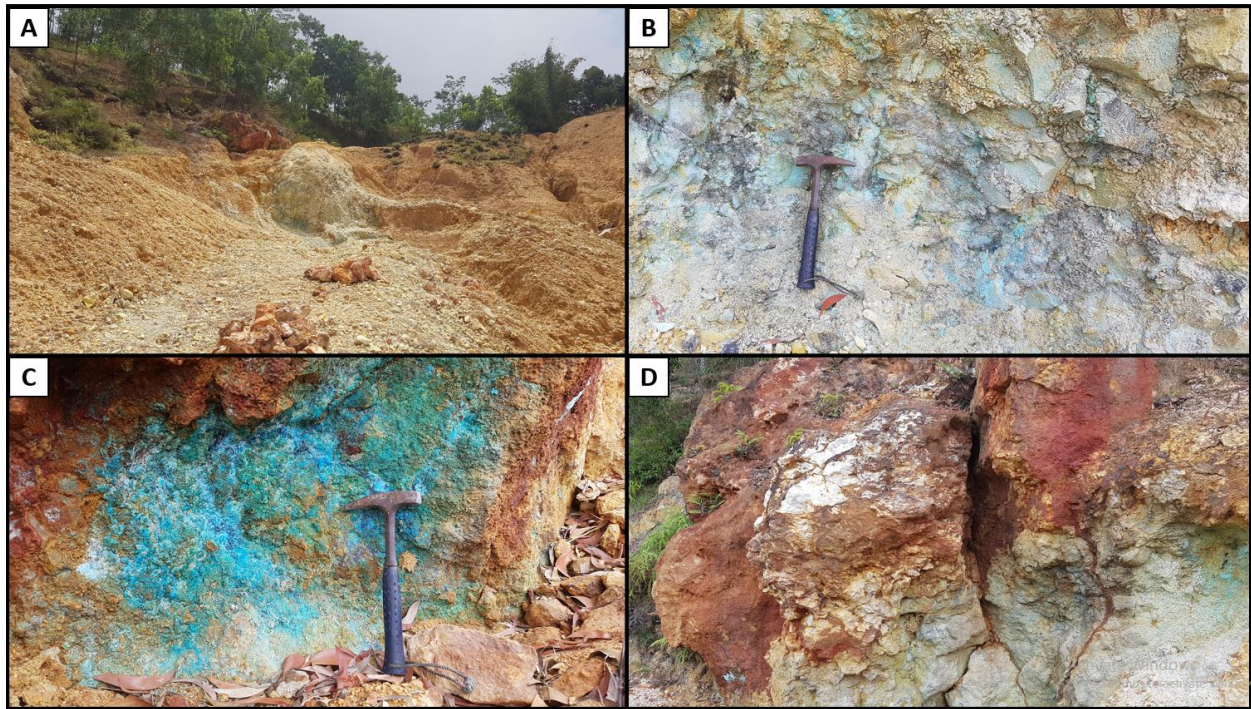


Figure 4.6: (a) Dacite outcrop of sample PCT-01. (b) Strongly fractured dacite with chalcocite and malachite. (c) Malachite, azurite, and iron oxide supergene mineralization. (d) Advanced argillic altered dacite with hematite and goethite. Photos courtesy of Adi Maryono.

Gemaharjo – PCT-02

Sample PCT-02 is an advanced argillic altered andesite porphyry and was collected from a road-side outcrop near the village of Gemaharjo, Pacitan Regency, Java, approximately 9km to the northeast of PCT-01 (Fig. 4.7). Hosted within the andesite outcrop and immediate area surrounding it are numerous ~10-30cm banded/cockade-breccia low-sulphidation epithermal veins (Wiloso and Yudha, 2018).

Gandusari – PNG-01

Sample PNG-01 is an intermediate argillic altered monomictic mosaic quartz breccia hosted in altered volcanic rocks, collected from a roadside outcrop near the village of

Gandusari, Ponorogo Regency, Java, approximately 14 km southeast of PCT-01 and PCT-02
(Fig. 4.8).



Figure 4.7: Roadside outcrop of andesite porphyry and artisanal workings at Gemaharjo site (PCT-02) along National Route 3, Java. Photo courtesy of Adi Maryono.



Figure 4.8: Quartz breccia in volcanic rocks, strongly silicified with sulfides and iron oxide (PNG-01). Photo courtesy of Adi Maryono.

4.1.3 – Trenggalek district

Seven samples were collected from the Trenggalek region of eastern Java (Fig. 4.9). The area hosts a number of porphyry, skarn, intermediate- and high-sulfidation epithermal prospects, with samples in this project from the Jerambah, Singgahan, Kebo Gemulung, and Kali Petang porphyry prospects. All four prospects consist of discrete altered diorite – quartz diorite – tonalite multiphase intrusions hosted within an assemblage of volcanic and volcanoclastic rocks (Mandalika Formation; PT Sumber Mineral Nusantara, 2019). Sample information, brief descriptions and sample photos are listed in Table 4.3 and Figure 4.10.

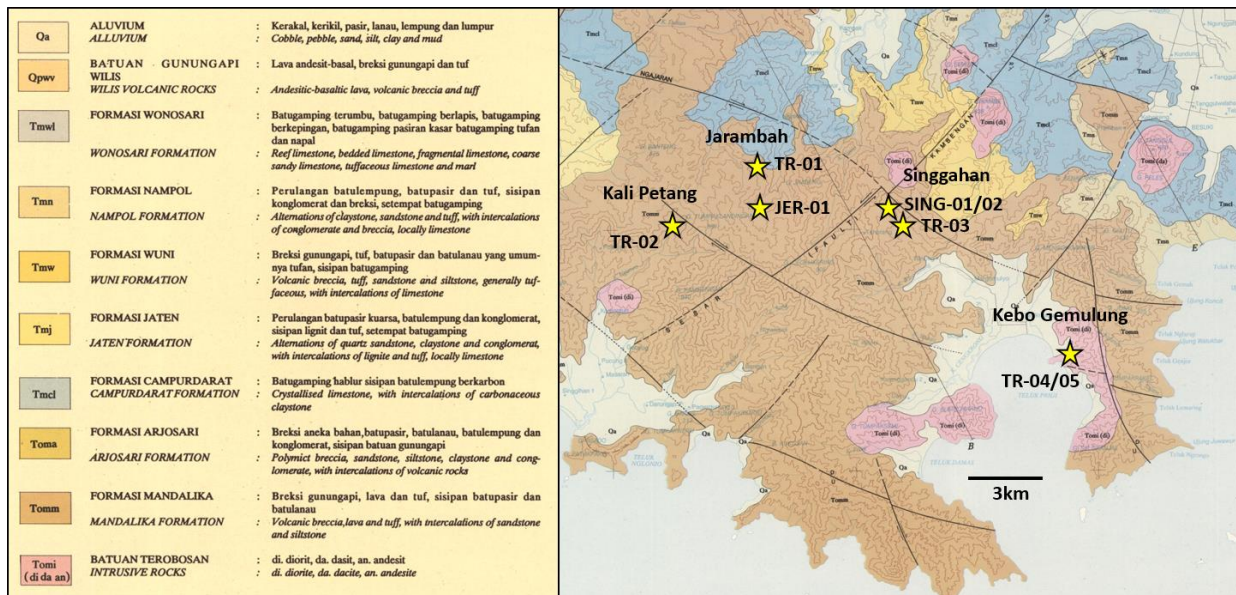


Figure 4.9: Regional geologic map of Trenggalek area, Java. Modified after Samodra et al. (1992).

Jerambah

Two samples were collected at the Jerambah prospect, Trenggalek, Java (TR-01, JER-01). Jerambah is a porphyry/high-sulfidation epithermal prospect, characterized by a 2 x 1.5 km quartz-pyrophyllite-dickite-pyrite lithocap overlying a multiphase quartz diorite

intrusion (PT Sumber Mineral Nusantara, 2019). Sample TR-01 is a sericite-chlorite altered porphyritic quartz diorite that pre-dates mineralization, collected from a river outcrop 1,500m north of JER-01 (Fig. 4.11). Sample JER-01 is a propylitic altered porphyritic quartz diorite collected from hole TRDD-054.

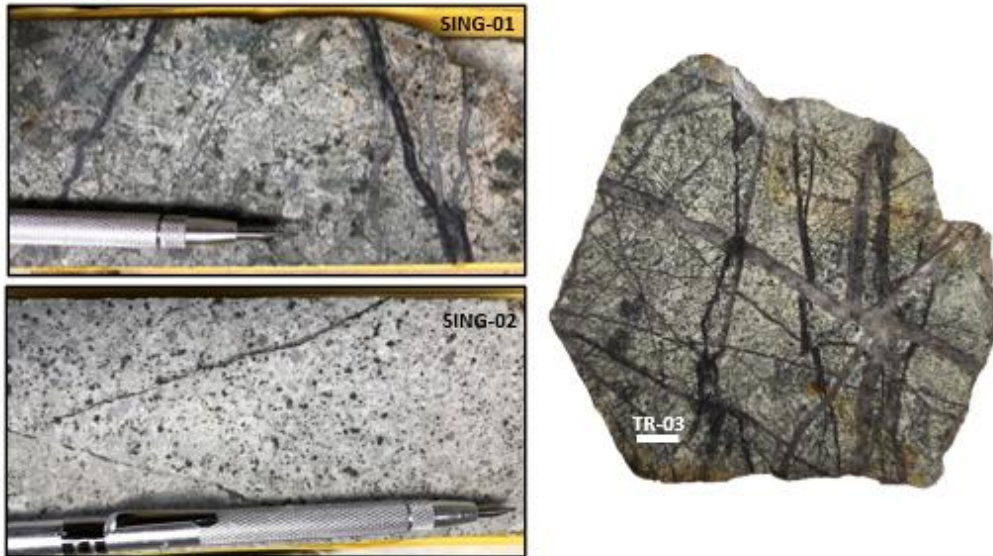
Table 4.3: Descriptions of samples from prospects within the Trenggalek district, Java. * denotes unknown drill hole depth.

| Sample | Sample Type | Drillcore ID | Rock Type | Alteration | Timing | Brief Description |
|----------------------|-------------|------------------|-------------------------|-------------------|--------|---|
| Jerambah | | | | | | |
| TR-01 | Surface | | Quartz diorite porphyry | Sericite-chlorite | Pre- | Porphyritic, 2-8mm plag phenos, OPX (0.5-4mm), chl after bt, minor qtz phenos. FG qtz-plag gm, wk alt to ilt. Minor chl, act, ep. diss mag, 1-2% diss py, tr. ccp. |
| JER-01 | Drill core | TRDD-054* | Quartz diorite porphyry | Propylitic | Syn- | Porphyritic, 1-5mm plag laths, all alt to ilt-ep-czo, minor other clays, qtz phenos up to 5mm, chl after bt. VFG gm, qtz-plag, st alt to ilt-sme. diss py-mag. |
| Singgahan | | | | | | |
| SING-01 | Drill core | TRDD-057* | Tonalite porphyry | Sericite-chlorite | Pre- | Porphyritic, 2-3mm plg phenos, st alt to cb-ilt. Mafic phenos replaced to mag-cb-chl. FG plag-dominated gm, altered to clays. diss 2-3% py-ccp. |
| SING-02 | Drill core | TRDD-057, 351.5m | Tonalite porphyry | Sericite-chlorite | Syn- | Porphyritic, 1-2mm blebby qtz phenos, plag lath phenos, most mod alt to ilt, patchy cb. FG gm dominantly plag with mod clay alt. diss 2-3% py-ccp. |
| TR-03 | Surface | | Diorite | Sericite-chlorite | Syn- | Equigranular ~0.5mm plag with mod patchy clay-cb alt. Interstitial minor fg qtz-plag, alt to clays. Patchy chl, diss and veinlet mag. 2% diss py-ccp. |
| Kebo Gemulung | | | | | | |
| TR-04 | Surface | | Diorite | Sericite-chlorite | Pre- | Sub-porphyritic, up to 3mm plag, alt to patchy ilt. Mafic grains completely replaced by chl and rimmed mag. Gm altered to clays, diss mag, chl. <1% diss py. |
| TR-05 | Surface | | Quartz diorite porphyry | Sericite-chlorite | Syn- | Porphyritic, plag phenos up to 3mm, completely altered to ilt-sme, lesser ~2-3mm qtz phenos. FG qtz dominated gm with finely diss mag/chl. Mafic phenos replaced by mag-chl-cb. Weakly oxidized, mlc-az staining on surface. 2% ccp-bn-py, diss and veinlets. |
| Kali Petang | | | | | | |
| TR-02 | Surface | | Quartz diorite porphyry | Sericite-chlorite | Syn- | Porphyritic, 2-5mm blebby qtz phenos, 1-2mm plag phenos mod alt to ilt. FG qtz-plag gm, alt to clays and patchy cb. Cb-chl-mag alt of mafic phenos. Tr. ep, mag veinlets, <1% diss py, tr ccp |

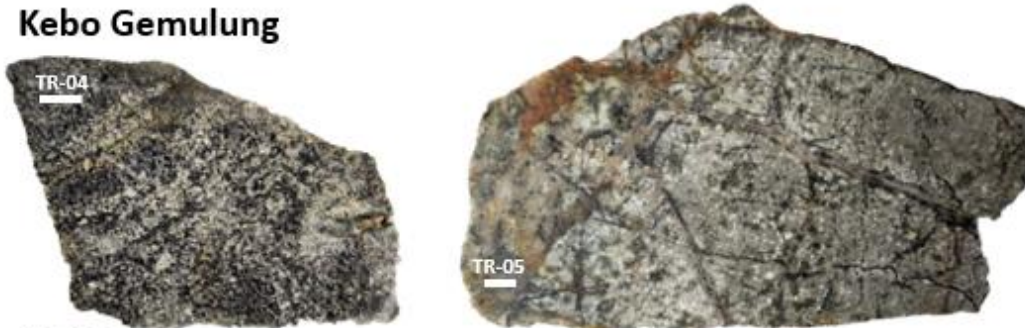
Jerambah



Singgahan



Kebo Gemulung



Kali Petang



Figure 4.10: Photographs of samples from the Trenggalek district, Java. White scale bar is 1 cm.

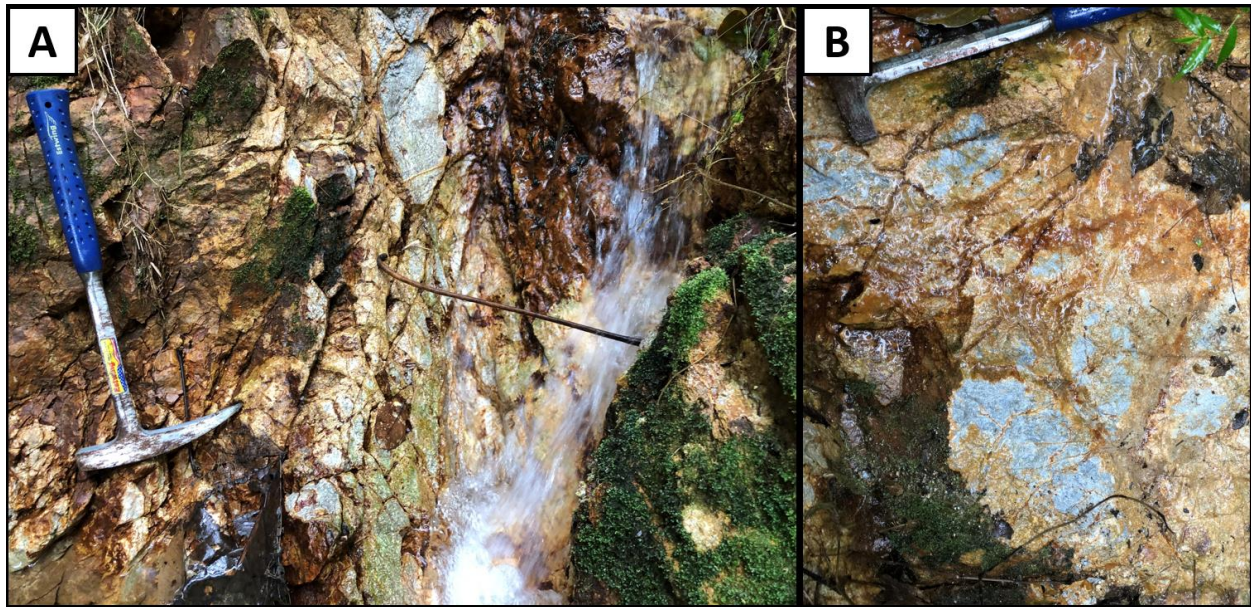


Figure 4.11: (a-b) Outcrop of quartz diorite porphyry (Sample TR-01) at Jerambah prospect, Trenggalek, Java. Photos courtesy of Adi Maryono.

Singgahan

Three samples were collected at the Singgahan prospect, Trenggalek, Java (SING-01, SING-02, TR-03). Singgahan consists of a 1 x 0.5 km elevated Au-Mo-Cu soil anomaly overlying an altered composite diorite/tonalite intrusion (PT Sumber Mineral Nusantara, 2019). Two sericite-chlorite altered tonalite porphyry samples are from drill hole TRDD-057 (SING-01, SING-02), and one sericite-chlorite altered diorite (TR-03) sample is from a river outcrop approximately 400 m southeast of the TRDD-057 collar (Fig. 4.12).

Kebo Gemulung

Two samples were collected at the Kebo Gemulung prospect, Trenggalek, Java (TR-04, TR-05). Sample TR-04 is a sericite-chlorite altered diorite that pre-dates mineralization (Fig. 4.13). Sample TR-05 is a mineralized quartz diorite porphyry, collected ~100 m east

of TR-04 along the Kebo Gemulung river (Fig. 4.14). The outcrop has malachite-azurite on weathered surfaces and intense porphyry stockwork veining.

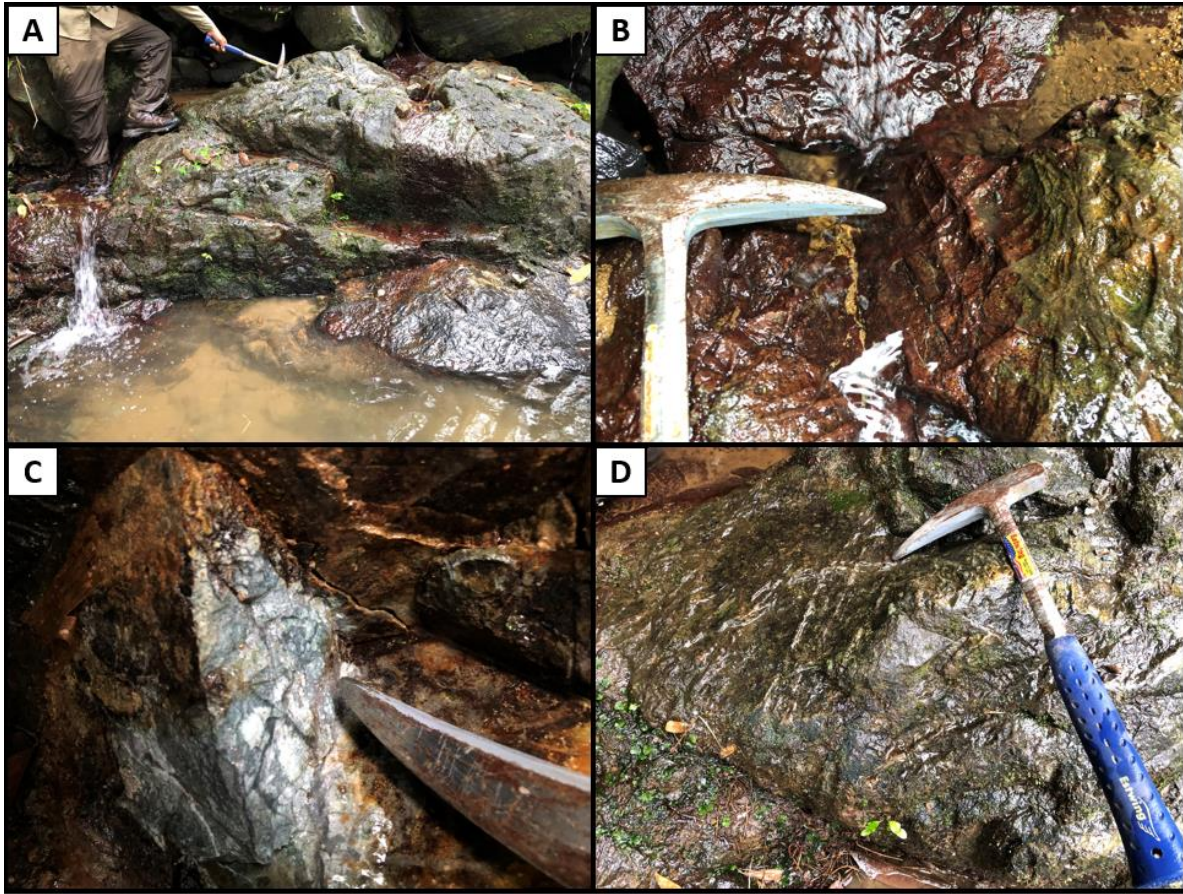


Figure 4.12: (a-b) Outcrop of diorite with stockwork veining at Singgahan prospect (sample TR-03). (c) A and B veining in mineralized diorite. (d) Weathered diorite outcrop. Photos courtesy of Adi Maryono.

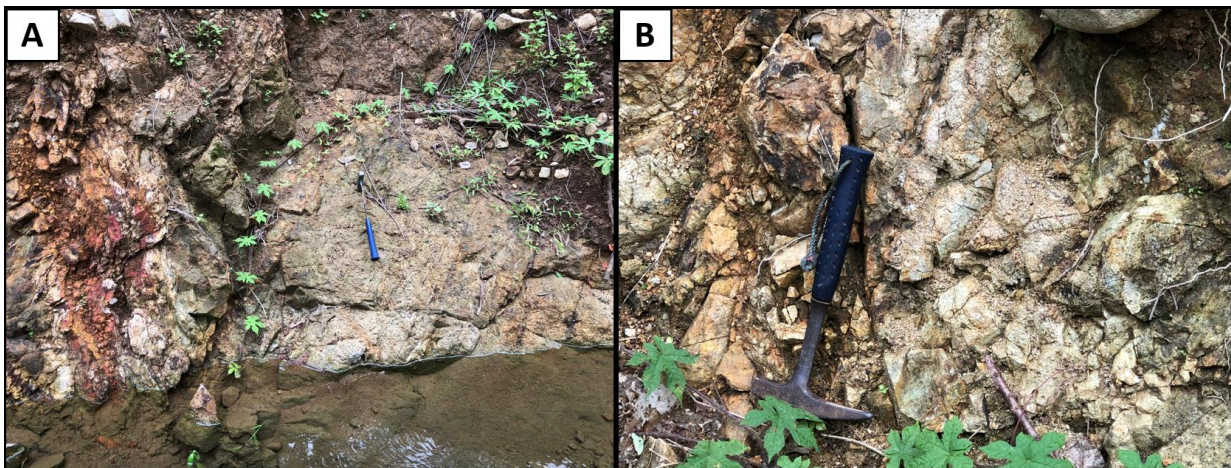


Figure 4.13: (a-b) Sample TR-04 weathered diorite intrusion outcrop, Kebo Gemulung, Trenggalek, Java. Photos courtesy of Adi Maryono.

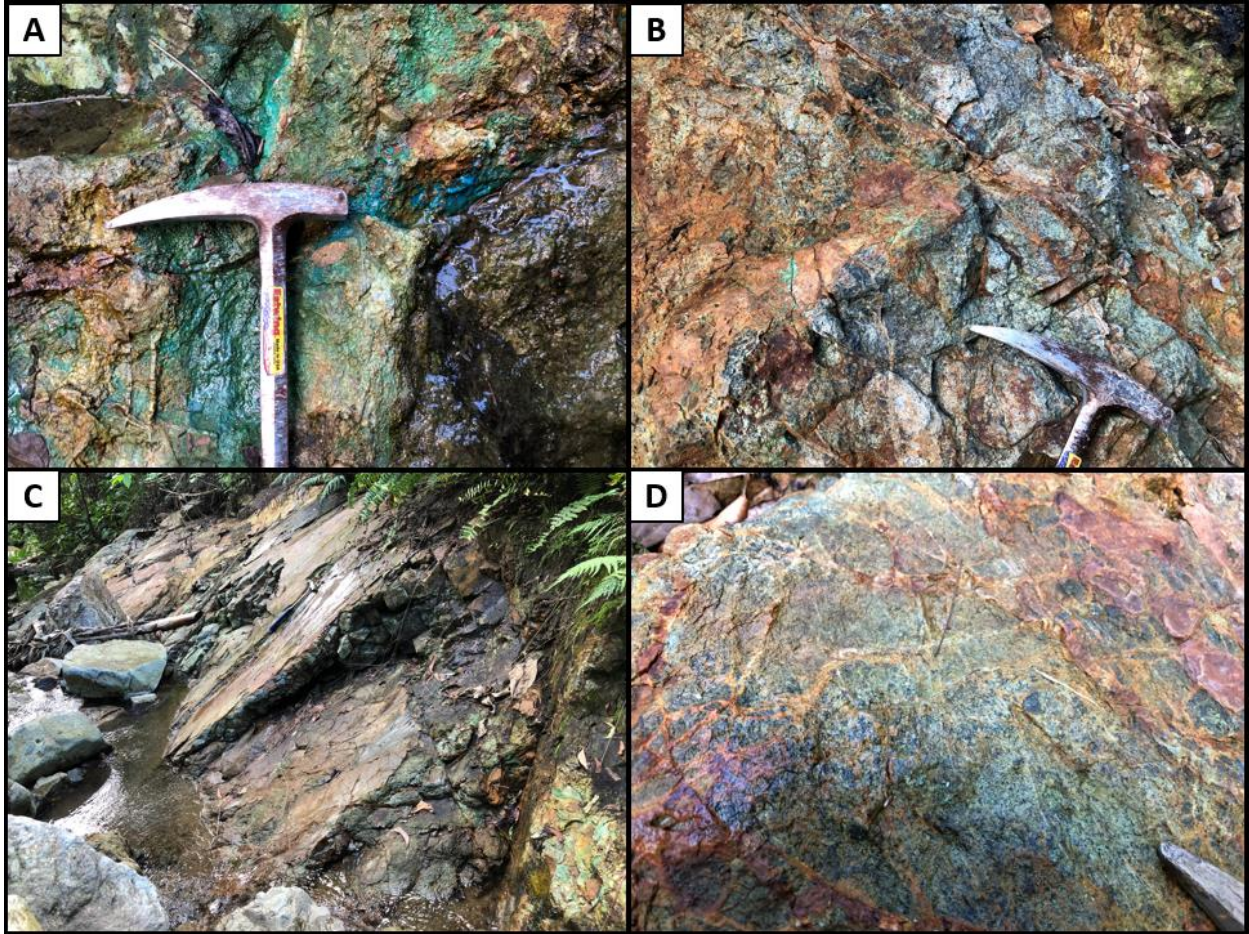


Figure 4.14: Sample TR-05 quartz diorite porphyry outcrop at Kebo Gemulung, Trenggalek, Java. (a) malachite-azurite mineralization. (b and d) Strong ser-chl-mag alteration with weathered sulfides and stockwork veining. (c) Outcrop in Kebo Gemulung river. Photos courtesy of Adi Maryono.

Kali Petang

One sample was collected at the Kali Petang prospect, Trenggalek, Java along the Kali Petang river approximately 3.5 km southwest of Jerambah. Sample TR-02 is a sericite-chlorite altered quartz-diorite porphyry. Sample information, brief descriptions and sample photos are listed in Table 4.3 and Figure 4.15.



Figure 4.15: Outcrop of quartz diorite porphyry (TR-02) at Kali Petang. Photo courtesy of Adi Maryono.

4.1.4 Tulungagung

Four samples were collected from the Sinawang prospect, Tulungagung, Java (SINA-01, SINA-02, SINA-04, SINA-05). Four quartz diorite porphyry samples were collected from various pits throughout the mine site, reflecting subtle changes in alteration mineralogy within alunite-kaolinite \pm pyrophyllite \pm illite-smectite assemblages. Samples and outcrops display intense porphyry stockwork veining, often completely oxidized to limonite-hematite-goethite after pyrite-enargite (Fig. 4.16). Sample information and brief descriptions are in Table 4.4 and sample photographs in Figure 4.17.

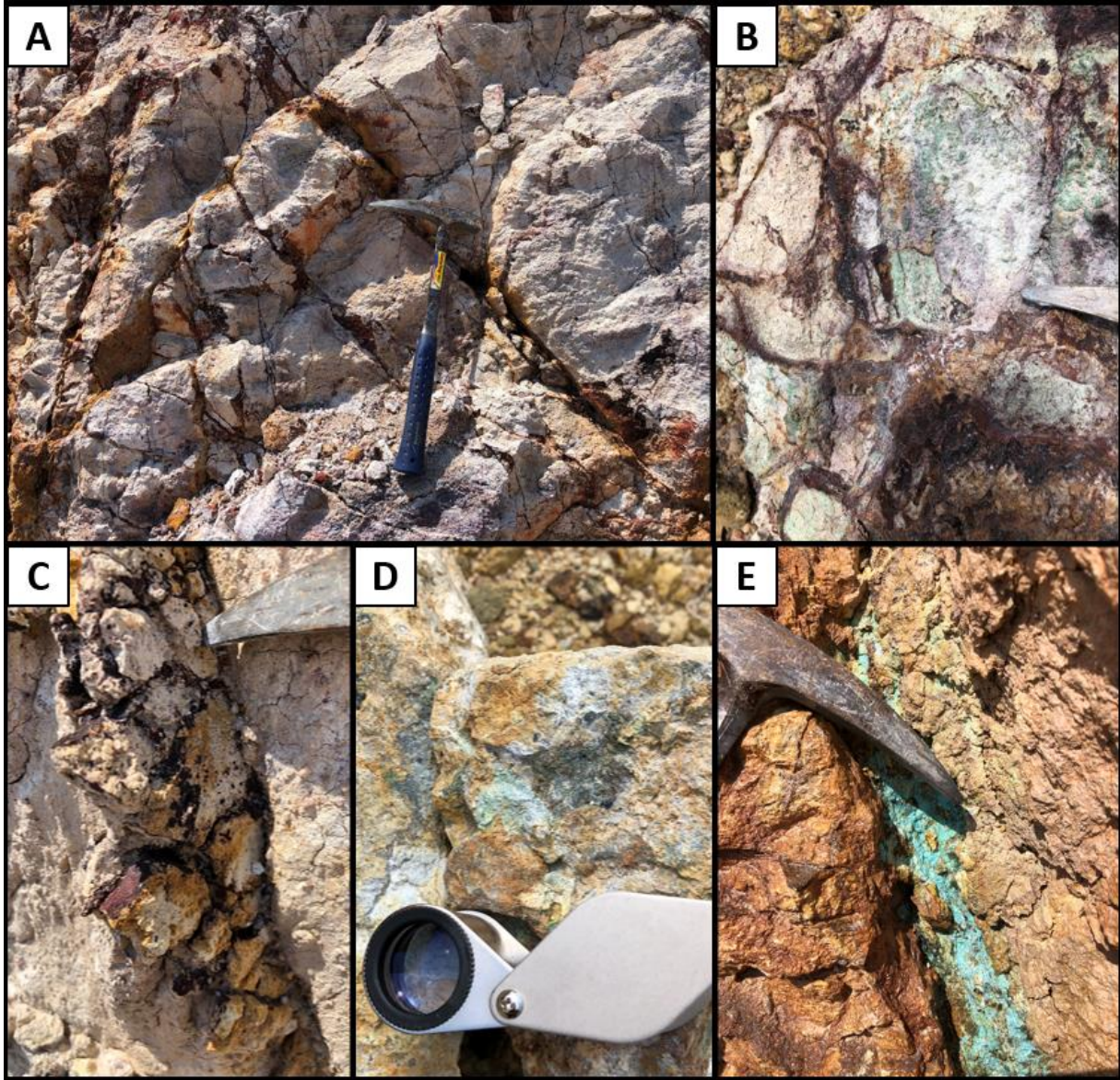


Figure 4.16: (a) SINA-05 - Kaolinite-alunite oxide zone with quartz-limonite stockwork. (b) SINA-02 - Close-up of hematite-dominant oxide zone with malachite. (c) SINA-01 - Hematite-goethite veinlets after pyrite-enargite. (d) SINA-04 - Close-up of malachite and trace supergene chalcocite. (e) Fracture-fill malachite.

Table 4.4: Descriptions of samples from the Sinawang prospect, Tulungagung, Java.

| Sample | Sample Type | Rock Type | Alteration | Timing | Brief Description |
|---------|-------------|-------------------------|-------------------|--------|---|
| SINA-01 | Surface | Quartz diorite porphyry | Advanced argillic | Syn- | Porphyritic, 2-5mm qtz phenos, relict 1-3mm plag phenos, altered to mg bladed alu. Pervasive clays throughout fg groundmass, kln. |
| SINA-02 | Surface | Quartz diorite porphyry | Advanced argillic | Syn- | Porphyritic, 2-4mm qtz phenos, relict 1-3mm plag phenos altered to fg bladed alu. Pervasive clays throughout vfg groundmass. Oxidized, lm veinlets throughout. |
| SINA-04 | Surface | Quartz diorite porphyry | Advanced argillic | Syn- | Porphyritic, 1-8mm plag phenos, alt to kln-alu-prl and py. Blebby qtz phenos up to 5mm, resorption rims common. Groundmass vfg kln-prl with minor qtz. Fg-mg py diss throughout, often clustered. |
| SINA-05 | Surface | Quartz diorite porphyry | Advanced argillic | Syn- | Porphyritic, 2-4mm plag phenos, altered to kln-alu-prl. Blebby qtz phenos up to 4mm. Gm dominantly alu with lesser clays, minor chl. |

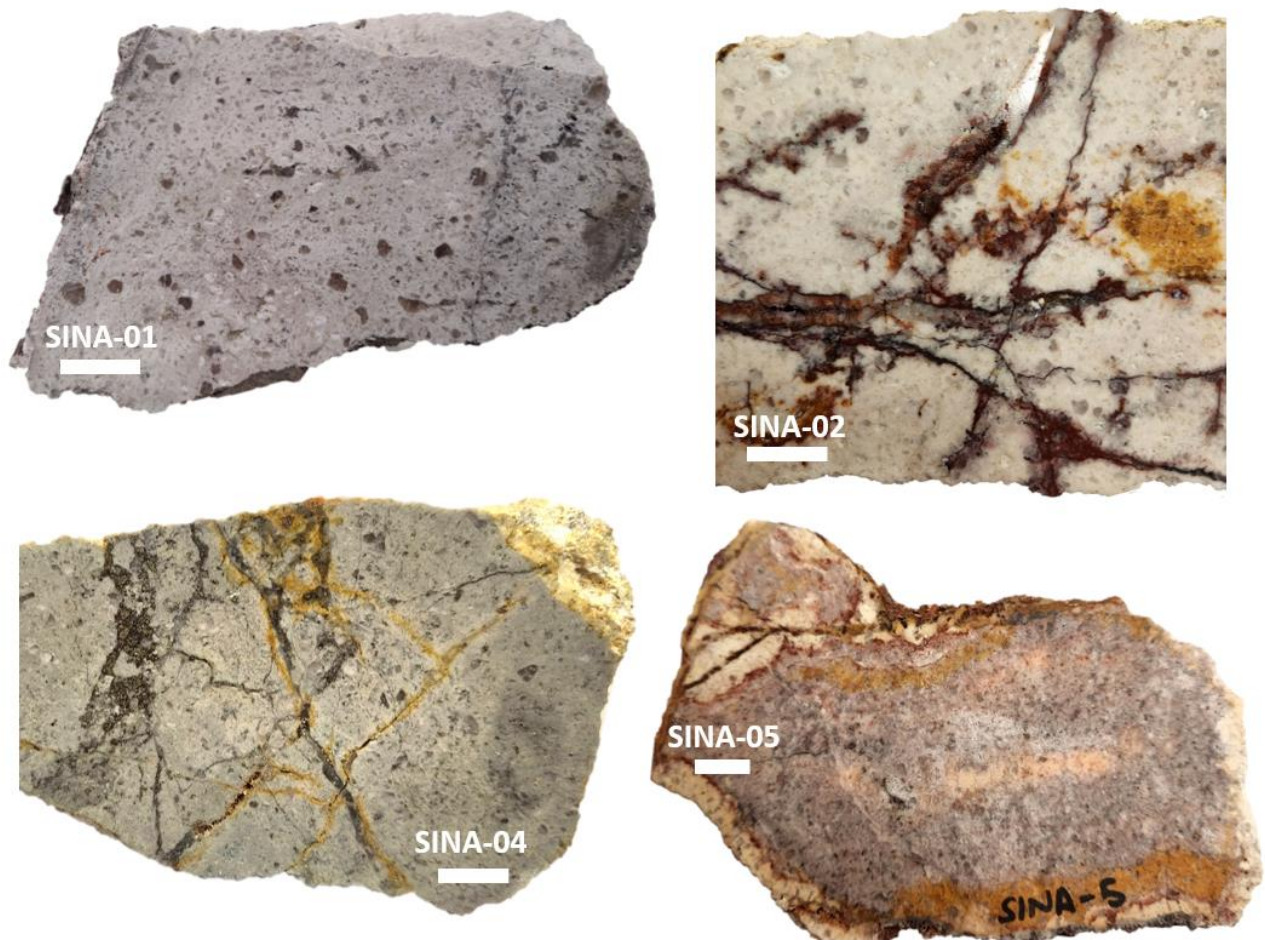


Figure 4.17: Photographs of quartz diorite porphyry samples from the Sinawang prospect, Tulungagung, Java. White scale bar is 1 cm.

4.1.5 – Malang

One sample was collected from Malang, Java (MLG-01). Sample MLG-01 is a weakly propylitic altered andesite porphyry from the Arjowinangun River (Fig. 4.18). Sample information and brief description is in Table 4.4 and sample photograph in Figure 4.19.



Figure 4.18: Andesite outcrop in Arjowinangun River, Java. Photo courtesy of Adi Maryono.

Table 4.5: Description of sample MLG-01 from Malang, Java.

| Sample | Sample Type | Rock Type | Alteration | Timing | Brief Description |
|--------|-------------|-------------------|------------|--------|--|
| MLG-01 | Surface | Andesite porphyry | Propylitic | | Porphyritic, irregular clumpy subhedral plag phenos up to ~5mm, lesser cpx/opx phenos, some alt to srp-chl-mag. Interlocking lathy fg plag gm, diss mag. Minor ilt alt and patchy cb. Minor fg ep. |



Figure 4.19: Photograph of andesite porphyry (MLG-01) from Malang, Java. White scale bar is 1 cm.

4.1.6 – Jember

Two samples were collected from the Jember prospect, Java (JEM-01, JEM-02). Sample JEM-01 is a fine-grained sericite-chlorite altered tonalite from a cliff outcrop and has malachite staining on weathered surfaces and intense porphyry stockwork veining (Fig. 4.20). Sample JEM-02 is a potassic altered quartz diorite porphyry with a significant amount of secondary shreddy biotite. It was collected from an outcrop along the Mandilis River, approximately 10 m from JEM-01 (Fig. 4.21). Sample information and brief descriptions for Jember are in Table 4.6 and sample photographs in Figure 4.22.

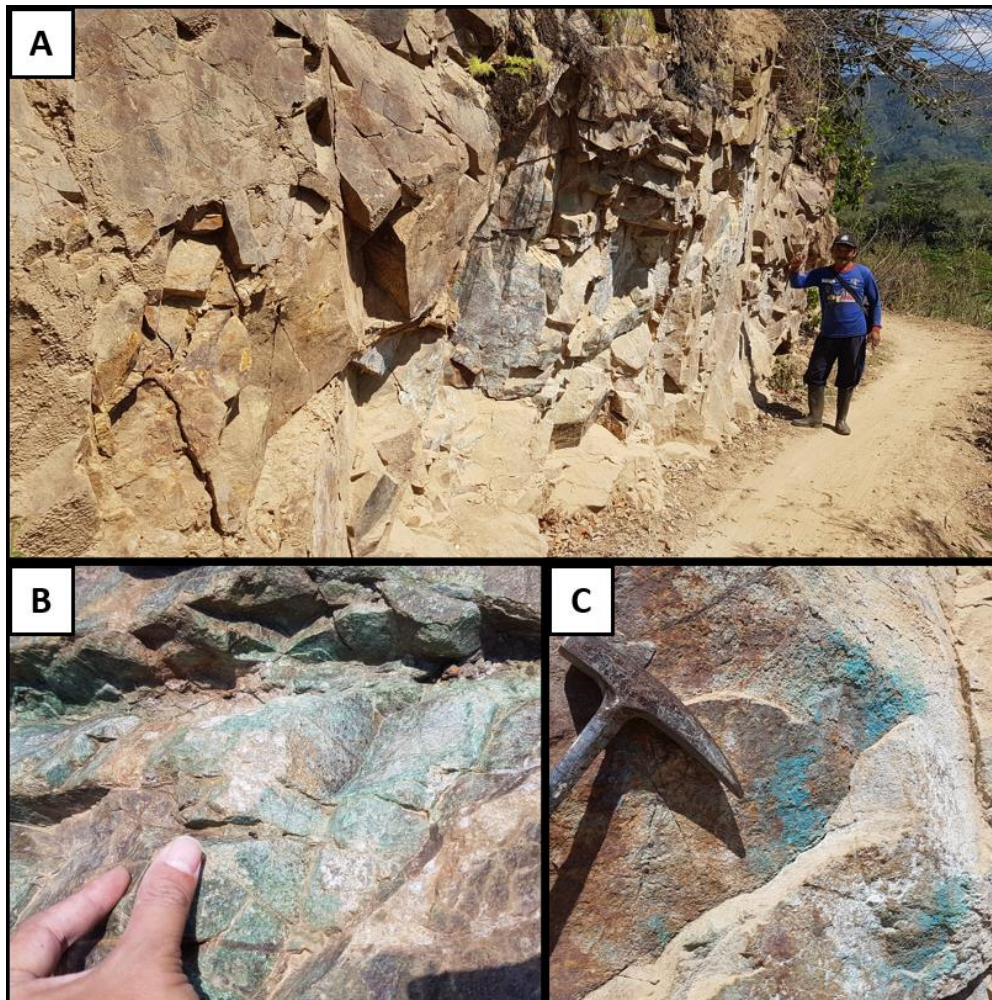


Figure 4.20: (a) Outcrop of tonalite (JEM-01) near the Mandilis River. (b-c) Close-up of tonalite with quartz stockwork and malachite staining. Photos courtesy of Adi Maryono.



Figure 4.21: (a) outcrop of quartz diorite porphyry in the Mandilis River (JEM-02). (b) Quartz stockwork in JEM-02. (c) Goethite and jarosite veinlets. Photos courtesy of Adi Maryono.

Table 4.6: Description of samples from Jember prospect, Java.

| Sample | Sample Type | Rock Type | Alteration | Timing | Brief Description |
|--------|-------------|-------------------------|-------------------|--------|---|
| JEM-01 | Surface | Tonalite | Sericite-chlorite | Syn- | Equigranular, interlocking plag laths with very minor qtz. Illt alt throughout, patchy cb. Patchy/diss chl, mag, tr. alu. |
| JEM-02 | Surface | Quartz diorite porphyry | Potassic | Syn- | Porphyritic, ~2-10mm plag phenos, relatively unaltered with strong variations in size. Gm fg qtz-plag, alt to illt-chl. Shreddy secondary bt (>10%), often in patches. diss mag. Weakly oxidized, minor mlc-az on weathered surfaces. |



Figure 4.22: Photographs of samples from Jember prospect, Java. White scale bar is 1 cm.

4.1.7 Tujuh Bukit

Twenty samples were collected from the Tujuh Bukit region, Java. Sixteen are from eight drill holes within the Tumpangpitu porphyry deposit: five pre-mineralization, six syn-mineralization, and five post-mineralization. Four samples are from one drill hole within the Salakan porphyry prospect, approximately 8.5 km to the northwest of Tumpangpitu (Fig. 4.23).

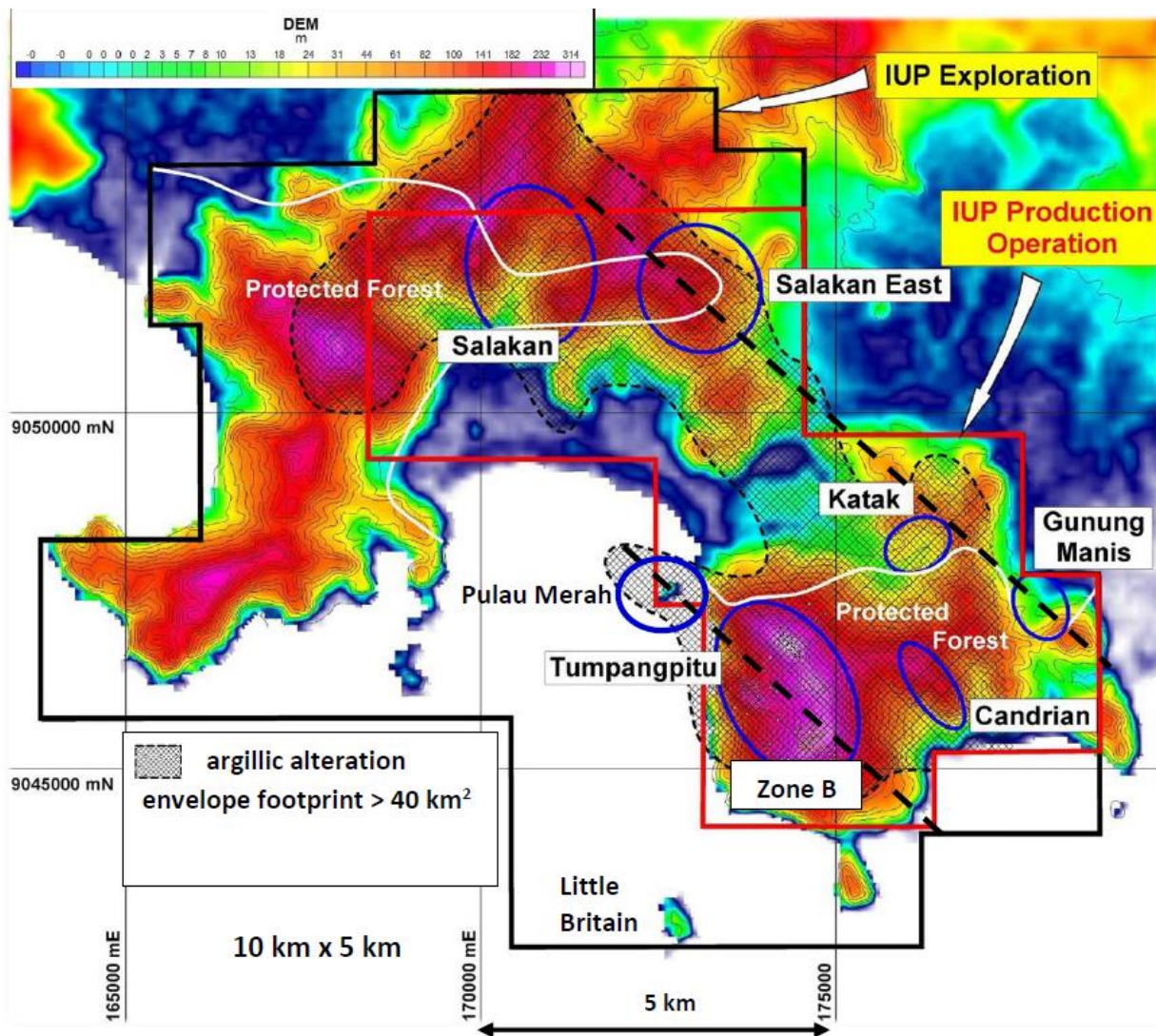


Figure 4.23: Digital elevation image (DEM) showing Cu-Au porphyries along NW-trending structural corridors (dashed lines) within the Tujuh Bukit district. Tumpangpitu and Salakan are included in this project. From Harrison (2017); modified after Intrepid Mines Ltd. (2010).

At Tumpangpitu, pre-mineralization samples consist of argillic altered diorite from the precursor diorite batholith within the Tujuh Bukit district. Samples are altered to kaolinite-dickite \pm pyrophyllite \pm alunite \pm illite-smectite assemblages (Harrison, 2017). Termed 'old diorite', this unit is the earliest recognized large intrusive phase and is cross-cut by later intrusions (Harrison, 2017). Sample information and brief descriptions for pre-mineralization diorite samples are in Table 4.7 and sample photographs in Figure 4.24.

Syn-mineralization samples consist of fine-grained tonalites with texture destructive advanced argillic alteration. Samples are altered to often patchy kaolinite-dickite \pm alunite \pm pyrophyllite and quartz assemblages. These units are the main host rock to high-sulfidation epithermal (HSE) mineralization, which has overprinted porphyry mineralization (Harrison, 2017). Sample information and brief descriptions for syn-mineralization tonalite samples are in Table 4.8 and sample photographs in Figure 4.25.

'Post'-mineralization (pre-HSE mineralization, late-inter-porphyry mineralization) consist of a dacite intrusion that forms an ovoid body that overlies the porphyry centre (Harrison, 2017). Samples are advanced argillic altered but are texturally well-preserved and often exhibit a crystal-crowded coarse-grained ($\sim 2 - 8$ mm) porphyritic texture with quartz eye phenocrysts. Sample information and brief descriptions for post-mineralization quartz diorite samples are in Table 4.9 and sample photographs in Figure 4.26.

Salakan samples consist of advanced argillic, oxidized, and texturally destroyed tonalites. The tonalites are similar to textural observations at Tumpangpitu; however, contain lower grades of porphyry and HSE mineralization (Harrison, 2017). The tonalites contain intense porphyry stockwork veining, but the veins are devoid of copper sulfides

(Harrison, 2017). Samples have variable clay alteration, kaolinite-dickite, as well as intense oxidation with goethite and hematite. Sample information and brief descriptions for tonalite samples at Salakan are in Table 4.10 and sample photographs in Figure 4.27.

Table 4.7: Descriptions of pre-mineralization samples from Tumpangpitu, Java.

| Sample | Sample Type | Drillcore ID | Rock Type | Alteration | Timing | Brief Description |
|----------|-------------|-------------------|------------------|-----------------------|--------|--|
| UG012183 | Drill core | UHGZ-20-010, 320m | Diorite porphyry | Advanced argillic | Pre- | Porphyritic, qtz phenos (~0.5mm) and relict subhedral plag (~0.5-2mm) completely altered to ilt-sme/prl. Minor alu. Fg qtz dominated gm (<0.1mm). Vuggy. |
| UG012191 | Drill core | UHGZ-20-018, 520m | Diorite porphyry | Advanced argillic | Pre- | Porphyritic, minor ~0.5mm qtz phenos and replaced plag phenos (~0.5-2mm). Diffuse alt patches throughout sample, mainly kln-dck with prl and minor ilt. Tr. dsp throughout gm. Gm fg <0.05mm qtz dominated. |
| UG012192 | Drill core | UHGZ-19-001, 656m | Diorite porphyry | Advanced argillic | Pre- | Porphyritic, minor ~0.5mm qtz phenos and replaced plag phenos (~0.5-2mm). Diffuse alt patches throughout sample, mainly kln-dck with prl and minor ilt. ~5% dsp throughout gm. Gm fg <0.05mm qtz dominated, minor alu. |
| UG012194 | Drill core | UHGZ-19-005, 286m | Diorite | Intermediate argillic | Pre- | Sub-porphyritic, minor ~0.5mm qtz phenos. Relict plag phenos replaced by ilt. diss fg dsp throughout qtz dominated fg (<0.05mm) gm. Minor alu patches, minor clay throughout gm. Resorption rims on qtz, minor brt, chl. |
| UG012198 | Drill core | UHGZ-20-016, 634m | Diorite porphyry | Advanced argillic | Pre- | Porphyritic, ~0.5-1mm qtz phenos. Gm fg qtz dominated with patchy ilt-sme and minor prl and kln-dck. |



Figure 4.24: Photographs of pre-mineralization samples from Tumpangpitu. White scale bar is 1 cm.

Table 4.8: Descriptions of syn-mineralization samples from Tumpangpitu, Java.

| Sample | Sample Type | Drillcore ID | Rock Type | Alteration | Timing | Brief Description |
|----------|-------------|--------------------|-------------------|-----------------------|--------|--|
| UG012185 | Drill core | UGTH-19-013, 206m | Tonalite | Advanced argillic | Syn- | Sub-porphyritic, varying clay clusters - mostly diffuse kln-dck patches interstitial to fg <0.05mm qtz dominated gm. |
| UG012188 | Drill core | UHGZ-19-006, 566m | Tonalite | Advanced argillic | Syn- | Sub-porphyritic, ilt-sme patches throughout qtz dominated gm with diss dsp (~4%). Lesser kln, prl. |
| UG012189 | Drill core | UHGZ-20-018, 124m | Tonalite | Advanced argillic | Syn- | Gusano texture, kln-dck-alu patches within splotchy qtz blebs throughout sample. Minor dsp. |
| UG012190 | Drill core | UHGZ-20-018, 322m | Tonalite | Advanced argillic | Syn- | Sub-porphyritic, qtz phenos up to 2mm, often with resorption rims and fractured/dissected. AA destructive alt, diffuse gm consisting of fg qtz and patches of alu, kln, prl. |
| UG012196 | Drill core | UHGZ-19-002A, 710m | Tonalite porphyry | Advanced argillic | Syn- | Porphyritic, 1-2mm qtz phenos, AA destructive alt with patches of prl and alu, lesser kln-dck. alu also in fractures. Minor brt. |
| UG012197 | Drill core | UHGZ-20-016, 424m | Tonalite | Intermediate argillic | Syn- | Sub-porphyritic. Relict plag destroyed with diffuse boundaries, replaced by ilt. Minor qtz phenos, composed of clusters of anhedral qtz. Interlocking veinlets of mag throughout. Minor kln and prl in relict plag and gm, tr alu. |

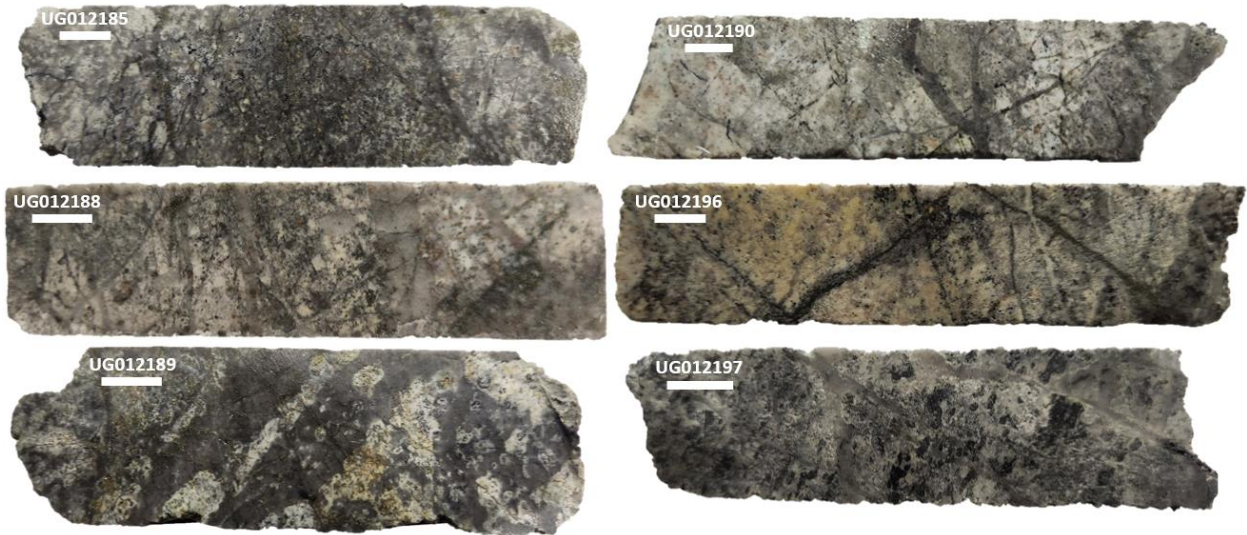


Figure 4.25: Photographs of syn-mineralization samples from Tumpangpitu. White scale bar is 1 cm.

Table 4.9: Descriptions of post-mineralization samples from Tumpangpitu, Java.

| Sample | Sample Type | Drillcore ID | Rock Type | Alteration | Timing | Brief Description |
|----------|-------------|--------------------|-----------------|-------------------|--------|--|
| UG012184 | Drill core | UGTH-19-013, 88m | Dacite porphyry | Advanced argillic | Post- | Porphyritic, fg qtz gm (<0.2mm). Plag phenos up to ~2mm, completely replaced by ilt-sme, alu needles, kln, and prl. Lesser smaller qtz phenos. |
| UG012186 | Drill core | UGTH-19-013, 702m | Dacite porphyry | Advanced argillic | Post- | Porphyritic, minor 1-2mm qtz phenos, relict plag ~0.5-2mm, all altered to kln, alu, prl, ilt. |
| UG012187 | Drill core | UHGZ-19-006, 58m | Dacite porphyry | Advanced argillic | Post- | Porphyritic, plag phenos 1-4mm, completely replaced by mg alu blades, lesser kln-dck. Fg qtz gm (<0.02mm), minor anhedral ~1mm qtz phenos. Minor ilt-sme, prl. |
| UG012193 | Drill core | UHGZ-19-005, 20m | Dacite porphyry | Advanced argillic | Post- | Porphyritic, 2-4mm plag phenos completely replaced to prl, ilt-sme, kln. Vfg qtz gm (<0.01mm). Minor ~1mm qtz phenos. diss mag. |
| UG012195 | Drill core | UHGZ-19-002A, 210m | Dacite porphyry | Advanced argillic | Post- | Porphyritic, ~0.5-4mm plag phenos, completely replaced by cg alu blades and dsp laths. Minor blebby <1mm qtz phenos. Fg qtz gm (<0.05mm), minor kln-dck, prl throughout. Tr chl. |

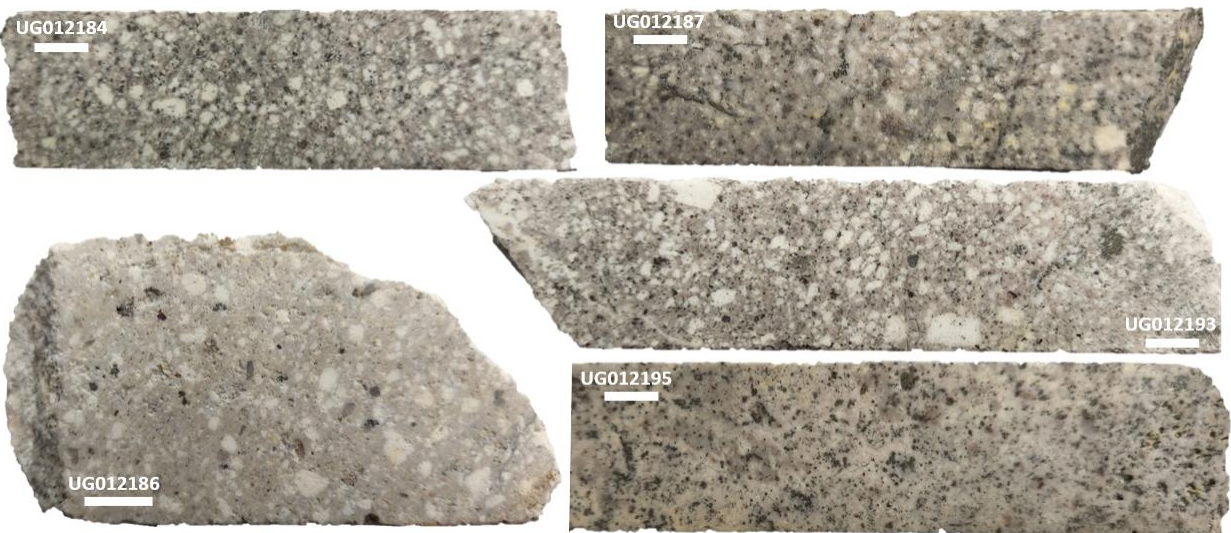


Figure 4.26: Photographs of post-mineralization dacite porphyry samples from Tumpangpitu. White scale bar is 1 cm.

Table 4.10: Descriptions of samples from the Salakan prospect, Tujuh Bukit, Java.

| Sample | Sample Type | Drillcore ID | Rock Type | Alteration | Timing | Brief Description |
|----------|-------------|------------------|-------------------|-------------------|--------|--|
| UG012199 | Drill core | SND-12-001, 112m | Tonalite porphyry | Advanced argillic | Syn- | Porphyritic, minor ~2-5mm Qtz phenos with equigranular ~0.25mm interlocking Qtz gm with lesser plag, replaced by ill-sme, dsp and alu. Fine Qtz veinlets throughout, vuggy Qtz, strongly oxidized. Iron-oxide veinlets common. |
| UG012200 | Drill core | SND-12-001, 222m | Tonalite | Advanced argillic | Syn- | Anhedra partially dissolved blebby Qtz phenos (~0.5mm) set within almost entirely dck. Clusters of mg py throughout. |
| UG012201 | Drill core | SND-12-001, 440m | Tonalite | Advanced argillic | Syn- | Patchy Qtz within pockets of dck-alu. Diss mag. |
| UG012202 | Drill core | SND-12-001, 916m | Tonalite porphyry | Advanced argillic | Post- | Porphyritic, ~1-4mm plag phenos completely replaced by mg alu blades, lesser kln-dck. Fg Qtz gm (<0.02mm), minor ~1mm Qtz phenos. Minor ill-sme, prl. |

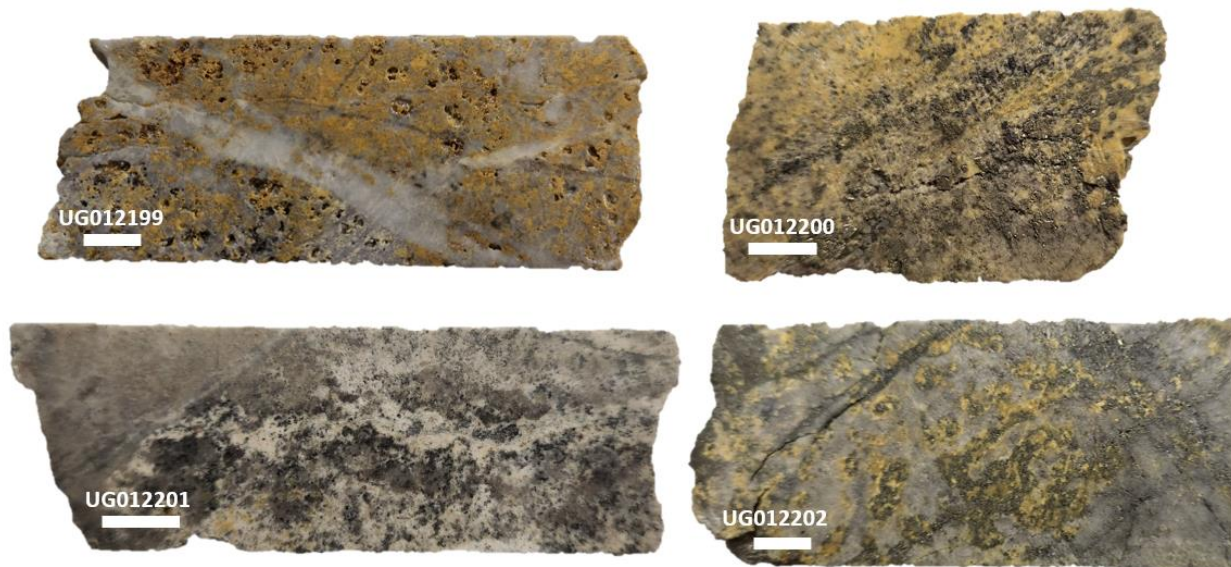


Figure 4.27: Photographs of samples from the Salakan prospect, Tujuh Bukit, Java. White scale bar is 1 cm.

4.2 – Lombok

Ten different prospects from Lombok were included in this study. These include Brambang (NW Brambang, Central Brambang, and Permula), Selodong (Montong Botek, Belikat, and Blongas), Lembar, Plambik, Songkang, and Kuta (Fig. 4.28).

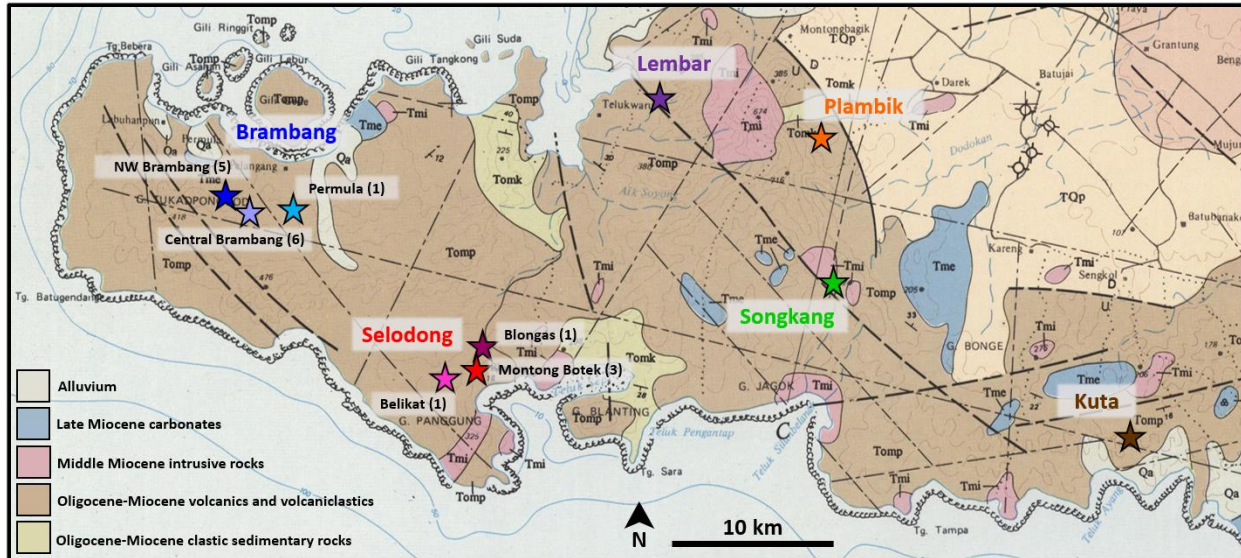


Figure 4.28: Regional geologic map of SW Lombok. Stars indicate sample locations. Modified after Mangga et al. (1994).

4.2.1 – Brambang

Twelve samples were collected from surface and drill holes at the NW Brambang, Central Brambang, and Permula prospects (Fig. 4.29). The Brambang area contains a number of multiphase tonalite intrusive complexes hosting porphyry Cu-Au and high-sulfidation epithermal mineralization. Samples are dominantly tonalites, with lesser quartz diorite and one volcanoclastic sample. Six samples are syn-mineralization, sericite-chlorite and intermediate argillic altered tonalites and quartz diorites from within Central Brambang, the most significantly developed prospect on the property. Five samples are from the less-developed NW Brambang prospect, including four syn-mineralization

tonalite/diorite samples, and one pre-mineralization volcanoclastic sample. Three of the samples from NW Brambang (LB011, LB014, LB015) are surface samples from weathered outcrops extending west of drillhole collar BDH-003 (Fig. 4.30). One unaltered quartz diorite sample was collected from the poorly mineralized Permula prospect to the east. Sample information and brief descriptions for tonalite samples at Salakan are in Table 4.11 and sample photographs in Figure 4.31.

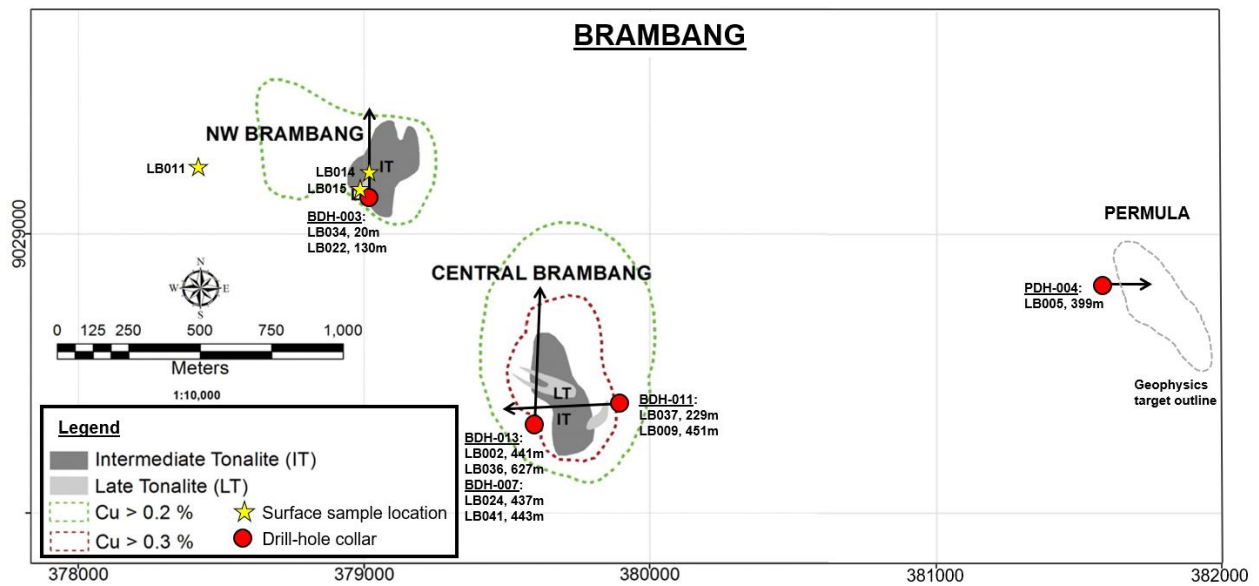


Figure 4.29: Simplified geologic map of Brambang. Modified after Maryono et al. (2018). Coordinates are UTM zone 50S.

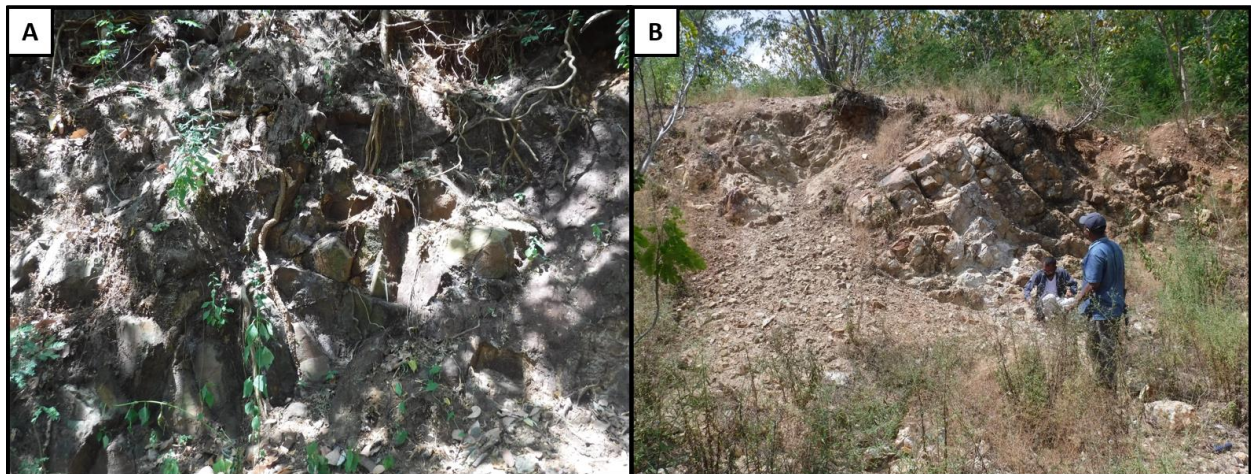


Figure 4.31: (a-b) Tonalite outcrops at NW Brambang (a: LB014; b: LB015). Photos courtesy of Adi Maryono.

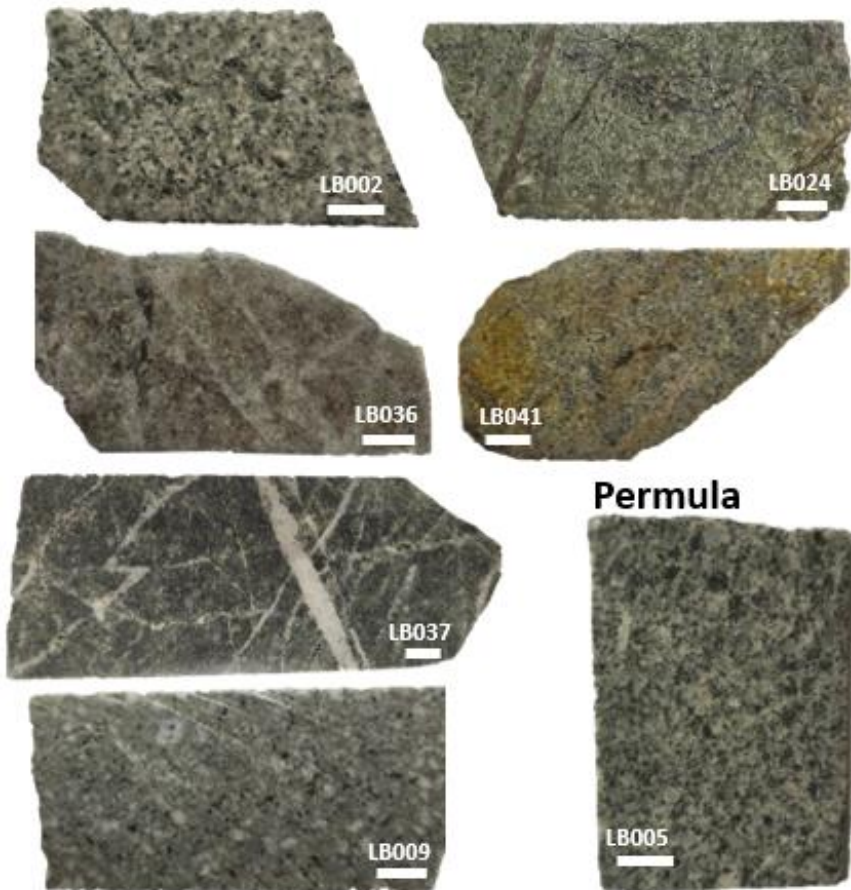
Table 4.11: Descriptions of samples from NW Brambang, Central Brambang, and Permula prospects, Lombok.

| Sample | Sample Type | Drillcore ID | Rock Type | Alteration | Timing | Brief Description |
|-------------------------|-------------|---------------|-------------------------|-----------------------|--------|--|
| NW Brambang | | | | | | |
| LB011 | Surface | | Diorite porphyry | Propylitic | Syn- | Porphyritic, with rare 1-5mm tabular plag phenos within an interlocking fg wk ilt alt plag groundmass with patchy cb-chl. Fg opx, wk alt to srp, lesser chl-cb. diss fg ep, mag. |
| LB014 | Surface | | Tonalite | Sericite-chlorite | Syn- | Equigranular, interlocking blebby plag (~0.5mm), minor qtz. Minor clusters of euhedral fg ep, chl and diss mag. Plag mod alt to ilt. Minor oxides, gth-lm. |
| LB015 | Surface | | Tonalite porphyry | Sericite-chlorite | Syn- | Porphyritic, blocky 1-10mm plag phenos, wk alt to ilt. Gm splotchy interlocking fg plag, minor qtz, diss fg hbl. Shreddy chl through, minor clays within gm, trace diss ep. < 1% sulfide, cct-ccp-py, weakly oxidized. Mic splotches throughout sample and on weathered surfaces. Cut by several irregular Fe-oxide veinlets . |
| LB022 | Drill core | BDH-003, 130m | Lapilli tuff | Propylitic | Pre- | Vfg, ~0.05mm variable-sized qtz dominated gm, patchy clay minerals (ilt-sme). Clasts of altered diorite within, diffuse boundaries. Minor fg bt/chl throughout. |
| LB034 | Drill core | BDH-003, 20m | Tonalite porphyry | Sericite-chlorite | Syn- | Porphyritic, 2-4mm tabular plag phenos, minor qtz. Gm interlocking blebby plag, minor qtz, often wk-mod patchy ilt alt. Minor opx, cb, brt, tr. Ep. |
| Central Brambang | | | | | | |
| LB002 | Drill core | BDH-013, 441m | Tonalite porphyry | Sericite-chlorite | Syn- | Porphyritic, 2-5mm plag phenos, mod ilt alt, lesser smaller qtz phenos. Relict mafic phenos completely alt to chl-cb-mag. Gm vfg, qtz dominated, lesser plag <0.05mm. Patchy ilt-other clay minerals within gm. |
| LB036 | Drill core | BDH-013, 627m | Tonalite | Intermediate argillic | Syn- | Equigranular qtz blebs (~0.5mm), with interstitial clays and completely destroyed textures. ilt-sme/kln-dck, minor chl. |
| LB024 | Drill core | BDH-007, 437m | Tonalite porphyry | Sericite-chlorite | Syn- | Porphyritic, minor ~1-5mm qtz phenos, often dissected with very irregular resorbed grain boundaries. Minor plag phenos. Qtz-plag fg gm, st alt to ilt-other clays. Patchy cb, minor diss chl. |
| LB041 | Drill core | BDH-007, 443m | Tonalite porphyry | Sericite-chlorite | Syn- | Porphyritic, minor blebby qtz phenos up to 2mm, with plag phenos completely replaced by ilt-sme. Gm qtz dominated with lesser plag, ~<0.05mm. St ilt alt of gm, minor shreddy chl. Mafic phenos replaced by chl-mag-cb. |
| LB037 | Drill core | BDH-011, 229m | Tonalite | Sericite-chlorite | Syn- | Sub-porphyritic, interlocking (up to ~5mm) plag phenos, with fg plag dominated gm with minor qtz. diss ep (~0.5mm) within gm. Relict opx, st alt to chl-srp. Patchy diss and veinlet cb throughout gm, tr. fg hbl. |
| LB009 | Drill core | BDH-011, 451m | Quartz diorite porphyry | Unaltered | Syn- | Porphyritic, 2-10mm plag phenos, lesser smaller qtz. Hbl phenos up to 5mm, anhedral. Gm qtz dominated ~0.25mm. Tr ep, cb within gm. |
| Permula | | | | | | |
| LB005 | Drill core | PDH-004, 399m | Quartz diorite | Unaltered | Pre- | Roughly equigranular, interlocking tabular ~1-4mm plag, unaltered. Lesser qtz interstitial to plag laths. Anhedral fg hbl throughout, some with minor chl alt. Tr. Opx. |

NW Brambang



Central Brambang



Permula



Figure 4.31: Photographs of samples from NW Brambang, Central Brambang, and Permula. White scale bar is 1 cm.

4.2.2 Selodong

Five samples were collected from surface at the Montong Botek, Belikat, and Belongas prospects, Selodong, Lombok (Fig. 4.32). The Selodong area contains a number of diorite porphyry intrusive complexes hosting porphyry Cu-Au and high-sulfidation epithermal mineralization (Southern Arc Minerals, 2013; Maryono et al., 2018). Montong Botek samples consist of quartz diorites with propylitic and sericite-chlorite alteration. Belikat consists of a weakly propylitic diorite porphyry with minor oxidized veinlets with limonite and malachite after sulfides. Belongas LB consists of an extremely weathered advanced argillic altered diorite that contains mostly alunite and other clays with minor oxidized quartz-limonite veinlets. Sample information and brief descriptions for tonalite samples at Salakan are in Table 4.12 and sample photographs in Figure 4.33.

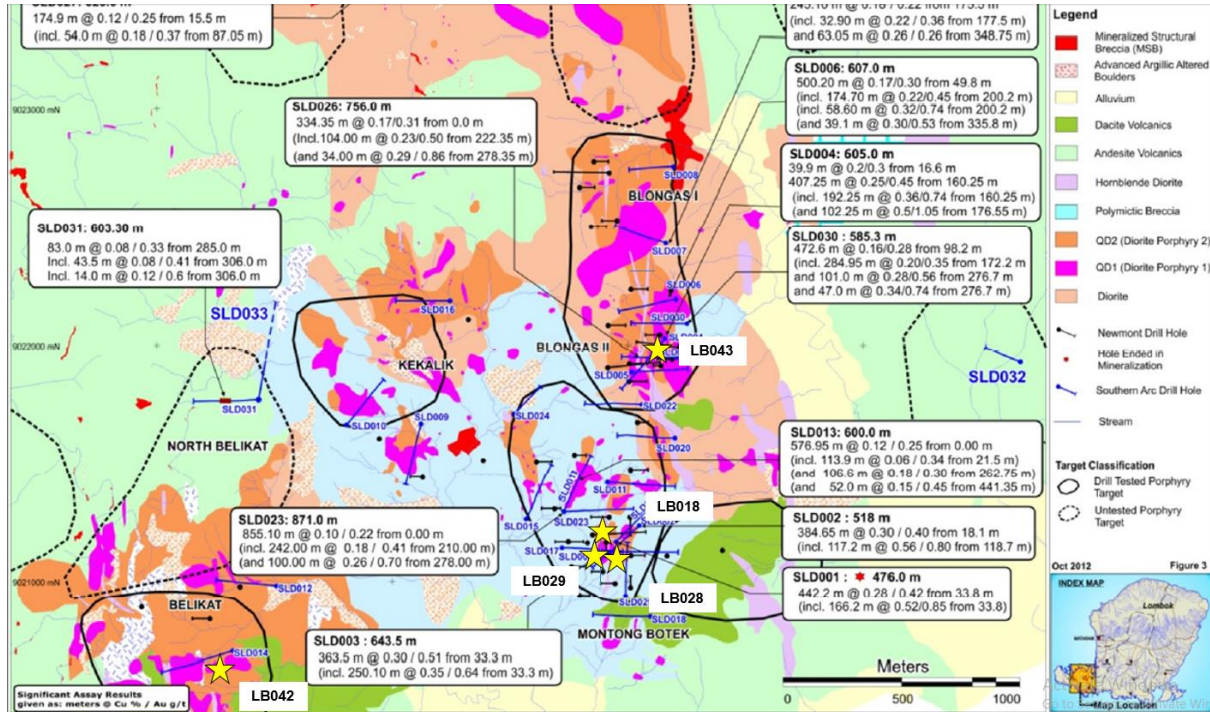


Figure 4.32: Prospect map of Selodong showing geology and mineralization. Samples in this study indicated by yellow stars. Modified after Southern Arc Minerals (2013).

Table 4.12: Descriptions of samples from Montong Botek, Belikat, and Belongas prospects, Selodong, Lombok.

| Sample | Sample Type | Rock Type | Alteration | Timing | Brief Description |
|----------------------|-------------|-------------------------|-------------------|--------|---|
| Montong Botek | | | | | |
| LB018 | Surface | Quartz diorite | Propylitic | Syn- | Vfg qtz dominated (<0.02mm). Occasional ~<0.5mm qtz grains. Patchy clay alt throughout, ilt. ~5% ep, fg often within clay patches, minor chl. All sulfides oxidized. diss/veinlet mag. |
| LB028 | Surface | Quartz diorite | Propylitic | Syn- | Vfg qtz dominated (<0.01mm). Occasional ~<0.5mm qtz grains. Patchy clay alt throughout, ilt. ~5% ep, fg often within clay patches, minor chl. All sulfides oxidized, minor qtz-Fe-oxide veinlets. |
| LB029 | Surface | Quartz diorite porphyry | Sericite-chlorite | Syn- | Porphyritic, 1-10mm plag phenos, lesser qtz (1-2mm), within vfg qtz dominated gm. Plag completely replaced to ilt, other patches of ilt-sme within gm, often assoc with oxides and fg diss ep. |
| Belikat | | | | | |
| LB042 | Surface | Diorite | Propylitic | Syn- | Porphyritic, blocky plag phenos up to 5mm, relatively unaltered. Gm highly variable, some fg qtz dominated, others fg qtz-plag, others dominated by fg interlocking plag laths. Patchy minor cb, chl throughout, minor ilt, tr. Ep. Oxidized, several qtz-lm veinlets, minor Cu-oxides in veinlets. |
| Belongas | | | | | |
| LB043 | Surface | Diorite | Advanced argillic | Syn- | Extremely weathered, clay-mag alt dominant (alu and other clays). Oxidized, qtz-lm vein stockworks, predominantly gth-lm. (no TS) |

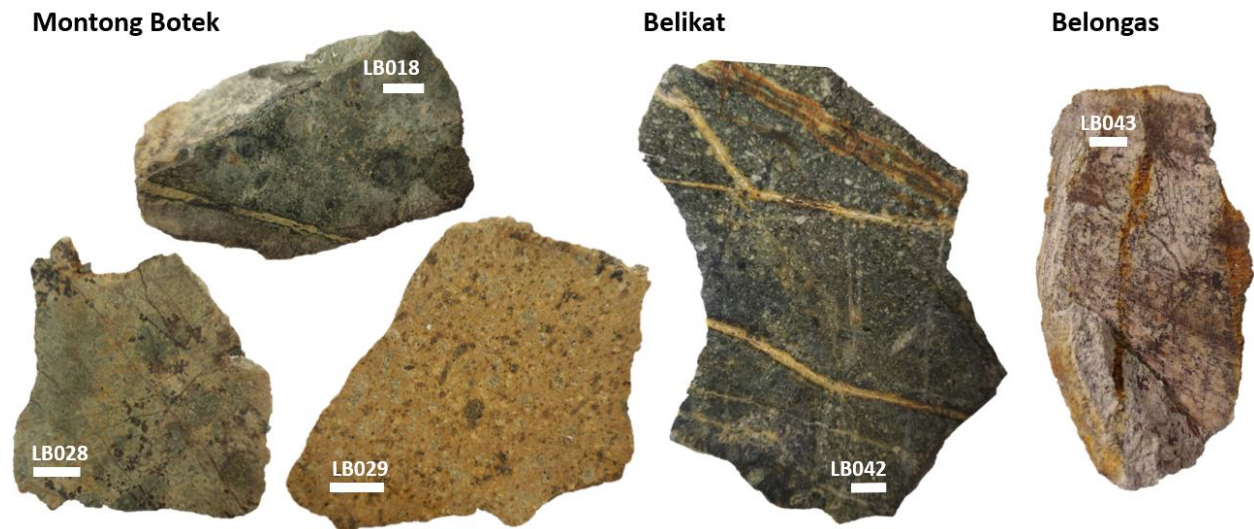


Figure 4.33: Photographs of samples from Montong Botek, Belikat, and Belongas prospects, Selodong, Lombok. White scale bar is 1 cm.

4.2.3 Other Lombok prospects

Eleven samples were collected from surface from four Lombok prospects to the northeast of Brambang and Selodong: Plambik, Songkang, Lembar, and Kuta (Fig. 4.28). These areas have had no previous work done (i.e. sampling, mapping, drilling) and are included in the project on the basis of interesting lithologies, stockwork veining, and alteration. Sample information and brief descriptions for the four prospects are in Table 4.13 and sample photographs in Figure 4.34.

Plambik

The Plambik prospect is located within Southwest Praya, Central Lombok district. The four samples are located between 750 and 2,000 m apart. Three samples at Plambik are diorite porphyries, of which LBO27 has minor sericite-chlorite alteration, whereas LB030 and LB031 are relatively unaltered with plagioclase and pyroxene phenocrysts. Sample LB033 is an advanced argillic altered quartz diorite porphyry with significant porphyry quartz-vein stockwork.

Songkang

The Songkang prospect is located within Southwest Praya, Central Lombok district approximately 7 km south of Plambik. All three samples at Songkang are quartz diorites with variable propylitic, sericite-chlorite, and advanced argillic alteration. Gusano texture is present within sample LB032.

Lembar

The Lembar prospect is located at the eastern end of the city of Lembar, West Lombok district, 9 km northwest of Plambik. The two samples at Lembar are propylitic-intermediate argillic altered quartz diorites.

Kuta

The Kuta prospect is located 1,500 m to the northeast of the town of Kuta, Central Lombok district, 20 km southeast of Plambik. The two samples at Kuta are propylitic-intermediate argillic diorite porphyries. Sample LB044 is cut by significant porphyry quartz-vein stockwork.

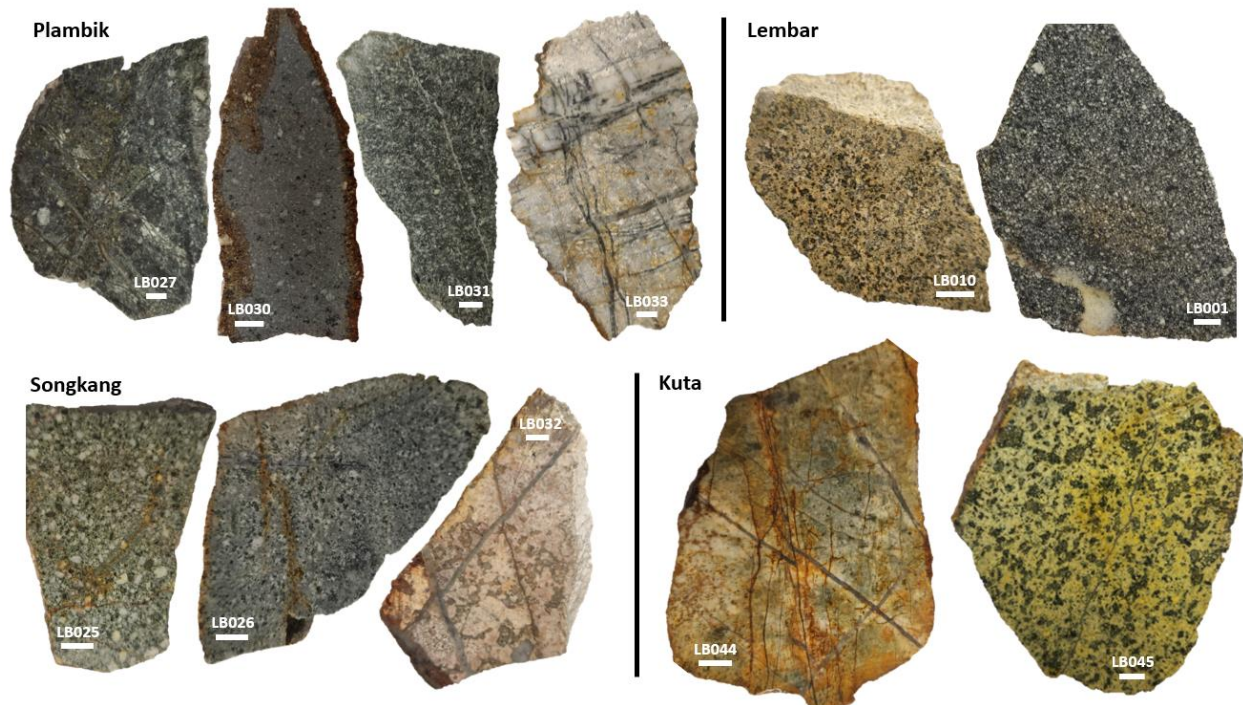


Figure 4.34: Photographs of samples from Plambik, Songkang, Lembar, and Kuta prospects, Lombok. White scale bar is 1 cm.

Table 4.13: Descriptions of samples from Plambik, Songkang, Lembar, and Kuta prospects, Lombok.

| Sample | Sample Type | Rock Type | Alteration | Timing | Brief Description |
|-----------------|-------------|-------------------------|-----------------------|--------|---|
| Plambik | | | | | |
| LB027 | Surface | Diorite porphyry | Sericite-chlorite | Syn- | Porphyritic, minor plag phenos up to 10mm, most smaller. Gm mostly fg plag, altered to clays - ilt. 10%+ patchy chl within groundmass, relict hbl alt to chl. Patchy cb alt. diss mag. |
| LB030 | Surface | Diorite porphyry | Unaltered | Syn- | Porphyritic, plag phenos up to ~5mm, rare. Fg gm (<0.05mm), interlocking plag laths with mag. Minor OPX phenos, up to 2mm. Patches of srp relict mafic phenos, minor chl. |
| LB031 | Surface | Diorite porphyry | Unaltered | Syn- | Porphyritic, euhedral plag lath phenos up to 3mm, opx and lesser cpx phenos and fg in gm. Gm dominated by plag laths and mag, ~0.25mm. diss mag. |
| LB033 | Surface | Quartz diorite porphyry | Advanced argillic | Syn- | Porphyritic, alt diffuse plag phenos, lesser ~2-5mm qtz phenos. Qtz dominated fg gm. Plag phenos altered to clay - kln-prl. Minor hem/gth blebs within gm. Intense stockwork veining - 21 vein/m (0.1-0.3cm). |
| Songkang | | | | | |
| LB025 | Surface | Quartz diorite porphyry | Propylitic | Syn- | Porphyritic, euhedral plag lath phenos up to 8mm, gm ~0.25mm qtz-plag, minor ilt alt. ~2% finely diss ep, patches of clay, chl and cb within gm. |
| LB026 | Surface | Quartz diorite porphyry | Sericite-chlorite | Syn- | Porphyritic, 1-4mm qtz phenos, lesser plag, minor ilt alt. Diffuse/patchy fg qtz dominated gm, cb-chl-ilt alt, tr ep. |
| LB032 | Surface | Quartz diorite | Advanced argillic | Syn- | Gusano texture. Clusters of bladed alu (~1-2mm) within clusters of vfg qtz <0.025mm. Qtz stockworks, 14 vein/m (0.1-0.5cm), minor Fe-oxides - hem. |
| Lembar | | | | | |
| LB001 | Surface | Quartz diorite | Unaltered | Syn- | Equigranular, ~0.5mm. Interlocking plag laths with interstitial fg qtz blebs. ~1% diss ep, minor act, chl, hbl. diss mag. |
| LB010 | Surface | Quartz diorite porphyry | Intermediate argillic | Syn- | Porphyritic, relict plag laths up to 8mm, altered to clays (ilt-sme, minor kln). Fg qtz and lesser plag gm, <0.02mm, patchy diffuse clay clusters throughout. All sulfides oxidized, minor gth. |
| Kuta | | | | | |
| LB044 | Surface | Diorite porphyry | Intermediate argillic | Syn- | Porphyritic, relict plag up to 4mm, lesser anhedral qtz phenos. Dominant fg <0.05mm qtz gm. Several oxide and qtz veinlets cut sample, some with clays (kln). Minor ilt-prl, alt variable throughout. |
| LB045 | Surface | Diorite porphyry | Propylitic | Syn- | Porphyritic, relict tabular plag phenos up to 4mm alt to ilt-sme. Irregular clay patches throughout gm. Clays and chl alt after mafic phenos. Sulfides oxidized, qtz dominant fg gm (<0.05mm), lesser plag. |

4.3 – Sumbawa

Included in this study are six deposits and prospects within Sumbawa. These include the Batu Hijau deposit and two satellite prospects to the northwest at Naga Emas and Nangka, as well as the Elang deposit and two satellite prospects to the northeast at Gerbang and Sepekat, approximately 50 km east of Batu Hijau (Fig. 4.35).



Figure 4.35: Map of sample locations within south-west Sumbawa, indicated by stars. Satellite image obtained from Google Earth (Image © TerraMetrics, 2023).

4.3.1 – Batu Hijau district

Eleven samples were collected from drill hole and surface at the Batu Hijau deposit and Naga Emas and Nangka prospects to the northwest (Fig. 4.36). The Batu Hijau district contains several porphyry centres that lie along a 12km belt, localized along the margins of a number of pre-mineralization quartz diorite plutons (Garwin, 2000). West Nangka is a poorly endowed quartz diorite porphyry prospect, typically grading <0.1% Cu and 0.1 g/t

Au (Garwin, 2000). Naga Emas is a recently discovered and poorly understood porphyry prospect, located adjacent to the southern margin of the Santong diatreme.

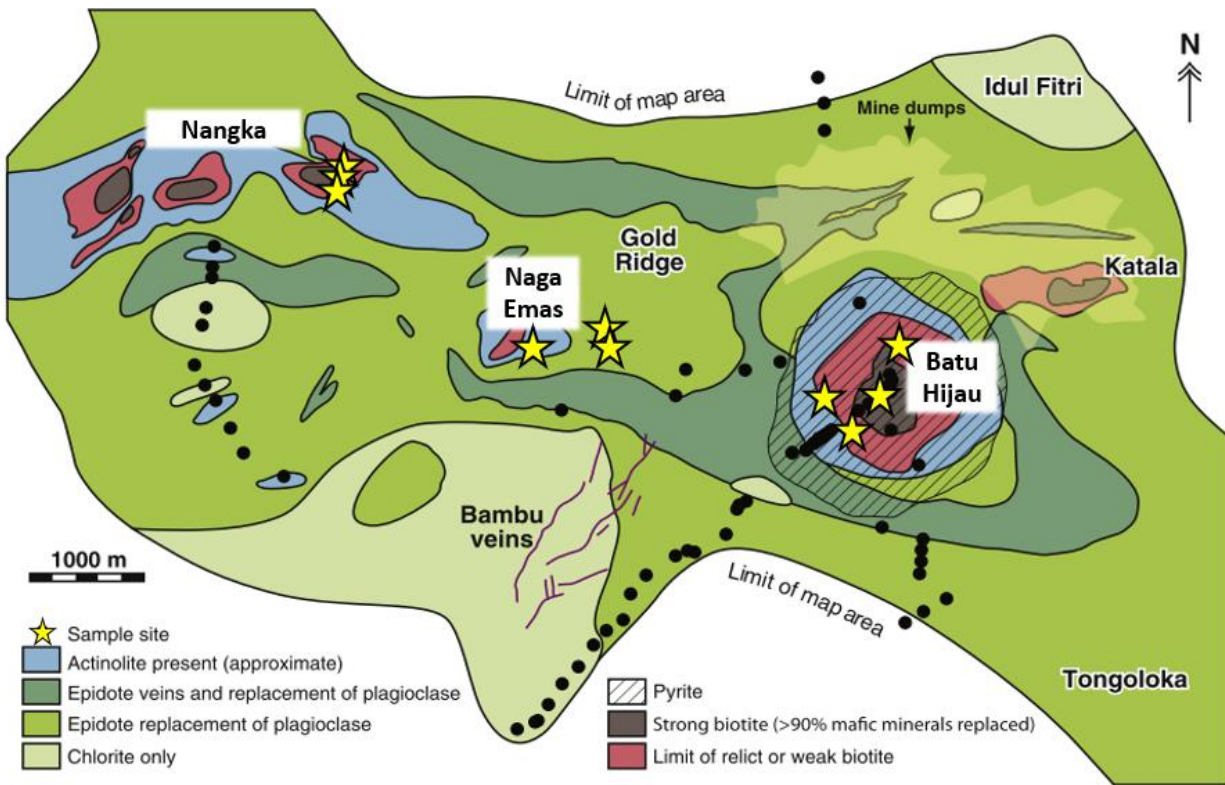


Figure 4.36: Simplified alteration map of the Batu Hijau district with sample locations indicated with yellow stars. Modified after Wilkinson et al. (2015) and Garwin (2000).

Batu Hijau

Four samples were collected from the Batu Hijau deposit: three samples from the open pit walls (Quartz diorite porphyry, Intermediate tonalite, Young tonalite), and one sample from drillcore (hole SBD731, Intermediate tonalite; Fig. 4.37). All samples are syn- (early- to late-) mineralization. Sample information and brief descriptions for the Batu Hijau samples are in Table 4.14 and sample photographs in Figure 4.38.

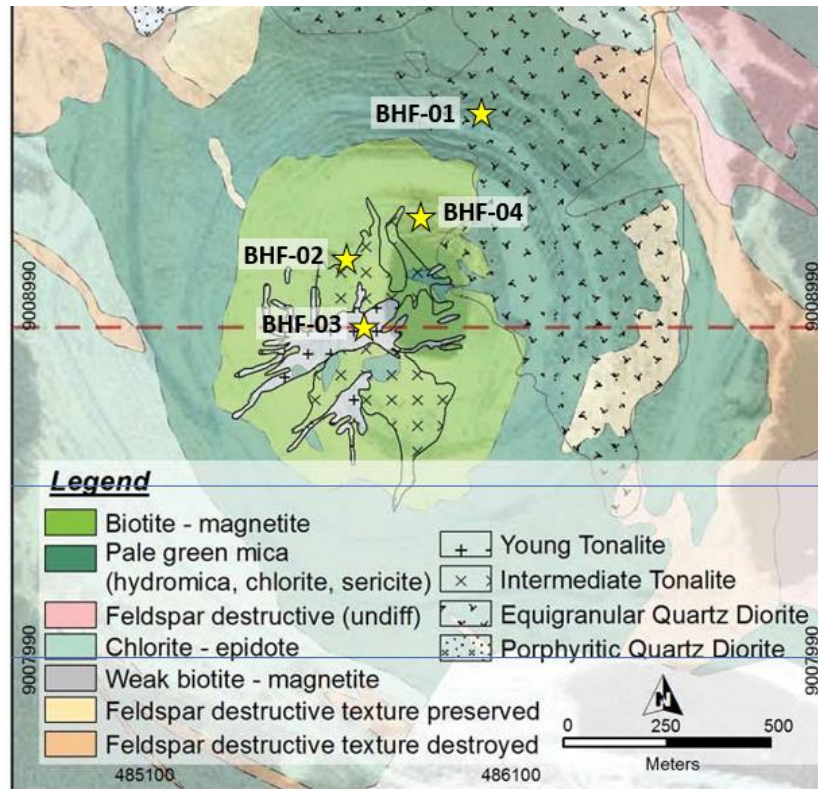


Figure 4.37: Geologic and alteration map of the Batu Hijau deposit with sample locations indicated with yellow stars. Samples BHF-01 – 03 are from the pit wall, sample BHF-04 is from drill hole SBD731, 873m) Modified after Maryono et al. (2018).

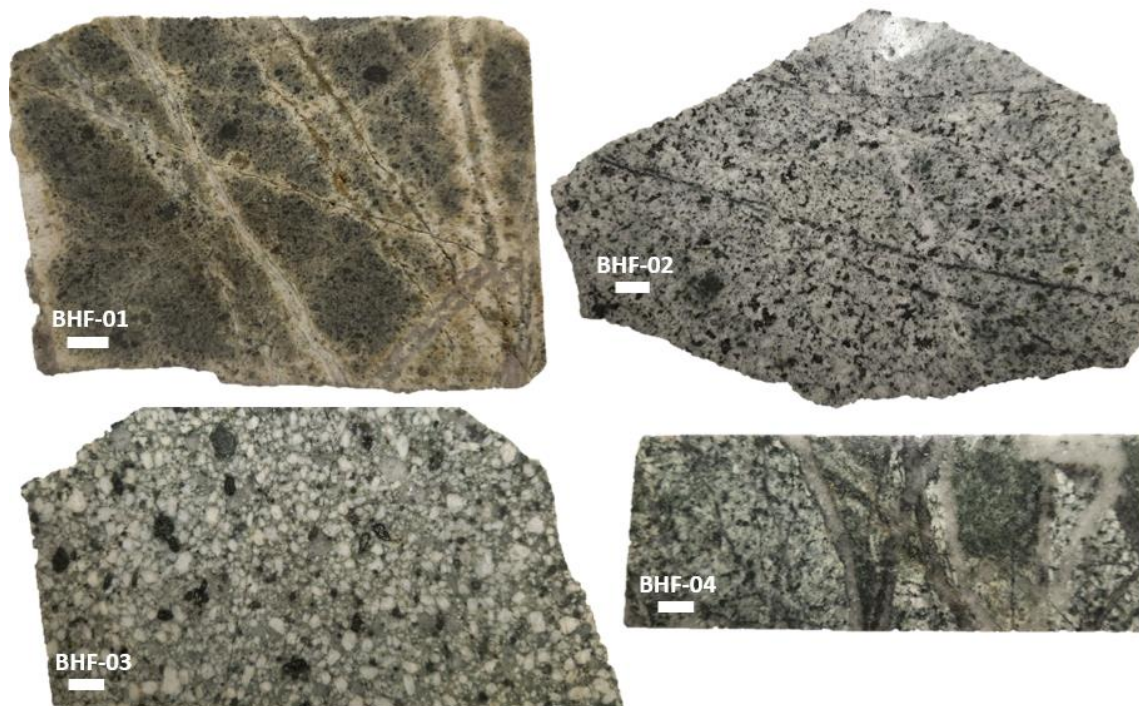


Figure 4.38: Photographs of samples from Batu Hijau, Sumbawa. White scale bar is 1 cm.

Table 4.14: Descriptions of samples from Batu Hijau, Sumbawa.

| Sample | Sample Type | Drillcore ID | Rock Type | Alteration | Timing | Brief Description |
|--------|-------------|--------------|-------------------------|-------------------|-------------|--|
| BHF-01 | Surface | | Quartz diorite porphyry | Sericite-chlorite | Syn-(early) | Porphyritic, tabular 2-4mm minor ilt alt plag phenos within equigranular ~0.25mm qtz dominated gm. Mafic phenos and clusters of gm completely replaced to ilt-sme. Shreddy fg chl clusters throughout. ilt-sme bands within fractures and qtz-vein selvages. |
| BHF-02 | Surface | | Intermediate Tonalite | Sericite-chlorite | Syn- | Sub-porphyritic, with interlocking plag phenos up to 3mm. Clusters of fg shreddy bt and chl within gm. Minor ~1-2% ep and czo. Clusters of fg qtz interstitial to larger plag phenos clusters. Minor ilt-sme. Tr. cb. diss mag. |
| BHF-03 | Surface | | Young Tonalite | Sericite-chlorite | Syn-(late) | Porphyritic, up to 1cm tabular plag and anhedral qtz phenos set within fg (aphanitic, <0.1mm) qtz dominated gm. Minor ep/czo. Shreddy chl and patchy ilt within gm. Some shreddy secondary bt clusters, enveloping some plag phenos. Minor cb. |
| BHF-04 | Drill hole | SBD731, 873m | Intermediate Tonalite | Sericite-chlorite | Syn- | Sub-porphyritic, with interlocking plag phenos up to 2mm, st alt to ilt-sme. Clusters of fg shreddy bt and chl within fg qtz dominated gm. Minor cb. |

Naga Emas and Nangka

The Naga Emas and Nangka prospects are approximately 3 and 6 km to the northwest of Batu Hijau, respectively (Fig. 4.36). Samples at both prospects consist of sericite-chlorite altered diorites to quartz diorites. Sample information and brief descriptions for the Batu Hijau samples are in Table 4.15 and sample photographs in Figure 4.39.

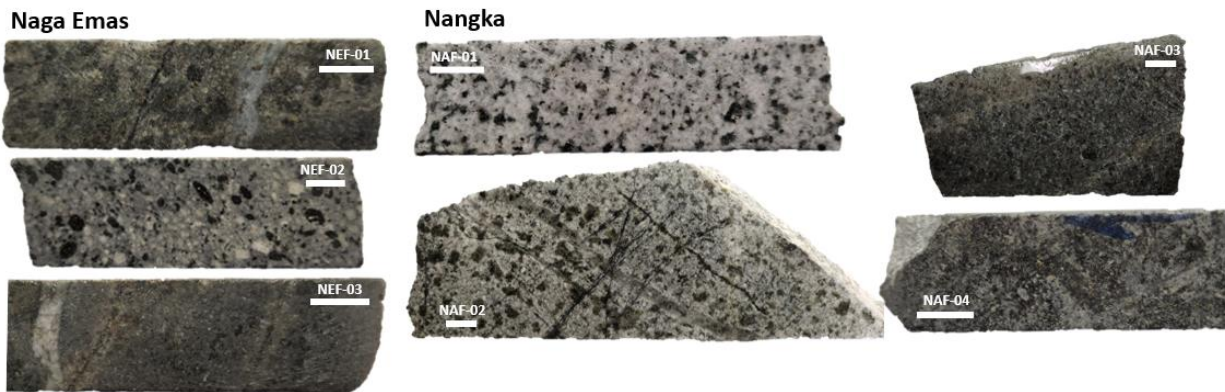


Figure 4.39: Photographs of samples from Naga Emas and Nangka prospects. White scale bar is 1 cm.

Table 4.15: Descriptions of samples from Naga Emas and Nangka prospects, Batu Hijau district, Sumbawa.

| Sample | Sample Type | Drillcore ID | Rock Type | Alteration | Brief Description |
|------------------|-------------|-----------------|------------------------------------|-------------------|---|
| Naga Emas | | | | | |
| NEF-01 | Drill hole | SGD-010, 453m | Diorite | Sericite-chlorite | Sub-porphyritic, patchy ilt-sme/prl and chl in relict plag and diss throughout fg qtz dominated gm. Tr. alu. |
| NEF-02 | Drill hole | SGD-008, 260m | Hornblende quartz diorite porphyry | Unaltered | Porphyritic, euhedral ~1-5mm hbl and 1-2mm plag (lesser qtz) phenos. Tabular 1-2mm bt phenos completely replaced to chl-cb-ilt. Qtz dominated gm vfg (<0.05mm). Plag unaltered. |
| NEF-03 | Drill hole | SGD-010, 548.2m | Diorite | Sericite-chlorite | Sub-porphyritic, rare anhedral 1-2mm tabular plag phenos within fg qtz dominated gm. ~5% <0.5mm blocky anh throughout gm, patchy chl. <0.5mm anhedral fg opx throughout. |
| Nangka | | | | | |
| NAF-01 | Drill hole | BND-002, 660m | Quartz diorite | Propylitic | Equigranular, ~1-2mm interlocking qtz and tabular plag. Chl after bt, often in 1-2mm clusters. Tr ep, anh. |
| NAF-02 | Drill hole | BND-002, 265m | Quartz diorite porphyry | Sericite-chlorite | Porphyritic, ~2mm plag set within fg qtz dominated gm. ~2mm patches of prl/ilt-sme. Shreddy chl in clusters within gm. Numerous hairline mag/cb veinlets. |
| NAF-03 | Drill hole | BND-002, 390m | Quartz diorite | Sericite-chlorite | Sub-porphyritic, 1-2mm blocky plag within fg qtz, bt, ms, chl, and lesser ilt-prl gm. Tr ep, anh, diss mag. |
| NAF-04 | Drill hole | BND-002, 540m | Diorite | Sericite-chlorite | Equigranular, ~1-3mm interlocking tabular plag with qtz, minor chl-bt often in patches. Minor ilt alt, tr. prl. |

4.3.2 – Elang District

Thirteen samples were collected from drill core at the Elang deposit and Gerbang and Sepekat prospects to the northeast (Fig. 4.40). At Elang, several Cu-Au mineralized centres are aligned along a 7 km NNE-trending structural corridor (Maryono et al., 2005). Gerbang samples are within the Elang deposit 0.3% Cu ore shell, and the Sepekat prospect is 2 km to the northeast of Gerbang.

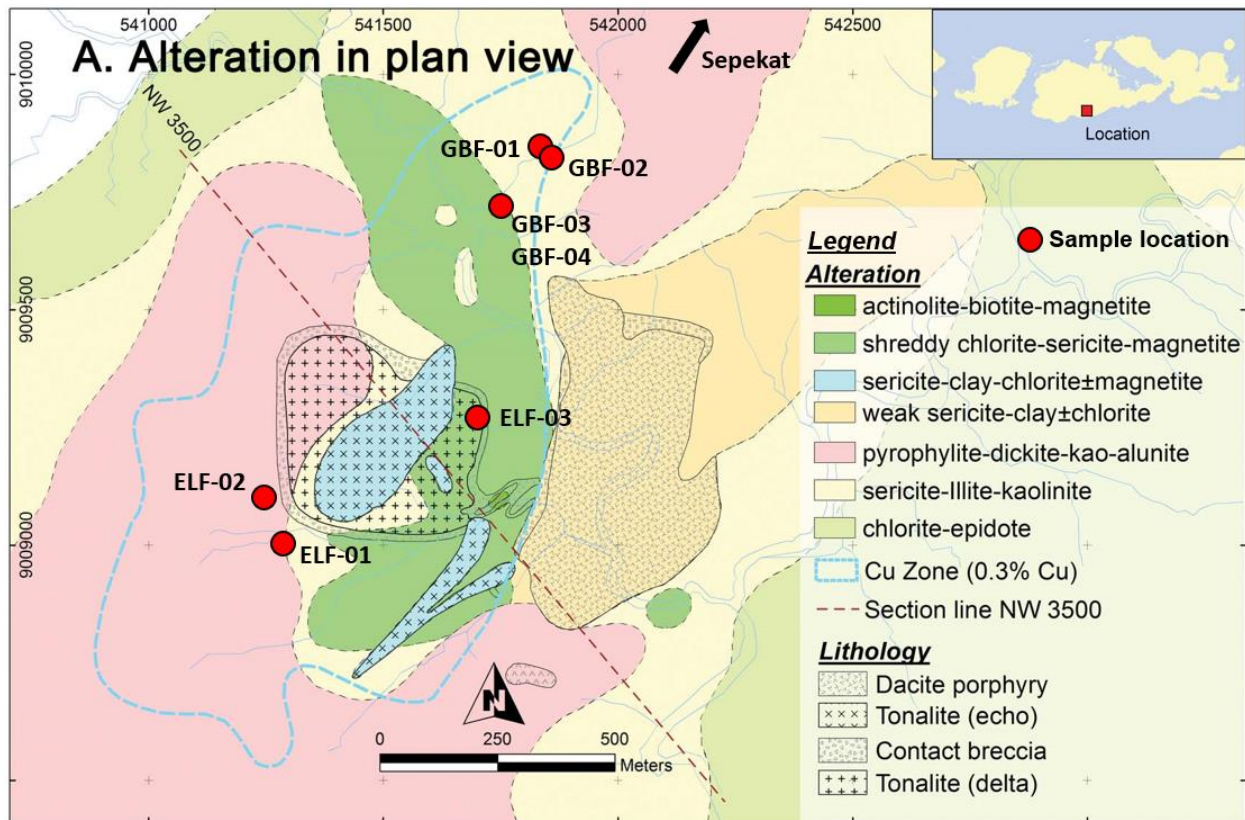


Figure 4.40: Alteration and geologic map of Elang deposit. Red circles indicate location of drill-hole collars. Sepekat prospect is 2 km to the northeast of Gerbang samples. Modified after Maryono et al. (2018).

A series of nested tonalite intrusions comprise the Elang deposit, with the Charlie and Delta tonalites (samples ELF-01, ELF-02) considered to be causative intrusions associated with Cu-Au mineralization, with a low-grade core of later Echo tonalite (ELF-03; Maryono et al., 2005, 2018). The three samples are advanced argillic altered, with moderate amounts of pyrophyllite \pm kaolinite.

Four samples (GBF-01 to GBF-04) were collected from drillcore at the Gerbang prospect to the northeast of Elang (Fig. 4.40). They consist of intermediate argillic and advanced argillic tonalites to quartz diorites, often with texturally destructive kaolinite-dickite \pm pyrophyllite alteration.

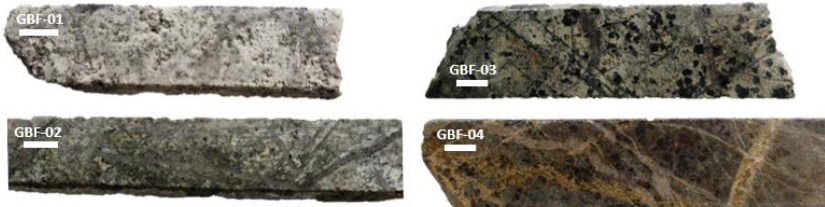
Six samples were collected from drillcore at the Sepekat prospect (SPF-01 to SPF-06), 2 km to the northeast of Gerbang. Samples are dominantly diorite to quartz diorite, with weaker (in comparison to Elang and Gerbang) sericite-chlorite alteration. One sample, SPF-06 is a mineralized potassic-altered clast-supported intrusive breccia with strong secondary shreddy biotite alteration and consists of clasts of diorite to quartz diorite with volcanic rock fragments.

Sample information and brief descriptions for the Elang district samples are in Table 4.16 and sample photographs in Figure 4.41.

Elang



Gerbang



Sepekat



Figure 4.41: Photographs of samples from Elang, Gerbang, and Sepekat. White scale bar is 1 cm.

Table 4.16: Description of samples from Elang, Gerbang, and Sepekat, Elang district, Sumbawa.

| Sample | Sample Type | Drillcore ID | Rock Type | Alteration | Timing | Brief Description |
|----------------|-------------|------------------|-------------------------|-----------------------|------------|---|
| Elang | | | | | | |
| ELF-01 | Drill core | DLD-500, 1157m | Delta Tonalite | Advanced argillic | Syn- | Equigranular, ~1-2mm plag and qtz with minor interstitial fg qtz. Mod ilt alt on plag, minor bt and chl within gm. Minor anh, diss and veinlet. Minor patches of prl, lesser kln and ilt. |
| ELF-02 | Drill core | DLD-500, 1355.7m | Charlie Tonalite | Advanced argillic | Syn- | Sub-porphyritic, minor ~1mm qtz phenos, all others completely alt to ilt. Gm ~0.25mm, equigranular, diss anh (~10%). Minor patches of prl-kln within gm. Minor chl, cb. |
| ELF-03 | Drill core | DLD-452, 101m | Echo Tonalite | Advanced argillic | Syn-(late) | Sub-porphyritic, anhedral qtz and tabular plag up to 4mm. Fg (<0.25mm) qtz gm interstitial to larger grains. Patchy/shreddy fg chl, minor ep, czo, ilt. |
| Gerbang | | | | | | |
| GBF-01 | Drill core | DLD-206, 169m | Delta Tonalite | Advanced argillic | Syn- | Destructive AA alt, original textures gone, composed of patches of dck-alu-prl-kln replacing both phenos and gm. diss mag. |
| GBF-02 | Drill core | DLD-206, 301.5m | Charlie Tonalite | Intermediate argillic | Syn- | Destructive IA alt, fg qtz groundmass (<0.2mm) intermingled with clays - ilt-sme, lesser prl dominate sample and replaced plag and gm. Minor shreddy chl. diss mag. |
| GBF-03 | Drill core | DLD-139, 177.5m | Quartz diorite | Intermediate argillic | Syn- | Fg qtz gm (<0.2mm), with relict phenos and intense clay alt. Clusters of chl and py-mag, with ilt-sme, prl and cb. Lesser kln. |
| GBF-04 | Drill core | DLD-139, 193.6m | Quartz diorite porphyry | Intermediate argillic | Syn- | Phenos up to 3mm and gm completely replaced by clay. Patchy cb throughout, minor chl in fractures, some larger 1-2mm shreddy chl grains. Tr ep, minor vfg anhedral qtz gm. |
| Sepekat | | | | | | |
| SPF-01 | Drill core | DKD-016, 261.1m | Quartz diorite | Sericite-chlorite | | Dominantly fg qtz gm (<0.2mm), equigranular. Relict patchy opx, mostly replaced by ilt-sme-cb-anh. Minor shreddy chl, cb. |
| SPF-02 | Drill core | DKD-016, 458m | Diorite | Sericite-chlorite | | Sub-porphyritic, 1-2mm plag and actinolite within fg (<0.25mm) qtz gm. Minor blocky opx, minor shreddy bt/chl. Minor anh, patchy ilt alt within gm. |
| SPF-03 | Drill core | DKD-011, 148m | Quartz diorite | Unaltered | | 1-2mm, equigranular, mostly interlocking plag grains with lesser qtz, opx, actinolite. Wk ilt alt on plag. Minor chl. Tr ep, anh, hbl. |
| SPF-04 | Drill core | DKD-016, 523m | Quartz diorite | Unaltered | | Sub-porphyritic, 1-2mm blocky plag phenos within fg (<0.25mm) qtz-plag gm. diss fg bt and chl throughout, tr. Actinolite, anh. |
| SPF-05 | Drill core | DKD-011, 22m | Quartz diorite | Sericite-chlorite | | Sub-porphyritic, dominantly varying sized interlocking plag (~0.5-4mm), with lesser qtz. Oxidized, lm and hem diss and within fractures. Chl after bt laths. Pockets of clays - minor prl with ilt. diss mag. |
| SPF-06 | Drill core | DKD-016, 559m | Intrusive breccia | Potassic | | Porphyritic, 2-4mm euhedral plag phenos (minor qtz) within vfg (<0.1mm) qtz-plag gm. Patchy clusters of vfg shreddy bt within gm (~15%). Wk ilt alt of plag, tr clay minerals kln-prl. Minor chl. diss mag. |

Chapter 5: Results

5.1 – Whole-rock geochemistry

Ninety-seven samples from the eastern Sunda arc, Indonesia were analysed for whole-rock major and trace element geochemistry. Of these, 57 samples were from drillcore and 40 were from surface rock chips. Forty-five samples are from Central and East Java, 28 from Lombok, and 24 from Sumbawa (Fig. 5.1). Samples for whole rock geochemical analysis were taken from a larger rock sample, the remainder of which was retained for petrological work and mineral separation. All whole rock geochemistry samples were between 160 g and 790 g, with an average of approximately 430 g. A significant number of samples contained quartz veining or silica alteration which were not removed prior to analysis, and as a result SiO₂ contents should be treated with caution.

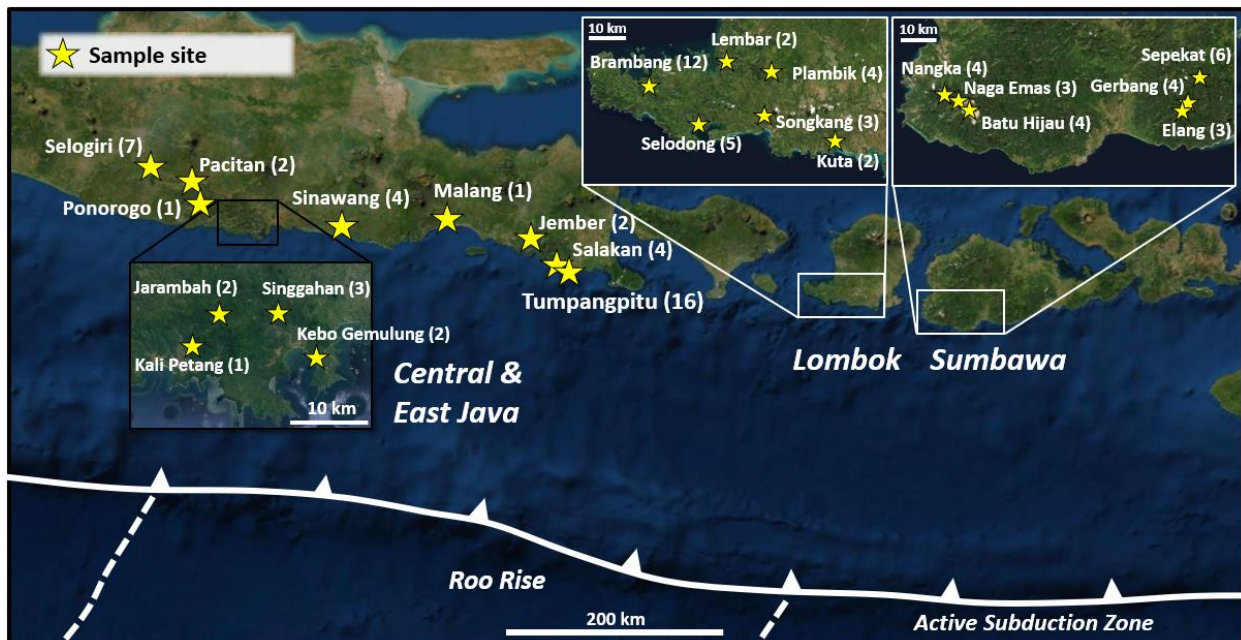


Figure 5.1: Sample sites within the eastern Sunda arc at central and east Java, Lombok, and Sumbawa. Satellite image obtained from Google Earth (Image © TerraMetrics, 2023).

The majority of samples display some form of hydrothermal alteration, and accordingly samples with loss on ignition (LOI) values of >3.5 wt. % are illustrated as open circles on all major and trace element diagrams in this chapter, and samples with LOI < 3.5 wt. % illustrated as closed circles. This was based on the screening suggestions of Loucks (2014) for porphyry-related magma discrimination diagrams. The loss on ignition values range from 0.63 to 18.5, with 54 of 97 samples having a LOI value > 3.5 wt. %. Samples LB005 (Permula, Lombok), LB009 (Central Brambang, Lombok), LB030 (Plambik, Lombok), LB031 (Plambik, Lombok), LB001 (Lembar, Lombok), NEF-02 (Naga Emas, Sumbawa), NAF-01 (Nangka, Sumbawa), SPF-03 (Sepekat, Sumbawa), SPF-04 (Sepekat, Sumbawa) are the only very weakly altered or unaltered samples in the study, based on petrographic observations. Sample PNG-01 (Ponorogo, East Java) has been excluded from this section due to it being a breccia and as such does not provide insight into the magmatic evolution of the study area. Site and lithological descriptions can be found in Chapter 4, and major, trace, and rare earth element concentrations of samples are provided in Appendix A.

Samples collected in this study throughout the eastern Sunda arc consist largely of porphyritic to equigranular diorites, quartz diorites, and tonalites, with only four volcanic samples (PCT-01 – dacite tuff, PCT-02 – andesite porphyry, MLG-02 – andesite porphyry, and LB022 – lapilli tuff). Silica contents for eastern Sunda arc rocks range from 48 to 77 weight percent, with a majority of samples containing between 55 and 70 weight percent SiO₂, excluding five outlier samples that have more quartz veining than host or contain significant silica alteration. The quartz veining and intensity of hydrothermal alteration mean that major element whole rock geochemistry is potentially unreliable, however the immobile trace elements should be more robust.

On primitive mantle normalized multielement plots, samples are characterized by strong negative Ti and Nb anomalies, with flat to weakly positive Zr and Hf anomalies (Fig. 5.2). A significant number of samples have positive to very positive Sr anomalies. The majority of samples are characterized by enriched LREE and flat HREE, with a relatively flat profile for volcanic samples (Fig. 5.2). Europium is variable with most samples displaying a flat to weakly positive or negative anomaly. Significantly altered samples with LOI > 3.5 wt. % (open circles) often display an erratic major element and REE signature, especially the Tujuh Bukit (Tumpangpitu and Salakan) samples, which have a high average LOI of 9.70 wt. %.

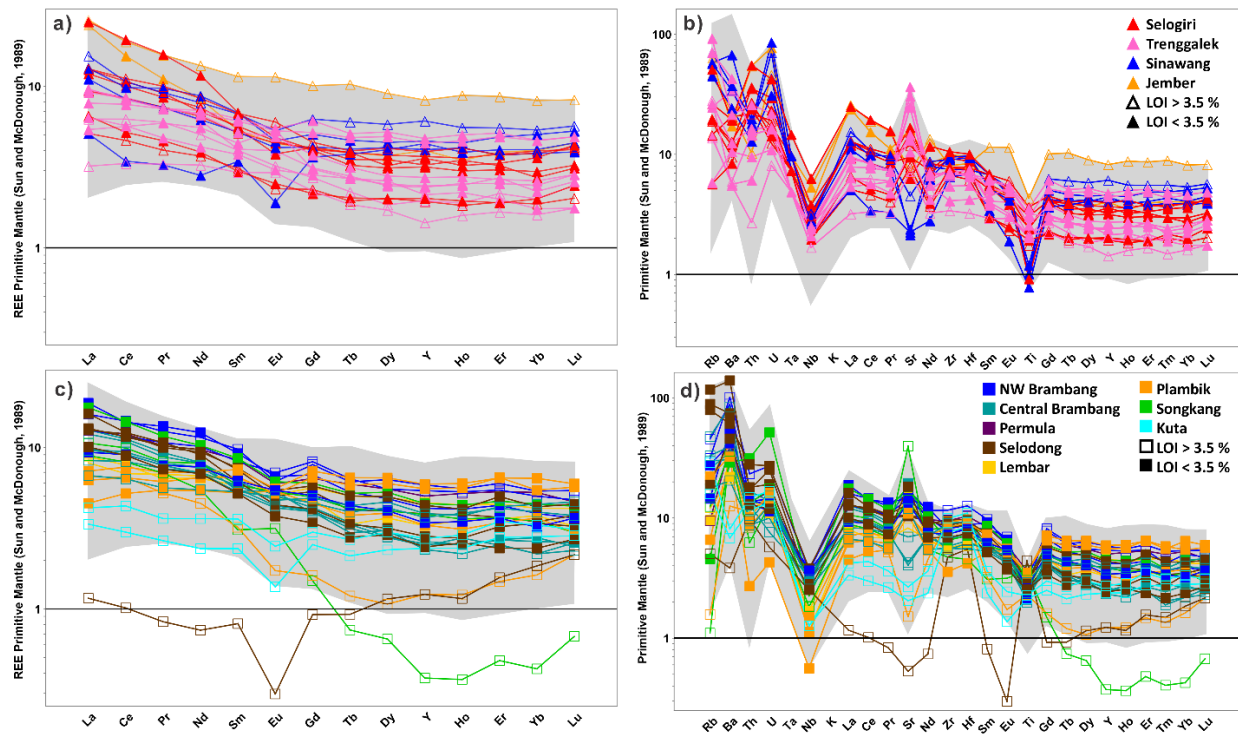


Figure 5.2: Chondrite-normalized REE plots (left) and multi-element plots (right) of samples from the eastern Sunda arc. (a-b) Java, (c-d) Lombok, (e-f) Sumbawa, (g-h) volcanics, (i-j) Tujuh Bukit district. Normalizing values from Sun and McDonough (1989). Grey region is area of all intrusive analyses with LOI < 3.5 wt. %.

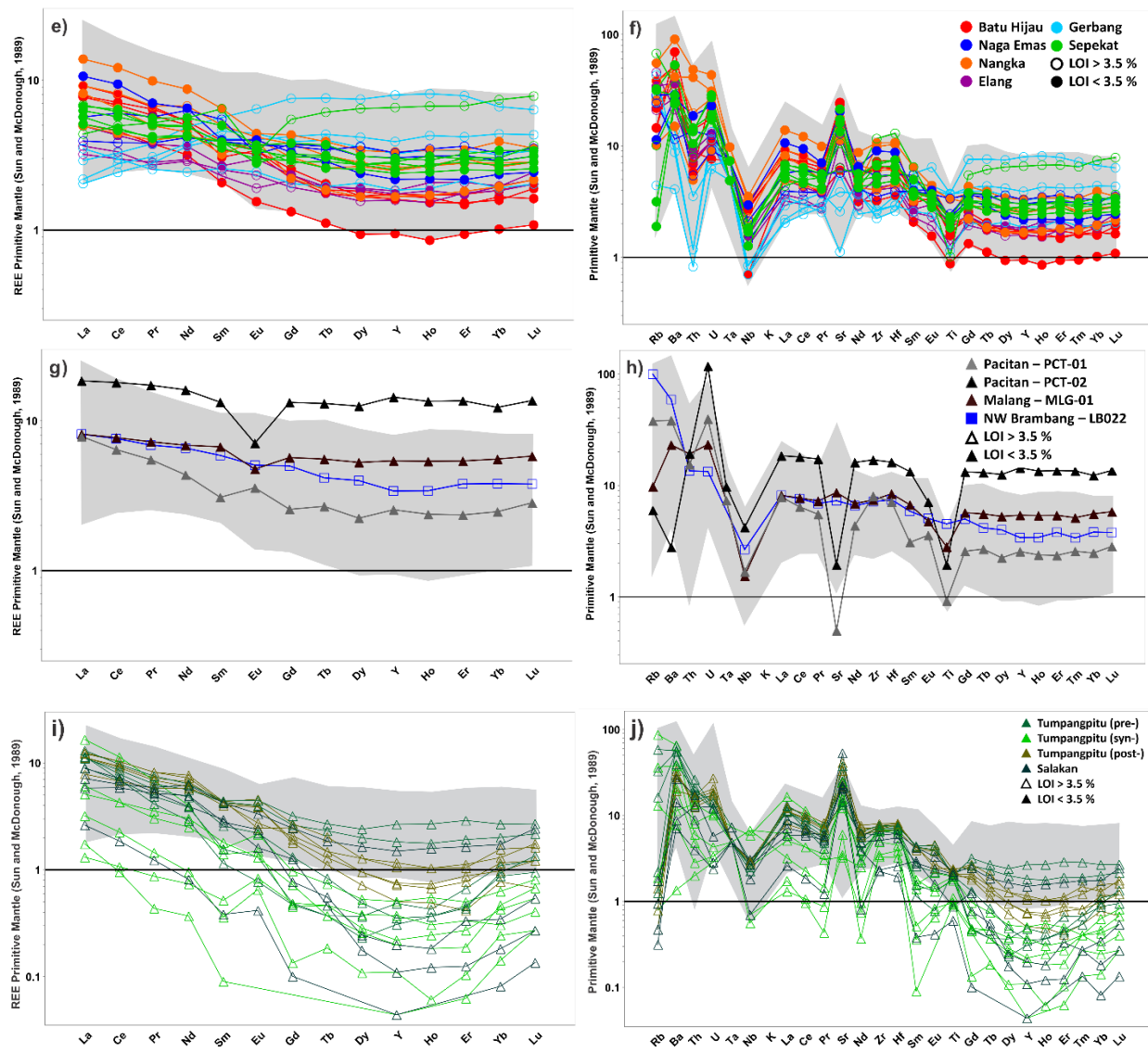


Figure 5.2: (Cont'd).

5.2 – Heavy mineral separates

All samples underwent heavy mineral separation to liberate zircon, apatite, titanite, and/or rutile grains from their host prior to LA-ICP-MS geochemical analysis. Ninety-three of 97 samples had recovery of sufficient grains of at least one of zircon, apatite, titanite, and/or rutile. The samples that failed to produce more than one grain at least 30 microns in size are SPF-01, SPF-02, SPF-04 (Sepekat), and SEF-03 (Selogiri). Seventy-seven samples

had zircon recovered, 54 with apatite, 26 with titanite, and 67 with rutile. Seventy-five samples had two or more of zircon, apatite, titanite, and/or rutile recovered. Grain analysis numbers from each sample are in Table 5.1. AMICS maps were generated for each sample and corresponding analysed grains indicated by number (Fig. 5.3). All annotated AMICS maps, modal percentages and grain abundances within samples are in Appendix E.

Table 5.1: Number of mineral grains analysed for each sample within the eastern Sunda arc.

| Sample ID | Rock Name | Alteration | Zircon | Apatite | Titanite | Rutile |
|---|-----------------------------|-----------------------|--------|---------|----------|--------|
| Selogiri (Randu Kuning), Java | | | | | | |
| SEF-01 | Hornblende diorite porphyry | Sericite-chlorite | 18 | 20 | 6 | |
| SEF-02 | Hornblende diorite | Sericite-chlorite | 3 | 15 | 13 | 3 |
| SEF-04 | Diorite | Sericite-chlorite | | 25 | 7 | |
| SLG-01 | Quartz diorite porphyry | Advanced argillic | 34 | 26 | | 19 |
| SLG-02 | Hornblende diorite porphyry | Intermediate argillic | 11 | 21 | 18 | |
| SLG-03 | Diorite | Propylitic | | 8 | 12 | |
| Jerambah, Trenggalek, Java | | | | | | |
| JER-01 | Quartz diorite porphyry | Propylitic | 22 | 20 | 18 | 19 |
| TR-01 | Quartz diorite porphyry | Sericite-chlorite | | 28 | | |
| Singgahan, Trenggalek, Java | | | | | | |
| SING-01 | Tonalite porphyry | Sericite-chlorite | 4 | 5 | 4 | 3 |
| SING-02 | Tonalite porphyry | Sericite-chlorite | 31 | 18 | 9 | 14 |
| TR-03 | Diorite | Sericite-chlorite | 2 | 7 | | |
| Kali Petang, Trenggalek, Java | | | | | | |
| TR-02 | Quartz diorite porphyry | Sericite-chlorite | 33 | 22 | 6 | |
| Kebo Gemulung, Trenggalek, Java | | | | | | |
| TR-05 | Quartz diorite porphyry | Sericite-chlorite | | 29 | | 5 |
| TR-04 | Diorite | Sericite-chlorite | 34 | 14 | 3 | 10 |
| Sinawang, Tulungagung, Java | | | | | | |
| SINA-01 | Quartz diorite porphyry | Advanced argillic | 27 | | 2 | 9 |
| SINA-02 | Quartz diorite porphyry | Advanced argillic | 30 | | | 8 |
| SINA-04 | Quartz diorite porphyry | Advanced argillic | 34 | | | 8 |
| SINA-05 | Quartz diorite porphyry | Advanced argillic | 40 | | | 3 |
| Malang, Java | | | | | | |
| MLG-01 | Andesite porphyry | Propylitic | | 27 | | |
| Jember, Java | | | | | | |
| JEM-01 | Tonalite | Sericite-chlorite | | 5 | | 28 |
| JEM-02 | Quartz diorite porphyry | Potassic | 16 | 7 | | 2 |
| Tujuh Bukit - Tumpangpitu (pre-), Java | | | | | | |
| UG012183 | Diorite porphyry | Advanced argillic | 6 | | | 29 |
| UG012191 | Diorite porphyry | Advanced argillic | 33 | | | 26 |
| UG012192 | Diorite porphyry | Advanced argillic | 11 | | | 13 |
| UG012194 | Diorite | Advanced argillic | 13 | | | 15 |
| UG012198 | Diorite porphyry | Advanced argillic | 42 | | | 30 |
| Tujuh Bukit - Tumpangpitu (syn-), Java | | | | | | |
| UG012185 | Tonalite | Advanced argillic | 26 | | | 15 |
| UG012188 | Tonalite | Advanced argillic | 27 | | | 32 |
| UG012189 | Tonalite | Advanced argillic | 12 | | | 21 |
| UG012190 | Tonalite | Advanced argillic | 32 | | | 32 |
| UG012196 | Tonalite porphyry | Advanced argillic | 23 | | | |
| UG012197 | Tonalite | Intermediate argillic | 25 | | | 10 |

Table 5.1: (Cont'd).

| Sample ID | Rock Name | Alteration | Zircon | Apatite | Titanite | Rutile |
|--|------------------------------------|-----------------------|--------|---------|----------|--------|
| Tujuh Bukit - Tumpangpitu (post-), Java | | | | | | |
| UG012184 | Diorite porphyry | Advanced argillic | 42 | | | 28 |
| UG012186 | Diorite porphyry | Advanced argillic | 21 | | | 24 |
| UG012187 | Diorite porphyry | Advanced argillic | 19 | | | 15 |
| UG012193 | Diorite porphyry | Advanced argillic | 20 | | | 18 |
| UG012195 | Diorite porphyry | Advanced argillic | 26 | | | 15 |
| Tujuh Bukit - Salakan, Java | | | | | | |
| UG012199 | Tonalite porphyry | Advanced argillic | 7 | | | 11 |
| UG012200 | Tonalite | Advanced argillic | 8 | | | 30 |
| UG012201 | Tonalite | Advanced argillic | | | | 10 |
| UG012202 | Tonalite porphyry | Advanced argillic | | | | 4 |
| NW Brambang, Lombok | | | | | | |
| LB011 | Diorite porphyry | Propylitic | 7 | 32 | | |
| LB014 | Tonalite | Sericite-chlorite | 30 | 40 | 22 | |
| LB015 | Tonalite porphyry | Sericite-chlorite | 7 | | | |
| LB022 | Lapilli tuff | Sericite-chlorite | | 15 | 2 | 8 |
| LB034 | Tonalite porphyry | Sericite-chlorite | 27 | 25 | | |
| Central Brambang, Lombok | | | | | | |
| LB009 | Quartz diorite porphyry | Unaltered | 22 | 14 | | |
| LB037 | Tonalite | Sericite-chlorite | | 39 | 41 | |
| LB002 | Tonalite porphyry | Sericite-chlorite | 46 | 14 | | 19 |
| LB024 | Tonalite porphyry | Sericite-chlorite | 38 | 8 | | |
| LB036 | Tonalite | Intermediate argillic | 20 | 6 | 2 | 17 |
| LB041 | Tonalite porphyry | Sericite-chlorite | 33 | | | 11 |
| Permula, Lombok | | | | | | |
| LB005 | Quartz diorite | Unaltered | 18 | | | 9 |
| Selodong - Montong Botek, Lombok | | | | | | |
| LB018 | Quartz diorite | Propylitic | 39 | 9 | 5 | 9 |
| LB028 | Quartz diorite | Propylitic | 30 | | | 9 |
| LB029 | Quartz diorite porphyry | Sericite-chlorite | 39 | 4 | 2 | 9 |
| Selodong - Belikat, Lombok | | | | | | |
| LB042 | Diorite | Propylitic | 33 | 20 | 2 | |
| Selodong - Belongas, Lombok | | | | | | |
| LB043 | Diorite | Advanced argillic | 10 | | | 17 |
| Lembar, Lombok | | | | | | |
| LB001 | Quartz diorite | Unaltered | | 20 | | |
| LB010 | Quartz diorite porphyry | Intermediate argillic | 6 | 28 | | |
| Plambik, Lombok | | | | | | |
| LB027 | Diorite porphyry | Sericite-chlorite | | 13 | | |
| LB030 | Diorite porphyry | Unaltered | | 17 | | |
| LB031 | Diorite porphyry | Unaltered | | 17 | | |
| LB033 | Quartz diorite porphyry | Advanced argillic | 10 | | | 20 |
| Songkang, Lombok | | | | | | |
| LB025 | Quartz diorite porphyry | Propylitic | 41 | 18 | 12 | 18 |
| LB026 | Quartz diorite porphyry | Sericite-chlorite | 25 | 35 | 7 | |
| LB032 | Quartz diorite | Advanced argillic | 15 | | | 18 |
| Kuta, Lombok | | | | | | |
| LB044 | Diorite porphyry | Intermediate argillic | 5 | | | 15 |
| LB045 | Diorite porphyry | Propylitic | 20 | | | 19 |
| Batu Hijau, Sumbawa | | | | | | |
| BHF-01 | Quartz diorite porphyry | Sericite-chlorite | 9 | 25 | | 35 |
| BHF-02 | Intermediate tonalite | Sericite-chlorite | 26 | 30 | 16 | 4 |
| BHF-03 | Young tonalite | Sericite-chlorite | 36 | 22 | | 12 |
| BHF-04 | Intermediate tonalite | Sericite-chlorite | 42 | 33 | | 20 |
| Naga Emas, Batu Hijau District, Sumbawa | | | | | | |
| NEF-01 | Diorite | Sericite-chlorite | 3 | 5 | | 23 |
| NEF-02 | Hornblende quartz diorite porphyry | Unaltered | 43 | 31 | 5 | 17 |
| NEF-03 | Diorite | Sericite-chlorite | 9 | 17 | | 16 |

Table 5.1: (Cont'd).

| Sample ID | Rock Name | Alteration | Zircon | Apatite | Titanite | Rutile |
|--|-------------------------|-----------------------|-------------|-------------|------------|-------------|
| <i>Nangka, Batu Hijau District, Sumbawa</i> | | | | | | |
| NAF-01 | Quartz diorite | Propylitic | 33 | 36 | 34 | 12 |
| NAF-02 | Quartz diorite porphyry | Sericite-chlorite | 46 | 25 | | 21 |
| NAF-03 | Quartz diorite | Sericite-chlorite | 35 | 28 | | 15 |
| <i>Elang, Sumbawa</i> | | | | | | |
| ELF-01 | Delta tonalite | Sericite-chlorite | 29 | 31 | 16 | 30 |
| ELF-02 | Charlie tonalite | Sericite-chlorite | 34 | 33 | | 32 |
| ELF-03 | Echo tonalite | Sericite-chlorite | 22 | 35 | 8 | 17 |
| <i>Gerbang, Elang District, Sumbawa</i> | | | | | | |
| GBF-01 | Delta tonalite | Advanced argillic | 16 | | | 31 |
| GBF-02 | Charlie tonalite | Intermediate argillic | | | | 30 |
| GBF-03 | Quartz diorite | Intermediate argillic | 6 | 9 | | 19 |
| GBF-04 | Quartz diorite porphyry | Intermediate argillic | 7 | 17 | | 8 |
| <i>Sepekat, Elang District, Sumbawa</i> | | | | | | |
| SPF-03 | Quartz diorite | Unaltered | 19 | | | |
| SPF-05 | Quartz diorite | Sericite-chlorite | 13 | 30 | 10 | 5 |
| SPF-06 | Intrusive breccia | Potassic | 19 | | | 29 |
| Total: | | | 1743 | 1124 | 282 | 1122 |

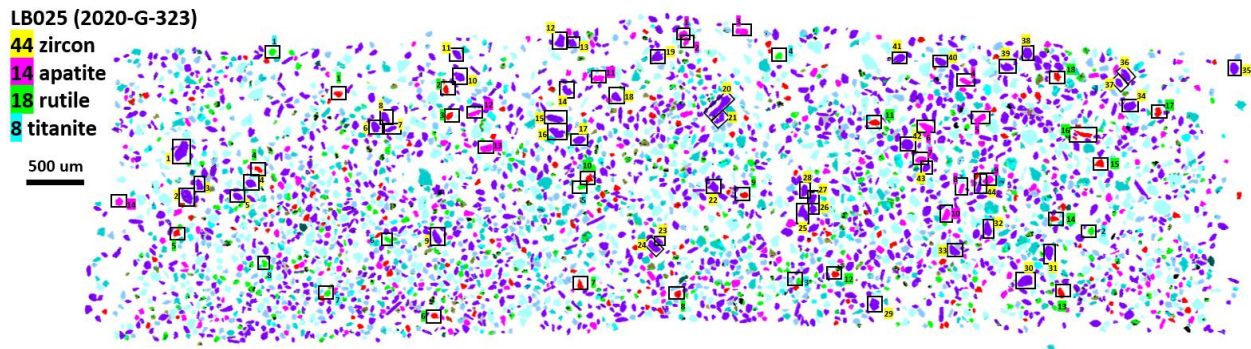


Figure 5.3: Example of AMICS map of sample mount LB025 (Songkang, Lombok). Analyzed grains are indicated by black boxes and analysis numbers indicated by coloured label. Numbers in top left correspond to total number of each phase analysed in sample. All annotated AMICS maps are in Appendix E.

5.3 – Uranium-lead geochronology

This section presents LA-ICP-MS U-Pb geochronological data for intrusive rocks from 28 porphyry Cu-Au prospects and deposits throughout the eastern Sunda arc.

Uranium-lead geochronology was attempted on zircon, apatite, titanite, and rutile from all samples, where present. Ten sites have previous age determinations: Selogiri (Maryono et al., 2018), Kasihan (JICA-JOGMEC, 2004), Singgahan (Arc Exploration, 2013), Jerambah (Arc

Exploration, 2013), Sinawang (Arc Exploration, 2013; Harrison, 2017), Tumpangpitu (Harrison, 2017), Brambang (Maryono et al., 2018), Selodong (Maryono et al., 2018), Batu Hijau (Garwin, 2000; Maryono et al., 2018), and Elang (Garwin, 2000; Maryono et al., 2018).

Table 5.2 summarizes analytical results for 28 samples from 16 sites with no previous geochronological data. New ages from the 483 zircon spots range from 27.0 to 2.73 Ma. Some of the zircons analysed contained only common Pb, with no radiogenic Pb detected and consequently are not included in age determinations. Full geochronological data for all 76 zircon samples are listed in Appendix B. Figure 5.4 presents examples of Concordia plots from the Elang deposit.

Table 5.2: Summary of new zircon weighted mean $^{206}\text{Pb}/^{238}\text{U}$ age determinations from intrusive rocks along the eastern Sunda arc. Ages listed are of the youngest population within the sample. * Sample type column denotes collected at surface or indication of drillhole and depth. ** Coordinates column consists of Easting (m), Northing (m), and UTM zones, respectively. Full data are provided in Appendix B.

| Sample ID | Sample type* | Coordinates** | Rock name | Age (Ma) | Error (2 σ) | # of analyses |
|------------------------------------|------------------|----------------------|-------------------------|----------|---------------------|---------------|
| Gemaharjo, Java | | | | | | |
| PCT-02 | Surface | 536968, 9109659, 49S | Andesite porphyry | 27.00 | 1.30 | 3 |
| Gandusari, Java | | | | | | |
| PNG-01 | Surface | 546107, 9097341, 49S | Breccia | 25.20 | 1.10 | 4 |
| Kebo Gemulung, Java | | | | | | |
| TR-04 | Surface | 581658, 9083063, 49S | Diorite | 23.23 | 0.32 | 25 |
| Kali Petang, Java | | | | | | |
| TR-02 | Surface | 566578, 9088021, 49S | Quartz diorite porphyry | 14.80 | 0.31 | 32 |
| Jember, Java | | | | | | |
| JEM-02 | Surface | 811043, 9074525, 49S | Quartz diorite porphyry | 6.94 | 0.11 | 16 |
| Tujuh Bukit - Salakan, Java | | | | | | |
| UG012199 | SND-12-001, 112m | | Tonalite porphyry | 9.59 | 0.68 | 5 |
| UG012200 | SND-12-001, 222m | | Tonalite | 8.49 | 0.25 | 8 |
| Permula, Lombok | | | | | | |
| LB005 | PDH-004, 399m | 382077, 9028601, 50S | Quartz diorite | 7.62 | 0.10 | 18 |
| Belikat, Selodong, Lombok | | | | | | |
| LB042 | Surface | 389266, 9020640, 50S | Diorite | 7.20 | 0.21 | 33 |
| Plambik, Lombok | | | | | | |
| LB033 | Surface | 409114, 9031897, 50S | Quartz diorite porphyry | 17.64 | 0.27 | 9 |

Table 5.2: (Cont'd).

| Sample ID | Sample type* | Coordinates** | Rock name | Age (Ma) | Error (2 σ) | # of analyses |
|---|-----------------|----------------------|---------------------------|--------------|---------------------|---------------|
| <i>Songkang, Lombok</i> | | | | | | |
| LB025 | Surface | 407704, 9025149, 50S | Quartz diorite porphyry | 8.23 | 0.16 | 45 |
| LB026 | Surface | 407674, 9025238, 50S | Quartz diorite porphyry | 7.99 | 0.30 | 19 |
| LB032 | Surface | 407819, 9025049, 50S | Quartz diorite | 10.65 | 0.41 | 12 |
| <i>Lembar, Lombok</i> | | | | | | |
| LB010 | Surface | 399485, 9033793, 50S | Quartz diorite porphyry | 17.37 | 0.63 | 3 |
| <i>Kuta, Lombok</i> | | | | | | |
| LB044 | Surface | 421851, 9017835, 50S | Diorite porphyry | 20.46 | 0.63 | 5 |
| LB045 | Surface | 421846, 9017831, 50S | Diorite porphyry | 20.47 | 0.40 | 18 |
| <i>Naga Emas, Batu Hijau District, Sumbawa</i> | | | | | | |
| NEF-01 | SGD-010, 453m | 483003, 9009541, 50S | Diorite | 3.39 | 0.68 | 3 |
| NEF-02 | SGD-008, 260m | 482349, 9009573, 50S | Hornblende quartz diorite | 5.05 | 0.12 | 42 |
| NEF-03 | SGD-010, 548m | 483006, 9009499, 50S | Diorite | 10.65 | 0.31 | 3 |
| <i>Nangka, Batu Hijau District, Sumbawa</i> | | | | | | |
| NAF-01 | BND-002, 660m | 480358, 9011256, 50S | Diorite | 5.55 | 0.09 | 22 |
| NAF-02 | BND-002, 265m | 480347, 9011046, 50S | Quartz diorite porphyry | 6.25 | 0.14 | 42 |
| NAF-03 | BND-002, 390m | 480349, 9011108, 50S | Quartz diorite | 6.46 | 0.14 | 35 |
| <i>Gerbang, Elang District, Sumbawa</i> | | | | | | |
| GBF-01 | DLD-206, 167m | 541873, 9009899, 50S | Delta Tonalite | 2.73 | 0.15 | 15 |
| GBF-03 | DLD-139, 177.5m | 541726, 9009764, 50S | Quartz diorite | 2.80 | 0.14 | 6 |
| GBF-04 | DLD-139, 193.6m | 541722, 9009770, 50S | Quartz diorite porphyry | 2.93 | 0.49 | 10 |
| <i>Sepekat, Elang District, Sumbawa</i> | | | | | | |
| SPF-03 | DKD-011, 148m | 542681, 9011557, 50S | Quartz diorite | 2.92 | 0.08 | 17 |
| SPF-05 | DKD-011, 22m | 542744, 9011555, 50S | Quartz diorite | 2.95 | 0.13 | 14 |
| SPF-06 | DKD-016, 559m | 543125, 9012526, 50S | Intrusive breccia | 2.91 | 0.10 | 19 |

Tables 5.3 and 5.4 summarize analytical results for eight titanite geochronology samples and 18 rutile geochronology samples. Ages from the 424 rutile spots and 153 titanite spots range from 33.2 to 2.55 Ma. A significant number of the rutile and titanite samples contain some or all analyses with high amounts of common Pb, with such ages not included here but data are provided in Appendix B. Geochronology was attempted on all apatite-bearing samples, however almost all analyses contain high amounts of common Pb, leading to imprecise ages and are not included in this chapter. Full geochronological data for all rutile, titanite, and apatite analyses are listed in Appendix B.

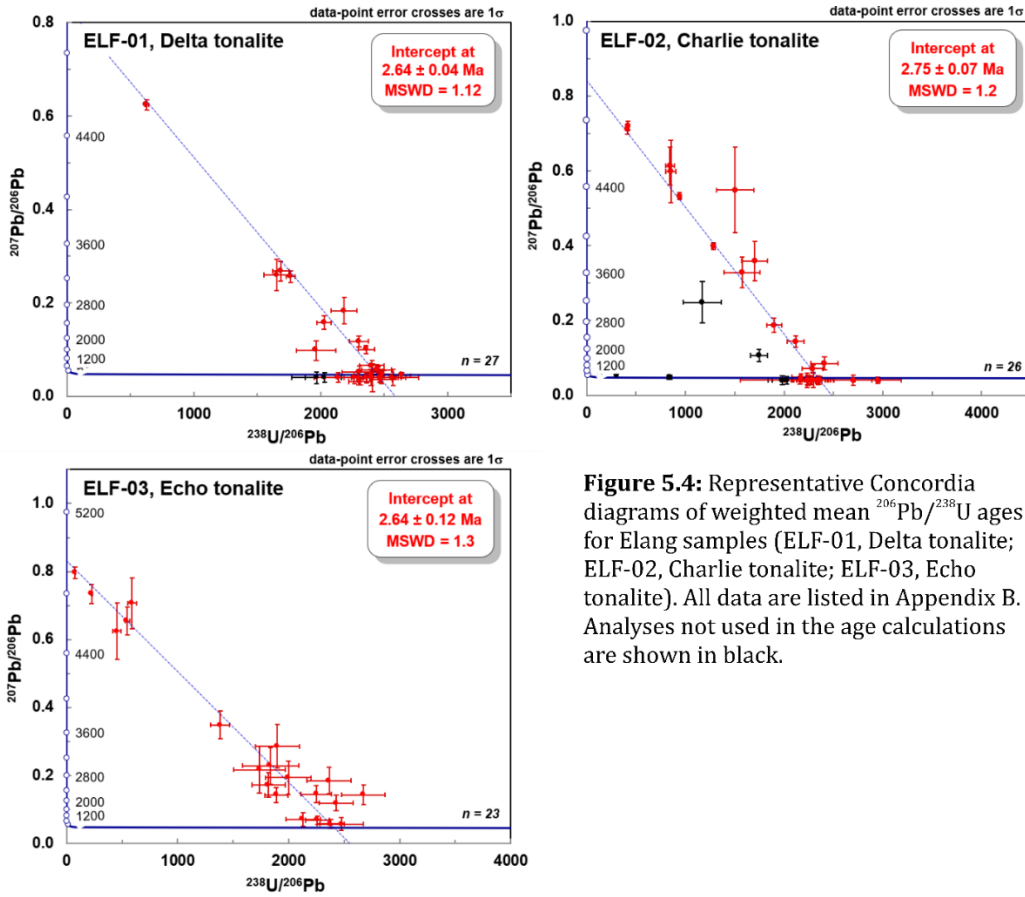


Figure 5.4: Representative Concordia diagrams of weighted mean $^{206}\text{Pb}/^{238}\text{U}$ ages for Elang samples (ELF-01, Delta tonalite; ELF-02, Charlie tonalite; ELF-03, Echo tonalite). All data are listed in Appendix B. Analyses not used in the age calculations are shown in black.

Table 5.3: Summary of titanite weighted mean $^{206}\text{Pb}/^{238}\text{U}$ age determinations from intrusive rocks along the eastern Sunda arc. * Sample type column denotes collected at surface or indication of drillhole and depth. ** Coordinates column consists of Easting (m), Northing (m), and UTM zone, respectively. Full data are provided in Appendix B.

| Sample ID | Sample type* | Coordinates** | Rock name | Age (Ma) | Error (2 σ) | # of analyses |
|--------------------------------------|---------------|----------------------|-------------------------|-------------|---------------------|---------------|
| Selogiri (Randu Kuning), Java | | | | | | |
| SLG-02 | Surface | 486332, 9138152, 49S | Hornblende diorite | 13.3 | 2.8 | 16 |
| SLG-03 | Surface | 486450, 9138298, 49S | Quartz diorite porphyry | 14.7 | 1.6 | 12 |
| SEF-01 | WDD08, 9.5m | 486174, 9138115, 49S | Diorite porphyry | 14.6 | 1.5 | 6 |
| NW Brambang, Lombok | | | | | | |
| LB014 | Surface | 379012, 9029222, 50S | Tonalite | 8.48 | 0.73 | 29 |
| Central Brambang, Lombok | | | | | | |
| LB037 | BDH-011, 229m | 379933, 9028382, 50S | Tonalite | 6.83 | 0.46 | 36 |
| Songkang, Lombok | | | | | | |
| LB026 | Surface | 407674, 9025238, 50S | Quartz diorite porphyry | 9.2 | 1.7 | 7 |
| Nangka, Sumbawa | | | | | | |
| NAF-01 | BND-002, 660m | 480358, 9011256, 50S | Diorite | 5.76 | 0.54 | 38 |
| Sepekat, Sumbawa | | | | | | |
| SPF-05 | DKD-011, 22m | 542744, 9011555, 50S | Quartz diorite | 8.9 | 5.7 | 9 |

Table 5.4: Summary of rutile weighted mean $^{206}\text{Pb}/^{238}\text{U}$ age determinations from intrusive rocks along the eastern Sunda arc. *Sample type column denotes collected at surface or indication of drillhole. **Coordinate column consists of Easting (m), Northing (m), and UTM zone. Full data are provided in Appendix B.

| Sample ID | Sample type* | Coordinates** | Rock name | Age (Ma) | Error (2 σ) | # of analyses |
|--|-------------------|----------------------|---------------------------|----------|---------------------|---------------|
| Selogiri (Randu Kuning), Java | | | | | | |
| SLG-01 | Surface | 486416, 9138208, 49S | Quartz diorite porphyry | 14.8 | 3.0 | 19 |
| Gemaharjo, Java | | | | | | |
| PCT-02 | Surface | 536968, 9109659, 49S | Andesite porphyry | 33.2 | 5.9 | 35 |
| Jember, Java | | | | | | |
| JEM-02 | Surface | 811043, 9074525, 49S | Quartz diorite porphyry | 7.36 | 0.63 | 3 |
| Tujuh Bukit - Tumpangpitu (pre-), Java | | | | | | |
| UG012198 | UHGZ-20-016, 636m | | Diorite porphyry | 5.4 | 1.6 | 30 |
| Tujuh Bukit - Tumpangpitu (syn-), Java | | | | | | |
| UG012190 | UHGZ-20-018, 322m | | Tonalite | 10.3 | 5.3 | 34 |
| Central Brambang, Lombok | | | | | | |
| LB002 | BDH-013, 441m | 379616, 9028323, 50S | Tonalite porphyry | 7.1 | 0.4 | 24 |
| LB036 | BDH-013, 627m | 379616, 9028323, 50S | Tonalite | 7.3 | 1.6 | 22 |
| LB041 | BDH-007, 443m | 379616, 9028318, 50S | Tonalite porphyry | 7.5 | 1.8 | 20 |
| Plambik, Lombok | | | | | | |
| LB033 | Surface | 409114, 9031897, 50S | Quartz diorite porphyry | 16.8 | 7.6 | 24 |
| Batu Hijau, Sumbawa | | | | | | |
| BHF-01 | Surface | 485966, 9009438, 50S | Quartz diorite porphyry | 3.45 | 0.23 | 34 |
| BHF-04 | SBD731, 874m | 485637, 9008991, 50S | Intermediate Tonalite | 4.33 | 0.76 | 22 |
| Naga Emas, Batu Hijau District, Sumbawa | | | | | | |
| NEF-02 | SGD-008, 260m | 482349, 9009573, 50S | Hornblende quartz diorite | 6.0 | 2.4 | 28 |
| Nangka, Batu Hijau District, Sumbawa | | | | | | |
| NAF-01 | BND-002, 660m | 480358, 9011256, 50S | Diorite | 5.0 | 1.1 | 12 |
| NAF-02 | BND-002, 265m | 480347, 9011046, 50S | Quartz diorite porphyry | 6.41 | 0.92 | 20 |
| NAF-03 | BND-002, 390m | 480349, 9011108, 50S | Quartz diorite | 5.7 | 1.3 | 14 |
| Elang | | | | | | |
| ELF-01 | DLD-500, 1157m | 541321, 9008979, 50S | Delta Tonalite | 2.95 | 0.93 | 28 |
| ELF-02 | DLD-500, 1356m | 541250, 9009097, 50S | Charlie Tonalite | 2.55 | 0.21 | 28 |
| Sepekat, Elang District, Sumbawa | | | | | | |
| SPF-06 | DKD-016, 559m | 543125, 9012526, 50S | Intrusive breccia | 2.84 | 0.23 | 27 |

Inherited zircons

Fifteen samples have inherited zircon grains, twelve of which have sufficient analysed grains to calculate an age on the older population (Fig. 5.5). After excluding analyses with high common Pb, three grains analysed from Java are Proterozoic to Paleozoic in age: Selogiri (SLG-02_3, 303 Ma; SLG-02_9, 608 Ma) and Tumpangpitu (UG012196_5, 308 Ma; Fig. 5.6).

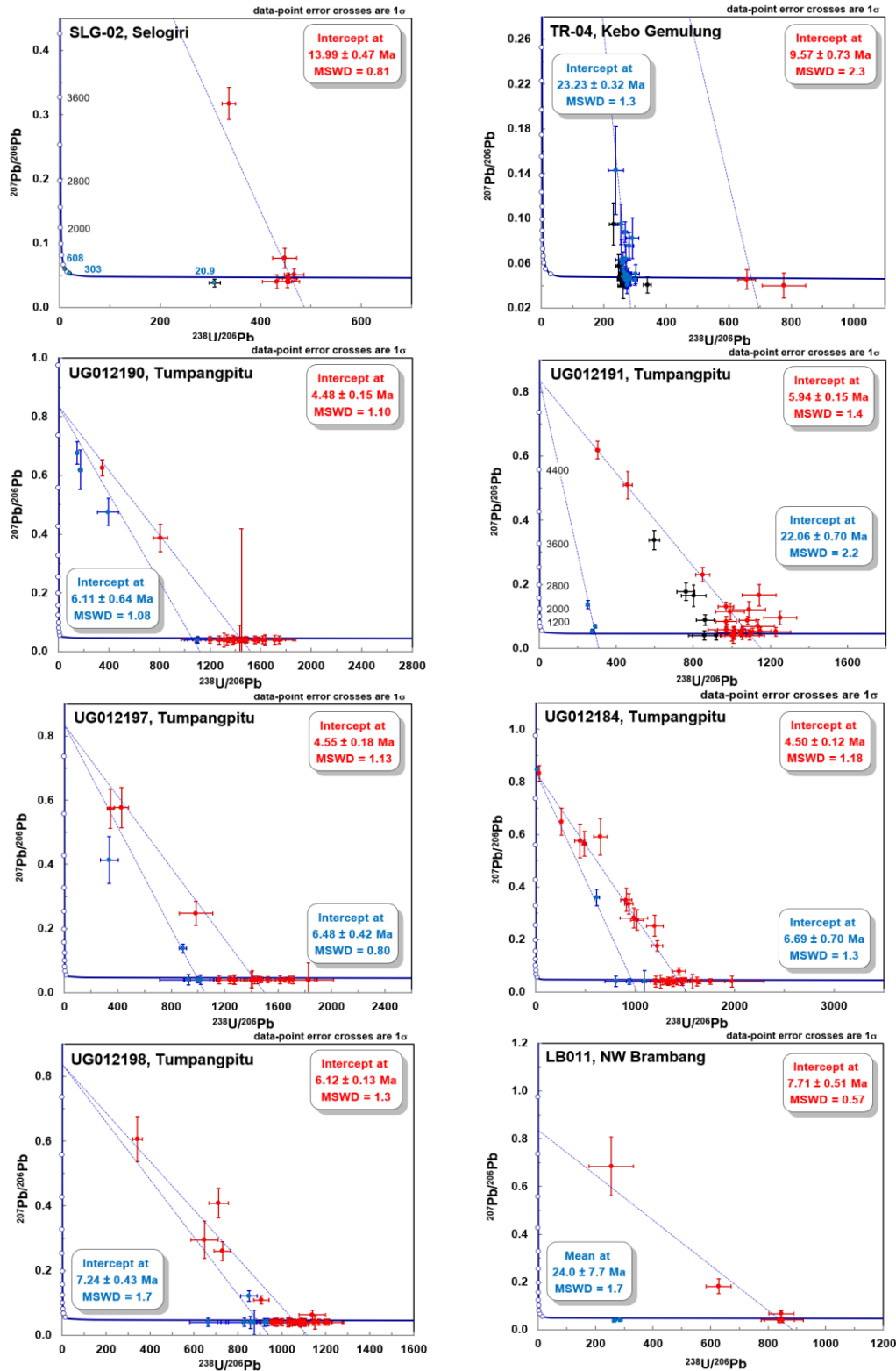


Figure 5.5: Concordia diagrams of weighted mean $^{206}\text{Pb}/^{238}\text{U}$ ages from the eastern Sunda arc with bi-modal age distributions or inherited grains. All data are listed in Appendix B. Analyses not used in the age calculations are shown in black. Individual grain ages for inherited zircons in samples SLG-02 and LB032 are labelled in blue.

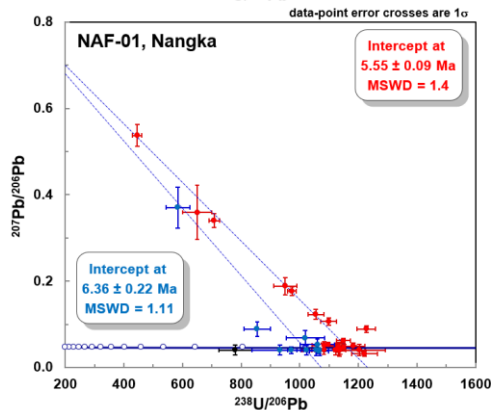
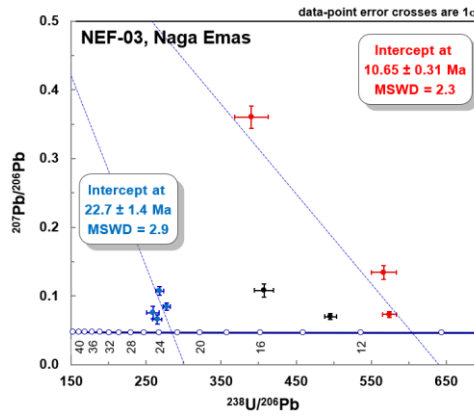
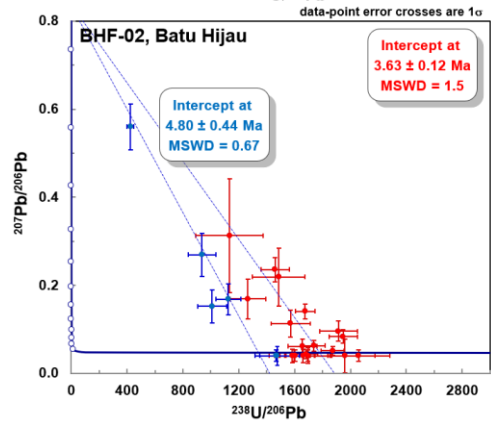
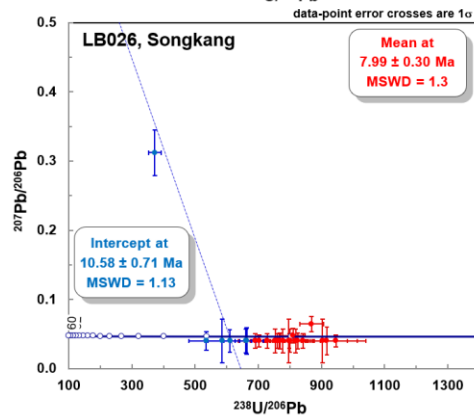
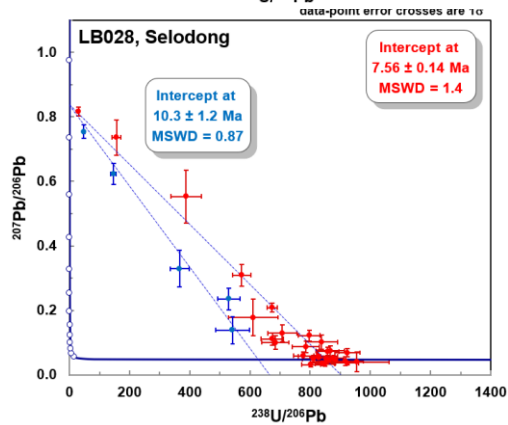
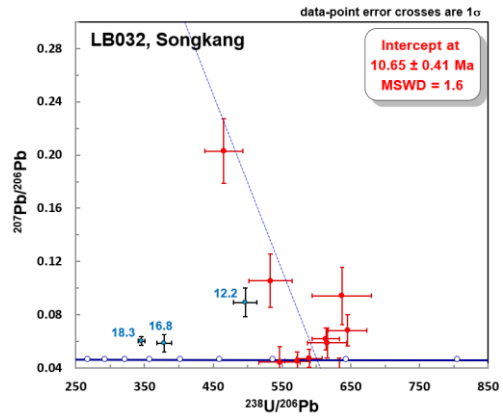
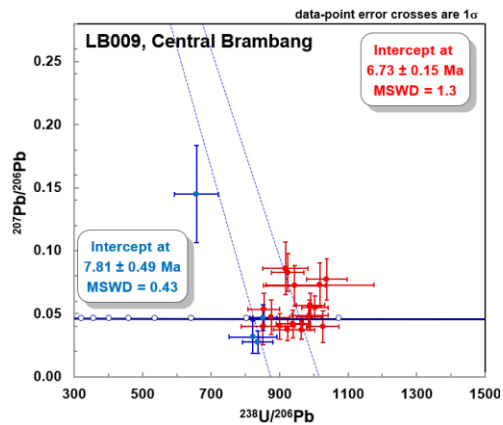


Figure 5.5: (Cont'd).

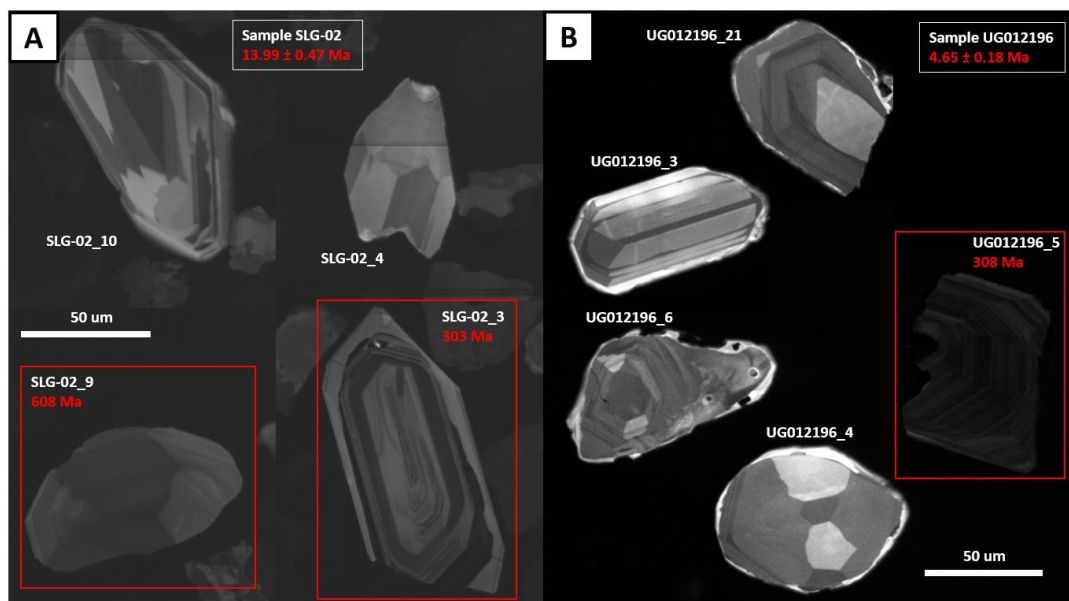


Figure 5.6: Representative cathodoluminescence images of zircons from samples SLG-02 and UG012196, with inherited grains and their ages highlighted in red.

5.4 – Zircon Hf isotopes

Results of zircon Lu-Hf isotope analyses of LA-ICP-MS U-Pb dated grains and corresponding calculated parameters are presented in Table 5.5. Grains were chosen on the basis of availability of a second laser spot ranging from 35 to 50 μm . In total, 392 isotope analyses were collected from 33 samples with individual grain ages ranging from 30.1 to 1.6 Ma. Analyses from samples range from three to 23, with an average of 12 grains per sample. Fifteen samples from Java (175 analyses) yielded $^{176}\text{Yb}/^{177}\text{Hf}$ and $^{176}\text{Lu}/^{176}\text{Hf}$ values of 0.00844 to 0.25105 and 0.00038 to 0.00689, respectively, with $\epsilon\text{Hf}(t)$ values ranging from 4.0 to 22.4. Ten samples from Lombok (133 analyses) yielded $^{176}\text{Yb}/^{177}\text{Hf}$ and $^{176}\text{Lu}/^{176}\text{Hf}$ values of 0.01639 to 0.22079 and 0.0059 to 0.00737, respectively, with $\epsilon\text{Hf}(t)$ values ranging from 10.8 to 22.6. Eight samples from Sumbawa (85 analyses) yielded $^{176}\text{Yb}/^{177}\text{Hf}$ and $^{176}\text{Lu}/^{176}\text{Hf}$ values of 0.00959 to 0.22797 and 0.00034 to 0.00669, respectively, with $\epsilon\text{Hf}(t)$ values ranging from 10.0 to 20.9.

Table 5.5: Zircon Lu-Hf isotope data averages for samples from the eastern Sunda arc. All data are listed in Appendix D.

| Sample ID | Rock name | Age (Ma) | Error (2 σ) | Yb ¹⁷⁶ /Hf ¹⁷⁷ | Lu ¹⁷⁶ /Hf ¹⁷⁷ | Hf ¹⁷⁶ /Hf ¹⁷⁷ | Hf ¹⁷⁸ /Hf ¹⁷⁷ | # of analyses | ϵ Hf (CHUR) | ϵ Hf (DM) |
|---|-------------------------|--------------|---------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|---------------|----------------------|--------------------|
| <i>Kasihah, Java</i> | | | | | | | | | | |
| PCT-01 | Dacitic tuff | 27.92 | 0.19 | 0.08857 | 0.00282 | 0.28320 | 1.46719 | 12 | 14.5 | -1.5 |
| <i>Jerambah, Trenggalek, Java</i> | | | | | | | | | | |
| JER-01 | Quartz diorite porphyry | 14.52 | 0.31 | 0.03886 | 0.00115 | 0.28324 | 1.46739 | 12 | 16.0 | 0.0 |
| <i>Singgahan, Trenggalek, Java</i> | | | | | | | | | | |
| SING-02 | Tonalite porphyry | 14.64 | 0.26 | 0.03802 | 0.00119 | 0.28319 | 1.46731 | 11 | 14.5 | -1.6 |
| <i>Kali Petang, Trenggalek, Java</i> | | | | | | | | | | |
| TR-02 | Quartz diorite porphyry | 14.80 | 0.31 | 0.03589 | 0.00114 | 0.28324 | 1.46726 | 11 | 16.1 | 0.1 |
| <i>Sinawang, Tulungagung, Java</i> | | | | | | | | | | |
| SINA-01 | Quartz diorite porphyry | 24.43 | 0.25 | 0.09471 | 0.00253 | 0.28320 | 1.46714 | 12 | 14.6 | -1.4 |
| SINA-02 | Quartz diorite porphyry | 24.54 | 0.22 | 0.07495 | 0.00200 | 0.28321 | 1.46730 | 8 | 15.0 | -1.0 |
| SINA-04 | Quartz diorite porphyry | 24.72 | 0.31 | 0.07729 | 0.00230 | 0.28319 | 1.46726 | 10 | 14.4 | -1.6 |
| SINA-05 | Quartz diorite porphyry | 24.77 | 0.23 | 0.08311 | 0.00221 | 0.28321 | 1.46722 | 7 | 15.0 | -1.1 |
| <i>Jember, Java</i> | | | | | | | | | | |
| JEM-02 | Quartz diorite porphyry | 6.94 | 0.11 | 0.05037 | 0.00165 | 0.28320 | 1.46732 | 13 | 14.8 | -1.2 |
| <i>Tumpangpitu (pre-), Java</i> | | | | | | | | | | |
| UG012191 | Diorite porphyry | 5.94 | 0.15 | 0.06684 | 0.00200 | 0.28323 | 1.46729 | 9 | 15.8 | -0.2 |
| UG012198 | Diorite porphyry | 6.12 | 0.13 | 0.05615 | 0.00194 | 0.28318 | 1.46723 | 15 | 13.8 | -2.2 |
| <i>Tumpangpitu (syn-), Java</i> | | | | | | | | | | |
| UG012185 | Tonalite | 4.34 | 0.14 | 0.04789 | 0.00131 | 0.28322 | 1.46729 | 7 | 15.5 | -0.5 |
| UG012190 | Tonalite | 4.48 | 0.15 | 0.03021 | 0.00098 | 0.28317 | 1.46724 | 12 | 13.7 | -2.3 |
| <i>Tumpangpitu (post-), Java</i> | | | | | | | | | | |
| UG012184 | Diorite porphyry | 4.50 | 0.12 | 0.04057 | 0.00146 | 0.28315 | 1.46716 | 13 | 12.8 | -3.2 |
| UG012195 | Diorite porphyry | 4.53 | 0.15 | 0.03524 | 0.00120 | 0.28314 | 1.46718 | 12 | 12.7 | -3.3 |

Table 5.5: (Cont'd).

| Sample ID | Rock name | Age (Ma) | Error (2 σ) | Yb ¹⁷⁶ /Hf ¹⁷⁷ | Lu ¹⁷⁶ /Hf ¹⁷⁷ | Hf ¹⁷⁶ /Hf ¹⁷⁷ | Hf ¹⁷⁸ /Hf ¹⁷⁷ | # of analyses | ϵ Hf (CHUR) | ϵ Hf (DM) |
|------------------------------|---------------------------|----------|---------------------|--------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|---------------|----------------------|--------------------|
| NW Brambang, Lombok | | | | | | | | | | |
| LB014 | Tonalite | 6.96 | 0.19 | 0.04248 | 0.00143 | 0.28318 | 1.46726 | 10 | 13.8 | -2.2 |
| C. Brambang, Lombok | | | | | | | | | | |
| LB024 | Tonalite porphyry | 7.06 | 0.13 | 0.04669 | 0.00156 | 0.28325 | 1.46731 | 23 | 16.3 | 0.3 |
| LB036 | Tonalite | 7.00 | 0.2 | 0.04212 | 0.00129 | 0.28324 | 1.46729 | 6 | 16.0 | 0.0 |
| LB041 | Tonalite porphyry | 6.71 | 0.12 | 0.03856 | 0.00131 | 0.28320 | 1.46723 | 6 | 14.7 | -1.3 |
| Montong Botek, Lombok | | | | | | | | | | |
| LB018 | Quartz diorite | 7.51 | 0.13 | 0.05167 | 0.00154 | 0.28324 | 1.46727 | 19 | 16.2 | 0.2 |
| LB028 | Quartz diorite | 7.56 | 0.14 | 0.05268 | 0.00174 | 0.28320 | 1.46730 | 12 | 14.8 | -1.2 |
| LB029 | Quartz diorite porphyry | 7.28 | 0.14 | 0.06019 | 0.00180 | 0.28324 | 1.46731 | 15 | 16.2 | 0.2 |
| Belikat, Lombok | | | | | | | | | | |
| LB042 | Diorite | 7.20 | 0.21 | 0.03972 | 0.00147 | 0.28318 | 1.46716 | 7 | 14.0 | -2.0 |
| Songkang, Lombok | | | | | | | | | | |
| LB025 | Quartz diorite porphyry | 8.23 | 0.16 | 0.03259 | 0.00113 | 0.28321 | 1.46722 | 7 | 14.9 | -1.1 |
| LB026 | Quartz diorite porphyry | 7.99 | 0.3 | 0.02849 | 0.00089 | 0.28326 | 1.46723 | 3 | 16.7 | 0.7 |
| Batu Hijau, Sumbawa | | | | | | | | | | |
| BHF-02 | Intermediate tonalite | 3.63 | 0.12 | 0.07448 | 0.00205 | 0.28320 | 1.46734 | 5 | 14.7 | -1.4 |
| BHF-04 | Intermediate tonalite | 3.75 | 0.1 | 0.04296 | 0.00146 | 0.28316 | 1.46720 | 19 | 13.4 | -2.6 |
| Naga Emas, Sumbawa | | | | | | | | | | |
| NEF-02 | Hornblende quartz diorite | 5.05 | 0.12 | 0.03701 | 0.00133 | 0.28319 | 1.46721 | 19 | 14.2 | -1.8 |
| Nangka, Sumbawa | | | | | | | | | | |
| NAF-01 | Diorite | 5.55 | 0.09 | 0.03465 | 0.00096 | 0.28325 | 1.46739 | 4 | 16.3 | 0.3 |
| Elang, Sumbawa | | | | | | | | | | |
| ELF-01 | Delta tonalite | 2.64 | 0.04 | 0.07351 | 0.00261 | 0.28321 | 1.46716 | 9 | 15.2 | -0.8 |
| ELF-02 | Charlie tonalite | 2.75 | 0.07 | 0.04734 | 0.00175 | 0.28322 | 1.46725 | 10 | 15.6 | -0.5 |
| ELF-03 | Echo tonalite | 2.64 | 0.12 | 0.04705 | 0.00185 | 0.28316 | 1.46723 | 6 | 13.3 | -2.7 |
| Sepekat, Sumbawa | | | | | | | | | | |
| SPF-05 | Quartz diorite | 2.95 | 0.13 | 0.03995 | 0.00126 | 0.28319 | 1.46722 | 7 | 14.4 | -1.6 |

5.5 – Zircon mineral chemistry

Zircons from 77 rocks were analysed, covering a range of igneous rock types from across Java, Lombok, and Sumbawa (Fig. 5.7). All zircons were analysed from mineral separates mounted in polished epoxy pucks, and a total of 1,743 LA-ICP-MS trace element analyses were obtained. Grains analysed in this study ranged from ~30 μm to ~300 μm in length. All zircon trace element data is listed in Appendix C. Some form of zoning is common to almost all zircons (Fig. 5.8). Zoning characteristics, as well as xenocrystic cores, reabsorption regions, and overgrowths, oscillatory zoning and sector zoning are complex and vary from both intrusions within the same deposit/region, as well as intra-sample. Mineral inclusions in zircon are common, with apatite the most common but quartz, feldspar, and/or fluid inclusions were also observed.

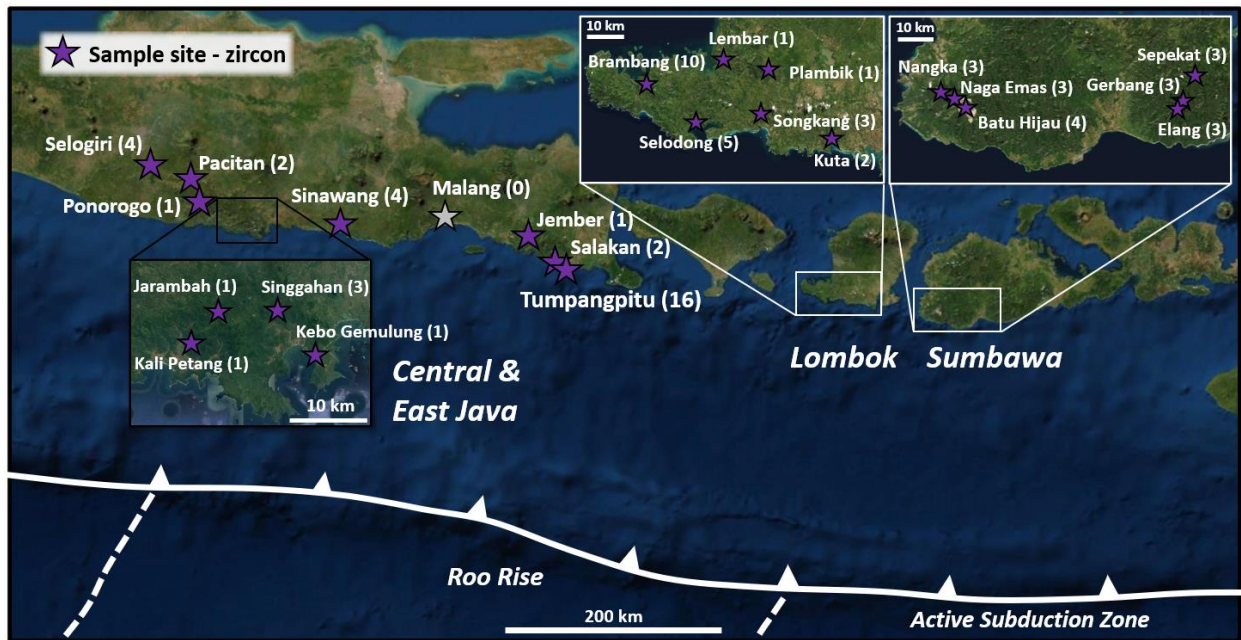


Figure 5.7: Locations of prospects and deposits within the eastern Sunda arc with zircon samples (number of samples indicated in parentheses). Only one site did not have any zircon recovered (Malang). Satellite image obtained from Google Earth (Image © TerraMetrics, 2023).

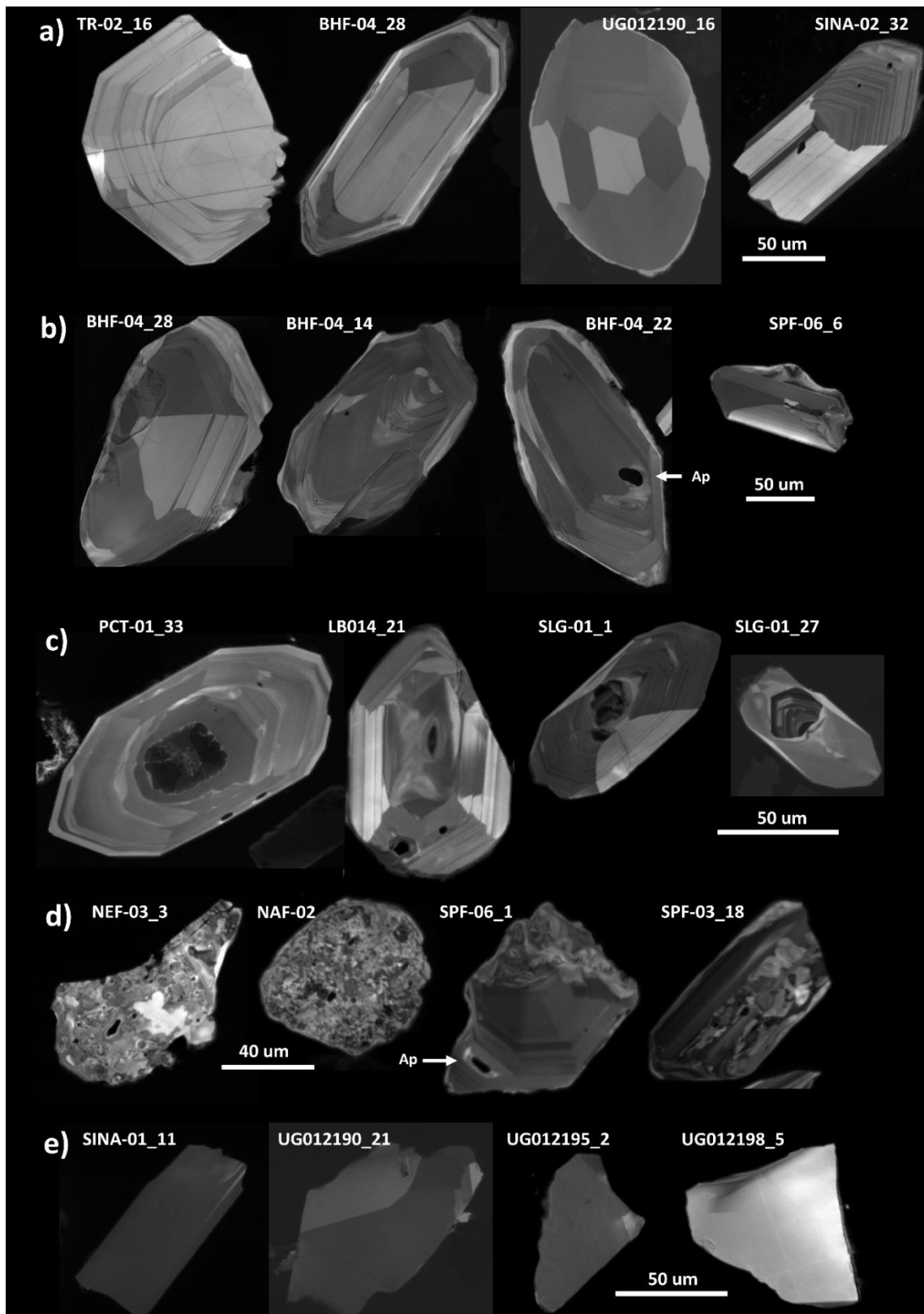


Figure 5.8: Representative CL images for zircons from the eastern Sunda arc, showing variations in: a) sector and oscillatory zoning, b) overgrowths, c) mottled cores with overgrowths, d) mottled grains and e) grains with weak or no zoning. Ap = apatite. Scale bars correspond to images in their respective row.

Hafnium values for Java zircons range between ~7,250 and 15,000 ppm (Fig. 5.9). Total REE (Σ REE) for Java zircons range from approximately 250 to 5,000 ppm. The majority of samples from Java have Chondrite-normalized Eu/Eu* values ranging from ~0.50 to ~0.7 at Selogiri, Jarambah, Singgahan, Kali Petang, and majority of Tujuh Bukit samples (Fig. 5.10). Samples from Pacitan, Ponorogo, Kebo Gemulung, Sinawang, and one Singgahan sample had lower Eu/Eu* values ranging from 0.10 to 0.35. There is little difference in Ce/Ce* values across Java. They generally display a broad range in Ce/Ce* values, ranging from ~0 to ~400 (Fig. 5.11).

Hafnium values for Lombok zircons range between ~8,250 and 14,000 ppm (Fig. 5.12). Total REE (Σ REE) for Lombok zircons range from approximately 250 to 8,000 ppm. Samples from Brambang have highest Eu/Eu* values ranging from ~0.45 to ~0.7 (Fig. 5.13). Selodong and Songkang have moderate Eu/Eu* values, ranging from ~0.35 to ~0.6. Two Brambang samples (Brambang and Permula), Lembar, Plambik, and Kuta samples have lowest Eu/Eu* values, ranging from ~0 to ~0.35. There is very little difference in Ce/Ce* values across Lombok samples, but a large variation of values intra-sample (Fig. 5.14).

Hafnium values for Sumbawa zircons range between ~8,000 and 17,000 ppm (Fig. 5.12). Total REE (Σ REE) for Sumbawa zircons range from 150 to 4,000 ppm. There is significant variation of Eu/Eu* values for Sumbawa zircons, both intra-deposit and regionally, with some samples (Batu Hijau, Naga Emas, Elang) ranging from 0.4 to 0.7, and others (Naga Emas, Nangka, Elang, Gerbang, Sepekat) ranging from 0.05 to ~0.5 (Fig. 5.13). There is little difference in Ce/Ce* values, with the majority of Sumbawa samples falling

within 25 to 250, with some Gerbang, Elang, and Naga Emas samples having values up to ~500 (Fig. 5.14).

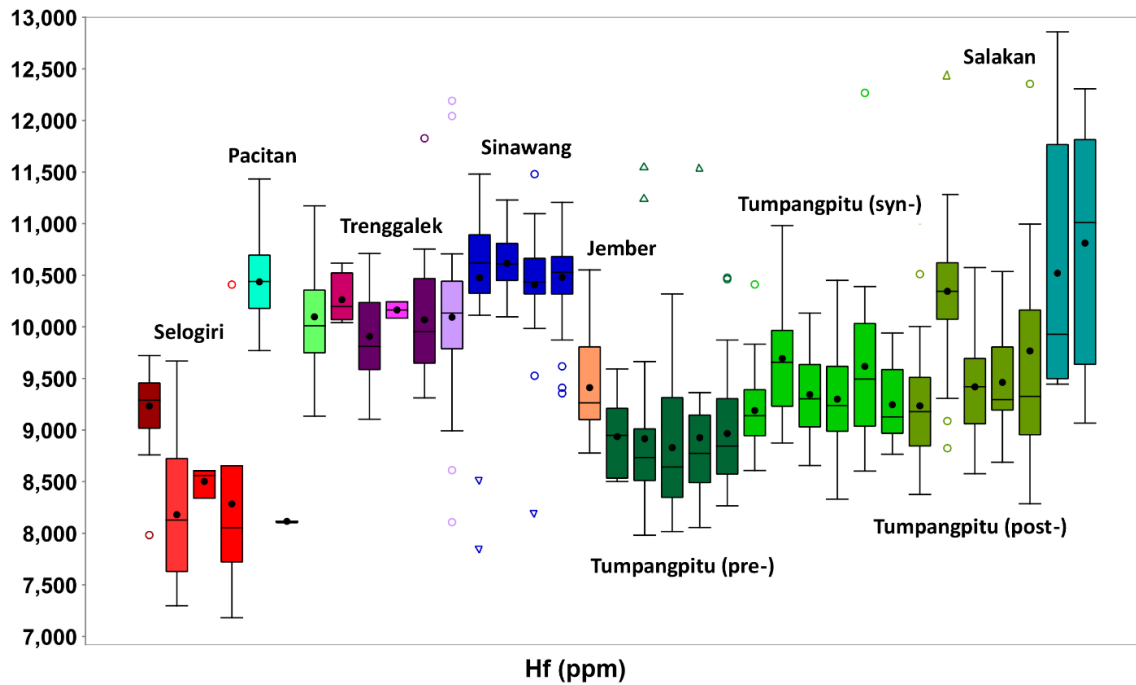


Figure 5.9: Box and whisker diagram showing the median, upper and lower quartiles and range of Hf contents in Java zircons.

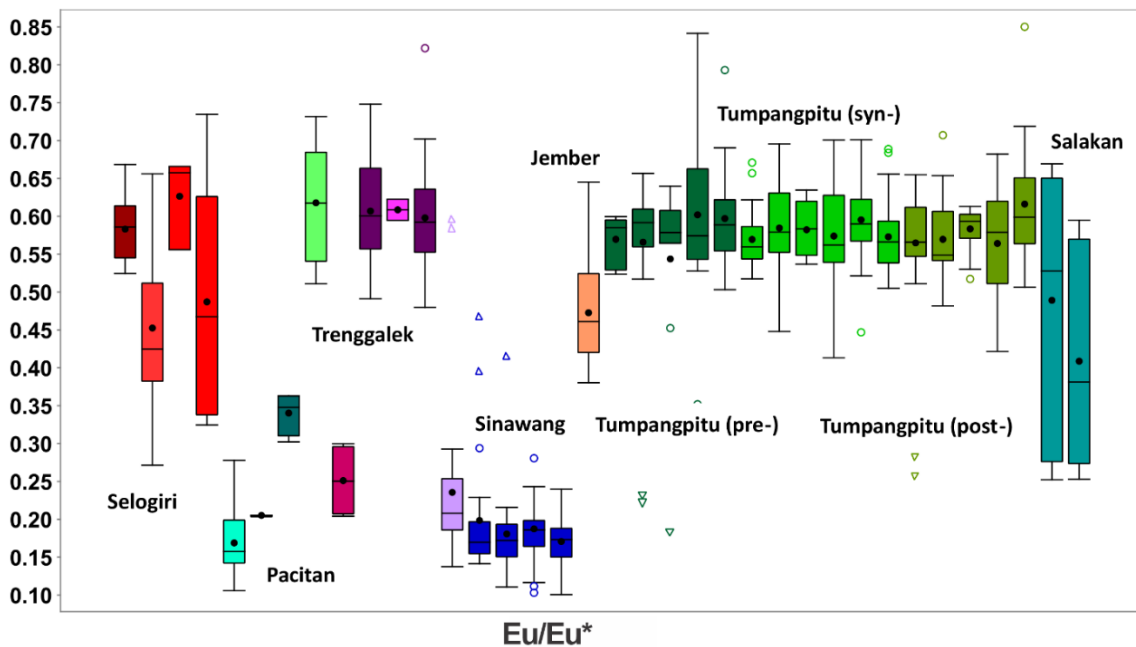


Figure 5.10: Box and whisker diagram showing the median, upper and lower quartiles and range of Eu/Eu* in Java zircons.

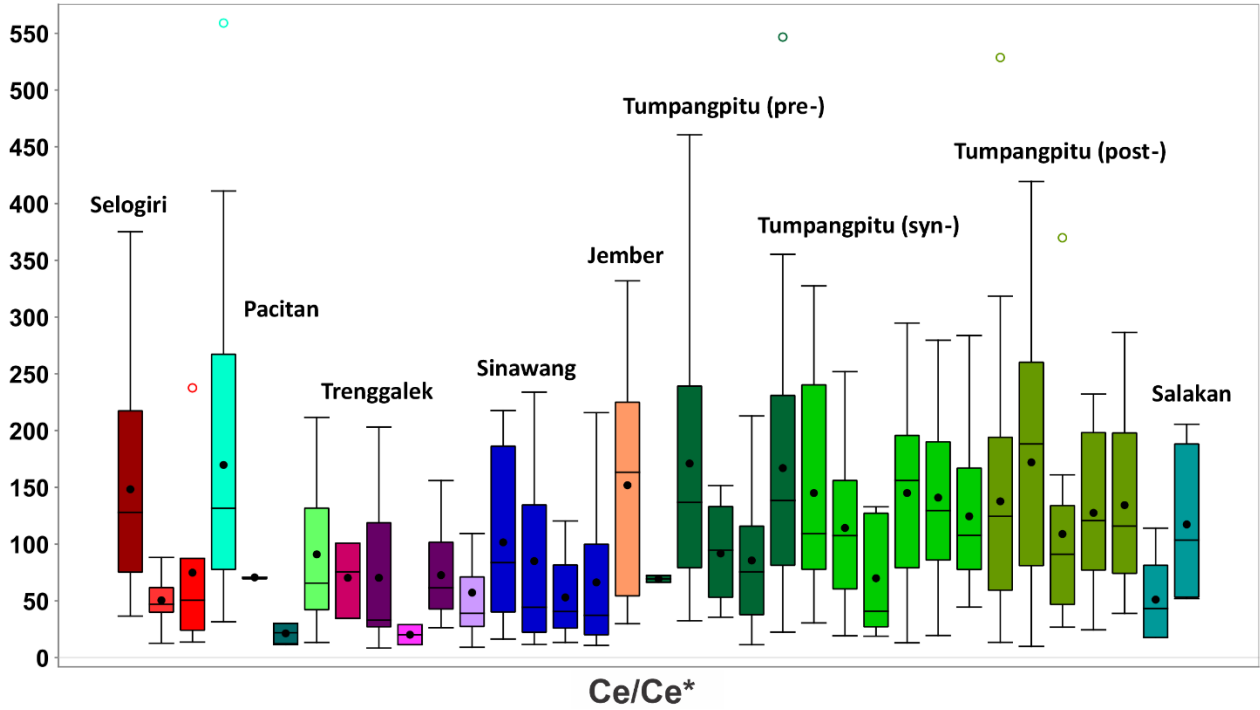


Figure 5.11: Box and whisker diagram showing the median, upper and lower quartiles and range of Ce/Ce* in Java zircons.

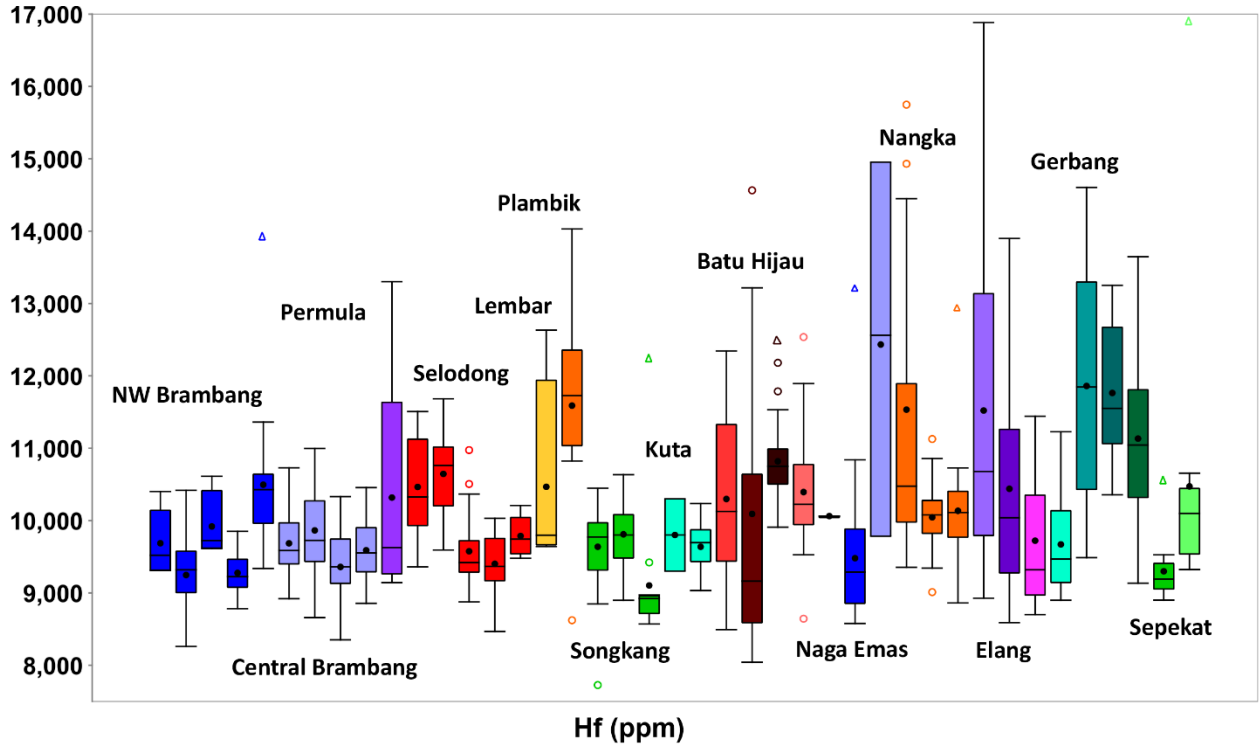


Figure 5.12: Box and whisker diagram showing the median, upper and lower quartiles and range of Hf content in Java zircons.

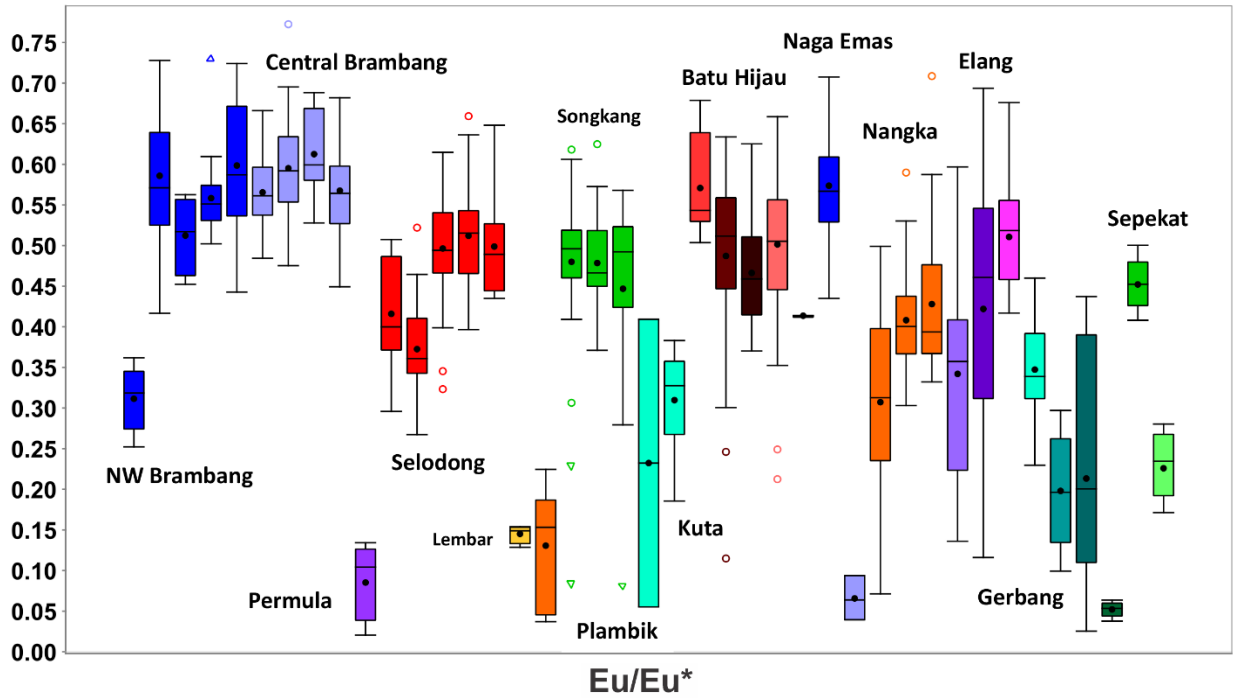


Figure 5.13: Box and whisker diagram showing the median, upper and lower quartiles and range of Eu/Eu^* in Java zircons.

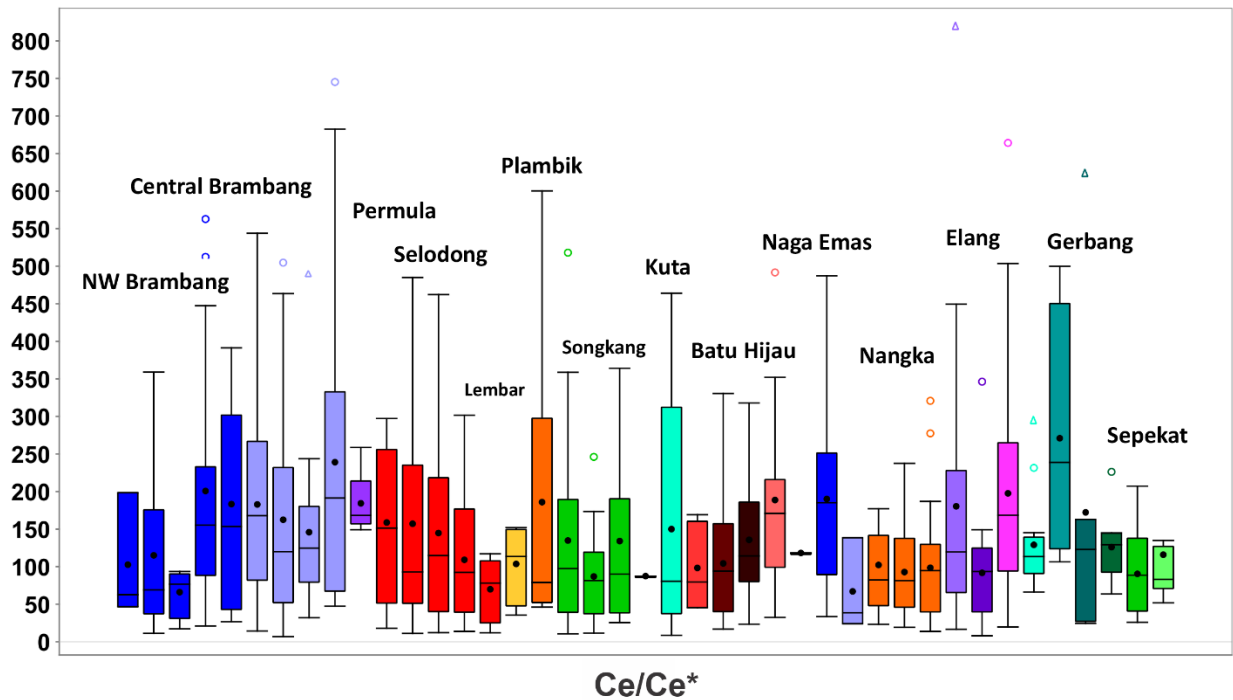


Figure 5.14: Box and whisker diagram showing the median, upper and lower quartiles and range of Ce/Ce^* in Java zircons.

All samples have zircon primitive mantle-normalized REE patterns that are broadly typical of crustal zircon, with strong LREE depletion and HREE enrichment, with 5-6 orders of magnitude difference between La_N and Lu_N (Fig. 5.15). On Java, Selogiri, Jerambah, Singgahan, Kali Petang, and Jember samples have flat to positive Eu anomalies, with Pacitan, Kebo Gemulung, and Sinawang samples having negative Eu anomalies. Salakan, as well as all Tumpangpitu samples (both pre-, syn-, and post-mineralization) have flat to positive Eu anomalies. On Lombok, all patterns have similarly flat to positive Eu, except for the very negative Eu anomaly for Permula, and lesser at Lembar, Plambik, and Kuta. On Sumbawa, the majority of samples have similar flat to small negative Eu anomalies, except samples at Naga Emas (NEF-03), Gerbang (GBF-04), and Sepekat (SPF-03).

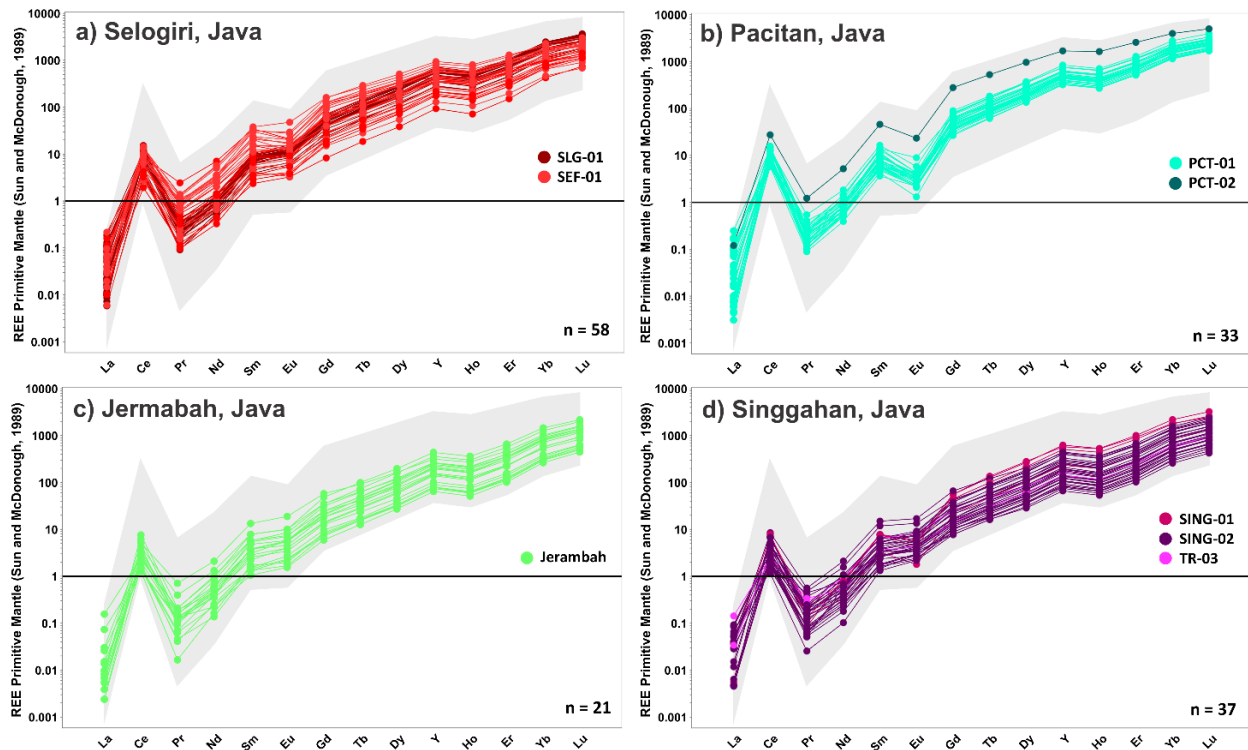


Figure 5.15: Primitive mantle-normalized REE patterns of zircon samples from the eastern Sunda arc. a) Selogiri, b) Pacitan, c) Jerambah, d) Singgahan, e) Kali Petang, f) Kebo Gemulung, g) Sinawang, h) Jember, i) Salakan, j) Tumpangpitu (pre-), k) Tumpangpitu (syn-), l) Tumpangpitu (post-), m) NW Brambang, n) Central Brambang, o) Permula, p) Selodong, q) Songkang, r) Lembar, s) Plambik, t) Kuta, u) Batu Hijau, v) Naga Emas, w) Nangka, x) Elang, y) Gerbang, z) Sepekat. Grey outline is field from all zircons in study. Normalizing values are from Sun and McDonough (1989).

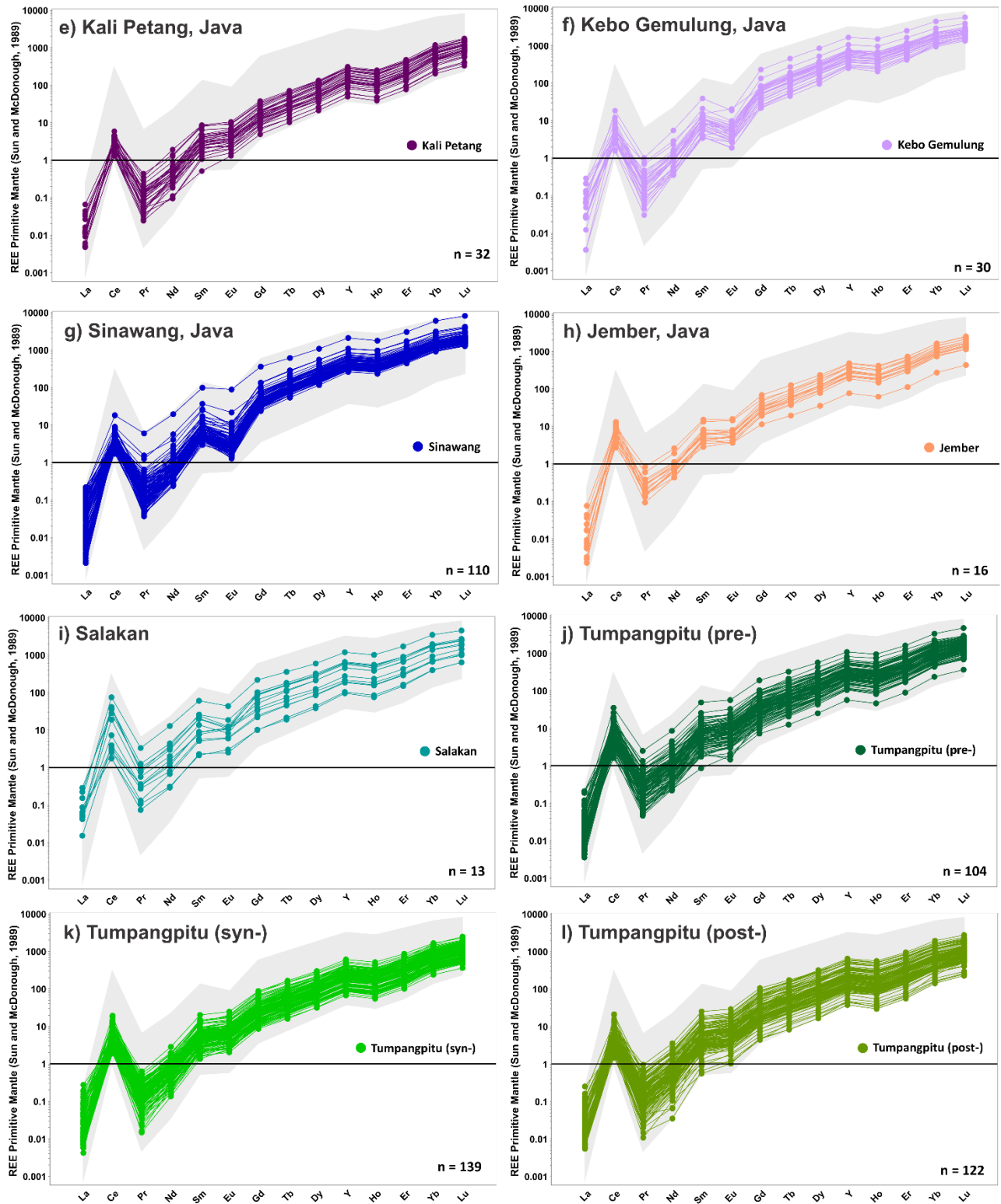


Figure 5.15: (Cont'd).

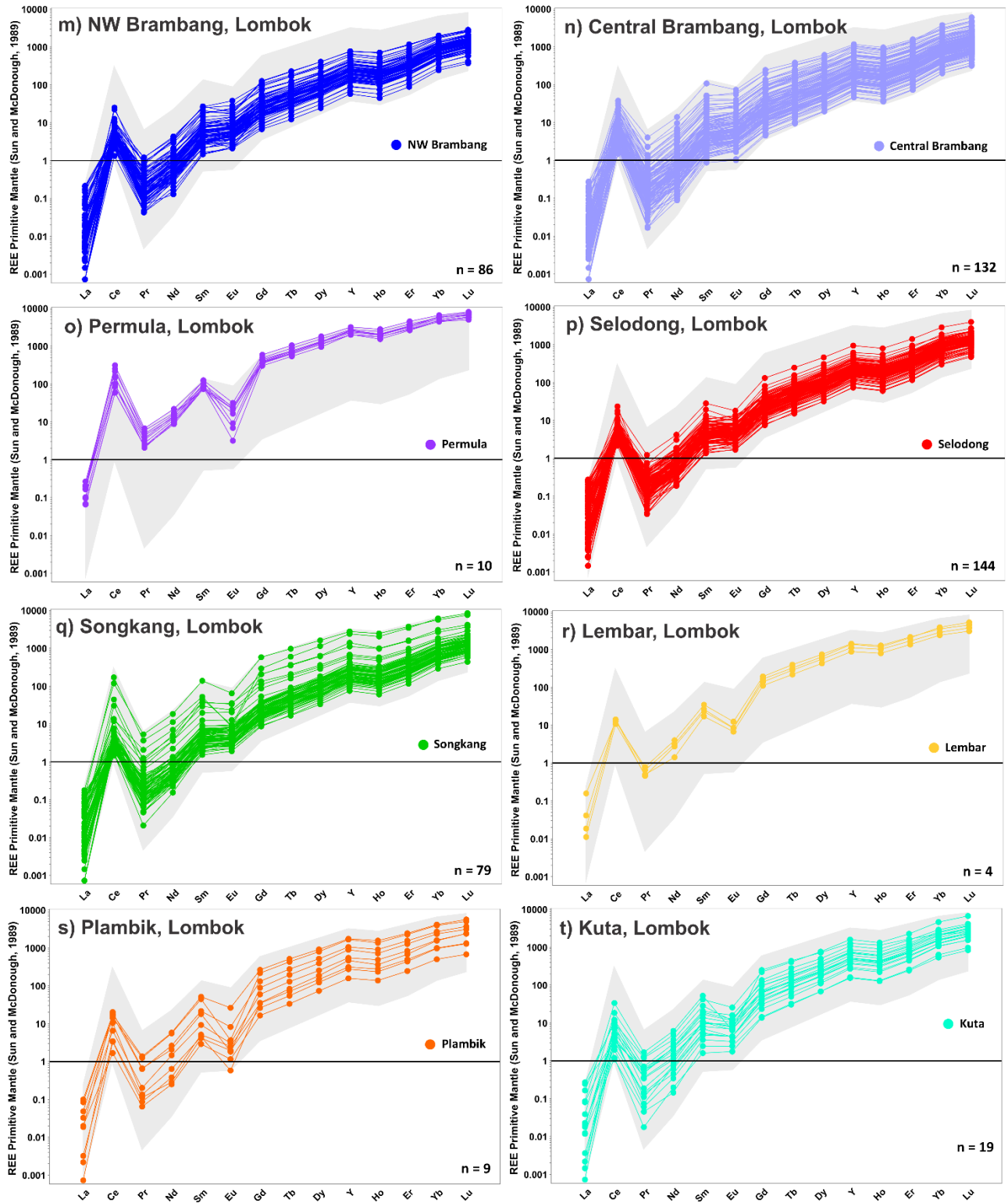


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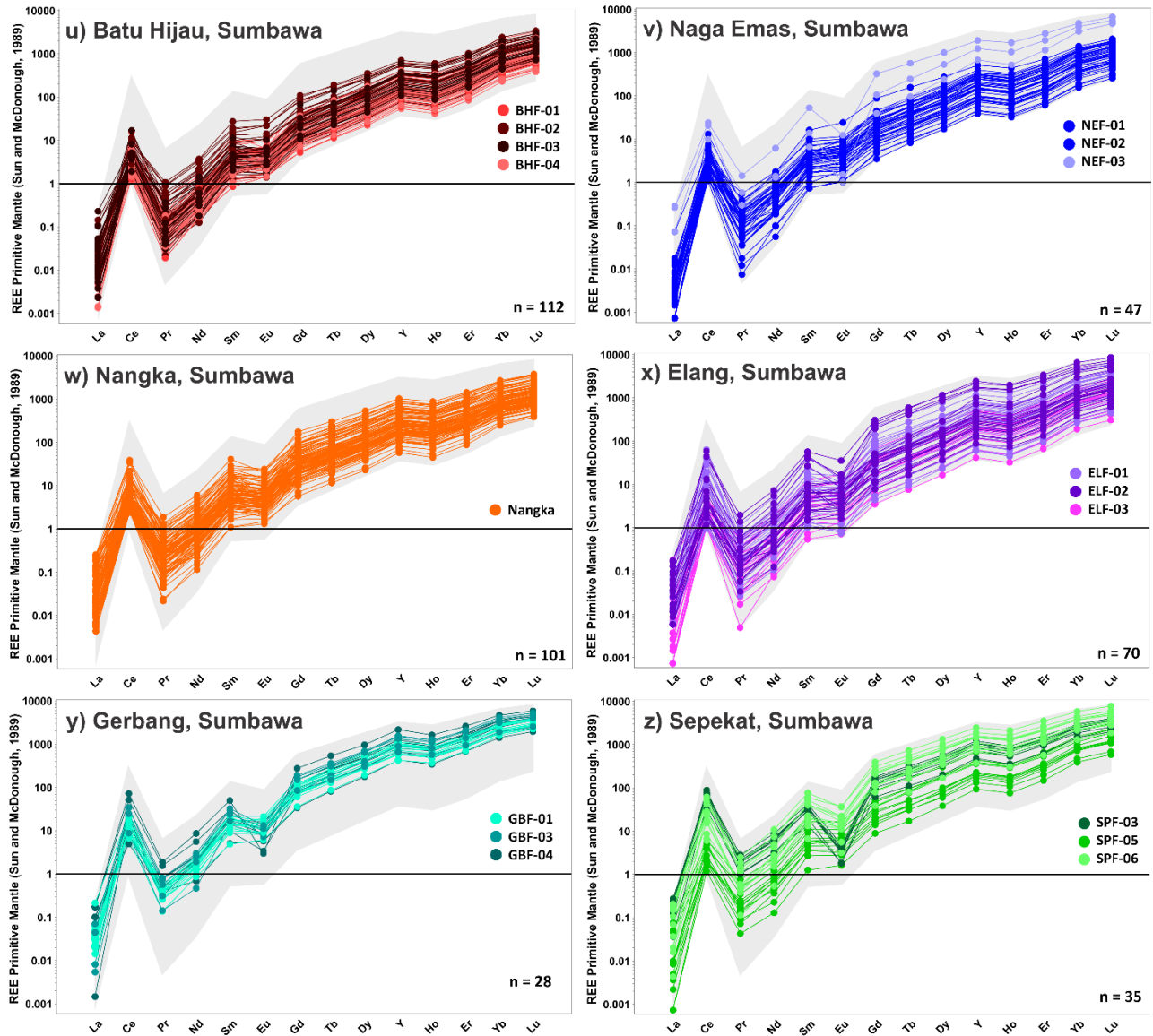


Figure 5.15: (Cont'd).

5.6 – Apatite mineral chemistry

Apatite was analysed from 54 rock samples, covering a range of igneous rock types from across Java, Lombok, and Sumbawa (Fig. 5.16). All apatite were analysed from mineral separates mounted in epoxy pucks, and a total of 1,124 LA-ICP-MS trace element analyses

were obtained, as well as 1,062 corresponding EMPA analyses. Grains analysed in this study ranged from ~30 um to ~200 um. The full data are listed in Appendix C.

Some form of cathodoluminescence (CL) emission response is present in all apatite, with variations in brightness and colour as well as apatite texture (Fig. 5.17). These textures are often very complex, with some deposits/regions having a uniform colour, whereas others have two or more variations within, including altered and unaltered apatite within the same sample. Primary igneous apatite grains have homogenous colour/CL emission response as well as a typical elongate habit. Replacement apatite often display heterogeneous colour/CL emission response and have irregular habit. Some grains show evidence of partial replacement, such as grain BHF-03_6, with primary apatite preserved in the top left and replacement apatite in the bottom left of the grain (Fig. 5.17b).

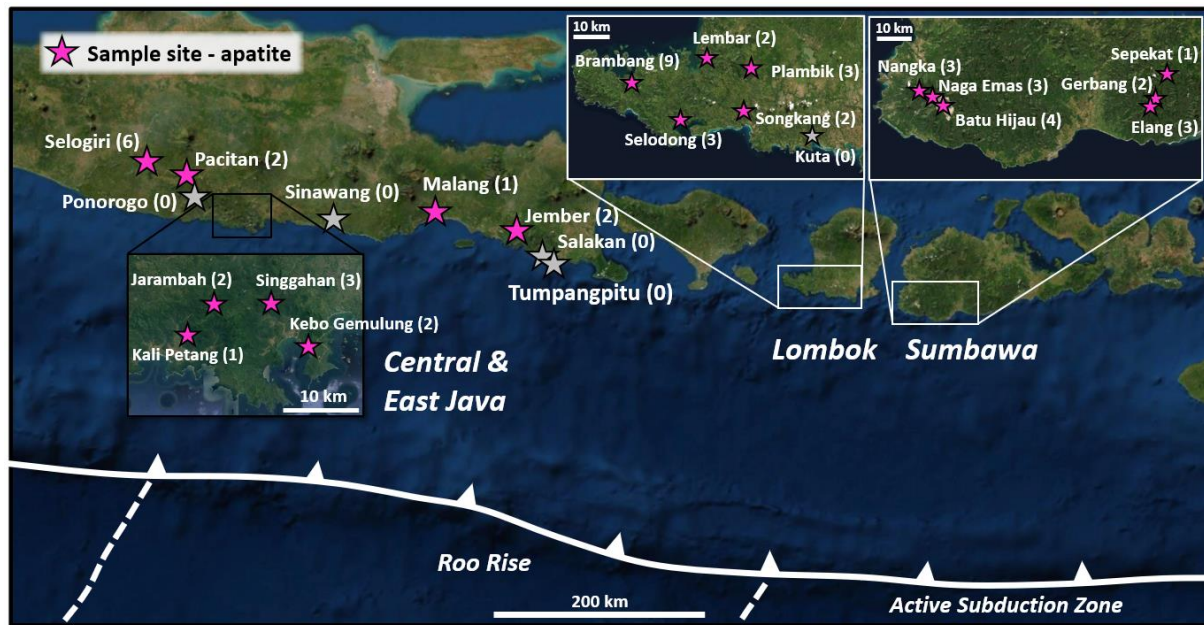


Figure 5.16: Locations of prospects and deposits within the eastern Sunda arc with apatite samples (number of samples indicated in parentheses). Five sites did not have any apatite recovered (Ponorogo, Sinawang, Salakan, and Tumpangpitu). Satellite image obtained from Google Earth (Image © TerraMetrics, 2023).

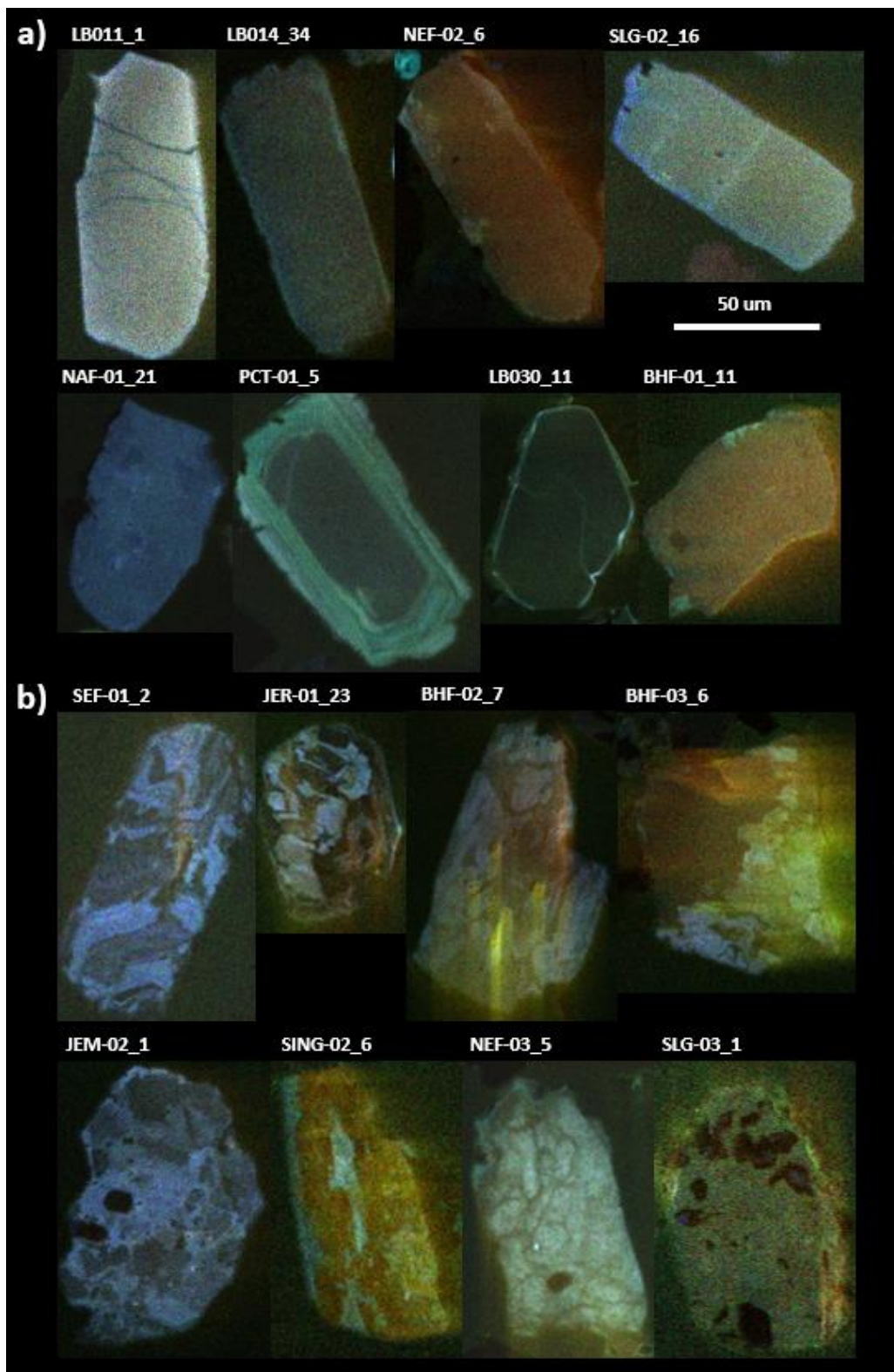


Figure 5.17: Summary of CL textures in apatite from samples from the eastern Sunda arc. a) Primary/unaltered apatite with strong variation in CL emission colour. b) Secondary/ replacement apatite with strong variation in both CL emission colour and texture. Note image BHF-03_6 with primary apatite preserved in top left of grain.

Nearly all analyses of F from the eastern Sunda arc are within the stoichiometric limit of F in apatite, with nine exceptions from 1,062 EMPA analyses. Throughout samples from the eastern Sunda arc, Cl and F contents in apatite generally show an inverse relationship (Figs. 5.18, 5.19, 5.20). The majority of replacement apatite has low to extremely low Cl contents (< 1.5 wt. %) and moderate to high F, with most replacement apatite plotting in the bottom right of the Cl-F diagrams. This is particularly evident with the Batu Hijau samples, all of which have both primary and secondary apatite analyses (Fig. 5.20b). Apatite from Jember are the only texturally primary apatite that have Cl content around detection limits (Fig. 5.18a). The majority of other primary apatite analyses have higher Cl contents, with 341 of 451 primary apatite analyses having greater than 1.0 wt. % Cl.

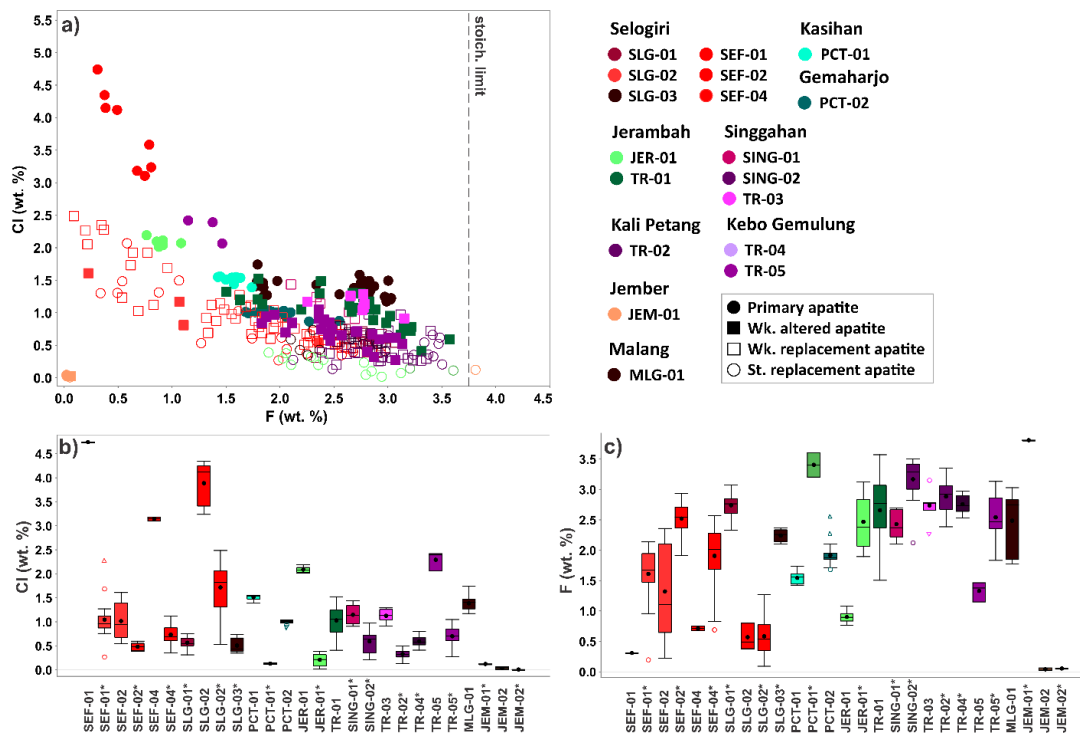


Figure 5.18: Halogen chemistry of Java apatites. a) F and Cl contents generally show an inverse relationship, with replacement apatite often high F, low Cl. b-c) Box and whisker diagrams showing the median, mean, quartiles, and ranges of Cl and F concentrations, with replacement apatite indicated by * in sample ID. All data collected by EMPA.

Sulfur concentrations are often close to detection limits (0.01 wt. %), with the majority of all analyses having < 0.17 wt. % S (Fig. 5.21). Most replacement apatite have very low S contents ($\sim < 0.05$ wt. %), except for a few rare analyses at Singgahan, Central Brambang and Batu Hijau (SING-02, LB036, LB024, BHF-01, BHF-04). These moderately high S analyses are likely due to small inclusions of sulfides, particularly bornite (Fig. 5.21d); however, in general the majority of apatite analyses throughout the eastern Sunda arc are devoid of sulfide inclusions.

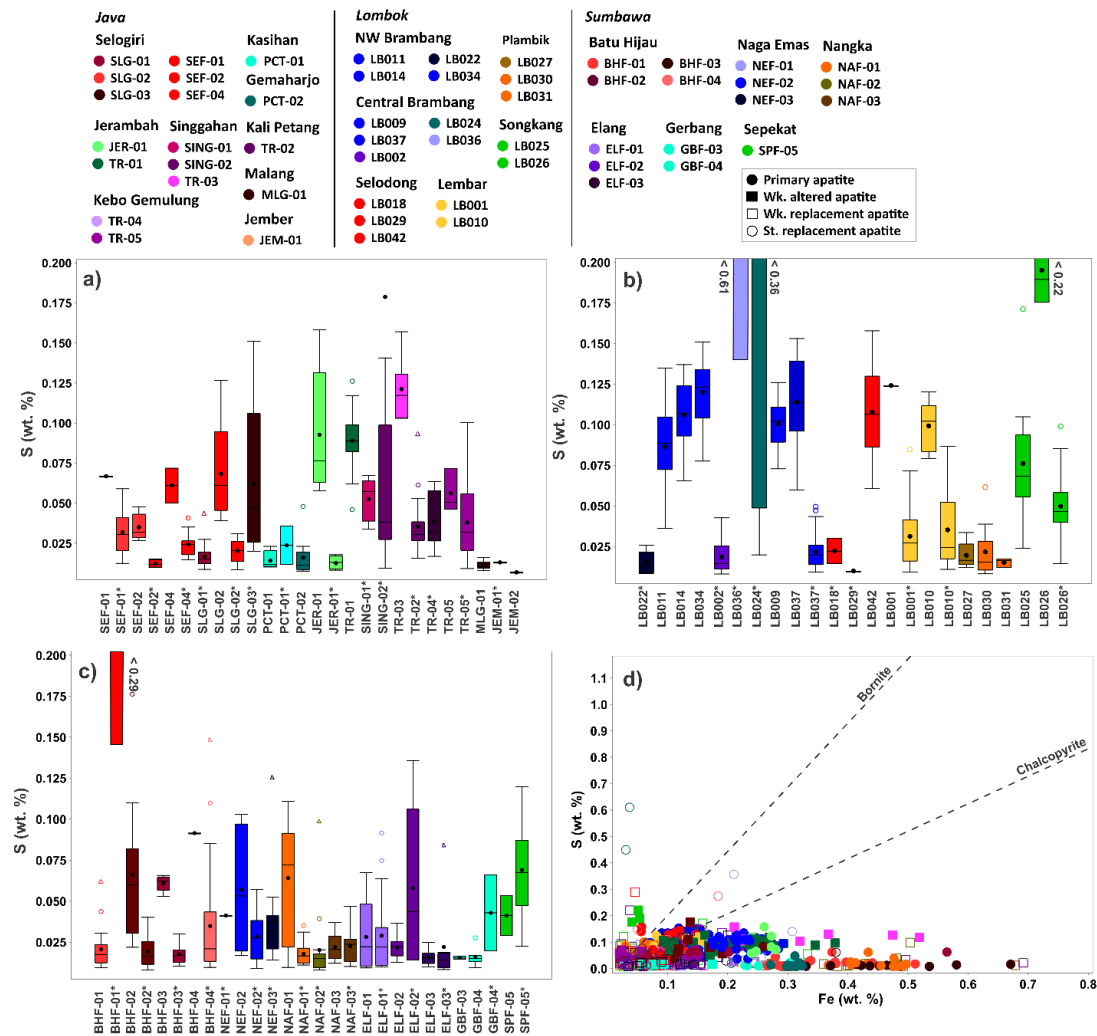


Figure 5.21: a-c) Box and whisker diagrams showing the median, mean, quartiles and range of S concentrations in apatites from Java, Lombok, and Sumbawa. d) S vs. Fe content. Some replacement apatite analyses have S:Fe ratios which could indicate small inclusions of sulfide minerals. All data collected by EMPA.

Chondrite normalized REE patterns of apatite from the eastern Sunda arc are variable, with most enriched in HREE and depleted in LREE and others displaying flat to m-shaped REE profiles (Fig. 5.22). Europium anomalies are variably pronounced, with Eu/Eu^* values for primary apatite ranging from 0.08 to 0.97. Some replacement apatite have negative Eu anomalies and REE profiles similar to primary counterparts within the same sample, and others have flat to very irregular REE profiles, occasionally with positive Eu anomalies.

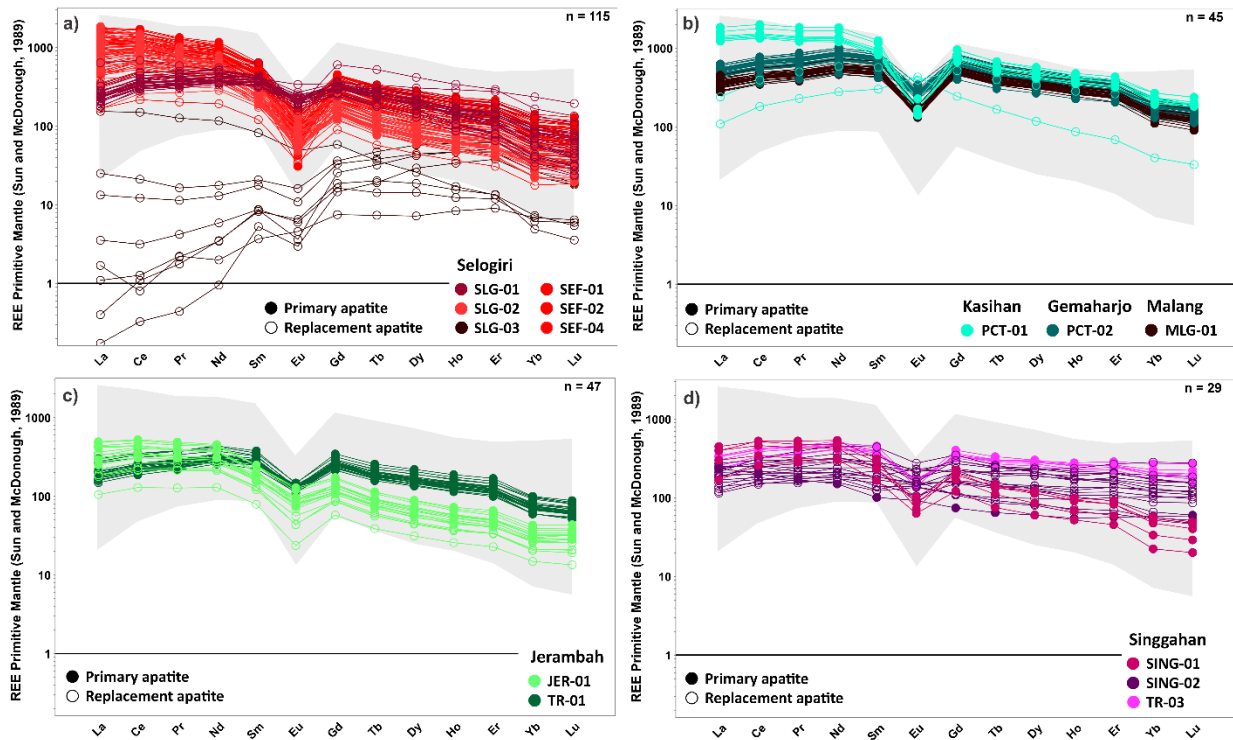


Figure 5.22: Primitive mantle-normalized REE patterns of apatite samples from the eastern Sunda arc. a) Selogiri, b) Pacitan and Ponorogo regions, c) Jerambah, d) Singgahan, e) Kali Petang, f) Kebo Gemulung, g) Jember, h) NW Brambang, i) Central Brambang, j) Selodong, k) Lembar, l) Plambik, m) Songkang, n) Batu Hijau, o) Naga Emas, p) Nangka, q) Elang, r) Gerbang and Sepekat. Grey outline is field from all primary apatite in study. Primary and replacement apatite grains are indicated by closed and open symbols, respectively. Normalizing values are from Sun and McDonough (1989).

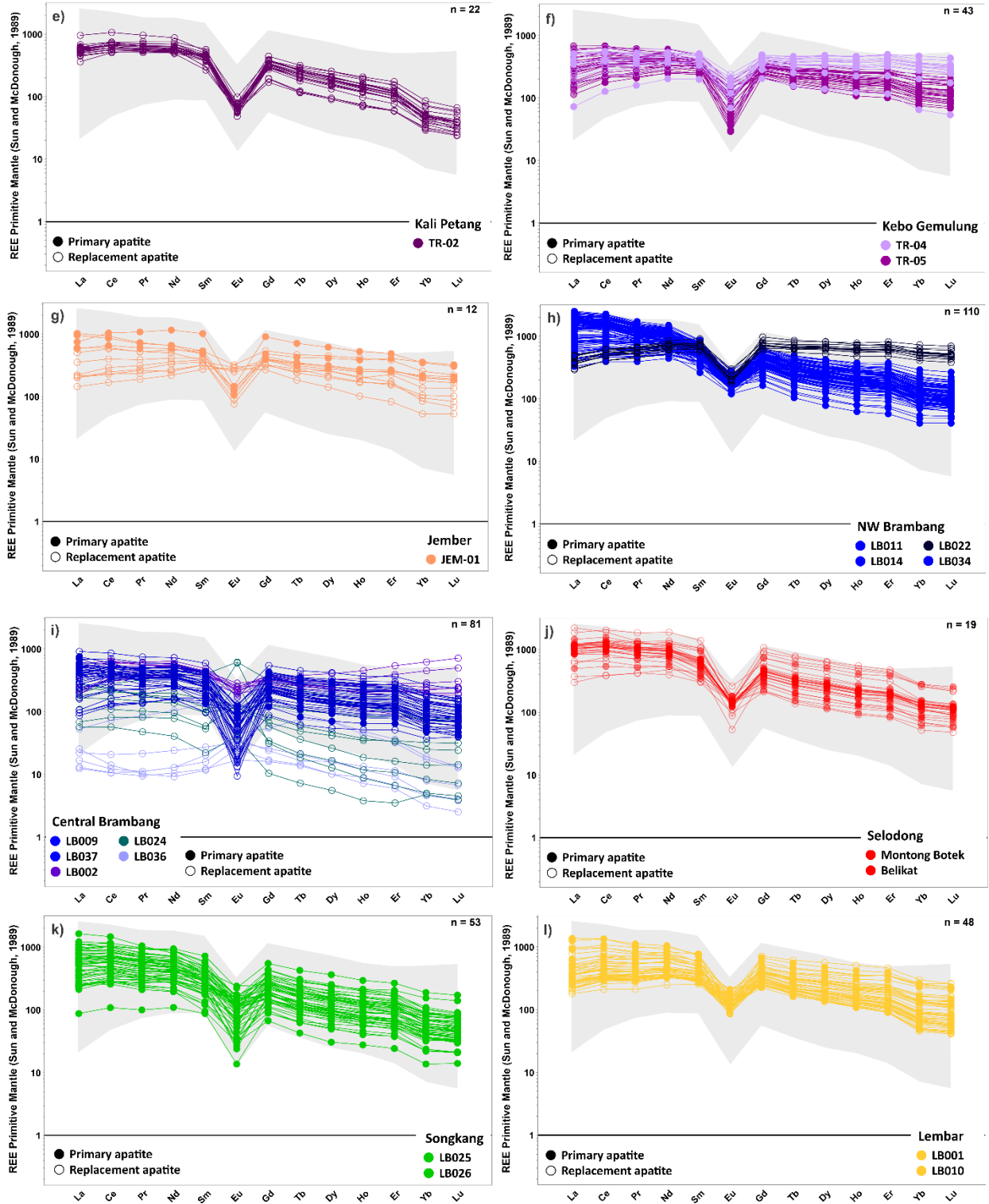


Figure 5.22: (Cont'd).

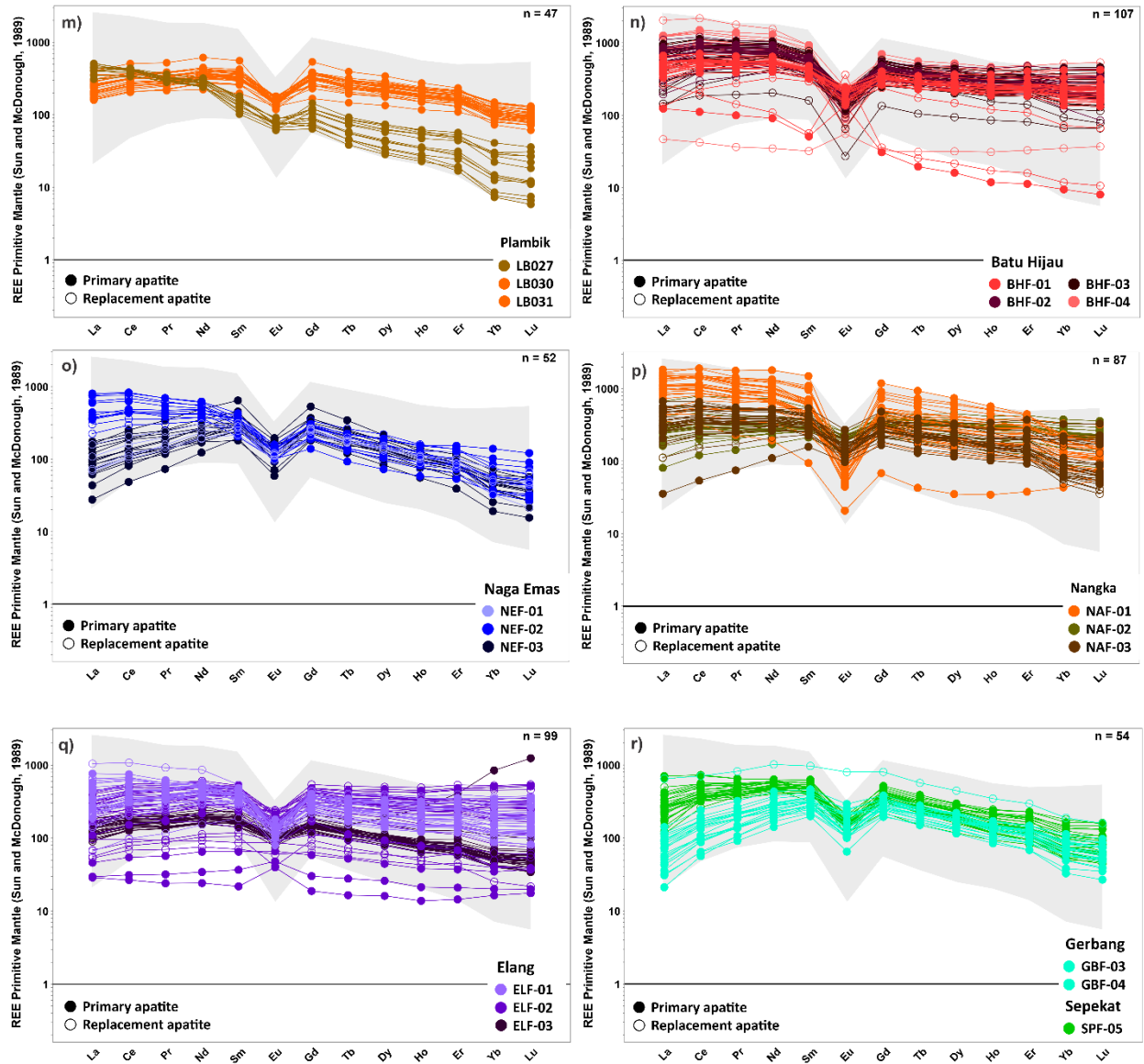


Figure 5.22: (Cont'd).

5.7 – Rutile mineral chemistry

Rutile from 67 rocks was analysed, covering a range of igneous rock types from across Java, Lombok, and Sumbawa (Fig. 5.23). All rutile were analysed from mineral separates mounted in epoxy pucks, and a total of 1,095 LA-ICP-MS trace element analyses were obtained, as well as 969 corresponding EMPA analyses. Grains analysed in this study

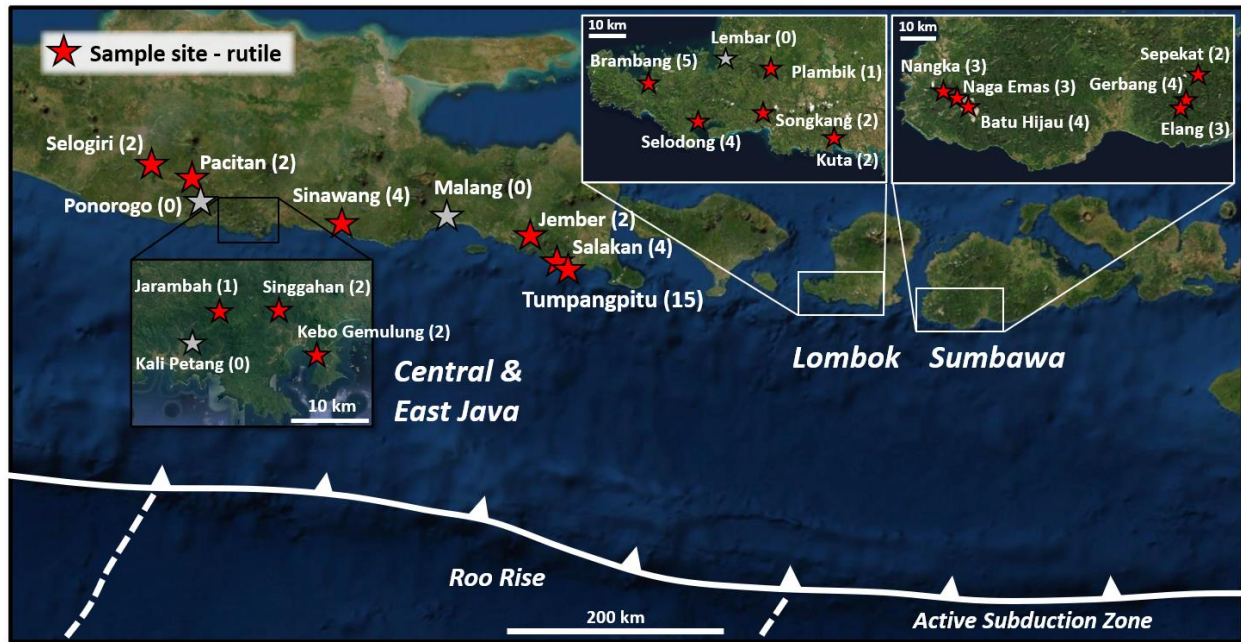


Figure 5.23: Locations of prospects and deposits within the eastern Sunda arc with rutile samples (number of samples indicated in parentheses). Four sites did not have any rutile recovered (Ponorogo, Kali Petang, Malang, and Lembar). Satellite image obtained from Google Earth (Image © TerraMetrics, 2023).

ranged from ~30 um to ~1000 um in length, with most grains closer to the smaller fraction. The full rutile mineral composition data are listed in Appendix C.

Rutile grain back-scattered electron (BSE) response and texture vary throughout the different deposits and prospects of the Sunda arc, as well as within the deposits and within samples. Rutile grain textures are summarized in Figures 5.24 and 5.25; however, many samples contain grains with two or more textures, or complex grains with several different textural features within. The example textures are listed in approximate declining abundance, with groups A to G the most observed throughout the dataset and groups H to N only occurring within 1 to 3 samples. Group A images are homogenous subhedral to euhedral grains. Group B are grains with cross-hatched exsolution lamellae, predominantly ilmenite (Fig. 5.24b). Exsolution lamellae of various thickness are common throughout the dataset. Group C consist of oscillatory and sector zoned rutile (Fig. 5.24c). Zoning varies

significantly in both style (thickness, regularity, and location within the grain) and brightness of the BSE response within the group and is often discontinuous. Intensely zoned rutile grains are rare; however, bright sections or sectors within grains are more common. Textures in group C are always accompanied by grains in the same sample that are homogenous gray or another dominant texture. Group D are grains with patchy and irregular 'zoning' or wispy regions with brighter BSE response. These grains are anhedral and often include minor void space, as well as an appearance of clustering or intergrowth of several rutile grains into one. Group E are grains with corroded grain boundaries or interiors, often anhedral with void space and partial mineral replacements. Group F are euhedral to subhedral grains that display triangular rutile cleavage planes often as triangular or elongate bladed voids. Group G are grains with varying amounts of inclusions, particularly of silicate minerals and circular void-space. Group H are grains consisting of aggregated bladed rutile. This group is only present at Sinawang, Tulungagung. Group I are mosaic texture rutile consisting of an interlocking growth pattern that grades in size from one side of grains to the other. This group is only present at Sinawang, Tulungagung. Group J are masses of corroded or needle-like rutile. This group is only present at Belongas, Selodong. Group K are rutile with titanite overgrowths. Group L are corroded rutile grains that are partially replaced by other mineral species, often pyrophyllite. Group M are feathery or fibrous rutile. This group is only present at Sinawang, Tulungagung. Group N are blebby aggregates of several smaller grains, often with irregular void space (Fig. 5.25).

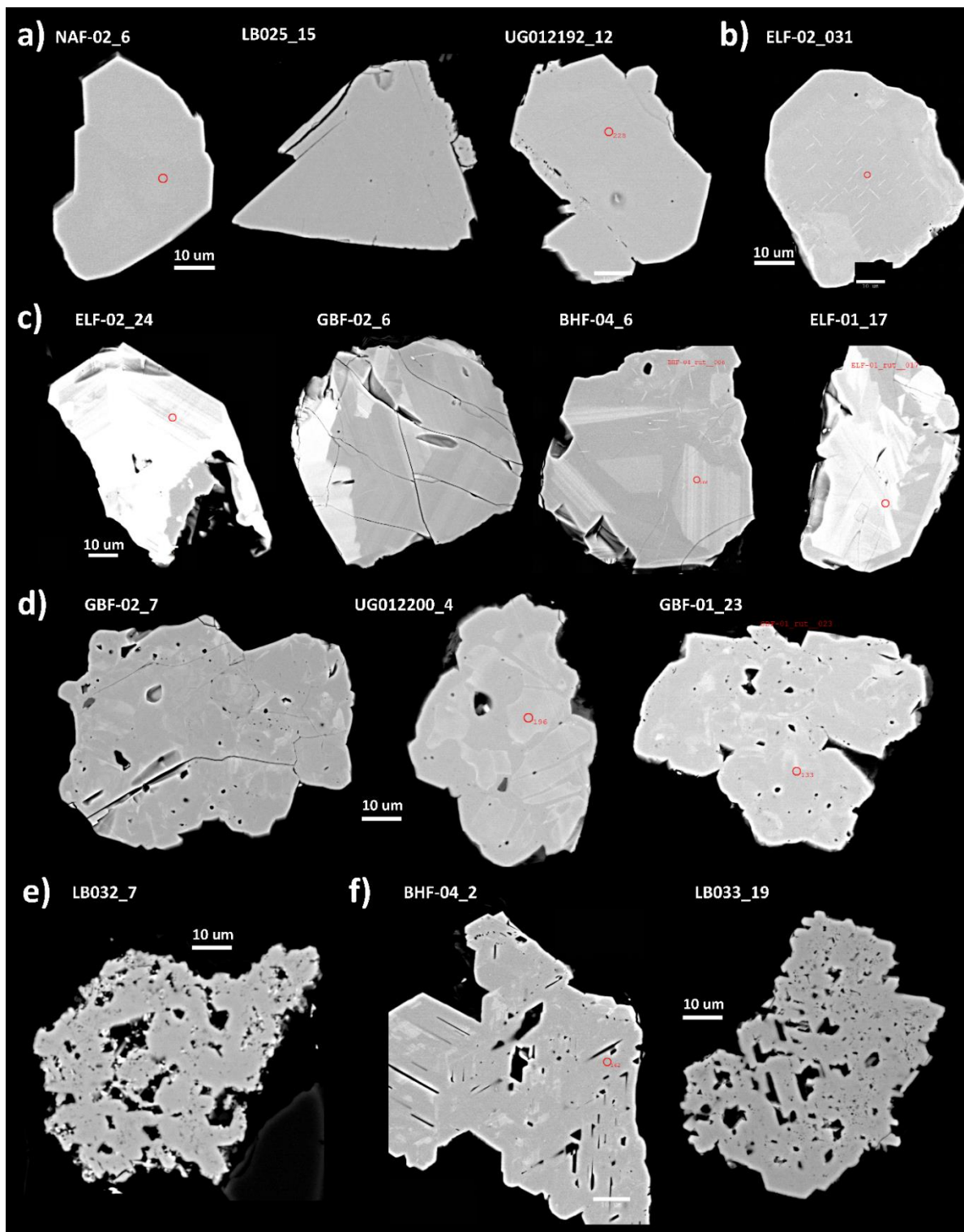


Figure 5.24: Backscattered electron images of representative rutile grains from throughout the eastern Sunda arc showing variations in textures. Brighter areas reflect higher mean atomic number. a) Homogenous grains (Nangka, Songkang, Tumpangpitu). b) Ilmenite exsolution texture (Elang). c) Oscillatory and sector zoning (Elang, Gerbang, Batu Hijau). d) Irregular patchy zoning (Gerbang, Salakan). e) Corroded grains (Songkang). f) Lattice-bladed texture with voids (Batu Hijau, Plambik). Red circles are EMPA analysis locations.

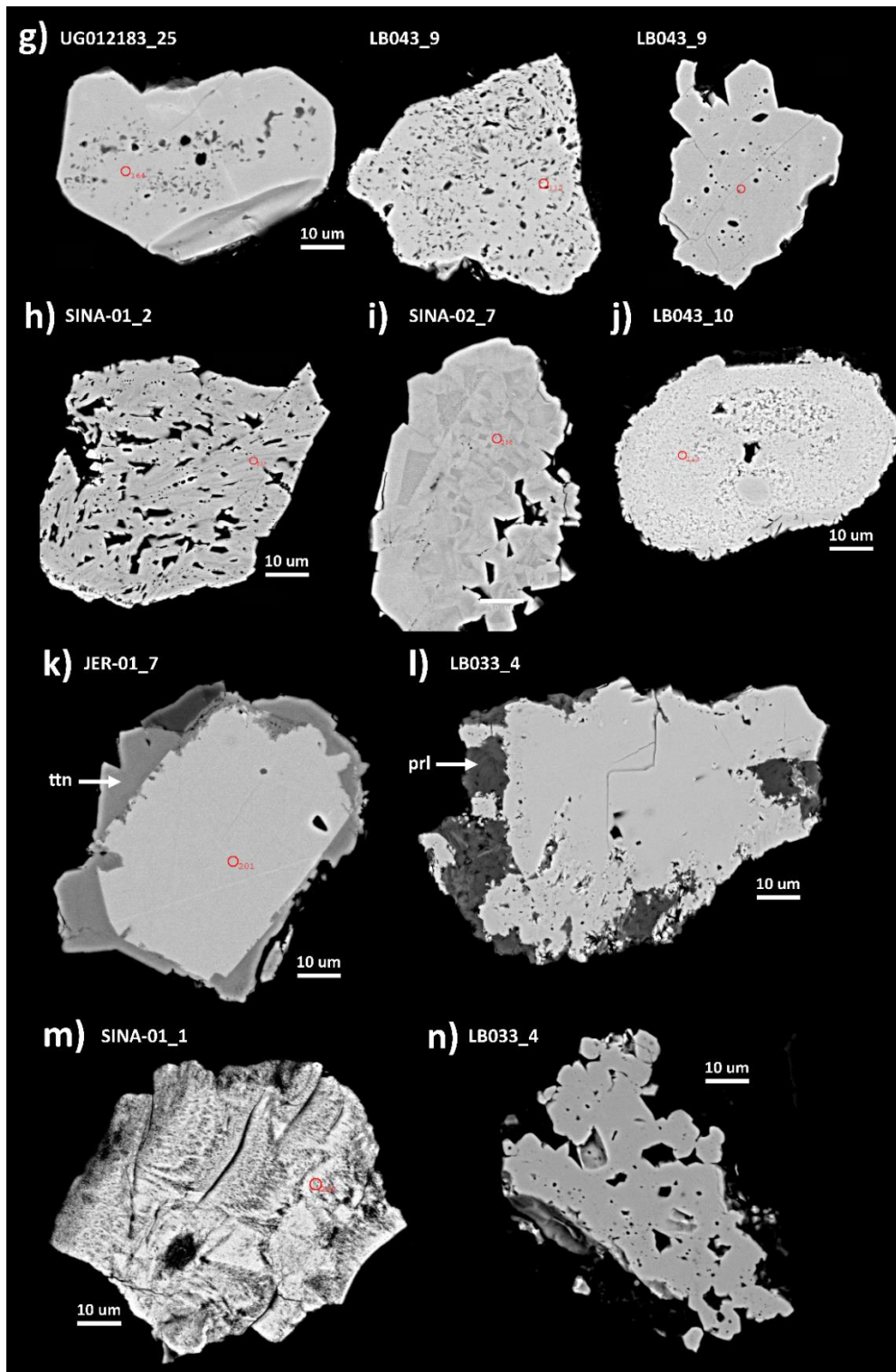


Figure 5.25: Backscattered electron images of representative rutile grains from throughout the eastern Sunda arc showing variations in textures. Brighter areas reflect higher mean atomic number. g) Inclusion-rich rutile (Tumpangpitu, Belongas). h) Aggregated bladed rutile (Sinawang). i) Mosaic texture (Sinawang). j) Corroded/needle rutile (Belongas). k) Rutile with titanite overgrowths. l) Corroded rutile with pyrophyllite intergrowths. m) ‘Feathery’ rutile (Sinawang). n) Blebby aggregates. Red circles are EMPA analysis locations.

Most rutile grains throughout the eastern Sunda arc have Cr, Cu, and Mo concentrations below or close to detection limits (<0.003 wt. %; Fig. 5.28). Copper concentrations are extremely low throughout the dataset, with only five samples with Cu values greater than 0.05 wt. % (Batu Hijau – BHF-02; Kebo Gemulung – TR-05; Sinawang – SINA-01, SINA-02). Molybdenum concentrations are extremely low, with most analyses being below detection limits of 0.007 wt. %. Only 152 of 969 EMPA analyses had measurable concentrations of Mo, with most being at or close to detection limits, and the majority of those occurring in grains at Tumpangpitu and to a lesser extent Batu Hijau. Tumpangpitu samples have Mo concentrations up to ~0.025 wt. % and Salakan up to 0.035 wt. %.

Heavy elements (W, Ta, Nb, Sn) as well as Fe and V are often highly variable within rutile from the eastern Sunda arc (Figs. 5.29, 5.30). Tungsten concentrations range over five and a half orders of magnitude, from 1.7 ppm at Nangka, to 49,561 ppm at Elang. Also common is high variance intra-sample, with W values at Central Brambang (LB002) ranging from 8.9 ppm to 11,314 ppm. Vanadium and Fe, similar to W, show elevated concentrations but less variation. Vanadium ranges from ~60ppm to 10,500 ppm, and Fe concentrations ~1,000 ppm to 100,000 ppm. As with W, there are often high variations in V and Fe content intra-sample. Tantalum, Sn, and Nb concentrations are generally lower than W, V, and Fe, with majority of Ta values less than 100 ppm, majority of Sn and Nb values less than 1000 ppm, one or two orders of magnitude less than Fe, W, and V maximum concentrations.

Primitive mantle-normalized REE patterns of rutile are often highly erratic, both throughout the dataset, within deposits/sites, and intra-sample (Fig. 5.26). Flat to slightly depleted HREE are the most common pattern, with positive or negative Eu anomalies of various intensities (e.g., Pacitan, Tumpangpitu, Salakan, Songkang, Batu Hijau). Normalized REE values are often less than 100 with most less than 10, with few exceptions in sites or individual analyses.

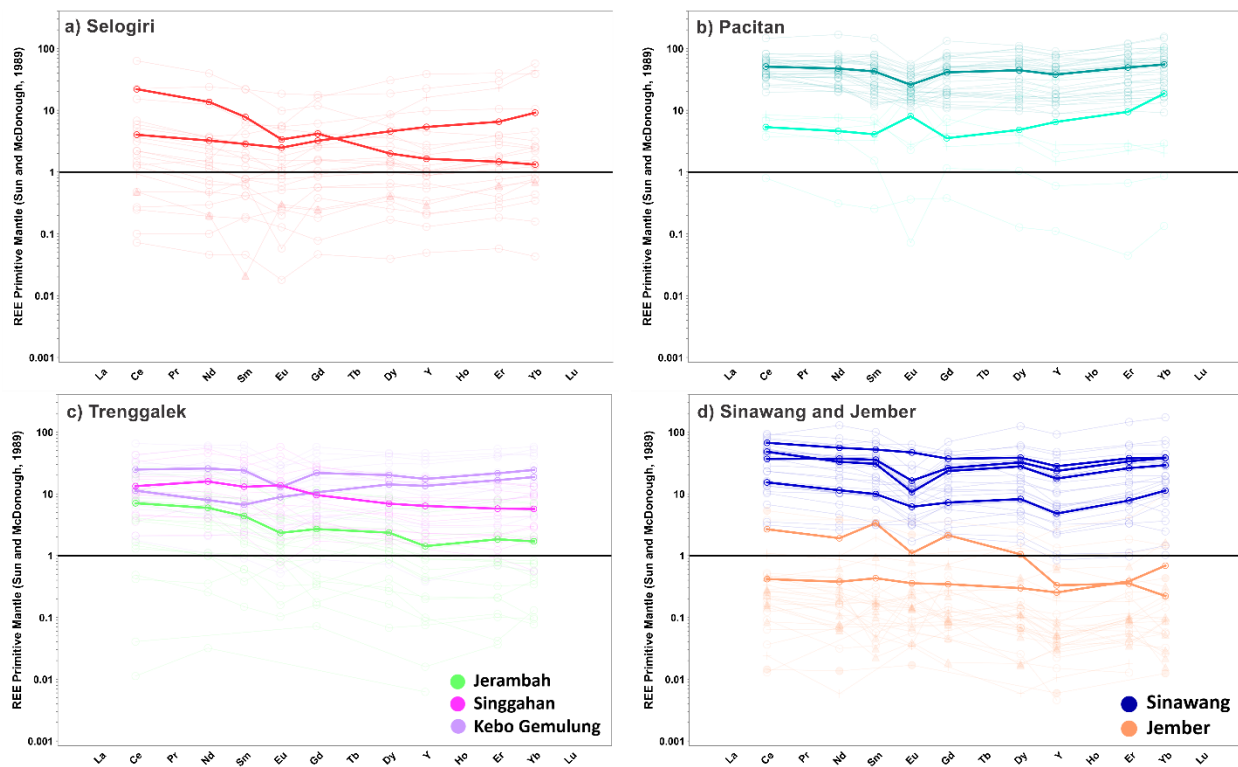


Figure 5.26: Primitive mantle-normalized REE patterns of rutile samples from the eastern Sunda arc. Median sample values are displayed as bold line. Normalizing values are from Sun and McDonough (1989).

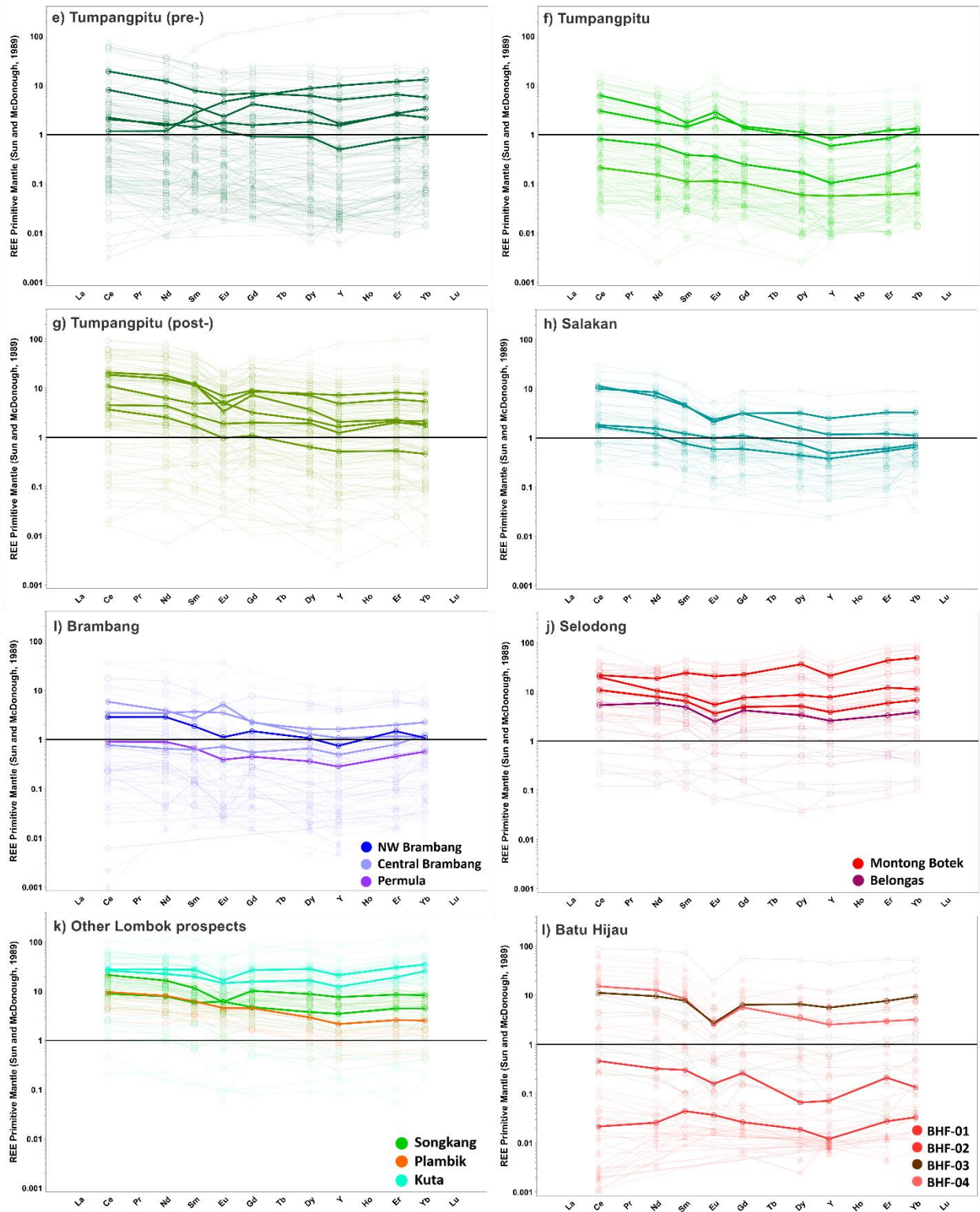


Figure 5.26: (Cont'd).

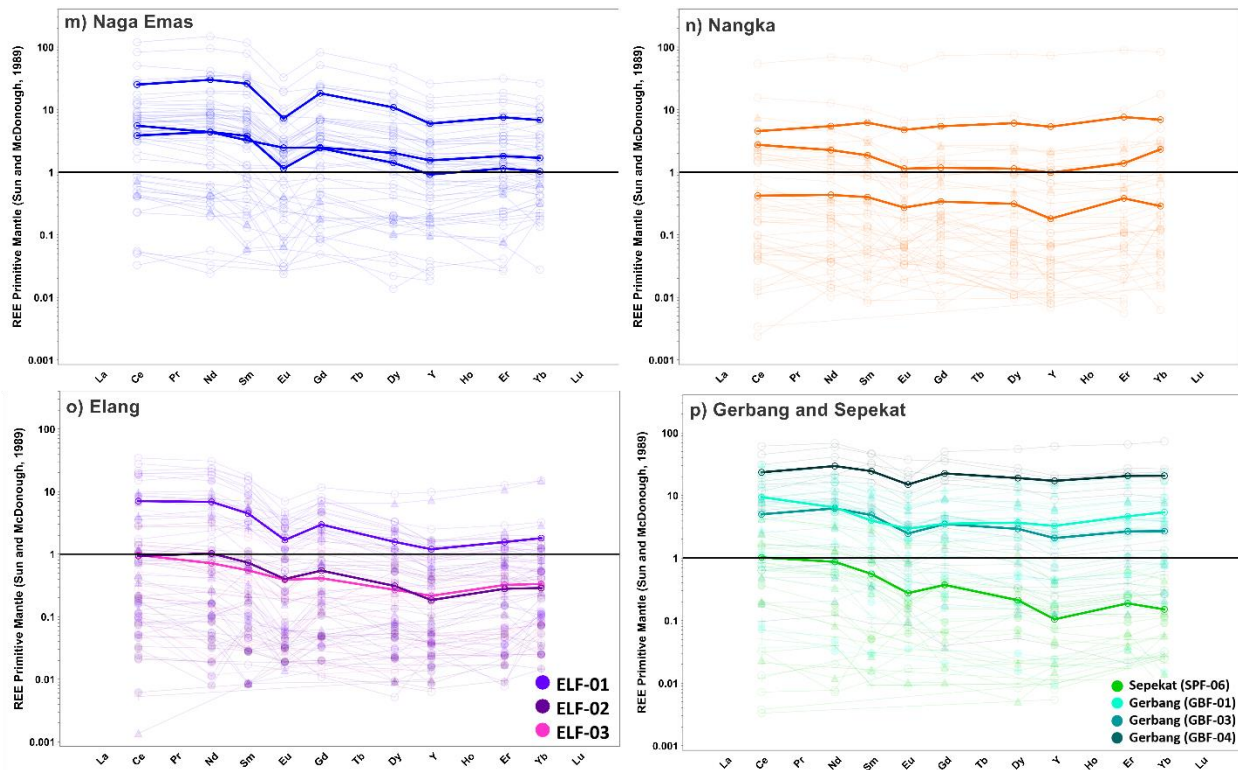


Figure 5.26: (Cont'd).

Six rutile laser maps were generated from a mineralized, intermediate argillic-altered tonalite at Gerbang (Elang District, Sumbawa). Sample GBF-02 has multiple different rutile grain textures: oscillatory/sector zoning, splotchy zoning, and homogenous gray rutile (Fig. 5.27). Fine oscillatory zoning in BSE in rutile is tied to W concentrations, with the brightest zones having up to 10 wt. % W. Oscillatory zoned rutile are often W-rich and Nb-poor (e.g., GBF-02_6), with irregular/splotchy zoned rutile (e.g. GBF-02_7) often displaying moderate W and increased Nb, although Nb concentrations are several orders of magnitude less than W. Homogenous gray rutile show relatively elevated W content (up to ~1,500 ppm), however show no BSE response. Grain size is often too small within imaged grains to show changes within fine-scale zonation in BSE. All rutile LA-ICP-MS maps are included in Appendix F.

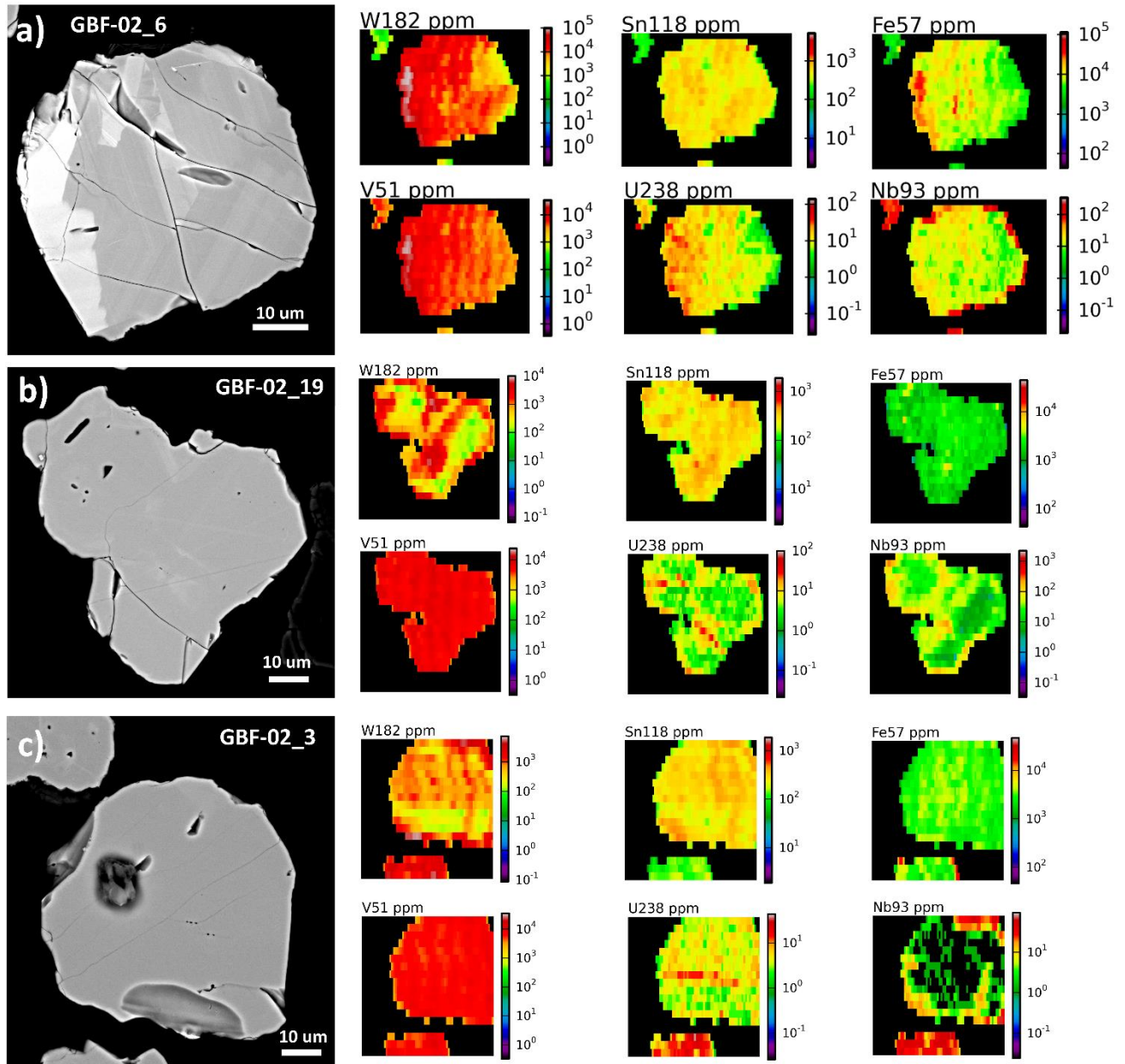


Figure 5.27: LA-ICP-MS maps of select a) strongly zoned, b) faintly zoned, and c) homogenous gray rutile grains from syn-mineralization Charlie tonalite, Gerbang, Elang district, Sumbawa (GBF-02). Note differences in magnitude of colour scales between grains.

5.8 – Titanite mineral chemistry

Titanite from 26 samples were analysed, covering a range of igneous rock types from across Java, Lombok, and Sumbawa (Fig. 5.28). All titanite were analysed from

mineral separates mounted in epoxy pucks, and a total of 282 LA-ICP-MS trace element analyses were obtained, as well as 203 corresponding EMPA analyses. The full dataset of titanite LA-ICP-MS and EMPA analyses are listed in Appendix C.

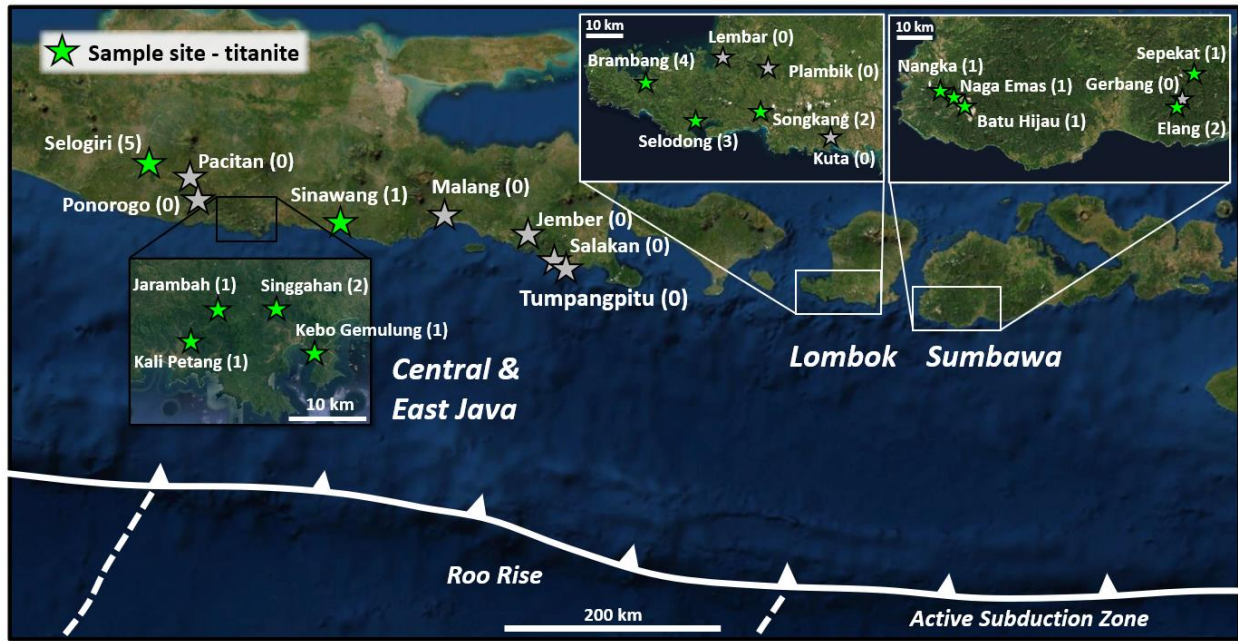


Figure 5.28: Locations of prospects and deposits within the eastern Sunda arc with titanite samples (number of samples indicated in parentheses). Ten sites did not have any titanite recovered (Pacitan, Ponorogo, Malang, Jember, Salakan, Tumpangpitu, Lembar, Plambik, Kuta, and Gerbang). Satellite image obtained from Google Earth (Image © TerraMetrics, 2023).

The most common titanite grain textures from samples from the eastern Sunda arc are euhedral-subhedral magmatic grains, occasionally with oscillatory or patchy zoning in BSE (Fig. 5.29a-b). Several sites (Songkang, Jerambah, Elang, Batu Hijau) have secondary titanite containing very fine-grained void space (Fig. 5.29c). Other textures consist of partial rutile replacement, corroded/altered grains with mineral intergrowths (Fig. 5.29d).

Mean primitive mantle normalized REE patterns of titanite from the eastern Sunda arc show four dominant patterns: 1) depleted LREE to flat HREE with no Eu anomaly, 2)

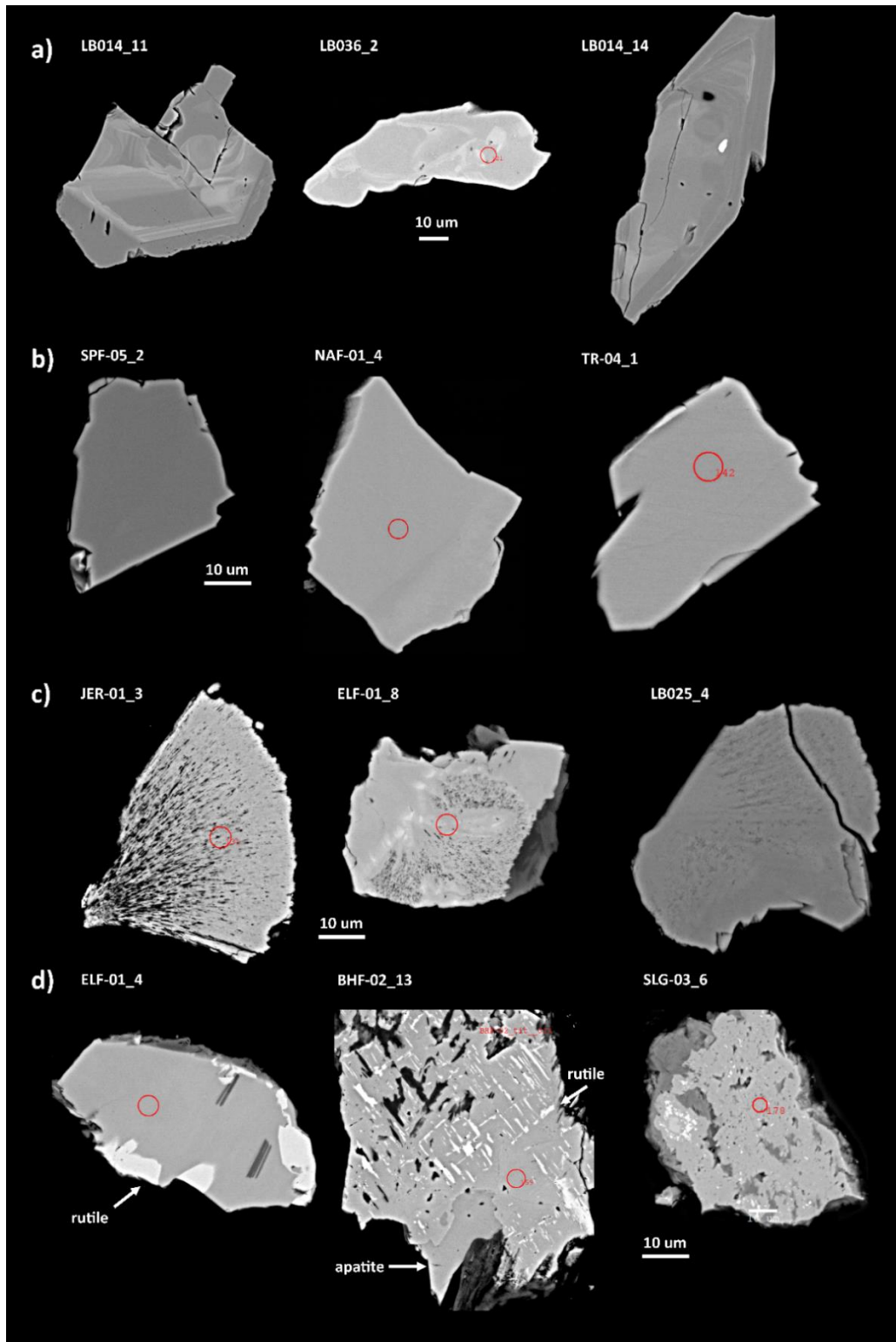


Figure 5.29: Backscattered electron images of representative titanite grains from throughout the eastern Sunda arc showing variations in textures. (a) Magmatic euhehedral to subhedral titanite with oscillatory or patchy zoning in BSE. (b) Magmatic homogenous textured titanite. (c) 'Porous' textured secondary or altered titanite. (d) Inclusion-rich or altered titanite, including replacement by rutile; rutile inclusions and corroded/altered grains. Red circles are locations of EMPA analyses.

slightly enriched LREE to flat HREE with a subtle negative Eu anomaly, 3) depleted LREE to flat HREE with a strong negative Eu anomaly, and 4) flat REE trend with a strong positive Eu anomaly (Fig. 5.30).

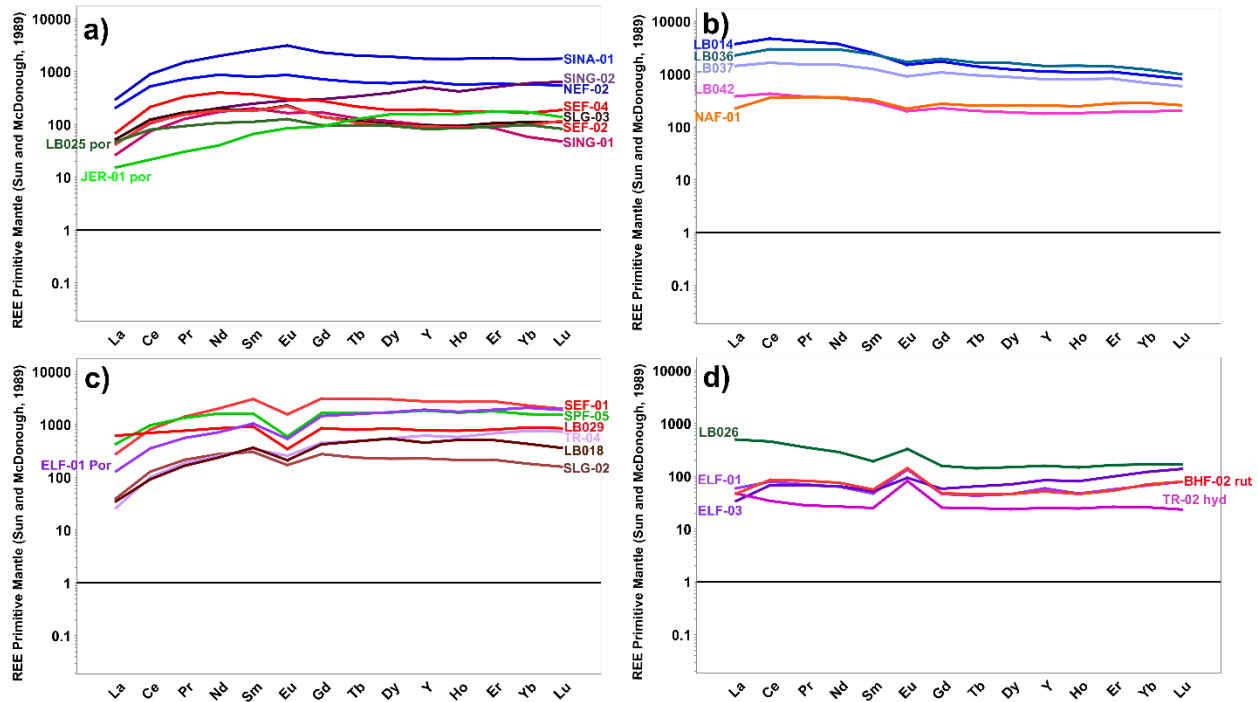


Figure 5.30: Mean Primitive mantle normalized REE patterns of titanite samples from the eastern Sunda arc. a) Depleted LREE to flat HREE pattern with no Eu anomaly. b) Slightly enriched LREE to flat HREE with subtle negative Eu anomaly. c) Depleted LREE to flat HREE with strong negative Eu anomaly. d) Flat REE pattern with strong positive Eu anomaly. Por = porous texture. Rut = partial rutile replacement. Hyd = hydrothermal/altered titanite. Normalizing values are from Sun and McDonough (1989).

Most titanite grains throughout the eastern Sunda arc have Cr and Sr concentrations below or close to detection limits (< 0.005 wt. %). Fluorine concentrations range from 0 to 5 wt. %, with altered titanite at Singgahan (SING-02) and Songkang (LB025) having the highest contents, with 3.5 to 5 and 3 to 4 wt. % F, respectively. Magmatic grains with strong zoning in BSE have the lowest F contents, with Selogiri (SLG-02), NW Brambang (LB014) and Central Brambang (LB036, LB037) all having analyses with less than 0.30 wt. % F.

Chapter 6: Discussion

6.1 – Geochronology

6.1.1 – Introduction

Zircon U-Pb LA-ICP-MS geochronology was conducted across 32 porphyry and epithermal-related intrusions and volcanic rocks throughout the eastern Sunda arc. Fifty-three age determinations from this study are consistent with those of previously published ages: Selogiri (Maryono et al., 2018), Kasihan (JICA-JOGMEC, 2004), Singgahan (Arc Exploration, 2013), Jerambah (Arc Exploration, 2013), Sinawang (Arc Exploration, 2013; Harrison, 2017), Tumpangpitu (Harrison, 2017), Brambang (Maryono et al., 2018), Selodong (Maryono et al., 2018), Batu Hijau (Garwin, 2000; Maryono et al., 2018), and Elang (Garwin, 2000; Maryono et al., 2018). However, several of these sites only had one prior age and have been subsequently improved with a greater site sample density, specifically at Brambang (12 zircon U-Pb samples from NW Brambang, Central Brambang, and Permula). Sixteen sites had no previous geochronology studies, and details of these age determinations are presented in Table 5.2 (Chapter 5). The majority of rutile, apatite and titanite U-Pb geochronology samples contained high amounts of common Pb (Chapter 5) and thus are not discussed here in detail. In addition, hydrothermal/magmatic apatite and titanite were not discriminated prior to geochronology calculations, thus likely have a combination of magmatic and hydrothermal grains in age calculations, potentially further complicating generation of ages.

6.1.2 – Java geochronology

Eastern and central Java porphyries and HSE-related intrusives and volcanic rocks range from late Oligocene to late Miocene, with two main periods of magmatism ~28 to 24 Ma (Sinawang, Trenggalek, Pacitan/Ponorogo) and ~15.5 to 13 Ma (majority of Trenggalek units and Selogiri; Fig. 6.1). Trenggalek district intrusive phases at Singgahan, Jerambah, and Kali Petang are mostly ~14-15 Ma, however one tonalite porphyry sample at Singgahan is significantly older at 26.38 ± 0.93 Ma. Kebo Gemulung yielded a bi-modal population with most analyses at 23.2 ± 0.32 Ma and two younger analyses at 9.57 ± 0.73 Ma. Selogiri has four samples that have ages ranging from 15.5 to 13.5 Ma. Jember is the only late Miocene or younger porphyry in eastern Java other than Tumpangpitu, with an intercept age of 6.94 ± 0.11 .

Tujuh Bukit district ages from this study range from late Miocene to early Pliocene (~10.5 Ma at Salakan to ~4.5 Ma at Tumpangpitu; Fig. 6.2). All syn-mineralization tonalites

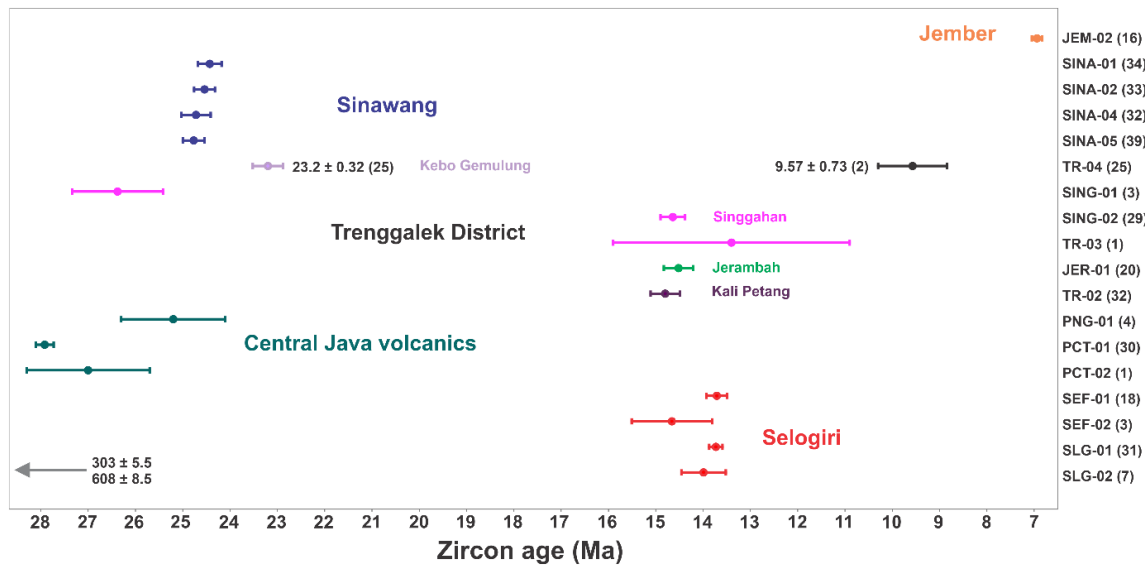


Figure 6.1: Zircon U-Pb age determinations from this study in Central and East Java. The number of zircons used in the age determinations are in parantheses. Secondary populations are indicated by black lines, inherited single grains are indicated by gray lines.

and post-mineralization diorites at Tumpangpitu overlap with each other within error as well as with an alunite $^{40}\text{Ar}/^{40}\text{Ar}$ age of 4.385 ± 0.049 and a Re-Os age of molybdenite of 4.303 ± 0.018 Ma from Harrison (2017). Three syn- and post-mineralization phases have inherited zircons populations that are the same age as pre-mineralization samples, with inherited zircon populations ranging in age from 7.5 to 5.5 Ma. The previously undated Salakan prospect to the northwest of Tumpangpitu yielded ages of 8.49 ± 0.25 and 9.59 ± 0.68 Ma, which pre-date the syn-mineralization phases at Tumpangpitu by at least 3.3 million years. The pre-mineralization Tanjung Jahe diatreme breccia at the southern end of the Tujuh Bukit district was dated by Harrison (2017) between 8.78 ± 0.22 Ma and 8.52 ± 0.21 Ma (zircon U-Pb age determinations), overlapping the emplacement age of the Salakan tonalites (this study).

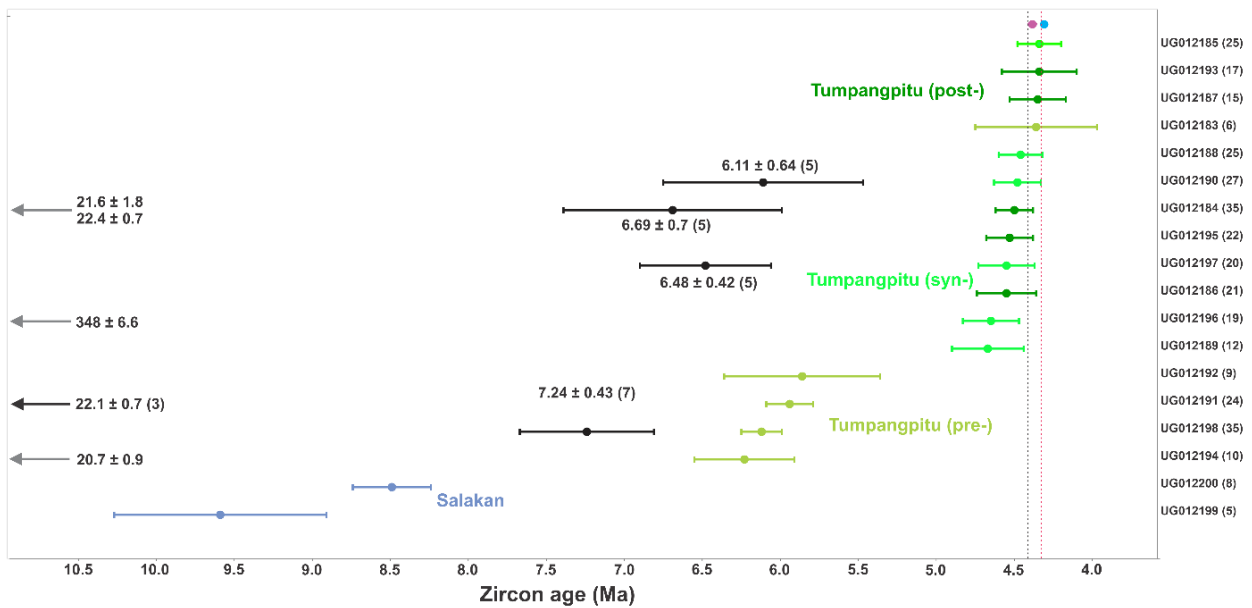


Figure 6.2: Zircon U-Pb age determinations from this study from the Tumpangpitu porphyry and Salakan porphyry prospect within the Tujuh Bukit district, East Java. The number of zircons used in age determinations are in parantheses. Older populations are indicated by black lines, inherited single grains are indicated by gray lines. Purple and blue dots are $^{40}\text{Ar}/^{39}\text{Ar}$ age of alunite (4.385 ± 0.049 Ma) and Re-Os age of molybdenite (4.303 ± 0.018 Ma), respectively, from Harrison (2017) (error bars are obscured by dots).

6.1.3 – Lombok geochronology

Syn-mineralization intrusive phases at NW Brambang range from 7.20 to 6.77 Ma, with two earlier phases at 7.71 ± 0.51 and 7.81 ± 0.53 Ma (LB011, LB015; Fig. 6.3). Central Brambang syn-mineralization samples are slightly younger and range from 7.20 to 6.58 Ma. Quartz diorite porphyry sample LB009 at Central Brambang has an inherited zircon population of the same age as earlier phases LB011 and LB015 at NW Brambang (7.81 ± 0.49). The barren prospect of Permula to the east of Central Brambang yielded a pre-mineralization age of 7.62 ± 0.10 Ma, similar to other pre-mineralization phases within Brambang. Selodong syn-mineralization intrusions at Montong Botek, Belikat, and Belongas range from 7.86 to 6.99 Ma. Songkang syn-mineralization sample LB032 yielded an age of 10.65 ± 0.41 Ma with Songkang quartz diorite porphyry samples (LB025, LB026) being younger at 8.23 ± 0.16 and 7.99 ± 0.30 Ma, respectively. Sample LB026 at Songkang and LB028 at Selodong have similar older inherited zircon populations that match with LB032, at 10.60 ± 0.71 and 10.3 ± 1.2 Ma, respectively. Porphyry prospects Lembar and Plambik yielded ages of 17.64 ± 0.27 and 17.37 ± 0.63 Ma, respectively. Sample LB032 at Songkang contained single inherited zircons at 18.3 ± 0.6 and 16.8 ± 1.0 Ma, roughly overlapping with Lembar and Plambik prospects. Kuta yielded the oldest ages for intrusive units on Lombok at 20.47 ± 0.40 and 20.46 ± 0.63 Ma (Fig. 6.3). Plambik, Lembar, and Kuta had no prior age determinations and are the first reported early Miocene porphyry systems on Lombok.

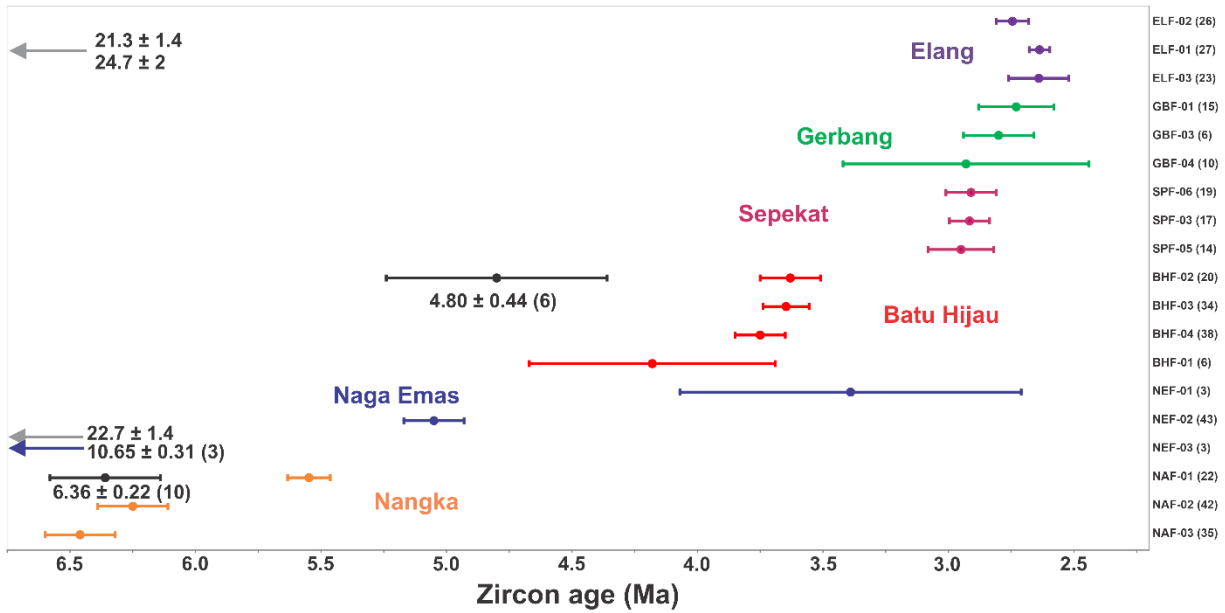


Figure 6.4: Zircon U-Pb age determinations from this study from Sumbawa. The number of zircons used in age determinations are in parantheses. Older populations are indicated by black lines, inherited single grains are indicated by gray lines.

hornblende quartz diorite porphyry (NEF-02) has an age of 5.05 ± 0.12 Ma. Nangka quartz diorites have two late Miocene ages at 6.25 ± 0.14 and 6.46 ± 0.14 Ma, with the latest quartz diorite having an age of 5.55 ± 0.09 Ma, with an inherited zircon grain population (10 zircons) that overlap with the previous two older ages (Fig. 6.4).

6.1.5 – Inherited zircons

Six samples within the eastern Sunda arc have inherited late Oligocene to early Miocene ~ 22 Ma zircon grains (11 grains in total). The most likely explanation for these inherited grains is that they are from late Oligocene to early Miocene volcanic and volcanoclastic rocks that dominate the main volume of rock throughout the islands of Java, Lombok, and Sumbawa (Maryono et al., 2018).

Smyth et al. (2007) documented inherited zircons in Cenozoic sedimentary and igneous rocks of East Java that range from Archean to Cenozoic in age, with age distributions interpreted to reflect different basement types at depth. Ordovician to Jurassic and Cretaceous zircons were restricted to Central Java and sedimentary sequences in the north, whereas older Archean and Proterozoic zircons were found within igneous samples that stretched along the Southern Mountains of east Java, extending east to Jember approximately 45 km northwest of Tujuh Bukit. Selogiri samples from this study yielded two significantly older inherited grains, one Neoproterozoic (608 ± 8.5 Ma) and one late-Carboniferous (303 ± 5.5 Ma), the latter matching the findings of Maryono et al. (2018) that reported Carboniferous grains within Selogiri samples. They are also consistent with the work of Smyth et al. (2007) who reports Proterozoic and older grains in samples surrounding the Selogiri area. Two Cretaceous zircon grains (98.5 ± 1.0 and 98.5 ± 0.8 Ma) were documented by Harrison (2017) in the Late Miocene Tanjung Jahe diatreme breccia (9.00 to 8.31 Ma) at Tujuh Bukit. Within this study, a syn-mineralization tonalite sample at Tumpangpitu yielded one Carboniferous grain (348 ± 6.6 Ma), supporting the findings from Harrison (2017) that the Tujuh Bukit district of east Java may be close to or on the margin of the Archean Gondwanan fragment that has been interpreted to underlie east Java (Smyth et al., 2007).

6.1.6 – Timing of magmatism along the eastern Sunda arc

Figure 6.5 summarizes the U-Pb zircon ages determined during this study from west to east along the eastern Sunda arc islands of Java, Lombok, and Sumbawa. The 5 Ma line on Figure 6.5 shows an approximate cutoff between giant porphyry deposits (e.g.

Tumpangpitu, Batu Hijau, and Elang) and poorly-endowed porphyries (e.g. Trenggalek district, Selogiri, Selodong). On a district scale intrusive rock units young eastward, with Late Oligocene to Pliocene ages in Java, Early Miocene to Late Miocene ages in Lombok, and Late Miocene to Pliocene ages in Sumbawa. The absolute age data presented in this study reaffirms a consistent east-younging in eastern Java from Trenggalek (~15 Ma) through Salakan (~8.5 Ma) and Jember (~7 Ma), to the pre-mineralization phases (~6.5 Ma) and syn-mineralization phases (~4 Ma) at Tumpangpitu, similar to findings of Harrison (2017) and Maryono et al. (2018). Lombok, which only had previous age determinations at the

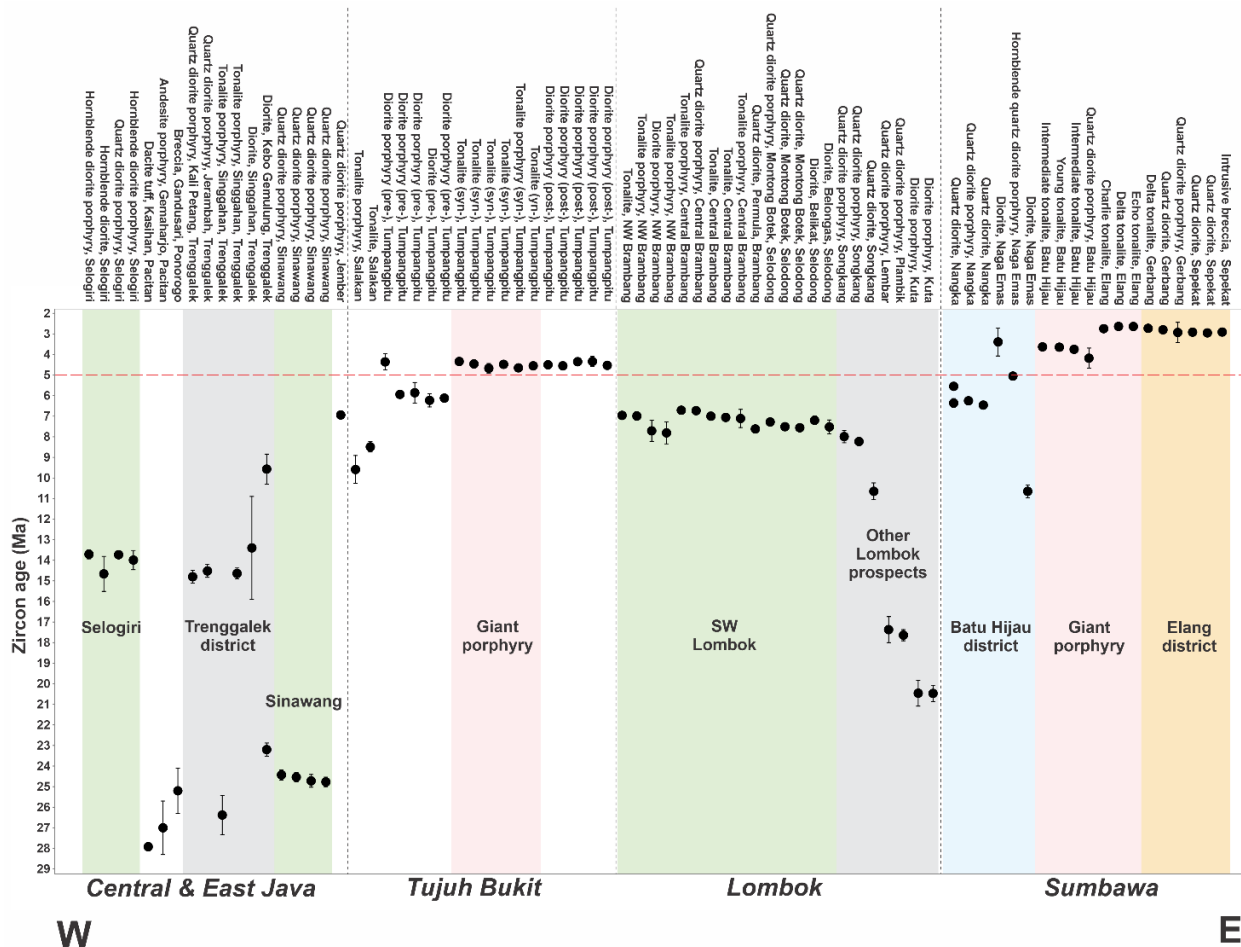


Figure 6.5: Compilation of zircon U-Pb age determinations from this study along the eastern Sunda arc. Data-points display the youngest zircon population, with inherited grains and populations omitted. Data-point errors symbols are error symbols are 2σ . Western-most samples at Selogiri and eastern-most samples at Elang are approximately 750 km apart.

western-most sites of Brambang and Selodong (Maryono et al., 2018), shows an opposite westward younging in SW Lombok from Kuta, Plambik and Lembar in the east (20-17.5 Ma) through Songkang (~10-8 Ma), Selodong (~7.5 Ma) and Brambang (~7 Ma). On Sumbawa, there is a general younging from west to east from Nangka (~6.5 Ma), Naga Emas (~5 and 3.5 Ma) to Batu Hijau (~4.5-3.5 Ma) and the Elang district (~3.0 to 2.5 Ma). Similar to Lombok, there is a local reversal in younging, with the northeast Sepekat prospect predating tonalite phases at Elang. The majority of intrusive phases on Sumbawa, including those from giant porphyries at Batu Hijau and Elang are Pliocene in age.

6.2 - Zircon

6.2.1 - Introduction

Substitution of REE³⁺ into zircon is easiest for REEs closest in size to Zr⁴⁺, favouring heavy REE (HREE) over light REE (LREE) (Burnham and Berry, 2012). Rare earth elements decrease in ionic radius with increasing atomic number and thus have chondrite-normalized concentrations that increase steadily over several orders of magnitude from La to Lu, excluding Eu and Ce which commonly display deficit and excess, respectively (Hoskin and Schaltegger, 2003; Burnham and Berry, 2012). This is due Ce and Eu being unusual among the REE in that they can exist in oxidation states other than 3+ in terrestrial conditions (Ce⁴⁺ and Ce³⁺; Eu²⁺ and Eu³⁺). Cerium in the 4+ state is more compatible in zircon than other REE³⁺ due to its similar ionic radius to Zr (Ce⁴⁺ = 0.97 Å; Zr⁴⁺ = 0.84 Å). Similarly Eu³⁺ (1.07 Å) is more compatible than Eu²⁺ (1.13 Å). Cerium⁴⁺ can substitute directly for Zr⁴⁺, whereas other REE are primarily believed to substitute by the xenotime substitution of Zr⁴⁺ + Si⁴⁺ ↔ REE³⁺ + P⁵⁺ (Hoskin and Schaltegger, 2003). The Eu anomaly is

often quantified using the ratio of measured Eu and a 'normalized' Eu value based on neighbouring REEs of Sm and Gd, and is calculated as:

$$\text{Eu}/\text{Eu}^* = \text{Eu}_N / (\text{Sm}_N \times \text{Gd}_N)^{0.5}$$

where subscript 'N' denotes the use of chondrite-normalized values (Sun and McDonough, 1989). Similarly, the Ce anomaly may be estimated in the same way as Eu and its neighbouring REEs, and is calculated as:

$$\text{Ce}/\text{Ce}^* = \text{Ce}_N / (\text{La}_N \times \text{Pr}_N)^{0.5}$$

However, the calculation of the Ce anomaly can be problematic due to the low abundance of LREE in zircon and La is often at, or near detection limits (Dilles et al., 2015). Ballard et al. (2002) proposed a method for calculating $\text{Ce}^{4+}/\text{Ce}^{3+}$ based on the assumption that Ce in the melt and zircon is a sum of its two oxidation states. Due to the calculation of $\text{Ce}^{4+}/\text{Ce}^{3+}$ relying on whole-rock composition, it has been excluded from this study due to the extensive alteration of the majority of samples.

6.2.2 – Zircon prospectivity indicators

Zircon is a robust mineral that is resistant to effects of hydrothermal alteration and weathering, and commonly is a main phase in detrital heavy mineral concentrates (e.g., Kelley et al., 2011; Plouffe et al., 2016; Lee et al., 2021). As a result, it can be a useful tool for investigating properties and fertility/prospectivity of individual intrusions or regional exploration programs from stream sediments. Zircon trace element chemistry can record key information regarding primary magmatic conditions, including magmatic oxidation states from Eu and Ce anomalies and ΔFMQ (Ballard et al., 2002; Hoskin and Schaltegger,

2003; Burnham and Berry 2012; Dilles et al., 2015; Loucks et al., 2020), zircon crystallization temperature from Ti (Watson and Harrison, 2005; Ferry and Watson, 2007), and evolving magma compositions from variations in Hf, Yb/Gd, Th/U and REE patterns (Claiborne et al., 2006; Wainwright et al., 2011; Dilles et al., 2015; Lee et al., 2017; Large et al., 2018). A number of studies have demonstrated the potential of zircon trace element chemistry in differentiating fertile and infertile porphyry suites. For example, Ballard et al. (2002) demonstrated that zircons from mineralized intrusions at the Chuquicamata-El Abra porphyry systems have elevated Eu/Eu^* (> 0.4) and $\text{Ce}^{4+}/\text{Ce}^{3+}$ (> 300), whereas zircons from barren intrusions had lower levels. Similarly, Dilles et al. (2015) showed zircon Eu/Eu^* contents in mineralizing intrusions at Chuquicamata-El Abra, Chile, Butte, Montana, El Salvador, Chile, Yerington, Nevada, and Yanacocha, Peru have elevated and highly variable Eu/Eu^* values attributed to increased oxidation due to removal of reducing fluids. Lu et al. (2016) used Eu/Eu^* and other Eu and Ce anomaly proxies to differentiate fertile and barren suites from several porphyry deposits in Asia, Australia, and North America. They found that zircon Eu proxies are most useful in differentiating fertile and barren systems and Dy/Yb and $\text{Ce}/\text{Nd}/\text{Y}$ moderately useful. In hydrous melts, early crystallizing amphibole preferentially incorporates Y and middle REE (e.g., Dy) over HREE (e.g., Yb; Davidson et al., 2007; Lu et al., 2016). As a result, fertile/prospective hydrous melts should display lower Dy/Yb ratios than drier, unprospective melts (Davidson et al., 2007; Richards and Kerrich, 2007; Lu et al., 2015, 2016). Lu et al. (2016) demonstrated that Ce/Nd can be used as a proxy for Ce/Ce^* , due to the difficulties in measuring La and Pr in zircon as described above. Recently, Loucks et al. (2020) presented a new method of calculating relative oxygen fugacity (ΔFMQ) of magma at zircon crystallization using ratios

of Ce, U and Ti without determination of crystallization temperature, pressure, or parental melt composition as was necessary with previous oxybarometer methods (e.g., Ce^{4+}/Ce^{3+} , Ballard et al., 2002).

Java zircons from Tumpangpitu, Selogiri, Trenggalek district (Jerambah, Singgahan, Kali Petang, Kebo Gemulung), and Jember display prospective high Eu/Eu^* ($\sim > 0.4$) and low Dy/Yb (< 0.3) compared to Sinawang and Pacitan samples with lower Eu/Eu^* (Fig. 6.6a). All Java samples have low Y and low Dy/Yb ($\sim < 0.3$) indicating hydrous conditions and partially overlap with $(Ce/Nd)/Y$ vs. Dy/Yb prospective field (Fig. 6.6b-c). All Java zircon samples except for Sinawang and Pacitan show an ore-forming/prospective signature in $10,000*(Eu/Eu^*)/Y > 2$ (of Ahmed, 2019) with a range of Ce anomaly $(Ce/Nd)/Y$ of ~ 0.05 to 0.1 (Fig. 6.6d). Sinawang and Pacitan zircons have distinctly lower $10,000*(Eu/Eu^*)/Y$ of < 2 compared to the rest of the suite at Tumpangpitu, Trenggalek, Jember and Selogiri. Tumpangpitu zircons are the only Java site with high Eu/Eu^* (> 0.4) combined with a moderately oxidized signature of ΔFMQ of 0.0 to $+2.5$ (Fig. 6.6e). Trenggalek, Selogiri, and Jember zircons show similarly high Eu/Eu^* of > 0.4 but are moderately reduced with ΔFMQ values of 0.5 to -1.0 .

Lombok zircons from Brambang (NW and Central), Selodong, and Songkang display prospective high Eu/Eu^* ($\sim > 0.4$) and low Dy/Yb (< 0.3) compared to Kuta, Lembar, Plambik and Permula (Brambang) samples with lower Eu/Eu^* (Fig. 6.7a). The majority of Lombok zircons have low Y and low Dy/Yb (< 0.3) and partially overlap with the $(Ce/Nd)/Y$ vs. Dy/Yb prospective field (Fig. 6.7b-c). 'Barren' Permula from Brambang is the

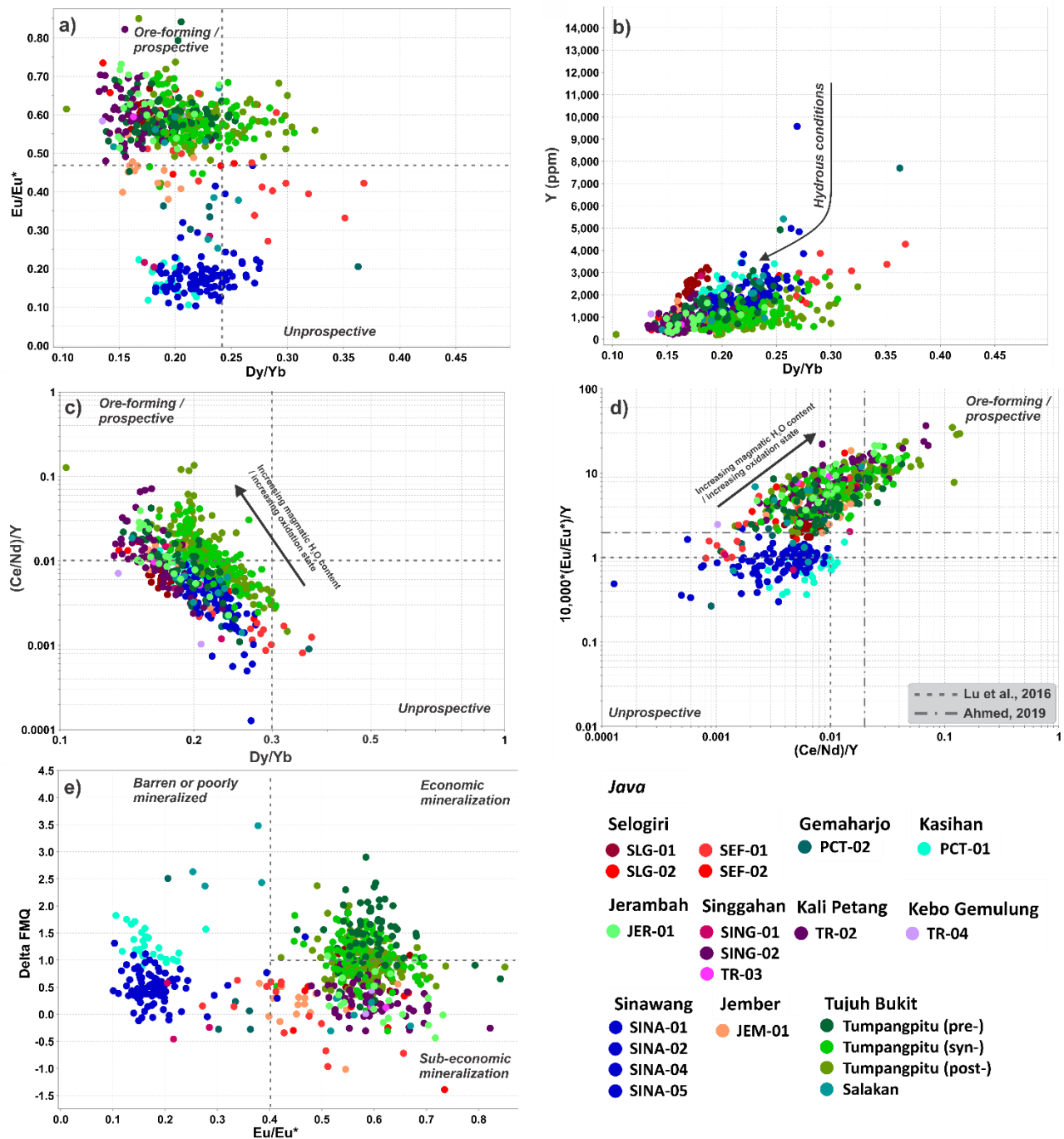


Figure 6.6: Java zircon prospectivity plots. a) Eu/Eu^* vs. Dy/Yb . b) Y vs. Dy/Yb . c) $(Ce/Nd)/Y$ vs. Dy/Yb . d) $10,000 \cdot (Eu/Eu^*)/Y$ vs. $(Ce/Nd)/Y$. e) ΔFMQ vs. Eu/Eu^* .

only sample to have an unprospective signature and high Y - Dy/Yb . Brambang (NW and Central), Selodong and Songkang all have an ore-forming or prospective signature with

$10,000*(Eu/Eu^*)/Y > \sim 2$ (using discriminations of Ahmed, 2019) and have a range of $(Ce/Nd)/Y \sim 0.03$ to 0.1 (Fig. 6.7d). Kuta, Plambik, Lembar and Permula zircons generally have low Eu and Ce anomalies, with $10,000*(Eu/Eu^*)/Y$ and $(Ce/Nd)/Y$ less than 1 and 0.01, respectively. Central Brambang zircons are the only Lombok site with high Eu/Eu^* (>0.4) combined with a moderately oxidized ΔFMQ signature of $\sim +0.5$ to $+2.5$ (Fig. 6.7e). Songkang, NW Brambang, and some zircons from Selodong have high Eu/Eu^* (>0.4); however, have a moderate ΔFMQ of -0.5 to $\sim +1.0$. A portion of Selodong and Songkang analyses have lower Eu/Eu^* ($0.3-0.4$) but a moderately oxidized ΔFMQ signature of $+0.5$ to $+2.0$ (Fig. 6.7e). Kuta, Lembar, and Plambik zircons all have Eu/Eu^* less than 0.4, and ΔFMQ of approximately -1.0 to $+1.5$. The samples from the barren Permula intrusion in Brambang are unique with extremely low Eu/Eu^* (~ 0.0 to 0.15) and extremely high or oxidized ΔFMQ at $+3.0$ to $+4.25$ (Fig. 6.7e).

Sumbawa zircons from Batu Hijau, Naga Emas, Elang, and some from Nangka display prospective high Eu/Eu^* ($\sim > 0.4$) and low Dy/Yb (< 0.3) compared to a majority of Sepekat, some Nangka, and some Elang zircons (Fig. 6.8a). The majority of Sumbawa zircons have low Dy/Yb (< 0.3) and Y, other than Sepekat, and partially overlap with $(Ce/Nd)/Y$ vs. Dy/Yb prospective field (Fig. 6.8b-c). Batu Hijau, Elang, Naga Emas, and most of Nangka zircons have prospective high $10,000*(Eu/Eu^*)/Y > \sim 2$, with $(Ce/Nd)/Y$ of approximately 0.02 to 0.1 (Fig. 6.8d). Batu Hijau, Nangka, and Naga Emas have similar Eu/Eu^* (~ 0.3 to 0.7) signatures, and moderate to weakly oxidized ΔFMQ signatures from ~ -0.25 to $+1.25$ (Fig. 6.8e). At Elang the Charlie tonalite (ELF-02) and Echo tonalite (ELF-03) have high Eu/Eu^* (0.4 to 0.7) but are moderately reduced with a ΔFMQ signature of -1.5 to 0.0 . The Delta tonalite (ELF-01) at Elang has a similar ΔFMQ with a broader Eu/Eu^* ,

ranging from ~0.15 to 0.6. Gerbang and Sepekat zircons, other than one Sepekat sample with similar Eu/Eu^* and ΔFMQ to Elang, have lower Eu/Eu^* of ~0.05 to 0.4 but are more oxidized, with a ΔFMQ signature of approximately 0.0 to +3.75 (Fig. 6.8e).

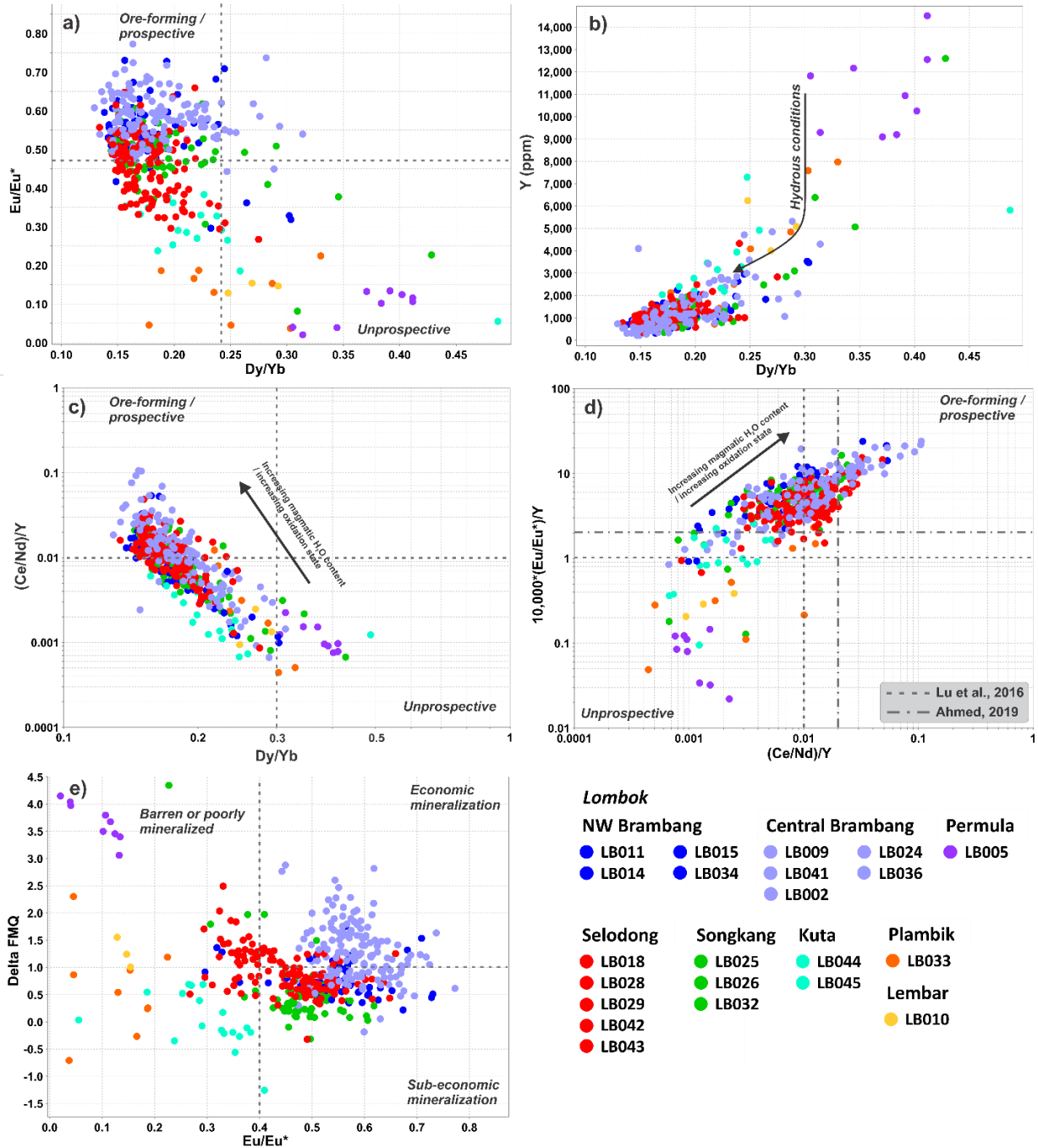


Figure 6.7: Lombok zircon prospectivity plots. a) Eu/Eu^* vs. Dy/Yb . b) Y vs. Dy/Yb . c) $(\text{Ce}/\text{Nd})/\text{Y}$ vs. Dy/Yb . d) $10,000 \cdot (\text{Eu}/\text{Eu}^*)/\text{Y}$ vs. $(\text{Ce}/\text{Nd})/\text{Y}$. e) ΔFMQ vs. Eu/Eu^* .

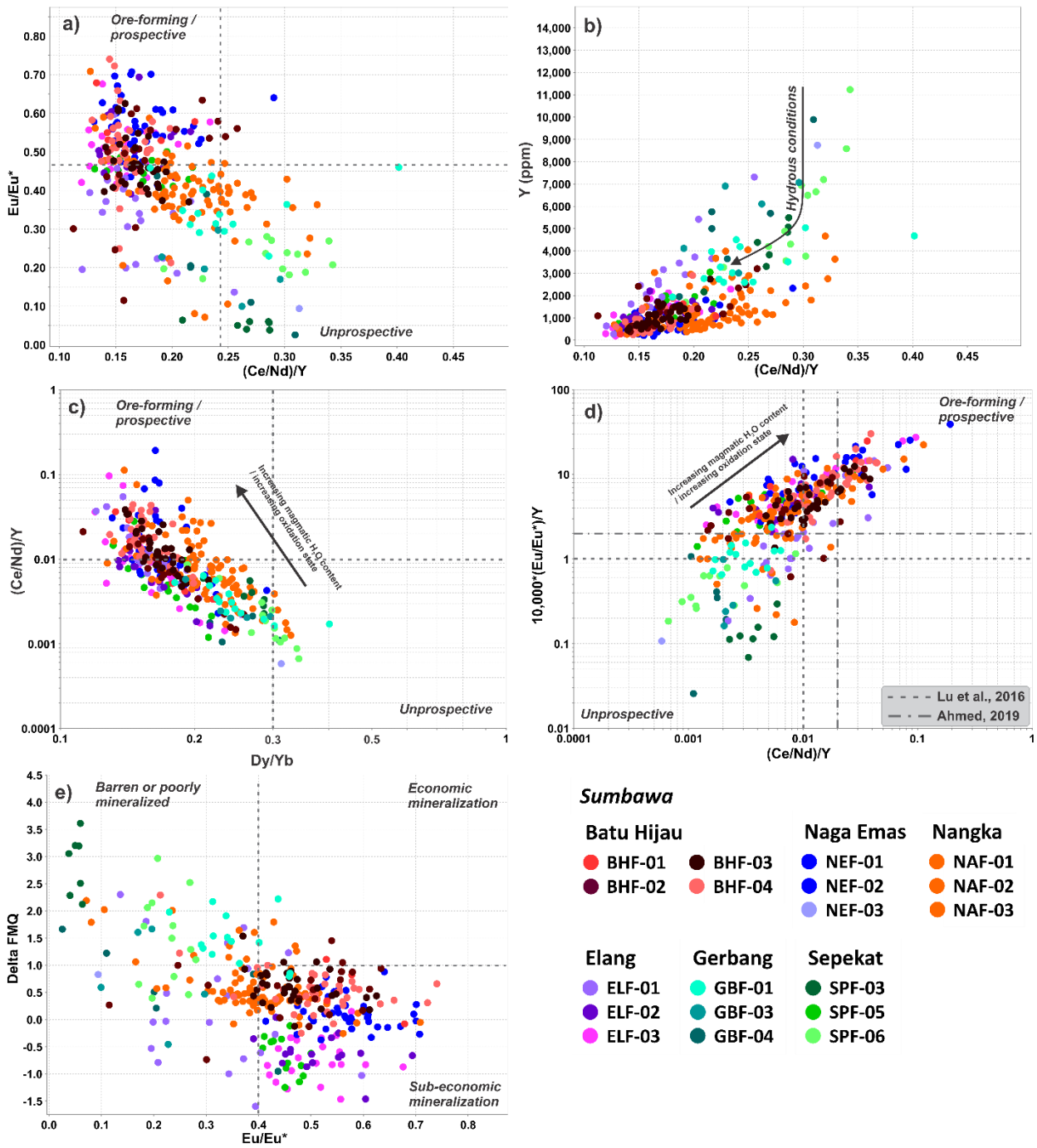


Figure 6.8: Sumbawa zircon prospectivity plots. a) Eu/Eu^* vs. Dy/Yb . b) Y vs. Dy/Yb . c) $(Ce/Nd)/Y$ vs. Dy/Yb . d) $10,000 \cdot (Eu/Eu^*)/Y$ vs. $(Ce/Nd)/Y$. e) Delta FMQ vs. Eu/Eu^* .

6.2.3 – Zircon crystallization temperature

The Ti content of magmatic zircon has been used to estimate crystallization temperature of igneous rocks (Watson et al., 2006; Ferry and Watson, 2007; Cao et al., 2018). In this study, the Ti-in-zircon thermometer of Ferry and Watson (2007) was used to estimate temperatures of zircon crystallization throughout systems from the eastern Sunda arc. At Brambang, early pre-mineralization phases at Permula and NW-Brambang have temperatures that range from ~750-870°C and 770-810°C, respectively (Fig. 6.9a). Syn-mineralization phases at NW Brambang have zircon temperature ranges of 710-800°C (sample averages of 730, 748, and 750°C). However, syn-mineralization Central Brambang zircons have a much broader temperature range of 670-845°C, with sample averages between 720 and 740°C, trending lower than NW Brambang (Fig. 6.9a). At Brambang, pre-mineralization intrusions are higher temperature and have lower Eu/Eu* than lower temperature and more hydrous syn-mineralization intrusions, similar to findings at several other porphyry systems (Large et al., 2020; Lee et al., 2021). The late, syn-mineralization phases at Central Brambang have the lowest zircon crystallization temperatures, high Eu/Eu* (0.4 – 0.8) and are moderately to strongly oxidized with ΔFMQ values of ~0.0 to +3.0 (Fig. 6.9b). At Tujuh Bukit, Tumpangpitu pre-, syn-, and post-mineralization intrusions all have similar Eu/Eu* (~0.45 – 0.7) but broad ranges in zircon crystallization temperature from ~675 to 830°C (Fig. 6.9c). Pre-, syn-, and post-mineral average temperatures subtly decrease, with averages of 755°C, 734°C, and 730°C, respectively, following the same trend as Brambang intrusions with decreasing crystallization temperatures with successive phases (Fig. 6.9c). Salakan average temperatures are similar to pre-mineralization Tumpangpitu at ~750°C, despite crystallizing several million years

earlier. All phases at Tumpangpitu have similar ΔFMQ values, ranging from ~ 0.0 to $+2.5$ (Fig. 6.9d). The two samples from Salakan have a mixed bi-modal population, with one population having low Eu/Eu^* 0.2-0.4 and high ΔFMQ of $+2.5$ to $+3.5$, and a second with high Eu/Eu^* similar to Tumpangpitu samples (0.5-0.7) and low ΔFMQ of $+0.25$ to -0.5 (Fig. 6.9d).

On Sumbawa, zircons from Batu Hijau range in crystallization temperature from approximately 675 - 790°C , with outliers up to 840°C (Fig. 6.10a). Nangka and Naga Emas, prospects extending northwest from Batu Hijau approximately 2 and 4 km, respectively, have average zircon crystallization temperatures of 760 and 740°C (Fig. 6.10a). Batu Hijau and Naga Emas zircons have Eu/Eu^* values that range from 0.4 to 0.75, with outliers, and ΔFMQ values of -0.25 to $+1.0$, with Naga Emas zircons slightly less oxidized than Batu Hijau. Nangka zircons have a wider Eu/Eu^* range of approximately 0.1 to 0.7, and a range of ΔFMQ values of -0.25 to $+2.25$ (Fig. 6.10b). Elang zircon crystallization temperatures range from 680 to 870°C , with a similar range for Elang satellites at Gerbang and Sepekat (Fig. 6.10c). The lowest average temperatures (~ 750 - 760°C) within the Elang district are from the Elang deposit (Charlie, Delta and Echo tonalites), which post-date all phases at Sepekat and Gerbang. In general, zircon crystallization temperatures decrease and Eu/Eu^* values increase within the temporal evolution of the Elang district (Fig. 6.10c). The Charlie and Echo tonalites at Elang have a narrow range of Eu/Eu^* and ΔFMQ values of 0.4 to 0.7 and -1.5 to 0.0 , respectively (Fig. 6.10d). Delta tonalite at Elang has a much broader range for both, with 0.15-0.6 Eu/Eu^* and ΔFMQ of -1.5 to $+2.25$. Similar to temperature, the earliest phases in the Elang district at Sepekat have the lowest Eu/Eu^* and are the most oxidized with highest ΔFMQ values, followed by Gerbang and to the high Eu/Eu^* values and

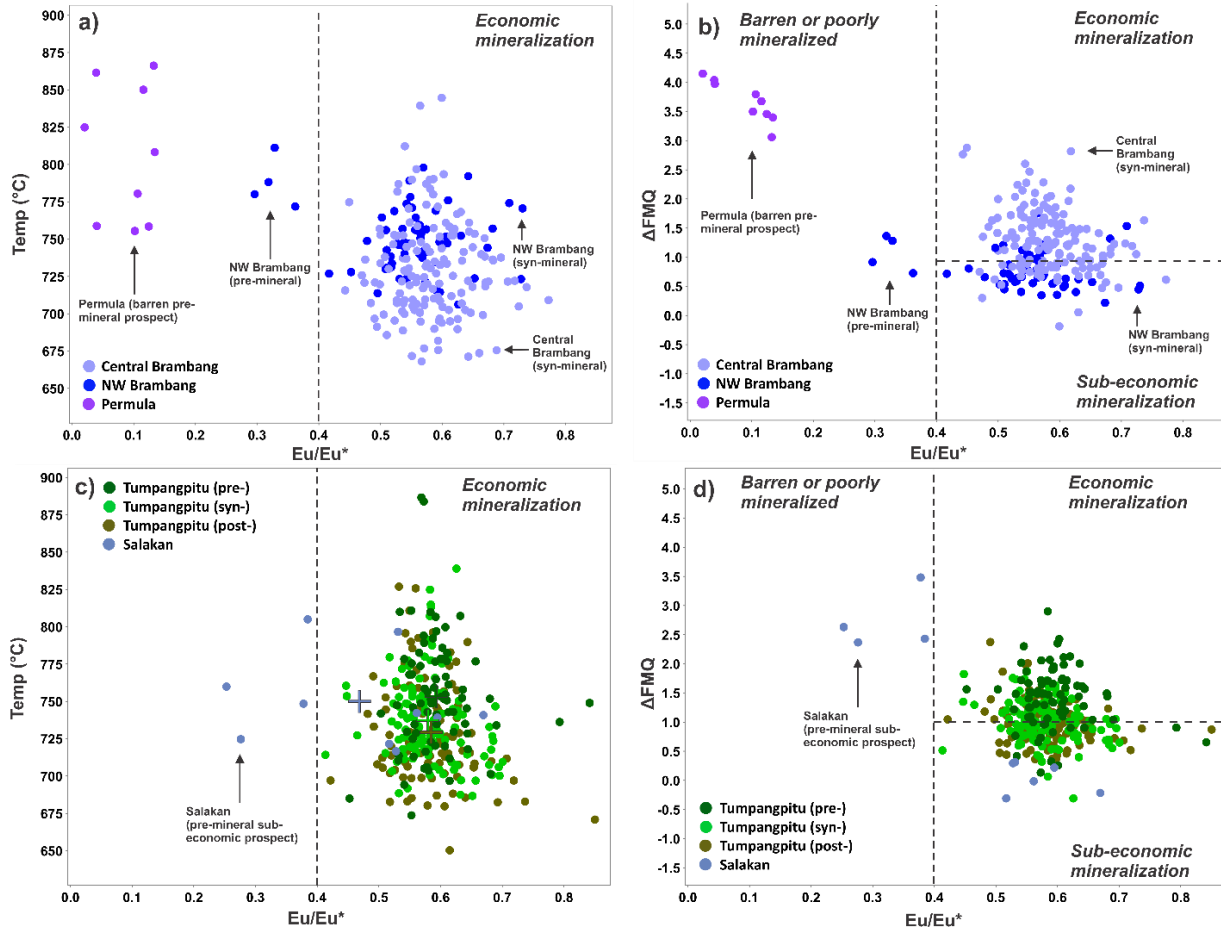


Figure 6.9: Plots of zircon Eu/Eu* vs. a), c) temperatures and b), d) Δ FMQ values. Temperatures calculated using Ti-in-zircon thermometer by Ferry and Watson (2007): $\log(\text{ppm Ti-in-zircon}) = 5.711 - 4800/T(K) - \log a_{\text{SiO}_2} + \log a_{\text{TiO}_2}$, where $\log a_{\text{SiO}_2} = 1$ due to abundance of quartz, and $\log a_{\text{TiO}_2} = 0.7$ due to the present of titanite. Δ FMQ values are calculated following the method of Loucks et al. (2020). Crosses are sample averages.

moderately reduced Δ FMQ signature of Elang phases, with the exception of one Sepekat phase which has similar values to the Charlie and Echo tonalites of Elang (Fig. 6.10d).

6.2.4 – Temporal variations and zircon prospectivity

Intrusive ages from the eastern Sunda arc range from Late Oligocene to Pliocene, approximately 28 to 2.5 Ma. Almost all middle Miocene zircons (> 15 Ma) show a

prospective Eu/Eu^* signature, with the majority of analyses having $10,000 \cdot (\text{Eu}/\text{Eu}^*)/Y > 2$ and an Eu/Eu^* value > 0.4 (Fig. 6.11a). However, there is little difference in ΔFMQ values, with both pre-15 Ma and post-15 Ma intrusions mostly moderately oxidized, with the majority of analyses ($\sim 85\%$) having ΔFMQ values between 0.0 and +2.0 (Fig. 6.11b). Inherited Miocene grains from Tumpangpitu, Elang, and Songkang (all sites with dominantly prospective zircons) have drastically lower Eu/Eu^* and Ce/Ce^* anomalies compared to the main population zircons in each sample (Fig. 6.11a-b). The Roo Rise, an

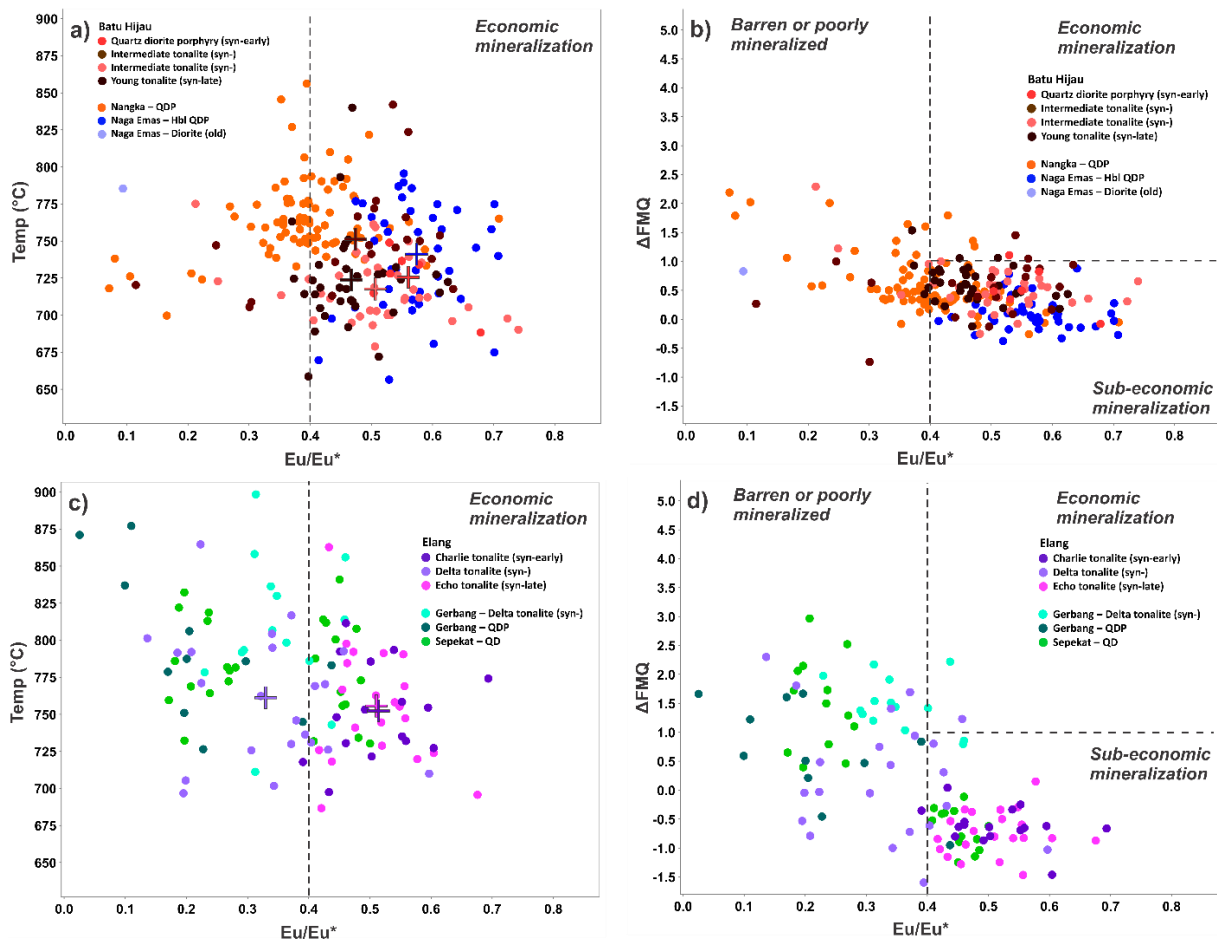


Figure 6.10: Plots of zircon Eu/Eu^* vs. a), c) temperatures and b), d) ΔFMQ values. Temperatures calculated using Ti-in-zircon thermometer by Ferry and Watson (2007): $\log(\text{ppm Ti-in-zircon}) = 5.711 - 4800/T(\text{K}) - \log a_{\text{SiO}_2} + \log a_{\text{TiO}_2}$, where $\log a_{\text{SiO}_2} = 1$ due to abundance of quartz, and $\log a_{\text{TiO}_2} = 0.7$ due to the present of titanite. ΔFMQ values are calculated following the method of Loucks et al. (2020). Crosses are sample averages.

oceanic plateau began subducting in the middle Miocene in Java, at approximately 15 Ma (Fuzhong et al., 2011). Several north-east trending transform crustal-scale faults formed throughout the eastern Sunda arc as a result of the subduction of the Roo Rise (Garwin et al., 2005; Hall, 2009; Maryono et al., 2018). In Sumbawa, the Batu Hijau and Elang deposits are above the northeastern extent of the Roo Rise, with authors inferring its collision with the arc in the late Pliocene (Garwin, 2002). Garwin (2002, 2005) proposed the collision of

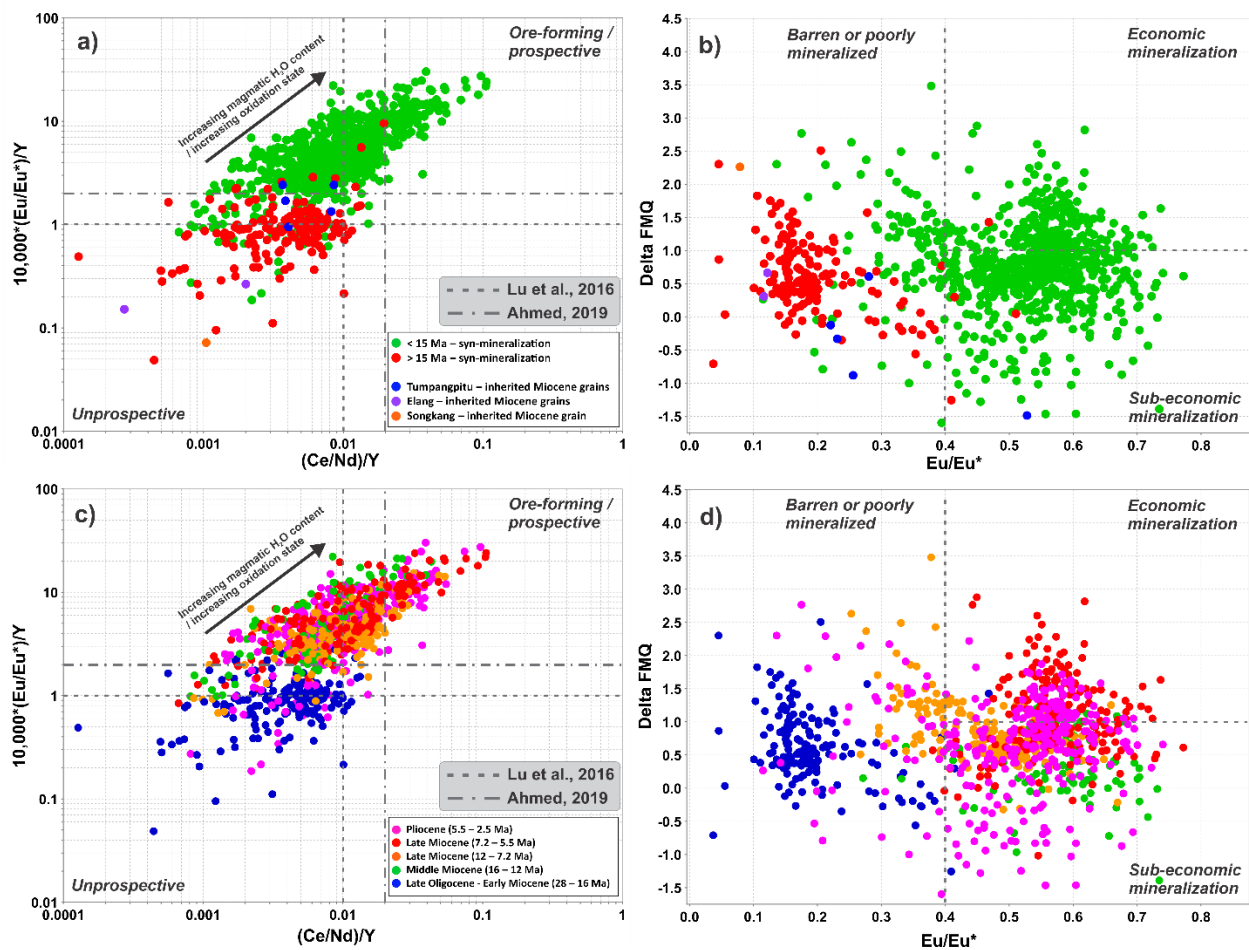


Figure 6.11: Eastern Sunda arc temporal zircon prospectivity plots. a) $10,000 \cdot (\text{Eu}/\text{Eu}^*)/Y$ vs. $(\text{Ce}/\text{Nd})/Y$ for intrusions younger and older than 15 m.y. b) Delta FMQ vs. Eu/Eu^* for intrusions younger and older than 15 m.y. c) $10,000 \cdot (\text{Eu}/\text{Eu}^*)/Y$ for subdivided Oligocene-Pliocene intrusions. d) Delta FMQ vs. Eu/Eu^* for subdivided Oligocene-Pliocene intrusions.

the Australian craton and Roo Rise with the eastern Sunda arc at approximately 4 to 3 Ma contributed to porphyry-copper deposit development at Batu Hijau. These collisions, starting approximately at 15 Ma in Java and again 3-4 Ma in Sumbawa that resulted in the formation of arc-transverse lineaments may have been key in facilitating development of pathways for hydrous magmas not observed in the eastern Sunda arc prior to 15 Ma.

6.2.5 – Zircon Hf isotopes

Eastern Sunda arc samples have average $\epsilon\text{Hf}(t)$ values of ~ 14.5 and are relatively homogenous, although they range from ~ 10 to 19. The uniform zircon Hf isotope compositions ($\epsilon\text{Hf}(t) > 10$; Fig. 6.12) point towards a juvenile/very depleted melt source with minimal input from older lithosphere. These results are similar to the findings of Fiorentini and Garwin (2010) who found that the source magmas feeding the Batu Hijau district on Sumbawa had a juvenile signature and received less than 0.1 % of sedimentary material input, based on Pb, Nd and whole-rock isotope signatures. These findings are in contrast with the low-sulfidation epithermal systems of west Java and provide further evidence that the different mineralization styles (west Java: LSE; east Java to Sumbawa: HSE/porphyry Cu-Au) are a result of different crustal types and source components for magma generation. Marcoux and Milisei (1994) and Alves et al. (1999) showed Pb and Re-Os isotopes of volcanic rocks and ore from the Bayah Dome of west Java have contributions from crustal materials. These are supported by a recent study by Wu et al. (2019) showing average ϵHf values of -11.5 at Ciemas, suggesting the middle Miocene arc magmatism in west Java had significant crustal contamination. The similar $\epsilon\text{Hf}(t)$ expression from late Oligocene through to the Pliocene at variably endowed porphyry systems demonstrates

that the initial melt source is not a main factor in magma prospectivity the eastern Sunda arc but is a factor in different mineralization styles within the region.

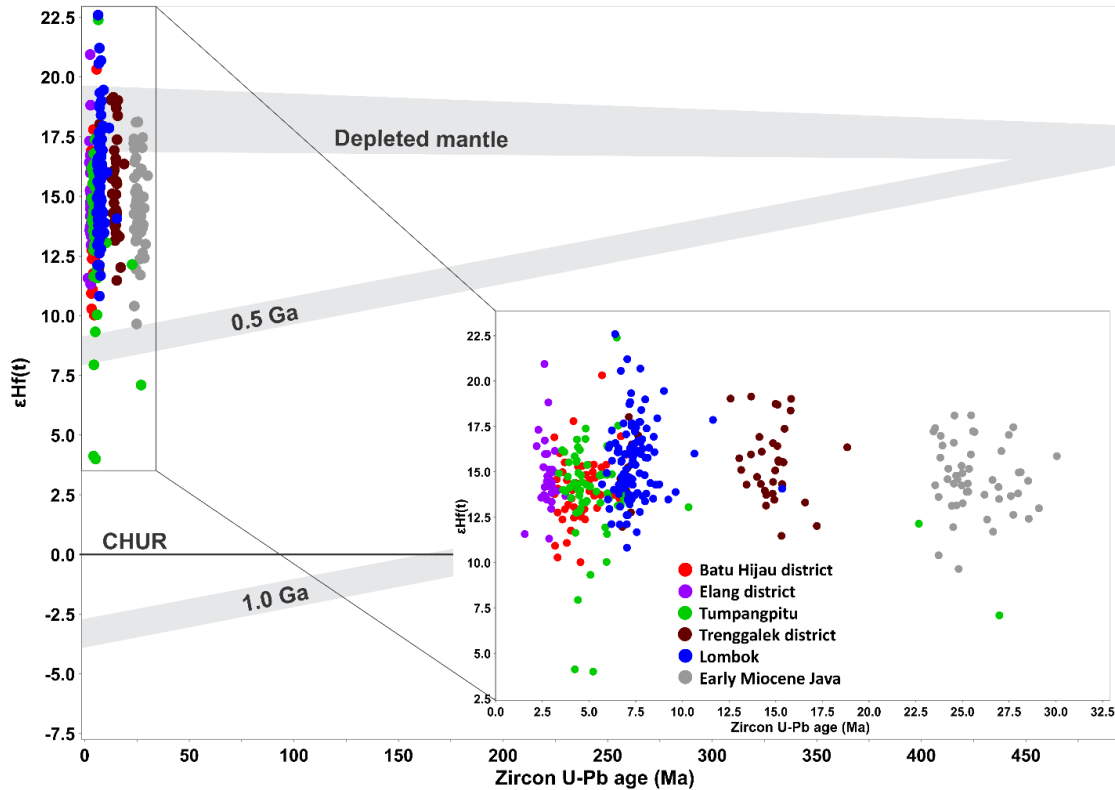


Figure 6.12: $\epsilon\text{Hf}(t)$ vs. zircon U-Pb ages for the eastern Sunda arc sites.

6.2.6 – Zircon summary

In general, pre-mineralization intrusions are higher temperature and have lower Eu/Eu^* than lower temperature and more hydrous syn-mineralization intrusions, similar to findings at several other porphyry systems (Large et al., 2020; Lee et al., 2021). Unique to Tumpangpitu, all intrusions (pre-, syn-, and post-mineralization) have a similar prospective zircon signature. All mid-Miocene to Pliocene syn-mineralization (< 15 Ma) intrusions in the eastern Sunda arc have a prospective zircon Eu/Eu^* and Ce/Ce^* signature related to high-water content and oxidation state of fertile intrusions (Fig. 6.13; Ballard et

al., 2002; Dilles et al., 2015; Shen et al., 2015; Lu et al., 2016; Lee et al., 2017); however, zircon prospectivity signatures show no significant variation with known size of deposits. All Oligocene to mid-Miocene intrusions (> 15 Ma) have an unprospective zircon Eu/Eu^* and Ce/Ce^* signature, indicative of drier and less oxidized magmas less conducive for economic porphyry mineralization. The pronounced change in zircon prospectivity signatures at approximately ~15 Ma likely marks significant changes in arc-scale geodynamics (e.g., Roo Rise) and demonstrates the potential of zircon as a regional discriminatory tool for fertility evaluation of systems within the eastern Sunda arc.

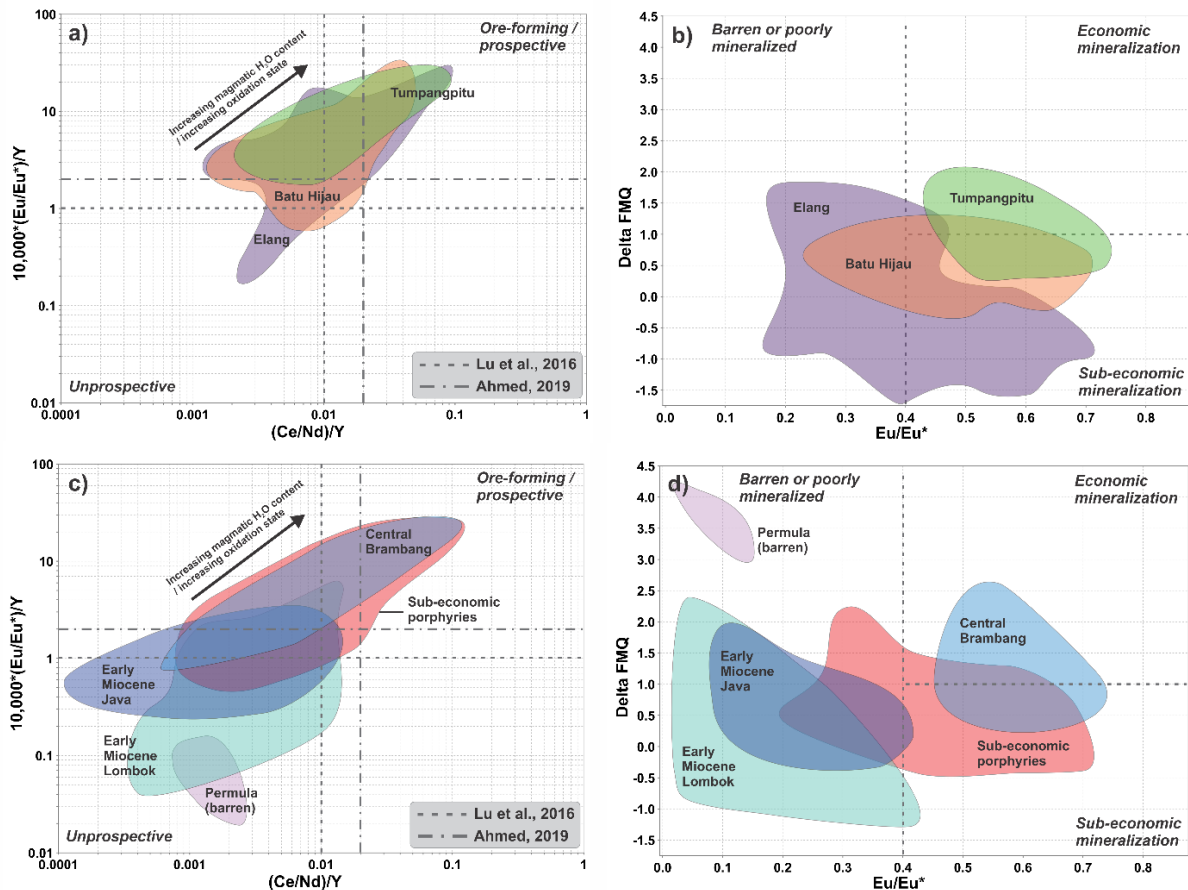


Figure 6.13: Summary of Eastern Sunda arc zircon prospectivity plots. a) $10,000 \cdot (\text{Eu}/\text{Eu}^*)/Y$ vs. $(\text{Ce}/\text{Nd})/Y$ for giant deposits. b) ΔFMQ vs. Eu/Eu^* for giant deposits. c) $10,000 \cdot (\text{Eu}/\text{Eu}^*)/Y$ vs. $(\text{Ce}/\text{Nd})/Y$ for Sub-economic porphyries, early Miocene Java HSE, early Miocene Lombok porphyries, Permula (Lombok), and Central Brambang (Lombok). d) ΔFMQ vs. Eu/Eu^* for Sub-economic porphyries, early Miocene Java HSE, early Miocene Lombok porphyries, Permula (Lombok), and Central Brambang (Lombok).

6.3 – Apatite

6.3.1 – Introduction

Apatite [$\text{Ca}_5(\text{PO}_4)_3(\text{F}, \text{OH}, \text{Cl})$] is common to a variety of rock types and is a typical accessory phase in plutonic and volcanic hypabyssal rocks associated with formation of porphyry deposits (Streck and Dilles, 1998). Apatite also crystallizes in both magmatic and hydrothermal environments and has the ability to record geochemical information throughout the lifespan of magmatic-hydrothermal systems, such as porphyries. Apatite crystal structure can be described by the general formula $\text{A}_5(\text{XO}_4)_3\text{Z}$ with the A-site accommodating large cations (e.g., Ca^{2+} , Sr^{2+} , Pb^{2+} , Mg^{2+} , Mn^{2+} , REE^{3+} , Eu^{2+} , Na^+) and X-site, primarily P^{5+} , accommodating other cations (e.g. Si^{4+} , S^{6+} , V^{5+} , As^{5+}) (Pan and Fleet, 2002; Piccoli and Candela, 2002; Hughes and Rakovan, 2002). The Z site is occupied by halogens (F and Cl) and OH.

Previous work has shown that magmas with high chlorine (>3,000 ppm) and sulfur (>1,000 ppm) contents are beneficial to the generation of productive magmatic-hydrothermal porphyry Cu deposits (Richards, 2015, Chiaradia et al., 2012; Loucks, 2014, Lu et al., 2016). These features are essential for transport of Cu in the magma and in high-temperature SO_2 -rich magmatic derived fluids (Candela and Holland, 1984). Consequently, apatites associated with porphyry deposits have been shown to often be Cl-rich (e.g., Roegge et al., 1974) and can be used as a proxy for Cl contents of parental melts (Holland, 1972). As sulfur only substitutes into apatite as sulphate (S^{6+}), apatites that have significant S must crystallize from oxidized magmas (Parat et al., 2011). Apatite S and Cl contents have been the focus of several recent studies into porphyry prospectivity/fertility (e.g., Mao et

al., 2016; Cao et al., 2021; Xiao et al., 2021; Parra-Avila et al., 2022; Qu et al., 2022; Wang et al., 2022; Zhu et al., 2022).

6.3.2 – Apatite texture

A wide variety of apatite textures are observed throughout sites from the eastern Sunda arc (see Chapter 5: Results); classified as either magmatic, altered, or hydrothermal, largely based on CL texture and trace element chemistry. The majority of grains are either completely unaltered or completely altered/replaced. The rare unaltered grains in hydrothermally altered rocks likely occurred as inclusions in robust grains of other phases that protected the apatite from hydrothermal alteration. Occasionally, grains show evidence of patchy partial replacement, or replacement along grain boundaries, representative of the hydrothermal alteration front (Fig. 6.14).

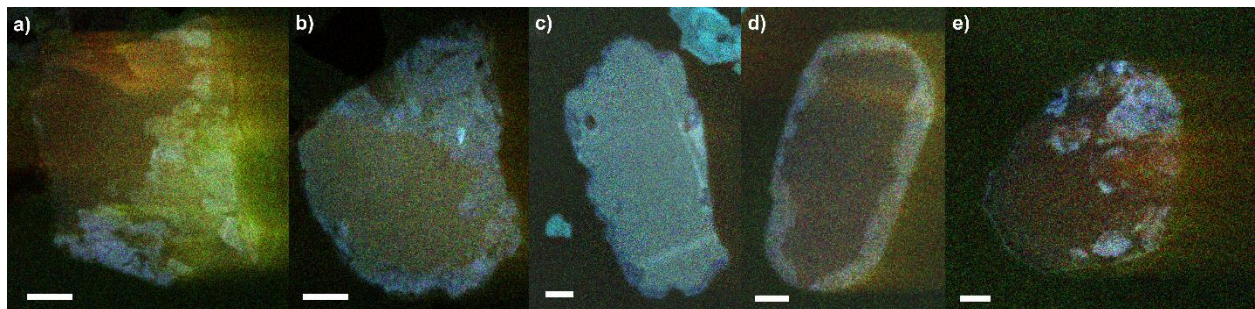


Figure 6.14: Cathodoluminescence images showing partial or rim replacement/alteration of primary magmatic apatite grains. (a) Batu Hijau, Sumbawa (BHF-03). (b) NW Brambang, Lombok (LB034). (c) Selogiri, Java (SLG-02). (d) Plambik, Lombok (LB010). (e) Jerembah, Trenggalek, Java (JER-01). White scale bars are 10 μm .

6.3.3 – Halogens and sulfur in apatite

Within eastern Sunda arc apatites, the most consistent way of discriminating hydrothermal or altered vs primary magmatic apatites is with Cl and F contents and CL

texture (Fig. 6.15). There are generally stark differences in primary and hydrothermal grains Cl and F contents, with primary magmatic apatite usually having increased Cl and decreased F and the opposite relationship with hydrothermal grains (Fig. 6.15a; 6.15c). Altered apatite, where present (i.e., grains not purely magmatic or purely hydrothermal, largely based on CL textures) generally show a transition between magmatic and hydrothermal Cl and F (Fig. 6.15b, 6.15d). Texturally, hydrothermal apatite usually has streaky CL emissions and patchy or irregular internal zonation, compared with the general homogenous CL response of blue/green/brown of magmatic apatite (Fig. 6.15). These Cl-F trends between magmatic and hydrothermal apatite are evident at Brambang

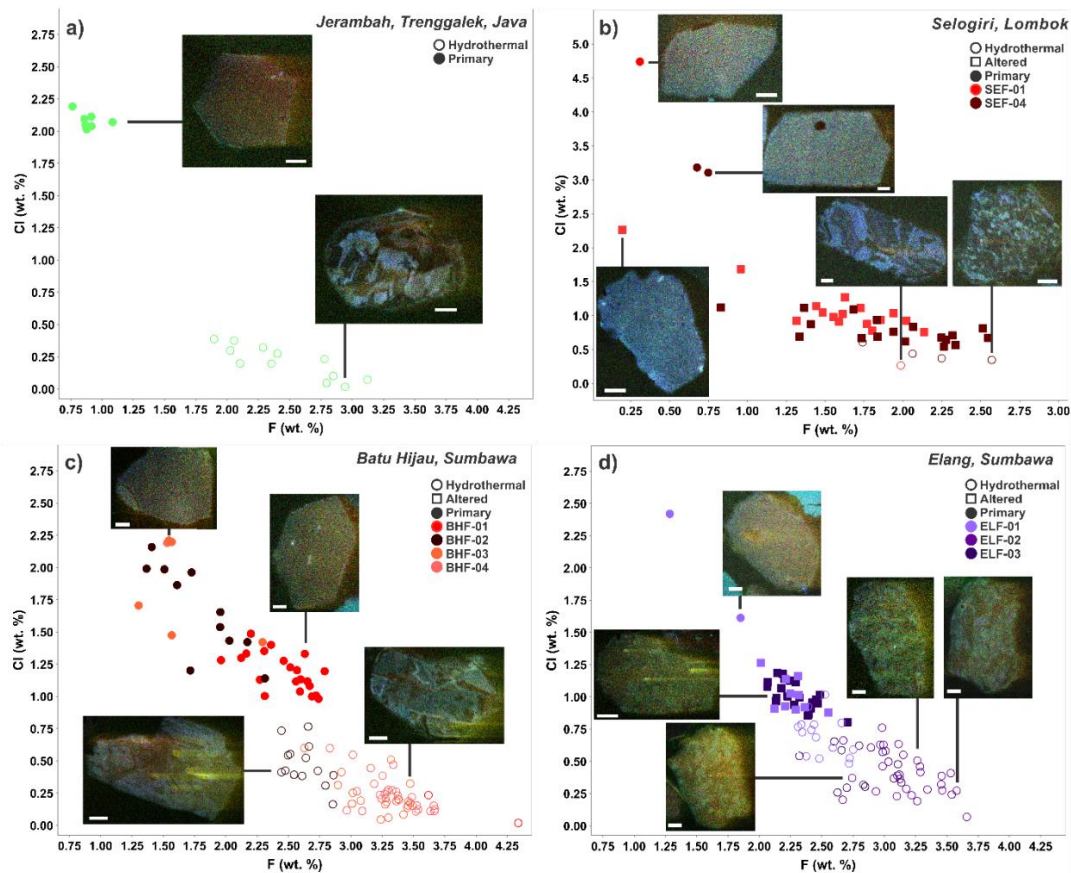


Figure 6.15: Cl and F contents of magmatic, altered, and hydrothermal apatite with representative CL images from selected sites from the eastern Sunda arc. (a) Jerambah, Trenggalek, Java. (b) Selogiri, Lombok. (c) Batu Hijau, Sumbawa. (d) Elang, Sumbawa. White scale bars on CL images are 10 μ m. Note different scale used for (b) Selogiri.

(Fig. 6.16a); however, NW Brambang pre-mineral phases also have low-Cl, high-F apatite compared to later, syn-mineralization intrusions. This change in apatite chemistry from early, low-Cl intrusions to later, high-Cl intrusions could be an important component for productive porphyry mineralization. This relationship is also present at Batu Hijau, with the earliest quartz diorite phase (BHF-01) having lower apatite Cl content than successive syn-mineral tonalite intrusions (BHF-02 – 04) (Fig. 6.15c). This relationship could not be tested at other sites due to the lack of pre- or post-mineralization phases that contain apatite.

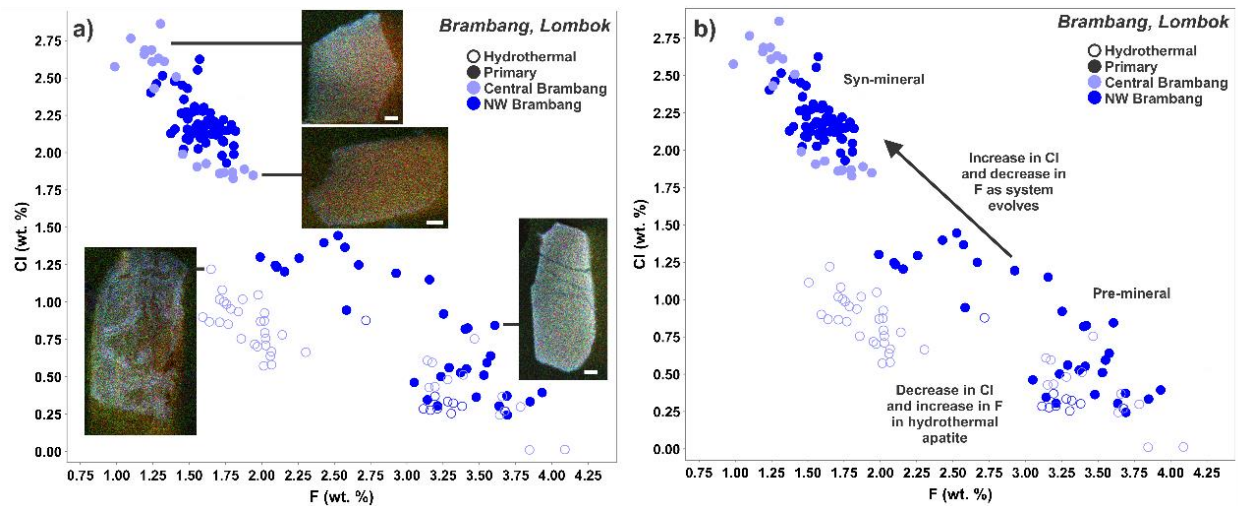


Figure 6.16: Cl and F contents of magmatic and hydrothermal apatite from Brambang, Lombok with (a) representative CL images and (b) timing relationships. White scale bars on CL images are 10 μm.

The other feature in apatite beneficial to the generation of productive porphyry Cu mineralization is sulfur. Similar to the increase in Cl contents of apatite in successive syn-mineralization intrusions compared to early phases, an increase in SO₃ is also observed (Fig. 6.17). Early quartz diorite at Batu Hijau has lower SO₃ than later syn-mineral phases, and at Brambang, early phases have lower SO₃ than later syn-mineral phases at NW

Brambang and Central Brambang. It is interesting to note that at Batu Hijau, the greater change between early and late phases is in SO_3 , and lesser Cl, whereas at Brambang the greater change between early and late phases is Cl, and lesser SO_3 . Both systems show an increase in Cl and SO_3 , but at different proportions.

High Cl and SO_3 values; however, are not ubiquitous or consistent solely with well-endowed systems. On a regional scale, hydrothermal apatite generally consists of both low Cl and SO_3 , with the majority of analyses below 1.5 wt. % Cl and 0.10 wt. % SO_3 (Fig. 6.18a). Magmatic apatite from volcanics in Java have similarly low Cl and SO_3 , less than ~ 1.0 and

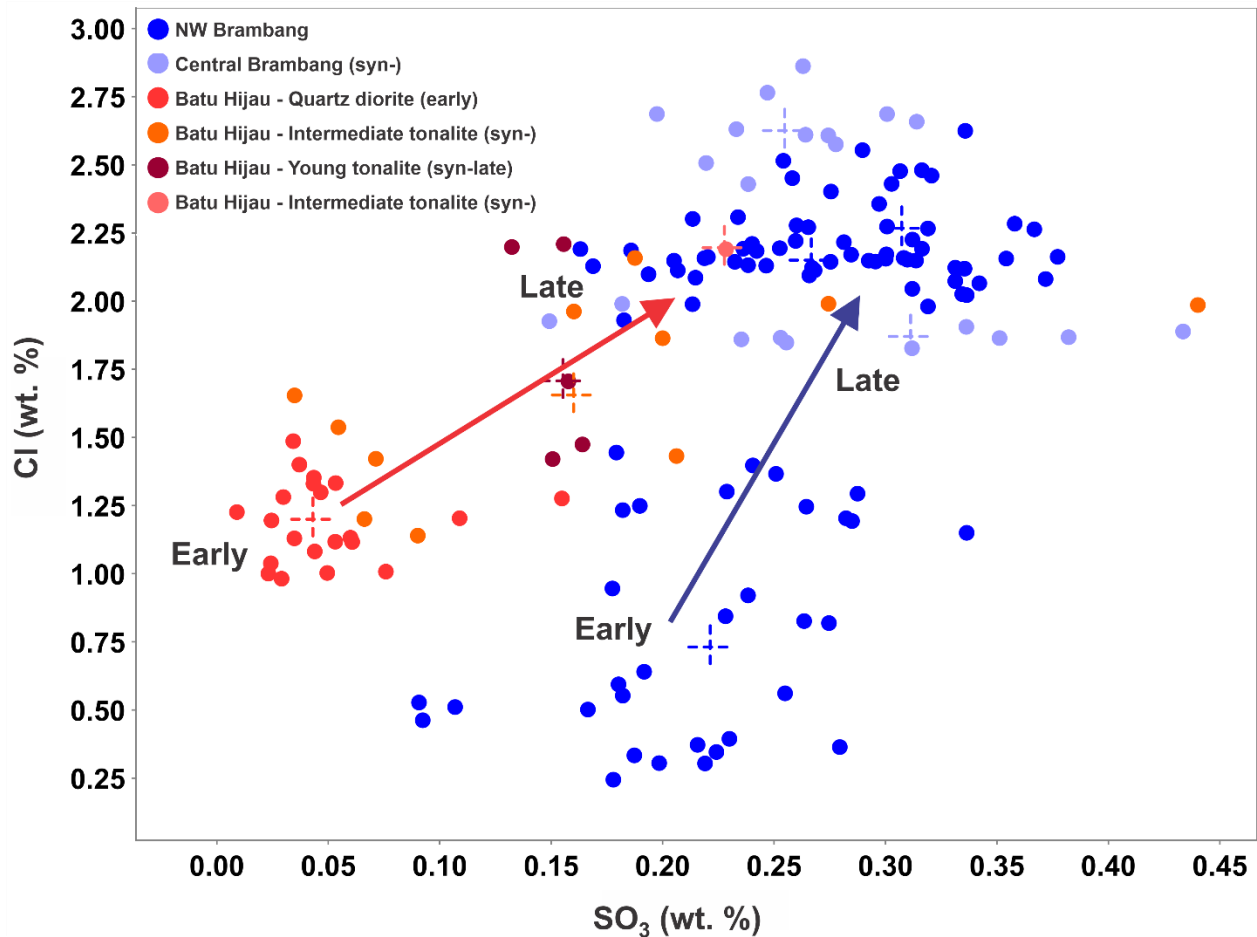


Figure 6.17: Magmatic apatite Cl and SO_3 contents from samples at Batu Hijau and Brambang. Early phases at both Brambang and Batu Hijau have lower Cl and SO_3 than later intrusions associated with mineralization. Median values of samples are indicated with crosses.

0.05 wt. % Cl and SO₃, respectively. Eastern Sunda arc S and Cl contents of apatite from syn-mineral intrusions are elevated compared to pre-mineral intrusions, matching observations that have been made within several other porphyry systems (e.g. Zhu et al., 2018; Chen et al., 2022; Parra-Avila et al., 2022). However, on a regional scale they are similar to values at several other sub-economic porphyries throughout Java, Lombok, and Sumbawa (Fig. 6.18a). Hydrothermal apatite have Cl less than 1.5 wt. % and F greater than 1.5% but overlap with magmatic apatite that spans the entire range of the dataset, from 0.25 – 4.75 wt. % Cl and 0.25 – 4.00 wt. % F (Fig. 6.18b).

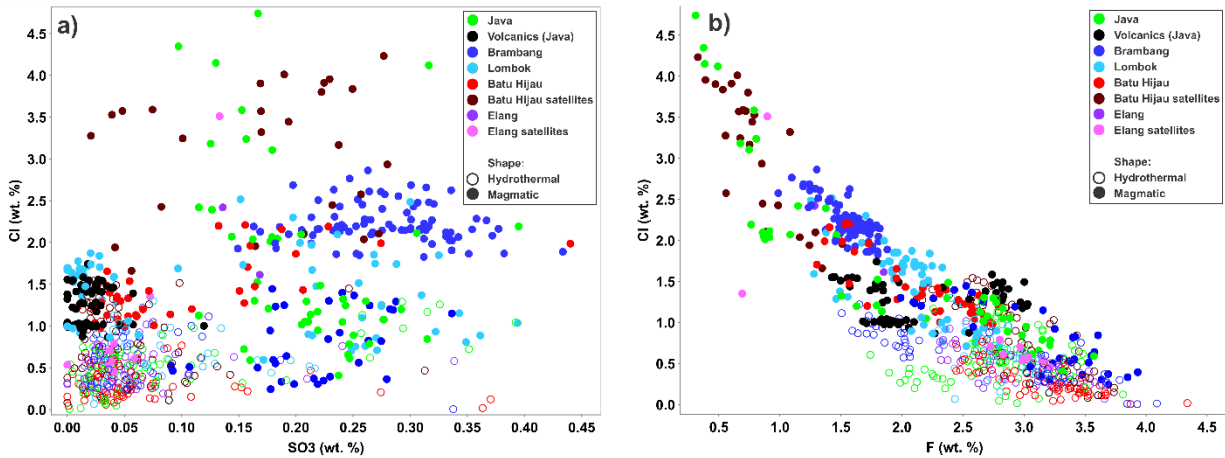


Figure 6.18: (a) Magmatic and hydrothermal apatite Cl and SO₃ from eastern Sunda arc sites. (b) Magmatic and hydrothermal apatite Cl and F from eastern Sunda arc sites.

6.3.4 – Hydrothermal apatite prospectivity

Bouzari et al. (2016) described in detail changes in CL texture and composition in hydrothermal apatite throughout several porphyry deposits in British Columbia. They found both changes in texture with alteration types, but also lower Na, Mn, Cl, REE and higher Mn/Fe ratios in altered apatite. Loader (2017) observed higher Mn, Sr and Fe in hydrothermal apatites associated with mineralization at Oyu Tolgoi and Resolution, as well

as lower LREE (lower La/Yb ratios) in hydrothermal apatites in general. Within the eastern Sunda arc, there are several different textures observed, both within magmatic and hydrothermal apatite, and some that repeat at different sites (Fig. 6.19). Jerambah, Brambang, and Batu Hijau samples all have similar orange-green magmatic apatite and purple-blue patchy hydrothermal apatite (Fig. 6.19). All samples share the similarity of

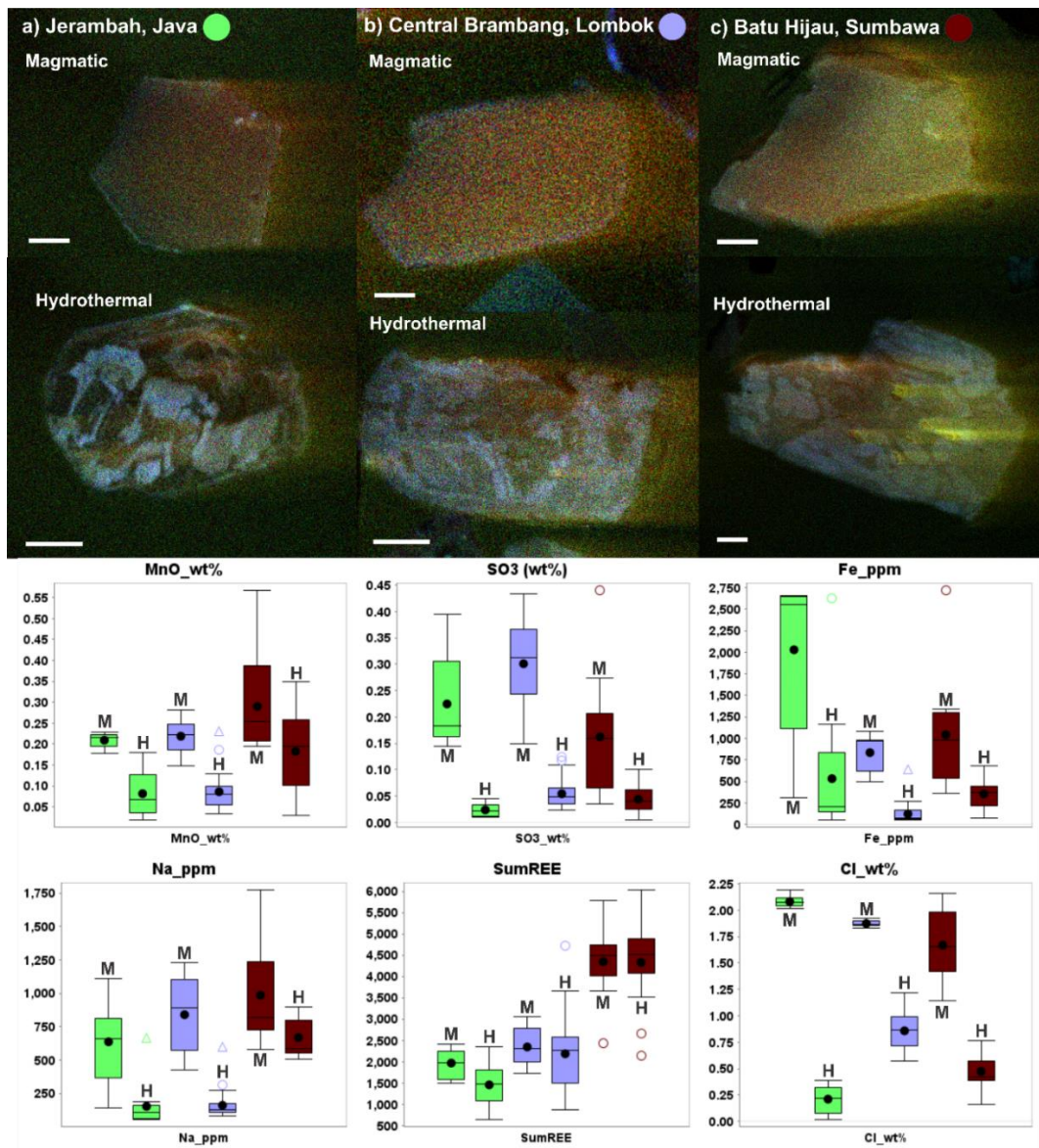


Figure 6.19: Cathodoluminescence images of similarly textured igneous and hydrothermal apatites from (a) Jerambah, Java, (b) Central Brambang, Lombok and (c) Batu Hijau, Sumbawa and corresponding box and whisker plots of selected elements (MnO, SO₃, Fe, Na, ΣREE, and Cl). Symbols M and H in box and whisker plots represent magmatic and hydrothermal apatite, respectively. White scale bars on CL images are 10 μm.

decreasing Mn, SO₃, Fe, Na, REE, and Cl from magmatic to hydrothermal apatite; however, all hydrothermal compositions are strongly tied to the primary magmatic composition. In general, hydrothermal apatite composition does not seem to be dictated by hydrothermal fluid composition but is more a factor of its original composition. The aforementioned features of hydrothermal apatite described at other sites (e.g. Bouzari et al., 2016; Loader, 2017, and others), specifically higher Mn/Fe ratios, drastically lower LREE, and high Sr are not evident in any of the eastern Sunda arc sites. The majority of Sr values are below 500 ppm, Mn/Fe ratios in both magmatic and hydrothermal apatite range from 0 to 30, and hydrothermal apatite has subtly lower LREE than magmatic apatite.

6.3.5 – Apatite summary

Apatite compositions and physical textures, both magmatic and hydrothermal, are very diverse. Apatite shows promise with tracking evolution of individual systems; however, compositions range so dramatically it is difficult to show robust regional trends, especially with regard to porphyry system endowment or fertility/prospectivity. Elevated values of Cl and S in magmatic apatite are a useful indicator of potential for a prospective system, specifically with lower Cl and S in early phases and higher Cl and S in syn-mineralization phases but are not ubiquitous to significantly endowed systems. Within the eastern Sunda arc, apatite trace element compositions from strongly mineralized porphyry systems do not appear to show a systematic change from poorly mineralized systems. Specifically, apatite compositions vary greatly from area to area, and appear to be controlled by local magma composition and formation factors, rather than influences from prospective or fertile intrusions.

6.4 – Titanite

Titanite grains from samples from the eastern Sunda arc are mostly euhedral-subhedral magmatic grains. A significant amount of grains from other sites are altered or corroded, often with inclusions or partially replaced by other minerals. Brambang, Lombok is the only site with magmatic grains that are zoned in BSE.

Most titanite grains throughout the eastern Sunda arc have Cr and Sr concentrations below or close to detection limits (< 0.005 wt. %). Selogiri, Jerambah, Singgahan, Songkang

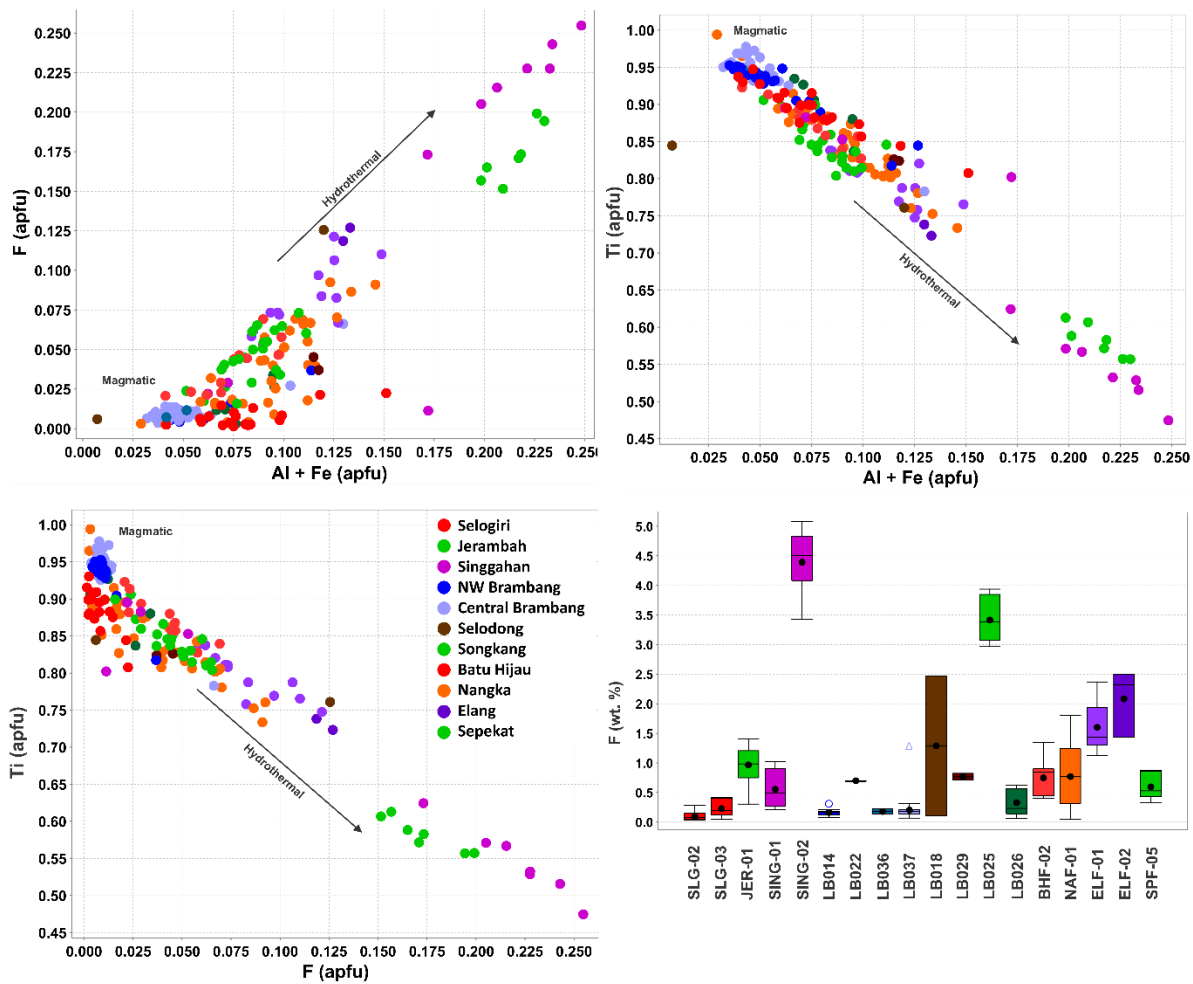


Figure 6.20: a) F vs. Al+Fe (apfu) bivariate plot. b) Ti vs. Al+Fe (apfu) bivariate plot. c) Ti vs. F (apfu) bivariate plot. d) Box and whisker diagram of F (wt. %) concentrations.

and Nangka have Cr up to 0.04 wt. %, with Selogiri, Jerambah, Central Brambang, Songkang, Batu Hijau, Naga Emas, and Elang the only sites with detectable Sr concentrations of up to 0.014 wt. %. Fluorine concentrations range from 0 to 5 wt. %, with altered titanite at Singgahan (SING-02) and Songkang (LB025) having the highest contents, with 3.5 to 5 and 3 to 4 wt. % F, respectively. Magmatic grains with strong zoning in BSE have the lowest F contents, with Selogiri (SLG-02), NW Brambang (LB014) and Central Brambang (LB036, LB037) all having analyses with less than 0.30 wt. % F (Fig. 6.20). Aluminum, Fe, and Ti apfu range from 0 to 0.25, 0 to 0.11, and 0.5 to 1.0, respectively (Fig. 6.20).

Titanite grains were only encountered in 25 samples, however most of those samples contained under five grains. Only three samples contained over twenty grains. As a result, titanite did not prove to be particularly useful for regional comparison of mineral chemistry.

6.5 - Rutile

6.5.1 - Introduction

Rutile (TiO_2) is an accessory mineral that is widely distributed in igneous, metamorphic and sedimentary rocks (Meinhold, 2010; Plavsá et al., 2018). Trace element compositions of rutile can provide information into potential sources and evolution of rocks, as well as ore-forming processes (e.g., Rabbia et al., 2009) Previous studies have investigated the link between rutile trace element chemistry and mineralization; however, there has been a large focus on orogenic gold (e.g. Graham and Morris, 1973; Clark and Williams-Jones, 2004; Scott and Radford, 2007; Agangi et al., 2019; Porter et al., 2020;

Sciuba and Beaudoin, 2021), with less work in porphyry Cu-(Au) systems (Williams and Cesbron, 1977; Czamanske et al., 1989; Scott, 2005; Rabbia et al., 2009; Schirra and Laurent, 2021).

6.5.2 – Occurrence of hydrothermal rutile in porphyry-Cu deposits

Hydrothermal rutile in porphyry deposits has been documented to form due to breakdown of primary Ti-bearing mineral phases (e.g., biotite, Ti-magnetite, ilmenite; Czamanske et al., 1981; Scott, 2005; Rabbia et al., 2009). Schirra and Laurent (2021) demonstrated evidence of several different generations of rutile within the Batu Hijau, Bingham Canyon, El Salvador, and Northparkes porphyry systems. They found that the different rutile occurrences form over the entire hydrothermal lifespan, from the potassic alteration stage at > 500°C down through sericite alteration (300°C) and contemporaneously with Cu-mineralization/sulfide precipitation at similar temperatures (i.e. 400°C to 300°C), indicating that hydrothermal rutile has the potential to record information about physical and chemical conditions pertaining to porphyry Cu mineralization (Schirra and Laurent, 2021).

6.5.3 – Rutile prospectivity indicators

Rutile mineral chemistry has attracted attention as a prospectivity or fertility tool for mineral deposits due to the robustness of the mineral, especially when sulfides have been leached out/destroyed as with detrital stream sediment or glacial till surveys (Williams and Cesbron, 1977; Clark and Williams-Jones, 2004; Scott, 2005; Meinhold, 2010; Taylor et al., 2018; Agangi et al., 2019; Porter et al., 2020). Several porphyry-related rutile prospectivity indicators or pathfinders towards mineralization have been proposed in

previous studies, based on trace element chemistry as well as texture and size of rutile grains. Czamanske et al. (1981) showed that rutile abundance and grain size increases with higher Cu grades in several porphyry deposits. Clark and Williams-Jones (2004) showed elevated W, Cu, and V in ore zones of several Au deposits whereas Scott (2005) documented rutile with V > 0.2 wt. % proximal to ore-zones in magmatic hydrothermal systems at Northparkes. Within the eastern Sunda arc sites rutile V concentrations are highly variable ranging from ~10 to 15,000 ppm (average ~2,600 ppm) and with the majority of samples, regardless of mineralization, having some analyses over the > 0.2 wt. % discrimination of Scott (2005). Clark and Williams-Jones (2004) developed a ternary diagram where Ti, 100*(Fe+Cr+V) and 1000*W values were plotted to highlight rutile associated with ore-zones in orogenic, VMS and base metal deposits. Figure 6.21 compares the eastern Sunda arc dataset with the discrimination field of Clark and Williams-Jones (2004) indicated by a dashed line. Approximately 90% of all rutile analyses plot within the ‘mineralized’ field. The vast majority of rutile analyses plot with highly variable W

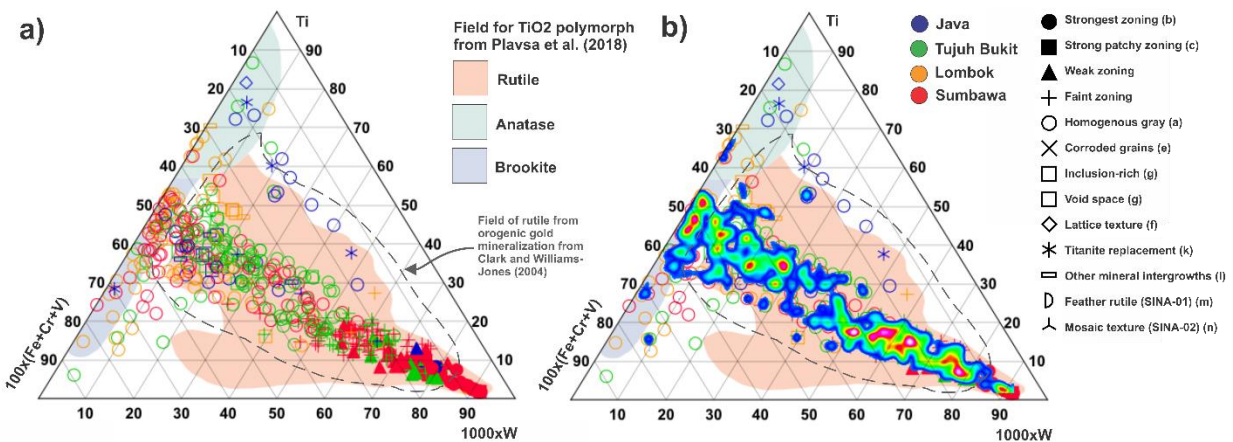


Figure 6.21: a) Ternary diagram showing Ti vs. 100(Fe+Cr+V) vs. 1000xW, adapted from Clark and Williams-Jones (2004). b) Same diagram with density of points, with the majority of analyses tied to variations in W composition.

concentrations with negligible change in Fe, Cr, V, or Ti, indicating that increases in W values are completely independent of the other values, indicating that increased W concentrations may itself be an indicator of mineralization potential in porphyry Cu systems of the eastern Sunda arc.

6.5.4 – Rutile texture and W concentrations

Rutile textures throughout the eastern Sunda arc are extremely varied and complex, at the intra-sample and inter-sample scales (See Chapter 5). Inclusions, intergrowths, void-spaces, regressed/altered grains and exsolution textures are common; however, the majority of grains are unzoned and homogeneous gray in BSE imaging (approximately 60%) with rarer oscillatory or patchy zoned grains. Several samples display a marked transition in grains from homogenous gray through to strongly zoned in BSE imaging that corresponds strongly with W concentrations (Figure 6.22). The ranking classification of strong through to faint zoning is subjective especially as it takes into consideration a single 30um laser spot which cannot record entire grain profiles.

In strongly zoned rutile from a strongly mineralized sample at Gerbang (Fig. 6.23a), zoning is largely controlled by W composition (up to 10 wt. % in the brightest sector). It is important to note that the extremely fine nano-scale oscillatory zoning coupled with the very fine grain size creates artifacts within some of the laser maps, most notably with W and V. Concentrations of U, the only other hexavalent ion in rutile (U) are higher in W-rich sectors, although significantly less abundant (Fig. 6.23). Similarly, Fe is highest in W-rich zones of strongest BSE zoned rutile. Tin and Nb (as well as other HFSE not shown) are several orders of magnitude less abundant, and do not display the same zoning as W (Fig.

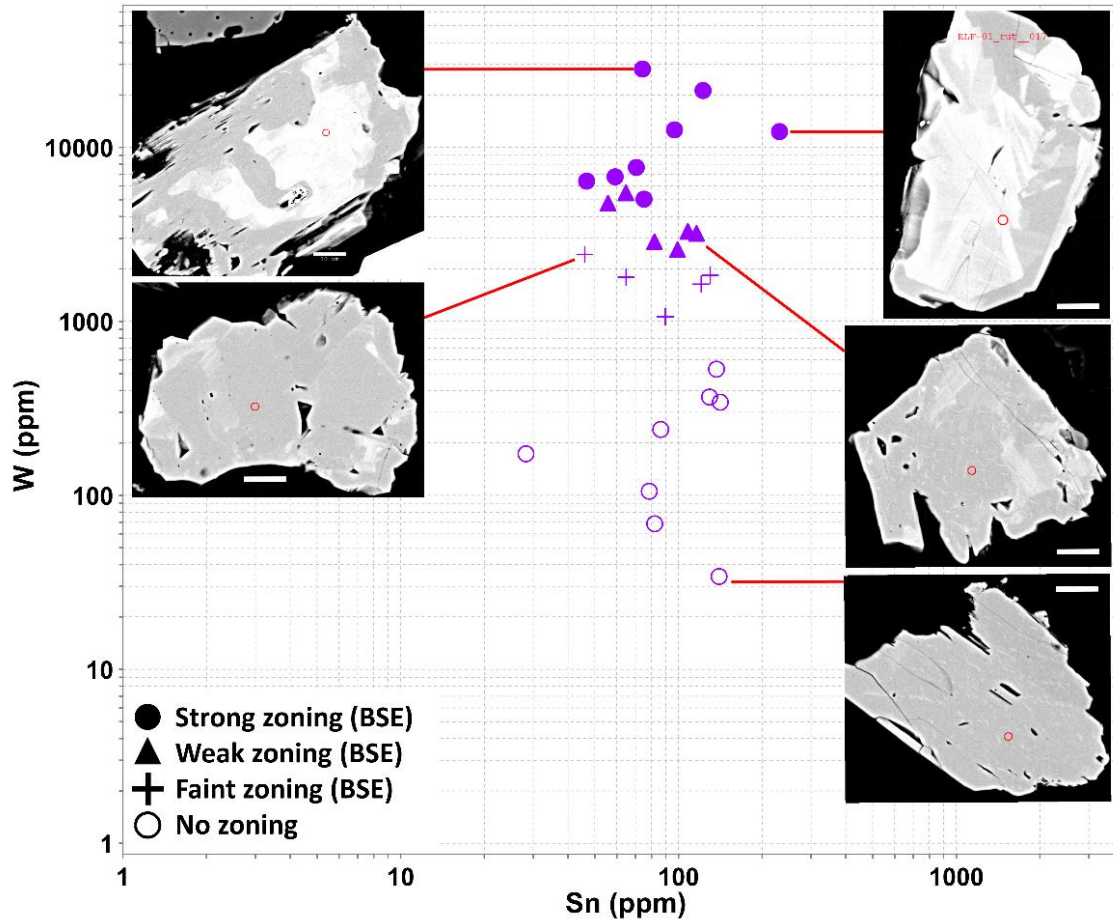


Figure 6.22: W vs. Sn of syn-mineralization Delta tonalite (ELF-01) from Elang, Sumbawa with inset examples of varying rutile zoning in BSE. High-W grains have the strongest zoning and BSE response, whereas low-W grains have no or faint zoning, and a dull grey BSE response. White scale bars are 10 microns. Red circles are locations of EMPA analyses.

6.23). Faintly zoned rutile (Fig. 6.23b) has barely visible zoning in BSE; however, the faint zones have small sectors of up to 10,000 ppm W and show complex W variations throughout the grain. It is important to note the differences in magnitudes of the colour scales compared to Figure 6.23a. Niobium, and to a lesser extent Sn are subtly elevated in W-rich areas. Uranium and Fe do not show a correlation with W. In homogenous gray rutile grains (Fig. 6.23c), chemical zoning disappears, as does BSE zoning. Tungsten concentrations are significantly lower (~500-1,000 ppm) with no significantly enriched

zones, although there are still heterogeneous patches showing minor variations in W concentrations.

These BSE zoned W-rich rutile grains are present at several other sites within the study area (Fig. 6.24). Tungsten content within rutile in the eastern Sunda arc dataset varies by over five orders of magnitude, with individual samples having grains varying by up to three to four orders of magnitude. When plotted against other highly compatible

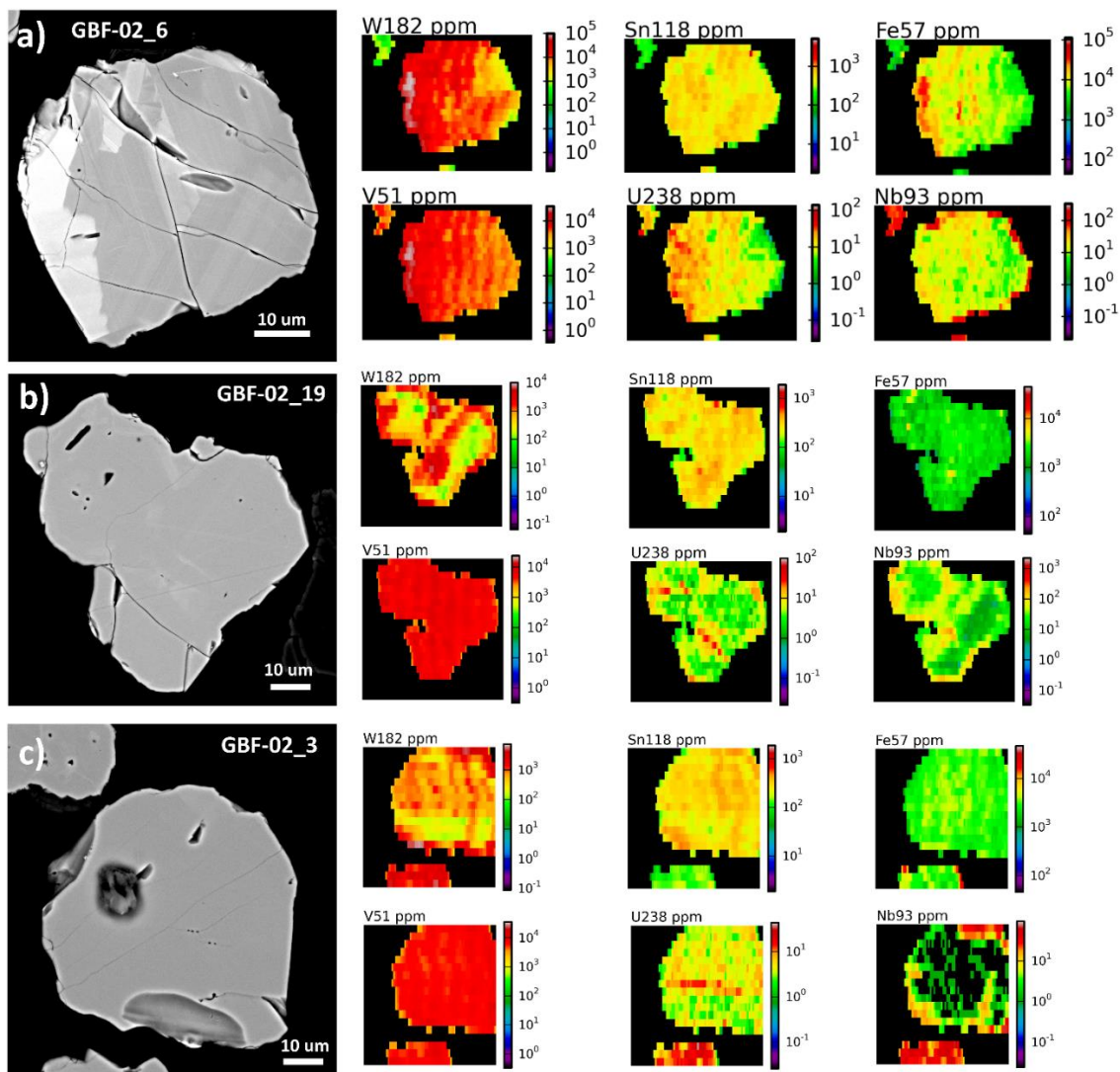


Figure 6.23: LA-ICP-MS maps of select a) strongly zoned, b) faintly zoned, and c) homogenous gray rutile grains from syn-mineralization Charlie tonalite, Gerbang, Elang district, Sumbawa (GBF-02). Note differences in magnitude of colour scales between grains.

Elements in rutile, the correlation between BSE zonation and high-W is evident (Fig. 6.24). Tungsten-Nb and W-Ta show no discernable trend, whereas W-V and W-Sn show weakly-positive to positive correlations; however, throughout all element ratios, W composition reflects whether or not grains have zoning. There is a distinct positive trend between W and Sn in Tumpangpitu rutile. Within the eastern Sunda arc, Sn-bearing sulfosalts are unique to Tumpangpitu (Harrison, 2017), and although they post-date hypogene and epithermal mineralization, could indicate a more Sn-rich source compared to other sites throughout the arc.

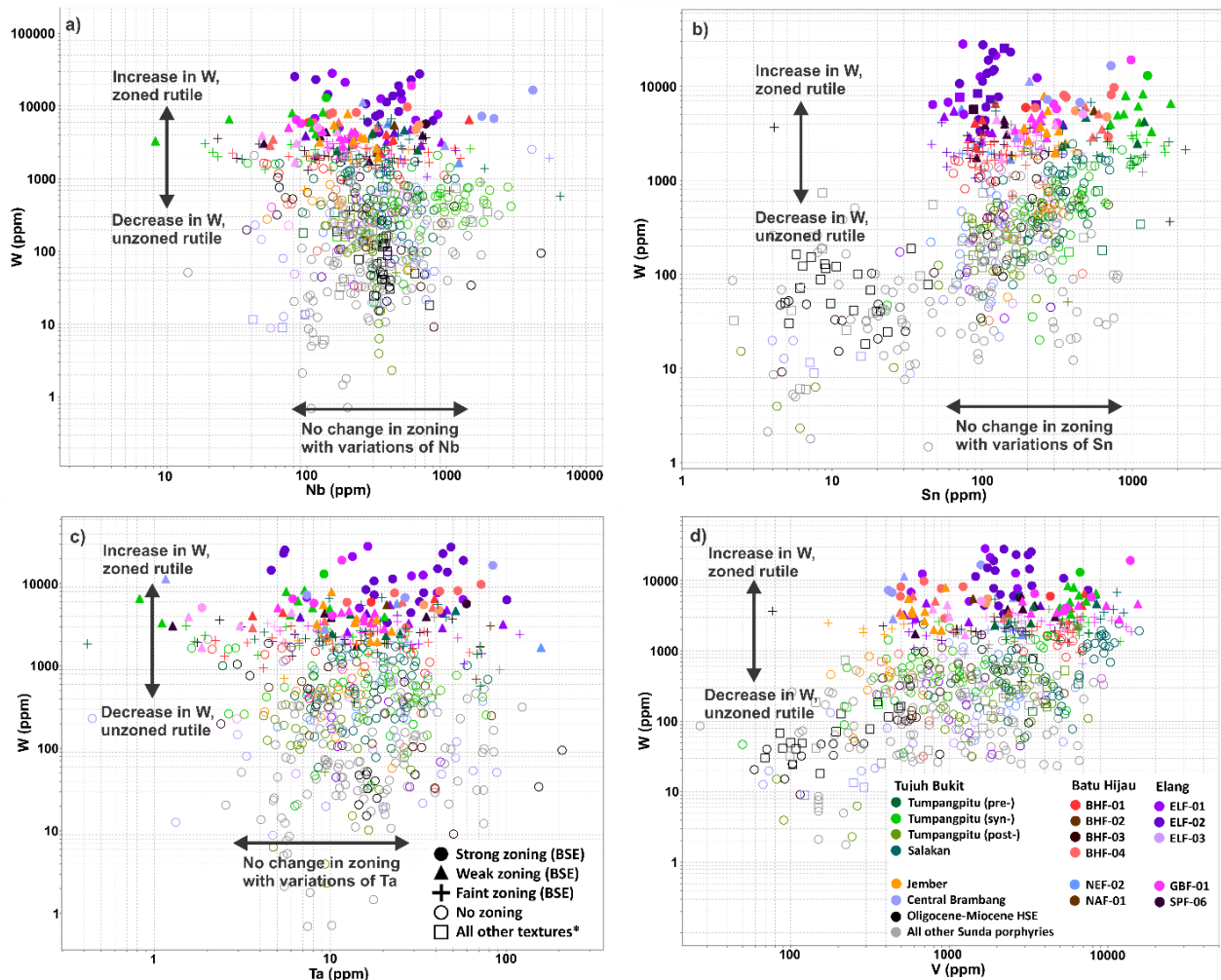


Figure 6.24: Rutile W bivariate plots of a) W vs. Nb, b) W vs. Sn, c) W vs. Ta, d) W vs. V. All plots show a strong correlation with BSE zonation and W composition, with no influence from other elements.

Due to the mineral separation aspect of this study, in-situ petrographic information on rutile mineral associations and occurrences was not possible, especially to quantify if W-rich, BSE zoned rutile are associated with mineralizing hydrothermal fluids. However, in the majority of samples that have a gradient of unzoned, W-poor rutile to strongly zoned, W-rich rutile, there is a trend of consistent Fe and increasing W that transitions to a positive correlation in increasing Fe and increasing W content (Fig. 6.25). This relationship is supported by the ionic substitution of $2 \text{Ti}^{4+} \leftrightarrow \text{M}^{6+} + 2\text{M}^{3+}$, where M^{6+} = hexavalent ions W^{6+} and U^{6+} , and M^{3+} = trivalent ions Al^{3+} , Sc^{3+} , V^{3+} , Cr^{3+} , Fe^{3+} , and Y^{3+} (Tiepolo et al., 2000),

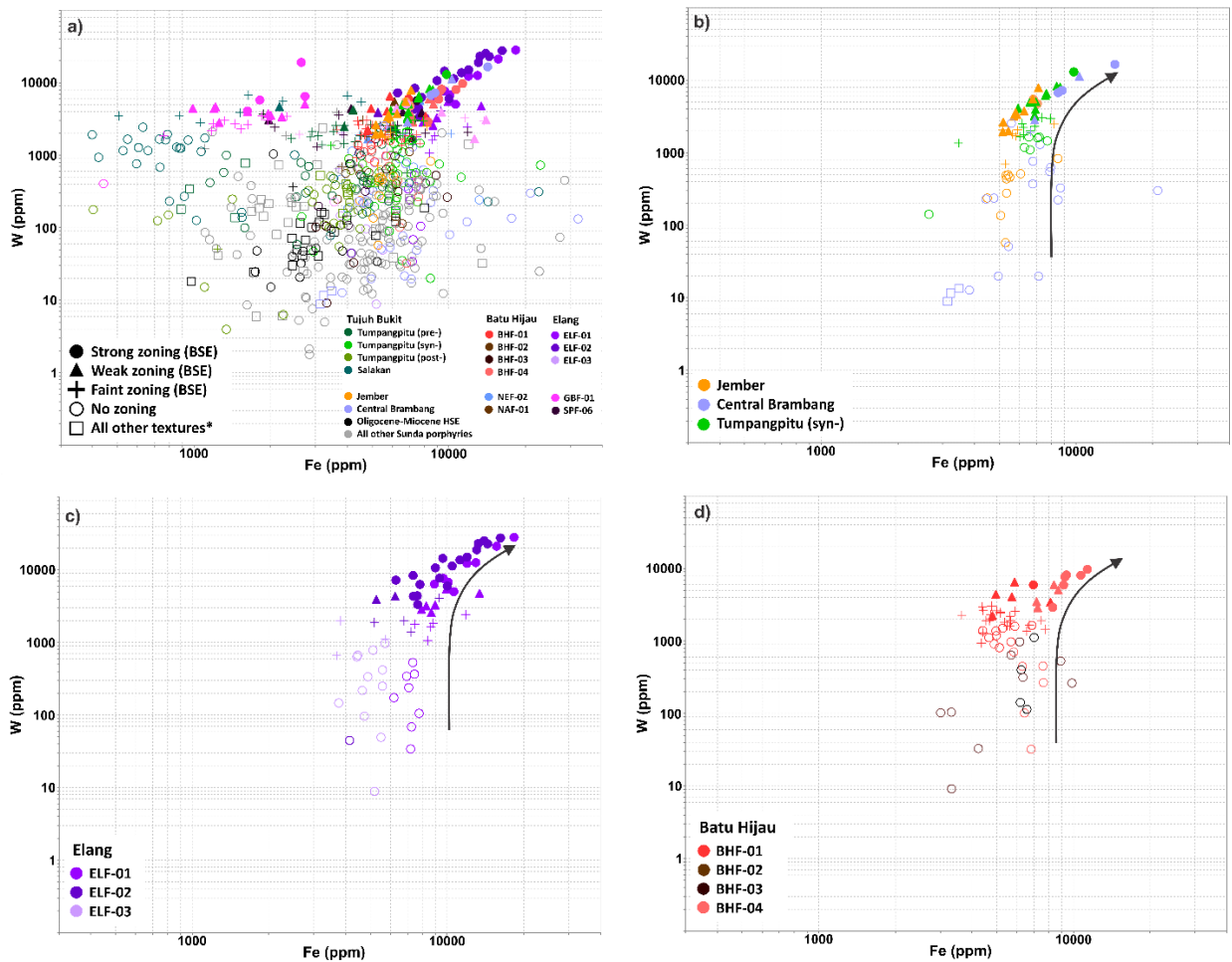


Figure 6.25: W vs. Fe of rutile grains from a) all eastern Sunda arc sites, b) selected Java and Lombok sites, c) Elang, and d) Batu Hijau showing an increase in both Fe and W concentrations in rutile in strongly zoned grains.

by which Ti can exchange for W and Fe by way of a coupled substitution. This trend is only present within samples from mineralized systems that contain these marked BSE and W composition zoning transitions, including Elang, Batu Hijau, Tumpangpitu, Central Brambang, and others. The strongly BSE zoned and W-rich rutile of Figure 6.23a shows correspondingly high Fe contents in the same sector, similar to the transition to near 1:1 ratio of W to Fe contents displayed in strongly BSE zoned rutile of Figure 6.25, which supports an interpretation that W-rich BSE zoned rutile is related to Fe-rich (and by association) W-rich hydrothermal fluids associated with significant mineralization.

6.5.5 – Relationship of zoned rutile and porphyry mineralization

Figure 6.26 shows the amount of BSE zoned rutile grains plotted against age, and circles corresponding to percentage of rutile within samples that were zoned in BSE. Zoned rutile in BSE is only present at 10 of 29 sites in the study, with only six sites with weak-strong zoning in more than 50% of rutile grains analysed. The majority of BSE zoned rutile occur in 5 Ma and younger systems, with those systems being the host to the main

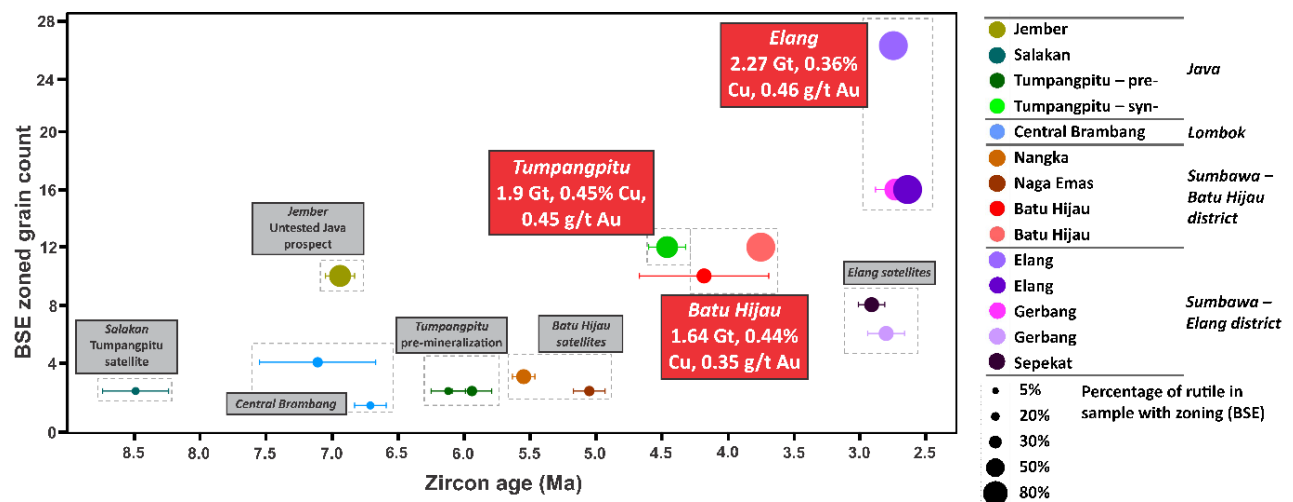


Figure 6.26: Plot of corresponding sample age vs. count of weak-strong BSE zoned rutile grains. Percentage of rutile in sample with BSE zoning is indicated by size of point, and indication of rutile error extent with error bars.

economic porphyry mineralization within the region. Giant porphyry deposit samples at Batu Hijau, Elang, and Tumpangpitu contain the highest number of BSE zoned rutile grains with high *W*. In addition these grains are only associated with giant porphyries and their satellites, as well as Central Brambang, the other most significantly mineralized system outside of the giants. Jember is the only exception to this, but is an untested, or undrilled prospect that is mineralized and has a significant amount of porphyry-style veining.

6.5.6 – Exploration implications and concluding remarks

Certain minerals related to ore systems can have chemical compositions that reflect potential for mineralization and are robust enough to survive weathering and transport (Averill, 2001; Plouffe et al., 2016). Schirra and Laurent (2021) identified high-*W* rutile at Batu Hijau, Bingham Canyon, El Salvador, and Northparkes porphyry deposits, with *W* one of the highest enriched elements in hydrothermal rutile compared to background/non-ore related detrital and metamorphic rutile. Eastern Sunda arc rutile grains that are zoned in BSE all contain high concentrations of *W*, with the vast number of zoned grains corresponding to samples from world-class porphyry Cu-Au deposits including Batu Hijau, Elang, and Tumpangpitu. What is significant is a transition from prevalent high-*W*, zoned rutile at large porphyry deposits, to low-*W*, unzoned rutile at sub-economic or small porphyry systems. Within the eastern Sunda arc, *W*-rich zoned rutile has the potential to be an effective proxy for porphyry-Cu mineralization, especially pertaining to regional exploration, such as in detrital stream sediment surveys.

Chapter 7: Conclusions

This study focused on two main components within the eastern Sunda arc: the investigation of magma fertility and prospectivity indicators for zircon, apatite, and rutile within several porphyry Cu-Au deposits and prospects along the arc and the U-Pb geochronology of the arc segment.

Geochronology reaffirms a consistent east-younging in central and eastern Java from Trenggalek (~15 Ma) through Salakan (~8.5 Ma) and Jember (~7 Ma), to the pre-mineralization phases (~6.5 Ma) and syn-mineralization phases (~4 Ma) at Tumpangpitu, similar to the findings of Harrison (2017) and Maryono et al. (2018). Lombok, which only had previous age determinations at the western-most sites of Brambang and Selodong (Maryono et al., 2018), shows an opposite westward younging in SW Lombok from Kuta, Plambik and Lembar in the east (20-17.5 Ma) through Songkang (~10-8 Ma), Selodong (~7.5 Ma) and Brambang (~7 Ma). The west-younging distribution of Lombok systems are aligned within broad regional NW trending structures in the SW portion of the island, indicating that the region with highest potential for Pliocene magmatism on Lombok are southwest of Brambang and Selodong. On Sumbawa, there is a general younging from west to east from Nangka (~6.5 Ma), Naga Emas (~5 and 3.5 Ma) to Batu Hijau (~4.5-3.5 Ma) and the Elang district (~3.0 to 2.5 Ma). The occurrence of Middle-Miocene intrusions on Lombok (Lembar, Plambik, Kuta) were previously unknown, and extend the limit of Middle-Miocene magmatism to Lombok.

Zircon chemistry can record redox conditions during magmatism, which can be determined by evaluating Ce and Eu anomalies relative to neighbouring rare-earth

elements. Since porphyry Cu-Au deposits require strongly oxidized conditions to form, the magnitudes of Eu and Ce anomalies in zircon are increasingly being used to evaluate or discriminate prospective areas for exploration that contain intrusions crystallized from oxidized and hydrous melts. All mid-Miocene to Pliocene syn-mineralization (< 15 Ma) intrusions in the eastern Sunda arc have a prospective zircon Eu/Eu* and Ce/Ce* signatures related to high water content and oxidation state. These signatures are similar for all intrusions of this age, and do not significantly vary between deposits with different known metal endowment. All Oligocene to mid-Miocene intrusions (> 15 Ma) have an unprospective zircon Eu/Eu* and Ce/Ce* signature, indicative of drier and less oxidized magmas less conducive to economic porphyry mineralization. The pronounced change in zircon prospectivity signatures at approximately ~15 Ma likely marks a significant change in arc-scale geodynamics (i.e., initiation of subduction of the Roo Rise), and demonstrates the potential of zircon as a regional discriminatory tool for evaluation of porphyry systems within the eastern Sunda arc. There is no discernable change in zircon chemistry between smaller, sub-economic mid to late-Miocene porphyry systems and giant Pliocene porphyry systems such as Tumpangpitu, Batu Hijau and Elang. All east Java to Sumbawa sites have zircon Hf isotopes (average $\epsilon_{\text{Hf}}(t) \sim +14.5$) with a very depleted or juvenile melt source signature with minimal input from older lithosphere. This signature is in strong contrast to west Java, low-sulfidation epithermal-dominated regions that show strong crustal contamination with average $\epsilon_{\text{Hf}}(t)$ values of -11.5 at Ciemas, west Java (Wu et al., 2019), indicating that crustal composition plays a significant role in mineralization style, but is not a main factor in magma prospectivity.

Apatite textures and compositions are incredibly diverse. Elevated values of Cl and S in magmatic apatite have potential to be useful indicators for eastern Sunda arc porphyry prospectivity; however, those signatures are not ubiquitous to large, mineralized porphyry Cu-Au deposits within the region. Magmatic apatite in early phases at Batu Hijau and Brambang have lower Cl and SO₃ contents than later, syn-mineralization phases. Trace elements of both magmatic and hydrothermal apatites do not show systematic or consistent changes between strongly and poorly mineralized porphyry systems. Within the eastern Sunda arc, hydrothermal apatite compositions are strongly tied to primary magmatic composition, and are influenced, but not entirely a result of, hydrothermal fluid characteristics, potentially limiting the effectiveness of hydrothermal apatite as an exploration tool within the eastern Sunda arc.

The bulk of previous research on rutile in mineral systems has largely focused on orogenic gold (e.g., Clark and Williams-Jones, 2004; Scott, 2007; Agangi et al., 2019; Sciuba and Beaudoin, 2021). Recently, Schirra and Laurent (2021) documented rutile from several giant porphyry systems and showed large ranges in the trace element chemistry from rutile within mineralized systems, including W. Large variations in trace element chemistry are also recorded here at the giant deposits of Batu Hijau, Elang, and Tumpangpitu, in particular with W that often ranges intra-sample over 3-4 orders of magnitude and in higher abundances than other HFSE and large ion elements (i.e., Sn, Nb, Ta).

Schirra and Laurent (2021) documented several generations of hydrothermal rutile associated with different alteration and vein types within porphyry systems. This could explain the large intra-sample variations observed in hydrothermal rutile compositions

within this study (e.g., Elang rutile W compositions: 10 – 50,000 ppm), likely with several different generations of rutile formed under different genetic conditions. However, the use of mineral separates for this study precluded detailed paragenetic studies. Other factors, such as the positive trend of BSE zoned rutile with high-W associated with high-Fe contents, could indicate a change in rutile chemistry from alteration-related rutile resulting from the breakdown of Ti-rich minerals to vein-related rutile associated with mineralizing fluids with high metal contents (e.g. W and Fe).

Laser mapping of rutile grains from this study (Gerbang, Sumbawa) show that zoning in rutile from mineralized intrusions is dominantly a result of W content, locally up to 10 wt. % in brightest sectors in BSE (back-scattered electron imaging). What is significant is a transition from prevalent high-W, zoned rutile at large porphyry deposits, to low-W, unzoned rutile at sub-economic or small porphyry systems within the eastern Sunda arc. The majority of BSE-zoned rutile grains with high-W are associated with < 5 Ma world-class porphyry deposits at Elang, Batu Hijau, and Tumpangpitu. Others have documented similarly large variations in W content in 'ore-zone'-related rutile, particularly the widely-used ternary diagram of Clark and Williams-Jones (2004); however, the relationship of W-rich, BSE zones being most associated with strongly mineralized systems (and not at less prospective systems) has not been previously documented.

Within the eastern Sunda arc, W-rich zoned rutile has the potential to be an effective proxy for porphyry-Cu mineralization, especially pertaining to regional exploration, such as in detrital stream sediment surveys. Zoning in BSE in rutile can be readily observed under the SEM without chemical analysis, with the added benefit that W contents are often in

excess of EMPA detection limits, potentially providing an extremely low-cost method of screening prospective regions to the explorers toolkit, in comparison to traditional, higher-cost laser ablation mineral chemistry methods.

There are; however, further questions pertaining to the usefulness of rutile as an effective porphyry indicator mineral. Is this relationship of high-W, BSE zoned rutile associated with mineralization ubiquitous to the eastern Sunda arc systems, or can it be used in other terranes? Tumpangpitu rutile had a subdued W signature compared to other giant systems (i.e. Elang and Batu Hijau). Are there issues with rutile as an exploration tool in extremely telescoped systems like Tumpangpitu that have a strong high-sulfidation epithermal overprint of porphyry mineralization, potentially affecting rutile chemistry? This study was constrained by the use of mineral separates, which limits contextual genetic information regarding rutile occurrence and formation. Further studies investigating in-situ analyses of rutile from different alteration types and porphyry vein styles would be particularly useful to determine if high-W, BSE zoned rutile does indeed have a direct relationship to mineralization and can be used as an effective proxy.

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Appendix A: Eastern Sunda arc sample location data:

| Sample ID | Region | Site | Hole ID | DBH Depth | UTM East | UTM North | UTM System | Sample Type | Rock Type | Alteration |
|-----------|--------------|------------------|----------|-----------|----------|------------|-----------------|--------------|------------------------------------|-----------------------|
| BHF-01 | Sumbawa | Batu Hijau | | | 485966.0 | 90094338.0 | WGS 84, UTM 50S | Mine Grab | Quartz diorite porphyry | Sericite-chlorite |
| BHF-02 | Sumbawa | Batu Hijau | | | 485477.0 | 9008842.0 | WGS 84, UTM 50S | Mine Grab | Tonalite | Sericite-chlorite |
| BHF-03 | Sumbawa | Batu Hijau | | | 485436.0 | 9008959.0 | WGS 84, UTM 50S | Mine Grab | Tonalite | Sericite-chlorite |
| BHF-04 | Sumbawa | Batu Hijau | | 873.4 | 485637.0 | 9008991.0 | WGS 84, UTM 50S | Diamond Core | Tonalite | Sericite-chlorite |
| ELF-01 | Sumbawa | Elang | | | 541321.0 | 9008979.0 | WGS 84, UTM 50S | Diamond Core | Tonalite | Sericite-chlorite |
| ELF-02 | Sumbawa | Elang | | 1356 | 541250.0 | 9009097.0 | WGS 84, UTM 50S | Diamond Core | Tonalite | Sericite-chlorite |
| ELF-03 | Sumbawa | Elang | | 101 | 541700.0 | 9009251.0 | WGS 84, UTM 50S | Diamond Core | Tonalite | Sericite-chlorite |
| GBF-01 | Sumbawa | Gerbang | | 167 | 541873.0 | 9009899.0 | WGS 84, UTM 50S | Diamond Core | Tonalite | Argillic-advanced |
| GBF-02 | Sumbawa | Gerbang | | 301.5 | 541916.0 | 9009849.0 | WGS 84, UTM 50S | Diamond Core | Tonalite | Argillic-intermediate |
| GBF-03 | Sumbawa | Gerbang | | 177.5 | 541722.0 | 9009764.0 | WGS 84, UTM 50S | Diamond Core | Quartz diorite | Argillic-intermediate |
| GBF-04 | Sumbawa | Gerbang | | 193.6 | 541726.0 | 9009770.0 | WGS 84, UTM 50S | Diamond Core | Quartz diorite porphyry | Argillic-intermediate |
| JEM-01 | Eastern Java | Jember | | | 811036.8 | 9074538.4 | WGS 84, UTM 49S | Outcrop Grab | Tonalite | Sericite-chlorite |
| JEM-02 | Eastern Java | Jember | | | 811043.1 | 9074525.1 | WGS 84, UTM 49S | Outcrop Grab | Quartz diorite porphyry | Polassic |
| JER-01 | Eastern Java | Jerambah | | 520 | 569926.0 | 9088663.0 | WGS 84, UTM 49S | Diamond Core | Quartz diorite porphyry | Propylitic-undefined |
| LB001 | Lombok | Lombok | TRDD-054 | | 399469.0 | 9033834.0 | WGS 84, UTM 50S | Outcrop Grab | Quartz diorite | Unaltered |
| LB002 | Lombok | Central Brambang | | 441 | 379616.0 | 9028323.4 | WGS 84, UTM 50S | Diamond Core | Tonalite porphyry | Sericite-chlorite |
| LB005 | Lombok | Pemulua | | 399 | 382077.6 | 9028602.0 | WGS 84, UTM 50S | Diamond Core | Quartz diorite | Propylitic-undefined |
| LB009 | Lombok | Central Brambang | | 451 | 379933.0 | 9028381.7 | WGS 84, UTM 50S | Diamond Core | Quartz diorite porphyry | Unaltered |
| LB010 | Lombok | Lembar | | | 399485.0 | 9033793.0 | WGS 84, UTM 50S | Outcrop Grab | Quartz diorite porphyry | Argillic-intermediate |
| LB011 | Lombok | NW Brambang | | | 378441.0 | 9029240.0 | WGS 84, UTM 50S | Outcrop Grab | Diorite porphyry | Propylitic-undefined |
| LB014 | Lombok | NW Brambang | | | 379012.0 | 9029222.0 | WGS 84, UTM 50S | Outcrop Grab | Tonalite | Sericite-chlorite |
| LB015 | Lombok | NW Brambang | | | 379006.0 | 9029154.0 | WGS 84, UTM 50S | Outcrop Grab | Tonalite porphyry | Sericite-chlorite |
| LB018 | Lombok | Montong Botek | | | 390867.0 | 9021229.0 | WGS 84, UTM 50S | Outcrop Grab | Quartz diorite | Propylitic-undefined |
| LB022 | Lombok | NW Brambang | | 130 | 379003.9 | 9029159.0 | WGS 84, UTM 50S | Diamond Core | Lapilli tuff | Propylitic-undefined |
| LB024 | Lombok | Central Brambang | | 437 | 379615.7 | 9028318.4 | WGS 84, UTM 50S | Diamond Core | Tonalite porphyry | Sericite-chlorite |
| LB025 | Lombok | Songkang | | | 407704.0 | 9025149.0 | WGS 84, UTM 50S | Outcrop Grab | Quartz diorite porphyry | Propylitic-undefined |
| LB026 | Lombok | Songkang | | | 407674.0 | 9025238.0 | WGS 84, UTM 50S | Outcrop Grab | Quartz diorite porphyry | Sericite-chlorite |
| LB027 | Lombok | Plambik | | | 409009.0 | 9031776.0 | WGS 84, UTM 50S | Outcrop Grab | Diorite porphyry | Sericite-chlorite |
| LB028 | Lombok | Montong Botek | | | 390811.0 | 9021114.0 | WGS 84, UTM 50S | Outcrop Grab | Quartz diorite | Propylitic-undefined |
| LB029 | Lombok | Montong Botek | | | 390879.0 | 9021127.0 | WGS 84, UTM 50S | Outcrop Grab | Quartz diorite porphyry | Sericite-chlorite |
| LB030 | Lombok | Plambik | | | 406947.0 | 9031179.0 | WGS 84, UTM 50S | Outcrop Grab | Diorite porphyry | Unaltered |
| LB031 | Lombok | Plambik | | | 406833.0 | 9033258.0 | WGS 84, UTM 50S | Outcrop Grab | Diorite porphyry | Unaltered |
| LB032 | Lombok | Songkang | | | 407819.0 | 9025049.0 | WGS 84, UTM 50S | Outcrop Grab | Quartz diorite | Argillic-advanced |
| LB033 | Lombok | Songkang | | | 409114.0 | 9031897.0 | WGS 84, UTM 50S | Outcrop Grab | Quartz diorite porphyry | Argillic-advanced |
| LB034 | Lombok | NW Brambang | | 20 | 379003.9 | 9029159.0 | WGS 84, UTM 50S | Diamond Core | Tonalite porphyry | Sericite-chlorite |
| LB036 | Lombok | Central Brambang | | 627 | 379616.0 | 9028323.4 | WGS 84, UTM 50S | Diamond Core | Tonalite | Argillic-intermediate |
| LB037 | Lombok | Central Brambang | | 229 | 379633.0 | 9028381.7 | WGS 84, UTM 50S | Diamond Core | Tonalite | Sericite-chlorite |
| LB041 | Lombok | Central Brambang | | 443 | 379615.7 | 9028318.4 | WGS 84, UTM 50S | Diamond Core | Tonalite porphyry | Sericite-chlorite |
| LB042 | Lombok | Belikat | | | 389266.0 | 9020640.0 | WGS 84, UTM 50S | Outcrop Grab | Diorite | Propylitic-undefined |
| LB043 | Lombok | Blongas | | | 391104.0 | 9021924.0 | WGS 84, UTM 50S | Outcrop Grab | Diorite | Argillic-supergene |
| LB044 | Lombok | Kula | | | 421851.0 | 9017835.0 | WGS 84, UTM 50S | Outcrop Grab | Diorite porphyry | Argillic-advanced |
| LB045 | Lombok | Kula | | | 421846.0 | 9017831.0 | WGS 84, UTM 50S | Outcrop Grab | Diorite porphyry | Propylitic-undefined |
| MLG-01 | Eastern Java | Malang | | | 686723.0 | 9079795.0 | WGS 84, UTM 48S | Outcrop Grab | Andesite porphyry | Unaltered |
| NAF-01 | Sumbawa | Nangka | | 660 | 480358.0 | 9011296.0 | WGS 84, UTM 50S | Diamond Core | Quartz diorite | Propylitic-undefined |
| NAF-02 | Sumbawa | Nangka | | 265 | 480347.0 | 9011046.0 | WGS 84, UTM 50S | Diamond Core | Quartz diorite porphyry | Propylitic-undefined |
| NAF-03 | Sumbawa | Nangka | | 390 | 480349.0 | 9011108.0 | WGS 84, UTM 50S | Diamond Core | Quartz diorite | Sericite-chlorite |
| NAF-04 | Sumbawa | Nangka | | 540 | 480352.0 | 9011188.0 | WGS 84, UTM 50S | Diamond Core | Diorite | Sericite-chlorite |
| NEF-01 | Sumbawa | Naga Emas | | 453 | 483003.0 | 9009541.0 | WGS 84, UTM 50S | Diamond Core | Diorite | Sericite-chlorite |
| NEF-02 | Sumbawa | Naga Emas | | 260 | 482349.0 | 9009573.0 | WGS 84, UTM 50S | Diamond Core | Hornblende quartz diorite porphyry | Unaltered |
| NEF-03 | Sumbawa | Naga Emas | | 548 | 483006.0 | 9009499.0 | WGS 84, UTM 50S | Diamond Core | Diorite | Sericite-chlorite |
| PCT-01 | Eastern Java | Pactian | | | 530489.0 | 9103437.0 | WGS 84, UTM 49S | Outcrop Grab | Dacitic tuff | Argillic-advanced |
| PCT-02 | Eastern Java | Pactian | | | 536968.0 | 9109659.0 | WGS 84, UTM 49S | Outcrop Grab | Andesite porphyry | Argillic-advanced |
| PNG-01 | Eastern Java | Ponorogo | | | 546107.0 | 9097341.0 | WGS 84, UTM 49S | Outcrop Grab | Breccia | Silicic |
| SEF-01 | Eastern Java | Selogiri | | 9.5 | 486174.4 | 9138115.2 | WGS 84, UTM 49S | Diamond Core | Hornblende diorite porphyry | Sericite-chlorite |
| SEF-02 | Eastern Java | Selogiri | | 59.5 | 486174.4 | 9138115.2 | WGS 84, UTM 49S | Diamond Core | Hornblende diorite | Sericite-chlorite |
| SEF-03 | Eastern Java | Selogiri | | 79 | 486151.4 | 9138207.7 | WGS 84, UTM 49S | Diamond Core | Diorite | Sericite-chlorite |
| SEF-04 | Eastern Java | Selogiri | | 88.6 | 486174.4 | 9138115.2 | WGS 84, UTM 49S | Diamond Core | Diorite | Sericite-chlorite |

Appendix A: Eastern Sunda arc sample location data:

| Sample ID | Region | Site | Hole ID | BDH Depth | UTM East | UTM North | UTM System | Sample Type | Rock Type | Alteration |
|-----------|--------------|---------------|--------------|-----------|----------|-----------|-----------------|--------------|----------------------------|-----------------------|
| SEF-04 | Eastern Java | Selogiri | WDD08 | 88.6 | 486174.4 | 9138115.2 | WGS 84, UTM 49S | Diamond Core | Diorite | Sericite-chlorite |
| SINA-01 | Eastern Java | Shawang | | | 632258.6 | 9085249.2 | WGS 84, UTM 49S | Outcrop Grab | Quartz diorite porphyry | Argillic-advanced |
| SINA-02 | Eastern Java | Shawang | | | 632240.3 | 9085239.1 | WGS 84, UTM 49S | Outcrop Grab | Quartz diorite porphyry | Argillic-advanced |
| SINA-04 | Eastern Java | Shawang | | | 632220.8 | 9085205.2 | WGS 84, UTM 49S | Outcrop Grab | Quartz diorite porphyry | Argillic-advanced |
| SINA-05 | Eastern Java | Shawang | | | 632208.2 | 9085218.3 | WGS 84, UTM 49S | Outcrop Grab | Quartz diorite porphyry | Argillic-advanced |
| SING-01 | Eastern Java | Singgahan | TRDD-057 | | 574956.0 | 9088554.0 | WGS 84, UTM 49S | Diamond Core | Tonalite porphyry | Sericite-chlorite |
| SING-02 | Eastern Java | Singgahan | TRDD-057 | 351.5 | 574956.0 | 9088554.0 | WGS 84, UTM 49S | Diamond Core | Tonalite porphyry | Sericite-chlorite |
| SLG-01 | Eastern Java | Selogiri | | | 486416.0 | 9138208.0 | WGS 84, UTM 49S | Outcrop Grab | Quartz diorite porphyry | Argillic-advanced |
| SLG-02 | Eastern Java | Selogiri | | | 486332.0 | 9138152.0 | WGS 84, UTM 49S | Outcrop Grab | Homblende diorite porphyry | Argillic-intermediate |
| SLG-03 | Eastern Java | Selogiri | | | 486450.0 | 9138298.0 | WGS 84, UTM 49S | Outcrop Grab | Diorite | Propylitic-undefined |
| SPF-01 | Sumbawa | Sepekat | DKD-016 | 261.1 | 542918.0 | 9012519.0 | WGS 84, UTM 50S | Diamond Core | Quartz diorite | Sericite-chlorite |
| SPF-02 | Sumbawa | Sepekat | DKD-016 | 458 | 543074.0 | 9012525.0 | WGS 84, UTM 50S | Diamond Core | Diorite | Sericite-chlorite |
| SPF-03 | Sumbawa | Sepekat | DKD-011 | 148 | 542681.0 | 9011557.0 | WGS 84, UTM 50S | Diamond Core | Quartz diorite | Unaltered |
| SPF-04 | Sumbawa | Sepekat | DKD-016 | 523 | 543100.0 | 9012526.0 | WGS 84, UTM 50S | Diamond Core | Quartz diorite | Unaltered |
| SPF-05 | Sumbawa | Sepekat | DKD-011 | 22 | 542744.0 | 9011555.0 | WGS 84, UTM 50S | Diamond Core | Quartz diorite | Sericite-chlorite |
| SPF-06 | Sumbawa | Sepekat | DKD-016 | 559 | 543125.0 | 9012528.0 | WGS 84, UTM 50S | Diamond Core | Intrusive breccia | Potassic |
| TR-01 | Eastern Java | Jerambah | | | 569835.0 | 9090180.0 | WGS 84, UTM 49S | Outcrop Grab | Quartz diorite porphyry | Sericite-chlorite |
| TR-02 | Eastern Java | Kali Petang | | | 566578.0 | 9088021.0 | WGS 84, UTM 49S | Outcrop Grab | Quartz diorite | Propylitic-undefined |
| TR-03 | Eastern Java | Singgahan | | | 575178.0 | 9088243.0 | WGS 84, UTM 49S | Outcrop Grab | Diorite | Sericite-chlorite |
| TR-04 | Eastern Java | Kebo Gemulung | | | 581658.0 | 9083063.0 | WGS 84, UTM 49S | Outcrop Grab | Diorite | Sericite-chlorite |
| TR-05 | Eastern Java | Kebo Gemulung | | | 581741.0 | 9083087.0 | WGS 84, UTM 49S | Outcrop Grab | Quartz diorite porphyry | Sericite-chlorite |
| UG012183 | Eastern Java | Tumpangtiti | UHGZ-20-010 | 320 | | | | Diamond Core | Diorite porphyry | Argillic-advanced |
| UG012184 | Eastern Java | Tumpangtiti | UGTH-19-013 | 88 | | | | Diamond Core | Diorite porphyry | Argillic-advanced |
| UG012185 | Eastern Java | Tumpangtiti | UGTH-19-013 | 206 | | | | Diamond Core | Tonalite | Argillic-advanced |
| UG012186 | Eastern Java | Tumpangtiti | UGTH-19-013 | 702 | | | | Diamond Core | Diorite porphyry | Argillic-advanced |
| UG012187 | Eastern Java | Tumpangtiti | UHGZ-19-006 | 58 | | | | Diamond Core | Diorite porphyry | Argillic-advanced |
| UG012188 | Eastern Java | Tumpangtiti | UHGZ-19-006 | 566 | | | | Diamond Core | Tonalite | Argillic-advanced |
| UG012189 | Eastern Java | Tumpangtiti | UHGZ-20-018 | 124 | | | | Diamond Core | Tonalite | Argillic-advanced |
| UG012190 | Eastern Java | Tumpangtiti | UHGZ-20-018 | 322 | | | | Diamond Core | Tonalite | Argillic-advanced |
| UG012191 | Eastern Java | Tumpangtiti | UHGZ-20-018 | 520 | | | | Diamond Core | Diorite porphyry | Argillic-advanced |
| UG012192 | Eastern Java | Tumpangtiti | UHGZ-19-001 | 656 | | | | Diamond Core | Diorite porphyry | Argillic-advanced |
| UG012193 | Eastern Java | Tumpangtiti | UHGZ-19-005 | 22 | | | | Diamond Core | Diorite porphyry | Argillic-advanced |
| UG012194 | Eastern Java | Tumpangtiti | UHGZ-19-005 | 288 | | | | Diamond Core | Diorite porphyry | Argillic-advanced |
| UG012195 | Eastern Java | Tumpangtiti | UHGZ-19-002A | 210 | | | | Diamond Core | Diorite porphyry | Argillic-intermediate |
| UG012196 | Eastern Java | Tumpangtiti | UHGZ-19-002A | 710 | | | | Diamond Core | Diorite porphyry | Argillic-advanced |
| UG012197 | Eastern Java | Tumpangtiti | UHGZ-20-016 | 424 | | | | Diamond Core | Tonalite | Argillic-advanced |
| UG012198 | Eastern Java | Tumpangtiti | UHGZ-20-016 | 636 | | | | Diamond Core | Diorite porphyry | Argillic-advanced |
| UG012199 | Eastern Java | Salakan | SND-12-001 | 112 | | | | Diamond Core | Tonalite porphyry | Argillic-advanced |
| UG012200 | Eastern Java | Salakan | SND-12-001 | 222 | | | | Diamond Core | Tonalite | Argillic-advanced |
| UG012201 | Eastern Java | Salakan | SND-12-001 | 440 | | | | Diamond Core | Tonalite | Argillic-advanced |
| UG012202 | Eastern Java | Salakan | SND-12-001 | 916 | | | | Diamond Core | Tonalite porphyry | Argillic-advanced |

Appendix A: Eastern Sunda arc whole-rock geochemistry

| Sample ID | SiO ₂ | Al ₂ O ₃ | Fe ₂ O ₃ | MgO | CaO | Na ₂ O | K ₂ O | TiO ₂ | P ₂ O ₅ | MnO | Cr ₂ O ₃ | LOI | TOTAL C | TOTAL S | Sum |
|-----------|------------------|--------------------------------|--------------------------------|------|------|-------------------|------------------|------------------|-------------------------------|------|--------------------------------|------|---------|---------|--------|
| BHF-01 | 68.8 | 16.55 | 2.15 | 1.54 | 1.69 | 5.8 | 0.67 | 0.4 | 0.17 | 0.02 | 0.002 | 1.54 | 0.06 | 0.22 | 99.39 |
| BHF-02 | 65.7 | 16.45 | 5.02 | 1.45 | 4.03 | 5.03 | 0.54 | 0.37 | 0.18 | 0.06 | 0.002 | 0.63 | 0.04 | 0.06 | 99.55 |
| BHF-03 | 66.8 | 16.5 | 3.99 | 1.34 | 4.23 | 4.79 | 0.44 | 0.34 | 0.16 | 0.07 | 0.002 | 1.99 | 0.21 | 0.06 | 100.75 |
| BHF-04 | 72.1 | 10.65 | 9.13 | 1.33 | 1.16 | 1.5 | 1.35 | 0.19 | 0.08 | 0.12 | 0.002 | 3.09 | 0.1 | 1.95 | 100.75 |
| ELF-01 | 71.2 | 11.8 | 5.27 | 1.42 | 3.88 | 3.56 | 0.57 | 0.28 | 0.05 | 0.03 | <0.002 | 3.82 | 0.13 | 1.9 | 101.92 |
| ELF-02 | 68.6 | 9.94 | 7.51 | 1.66 | 3.33 | 1.73 | 1.15 | 0.25 | 0.05 | 0.09 | 0.002 | 5.05 | 0.25 | 4.39 | 99.39 |
| ELF-03 | 63.3 | 17.15 | 6.13 | 2.41 | 3.49 | 4.58 | 0.86 | 0.43 | 0.11 | 0.04 | 0.002 | 2.32 | 0.07 | 0.49 | 100.89 |
| GBF-01 | 76.1 | 10.6 | 6.18 | 0.24 | 0.11 | 0.3 | 1.08 | 0.25 | 0.1 | 0.02 | 0.002 | 4.9 | 0.03 | 5.06 | 99.89 |
| GBF-02 | 64.3 | 11.7 | 10.75 | 0.99 | 0.2 | 0.65 | 1.02 | 0.81 | 0.06 | 0.25 | <0.002 | 7.48 | 0.43 | 7.16 | 98.22 |
| GBF-03 | 60.7 | 14.9 | 11.35 | 4.65 | 0.44 | 0.28 | 1.22 | 0.79 | 0.14 | 0.25 | 0.002 | 6.52 | 0.22 | 1.37 | 101.25 |
| GBF-04 | 53.9 | 16.35 | 13.05 | 3.82 | 2.56 | 1.88 | 1.12 | 0.8 | 0.06 | 0.13 | 0.003 | 7.67 | 0.27 | 0.57 | 100.34 |
| JEM-01 | 60.9 | 14.25 | 8.36 | 1.9 | 1.12 | 4.27 | 1.02 | 0.94 | 0.44 | 0.04 | 0.002 | 4.75 | 0.02 | 4.34 | 98.02 |
| JEM-02 | 63.8 | 16.3 | 5.27 | 2.38 | 4.44 | 3.23 | 0.95 | 0.53 | 0.17 | 0.02 | 0.003 | 1.98 | 0.04 | 0.15 | 99.11 |
| JER-01 | 64.4 | 15.7 | 4.86 | 1.98 | 5.5 | 3.29 | 0.69 | 0.45 | 0.12 | 0.13 | 0.007 | 2.55 | 0.04 | 1.04 | 99.76 |
| LB001 | 59 | 15.5 | 10.1 | 3.2 | 5.41 | 3.43 | 0.35 | 0.6 | 0.11 | 0.2 | <0.002 | 2.55 | 0.1 | 0.01 | 100.5 |
| LB002 | 64.9 | 15.3 | 5.76 | 2.34 | 2.93 | 3.48 | 0.75 | 0.47 | 0.13 | 0.22 | <0.002 | 5.42 | 0.22 | 0.23 | 101.75 |
| LB005 | 54.7 | 15.95 | 8.17 | 3.43 | 7.23 | 3.21 | 0.48 | 0.79 | 0.15 | 0.22 | 0.002 | 5.68 | 0.01 | 5.31 | 100.07 |
| LB009 | 64.3 | 15.9 | 6.02 | 2.16 | 5.35 | 3.99 | 0.85 | 0.5 | 0.15 | 0.19 | <0.002 | 1.59 | 0.09 | 0.18 | 101.08 |
| LB010 | 59.8 | 17 | 8.6 | 3.28 | 2 | 4.67 | 0.54 | 0.66 | 0.1 | 0.11 | 0.003 | 4.6 | 0.03 | 0.02 | 101.39 |
| LB011 | 59 | 15.95 | 6.26 | 2.42 | 5.9 | 3.13 | 1.13 | 0.65 | 0.11 | 0.15 | 0.002 | 3.6 | 0.13 | 0.01 | 98.42 |
| LB014 | 68.8 | 14.05 | 6.77 | 0.34 | 1.8 | 4.65 | 1.61 | 0.46 | 0.11 | 0.08 | <0.002 | 2.74 | 0.01 | 0.02 | 101.48 |
| LB015 | 62.1 | 15.1 | 7 | 2.09 | 2.57 | 4.88 | 2.23 | 0.53 | 0.19 | 0.17 | <0.002 | 3.9 | <0.01 | 0.05 | 100.88 |
| LB018 | 64.2 | 13.9 | 8.48 | 1.9 | 2.3 | 2.79 | 2.68 | 0.63 | 0.15 | 0.2 | 0.005 | 2.64 | 0.03 | 0.02 | 99.95 |
| LB022 | 54.2 | 19.1 | 11 | 2.12 | 2.13 | 3.71 | 2.49 | 0.98 | 0.13 | 0.22 | <0.002 | 4.51 | 0.12 | 0.73 | 100.65 |
| LB024 | 62.5 | 13.25 | 8.52 | 2.68 | 1.75 | 2.87 | 1.14 | 0.49 | 0.13 | 0.11 | 0.004 | 4.71 | 0.17 | 0.91 | 98.19 |
| LB025 | 63.1 | 16.95 | 5.58 | 3.06 | 4.14 | 3.32 | 0.49 | 0.54 | 0.15 | 0.12 | 0.004 | 4.34 | 0.12 | 0.05 | 101.85 |
| LB026 | 58.9 | 17.7 | 6.16 | 2.91 | 9.66 | 2.26 | 0.27 | 0.65 | 0.16 | 0.14 | <0.002 | 3.05 | 0.07 | 0.12 | 101.92 |
| LB027 | 48.4 | 17.55 | 11.4 | 7.49 | 9.96 | 2.09 | 0.26 | 0.65 | 0.07 | 0.2 | 0.028 | 2.4 | <0.01 | 0.02 | 100.55 |
| LB028 | 63.4 | 14.5 | 9.13 | 2.5 | 2.13 | 1.84 | 4.37 | 0.65 | 0.1 | 0.25 | 0.003 | 2.76 | 0.03 | 0.01 | 101.75 |
| LB029 | 64 | 16 | 5.73 | 1.54 | 2.84 | 3.22 | 2.51 | 0.54 | 0.13 | 0.12 | <0.002 | 3.45 | 0.02 | 0.01 | 100.16 |
| LB030 | 59.3 | 17.15 | 7.75 | 2.74 | 7.18 | 3.76 | 0.84 | 0.75 | 0.13 | 0.14 | 0.003 | 1.96 | 0.01 | 0.01 | 101.75 |
| LB031 | 56.4 | 16.8 | 9.1 | 4.01 | 7.74 | 3.11 | 0.76 | 0.76 | 0.1 | 0.17 | 0.004 | 2.19 | 0.05 | 0.01 | 101.19 |
| LB032 | 66.6 | 12.75 | 1.92 | 0.04 | 0.26 | 1.05 | 1.39 | 0.79 | 0.16 | 0.01 | 0.024 | 15.4 | <0.01 | 4.48 | 100.51 |
| LB033 | 83 | 9.93 | 3.33 | 0.05 | 0.05 | 0.03 | 0.06 | 0.5 | 0.02 | 0.04 | 0.003 | 3.73 | 0.01 | 0.03 | 100.75 |
| LB034 | 61.2 | 15.25 | 9.06 | 2.49 | 2.53 | 4.58 | 1.88 | 0.56 | 0.18 | 0.26 | <0.002 | 3.28 | 0.18 | 0.32 | 101.32 |
| LB036 | 74.5 | 11.65 | 5.41 | 1.39 | 0.91 | 0.77 | 1.63 | 0.43 | 0.06 | 0.08 | <0.002 | 3.75 | 0.02 | 1.03 | 100.61 |
| LB037 | 59 | 16.6 | 7.22 | 1.88 | 6.25 | 4.22 | 1.25 | 0.63 | 0.08 | 0.23 | 0.002 | 3.63 | 0.19 | 0.54 | 101.03 |
| LB041 | 68.2 | 12.1 | 8.64 | 2.48 | 0.96 | 1.97 | 2.01 | 0.45 | 0.15 | 0.14 | <0.002 | 4.65 | 0.1 | 1.39 | 101.82 |
| LB042 | 66.3 | 15.15 | 5.33 | 2.19 | 4.44 | 3.46 | 0.83 | 0.55 | 0.14 | 0.11 | 0.003 | 1.99 | 0.02 | 0.02 | 100.57 |
| LB043 | 53.2 | 22 | 11.05 | 0.49 | 0.17 | 0.05 | 0.19 | 0.96 | 0.11 | 0.08 | <0.002 | 13.2 | 0.03 | 0.05 | 101.5 |
| LB044 | 67 | 13.6 | 4.84 | 4.16 | 0.21 | 3.29 | 0.54 | 0.46 | 0.05 | 0.1 | 0.002 | 5.1 | 0.01 | 0.32 | 99.36 |
| LB045 | 63.7 | 14.2 | 5.63 | 5.26 | 0.19 | 3.31 | 0.98 | 0.49 | 0.05 | 0.08 | <0.002 | 5.32 | 0.02 | 0.32 | 99.22 |
| MLG-01 | 58.3 | 15.55 | 7.55 | 4.88 | 6.98 | 1.95 | 0.78 | 0.61 | 0.1 | 0.14 | 0.016 | 3.18 | 0.12 | 0.26 | 100.07 |
| NAF-01 | 67.9 | 14.65 | 5.11 | 1.89 | 4.02 | 3.36 | 1.9 | 0.45 | 0.12 | 0.1 | 0.002 | 0.89 | 0.04 | 0.44 | 100.5 |
| NAF-02 | 67.1 | 14.7 | 8.19 | 2.02 | 1.76 | 3.21 | 0.77 | 0.47 | 0.11 | 0.1 | <0.002 | 2.25 | 0.03 | 0.26 | 100.73 |
| NAF-03 | 58.1 | 16.8 | 7.43 | 4.64 | 3.71 | 2.77 | 0.96 | 0.72 | 0.12 | 0.11 | 0.014 | 3.78 | 0.06 | 1.71 | 99.22 |
| NAF-04 | 58.3 | 15.95 | 8.57 | 4.49 | 6.62 | 3.27 | 0.39 | 0.73 | 0.11 | 0.21 | 0.005 | 1.14 | 0.04 | 0.42 | 99.83 |
| NEF-01 | 66.8 | 11.5 | 9.14 | 2.65 | 1.73 | 1.99 | 0.69 | 0.53 | 0.1 | 0.05 | 0.002 | 4.23 | 0.18 | 2.31 | 99.43 |
| NEF-02 | 63.1 | 16.9 | 5.57 | 2.67 | 5.53 | 3.36 | 0.31 | 0.49 | 0.13 | 0.15 | 0.003 | 2.45 | 0.23 | 0.16 | 100.72 |

*All major oxides, C and S are in wt. %.

Appendix A: Eastern Sunda arc whole-rock geochemistry

| Sample ID | Ag | As | Ba | Bi | Cd | Ce | Co | Cr | Cs | Cu | Dy | Er | Eu | Ga | Gd | Ge | Hf |
|-----------|------|------|-------|-------|------|------|----|-----|------|-------|------|------|------|------|------|----|-----|
| BHF-01 | 0.7 | 0.5 | 252 | 0.32 | <0.5 | 12.6 | 3 | 20 | 0.72 | 3860 | 1.34 | 0.71 | 0.57 | 17.5 | 1.39 | <5 | 1.9 |
| BHF-02 | 0.7 | 0.6 | 364 | 0.12 | <0.5 | 12.1 | 7 | 20 | 0.24 | 1520 | 1.23 | 0.73 | 0.54 | 20.7 | 1.32 | <5 | 2.3 |
| BHF-03 | 1.1 | 0.5 | 486 | 0.2 | <0.5 | 14.2 | 6 | 10 | 1.01 | 1100 | 1.24 | 0.83 | 0.57 | 20.2 | 1.52 | <5 | 2 |
| BHF-04 | 0.8 | 1.1 | 364 | 0.56 | <0.5 | 9.14 | 5 | 20 | 0.78 | 914 | 0.69 | 0.45 | 0.26 | 19.4 | 0.79 | <5 | 1.1 |
| ELF-01 | 0.6 | 42.5 | 188 | 0.11 | <0.5 | 5.9 | 8 | 10 | 0.78 | 5220 | 1.15 | 0.85 | 0.39 | 13.3 | 1.15 | <5 | 1.4 |
| ELF-02 | <0.5 | 16 | 148 | 0.2 | <0.5 | 5.3 | 8 | 10 | 1.83 | 3260 | 1.4 | 1 | 0.32 | 13.3 | 1.28 | <5 | 1.3 |
| ELF-03 | <0.5 | 6.1 | 255 | 0.1 | <0.5 | 7.6 | 11 | 20 | 0.52 | 779 | 1.38 | 0.83 | 0.5 | 18.3 | 1.39 | <5 | 1.7 |
| GBF-01 | 1.7 | >250 | 94.3 | 1.75 | 2.4 | 5.3 | 14 | 10 | 0.46 | 6880 | 1.52 | 1.03 | 0.41 | 13.8 | 1.22 | <5 | 0.9 |
| GBF-02 | 3.9 | >250 | 71 | 4.3 | 0.5 | 5.8 | 25 | 10 | 1.07 | 10000 | 5.5 | 3.78 | 1.08 | 12.9 | 4.5 | 5 | 0.9 |
| GBF-03 | 0.6 | 25.6 | 61.4 | 0.25 | 2.8 | 4.3 | 18 | 20 | 1.84 | 3960 | 3.07 | 2.01 | 0.67 | 17.1 | 2.51 | <5 | 1.1 |
| GBF-04 | <0.5 | 8.3 | 28.5 | 0.12 | <0.5 | 4.9 | 33 | 20 | 1.74 | 3630 | 2.63 | 1.62 | 0.74 | 16.7 | 2.31 | <5 | 0.8 |
| JEM-01 | <0.5 | 0.6 | 156.5 | 0.28 | <0.5 | 33.5 | 34 | 20 | 0.35 | 2360 | 6.65 | 4.14 | 1.92 | 15.6 | 6.01 | <5 | 2.6 |
| JEM-02 | 0.6 | 0.5 | 120.5 | 0.07 | <0.5 | 27.3 | 8 | 20 | 1.49 | 1030 | 2.73 | 1.88 | 0.74 | 16.5 | 2.49 | <5 | 3 |
| JER-01 | 0.5 | 28.4 | 236 | 0.04 | <0.5 | 15.1 | 11 | 50 | 0.53 | 16 | 1.78 | 1.2 | 0.67 | 16.3 | 1.86 | <5 | 2.4 |
| LB001 | 0.5 | 1.1 | 153.5 | 0.04 | 0.6 | 13.8 | 16 | 10 | 0.35 | 406 | 2.69 | 1.73 | 0.8 | 16 | 2.85 | <5 | 1.9 |
| LB002 | <0.5 | 1.1 | 247 | 0.01 | 1.5 | 19.3 | 11 | 10 | 0.57 | 687 | 2.06 | 1.29 | 0.9 | 17 | 2.32 | <5 | 2.7 |
| LB005 | <0.5 | 2.8 | 279 | 0.46 | 0.6 | 21.5 | 21 | 10 | 0.1 | 54 | 4.07 | 2.55 | 1 | 16.5 | 3.82 | <5 | 3.2 |
| LB009 | 1 | 1 | 379 | 0.06 | 0.5 | 20 | 13 | 10 | 0.29 | 982 | 2.2 | 1.28 | 0.85 | 18 | 2.52 | <5 | 2.3 |
| LB010 | <0.5 | 0.3 | 147.5 | 0.03 | <0.5 | 12.2 | 16 | 20 | 0.27 | 87 | 3.61 | 2.14 | 0.85 | 16.1 | 3.36 | <5 | 1.8 |
| LB011 | <0.5 | 4.5 | 707 | <0.01 | <0.5 | 25.8 | 16 | 20 | 0.21 | 42 | 4.65 | 2.87 | 1.03 | 15.9 | 4.66 | <5 | 3.9 |
| LB014 | 1.7 | 1 | 385 | 0.08 | 0.9 | 25.3 | 6 | 10 | 0.15 | 1050 | 3.55 | 2.1 | 1.11 | 15.8 | 4.03 | <5 | 2.7 |
| LB015 | 1.4 | 0.3 | 621 | 0.05 | 0.8 | 20.8 | 13 | <10 | 0.29 | 10000 | 4.07 | 2.61 | 1.17 | 16 | 4.86 | <5 | 2.5 |
| LB018 | 0.7 | 0.8 | 518 | 0.05 | 2.3 | 20.6 | 16 | 40 | 0.31 | 1075 | 2.98 | 1.77 | 0.84 | 13.9 | 3.17 | <5 | 2.7 |
| LB022 | 1.3 | 1.6 | 412 | 0.07 | 1 | 13.5 | 26 | 10 | 1.31 | 1120 | 2.94 | 1.82 | 0.85 | 15.7 | 2.98 | 5 | 2.3 |
| LB024 | 0.9 | 0.5 | 215 | 0.06 | <0.5 | 16.6 | 15 | 30 | 0.68 | 3090 | 2.04 | 1.19 | 0.73 | 16.4 | 2.42 | <5 | 1.9 |
| LB025 | <0.5 | 1.9 | 254 | 0.01 | 0.7 | 17.6 | 19 | 40 | 0.62 | 55 | 2.98 | 1.77 | 0.89 | 17.3 | 2.94 | <5 | 2.8 |
| LB026 | 0.5 | 1.4 | 203 | 0.01 | 0.5 | 25.6 | 13 | 10 | 0.3 | 726 | 3.89 | 2.23 | 1.03 | 16.5 | 3.57 | <5 | 2.2 |
| LB027 | 0.8 | 0.5 | 226 | 0.13 | 2.4 | 9.2 | 33 | 200 | 0.22 | 324 | 2.88 | 1.64 | 0.9 | 17.2 | 2.68 | <5 | 1.3 |
| LB028 | 1.1 | 0.8 | 974 | 0.06 | 1.3 | 21.4 | 19 | 30 | 0.35 | 1225 | 3.65 | 2.38 | 0.91 | 16.5 | 3.44 | <5 | 2.9 |
| LB029 | <0.5 | 0.6 | 425 | 0.01 | 1.4 | 21.9 | 12 | 10 | 0.56 | 372 | 2.33 | 1.55 | 0.74 | 17.4 | 2.47 | <5 | 3 |
| LB030 | <0.5 | 1 | 292 | 0.04 | 0.6 | 13.4 | 16 | 20 | 0.2 | 63 | 4.77 | 3.1 | 0.93 | 17.1 | 4.25 | <5 | 2.8 |
| LB031 | <0.5 | 1 | 228 | 0.02 | 0.6 | 11.5 | 23 | 30 | 0.29 | 47 | 4.4 | 3.12 | 0.87 | 17 | 3.88 | <5 | 2.5 |
| LB032 | <0.5 | 57.1 | 250 | 0.55 | <0.5 | 14.4 | 1 | 170 | 0.03 | 22 | 0.48 | 0.23 | 0.53 | 5.4 | 0.89 | <5 | 1.4 |
| LB033 | <0.5 | 1.4 | 87.9 | 0.62 | <0.5 | 11.6 | 2 | 30 | 0.06 | 24 | 0.79 | 0.71 | 0.29 | 5.8 | 0.96 | <5 | 3 |
| LB034 | 0.8 | 0.6 | 293 | 0.1 | 3.6 | 16 | 14 | 10 | 0.48 | 1645 | 2.99 | 1.75 | 0.91 | 17.1 | 3 | <5 | 2.5 |
| LB036 | 1.3 | 0.5 | 275 | 0.06 | 0.5 | 14.5 | 9 | 10 | 0.52 | 3970 | 3.38 | 2.06 | 0.79 | 15.5 | 2.89 | <5 | 2.9 |
| LB037 | 1.4 | 0.9 | 143.5 | 0.06 | 1.9 | 11.3 | 12 | 10 | 1.36 | 2140 | 3.11 | 2.02 | 0.83 | 15.9 | 2.7 | <5 | 1.7 |
| LB041 | 0.8 | 0.6 | 589 | 0.06 | <0.5 | 16.1 | 17 | 10 | 0.84 | 2180 | 2.25 | 1.2 | 0.71 | 13.6 | 2.38 | <5 | 2 |
| LB042 | 0.7 | 0.6 | 319 | 0.08 | <0.5 | 15.8 | 13 | 20 | 0.31 | 2050 | 2.12 | 1.14 | 0.63 | 15.1 | 2.03 | <5 | 2.3 |
| LB043 | <0.5 | 2.1 | 26.8 | 0.04 | <0.5 | 1.8 | 5 | 10 | 0.36 | 118 | 0.85 | 0.75 | 0.05 | 21.3 | 0.55 | <5 | 1.7 |
| LB044 | <0.5 | 21.5 | 47.6 | 0.15 | <0.5 | 5.3 | 6 | 20 | 0.21 | 252 | 1.71 | 1.33 | 0.23 | 13.5 | 1.49 | <5 | 2.6 |
| LB045 | <0.5 | 2.4 | 56.6 | 0.24 | <0.5 | 7.7 | 6 | 10 | 0.34 | 106 | 2.2 | 1.67 | 0.41 | 14.5 | 1.78 | <5 | 3.4 |
| MLG-01 | <0.5 | 30.2 | 161.5 | 0.56 | <0.5 | 13.7 | 22 | 120 | 0.33 | 53 | 3.89 | 2.59 | 0.8 | 16.2 | 3.39 | <5 | 2.6 |
| NAF-01 | <0.5 | 2.3 | 633 | 0.26 | <0.5 | 11.5 | 12 | 20 | 2.16 | 61 | 1.23 | 0.87 | 0.67 | 15.1 | 1.32 | <5 | 3.2 |
| NAF-02 | <0.5 | 1.4 | 290 | 0.05 | 0.6 | 21.5 | 7 | 10 | 0.53 | 588 | 2.5 | 1.64 | 0.74 | 17.7 | 2.57 | <5 | 3.3 |
| NAF-03 | <0.5 | 1.7 | 336 | 0.11 | 0.5 | 14.5 | 27 | 100 | 2.08 | 290 | 2.08 | 1.34 | 0.7 | 17.8 | 2.24 | <5 | 1.9 |
| NAF-04 | <0.5 | 1.4 | 104.5 | 0.08 | 0.9 | 7.8 | 26 | 40 | 0.55 | 396 | 1.96 | 1.44 | 0.68 | 16.9 | 1.82 | <5 | 1.4 |
| NEF-01 | 0.9 | 3.6 | 80.3 | 0.1 | <0.5 | 10.7 | 18 | 20 | 0.77 | 4920 | 2.29 | 1.51 | 0.54 | 13.5 | 2.23 | <5 | 1.7 |
| NEF-02 | <0.5 | 1.2 | 189 | 0.03 | <0.5 | 16.7 | 10 | 20 | 0.54 | 63 | 1.76 | 1.04 | 0.67 | 17.9 | 1.97 | <5 | 2.7 |

*All elements are in ppm.

Appendix A: Eastern Sunda arc whole-rock geochemistry

| Sample ID | Hg | Ho | In | La | Li | Lu | Mo | Nb | Nd | Ni | Pb | Pr | Rb | Re | Sb |
|-----------|--------|------|--------|------|-----|------|-----|-----|------|----|-----|------|------|--------|-------|
| BHF-01 | <0.005 | 0.27 | 0.01 | 5.4 | 10 | 0.12 | 10 | 1.9 | 7.2 | 6 | 5 | 1.77 | 13.8 | 0.027 | <0.05 |
| BHF-02 | <0.005 | 0.25 | <0.005 | 5.3 | <10 | 0.14 | 1 | 2 | 6.8 | 4 | <2 | 1.61 | 9.2 | <0.001 | <0.05 |
| BHF-03 | <0.005 | 0.28 | 0.014 | 6.3 | <10 | 0.15 | 1 | 2.1 | 7.2 | 4 | 4 | 1.83 | 9.2 | <0.001 | <0.05 |
| BHF-04 | <0.005 | 0.14 | 0.191 | 3.5 | 10 | 0.08 | 1 | 0.5 | 4.3 | 5 | <2 | 1.04 | 24.2 | <0.001 | <0.05 |
| ELF-01 | 0.008 | 0.25 | 0.064 | 2.5 | <10 | 0.15 | 3 | 0.9 | 3.9 | 5 | 2 | 0.75 | 13.3 | 0.01 | 0.78 |
| ELF-02 | 0.006 | 0.34 | 0.048 | 2.2 | <10 | 0.16 | 9 | 0.5 | 4 | 7 | 4 | 0.78 | 28.9 | 0.036 | 0.39 |
| ELF-03 | 0.007 | 0.3 | 0.038 | 3.4 | 10 | 0.18 | 4 | 1.1 | 4.9 | 9 | 7 | 1.03 | 21.8 | 0.034 | 0.49 |
| GBF-01 | 0.349 | 0.31 | 0.087 | 2.4 | <10 | 0.15 | 6 | 0.5 | 3.3 | 8 | 34 | 0.7 | 15.7 | 0.032 | 10.45 |
| GBF-02 | 0.465 | 1.33 | 0.13 | 2 | <10 | 0.47 | 231 | 0.6 | 6.6 | 7 | 67 | 1.04 | 16.7 | 0.941 | 157 |
| GBF-03 | 0.016 | 0.7 | 0.113 | 1.4 | 10 | 0.32 | 34 | 0.6 | 4.9 | 5 | 96 | 0.77 | 27.4 | 0.159 | 0.57 |
| GBF-04 | <0.005 | 0.56 | 0.085 | 1.5 | 10 | 0.25 | 25 | 0.5 | 5.1 | 9 | 21 | 0.85 | 2.8 | 0.156 | 0.6 |
| JEM-01 | <0.005 | 1.44 | 0.039 | 17.7 | 10 | 0.61 | 33 | 2.7 | 18.2 | 4 | 12 | 4.3 | 29.3 | 0.074 | <0.05 |
| JEM-02 | <0.005 | 0.57 | 0.047 | 16.4 | 10 | 0.33 | 8 | 3.8 | 11.3 | 11 | 3 | 3.06 | 40.2 | 0.012 | <0.05 |
| JEM-01 | 0.021 | 0.41 | 0.007 | 6.5 | 10 | 0.21 | 2 | 1.9 | 8.3 | 15 | <2 | 2.03 | 15.7 | <0.001 | 0.53 |
| LB001 | <0.005 | 0.58 | 0.063 | 6 | 10 | 0.24 | <1 | 1.2 | 8.7 | 7 | 3 | 1.77 | 6.1 | 0.001 | 0.12 |
| LB002 | <0.005 | 0.41 | 0.036 | 8.3 | 20 | 0.18 | 18 | 2.4 | 10.8 | 4 | 13 | 2.41 | 16.3 | 0.102 | 0.06 |
| LB005 | <0.005 | 0.85 | 0.045 | 8.7 | <10 | 0.34 | 1 | 2 | 13.1 | 9 | 16 | 2.82 | 6 | 0.001 | 0.11 |
| LB009 | <0.005 | 0.41 | 0.024 | 8.8 | 10 | 0.19 | 2 | 2.1 | 10.9 | 3 | 4 | 2.56 | 9.2 | 0.002 | <0.05 |
| LB010 | <0.005 | 0.72 | 0.016 | 5.5 | 10 | 0.31 | 1 | 0.8 | 9 | 9 | 7 | 1.88 | 7.7 | <0.001 | <0.05 |
| LB011 | <0.005 | 0.91 | 0.031 | 11 | 10 | 0.4 | 1 | 2.6 | 15.6 | 10 | 8 | 3.46 | 19.9 | <0.001 | 0.09 |
| LB014 | <0.005 | 0.68 | 0.064 | 12.9 | <10 | 0.27 | 4 | 2.6 | 16.7 | 2 | 8 | 3.72 | 9.2 | 0.001 | <0.05 |
| LB015 | <0.005 | 0.67 | 0.071 | 8.8 | <10 | 0.35 | 10 | 2.2 | 13.7 | 3 | 17 | 2.95 | 28.9 | 0.01 | <0.05 |
| LB018 | <0.005 | 0.83 | 0.104 | 9 | 10 | 0.28 | 5 | 2 | 13.1 | 11 | 19 | 2.82 | 56.4 | 0.005 | 0.05 |
| LB022 | <0.005 | 0.56 | 0.065 | 5.6 | 10 | 0.28 | 76 | 1.9 | 8.9 | 5 | 9 | 1.9 | 63.2 | 0.612 | <0.05 |
| LB024 | <0.005 | 0.45 | 0.057 | 6.7 | 10 | 0.19 | 24 | 2.3 | 10.2 | 3 | 3 | 2.2 | 18.9 | 0.143 | <0.05 |
| LB025 | <0.005 | 0.59 | 0.023 | 7.3 | 20 | 0.22 | 1 | 1.6 | 10.8 | 33 | 5 | 2.24 | 7.9 | <0.001 | 0.06 |
| LB026 | <0.005 | 0.72 | 0.035 | 12.1 | <10 | 0.32 | 3 | 1.9 | 13.9 | 7 | <2 | 3.23 | 2.9 | 0.009 | <0.05 |
| LB027 | <0.005 | 0.51 | 0.078 | 3.1 | <10 | 0.22 | 3 | 0.4 | 7.3 | 59 | 24 | 1.5 | 4.2 | 0.003 | <0.05 |
| LB028 | <0.005 | 0.68 | 0.059 | 8.8 | 10 | 0.33 | 13 | 2 | 12.7 | 16 | 55 | 2.75 | 74.6 | 0.001 | 0.08 |
| LB029 | <0.005 | 0.45 | 0.036 | 11.1 | 10 | 0.24 | 2 | 2.7 | 12.2 | 7 | 5 | 2.95 | 50.3 | 0.001 | <0.05 |
| LB030 | <0.005 | 0.98 | 0.027 | 4.9 | 10 | 0.44 | 1 | 1.1 | 9.5 | 6 | <2 | 1.93 | 13.1 | <0.001 | <0.05 |
| LB031 | <0.005 | 0.92 | 0.02 | 4.3 | 10 | 0.42 | 1 | 0.8 | 8.8 | 13 | <2 | 1.69 | 14.1 | <0.001 | <0.05 |
| LB032 | <0.005 | 0.06 | 0.014 | 6.1 | <10 | 0.05 | 8 | 1.3 | 7.4 | 2 | 144 | 1.91 | 0.7 | 0.001 | 3.21 |
| LB033 | <0.005 | 0.2 | 0.014 | 4.5 | <10 | 0.16 | 3 | 0.8 | 6.1 | 2 | 14 | 1.44 | 1 | 0.001 | 0.08 |
| LB034 | <0.005 | 0.57 | 0.107 | 6.4 | <10 | 0.27 | 9 | 2.6 | 10.2 | 4 | 16 | 2.14 | 17.5 | 0.029 | <0.05 |
| LB036 | <0.005 | 0.62 | 0.089 | 5.7 | <10 | 0.34 | 4 | 2.1 | 9.5 | 3 | 15 | 2.04 | 21 | 0.008 | <0.05 |
| LB037 | <0.005 | 0.64 | 0.042 | 4.6 | <10 | 0.28 | 9 | 1.8 | 7.4 | 5 | 7 | 1.55 | 11.2 | 0.019 | <0.05 |
| LB041 | <0.005 | 0.36 | 0.033 | 6.6 | <10 | 0.17 | 48 | 2.2 | 9.4 | 4 | 4 | 2.13 | 30.3 | 0.194 | <0.05 |
| LB042 | <0.005 | 0.42 | 0.024 | 6.9 | <10 | 0.2 | 1 | 1.8 | 9.3 | 11 | 6 | 2.02 | 12 | 0.001 | <0.05 |
| LB043 | <0.005 | 0.19 | 0.083 | 0.8 | 10 | 0.16 | 8 | 1.8 | 3.2 | 7 | 5 | 0.23 | 3.2 | 0.001 | <0.05 |
| LB044 | 0.107 | 0.39 | 0.122 | 2.3 | 20 | 0.21 | 2 | 0.9 | 3.2 | 3 | 59 | 0.73 | 10.1 | 0.003 | 0.53 |
| LB045 | <0.005 | 0.47 | 0.154 | 2.9 | 10 | 0.23 | 2 | 0.9 | 4.9 | 3 | <2 | 1 | 18.3 | 0.003 | 0.11 |
| MLG-01 | <0.005 | 0.88 | 0.034 | 5.6 | 10 | 0.43 | 1 | 1.1 | 9.3 | 24 | 6 | 2 | 6.2 | 0.001 | 0.48 |
| NAF-01 | <0.005 | 0.28 | 0.017 | 5.6 | 10 | 0.16 | 4 | 2.3 | 6.1 | 9 | 11 | 1.37 | 35.1 | 0.004 | 0.08 |
| NAF-02 | <0.005 | 0.56 | 0.043 | 9.5 | 10 | 0.26 | 3 | 2.5 | 11.8 | 6 | 29 | 2.73 | 16.3 | 0.006 | 0.05 |
| NAF-03 | <0.005 | 0.44 | 0.02 | 6.3 | 10 | 0.21 | 7 | 1.6 | 5.7 | 41 | 11 | 1.86 | 24.3 | 0.036 | 0.08 |
| NAF-04 | <0.005 | 0.44 | 0.03 | 3.4 | <10 | 0.21 | 8 | 0.9 | 5.7 | 13 | 6 | 1.1 | 6.5 | 0.04 | 0.05 |
| NEF-01 | <0.005 | 0.51 | 0.069 | 3.9 | 10 | 0.23 | 5 | 1.5 | 8.5 | 10 | 3 | 1.57 | 15.3 | 0.05 | 0.14 |
| NEF-02 | <0.005 | 0.36 | 0.017 | 7.3 | 10 | 0.18 | 1 | 2.1 | 8.8 | 11 | 25 | 1.94 | 7.2 | 0.004 | 0.06 |

*All elements are in ppm.

Appendix A: Eastern Sunda arc whole-rock geochemistry

| Sample ID | Sc | Se | Sm | Sn | Sr | Ta | Tb | Te | Th | Tl | Tm | U | V | W | Y | Yb | Zn | Zr |
|-----------|----|------|------|----|-------|------|------|------|------|-------|------|------|-----|----|------|------|------|-----|
| BHF-01 | 4 | 4 | 1.36 | | 2 | 345 | 0.2 | 0.04 | 0.58 | 0.02 | 0.12 | 0.23 | 75 | 7 | 7.7 | 0.82 | 19 | 73 |
| BHF-02 | 5 | 1.9 | 1.51 | 1 | 517 | 0.3 | 0.19 | 0.08 | 0.75 | 0.02 | 0.12 | 0.16 | 81 | 1 | 1.2 | 7.3 | 0.78 | 45 |
| BHF-03 | 4 | 1.1 | 1.75 | 1 | 498 | 0.3 | 0.22 | 0.07 | 1.19 | 0.02 | 0.12 | 0.37 | 55 | 1 | 7.9 | 0.91 | 72 | 70 |
| BHF-04 | 3 | 1.1 | 0.92 | 1 | 127.5 | 0.2 | 0.12 | 0.27 | 0.49 | 0.02 | 0.07 | 0.6 | 81 | 5 | 4.3 | 0.5 | 71 | 36 |
| ELF-01 | 6 | 6.6 | 1.12 | 1 | 234 | 0.3 | 0.19 | 0.09 | 0.65 | 0.05 | 0.14 | 0.23 | 75 | 4 | 7.2 | 0.9 | 32 | 47 |
| ELF-02 | 6 | 5.4 | 1.02 | 1 | 134.5 | 0.2 | 0.21 | 0.2 | 0.61 | 0.05 | 0.13 | 0.23 | 86 | 13 | 8.3 | 0.97 | 30 | 45 |
| ELF-03 | 7 | 1.5 | 1.19 | 1 | 321 | 0.3 | 0.21 | 0.11 | 0.76 | 0.03 | 0.14 | 0.27 | 123 | 4 | 7.9 | 0.96 | 93 | 58 |
| GBF-01 | 6 | 9.2 | 1.14 | 4 | 115 | 0.3 | 0.21 | 0.86 | 0.3 | 0.19 | 0.14 | 0.14 | 133 | 15 | 8.4 | 0.94 | 14 | 29 |
| GBF-02 | 27 | 13.1 | 2.5 | 7 | 54.4 | 0.2 | 0.82 | 41.6 | 0.1 | 0.15 | 0.53 | 0.28 | 193 | 18 | 36.2 | 3.28 | 1155 | 30 |
| GBF-03 | 27 | 4.6 | 1.81 | 2 | 23.6 | 0.2 | 0.47 | 0.38 | 0.1 | 0.05 | 0.31 | 0.24 | 194 | 7 | 17.7 | 2.16 | 887 | 29 |
| GBF-04 | 32 | 4.4 | 2.03 | 1 | 81.1 | 0.2 | 0.43 | 0.11 | 0.07 | 0.02 | 0.22 | 0.13 | 279 | 3 | 14.7 | 1.57 | 153 | 25 |
| JEM-01 | 26 | 7.6 | 5.1 | 3 | 150 | 0.3 | 1.11 | 0.09 | 0.87 | 0.05 | 0.66 | 0.96 | 27 | 13 | 37.4 | 4.02 | 35 | 90 |
| JEM-02 | 11 | 1 | 2.37 | 1 | 336 | 0.4 | 0.42 | 0.02 | 4.63 | 0.15 | 0.3 | 1.62 | 268 | 3 | 18.2 | 1.97 | 26 | 110 |
| JER-01 | 10 | 0.3 | 1.81 | <1 | 518 | 0.3 | 0.3 | 0.2 | 1.34 | 0.04 | 0.17 | 0.36 | 93 | 1 | 10.8 | 1.2 | 41 | 81 |
| LB001 | 17 | 0.5 | 2.57 | 1 | 351 | <0.1 | 0.36 | 0.02 | 1.25 | 0.02 | 0.26 | 0.23 | 186 | 2 | 14.9 | 1.86 | 83 | 63 |
| LB002 | 7 | 0.5 | 2.38 | 1 | 274 | <0.1 | 0.36 | 0.04 | 1.42 | 0.02 | 0.18 | 0.29 | 92 | 1 | 11.5 | 1.36 | 365 | 93 |
| LB005 | 20 | 7.3 | 3.72 | 1 | 361 | <0.1 | 0.64 | 0.55 | 1.15 | <0.02 | 0.37 | 0.35 | 209 | 1 | 22.7 | 2.59 | 168 | 106 |
| LB009 | 8 | 0.6 | 2.71 | <1 | 412 | <0.1 | 0.37 | 0.03 | 1.13 | <0.02 | 0.21 | 0.29 | 100 | 2 | 11.9 | 1.29 | 425 | 74 |
| LB010 | 23 | 0.8 | 2.89 | 1 | 174 | <0.1 | 0.54 | 0.01 | 0.71 | 0.02 | 0.35 | 0.28 | 210 | 2 | 20.7 | 2.07 | 74 | 62 |
| LB011 | 15 | 0.4 | 4.32 | 1 | 365 | <0.1 | 0.66 | 0.74 | 1.98 | 0.02 | 0.39 | 0.57 | 137 | 1 | 26.6 | 2.64 | 69 | 130 |
| LB014 | 8 | 0.4 | 4.07 | 1 | 308 | <0.1 | 0.57 | 0.12 | 1.18 | <0.02 | 0.27 | 0.3 | 98 | 2 | 19.1 | 1.92 | 239 | 91 |
| LB015 | 10 | 1.1 | 3.63 | 1 | 306 | <0.1 | 0.69 | 0.01 | 1.23 | <0.02 | 0.31 | 0.26 | 99 | 2 | 24.5 | 2.46 | 183 | 87 |
| LB018 | 11 | 0.5 | 3.22 | 2 | 225 | <0.1 | 0.44 | 0.01 | 1.53 | 0.04 | 0.25 | 0.2 | 147 | 3 | 17.6 | 1.71 | 804 | 94 |
| LB022 | 19 | 1.1 | 2.61 | 3 | 154 | <0.1 | 0.45 | 0.1 | 1.15 | 0.09 | 0.25 | 0.28 | 219 | 3 | 15.5 | 1.88 | 535 | 80 |
| LB024 | 11 | 2.3 | 2.46 | 2 | 147 | <0.1 | 0.34 | 0.03 | 1.09 | 0.03 | 0.15 | 0.16 | 117 | 2 | 11.2 | 1.08 | 253 | 61 |
| LB025 | 12 | 0.5 | 2.59 | 1 | 299 | <0.1 | 0.45 | 0.03 | 1.11 | 0.03 | 0.24 | 0.37 | 120 | 1 | 17.5 | 1.72 | 106 | 94 |
| LB026 | 13 | 0.8 | 3.8 | 1 | 384 | <0.1 | 0.56 | 0.01 | 2.66 | <0.02 | 0.28 | 1.08 | 130 | 1 | 20.4 | 2.2 | 73 | 73 |
| LB027 | 30 | 0.3 | 2.32 | 2 | 224 | <0.1 | 0.41 | 0.03 | 0.23 | 0.02 | 0.27 | 0.09 | 261 | 2 | 15 | 1.8 | 602 | 40 |
| LB028 | 18 | 0.5 | 3.3 | 3 | 219 | <0.1 | 0.54 | 0.02 | 1.46 | 0.02 | 0.32 | 0.53 | 161 | 3 | 19.9 | 2.11 | 775 | 97 |
| LB029 | 11 | 0.6 | 2.72 | 1 | 274 | <0.1 | 0.36 | 0.01 | 2.37 | 0.03 | 0.2 | 0.57 | 116 | 2 | 12.8 | 1.67 | 212 | 107 |
| LB030 | 24 | 0.4 | 3.24 | 1 | 230 | <0.1 | 0.7 | 0.01 | 0.86 | 0.02 | 0.41 | 0.34 | 182 | 2 | 26.9 | 3.17 | 73 | 94 |
| LB031 | 25 | 0.2 | 2.91 | 1 | 238 | <0.1 | 0.63 | 0.02 | 0.73 | <0.02 | 0.43 | 0.27 | 229 | 2 | 25.2 | 2.68 | 70 | 82 |
| LB032 | 4 | 1 | 1.37 | 3 | 835 | <0.1 | 0.08 | 0.19 | 0.53 | <0.02 | 0.03 | 0.27 | 48 | 6 | 1.7 | 0.21 | 4 | 53 |
| LB033 | 4 | 4.3 | 1.42 | 11 | 31.9 | <0.1 | 0.13 | 0.2 | 0.96 | 0.03 | 0.1 | 0.31 | 88 | 2 | 5.6 | 0.8 | 20 | 104 |
| LB034 | 10 | 1.1 | 2.75 | 1 | 284 | <0.1 | 0.47 | 0.05 | 1.13 | 0.02 | 0.25 | 0.24 | 104 | 2 | 15.5 | 1.58 | 1000 | 82 |
| LB036 | 10 | 2.8 | 2.57 | 1 | 90.3 | <0.1 | 0.47 | 0.07 | 0.8 | 0.03 | 0.28 | 0.32 | 65 | 2 | 17.7 | 2.19 | 232 | 101 |
| LB037 | 14 | 1 | 2.36 | 1 | 252 | <0.1 | 0.43 | 0.13 | 0.74 | <0.02 | 0.27 | 0.21 | 133 | 2 | 16.8 | 1.96 | 273 | 63 |
| LB041 | 8 | 1.6 | 2.34 | 2 | 85.3 | <0.1 | 0.32 | 0.02 | 0.7 | 0.03 | 0.14 | 0.27 | 67 | 2 | 10.6 | 1.08 | 442 | 65 |
| LB042 | 10 | 0.6 | 2.3 | 1 | 385 | <0.1 | 0.3 | 0.03 | 1.1 | <0.02 | 0.16 | 0.25 | 112 | 1 | 11 | 1.17 | 90 | 77 |
| LB043 | 8 | 0.6 | 0.36 | 3 | 11.2 | <0.1 | 0.23 | 0.01 | 0.83 | <0.02 | 0.11 | 0.12 | 229 | 2 | 5.6 | 0.91 | 158 | 53 |
| LB044 | 16 | 0.9 | 1.05 | 1 | 43.3 | <0.1 | 0.23 | 0.3 | 0.99 | <0.02 | 0.2 | 0.28 | 145 | 2 | 10.8 | 1.38 | 329 | 85 |
| LB045 | 19 | 1.1 | 1.6 | 1 | 56.2 | <0.1 | 0.29 | 0.04 | 1.26 | 0.02 | 0.23 | 0.35 | 148 | 2 | 12.4 | 1.63 | 78 | 111 |
| MLG-01 | 28 | 0.2 | 2.98 | 1 | 182.5 | 0.3 | 0.6 | 0.13 | 1.63 | 0.02 | 0.38 | 0.49 | 186 | 1 | 24.6 | 2.74 | 58 | 83 |
| NAF-01 | 9 | 0.7 | 1.42 | 1 | 376 | 0.4 | 0.2 | 0.09 | 4.11 | 0.06 | 0.13 | 0.91 | 91 | 3 | 7.6 | 0.96 | 81 | 110 |
| NAF-02 | 10 | 0.5 | 2.87 | 3 | 291 | 0.4 | 0.42 | 0.05 | 3.5 | 0.06 | 0.25 | 0.65 | 105 | 2 | 15.1 | 1.92 | 184 | 119 |
| NAF-03 | 20 | 2.7 | 2.22 | 1 | 291 | 0.3 | 0.34 | 0.1 | 1.67 | 0.23 | 0.19 | 0.56 | 212 | 9 | 11.9 | 1.38 | 124 | 67 |
| NAF-04 | 20 | 0.8 | 1.75 | 1 | 335 | 0.3 | 0.28 | 0.06 | 0.42 | 0.05 | 0.19 | 0.19 | 226 | 3 | 11.3 | 1.3 | 164 | 45 |
| NEF-01 | 9 | 5.9 | 2.43 | 1 | 120.5 | 0.3 | 0.39 | 0.11 | 1.15 | 0.03 | 0.23 | 0.26 | 156 | 5 | 13.8 | 1.43 | 42 | 60 |
| NEF-02 | 10 | 0.3 | 1.77 | 1 | 429 | 0.3 | 0.31 | 0.01 | 1.58 | <0.02 | 0.16 | 0.48 | 111 | 3 | 9.9 | 1.16 | 71 | 101 |

*All elements are in ppm.

Appendix A: Eastern Sunda arc whole-rock geochemistry

| Sample ID | SiO ₂ | Al ₂ O ₃ | Fe ₂ O ₃ | MgO | CaO | Na ₂ O | K ₂ O | TiO ₂ | P ₂ O ₅ | MnO | Cr ₂ O ₃ | LOI | TOTAL C | TOTAL S | Sum |
|-----------|------------------|--------------------------------|--------------------------------|-------|------|-------------------|------------------|------------------|-------------------------------|-------|--------------------------------|-------|---------|---------|--------|
| NEF-03 | 51.9 | 17.75 | 9.44 | 3.46 | 6.01 | 2.23 | 0.74 | 0.73 | 0.11 | 0.08 | <0.002 | 6.05 | 0.18 | 3.64 | 98.55 |
| PCT-01 | 85 | 6.47 | 3.34 | 0.86 | 0.13 | 0.07 | 1.56 | 0.2 | 0.02 | 0.02 | 0.005 | 3.12 | 0.01 | 1.8 | 100.83 |
| PCT-02 | 72.7 | 13.45 | 3.83 | 2.24 | 0.29 | 5.88 | 0.24 | 0.42 | 0.09 | 0.14 | <0.002 | 2.12 | 0.01 | 0.82 | 101.4 |
| PNG-01 | 84 | 4.44 | 7.17 | 0.74 | 0.1 | 0.08 | 0.92 | 0.25 | 0.08 | 0.08 | 0.006 | 3.64 | 0.02 | 2.87 | 101.52 |
| SEF-01 | 61 | 16.8 | 6.72 | 3.6 | 6.53 | 3.69 | 0.65 | 0.52 | 0.14 | 0.13 | 0.019 | 1.3 | 0.1 | 0.04 | 101.15 |
| SEF-02 | 54.3 | 16.35 | 8.37 | 5.99 | 8.2 | 3.35 | 0.47 | 0.66 | 0.11 | 0.17 | 0.03 | 1.49 | 0.11 | 0.08 | 99.53 |
| SEF-03 | 58.8 | 16.05 | 8.86 | 3.05 | 4.94 | 4.32 | 0.54 | 0.53 | 0.12 | 0.15 | 0.004 | 2.69 | 0.31 | 0.14 | 100.08 |
| SEF-04 | 61.8 | 11.95 | 10.9 | 2.54 | 3.69 | 2.53 | 0.47 | 0.38 | 0.12 | 0.18 | 0.012 | 3.61 | 0.39 | 1.81 | 98.2 |
| SINA-01 | 71.2 | 8.76 | 8.47 | 0.43 | 0.18 | 0.05 | 2.23 | 0.22 | 0.04 | 0.01 | <0.002 | 6.56 | 0.02 | 6.62 | 98.18 |
| SINA-02 | 82.2 | 9.16 | 3.07 | 0.42 | 0.11 | 0.05 | 2.4 | 0.22 | 0.03 | 0.02 | <0.002 | 2.21 | 0.02 | 99.94 | 100.33 |
| SINA-04 | 82.9 | 10 | 1.61 | 0.53 | 0.09 | 0.05 | 2.75 | 0.26 | 0.02 | 0.03 | <0.002 | 2.06 | 0.01 | 0.02 | 100.33 |
| SINA-05 | 86.4 | 7.12 | 3.43 | 0.32 | 0.08 | 0.05 | 1.74 | 0.17 | <0.01 | 0.02 | 0.002 | 1.9 | 0.02 | 0.03 | 101.25 |
| SING-01 | 59.2 | 16.7 | 5.18 | 3.15 | 5.97 | 4.79 | 0.39 | 0.69 | 0.12 | 0.08 | 0.003 | 3.47 | 0.17 | 2.18 | 99.82 |
| SING-02 | 60.4 | 15.25 | 4.53 | 3.11 | 3.99 | 4.24 | 0.36 | 0.45 | 0.14 | 0.05 | 0.003 | 6.72 | 0.17 | 3.28 | 99.3 |
| SLG-01 | 72.4 | 16.35 | 1.38 | 1.06 | 0.74 | 5.03 | 1.38 | 0.2 | 0.08 | 0.03 | <0.002 | 2.5 | 0.01 | 0.01 | 101.17 |
| SLG-02 | 62.1 | 13.9 | 11.95 | 2.76 | 3 | 3.37 | 0.23 | 0.42 | 0.1 | 0.13 | 0.012 | 2.85 | 0.02 | 0.01 | 100.85 |
| SLG-03 | 57.8 | 17.9 | 6.64 | 4.56 | 5.58 | 2.17 | 0.5 | 0.79 | 0.14 | 0.22 | 0.005 | 4.47 | 0.06 | 0.91 | 100.82 |
| SPF-01 | 77 | 9.93 | 2.12 | 1.16 | 2.96 | 3.35 | 0.43 | 0.22 | 0.06 | 0.09 | <0.002 | 3.7 | 0.31 | 0.34 | 101.05 |
| SPF-02 | 61.1 | 17.5 | 5.68 | 2.85 | 6.9 | 3.63 | 0.93 | 0.47 | 0.09 | 0.13 | <0.002 | 1.56 | 0.09 | 0.07 | 100.93 |
| SPF-03 | 63.6 | 15 | 6.14 | 2.84 | 6 | 3.59 | 0.11 | 0.45 | 0.08 | 0.09 | <0.002 | 1.58 | 0.11 | 0.12 | 99.54 |
| SPF-04 | 67.1 | 15.4 | 5.07 | 2.2 | 5.37 | 3.75 | 0.64 | 0.4 | 0.11 | 0.07 | <0.002 | 1.82 | 0.14 | 0.09 | 101.98 |
| SPF-05 | 63.2 | 17.1 | 6.01 | 2.42 | 4.74 | 3.58 | 0.12 | 0.5 | 0.12 | 0.12 | <0.002 | 3.36 | 0.01 | 0.01 | 101.33 |
| SPF-06 | 62.8 | 15.9 | 3.67 | 3.34 | 3.68 | 3.25 | 1.23 | 0.5 | 0.09 | 0.03 | <0.002 | 4.01 | 0.19 | 0.96 | 98.55 |
| TR-01 | 57.1 | 17.3 | 8.51 | 3.78 | 6.4 | 2.97 | 0.26 | 0.77 | 0.11 | 0.2 | <0.002 | 3.24 | 0.08 | 1.59 | 100.68 |
| TR-02 | 61.7 | 17.9 | 5.04 | 3.32 | 3.85 | 3.72 | 2.54 | 0.56 | 0.15 | 0.06 | 0.002 | 2.98 | 0.14 | 0.67 | 101.89 |
| TR-03 | 70.3 | 11.1 | 6.67 | 3.5 | 1.5 | 2.48 | 0.66 | 0.47 | 0.1 | 0.18 | 0.004 | 4.26 | 0.18 | 1.14 | 101.24 |
| TR-04 | 57.9 | 17.5 | 7.78 | 2.41 | 3.71 | 4.05 | 1.67 | 0.66 | 0.15 | 0.06 | <0.002 | 2.9 | 0.02 | 0.02 | 98.89 |
| TR-05 | 64.3 | 16.15 | 7.16 | 2.21 | 2.05 | 4.08 | 0.51 | 0.44 | 0.14 | 0.08 | <0.002 | 2.9 | 0.04 | 0.19 | 100.05 |
| UG012183 | 65.7 | 14.95 | 10.7 | 0.04 | 0.06 | 0.13 | 1.28 | 0.49 | 0.12 | <0.01 | <0.002 | 8.46 | 0.02 | 8.6 | 102 |
| UG012184 | 63.6 | 15.95 | 4.67 | 0.02 | 0.17 | 0.57 | 0.68 | 0.46 | 0.2 | <0.01 | <0.002 | 12.75 | 0.02 | 6.42 | 99.2 |
| UG012185 | 71.9 | 14.25 | 4.23 | 0.1 | 0.11 | 0.11 | 3.22 | 0.42 | 0.16 | 0.02 | <0.002 | 4.86 | 0.02 | 2.89 | 99.46 |
| UG012186 | 64.5 | 16.6 | 4.57 | 0.01 | 0.11 | 0.46 | 1.13 | 0.45 | 0.11 | <0.01 | <0.002 | 12.9 | 0.06 | 6.15 | 100.92 |
| UG012187 | 57.8 | 15.5 | 6.32 | 0.01 | 0.15 | 1.07 | 1.01 | 0.43 | 0.15 | <0.01 | <0.002 | 17.15 | 0.04 | 9.02 | 99.7 |
| UG012188 | 74 | 7.7 | 11.25 | 0.01 | 0.02 | 0.02 | 0.03 | 0.2 | 0.01 | 0.01 | <0.002 | 8.35 | 0.02 | 9.72 | 101.61 |
| UG012189 | 72.8 | 14.5 | 4.23 | 0.12 | 0.08 | 0.43 | 1.6 | 0.42 | 0.02 | 0.01 | <0.002 | 5.11 | 0.03 | 1.69 | 99.35 |
| UG012190 | 73.7 | 9.56 | 3.61 | <0.01 | 0.1 | 0.78 | 0.88 | 0.24 | 0.09 | 0.01 | 0.002 | 12.65 | 0.12 | 6.21 | 101.7 |
| UG012191 | 68.1 | 16.55 | 5.81 | 0.28 | 0.16 | 0.23 | 1.61 | 0.45 | 0.18 | 0.01 | <0.002 | 7.4 | 0.04 | 4.92 | 100.85 |
| UG012192 | 61.4 | 15.8 | 5.18 | 0.02 | 0.08 | 0.26 | 1.93 | 0.43 | 0.14 | <0.01 | <0.002 | 15.1 | 0.02 | 7.86 | 100.45 |
| UG012193 | 70.5 | 17.2 | 4.81 | 0.02 | 0.13 | 0.03 | 0.03 | 0.5 | 0.17 | <0.01 | <0.002 | 7.34 | 0.02 | 4.39 | 100.79 |
| UG012194 | 62.2 | 15.15 | 12.05 | 0.01 | 0.05 | 0.04 | 0.08 | 0.39 | 0.12 | <0.01 | <0.002 | 10.9 | 0.02 | 9.92 | 101.11 |
| UG012195 | 67.7 | 17.45 | 6.6 | 0.02 | 0.19 | 0.05 | 0.02 | 0.52 | 0.21 | <0.01 | <0.002 | 7.62 | 0.03 | 5.57 | 100.44 |
| UG012196 | 70.4 | 14.65 | 5.36 | 0.01 | 0.08 | 0.21 | 0.21 | 0.38 | 0.1 | 0.01 | <0.002 | 7.72 | 0.03 | 5.14 | 99.18 |
| UG012197 | 74.6 | 7.02 | 13.35 | 0.2 | 0.16 | 0.39 | 0.34 | 0.21 | 0.02 | 0.05 | <0.002 | 4.31 | 0.03 | 3.51 | 100.66 |
| UG012198 | 71 | 15.45 | 4.97 | 0.31 | 0.13 | 0.4 | 2.8 | 0.43 | 0.16 | <0.01 | <0.002 | 5.59 | 0.02 | 3.84 | 101.31 |
| UG012199 | 75.9 | 10.7 | 2.63 | 0.02 | 0.2 | 0.86 | 0.56 | 0.45 | 0.15 | 0.01 | <0.002 | 10.15 | <0.01 | 2.66 | 101.7 |
| UG012200 | 43.3 | 15.1 | 20.8 | 0.07 | 0.03 | 0.05 | 0.09 | 0.19 | 0.12 | <0.01 | 0.002 | 18.5 | 0.01 | 17.65 | 98.39 |
| UG012201 | 71.9 | 15.15 | 4.72 | 0.01 | 0.05 | 0.03 | 0.06 | 0.48 | 0.09 | <0.01 | <0.002 | 7.97 | <0.01 | 4.1 | 100.52 |
| UG012202 | 73.1 | 5.72 | 11.95 | 0.02 | 0.02 | 0.03 | 0.02 | 0.13 | 0.05 | 0.01 | <0.002 | 9.09 | 0.01 | 9.9 | 100.19 |

* All major oxides, C and S are in wt. %.

Appendix A: Eastern Sunda arc whole-rock geochemistry

| Sample ID | Ag | As | Ba | Bi | Cd | Ce | Co | Cr | Cs | Cu | Dy | Er | Eu | Ga | Gd | Ge | Hf |
|-----------|------|-------|-------|------|------|------|----|-----|------|-------|-------|-------|-------|------|-------|----|-----|
| NEF-03 | 0.6 | 2 | 202 | 0.17 | <0.5 | 6.8 | 23 | 10 | 2.14 | 1080 | 2.66 | 1.74 | 0.62 | 19.1 | 2.16 | <5 | 1.2 |
| PCT-01 | 10.1 | 66 | 268 | 1.19 | 5.3 | 11.4 | 9 | 30 | 0.4 | 277 | 1.65 | 1.13 | 0.6 | 10.6 | 1.53 | <5 | 2.2 |
| PCT-02 | <0.5 | 1.2 | 19.5 | 0.11 | 2.2 | 32 | 2 | 10 | 0.06 | 9 | 9.24 | 6.53 | 1.19 | 15.9 | 7.9 | <5 | 5 |
| PNG-01 | 6.2 | 39.1 | 98.2 | 3.44 | 2.1 | 3.6 | 11 | 40 | 0.06 | 465 | 2.13 | 1.32 | 0.32 | 6.5 | 1.49 | <5 | 1.1 |
| SEF-01 | 0.6 | 0.9 | 136 | 0.07 | <0.5 | 19 | 17 | 140 | 1.06 | 420 | 2.39 | 1.46 | 0.77 | 17.9 | 2.39 | <5 | 2.7 |
| SEF-02 | 0.9 | 0.7 | 89.4 | 0.15 | <0.5 | 14.9 | 25 | 220 | 0.4 | 809 | 2.59 | 1.55 | 0.75 | 17.5 | 2.46 | <5 | 2.1 |
| SEF-03 | 0.9 | 0.5 | 83.7 | 0.37 | <0.5 | 17.8 | 15 | 30 | 0.9 | 1810 | 2.76 | 1.82 | 0.64 | 17.4 | 2.48 | <5 | 2.8 |
| SEF-04 | 1.9 | 3.6 | 66.3 | 0.51 | <0.5 | 8.2 | 14 | 80 | 0.55 | 2120 | 1.49 | 0.92 | 0.39 | 15.9 | 1.37 | <5 | 1.9 |
| SINA-01 | 7.2 | 174.5 | 239 | 0.69 | 2.6 | 18.9 | 6 | 10 | 0.42 | 2560 | 4.28 | 2.65 | 0.89 | 13.4 | 3.73 | <5 | 2.3 |
| SINA-02 | 6.9 | 94 | 471 | 0.74 | 0.6 | 14.8 | <1 | 10 | 0.22 | 450 | 3.08 | 1.8 | 0.77 | 14.4 | 2.51 | <5 | 3 |
| SINA-04 | 15 | 11 | 260 | 0.85 | <0.5 | 17.4 | <1 | 10 | 0.78 | 252 | 3.31 | 2.33 | 0.77 | 13.3 | 3 | <5 | 2.9 |
| SINA-05 | 2.8 | 85.9 | 169.5 | 1.62 | <0.5 | 6.1 | <1 | 10 | 0.28 | 169 | 2.98 | 1.94 | 0.32 | 10.2 | 2.17 | <5 | 2.1 |
| SING-01 | 0.5 | 9 | 39.4 | 0.16 | <0.5 | 10 | 10 | 20 | 3.23 | 594 | 1.91 | 0.96 | 0.9 | 19.4 | 1.83 | <5 | 1.3 |
| SING-02 | <0.5 | 4.7 | 41.7 | 0.2 | 0.6 | 11.1 | 7 | 20 | 2.03 | 68 | 1.36 | 1.04 | 0.54 | 16.5 | 1.62 | <5 | 2.2 |
| SLG-01 | <0.5 | 0.7 | 135 | 0.02 | <0.5 | 34.5 | 3 | <10 | 0.67 | 22 | 2.37 | 1.6 | 0.81 | 16.7 | 2.42 | <5 | 3.1 |
| SLG-02 | 2.6 | 1.1 | 58.9 | 0.2 | 0.6 | 9.2 | 16 | 90 | 0.15 | 4460 | 1.48 | 0.91 | 0.42 | 16.4 | 1.29 | <5 | 2.3 |
| SLG-03 | <0.5 | 6.5 | 144 | 0.32 | 0.7 | 19.8 | 8 | 40 | 0.54 | 23 | 3.04 | 1.8 | 1.01 | 19.9 | 2.68 | <5 | 2.4 |
| SPF-01 | <0.5 | 1.2 | 165.5 | 0.05 | <0.5 | 8.8 | 5 | 10 | 0.45 | 956 | 4.76 | 3.23 | 0.55 | 12 | 3.26 | <5 | 4 |
| SPF-02 | 0.6 | 1.1 | 371 | 0.03 | <0.5 | 10.1 | 14 | 10 | 1.27 | 397 | 2.01 | 1.36 | 0.57 | 17.3 | 1.84 | <5 | 1.7 |
| SPF-03 | <0.5 | 1.5 | 166 | 0.02 | 0.6 | 8.2 | 12 | 20 | 0.59 | 1025 | 1.87 | 1.21 | 0.5 | 15.5 | 1.74 | <5 | 1.5 |
| SPF-04 | <0.5 | 0.8 | 198 | 0.02 | <0.5 | 8.5 | 8 | 10 | 1.18 | 440 | 2.02 | 1.43 | 0.47 | 15.5 | 1.91 | <5 | 2.3 |
| SPF-05 | <0.5 | 2.5 | 174.5 | 0.03 | 0.6 | 11.3 | 11 | 10 | 0.42 | 335 | 2.29 | 1.55 | 0.62 | 17.2 | 2.26 | <5 | 2 |
| SPF-06 | <0.5 | 1.1 | 240 | 0.03 | <0.5 | 10.9 | 19 | 10 | 2.31 | 944 | 2.01 | 1.46 | 0.6 | 16.7 | 1.68 | <5 | 2.3 |
| TR-01 | <0.5 | 6.1 | 73.4 | 0.78 | 0.6 | 13.7 | 19 | 10 | 0.32 | 70 | 3.84 | 2.46 | 0.92 | 16.1 | 3.65 | <5 | 2.1 |
| TR-02 | <0.5 | 6.1 | 298 | 0.03 | <0.5 | 14.6 | 13 | 20 | 2.51 | 32 | 2.05 | 1.27 | 0.82 | 17.4 | 2.24 | <5 | 2.3 |
| TR-03 | 0.7 | 15.2 | 38.5 | 0.32 | 0.8 | 5.9 | 12 | 30 | 1.43 | 1655 | 1.26 | 0.8 | 0.49 | 12.3 | 1.34 | <5 | 1 |
| TR-04 | <0.5 | 2.8 | 150 | 0.02 | <0.5 | 14.9 | 10 | 10 | 5.34 | 512 | 3.59 | 2.34 | 0.89 | 17 | 3.08 | <5 | 2 |
| TR-05 | 4.3 | 3.6 | 87.2 | 1.01 | <0.5 | 10.1 | 10 | 10 | 6.96 | 4160 | 1.82 | 1.3 | 0.51 | 18.7 | 1.68 | <5 | 1.7 |
| UG012183 | <0.5 | 32.8 | 387 | 0.34 | 0.5 | 12.4 | 15 | 10 | 0.19 | 202 | 0.27 | 0.32 | 0.13 | 6.5 | 0.28 | <5 | 2.2 |
| UG012184 | <0.5 | 79 | 232 | 0.76 | 1 | 16.6 | 7 | 10 | 0.07 | 181 | 0.53 | 0.2 | 0.66 | 9.6 | 1.07 | <5 | 2.5 |
| UG012185 | 1.1 | 22 | 460 | 1.57 | 1 | 20.2 | 5 | <10 | 1.99 | 10000 | 0.21 | 0.13 | 0.25 | 5.5 | 0.27 | 8 | 2 |
| UG012186 | <0.5 | 6.1 | 207 | 1.07 | 0.6 | 18.3 | 7 | <10 | 0.08 | 345 | 0.7 | 0.42 | 0.46 | 20.9 | 1.24 | <5 | 2.4 |
| UG012187 | <0.5 | 140 | 233 | 1.23 | 0.5 | 16 | 5 | 10 | 0.15 | 481 | 0.7 | 0.37 | 0.65 | 10.9 | 1.14 | <5 | 2.1 |
| UG012188 | <0.5 | >250 | 9.5 | 0.62 | 0.5 | 1.7 | 10 | 10 | 0.04 | 1180 | <0.05 | 0.03 | <0.02 | 19.3 | <0.05 | <5 | 1.2 |
| UG012189 | 1.8 | 2 | 265 | 0.86 | <0.5 | 7.6 | 3 | 10 | 1.54 | 10000 | 0.39 | 0.24 | 0.36 | 7.7 | 0.58 | 7 | 2.1 |
| UG012190 | 0.8 | 49 | 145 | 0.62 | <0.5 | 4 | 3 | 20 | 0.06 | 3810 | 0.08 | 0.05 | 0.11 | 5.8 | 0.08 | <5 | 1.4 |
| UG012191 | <0.5 | 4.9 | 388 | 0.22 | <0.5 | 15.2 | 29 | 10 | 2.28 | 1550 | 1.47 | 0.92 | 0.67 | 14.8 | 1.56 | <5 | 2.4 |
| UG012192 | 0.7 | >250 | 450 | 0.61 | 0.6 | 14 | 19 | 10 | 0.05 | 4800 | 0.36 | 0.22 | 0.37 | 21.6 | 0.79 | <5 | 2.1 |
| UG012193 | <0.5 | 15.1 | 135.5 | 0.35 | <0.5 | 18.3 | 9 | <10 | 0.17 | 66 | 0.94 | 0.5 | 0.77 | 24.2 | 1.61 | <5 | 2.5 |
| UG012194 | <0.5 | 16.3 | 276 | 0.27 | <0.5 | 12.1 | 21 | 10 | 0.04 | 312 | 0.17 | 0.21 | 0.22 | 9.9 | 0.29 | <5 | 1.9 |
| UG012195 | <0.5 | 133 | 195 | 0.25 | <0.5 | 12 | 14 | 10 | 0.07 | 44 | 0.94 | 0.54 | 0.41 | 8.7 | 1.48 | <5 | 2.4 |
| UG012196 | 2.5 | >250 | 79.4 | 4.35 | <0.5 | 7.6 | 6 | <10 | 0.12 | 7980 | 0.19 | 0.09 | 0.22 | 21.4 | 0.43 | 20 | 2.3 |
| UG012197 | 0.9 | 11.8 | 54.6 | 0.48 | 0.6 | 1.9 | 13 | 10 | 1.02 | 2600 | 0.28 | 0.16 | 0.14 | 17.3 | 0.29 | <5 | 1 |
| UG012198 | <0.5 | >250 | 396 | 0.15 | <0.5 | 17.2 | 33 | 10 | 0.05 | 1960 | 1.77 | 1.39 | 0.75 | 12.9 | 1.9 | <5 | 2.3 |
| UG012199 | 1.4 | 49.5 | 187.5 | 0.36 | <0.5 | 10.4 | 1 | 10 | 0.04 | 66 | 0.18 | 0.16 | 0.4 | 7 | 0.46 | <5 | 1.7 |
| UG012200 | 2.6 | >250 | 100 | 2.66 | <0.5 | 12.8 | 16 | 10 | 0.04 | 10000 | 0.13 | 0.06 | 0.27 | 6.6 | 0.75 | <5 | 0.8 |
| UG012201 | 1.3 | >250 | 61.5 | 1.79 | <0.5 | 11.2 | 12 | 10 | 0.03 | 2560 | 1.21 | 0.79 | 0.56 | 8.5 | 1.46 | 10 | 1.9 |
| UG012202 | 1.6 | 183.5 | 49.5 | 3.27 | <0.5 | 3.3 | 9 | 10 | 0.03 | 932 | <0.05 | <0.03 | 0.07 | 8.7 | 0.06 | <5 | 0.6 |

*All elements are in ppm.

Appendix A: Eastern Sunda arc whole-rock geochemistry

| Sample ID | Hg | Ho | In | La | Li | Lu | Mo | Nb | Nd | Ni | Pb | Pr | Rb | Re | Sb |
|-----------|--------|-------|-------|------|-----|-------|-----|-----|------|----|-----|------|------|--------|-------|
| NEF-01 | <0.005 | 0.57 | 0.025 | 2.7 | 10 | 0.26 | 2 | 1 | 5.6 | 5 | 2 | 1.05 | 18.1 | 0.01 | 0.1 |
| PCT-01 | 0.009 | 0.39 | 0.215 | 5.4 | 10 | 0.215 | 52 | 1.2 | 5.9 | 4 | 116 | 1.52 | 24.1 | 0.008 | 4.46 |
| PCT-02 | <0.005 | 2.21 | 0.063 | 12.7 | <10 | 1.01 | 2 | 3 | 21.8 | 4 | <2 | 4.77 | 3.8 | 0.004 | <0.05 |
| PNG-01 | 0.017 | 0.46 | 0.306 | 1.9 | 10 | 0.19 | 139 | 0.6 | 3.1 | 13 | 727 | 0.63 | 20.6 | 0.007 | 10.35 |
| SEF-01 | <0.005 | 0.49 | 0.043 | 8.7 | 10 | 0.24 | 3 | 2.1 | 9.4 | 39 | 9 | 2.5 | 16.7 | 0.01 | 0.11 |
| SEF-02 | <0.005 | 0.57 | 0.051 | 6.4 | 10 | 0.23 | 2 | 1.8 | 8.8 | 89 | 4 | 2.05 | 12.5 | 0.005 | 0.05 |
| SEF-03 | 0.005 | 0.59 | 0.032 | 8.2 | 10 | 0.3 | 5 | 2.7 | 10 | 9 | 10 | 2.36 | 12.3 | 0.021 | 0.09 |
| SEF-04 | <0.005 | 0.3 | 0.175 | 3.5 | 10 | 0.15 | 2 | 1.4 | 5 | 33 | 4 | 1.11 | 12 | 0.005 | 0.1 |
| SINA-01 | 0.304 | 0.91 | 1.52 | 10.6 | <10 | 0.42 | 34 | 1.9 | 10.7 | 1 | 276 | 2.52 | 36.2 | 0.021 | 2.79 |
| SINA-02 | 1.18 | 0.68 | 0.892 | 7.6 | <10 | 0.29 | 12 | 2 | 8.4 | 1 | 382 | 2.04 | 36.6 | <0.001 | 10.15 |
| SINA-04 | 0.48 | 0.73 | 0.269 | 8.9 | <10 | 0.39 | 2 | 2.3 | 11.8 | 2 | 123 | 2.68 | 44.8 | 0.001 | 1.22 |
| SINA-05 | 0.522 | 0.64 | 1.73 | 3.5 | 10 | 0.33 | 7 | 1.5 | 3.8 | 1 | 185 | 0.9 | 28.6 | <0.001 | 3.25 |
| SING-01 | 0.012 | 0.36 | 0.043 | 3.7 | 10 | 0.13 | 3 | 1.5 | 7.5 | 6 | 8 | 1.63 | 9 | 0.011 | 0.19 |
| SING-02 | <0.005 | 0.31 | 0.014 | 4.3 | 20 | 0.18 | 4 | 1.8 | 6.8 | 8 | 8 | 1.65 | 8.7 | 0.057 | 0.14 |
| SLG-01 | 0.005 | 0.53 | 0.012 | 17.2 | 10 | 0.32 | <1 | 4.5 | 15.8 | 3 | 6 | 4.35 | 32.4 | <0.001 | 0.09 |
| SLG-02 | <0.005 | 0.32 | 0.05 | 4.5 | 10 | 0.18 | 1 | 1.4 | 5.3 | 30 | 4 | 1.27 | 3.6 | <0.001 | 0.05 |
| SLG-03 | 0.006 | 0.68 | 0.066 | 8.8 | 20 | 0.31 | <1 | 2.2 | 11.4 | 17 | 11 | 2.76 | 9.2 | <0.001 | 0.16 |
| SPF-01 | <0.005 | 1.1 | 0.031 | 3 | 10 | 0.58 | 5 | 1.4 | 7.6 | 3 | 10 | 1.43 | 6.4 | 0.03 | 0.11 |
| SPF-02 | <0.005 | 0.45 | 0.019 | 4.3 | 10 | 0.21 | 4 | 1.3 | 6.7 | 6 | 5 | 1.4 | 20.6 | 0.025 | <0.05 |
| SPF-03 | 0.005 | 0.4 | 0.018 | 3.5 | <10 | 0.19 | 1 | 0.9 | 5.8 | 10 | 3 | 1.16 | 1.2 | 0.001 | 0.06 |
| SPF-04 | <0.005 | 0.51 | 0.02 | 3.9 | 10 | 0.23 | 6 | 1.3 | 5.7 | 4 | 2 | 1.13 | 19.9 | 0.05 | <0.05 |
| SPF-05 | <0.005 | 0.48 | 0.019 | 4.6 | 10 | 0.25 | 1 | 1.2 | 7.6 | 5 | 6 | 1.54 | 2 | 0.001 | 0.06 |
| SPF-06 | <0.005 | 0.43 | 0.015 | 4.7 | 10 | 0.27 | 40 | 1.1 | 6.6 | 5 | 3 | 1.37 | 42.8 | 0.435 | <0.05 |
| TR-01 | 0.01 | 0.82 | 0.029 | 5.4 | <10 | 0.36 | <1 | 1.5 | 9.6 | 6 | 14 | 2 | 3.7 | 0.013 | 0.19 |
| TR-02 | <0.005 | 0.45 | 0.018 | 6.6 | 10 | 0.21 | 1 | 1.8 | 9 | 12 | 16 | 2.03 | 44.8 | 0.004 | 0.07 |
| TR-03 | 0.005 | 0.26 | 0.123 | 2.2 | 20 | 0.13 | 4 | 1.2 | 4.4 | 8 | 9 | 0.91 | 17.8 | 0.033 | 0.17 |
| TR-04 | <0.005 | 0.75 | 0.025 | 6.3 | 10 | 0.36 | 1 | 1.7 | 9.2 | 2 | 3 | 1.99 | 58.6 | 0.011 | 0.08 |
| TR-05 | 0.006 | 0.4 | 0.019 | 4.4 | 10 | 0.19 | 1 | 1.5 | 5.7 | 4 | 5 | 1.32 | 16.8 | 0.005 | 1.42 |
| UG012183 | 0.035 | 0.07 | 0.096 | 7.9 | <10 | 0.09 | 3 | 2.1 | 3.9 | 1 | 32 | 1.14 | 10.4 | 0.009 | 0.14 |
| UG012184 | 0.015 | 0.08 | 0.079 | 7.7 | 10 | 0.05 | 1 | 1.9 | 9 | 1 | 225 | 1.99 | 0.6 | 0.002 | 1.39 |
| UG012185 | 0.07 | 0.04 | 1.38 | 11.4 | <10 | 0.04 | 322 | 4.2 | 5.4 | <1 | 60 | 1.89 | 55.5 | 2.88 | 0.12 |
| UG012186 | 0.024 | 0.12 | 0.074 | 8.4 | <10 | 0.09 | <1 | 1.9 | 9.8 | 2 | 133 | 2.26 | 0.9 | 0.004 | 0.16 |
| UG012187 | 0.039 | 0.11 | 0.108 | 7.7 | <10 | 0.09 | 1 | 1.9 | 8.1 | 1 | 97 | 1.9 | 0.8 | 0.002 | 1.29 |
| UG012188 | 0.026 | <0.01 | 0.036 | 1.2 | 20 | 0.02 | 1 | 0.4 | 0.5 | 1 | 35 | 0.12 | 0.5 | 0.004 | 0.4 |
| UG012189 | <0.005 | 0.09 | 1.195 | 4.2 | 10 | 0.06 | 379 | 4.8 | 3.4 | <1 | 18 | 0.84 | 23.1 | 1.265 | <0.05 |
| UG012190 | 0.112 | 0.01 | 0.06 | 2.2 | 10 | 0.02 | 8 | 4.8 | 1.3 | 1 | 104 | 0.4 | 0.6 | 0.063 | 0.6 |
| UG012191 | 0.006 | 0.29 | 0.136 | 7.6 | 20 | 0.16 | 18 | 1.9 | 7.6 | 2 | 37 | 1.75 | 20.9 | 0.065 | 0.17 |
| UG012192 | 0.128 | 0.06 | 0.167 | 7.8 | <10 | 0.07 | 3 | 1.8 | 6.5 | 3 | 193 | 1.55 | 1.4 | 0.031 | 0.23 |
| UG012193 | <0.005 | 0.17 | 0.018 | 8.6 | 30 | 0.12 | 34 | 2 | 10.4 | 2 | 22 | 2.26 | 0.5 | 0.003 | 0.36 |
| UG012194 | 0.079 | 0.06 | 0.136 | 6.2 | 20 | 0.1 | 57 | 1.6 | 5.2 | 6 | 90 | 1.34 | 0.8 | 0.381 | 0.09 |
| UG012195 | 0.021 | 0.17 | 0.069 | 5.4 | 10 | 0.13 | <1 | 2.1 | 7.8 | 2 | 38 | 1.59 | 0.3 | 0.001 | 0.59 |
| UG012196 | 0.063 | 0.03 | 0.043 | 3.5 | 10 | 0.05 | 12 | 1.8 | 4.1 | 1 | 111 | 0.98 | 1.2 | 0.07 | 0.29 |
| UG012197 | 0.025 | 0.05 | 0.847 | 0.9 | <10 | 0.03 | 2 | 0.5 | 1 | 1 | 43 | 0.24 | 8.3 | 0.015 | 0.08 |
| UG012198 | 0.134 | 0.03 | 0.153 | 9 | 10 | 0.2 | 21 | 1.8 | 8.6 | 3 | 22 | 2.08 | 37.2 | 0.094 | 2.32 |
| UG012199 | 0.023 | 0.03 | 0.01 | 4 | <10 | 0.04 | 6 | 1.9 | 6.7 | 3 | 89 | 1.43 | 0.6 | 0.006 | 1.61 |
| UG012200 | 0.672 | 0.02 | 0.016 | 6.1 | 20 | 0.02 | 6 | 1.3 | 5.3 | 2 | 142 | 1.47 | 0.2 | 0.008 | 46.9 |
| UG012201 | 0.073 | 0.26 | 0.217 | 4.9 | 20 | 0.18 | 48 | 2.2 | 8.4 | 4 | 30 | 1.63 | 1.1 | 0.17 | 14.35 |
| UG012202 | 0.079 | <0.01 | 0.019 | 1.8 | <10 | 0.01 | 4 | 0.5 | 1.1 | 4 | 50 | 0.34 | 0.3 | 0.006 | 1.73 |

*All elements are in ppm.

Appendix A: Eastern Sunda arc whole-rock geochemistry

| Sample ID | Sc | Se | Sm | Sn | Sr | Ta | Tb | Te | Th | Ti | Tm | U | V | W | Y | Yb |
|-----------|----|------|------|----|-------|-----|-------|-------|------|-------|------|------|-----|---|------|------|
| NEF-03 | 17 | 2.3 | 1.73 | 1 | 273 | 0.3 | 0.37 | 0.13 | 0.46 | 0.03 | 0.25 | 0.19 | 237 | 2 | 14.9 | 1.6 |
| PCT-01 | 4 | 0.5 | 1.37 | 1 | 10.5 | 0.3 | 0.29 | 0.06 | 1.31 | 0.22 | 0.19 | 0.83 | 39 | 4 | 11.6 | 1.22 |
| PCT-02 | 14 | <0.2 | 5.91 | 1 | 40.9 | 0.4 | 1.41 | 0.03 | 1.65 | <0.02 | 1 | 2.47 | 32 | 1 | 65.5 | 6.06 |
| PNG-01 | 8 | 2 | 1.06 | 1 | 6.4 | 0.2 | 0.31 | 0.99 | 0.61 | 0.07 | 0.2 | 0.26 | 55 | 2 | 13.1 | 1.24 |
| SEF-01 | 15 | 0.2 | 2.51 | 1 | 352 | 0.4 | 0.35 | 0.02 | 3 | 0.05 | 0.22 | 0.62 | 145 | 1 | 14.4 | 1.46 |
| SEF-02 | 22 | 0.4 | 2.28 | 1 | 321 | 0.4 | 0.38 | 0.05 | 2.07 | 0.06 | 0.22 | 0.36 | 211 | 1 | 14.8 | 1.34 |
| SEF-03 | 12 | 0.4 | 2.44 | 1 | 200 | 0.4 | 0.42 | 0.1 | 3.07 | 0.03 | 0.27 | 0.49 | 127 | 1 | 16.7 | 1.96 |
| SEF-04 | 10 | 1.3 | 1.38 | 1 | 165.5 | 0.3 | 0.21 | 0.82 | 2.1 | 0.03 | 0.15 | 0.26 | 124 | 2 | 8.8 | 0.92 |
| SINA-01 | 6 | 0.2 | 2.99 | 1 | 95.2 | 0.3 | 0.65 | 0.07 | 1.43 | 6.31 | 0.41 | 1.48 | 139 | 2 | 27.7 | 2.64 |
| SINA-02 | 5 | 0.9 | 2.31 | 2 | 50.2 | 0.4 | 0.44 | 0.11 | 1.54 | 0.2 | 0.29 | 1.8 | 30 | 1 | 18.4 | 1.89 |
| SINA-04 | 6 | 1.3 | 3.04 | 2 | 44.9 | 0.3 | 0.5 | 0.03 | 1.68 | 0.19 | 0.36 | 0.9 | 25 | 1 | 20.8 | 2.48 |
| SINA-05 | 5 | <0.2 | 1.52 | 15 | 47.3 | 0.3 | 0.41 | 0.13 | 1.09 | 0.07 | 0.32 | 0.65 | 30 | 2 | 20.1 | 2 |
| SING-01 | 12 | 2.4 | 1.97 | 2 | 77.1 | 0.2 | 0.29 | 0.32 | 0.52 | 0.02 | 0.14 | 0.33 | 172 | 3 | 9.7 | 0.86 |
| SING-02 | 9 | 4.9 | 1.78 | 1 | 524 | 0.3 | 0.24 | 0.12 | 1.25 | <0.02 | 0.14 | 0.34 | 101 | 2 | 8.9 | 0.99 |
| SLG-01 | 2 | <0.2 | 3.05 | 2 | 133 | 0.6 | 0.42 | <0.01 | 4.7 | 0.05 | 0.26 | 0.89 | 27 | 1 | 16.3 | 1.78 |
| SLG-02 | 10 | 0.5 | 1.32 | 1 | 206 | 0.3 | 0.22 | 0.2 | 2.29 | <0.02 | 0.16 | 0.3 | 130 | 1 | 9.2 | 0.99 |
| SLG-03 | 19 | 0.3 | 3.01 | 1 | 249 | 0.3 | 0.43 | 0.67 | 1.85 | 0.02 | 0.28 | 0.4 | 230 | 1 | 17.9 | 1.9 |
| SPF-01 | 11 | 1.1 | 2.86 | <1 | 132.5 | 0.3 | 0.66 | 0.03 | 0.67 | <0.02 | 0.48 | 0.38 | 32 | 4 | 29.9 | 3.65 |
| SPF-02 | 11 | 0.5 | 1.69 | 1 | 450 | 0.3 | 0.33 | 0.02 | 1.14 | <0.02 | 0.18 | 0.6 | 121 | 2 | 11.5 | 1.33 |
| SPF-03 | 12 | 0.4 | 1.57 | 1 | 362 | 0.2 | 0.28 | 0.02 | 0.89 | <0.02 | 0.18 | 0.36 | 130 | 2 | 10.9 | 1.23 |
| SPF-04 | 9 | 0.3 | 1.72 | 1 | 282 | 0.3 | 0.34 | 0.01 | 1.23 | 0.03 | 0.21 | 0.4 | 101 | 2 | 13 | 1.42 |
| SPF-05 | 11 | 0.2 | 2.21 | <1 | 336 | 0.2 | 0.4 | 0.01 | 1.15 | <0.02 | 0.23 | 0.57 | 131 | 3 | 13.7 | 1.67 |
| SPF-06 | 17 | 2 | 1.71 | 1 | 223 | 0.2 | 0.31 | 0.02 | 0.83 | 0.11 | 0.22 | 0.38 | 193 | 4 | 12.7 | 1.49 |
| TR-01 | 20 | 3.1 | 2.79 | 1 | 278 | 0.2 | 0.55 | 0.66 | 0.81 | 0.02 | 0.36 | 0.23 | 212 | 1 | 21.6 | 2.28 |
| TR-02 | 11 | 0.3 | 2.3 | 1 | 308 | 0.2 | 0.34 | 0.17 | 1.23 | 0.03 | 0.18 | 0.34 | 145 | 1 | 12.4 | 1.28 |
| TR-03 | 10 | 2 | 1.3 | 2 | 152 | 0.2 | 0.2 | 0.27 | 0.23 | 0.05 | 0.11 | 0.17 | 125 | 2 | 6.5 | 0.79 |
| TR-04 | 10 | <0.2 | 2.7 | 2 | 641 | 0.2 | 0.52 | <0.01 | 2.2 | 0.03 | 0.32 | 0.46 | 103 | 1 | 20.3 | 2.27 |
| TR-05 | 9 | 3 | 1.68 | 1 | 221 | 0.2 | 0.29 | 0.17 | 1.4 | 0.04 | 0.16 | 0.35 | 94 | 1 | 11 | 1.1 |
| UG012183 | 3 | 9.9 | 0.51 | 15 | 306 | 0.3 | 0.04 | 0.22 | 1.31 | 0.07 | 0.05 | 0.36 | 61 | 9 | 2.2 | 0.54 |
| UG012184 | 2 | 2 | 1.88 | 4 | 867 | 0.2 | 0.12 | 0.52 | 1.14 | 0.11 | 0.04 | 0.37 | 57 | 3 | 2.3 | 0.38 |
| UG012185 | 1 | 11.5 | 0.62 | 15 | 258 | 0.3 | 0.05 | 2.25 | 0.69 | 0.99 | 0.03 | 0.22 | 50 | 8 | 1 | 0.21 |
| UG012186 | 4 | 1.2 | 1.89 | 5 | 503 | 0.2 | 0.16 | 0.72 | 1.41 | 0.04 | 0.06 | 0.57 | 74 | 2 | 3.4 | 0.48 |
| UG012187 | 3 | 1.2 | 1.77 | 3 | 701 | 0.2 | 0.14 | 0.85 | 1.07 | 0.84 | 0.06 | 0.33 | 62 | 2 | 3.3 | 0.57 |
| UG012188 | 1 | 6.1 | 0.04 | 5 | 127 | 0.2 | <0.01 | 0.6 | 0.17 | 0.09 | 0.01 | 0.06 | 48 | 7 | 0.2 | 0.07 |
| UG012189 | 2 | 4.9 | 0.7 | 13 | 69.1 | 0.2 | 0.08 | 0.33 | 0.51 | 0.06 | 0.03 | 0.09 | 27 | 9 | 2.3 | 0.31 |
| UG012190 | 1 | 1.3 | 0.16 | 4 | 517 | 0.2 | 0.02 | 0.38 | 0.41 | 0.11 | 0.02 | 0.05 | 18 | 5 | 0.5 | 0.12 |
| UG012191 | 5 | 4.7 | 1.91 | 11 | 301 | 0.2 | 0.25 | 0.19 | 1.53 | 0.19 | 0.14 | 0.25 | 68 | 7 | 8.3 | 0.99 |
| UG012192 | 6 | 2.7 | 1.14 | 12 | 534 | 0.2 | 0.09 | 0.44 | 2.23 | 2.22 | 0.05 | 0.26 | 92 | 6 | 1.6 | 0.43 |
| UG012193 | 3 | 2.1 | 1.93 | 4 | 461 | 0.2 | 0.22 | 0.31 | 1.43 | 0.03 | 0.09 | 0.43 | 86 | 3 | 4.8 | 0.77 |
| UG012194 | 4 | 9.8 | 0.69 | 7 | 798 | 0.2 | 0.04 | 0.37 | 1.67 | 0.48 | 0.04 | 0.3 | 65 | 3 | 1.4 | 0.46 |
| UG012195 | 2 | 1.7 | 1.96 | 3 | 326 | 0.2 | 0.16 | 0.48 | 1.37 | 5.98 | 0.11 | 0.39 | 82 | 2 | 5.3 | 0.64 |
| UG012196 | 3 | 5.2 | 0.8 | 6 | 329 | 0.2 | 0.04 | 1.3 | 1.16 | 1.38 | 0.03 | 0.21 | 51 | 6 | 0.9 | 0.23 |
| UG012197 | 2 | 2 | 0.23 | 2 | 73.8 | 0.2 | 0.05 | 0.58 | 0.24 | 0.11 | 0.03 | 0.07 | 54 | 2 | 1.7 | 0.15 |
| UG012198 | 6 | 4.1 | 1.96 | 12 | 281 | 0.2 | 0.29 | 0.14 | 1.81 | 0.15 | 0.21 | 0.25 | 76 | 7 | 12.1 | 1.32 |
| UG012199 | 1 | 0.4 | 1.24 | 6 | 457 | 0.3 | 0.06 | 0.25 | 1.48 | <0.02 | 0.02 | 0.12 | 57 | 3 | 0.9 | 0.17 |
| UG012200 | 2 | 2.4 | 1.31 | 12 | 1125 | 0.2 | 0.05 | 1.3 | 0.76 | 0.03 | 0.03 | 0.06 | 52 | 9 | 0.5 | 0.09 |
| UG012201 | 7 | 1.3 | 1.88 | 5 | 477 | 0.2 | 0.2 | 5.71 | 1.09 | 0.03 | 0.13 | 0.26 | 89 | 9 | 6.8 | 0.85 |
| UG012202 | 1 | 2.5 | 0.17 | 2 | 435 | 0.2 | <0.01 | 0.68 | 0.34 | 0.02 | 0.01 | 0.05 | 34 | 5 | 0.2 | 0.04 |

*All elements are in ppm.

Appendix B: Eastern Sunda arc geochronology data - zircon

| Analysis ID | Pref_Age_Ma | 2s% | 206Pb/238U Age (Ma) | 2s% | 238U/206Pb ratio | 1s% | 207Pb/206Pb ratio | 1s% | 207Pb/235U (calc) ratio | 1s% | 206Pb/238U ratio | 1s% | 208Pb/232Th ratio | 1s% | 206Pb/238U Age (Ma) | 2s% | 207Pb/235U (calc) Age (Ma) | 2s% | 208Pb/232Th Age (Ma) | 2s% | |
|----------------|-------------|-------|---------------------|--------|------------------|-------|-------------------|-------|-------------------------|-------|------------------|-------|-------------------|-------|---------------------|-------|----------------------------|--------|----------------------|-------|--------|
| LB014_322_zr1 | 6.6 | 11.2 | 6.59 | 11.19 | 837.97 | 4.72 | 0.1593 | 12.57 | 0.0261 | 11.76 | 0.0012 | 4.74 | 0.00088 | 10.46 | 7.69 | 9.49 | 26.13 | 23.52 | 17.90 | 20.91 | |
| LB014_322_zr10 | 6.6 | 11.9 | 6.56 | 11.86 | 979.36 | 6.69 | <DL | 25.90 | 0.0071 | 25.32 | 0.0010 | 6.70 | 0.00048 | 15.70 | 6.60 | 11.39 | 7.13 | 50.63 | 31.39 | 9.64 | 31.39 |
| LB014_322_zr11 | 7.9 | 12.4 | 7.56 | 15.61 | 822.82 | 7.28 | 0.0974 | 24.15 | <DL | 11.46 | 0.0012 | 5.20 | 0.00032 | 21.20 | 7.90 | 12.39 | <DL | 222.91 | 6.44 | 6.44 | 42.41 |
| LB014_322_zr12 | 7.6 | 15.6 | 8.00 | 19.85 | 758.15 | 42.69 | 0.0841 | 32.49 | 0.0167 | 23.10 | 0.0013 | 7.13 | 0.00038 | 23.50 | 8.08 | 14.26 | 16.85 | 46.19 | 7.80 | 47.00 | 42.41 |
| LB014_322_zr13 | 8.0 | 19.9 | 8.00 | 19.85 | 758.15 | 42.69 | 0.0841 | 32.49 | 0.0152 | 31.24 | 0.0013 | 9.24 | 0.00082 | 24.27 | 8.40 | 18.48 | 15.31 | 62.48 | 18.60 | 48.54 | 48.54 |
| LB014_322_zr14 | 6.4 | 12.2 | 6.39 | 12.17 | 994.37 | 6.16 | 0.0555 | 25.23 | 0.0076 | 24.60 | 0.0010 | 5.82 | 0.00046 | 17.29 | 6.47 | 11.63 | 7.71 | 49.20 | 9.34 | 34.58 | 34.58 |
| LB014_322_zr15 | 6.8 | 28.9 | 6.78 | 28.89 | 473.64 | 6.07 | 0.4413 | 10.89 | 0.1264 | 9.19 | 0.0021 | 7.70 | 0.00340 | 8.21 | 13.54 | 15.40 | 120.85 | 18.38 | 68.78 | 16.42 | 16.42 |
| LB014_322_zr16 | 7.0 | 9.3 | 7.03 | 9.34 | 816.75 | 3.69 | 0.1335 | 10.61 | 0.0224 | 10.07 | 0.0012 | 4.21 | 0.00064 | 7.29 | 7.90 | 8.43 | 22.47 | 20.14 | 12.91 | 14.58 | 14.58 |
| LB014_322_zr17 | 14.4 | 45.7 | 14.38 | 45.68 | 97.09 | 4.09 | 0.6658 | 5.72 | 0.8967 | 5.52 | 0.0102 | 4.90 | 0.01906 | 6.11 | 65.30 | 9.80 | 649.96 | 11.05 | 382.77 | 12.22 | 12.22 |
| LB014_322_zr18 | 8.5 | 19.1 | 7.51 | 17.38 | 735.60 | 10.51 | <DL | 43.79 | <DL | 42.84 | 0.0013 | 9.53 | <DL | 51.64 | 8.54 | 19.05 | <DL | 85.69 | <DL | <DL | 103.28 |
| LB014_322_zr19 | 7.5 | 17.4 | 7.51 | 17.38 | 797.32 | 7.80 | 0.1140 | 24.29 | 0.0194 | 23.06 | 0.0013 | 7.80 | 0.00111 | 17.51 | 8.21 | 15.60 | 19.47 | 46.12 | 22.42 | 35.01 | 35.01 |
| LB014_322_zr2 | 6.6 | 13.6 | 6.65 | 13.61 | 947.31 | 6.68 | 0.0537 | 28.77 | 0.0077 | 28.07 | 0.0010 | 6.51 | 0.00036 | 23.84 | 6.71 | 13.03 | 7.77 | 56.13 | 7.34 | 47.67 | 47.67 |
| LB014_322_zr20 | 7.0 | 10.1 | 6.97 | 10.06 | 903.60 | 4.63 | 0.0672 | 18.30 | 0.0103 | 17.78 | 0.0011 | 4.77 | 0.00049 | 11.62 | 7.16 | 9.54 | 10.42 | 35.55 | 9.98 | 23.23 | 23.23 |
| LB014_322_zr21 | 7.5 | 10.4 | 7.48 | 10.36 | 846.07 | 4.92 | 0.0627 | 20.12 | 0.0101 | 19.57 | 0.0012 | 4.92 | 0.00030 | 15.89 | 7.64 | 9.84 | 10.22 | 39.13 | 6.13 | 31.77 | 31.77 |
| LB014_322_zr22 | 6.8 | 7.5 | 6.83 | 7.54 | 910.05 | 3.52 | 0.0720 | 13.52 | 0.0108 | 13.14 | 0.0011 | 3.55 | 0.00043 | 9.04 | 7.06 | 7.09 | 10.89 | 26.28 | 8.75 | 18.07 | 18.07 |
| LB014_322_zr23 | 7.4 | 13.2 | 7.02 | 24.94 | 871.27 | 6.58 | <DL | 30.54 | <DL | 29.86 | 0.0011 | 6.59 | 0.00033 | 25.60 | 7.39 | 13.17 | <DL | 59.72 | 6.74 | 51.20 | 51.20 |
| LB014_322_zr24 | 7.0 | 24.9 | 6.83 | 10.58 | 735.79 | 9.87 | 0.1976 | 24.35 | 0.0354 | 22.30 | 0.0013 | 9.94 | 0.00086 | 23.31 | 8.68 | 19.88 | 35.34 | 44.60 | 17.40 | 46.63 | 46.63 |
| LB014_322_zr25 | 6.9 | 10.7 | 6.91 | 10.67 | 788.38 | 4.42 | 0.1724 | 11.50 | 0.0298 | 10.72 | 0.0013 | 8.22 | 0.00068 | 8.79 | 8.22 | 8.83 | 29.82 | 21.43 | 13.78 | 17.58 | 17.58 |
| LB014_322_zr28 | 6.4 | 9.8 | 6.41 | 9.84 | 953.37 | 4.55 | 0.0884 | 15.85 | 0.0127 | 15.26 | 0.0011 | 4.55 | 0.00037 | 14.10 | 6.78 | 9.10 | 12.83 | 30.52 | 7.40 | 28.21 | 28.21 |
| LB014_322_zr29 | 8.0 | 11.5 | 7.28 | 16.03 | 813.37 | 5.78 | 0.0439 | 27.97 | 0.0074 | 27.42 | 0.0014 | 5.76 | 0.00030 | 22.43 | 7.98 | 11.52 | 7.51 | 54.84 | 6.03 | 44.86 | 44.86 |
| LB014_322_zr3 | 7.3 | 16.0 | 7.28 | 16.03 | 701.12 | 6.15 | 0.2142 | 14.64 | 0.0425 | 13.37 | 0.0012 | 6.23 | 0.00048 | 11.61 | 9.24 | 12.45 | 42.26 | 26.74 | 29.90 | 23.21 | 23.21 |
| LB014_322_zr30 | 7.7 | 36.6 | 7.69 | 36.60 | 691.64 | 14.85 | 0.1681 | 36.89 | 0.0368 | 33.95 | 0.0015 | 14.85 | 0.00286 | 20.95 | 9.37 | 29.89 | 36.72 | 67.89 | 57.84 | 41.90 | 41.90 |
| LB014_322_zr31 | 6.1 | 37.2 | 6.07 | 37.24 | 737.54 | 18.24 | 0.2655 | 26.52 | 0.0530 | 23.54 | 0.0014 | 12.55 | 0.00070 | 27.87 | 8.70 | 25.10 | 52.45 | 47.08 | 14.24 | 55.74 | 55.74 |
| LB014_322_zr4 | 6.6 | 8.9 | 7.69 | 8.97 | 978.87 | 4.37 | 0.0453 | 20.80 | 0.0064 | 20.39 | 0.0010 | 4.44 | 0.00028 | 14.56 | 6.61 | 8.89 | 6.46 | 40.79 | 5.75 | 29.12 | 29.12 |
| LB014_322_zr5 | 7.2 | 15.4 | 897.71 | 7.69 | 897.71 | 7.69 | <DL | 32.97 | <DL | 32.10 | 0.0011 | 7.69 | 0.00031 | 28.83 | 7.18 | 15.38 | <DL | 64.19 | 6.23 | 57.66 | 57.66 |
| LB014_322_zr6 | 7.1 | 15.2 | 7.10 | 15.19 | 877.58 | 7.13 | 0.0742 | 27.02 | 0.0116 | 26.11 | 0.0011 | 7.13 | 0.00058 | 18.95 | 7.36 | 14.26 | 11.72 | 52.22 | 11.81 | 37.90 | 37.90 |
| LB014_322_zr7 | 6.7 | 8.4 | 6.70 | 8.41 | 952.89 | 3.97 | 0.0509 | 17.82 | 0.0073 | 17.45 | 0.0010 | 4.04 | 0.00034 | 10.77 | 6.74 | 8.09 | 7.43 | 34.89 | 6.82 | 21.53 | 21.53 |
| LB014_322_zr8 | 8.8 | 13.7 | 8.76 | 13.71 | 703.68 | 6.38 | 0.0798 | 23.40 | 0.0153 | 22.56 | 0.0014 | 6.40 | 0.00073 | 15.49 | 9.15 | 12.79 | 15.42 | 45.13 | 14.72 | 30.98 | 30.98 |
| LB014_322_zr9 | 6.7 | 11.0 | 6.70 | 11.00 | 962.51 | 6.31 | 0.0426 | 27.04 | 0.0061 | 26.52 | 0.0010 | 5.50 | 0.00031 | 17.76 | 6.69 | 10.99 | 6.13 | 53.04 | 6.31 | 35.51 | 35.51 |
| LB025_323_zr1 | 8.8 | 11.9 | 8.80 | 11.90 | 733.66 | 5.92 | 0.0398 | 30.33 | 0.0074 | 29.78 | 0.0014 | 5.97 | 0.00049 | 21.88 | 8.76 | 11.93 | 7.47 | 59.57 | 9.85 | 43.77 | 43.77 |
| LB025_323_zr10 | 9.2 | 12.1 | 8.80 | 18.34 | 512.57 | 6.20 | 0.2850 | 13.07 | 0.0771 | 11.62 | 0.0020 | 6.18 | 0.00182 | 11.77 | 12.61 | 12.37 | 75.44 | 23.25 | 11.28 | 42.50 | 42.50 |
| LB025_323_zr12 | 9.6 | 18.0 | 9.59 | 18.02 | 653.33 | 8.62 | 0.0715 | 33.29 | 0.0155 | 32.19 | 0.0015 | 8.46 | 0.00042 | 35.68 | 9.91 | 16.92 | 15.64 | 64.39 | 8.51 | 71.36 | 71.36 |
| LB025_323_zr13 | 9.4 | 14.2 | 9.44 | 14.24 | 557.27 | 5.70 | 0.1896 | 14.21 | 0.0474 | 13.11 | 0.0018 | 5.77 | 0.00157 | 11.73 | 11.53 | 11.54 | 47.05 | 26.22 | 31.71 | 23.46 | 23.46 |
| LB025_323_zr14 | 6.7 | 26.8 | 6.74 | 26.75 | 816.01 | 11.21 | 0.1675 | 29.43 | 0.0294 | 27.28 | 0.0012 | 11.16 | 0.00063 | 30.58 | 7.97 | 22.33 | 29.40 | 54.56 | 12.74 | 61.15 | 61.15 |
| LB025_323_zr17 | 7.7 | 12.9 | 7.72 | 12.87 | 788.28 | 6.35 | 0.0885 | 20.75 | 0.0153 | 19.94 | 0.0013 | 5.95 | 0.00063 | 18.54 | 8.16 | 11.90 | 15.43 | 39.68 | 12.87 | 37.08 | 37.08 |
| LB025_323_zr18 | 8.5 | 11.3 | 8.46 | 11.31 | 763.79 | 8.72 | 0.0482 | 25.24 | 0.0086 | 24.70 | 0.0013 | 5.44 | 0.00050 | 20.16 | 8.49 | 10.89 | 8.70 | 49.40 | 10.20 | 40.32 | 40.32 |
| LB025_323_zr19 | 7.2 | 12.7 | 898.84 | 6.36 | 898.84 | 6.36 | <DL | 33.93 | <DL | 33.36 | 0.0011 | 6.35 | 0.00059 | 16.70 | 7.20 | 12.70 | <DL | 66.73 | 11.96 | 33.40 | 33.40 |
| LB025_323_zr2 | 12.5 | 100.3 | 12.49 | 100.29 | 27.34 | 3.03 | 0.8088 | 2.34 | 3.9168 | 3.39 | 0.0370 | 3.34 | 0.05433 | 3.35 | 234.01 | 6.69 | 1617.16 | 6.78 | 1072.35 | 6.69 | 6.69 |
| LB025_323_zr20 | 8.2 | 12.1 | 8.15 | 12.08 | 740.47 | 5.54 | 0.0960 | 18.61 | 0.0178 | 17.84 | 0.0014 | 5.54 | 0.00057 | 16.27 | 8.70 | 11.08 | 17.88 | 35.68 | 11.47 | 32.54 | 32.54 |
| LB025_323_zr21 | 9.2 | 20.5 | 9.21 | 20.47 | 395.97 | 5.25 | 0.3884 | 9.67 | 0.1379 | 8.51 | 0.0025 | 5.54 | 0.00505 | 8.34 | 16.23 | 11.08 | 131.21 | 17.01 | 102.10 | 16.68 | 16.68 |
| LB025_323_zr22 | 8.1 | 9.3 | 793.66 | 4.21 | 793.66 | 4.21 | 0.0320 | 23.77 | 0.0056 | 23.44 | 0.0013 | 4.66 | 0.00042 | 16.11 | 8.14 | 9.32 | 5.63 | 46.89 | 8.51 | 32.23 | 32.23 |
| LB025_323_zr23 | 8.7 | 8.0 | 8.73 | 7.97 | 741.94 | 3.50 | 0.0468 | 15.95 | 0.0087 | 15.81 | 0.0014 | 3.87 | 0.00041 | 6.17 | 8.74 | 7.75 | 8.78 | 31.61 | 8.39 | 12.33 | 12.33 |
| LB025_323_zr24 | 7.6 | 12.3 | 7.64 | 12.29 | 793.62 | 5.83 | 0.0876 | 19.97 | 0.0152 | 19.21 | 0.0013 | 5.68 | 0.00053 | 18.35 | 8.07 | 11.37 | 15.29 | 38.41 | 10.81 | 36.70 | 36.70 |

Appendix B: Eastern Sunda arc geochronology data - zircon

| Analysis ID | Pref_Age_Ma | 2s% | 206Pb/238U Age (Ma) | 25% | 238U/206Pb ratio | 1s% | 207Pb/206Pb ratio | 1s% | 207Pb/235U (calc) ratio | 1s% | 208Pb/238U ratio | 1s% | 208Pb/232Th ratio | 2s% | 207Pb/235U (calc) Age (Ma) | 2s% | 208Pb/232Th Age (Ma) | 25% |
|----------------|-------------|------|---------------------|------|------------------|-------|-------------------|-------|-------------------------|------|------------------|-------|-------------------|-------|----------------------------|-------|----------------------|-------|
| LB025_323_zr25 | 7.6 | 9.9 | 849.07 | 4.55 | 0.0370 | 23.82 | 0.0060 | 23.44 | 0.0012 | 4.93 | 0.00046 | 14.69 | 7.58 | 9.86 | 6.05 | 46.87 | 9.36 | 29.37 |
| LB025_323_zr26 | 7.3 | 23.4 | 668.05 | 9.67 | 0.2317 | 20.18 | 0.0471 | 18.24 | 0.0015 | 8.75 | 0.00161 | 19.04 | 9.55 | 17.51 | 46.72 | 36.48 | 32.67 | 38.09 |
| LB025_323_zr27 | 7.5 | 19.8 | 524.10 | 5.67 | 0.3539 | 11.02 | 0.0951 | 9.58 | 0.0019 | 5.66 | 0.00351 | 8.88 | 12.29 | 11.33 | 92.24 | 18.16 | 71.12 | 17.75 |
| LB025_323_zr28 | 8.3 | 16.4 | 484.97 | 4.35 | 0.3636 | 8.40 | 0.1068 | 7.34 | 0.0022 | 5.00 | 0.00464 | 7.21 | 13.87 | 9.99 | 103.03 | 14.68 | 93.76 | 14.42 |
| LB025_323_zr29 | 8.5 | 10.4 | 752.60 | 5.00 | 0.0474 | 23.31 | 0.0087 | 22.82 | 0.0013 | 4.99 | 0.00046 | 20.16 | 8.51 | 9.98 | 8.82 | 45.65 | 9.28 | 40.32 |
| LB025_323_zr3 | 7.7 | 39.0 | 235.77 | 4.21 | 0.6161 | 6.74 | 0.3475 | 6.10 | 0.0043 | 4.20 | 0.00697 | 5.66 | 27.54 | 8.40 | 302.86 | 12.19 | 140.76 | 11.32 |
| LB025_323_zr30 | 8.6 | 8.9 | 731.55 | 4.22 | 0.0697 | 16.38 | 0.0131 | 15.90 | 0.0014 | 4.22 | 0.00048 | 16.87 | 8.83 | 8.44 | 13.25 | 31.80 | 9.72 | 33.73 |
| LB025_323_zr31 | 8.6 | 16.4 | 727.50 | 7.48 | 0.0666 | 29.39 | 0.0130 | 28.50 | 0.0014 | 7.82 | 0.00070 | 19.79 | 8.83 | 15.65 | 13.08 | 57.00 | 14.22 | 39.59 |
| LB025_323_zr32 | 7.9 | 11.1 | 755.08 | 5.04 | 0.1059 | 16.09 | 0.0193 | 15.37 | 0.0013 | 5.02 | 0.00044 | 19.09 | 8.55 | 10.03 | 19.42 | 30.74 | 8.90 | 38.18 |
| LB025_323_zr33 | 9.6 | 26.9 | 380.53 | 8.07 | 0.3886 | 12.48 | 0.1430 | 10.70 | 0.0026 | 7.97 | 0.00580 | 10.81 | 16.91 | 15.95 | 135.73 | 21.39 | 117.29 | 21.62 |
| LB025_323_zr34 | 8.2 | 9.3 | 778.46 | 4.47 | 0.0549 | 19.44 | 0.0097 | 18.98 | 0.0013 | 4.47 | 0.00044 | 15.03 | 8.29 | 8.94 | 9.79 | 37.96 | 8.98 | 30.06 |
| LB025_323_zr35 | 8.1 | 10.2 | 755.53 | 4.71 | 0.0888 | 16.37 | 0.0158 | 15.75 | 0.0013 | 4.71 | 0.00069 | 11.60 | 8.56 | 9.41 | 15.92 | 31.51 | 13.96 | 23.19 |
| LB025_323_zr36 | 8.3 | 11.1 | 715.53 | 4.57 | 0.1092 | 14.53 | 0.0212 | 13.88 | 0.0014 | 5.10 | 0.00056 | 11.82 | 9.05 | 10.21 | 21.35 | 27.75 | 11.39 | 23.63 |
| LB025_323_zr37 | 7.1 | 16.6 | 536.19 | 4.53 | 0.3714 | 8.64 | 0.0952 | 7.52 | 0.0019 | 4.53 | 0.00309 | 7.38 | 12.04 | 9.06 | 92.35 | 15.04 | 62.53 | 14.76 |
| LB025_323_zr38 | 8.1 | 10.2 | 683.70 | 4.33 | 0.1530 | 11.79 | 0.0307 | 11.08 | 0.0015 | 4.34 | 0.00100 | 10.05 | 9.41 | 8.67 | 30.70 | 22.16 | 20.19 | 20.10 |
| LB025_323_zr39 | 7.5 | 10.0 | 856.19 | 4.77 | 0.0592 | 20.06 | 0.0096 | 19.54 | 0.0012 | 4.78 | 0.00055 | 13.33 | 7.58 | 9.55 | 9.66 | 39.09 | 11.11 | 26.66 |
| LB025_323_zr4 | 8.3 | 8.6 | 755.39 | 4.08 | 0.0630 | 16.61 | 0.0115 | 16.17 | 0.0013 | 4.08 | 0.00055 | 14.70 | 8.53 | 8.17 | 11.56 | 32.94 | 11.11 | 29.40 |
| LB025_323_zr40 | 8.6 | 12.4 | 724.53 | 6.49 | 0.0729 | 22.17 | 0.0137 | 21.45 | 0.0014 | 5.81 | 0.00038 | 27.92 | 8.94 | 11.62 | 13.86 | 42.91 | 7.65 | 55.83 |
| LB025_323_zr41 | 8.5 | 23.2 | 519.38 | 7.71 | 0.2907 | 16.24 | 0.0790 | 14.37 | 0.0019 | 7.74 | 0.00364 | 13.89 | 12.35 | 15.49 | 77.21 | 28.74 | 73.66 | 27.78 |
| LB025_323_zr42 | 9.6 | 15.8 | 668.65 | 7.84 | < DL | 34.83 | < DL | 33.97 | 0.0015 | 7.89 | 0.00071 | 24.84 | 9.64 | 15.77 | < DL | 67.93 | 14.38 | 49.67 |
| LB025_323_zr43 | 8.0 | 12.7 | 804.54 | 9.00 | 0.0511 | 27.55 | 0.0088 | 26.91 | 0.0012 | 6.11 | 0.00051 | 20.00 | 8.01 | 12.22 | 8.91 | 53.82 | 10.29 | 40.01 |
| LB025_323_zr44 | 8.7 | 4.9 | 745.09 | 2.38 | 0.0431 | 11.16 | 0.0080 | 11.23 | 0.0013 | 2.44 | 0.00045 | 4.49 | 8.66 | 4.88 | 8.07 | 22.46 | 9.10 | 8.98 |
| LB025_323_zr6 | 7.8 | 12.8 | 759.24 | 5.79 | 0.1139 | 17.95 | 0.0207 | 17.07 | 0.0013 | 5.76 | 0.00052 | 19.62 | 8.54 | 11.52 | 20.83 | 34.13 | 10.58 | 39.25 |
| LB025_323_zr7 | 7.2 | 18.1 | 746.13 | 7.36 | 0.1843 | 18.57 | 0.0340 | 17.26 | 0.0013 | 7.38 | 0.00079 | 13.57 | 8.27 | 14.75 | 33.92 | 34.52 | 15.95 | 27.15 |
| LB025_323_zr8 | 8.0 | 12.6 | 796.33 | 5.89 | 0.0716 | 22.87 | 0.0123 | 22.14 | 0.0013 | 5.94 | 0.00089 | 15.28 | 8.67 | 11.88 | 12.43 | 44.28 | 18.09 | 30.55 |
| LB025_323_zr9 | 8.0 | 7.2 | 812.61 | 3.48 | 0.0465 | 16.26 | 0.0078 | 15.96 | 0.0012 | 3.47 | 0.00045 | 8.38 | 7.96 | 6.95 | 7.91 | 31.93 | 9.06 | 16.77 |
| LB032_326_zr1 | 11.2 | 13.1 | 532.92 | 5.95 | 0.1056 | 19.07 | 0.0275 | 18.32 | 0.0019 | 5.94 | 0.00085 | 15.96 | 12.15 | 11.89 | 27.57 | 36.64 | 17.14 | 31.93 |
| LB032_326_zr10 | 9.7 | 9.3 | 645.32 | 4.40 | 0.0682 | 17.28 | 0.0145 | 16.78 | 0.0015 | 4.41 | 0.00040 | 17.20 | 9.96 | 8.81 | 14.58 | 33.57 | 8.05 | 34.40 |
| LB032_326_zr11 | 12.2 | 7.5 | 496.64 | 3.45 | 0.0893 | 11.90 | 0.0246 | 11.49 | 0.0020 | 3.47 | 0.00118 | 11.96 | 12.95 | 6.94 | 24.68 | 22.98 | 23.85 | 23.92 |
| LB032_326_zr12 | 18.3 | 3.2 | 345.47 | 1.42 | 0.0602 | 5.20 | 0.0242 | 5.69 | 0.0029 | 1.53 | 0.00104 | 4.00 | 18.65 | 3.05 | 24.23 | 11.37 | 21.09 | 7.99 |
| LB032_326_zr13 | 11.1 | 14.3 | 465.24 | 5.91 | 0.2030 | 11.99 | 0.0596 | 11.03 | 0.0021 | 6.02 | 0.00250 | 8.51 | 13.83 | 12.04 | 58.79 | 22.05 | 50.51 | 17.01 |
| LB032_326_zr14 | 9.6 | 14.7 | 637.39 | 6.77 | 0.0942 | 22.85 | 0.0206 | 22.00 | 0.0016 | 6.77 | 0.00083 | 19.76 | 10.21 | 13.54 | 20.70 | 44.00 | 16.79 | 39.52 |
| LB032_326_zr15 | 11.5 | 12.4 | 557.55 | 6.14 | < DL | 30.81 | < DL | 30.31 | 0.0018 | 6.20 | 0.00083 | 18.03 | 11.50 | 12.40 | < DL | 60.62 | 16.89 | 36.06 |
| LB032_326_zr2 | 16.8 | 5.9 | 378.62 | 2.70 | 0.0588 | 11.01 | 0.0215 | 11.01 | 0.0016 | 2.81 | 0.00105 | 7.70 | 17.04 | 5.62 | 21.62 | 22.02 | 21.27 | 15.40 |
| LB032_326_zr3 | 10.4 | 9.6 | 615.68 | 4.59 | 0.0590 | 19.06 | 0.0133 | 18.70 | 0.0016 | 4.56 | 0.00059 | 13.33 | 10.54 | 9.11 | 13.46 | 37.41 | 11.98 | 26.66 |
| LB032_326_zr4 | 10.6 | 14.5 | 609.30 | 7.15 | < DL | 38.19 | < DL | 37.60 | 0.0016 | 7.23 | 0.00062 | 21.31 | 10.61 | 14.46 | < DL | 75.21 | 12.66 | 42.63 |
| LB032_326_zr5 | 11.8 | 10.9 | 546.86 | 5.49 | 0.0445 | 26.12 | 0.0113 | 25.69 | 0.0018 | 5.45 | 0.00068 | 13.86 | 11.78 | 10.90 | 11.38 | 51.38 | 13.70 | 27.71 |
| LB032_326_zr6 | 10.2 | 10.2 | 633.24 | 6.36 | 0.0376 | 26.48 | 0.0081 | 26.04 | 0.0016 | 5.08 | 0.00049 | 15.40 | 10.19 | 10.16 | 8.22 | 52.08 | 9.97 | 30.81 |
| LB032_326_zr7 | 10.9 | 7.0 | 589.85 | 3.05 | 0.0472 | 14.16 | 0.0110 | 13.91 | 0.0017 | 3.41 | 0.00057 | 9.63 | 10.91 | 6.83 | 11.06 | 27.82 | 11.55 | 19.27 |
| LB032_326_zr8 | 10.3 | 6.8 | 572.28 | 3.26 | 0.0451 | 15.46 | 0.0108 | 15.19 | 0.0017 | 3.39 | 0.00055 | 11.37 | 11.26 | 6.78 | 10.91 | 30.37 | 11.14 | 22.73 |
| LB032_326_zr9 | 10.3 | 7.8 | 613.84 | 3.24 | 0.0620 | 13.22 | 0.0138 | 12.91 | 0.0016 | 3.77 | 0.00064 | 9.85 | 10.49 | 7.53 | 13.95 | 25.82 | 12.89 | 19.70 |
| LB033_327_zr1 | 17.6 | 10.9 | 338.04 | 4.92 | 0.1092 | 15.27 | 0.0451 | 14.58 | 0.0030 | 4.93 | 0.00208 | 13.93 | 19.13 | 9.87 | 44.81 | 29.15 | 42.22 | 27.85 |
| LB033_327_zr10 | 17.7 | 2.8 | 363.26 | 1.24 | 0.0531 | 4.37 | 0.0200 | 4.99 | 0.0028 | 1.36 | 0.00085 | 3.24 | 17.80 | 2.72 | 20.11 | 9.89 | 17.24 | 6.49 |
| LB033_327_zr2 | 17.7 | 5.8 | 363.85 | 2.90 | 0.0455 | 13.63 | 0.0172 | 13.41 | 0.0028 | 2.90 | 0.00105 | 11.12 | 17.30 | 5.79 | 17.30 | 26.82 | 21.30 | 22.24 |
| LB033_327_zr3 | 18.7 | 9.7 | 337.02 | 4.29 | 0.0593 | 18.05 | 0.0240 | 17.60 | 0.0030 | 4.64 | 0.00111 | 17.63 | 19.06 | 9.27 | 24.10 | 35.19 | 22.57 | 35.27 |

Appendix B: Eastern Sunda arc geochronology data - zircon

| Analysis ID | Pref Age Ma | 2s% | 206Pb/238U Age (Ma) | 2s% | 238U/206Pb ratio | 1s% | 207Pb/206Pb ratio | 1s% | 207Pb/235U (calc) ratio | 1s% | 206Pb/238U ratio | 1s% | 208Pb/232Th ratio | 1s% | 206Pb/238U Age (Ma) | 2s% | 207Pb/235U (calc) Age (Ma) | 2s% | 208Pb/232Th Age (Ma) | 2s% |
|----------------|----------------|------|------------------------|-------|---------------------|-------|----------------------|-------|----------------------------|-------|---------------------|-------|----------------------|-------|------------------------|-------|----------------------------------|--------|-------------------------|-------|
| LB033_327_zr14 | 17.5 | 4.0 | 17.54 | 4.00 | 364.45 | 1.93 | 0.0552 | 7.82 | 0.0211 | 8.05 | 0.0028 | 1.93 | 0.00105 | 5.89 | 17.74 | 3.85 | 21.21 | 16.10 | 21.26 | 11.77 |
| LB033_327_zr5 | 17.7 | 5.6 | 17.74 | 5.64 | 358.41 | 2.57 | 0.0597 | 10.41 | 0.0232 | 10.44 | 0.0028 | 2.70 | 0.00097 | 6.70 | 18.05 | 5.41 | 23.29 | 20.88 | 19.74 | 13.40 |
| LB033_327_zr6 | 17.6 | 3.6 | 17.60 | 3.56 | 333.43 | 1.53 | 0.1179 | 4.16 | 0.0491 | 4.72 | 0.0030 | 1.64 | 0.00145 | 3.79 | 19.35 | 3.29 | 48.69 | 9.44 | 29.41 | 7.57 |
| LB033_327_zr7 | 20.7 | 5.3 | 20.73 | 5.33 | 296.77 | 2.25 | 0.0848 | 7.69 | 0.0399 | 7.83 | 0.0034 | 2.82 | 0.00150 | 7.46 | 21.78 | 5.04 | 39.68 | 15.67 | 30.37 | 14.92 |
| LB033_327_zr8 | 18.7 | 10.7 | 18.72 | 10.74 | 340.19 | 4.32 | 0.0678 | 17.30 | 0.0281 | 16.93 | 0.0030 | 5.15 | 0.00115 | 10.50 | 19.24 | 10.31 | 28.09 | 33.89 | 23.31 | 21.00 |
| LB033_327_zr9 | 17.9 | 8.4 | 17.87 | 8.45 | 362.32 | 3.43 | 0.0486 | 15.52 | 0.0188 | 15.38 | 0.0028 | 4.12 | 0.00086 | 11.34 | 17.92 | 8.24 | 18.86 | 30.76 | 19.45 | 22.67 |
| LB034_328_zr1 | 7.0 | 22.1 | 923.51 | 12.87 | <DL | 51.21 | <DL | 50.08 | <DL | 50.08 | 0.0011 | 11.07 | 0.00049 | 32.94 | 7.01 | 22.14 | <DL | 100.16 | 9.97 | 65.88 |
| LB034_328_zr11 | 7.7 | 10.7 | 835.97 | 5.36 | 835.97 | 5.36 | 0.0351 | 28.98 | 0.0058 | 28.52 | 0.0012 | 5.37 | 0.00030 | 19.86 | 7.69 | 10.74 | 5.86 | 57.04 | 6.17 | 39.71 |
| LB034_328_zr12 | 7.4 | 9.9 | 869.52 | 4.98 | 869.52 | 4.98 | 0.0451 | 23.61 | 0.0072 | 23.14 | 0.0012 | 4.94 | 0.00041 | 12.79 | 7.42 | 9.88 | 7.29 | 46.27 | 8.31 | 25.59 |
| LB034_328_zr13 | 6.4 | 9.4 | 980.82 | 4.86 | 980.82 | 4.86 | 0.0691 | 17.38 | 0.0097 | 16.87 | 0.0010 | 4.45 | 0.00042 | 13.29 | 6.57 | 8.91 | 9.80 | 33.74 | 8.45 | 26.58 |
| LB034_328_zr15 | 7.6 | 11.4 | 847.37 | 5.72 | 847.37 | 5.72 | 0.0452 | 27.29 | 0.0073 | 26.73 | 0.0012 | 5.70 | 0.00039 | 21.90 | 7.64 | 11.40 | 7.40 | 53.47 | 7.84 | 43.80 |
| LB034_328_zr16 | 7.8 | 11.9 | 817.10 | 5.92 | 817.10 | 5.92 | <DL | 36.66 | <DL | 36.21 | 0.0012 | 5.94 | 0.00055 | 18.27 | 7.85 | 11.87 | <DL | 72.41 | 11.19 | 36.54 |
| LB034_328_zr17 | 6.8 | 11.3 | 947.61 | 5.85 | 947.61 | 5.85 | 0.0438 | 23.52 | 0.0063 | 23.06 | 0.0011 | 5.64 | 0.00036 | 16.40 | 6.80 | 11.28 | 6.37 | 46.12 | 7.22 | 32.81 |
| LB034_328_zr18 | 6.1 | 16.3 | 947.68 | 9.34 | 947.68 | 9.34 | 0.1234 | 21.76 | 0.0179 | 20.58 | 0.0011 | 7.24 | 0.00040 | 24.25 | 6.80 | 14.48 | 18.00 | 41.15 | 8.06 | 48.51 |
| LB034_328_zr19 | 8.1 | 17.4 | 753.23 | 8.16 | 753.23 | 8.16 | 0.0896 | 27.97 | 0.0162 | 26.83 | 0.0013 | 8.06 | 0.00073 | 18.60 | 8.55 | 16.11 | 16.31 | 53.67 | 14.81 | 37.21 |
| LB034_328_zr2 | 7.0 | 10.3 | 920.37 | 5.14 | 920.37 | 5.14 | 0.0397 | 26.17 | 0.0080 | 25.70 | 0.0011 | 5.15 | 0.00041 | 15.21 | 6.98 | 10.30 | 6.04 | 51.41 | 8.27 | 30.42 |
| LB034_328_zr20 | 6.8 | 10.7 | 833.58 | 5.10 | 833.58 | 5.10 | 0.0544 | 22.32 | 0.0080 | 21.78 | 0.0011 | 5.10 | 0.00044 | 16.29 | 6.91 | 10.20 | 8.14 | 43.56 | 8.82 | 32.59 |
| LB034_328_zr21 | 6.3 | 8.7 | 1029.96 | 4.33 | 1029.96 | 4.33 | 0.0284 | 25.82 | 0.0038 | 25.50 | 0.0010 | 4.33 | 0.00036 | 13.40 | 6.26 | 8.65 | 3.83 | 51.00 | 7.30 | 26.80 |
| LB034_328_zr22 | 7.0 | 9.4 | 918.22 | 4.04 | 918.22 | 4.04 | 0.0465 | 18.98 | 0.0069 | 18.61 | 0.0011 | 4.54 | 0.00033 | 12.78 | 7.00 | 9.09 | 7.02 | 37.21 | 6.78 | 25.56 |
| LB034_328_zr23 | 7.3 | 12.4 | 839.04 | 8.34 | 839.04 | 8.34 | 0.0857 | 20.28 | 0.0139 | 19.52 | 0.0012 | 5.73 | 0.00079 | 13.44 | 7.67 | 11.47 | 13.99 | 39.04 | 16.03 | 26.87 |
| LB034_328_zr24 | 7.6 | 8.3 | 818.49 | 3.90 | 818.49 | 3.90 | 0.0745 | 14.66 | 0.0125 | 14.21 | 0.0012 | 3.90 | 0.00046 | 9.27 | 7.86 | 7.80 | 12.66 | 28.42 | 9.28 | 18.53 |
| LB034_328_zr25 | 7.2 | 10.6 | 872.58 | 5.38 | 872.58 | 5.38 | 0.0651 | 20.15 | 0.0103 | 19.58 | 0.0012 | 5.01 | 0.00064 | 12.27 | 7.42 | 10.01 | 10.38 | 39.15 | 13.03 | 24.54 |
| LB034_328_zr26 | 7.6 | 12.4 | 811.38 | 5.79 | 811.38 | 5.79 | 0.0831 | 20.61 | 0.0142 | 19.85 | 0.0012 | 5.74 | 0.00089 | 13.49 | 7.94 | 11.49 | 14.33 | 39.71 | 17.98 | 26.99 |
| LB034_328_zr27 | 8.0 | 15.7 | 775.21 | 8.85 | 775.21 | 8.85 | 0.0641 | 30.20 | 0.0111 | 29.31 | 0.0013 | 7.44 | 0.00088 | 19.88 | 8.21 | 14.88 | 11.20 | 58.62 | 17.81 | 39.75 |
| LB034_328_zr28 | 7.9 | 12.8 | 794.43 | 6.02 | 794.43 | 6.02 | 0.0703 | 23.39 | 0.0121 | 22.65 | 0.0013 | 6.03 | 0.00048 | 19.83 | 8.12 | 12.05 | 12.26 | 45.30 | 9.71 | 39.66 |
| LB034_328_zr29 | 7.6 | 12.5 | 792.40 | 7.37 | 792.40 | 7.37 | 0.1040 | 18.29 | 0.0179 | 17.47 | 0.0013 | 5.67 | 0.00063 | 14.39 | 8.15 | 11.34 | 18.01 | 34.93 | 12.73 | 28.78 |
| LB034_328_zr3 | 7.1 | 10.8 | 861.60 | 5.02 | 861.60 | 5.02 | 0.0787 | 18.48 | 0.0125 | 17.85 | 0.0012 | 5.03 | 0.00042 | 16.83 | 7.46 | 10.06 | 12.59 | 35.69 | 8.53 | 33.65 |
| LB034_328_zr30 | 8.7 | 14.9 | 741.92 | 14.93 | 741.92 | 14.93 | <DL | 44.81 | <DL | 44.22 | 0.0013 | 7.44 | 0.00063 | 22.22 | 8.69 | 14.89 | <DL | 88.44 | 12.84 | 44.45 |
| LB034_328_zr34 | 7.2 | 10.7 | 897.08 | 6.23 | 897.08 | 6.23 | 0.0462 | 25.25 | 0.0071 | 24.72 | 0.0011 | 5.35 | 0.00036 | 18.32 | 7.17 | 10.69 | 7.14 | 49.45 | 7.32 | 36.63 |
| LB034_328_zr5 | 6.4 | 22.6 | 462.36 | 4.50 | 462.36 | 4.50 | 0.4732 | 7.88 | 0.1394 | 6.66 | 0.0022 | 4.51 | 0.00489 | 6.62 | 13.95 | 9.01 | 132.50 | 13.32 | 98.97 | 13.23 |
| LB034_328_zr6 | 6.9 | 9.5 | 928.79 | 4.78 | 928.79 | 4.78 | 0.0277 | 28.71 | 0.0041 | 28.36 | 0.0011 | 4.75 | 0.00038 | 15.19 | 6.92 | 9.50 | 4.14 | 56.71 | 7.69 | 30.37 |
| LB034_328_zr7 | 7.2 | 28.9 | 883.81 | 13.85 | 883.81 | 13.85 | <DL | 55.74 | <DL | 54.11 | 0.0011 | 14.47 | 0.00035 | 48.28 | 7.24 | 28.95 | <DL | 108.22 | 7.01 | 92.57 |
| LB034_328_zr9 | 6.5 | 11.6 | 988.70 | 5.77 | 988.70 | 5.77 | <DL | 31.36 | <DL | 30.86 | 0.0010 | 5.79 | 0.00018 | 27.15 | 6.49 | 11.58 | <DL | 61.72 | 3.74 | 54.30 |
| LB041_330_zr1 | 7.2 | 12.5 | 877.94 | 6.18 | 877.94 | 6.18 | 0.0730 | 22.38 | 0.0116 | 21.85 | 0.0012 | 5.87 | 0.00056 | 14.78 | 7.41 | 11.74 | 11.66 | 43.30 | 11.30 | 29.55 |
| LB041_330_zr10 | 6.8 | 18.8 | 806.26 | 6.58 | 806.26 | 6.58 | 0.1778 | 16.55 | 0.0315 | 15.47 | 0.0013 | 8.27 | 0.00068 | 11.89 | 8.16 | 16.54 | 31.52 | 30.94 | 17.75 | 23.78 |
| LB041_330_zr11 | 6.6 | 7.7 | 964.40 | 3.65 | 964.40 | 3.65 | 0.0513 | 16.20 | 0.0074 | 16.02 | 0.0010 | 3.69 | 0.00036 | 8.20 | 6.67 | 7.37 | 7.52 | 32.03 | 7.22 | 16.39 |
| LB041_330_zr12 | 6.6 | 9.6 | 982.47 | 4.02 | 982.47 | 4.02 | 0.0460 | 18.85 | 0.0066 | 18.61 | 0.0010 | 4.80 | 0.00038 | 10.00 | 6.80 | 9.60 | 6.63 | 37.23 | 7.74 | 20.00 |
| LB041_330_zr13 | 7.1 | 7.8 | 913.46 | 3.89 | 913.46 | 3.89 | 0.0371 | 20.20 | 0.0057 | 20.00 | 0.0011 | 3.89 | 0.00037 | 10.12 | 7.05 | 7.77 | 5.73 | 40.00 | 7.54 | 20.23 |
| LB041_330_zr14 | 6.6 | 14.0 | 972.03 | 6.70 | 972.03 | 6.70 | 0.0549 | 29.17 | 0.0078 | 28.44 | 0.0010 | 6.68 | 0.00045 | 23.98 | 6.65 | 13.36 | 7.87 | 56.88 | 9.19 | 47.95 |
| LB041_330_zr15 | 6.2 | 19.7 | 1059.05 | 12.64 | 1059.05 | 12.64 | <DL | 46.81 | <DL | 45.79 | 0.0010 | 9.84 | 0.00034 | 31.64 | 6.20 | 19.67 | <DL | 91.58 | 6.84 | 63.28 |
| LB041_330_zr16 | 6.9 | 10.7 | 834.46 | 3.88 | 834.46 | 3.88 | 0.1346 | 11.20 | 0.0225 | 10.61 | 0.0012 | 4.88 | 0.00074 | 8.67 | 7.24 | 9.76 | 22.62 | 14.97 | 17.34 | 17.34 |
| LB041_330_zr17 | 7.1 | 12.5 | 886.93 | 13.74 | 886.93 | 13.74 | 0.0624 | 24.29 | 0.0096 | 23.61 | 0.0011 | 5.92 | 0.00041 | 20.52 | 7.23 | 11.83 | 9.70 | 47.21 | 8.24 | 41.04 |
| LB041_330_zr19 | 5.7 | 18.0 | 1140.78 | 9.02 | 1140.78 | 9.02 | <DL | 45.43 | <DL | 44.56 | 0.0009 | 8.98 | <DL | 38.01 | 5.70 | 17.96 | <DL | 89.13 | <DL | 76.03 |
| LB041_330_zr2 | 6.7 | 17.8 | 744.03 | 8.10 | 744.03 | 8.10 | 0.2268 | 15.58 | 0.0429 | 14.31 | 0.0014 | 6.74 | 0.00076 | 13.54 | 8.72 | 13.48 | 42.61 | 28.61 | 15.47 | 27.09 |

Appendix B: Eastern Sunda arc geochronology data - zircon

| Analysis ID | Pref_Age_Ma | 2s% | 238U/206Pb ratio | 1s% | 207Pb/206Pb ratio | 1s% | 207Pb/235U (calc) ratio | 1s% | 206Pb/238U ratio | 1s% | 208Pb/232Th ratio | 1s% | 206Pb/238U Age (Ma) | 2s% | 207Pb/235U (calc) Age (Ma) | 2s% | 208Pb/232Th Age (Ma) | 2s% |
|-----------------|-------------|------|------------------|-------|-------------------|-------|-------------------------|-------|------------------|-------|-------------------|-------|---------------------|-------|----------------------------|-------|----------------------|--------|
| LB04_1_330_zr22 | 7.2 | 12.4 | 889.99 | 5.99 | 0.0486 | 27.49 | 0.0075 | 26.89 | 0.0011 | 5.96 | 0.00030 | 24.34 | 7.25 | 11.91 | 7.61 | 53.78 | 6.05 | 48.67 |
| LB04_1_330_zr23 | 7.1 | 10.4 | 882.14 | 4.89 | 0.0694 | 19.06 | 0.0108 | 18.48 | 0.0011 | 4.89 | 0.00042 | 17.86 | 7.30 | 9.78 | 10.94 | 36.96 | 8.53 | 35.71 |
| LB04_1_330_zr24 | 6.3 | 9.6 | 990.95 | 4.55 | 0.0678 | 17.87 | 0.0094 | 17.35 | 0.0010 | 4.54 | 0.00034 | 14.29 | 6.51 | 9.08 | 9.53 | 34.71 | 6.97 | 28.56 |
| LB04_1_330_zr25 | 7.1 | 9.0 | 921.36 | 3.75 | 0.0366 | 19.47 | 0.0056 | 19.67 | 0.0011 | 4.48 | 0.00029 | 9.26 | 7.06 | 8.97 | 5.65 | 38.98 | 5.93 | 18.52 |
| LB04_1_330_zr26 | 6.9 | 11.1 | 942.26 | 5.59 | 0.0461 | 26.24 | 0.0068 | 25.79 | 0.0011 | 5.56 | 0.00026 | 17.38 | 6.85 | 11.11 | 6.91 | 51.98 | 5.21 | 34.75 |
| LB04_1_330_zr27 | 6.3 | 6.9 | 1022.61 | 2.93 | 0.0480 | 13.29 | 0.0065 | 13.24 | 0.0010 | 3.36 | 0.00033 | 6.02 | 6.31 | 6.72 | 6.62 | 26.48 | 6.69 | 12.05 |
| LB04_1_330_zr28 | 6.5 | 10.2 | 980.36 | 4.87 | 0.0594 | 20.41 | 0.0083 | 19.89 | 0.0010 | 4.87 | 0.00045 | 13.39 | 6.56 | 9.75 | 8.43 | 39.77 | 9.10 | 26.78 |
| LB04_1_330_zr29 | 6.9 | 11.9 | 907.64 | 5.72 | 0.0701 | 21.77 | 0.0106 | 21.09 | 0.0011 | 5.60 | 0.00033 | 19.34 | 7.07 | 11.20 | 10.69 | 42.18 | 6.71 | 38.68 |
| LB04_1_330_zr3 | 6.9 | 15.2 | 944.82 | 7.66 | < DL | 39.96 | < DL | 39.68 | 0.0011 | 7.61 | 0.00052 | 17.50 | 6.85 | 15.23 | < DL | 78.63 | 10.52 | 35.00 |
| LB04_1_330_zr30 | 6.8 | 15.4 | 926.36 | 7.66 | < DL | 40.32 | < DL | 39.68 | 0.0011 | 7.69 | 0.00022 | 26.74 | 6.80 | 15.38 | < DL | 79.36 | 4.46 | 53.49 |
| LB04_1_330_zr31 | 6.6 | 7.4 | 960.60 | 3.36 | 0.0531 | 14.64 | 0.0077 | 14.50 | 0.0010 | 3.56 | 0.00030 | 6.94 | 6.71 | 7.12 | 7.81 | 29.01 | 6.16 | 13.88 |
| LB04_1_330_zr32 | 6.6 | 6.9 | 969.10 | 3.15 | 0.0561 | 13.43 | 0.0080 | 13.15 | 0.0010 | 3.29 | 0.00038 | 7.94 | 6.65 | 6.58 | 8.07 | 26.30 | 7.69 | 15.88 |
| LB04_1_330_zr33 | 6.6 | 7.9 | 972.55 | 3.58 | 0.0482 | 16.41 | 0.0068 | 16.10 | 0.0010 | 3.60 | 0.00027 | 12.32 | 6.61 | 7.60 | 6.90 | 32.19 | 5.41 | 24.64 |
| LB04_1_330_zr34 | 7.1 | 11.3 | 844.36 | 5.14 | 0.1064 | 16.37 | 0.0176 | 15.78 | 0.0012 | 5.13 | 0.00078 | 11.93 | 7.65 | 10.25 | 17.70 | 31.55 | 15.77 | 23.86 |
| LB04_1_330_zr35 | 6.1 | 9.0 | 1010.15 | 4.22 | 0.0817 | 15.12 | 0.0113 | 14.77 | 0.0010 | 4.22 | 0.00041 | 10.01 | 6.42 | 8.44 | 11.42 | 29.54 | 8.38 | 20.01 |
| LB04_1_330_zr4 | 6.8 | 7.2 | 922.42 | 3.39 | 0.0628 | 13.79 | 0.0094 | 13.45 | 0.0011 | 3.40 | 0.00040 | 8.58 | 6.95 | 6.80 | 9.49 | 26.90 | 8.09 | 17.17 |
| LB04_1_330_zr5 | 7.3 | 12.4 | 892.94 | 6.43 | 0.0500 | 27.10 | 0.0077 | 26.48 | 0.0011 | 5.96 | 0.00027 | 24.41 | 7.29 | 11.91 | 7.81 | 52.97 | 5.48 | 48.82 |
| LB04_1_330_zr6 | 6.6 | 14.6 | 952.29 | 6.90 | 0.0693 | 26.95 | 0.0101 | 26.19 | 0.0011 | 6.91 | 0.00025 | 26.71 | 6.77 | 13.81 | 10.22 | 52.39 | 4.99 | 53.42 |
| LB04_1_330_zr7 | 6.9 | 9.6 | 937.25 | 4.78 | 0.0332 | 26.36 | 0.0049 | 26.06 | 0.0011 | 4.78 | 0.00043 | 13.67 | 6.87 | 9.56 | 5.00 | 52.13 | 8.78 | 27.34 |
| LB04_1_330_zr8 | 7.4 | 11.0 | 816.24 | 7.40 | 0.0934 | 17.25 | 0.0156 | 16.56 | 0.0012 | 5.08 | 0.00049 | 13.99 | 7.86 | 10.16 | 15.76 | 33.13 | 9.91 | 27.98 |
| LB04_1_330_zr9 | 8.2 | 21.9 | 807.36 | 9.61 | 0.0665 | 41.16 | 0.0101 | 40.07 | 0.0013 | 10.56 | 0.00047 | 29.27 | 8.29 | 21.13 | 10.17 | 80.13 | 9.43 | 56.54 |
| LB04_2_331_zr1 | 7.3 | 14.5 | 681.85 | 5.49 | 0.2252 | 12.70 | 0.0456 | 11.57 | 0.0015 | 5.52 | 0.00115 | 11.71 | 9.43 | 11.04 | 45.24 | 23.13 | 23.35 | 23.41 |
| LB04_2_331_zr10 | 7.3 | 13.8 | 843.29 | 6.42 | 0.0767 | 23.92 | 0.0125 | 23.09 | 0.0012 | 6.48 | 0.00057 | 17.06 | 7.63 | 12.97 | 12.63 | 46.18 | 11.46 | 34.11 |
| LB04_2_331_zr11 | 8.0 | 12.4 | 761.00 | 5.65 | 0.0632 | 19.26 | 0.0168 | 18.47 | 0.0013 | 5.69 | 0.00097 | 11.85 | 8.46 | 11.37 | 16.91 | 36.94 | 19.70 | 23.71 |
| LB04_2_331_zr12 | 7.9 | 15.1 | 818.07 | 7.55 | < DL | 35.90 | < DL | 35.21 | 0.0012 | 7.55 | 0.00040 | 27.39 | 7.92 | 15.09 | < DL | 70.41 | 8.18 | 54.78 |
| LB04_2_331_zr13 | 7.1 | 34.7 | 697.34 | 13.10 | 0.2303 | 30.13 | 0.0462 | 27.29 | 0.0014 | 13.06 | 0.00171 | 22.87 | 9.32 | 26.13 | 45.89 | 54.56 | 34.65 | 45.73 |
| LB04_2_331_zr14 | 7.2 | 10.8 | 889.14 | 5.40 | < DL | 40.94 | < DL | 40.67 | 0.0011 | 5.41 | 0.00037 | 15.01 | 7.24 | 10.82 | < DL | 81.34 | 7.58 | 30.01 |
| LB04_2_331_zr15 | 7.7 | 12.6 | 757.71 | 5.65 | 0.1169 | 17.32 | 0.0215 | 16.59 | 0.0013 | 5.65 | 0.00067 | 14.79 | 8.48 | 11.31 | 21.56 | 33.19 | 13.50 | 29.58 |
| LB04_2_331_zr16 | 6.9 | 13.9 | 900.34 | 6.53 | 0.0662 | 26.14 | 0.0100 | 25.35 | 0.0011 | 6.56 | 0.00038 | 21.67 | 7.12 | 13.11 | 10.12 | 50.71 | 7.67 | 43.34 |
| LB04_2_331_zr17 | 6.9 | 19.0 | 889.70 | 14.39 | 0.0838 | 31.59 | 0.0132 | 30.46 | 0.0011 | 8.83 | 0.00091 | 16.30 | 7.25 | 17.65 | 13.27 | 60.91 | 18.53 | 36.59 |
| LB04_2_331_zr18 | 6.9 | 9.5 | 908.67 | 4.49 | 0.0667 | 17.78 | 0.0101 | 17.27 | 0.0011 | 4.48 | 0.00042 | 13.97 | 7.09 | 8.97 | 10.23 | 34.54 | 8.45 | 27.93 |
| LB04_2_331_zr19 | 7.1 | 18.6 | 858.59 | 15.87 | 0.0895 | 29.86 | 0.0142 | 28.64 | 0.0012 | 8.59 | 0.00051 | 25.02 | 7.56 | 17.18 | 14.30 | 57.28 | 10.35 | 50.05 |
| LB04_2_331_zr2 | 6.6 | 13.9 | 739.19 | 6.33 | 0.2344 | 11.73 | 0.0439 | 10.66 | 0.0013 | 5.22 | 0.00138 | 11.21 | 8.64 | 10.43 | 43.59 | 21.32 | 27.97 | 22.43 |
| LB04_2_331_zr20 | 7.0 | 13.5 | 893.48 | 7.20 | 0.0752 | 23.69 | 0.0118 | 22.89 | 0.0011 | 6.31 | 0.00061 | 14.31 | 7.23 | 12.62 | 11.87 | 45.77 | 12.31 | 28.63 |
| LB04_2_331_zr21 | 7.5 | 10.6 | 808.72 | 5.23 | 0.0901 | 16.84 | 0.0153 | 16.19 | 0.0012 | 4.88 | 0.00046 | 14.57 | 7.92 | 9.75 | 15.45 | 32.39 | 9.24 | 29.14 |
| LB04_2_331_zr22 | 6.2 | 12.1 | 1004.51 | 5.67 | 0.0733 | 21.54 | 0.0101 | 20.84 | 0.0010 | 5.66 | 0.00032 | 19.32 | 6.42 | 11.33 | 10.18 | 41.69 | 6.48 | 38.64 |
| LB04_2_331_zr23 | 7.8 | 15.5 | 776.02 | 7.01 | 0.1001 | 23.31 | 0.0177 | 22.27 | 0.0013 | 7.07 | 0.00037 | 21.78 | 8.36 | 14.14 | 17.84 | 44.54 | 7.49 | 43.55 |
| LB04_2_331_zr24 | 6.5 | 18.3 | 960.73 | 8.59 | 0.0763 | 32.09 | 0.0111 | 31.05 | 0.0010 | 8.58 | 0.00016 | 35.70 | 6.75 | 17.16 | 11.24 | 62.09 | 3.29 | 71.40 |
| LB04_2_331_zr25 | 7.9 | 16.2 | 662.95 | 6.45 | 0.1918 | 16.13 | 0.0401 | 15.01 | 0.0015 | 6.51 | 0.00147 | 13.88 | 9.69 | 13.03 | 39.92 | 30.01 | 29.87 | 27.77 |
| LB04_2_331_zr26 | 8.0 | 22.6 | 752.74 | 10.38 | 0.0895 | 36.21 | 0.0165 | 34.79 | 0.0013 | 10.44 | 0.00087 | 20.41 | 8.46 | 20.87 | 16.63 | 69.58 | 17.56 | 40.82 |
| LB04_2_331_zr27 | 6.7 | 16.9 | 883.52 | 7.64 | 0.1079 | 24.33 | 0.0166 | 23.16 | 0.0011 | 7.62 | 0.00048 | 20.88 | 7.31 | 15.24 | 16.69 | 46.32 | 9.75 | 41.76 |
| LB04_2_331_zr27 | 9.2 | 20.9 | 605.59 | 8.88 | 0.1554 | 24.13 | 0.0358 | 22.60 | 0.0017 | 8.90 | 0.00320 | 14.30 | 10.65 | 17.79 | 35.73 | 45.20 | 64.66 | 28.60 |
| LB04_2_331_zr28 | 10.1 | 28.2 | 653.84 | 14.28 | < DL | 45.55 | < DL | 43.40 | 0.0016 | 14.08 | < DL | 60.61 | 10.06 | 28.17 | < DL | 86.80 | < DL | 121.22 |
| LB04_2_331_zr29 | 6.9 | 10.7 | 913.33 | 9.94 | 0.0854 | 20.32 | 0.0098 | 19.74 | 0.0011 | 5.07 | 0.00047 | 13.45 | 7.05 | 10.14 | 9.94 | 39.48 | 9.55 | 26.91 |
| LB04_2_331_zr3 | 7.9 | 33.3 | 366.12 | 6.48 | 0.4848 | 11.10 | 0.1873 | 9.48 | 0.0028 | 6.40 | 0.00654 | 8.87 | 17.84 | 12.80 | 174.32 | 18.96 | 132.21 | 17.73 |

Appendix B: Eastern Sunda arc geochronology data - zircon

| Analysis ID | Pref_Age_1Ma | 2s% | 208Pb/238U Age | 2s% | 238U/208Pb ratio | 1s% | 207Pb/206Pb ratio | 1s% | 207Pb/235U (calc)/ratio | 1s% | 208Pb/238U ratio | 1s% | 208Pb/232Th ratio | 1s% | 206Pb/238U Age (Ma) | 2s% | 207Pb/235U (calc) Age (Ma) | 2s% | 208Pb/232Th Age (Ma) | 2s% | |
|----------------|--------------|-------|----------------|--------|------------------|-------|-------------------|-------|-------------------------|-------|------------------|-------|-------------------|-------|---------------------|-------|----------------------------|--------|----------------------|-------|--|
| LB042_331_zr31 | 8.3 | 19.6 | 8.31 | 19.56 | 666.03 | 8.25 | 0.1606 | 22.08 | 0.0337 | 20.66 | 0.0015 | 8.25 | 0.00079 | 18.27 | 9.72 | 16.51 | 33.70 | 41.32 | 15.92 | 36.55 | |
| LB042_331_zr32 | 6.6 | 16.7 | | | 980.68 | 8.39 | < DL | 80.45 | < DL | 80.06 | 0.0010 | 8.36 | 0.00062 | 18.66 | 6.62 | 16.72 | < DL | 160.13 | 12.56 | 37.32 | |
| LB042_331_zr33 | 7.3 | 22.5 | 7.30 | 22.50 | 646.11 | 8.05 | 0.2572 | 17.89 | 0.0553 | 16.00 | 0.0015 | 8.04 | 0.00150 | 15.18 | 9.95 | 16.98 | 54.67 | 31.99 | 30.36 | 30.37 | |
| LB042_331_zr4 | 8.1 | 31.6 | 8.13 | 31.64 | 427.03 | 7.81 | 0.4043 | 14.57 | 0.1314 | 12.38 | 0.0023 | 7.98 | 0.00304 | 13.42 | 14.86 | 15.07 | 125.37 | 24.76 | 61.46 | 26.85 | |
| LB042_331_zr5 | 7.0 | 10.4 | | | 917.81 | 6.06 | 0.0364 | 27.68 | 0.0054 | 27.23 | 0.0011 | 5.22 | 0.00047 | 15.70 | 7.01 | 10.45 | 5.52 | 54.46 | 9.46 | 31.41 | |
| LB042_331_zr6 | 7.0 | 15.2 | 6.95 | 15.16 | 930.66 | 6.62 | 0.0464 | 30.60 | 0.0070 | 29.92 | 0.0011 | 7.35 | 0.00033 | 19.63 | 6.97 | 14.70 | 7.09 | 59.84 | 6.67 | 39.26 | |
| LB042_331_zr7 | 6.7 | 16.9 | | | 646.05 | 5.50 | 0.2960 | 11.55 | 0.0622 | 10.25 | 0.0015 | 5.56 | 0.00188 | 9.84 | 9.86 | 11.11 | 61.32 | 20.50 | 38.14 | 19.68 | |
| LB042_331_zr8 | 8.3 | 15.6 | 8.29 | 15.59 | 672.16 | 8.75 | 0.1586 | 17.75 | 0.0334 | 16.55 | 0.0015 | 6.60 | 0.00111 | 12.22 | 9.66 | 13.20 | 33.34 | 33.10 | 22.39 | 24.44 | |
| LB042_331_zr9 | 8.1 | 11.7 | 8.07 | 11.74 | 780.04 | 7.89 | 0.0610 | 23.12 | 0.0107 | 22.49 | 0.0013 | 5.58 | 0.00042 | 19.33 | 8.22 | 11.16 | 10.81 | 44.99 | 8.50 | 38.66 | |
| LB045_332_zr1 | 20.0 | 11.7 | 20.04 | 11.70 | 286.63 | 4.54 | 0.1356 | 12.28 | 0.0661 | 11.82 | 0.0035 | 5.35 | 0.00186 | 9.33 | 22.58 | 10.70 | 65.03 | 23.64 | 37.72 | 18.65 | |
| LB045_332_zr10 | 20.7 | 6.3 | 20.72 | 6.33 | 311.22 | 2.80 | 0.0468 | 12.94 | 0.0210 | 12.73 | 0.0032 | 3.08 | 0.00106 | 10.58 | 20.73 | 6.15 | 21.05 | 25.47 | 21.39 | 21.16 | |
| LB045_332_zr11 | 21.1 | 7.1 | 21.10 | 7.11 | 303.85 | 3.04 | 0.0520 | 13.39 | 0.0240 | 13.32 | 0.0033 | 3.44 | 0.00128 | 10.42 | 21.25 | 6.89 | 24.05 | 26.63 | 25.85 | 20.83 | |
| LB045_332_zr12 | 21.9 | 5.1 | 21.89 | 5.08 | 283.96 | 2.47 | 0.0468 | 11.12 | 0.0222 | 11.18 | 0.0034 | 2.46 | 0.00115 | 6.77 | 21.90 | 4.92 | 22.26 | 22.36 | 23.29 | 13.53 | |
| LB045_332_zr13 | 21.8 | 5.6 | | | 295.10 | 2.42 | 0.0435 | 11.30 | 0.0206 | 11.37 | 0.0034 | 2.80 | 0.00108 | 4.90 | 21.79 | 5.61 | 20.69 | 22.74 | 21.82 | 9.81 | |
| LB045_332_zr14 | 21.7 | 6.0 | 21.74 | 5.95 | 276.60 | 2.72 | 0.1005 | 8.79 | 0.0509 | 8.51 | 0.0036 | 2.72 | 0.00189 | 7.36 | 23.34 | 5.45 | 50.45 | 17.02 | 38.30 | 14.73 | |
| LB045_332_zr15 | 15.4 | 57.6 | 15.36 | 57.62 | 185.21 | 10.89 | 0.4907 | 18.85 | 0.3689 | 15.69 | 0.0054 | 10.89 | 0.03139 | 12.28 | 34.96 | 21.77 | 318.85 | 31.37 | 626.55 | 24.56 | |
| LB045_332_zr16 | 19.9 | 6.0 | 19.92 | 6.03 | 321.96 | 2.76 | 0.0552 | 11.46 | 0.0242 | 11.46 | 0.0031 | 2.91 | 0.00124 | 8.23 | 20.15 | 5.81 | 24.27 | 22.92 | 25.19 | 16.46 | |
| LB045_332_zr17 | 20.4 | 6.6 | 20.43 | 6.63 | 301.58 | 2.87 | 0.0813 | 10.26 | 0.0375 | 10.20 | 0.0033 | 3.13 | 0.00153 | 6.85 | 37.42 | 6.26 | 37.42 | 20.40 | 31.00 | 13.70 | |
| LB045_332_zr18 | 22.0 | 6.2 | 21.99 | 6.21 | 294.51 | 2.87 | 0.0471 | 13.15 | 0.0223 | 13.12 | 0.0034 | 3.01 | 0.00118 | 7.15 | 22.01 | 6.02 | 22.38 | 26.23 | 23.89 | 14.30 | |
| LB045_332_zr2 | 20.4 | 8.6 | 20.37 | 8.62 | 280.91 | 3.57 | 0.1343 | 9.56 | 0.0666 | 9.35 | 0.0036 | 3.91 | 0.00243 | 7.72 | 22.92 | 7.81 | 65.52 | 16.70 | 48.12 | 15.45 | |
| LB045_332_zr20 | 20.7 | 6.1 | 20.66 | 6.12 | 302.13 | 2.81 | 0.0682 | 10.71 | 0.0313 | 10.69 | 0.0033 | 2.91 | 0.00134 | 8.01 | 31.25 | 5.82 | 31.25 | 21.38 | 27.18 | 16.01 | |
| LB045_332_zr21 | 19.7 | 10.8 | 19.66 | 10.85 | 327.50 | 5.27 | 0.0550 | 22.77 | 0.0235 | 22.32 | 0.0031 | 5.19 | 0.00088 | 18.41 | 19.87 | 10.37 | 23.62 | 44.64 | 17.87 | 36.82 | |
| LB045_332_zr22 | 19.1 | 6.6 | 19.07 | 6.57 | 334.53 | 3.21 | 0.0580 | 13.26 | 0.0244 | 13.16 | 0.0030 | 3.14 | 0.00108 | 8.19 | 19.36 | 6.27 | 24.45 | 26.32 | 21.93 | 16.39 | |
| LB045_332_zr3 | 20.6 | 6.4 | 20.64 | 6.42 | 311.76 | 3.11 | 0.0467 | 14.42 | 0.0207 | 14.17 | 0.0032 | 3.10 | 0.00142 | 12.29 | 20.65 | 6.20 | 20.80 | 28.34 | 28.70 | 24.59 | |
| LB045_332_zr4 | 20.1 | 5.7 | | | 320.66 | 2.74 | 0.0443 | 13.04 | 0.0190 | 12.84 | 0.0031 | 2.83 | 0.00103 | 12.13 | 20.08 | 5.66 | 19.07 | 25.68 | 20.95 | 24.27 | |
| LB045_332_zr6 | 20.2 | 6.2 | 20.18 | 6.24 | 302.74 | 2.74 | 0.0943 | 8.87 | 0.0437 | 8.98 | 0.0033 | 2.91 | 0.00125 | 7.55 | 21.48 | 5.81 | 43.46 | 17.95 | 25.30 | 15.11 | |
| LB045_332_zr7 | 21.7 | 4.1 | | | 282.24 | 3.50 | 0.0463 | 8.87 | 0.0217 | 9.05 | 0.0034 | 2.07 | 0.00107 | 5.67 | 21.70 | 4.14 | 21.84 | 18.11 | 21.74 | 11.33 | |
| LB045_332_zr8 | 21.1 | 9.6 | 21.08 | 9.57 | 321.55 | 2.93 | 0.1097 | 12.40 | 0.0534 | 11.94 | 0.0036 | 4.41 | 0.00136 | 7.31 | 22.90 | 8.82 | 52.84 | 23.88 | 27.52 | 14.61 | |
| LB045_332_zr9 | 19.7 | 6.2 | 19.68 | 6.19 | 321.55 | 2.93 | 0.0606 | 11.81 | 0.0261 | 11.76 | 0.0031 | 2.96 | 0.00109 | 8.10 | 20.03 | 5.91 | 26.15 | 23.52 | 22.15 | 16.19 | |
| ELF-03_zr1 | 2.7 | 25.4 | 2.65 | 25.37 | 1998.06 | 10.18 | 0.1927 | 25.26 | 0.0135 | 23.18 | 0.0005 | 10.18 | 0.00127 | 19.29 | 3.26 | 20.36 | 13.59 | 46.35 | 25.77 | 36.57 | |
| ELF-03_zr10 | 3.0 | 12.6 | | | 1888.30 | 5.46 | 0.1411 | 15.28 | 0.0103 | 14.38 | 0.0005 | 5.46 | 0.00063 | 13.72 | 3.42 | 10.92 | 10.36 | 28.76 | 12.74 | 27.45 | |
| ELF-03_zr11 | 2.8 | 10.3 | 2.76 | 10.26 | 2259.04 | 4.76 | 0.0679 | 18.76 | 0.0041 | 18.21 | 0.0004 | 4.86 | 0.00024 | 14.94 | 2.84 | 9.71 | 4.14 | 36.42 | 4.86 | 29.88 | |
| ELF-03_zr12 | 2.3 | 38.8 | 2.33 | 38.82 | 1899.09 | 10.55 | 0.2847 | 22.46 | 0.0200 | 19.87 | 0.0005 | 15.56 | 0.00104 | 21.81 | 3.34 | 31.11 | 20.15 | 39.74 | 20.98 | 43.62 | |
| ELF-03_zr13 | 2.5 | 13.9 | 2.54 | 13.92 | 2248.05 | 6.07 | 0.1444 | 17.01 | 0.0088 | 15.96 | 0.0005 | 5.99 | 0.00047 | 13.04 | 2.90 | 11.97 | 8.86 | 31.93 | 9.56 | 26.08 | |
| ELF-03_zr14 | 4.8 | 84.7 | 4.78 | 84.71 | 75.94 | 1.53 | 0.7963 | 2.06 | 1.4565 | 3.11 | 0.0132 | 1.56 | 0.07802 | 2.68 | 84.44 | 3.12 | 912.55 | 6.22 | 1522.84 | 5.35 | |
| ELF-03_zr15 | 2.7 | 27.5 | 2.65 | 27.50 | 1837.30 | 13.76 | 0.2280 | 23.79 | 0.0167 | 21.51 | 0.0005 | 10.46 | 0.00128 | 18.69 | 3.44 | 20.91 | 16.80 | 43.03 | 25.85 | 37.38 | |
| ELF-03_zr16 | 2.6 | 11.1 | | | 2379.16 | 5.23 | 0.0567 | 22.36 | 0.0033 | 21.80 | 0.0004 | 5.30 | 0.00023 | 17.21 | 2.68 | 10.59 | 3.35 | 43.60 | 4.58 | 34.41 | |
| ELF-03_zr17 | 2.6 | 17.4 | | | 2473.53 | 8.77 | < DL | 37.14 | < DL | 36.15 | 0.0004 | 8.68 | 0.00036 | 26.78 | 2.63 | 17.37 | 2.63 | 72.29 | 7.31 | 53.55 | |
| ELF-03_zr18 | 2.7 | 46.5 | 2.73 | 46.52 | 546.52 | 4.01 | 0.6540 | 6.27 | 0.1666 | 5.53 | 0.0018 | 4.19 | 0.00735 | 5.18 | 11.84 | 8.37 | 156.43 | 11.06 | 148.42 | 10.36 | |
| ELF-03_zr19 | 2.9 | 34.8 | 2.86 | 34.83 | 1737.89 | 13.32 | 0.2161 | 31.74 | 0.0166 | 28.82 | 0.0006 | 13.44 | 0.00205 | 22.90 | 3.65 | 26.89 | 16.74 | 57.64 | 41.51 | 45.80 | |
| ELF-03_zr2 | 3.2 | 22.8 | | | 2046.46 | 11.59 | < DL | 41.54 | < DL | 40.04 | 0.0005 | 11.38 | 0.00177 | 17.16 | 3.21 | 22.76 | < DL | 80.07 | 35.81 | 34.32 | |
| ELF-03_zr20 | 2.1 | 16.9 | 2.12 | 16.94 | 2675.35 | 7.32 | 0.1423 | 20.68 | 0.0072 | 19.40 | 0.0004 | 7.33 | 0.00036 | 21.17 | 2.41 | 14.85 | 7.30 | 38.79 | 7.36 | 42.35 | |
| ELF-03_zr21 | 1.8 | 117.7 | 1.81 | 117.65 | 589.26 | 6.86 | 0.7065 | 10.67 | 0.1672 | 8.30 | 0.0017 | 6.90 | 0.01243 | 8.47 | 11.03 | 13.79 | 156.94 | 16.60 | 250.37 | 16.95 | |
| ELF-03_zr22 | 2.9 | 20.8 | 2.87 | 20.82 | 1383.38 | 6.04 | 0.3478 | 11.85 | 0.0349 | 10.30 | 0.0007 | 6.05 | 0.00192 | 10.24 | 4.65 | 12.10 | 34.84 | 20.61 | 38.85 | 20.48 | |
| ELF-03_zr3 | 2.9 | 15.5 | 2.94 | 15.54 | 2131.56 | 7.32 | 0.0704 | 28.37 | 0.0046 | 27.54 | 0.0005 | 7.32 | 0.00028 | 24.58 | 3.04 | 14.63 | 4.66 | 55.08 | 5.70 | 49.16 | |

Appendix B: Eastern Sunda arc geochronology data - zircon

| Analysis ID | Pref_Age_Ma | 2s% | 206Pb/238U Age | 2s% | 238U/206Pb ratio | 1s% | 207Pb/206Pb ratio | 1s% | 207Pb/235U (calc) ratio | 1s% | 206Pb/238U ratio | 1s% | 208Pb/232Th ratio | 1s% | 206Pb/238U Age (Ma) | 2s% | 207Pb/235U (calc) Age (Ma) | 2s% | 208Pb/232Th Age (Ma) | 2s% |
|---------------|-------------|------|----------------|-----|------------------|-------|-------------------|-------|-------------------------|-------|------------------|-------|-------------------|--------|---------------------|-------|----------------------------|-------|----------------------|--------|
| ELF-01_zirc29 | 3.2 | 14.5 | | | 2030.49 | 7.39 | 0.0400 | 26.69 | < DL | 25.66 | 0.0005 | 7.27 | 0.00082 | 17.48 | 3.24 | 14.54 | < DL | 51.32 | 16.52 | 34.96 |
| ELF-01_zirc3 | 2.6 | 7.1 | | | 2474.79 | 5.97 | 0.0356 | 18.91 | 0.0020 | 18.59 | 0.0004 | 3.55 | 0.00016 | 8.06 | 2.60 | 7.10 | 2.60 | 37.18 | 3.16 | 16.11 |
| ELF-01_zirc4 | 2.8 | 12.9 | | | 2304.50 | 5.97 | 0.0512 | 27.02 | 0.0029 | 26.36 | 0.0004 | 6.19 | 0.00013 | 12.05 | 2.81 | 12.37 | 2.99 | 52.72 | 2.60 | 24.10 |
| ELF-01_zirc5 | 2.6 | 6.2 | | | 2358.53 | 2.68 | 0.1004 | 8.73 | 0.0036 | 8.34 | 0.0004 | 2.88 | 0.00018 | 7.18 | 2.74 | 5.76 | 5.65 | 16.69 | 3.60 | 14.36 |
| ELF-01_zirc6 | 2.5 | 16.3 | | | 2569.39 | 7.91 | 0.0400 | 43.06 | < DL | 42.34 | 0.0004 | 8.15 | 0.00014 | 20.83 | 2.51 | 16.29 | < DL | 84.67 | 2.88 | 41.67 |
| ELF-01_zirc7 | 2.8 | 12.9 | | | 628.53 | 1.96 | 0.6239 | 1.72 | 0.1296 | 2.47 | 0.0016 | 2.02 | 0.00037 | 4.03 | 10.30 | 4.05 | 123.72 | 4.94 | 47.92 | 8.07 |
| ELF-01_zirc8 | 2.5 | 8.2 | | | 2300.96 | 3.20 | 0.1175 | 9.55 | 0.0070 | 9.14 | 0.0004 | 3.81 | 0.00032 | 7.67 | 2.76 | 7.63 | 7.08 | 18.28 | 6.55 | 15.34 |
| ELF-01_zirc9 | 2.7 | 12.3 | | | 2397.34 | 8.96 | 0.0400 | 42.66 | < DL | 42.24 | 0.0004 | 6.15 | 0.00024 | 17.37 | 2.70 | 12.29 | < DL | 84.48 | 4.78 | 34.73 |
| ELF-02_zirc1 | 2.7 | 10.9 | | | 2291.31 | 4.64 | 0.0708 | 15.32 | 0.0411 | 14.87 | 0.0004 | 5.24 | 0.00019 | 8.55 | 2.82 | 10.48 | 4.44 | 29.75 | 3.87 | 17.10 |
| ELF-02_zirc10 | 2.8 | 5.8 | | | 1283.08 | 5.78 | 0.3886 | 2.34 | 0.0411 | 2.40 | 0.0008 | 1.66 | 0.00105 | 2.72 | 5.03 | 3.32 | 40.92 | 4.80 | 21.28 | 5.45 |
| ELF-02_zirc11 | 2.9 | 13.4 | | | 2232.05 | 6.69 | 0.0400 | 46.17 | < DL | 45.68 | 0.0004 | 6.71 | < DL | 24.33 | 2.87 | 13.42 | < DL | 91.37 | < DL | 48.66 |
| ELF-02_zirc12 | 2.8 | 11.3 | | | 2342.34 | 6.76 | 0.0400 | 30.96 | < DL | 30.53 | 0.0004 | 5.63 | < DL | 31.64 | 2.76 | 11.25 | < DL | 61.07 | < DL | 63.28 |
| ELF-02_zirc13 | 7.7 | 5.6 | | | 839.35 | 2.69 | 0.0482 | 12.18 | 0.0080 | 11.99 | 0.0012 | 2.69 | 0.00042 | 8.44 | 7.72 | 5.38 | 8.11 | 23.97 | 8.47 | 16.88 |
| ELF-02_zirc14 | 1.6 | 83.4 | | | 1504.30 | 12.40 | 0.5484 | 20.83 | 0.0513 | 16.80 | 0.0007 | 12.43 | 0.00289 | 14.21 | 4.28 | 24.87 | 50.78 | 33.60 | 58.48 | 28.42 |
| ELF-02_zirc15 | 2.7 | 10.2 | | | 2336.49 | 5.82 | 0.0400 | 20.62 | < DL | 20.00 | 0.0004 | 5.09 | 0.00012 | 19.22 | 2.75 | 10.18 | < DL | 40.00 | 2.39 | 36.44 |
| ELF-02_zirc16 | 24.7 | 8.2 | | | 241.71 | 3.21 | 0.1020 | 12.87 | 0.0583 | 10.49 | 0.0041 | 3.72 | 0.00283 | 9.09 | 26.57 | 7.43 | 57.58 | 20.98 | 57.23 | 18.17 |
| ELF-02_zirc17 | 3.4 | 12.5 | | | 1746.31 | 4.96 | 0.1063 | 15.96 | 0.0086 | 15.19 | 0.0006 | 5.78 | 0.00020 | 10.58 | 3.70 | 11.56 | 8.65 | 30.38 | 4.08 | 21.17 |
| ELF-02_zirc18 | 2.8 | 10.3 | | | 1898.10 | 4.04 | 0.1873 | 10.41 | 0.0134 | 9.58 | 0.0005 | 4.17 | 0.00041 | 10.29 | 3.41 | 8.34 | 13.55 | 19.16 | 8.38 | 20.57 |
| ELF-02_zirc19 | 2.9 | 15.0 | | | 2243.27 | 7.52 | 0.0400 | 33.04 | < DL | 32.18 | 0.0004 | 7.52 | < DL | 22.54 | 2.88 | 15.03 | < DL | 64.36 | < DL | 46.08 |
| ELF-02_zirc2 | 2.2 | 47.2 | | | 842.52 | 5.14 | 0.6129 | 8.31 | 0.0982 | 6.57 | 0.0012 | 5.14 | 0.00143 | 6.30 | 7.65 | 10.28 | 96.07 | 13.14 | 28.94 | 12.60 |
| ELF-02_zirc20 | 2.3 | 71.7 | | | 852.40 | 5.96 | 0.5983 | 13.96 | 0.0975 | 9.39 | 0.0012 | 6.62 | 0.00050 | 7.52 | 7.60 | 13.23 | 94.45 | 18.77 | 10.21 | 15.04 |
| ELF-02_zirc21 | 2.3 | 27.0 | | | 1701.99 | 7.60 | 0.3587 | 14.80 | 0.0294 | 12.78 | 0.0006 | 7.63 | 0.00089 | 14.58 | 3.79 | 15.27 | 28.45 | 25.55 | 18.10 | 29.16 |
| ELF-02_zirc22 | 1.0 | 92.6 | | | 966.42 | 4.91 | 0.7230 | 7.09 | 0.1066 | 5.59 | 0.0010 | 5.88 | 0.00396 | 7.82 | 6.71 | 11.17 | 102.83 | 11.17 | 80.12 | 15.63 |
| ELF-02_zirc23 | 4.5 | 48.5 | | | 1170.61 | 16.62 | 0.2486 | 22.36 | 0.0336 | 20.02 | 0.0009 | 22.34 | 0.00145 | 18.00 | 6.06 | 44.67 | 33.51 | 40.05 | 29.44 | 36.00 |
| ELF-02_zirc24 | 3.2 | 14.8 | | | 1982.00 | 7.36 | 0.0400 | 28.56 | < DL | 27.60 | 0.0005 | 7.38 | < DL | 111.72 | 3.23 | 14.76 | < DL | 55.20 | < DL | 223.44 |
| ELF-02_zirc25 | 2.7 | 10.4 | | | 2118.04 | 4.04 | 0.1440 | 10.86 | 0.0096 | 10.25 | 0.0005 | 4.67 | 0.00027 | 8.29 | 3.06 | 9.34 | 9.66 | 20.51 | 5.50 | 16.59 |
| ELF-02_zirc26 | 2.7 | 11.8 | | | 2363.46 | 5.69 | 0.0400 | 23.93 | < DL | 23.26 | 0.0004 | 5.91 | 0.00035 | 14.16 | 2.74 | 11.81 | < DL | 46.52 | 7.12 | 28.31 |
| ELF-02_zirc27 | 2.8 | 13.2 | | | 2297.30 | 6.61 | 0.0400 | 46.14 | < DL | 45.69 | 0.0004 | 6.59 | < DL | 31.36 | 2.82 | 13.19 | < DL | 91.38 | < DL | 62.73 |
| ELF-02_zirc28 | 2.4 | 14.3 | | | 2700.14 | 7.13 | 0.0400 | 36.00 | < DL | 35.32 | 0.0004 | 7.15 | < DL | 19.27 | 2.37 | 14.30 | < DL | 70.64 | < DL | 38.53 |
| ELF-02_zirc29 | 2.6 | 20.2 | | | 1573.53 | 11.42 | 0.3284 | 12.31 | 0.0285 | 10.70 | 0.0006 | 6.18 | 0.00120 | 10.02 | 4.09 | 12.36 | 28.49 | 21.40 | 24.38 | 20.03 |
| ELF-02_zirc3 | 2.6 | 12.2 | | | 2408.01 | 5.83 | 0.0849 | 20.08 | 0.0049 | 19.33 | 0.0004 | 5.67 | 0.00026 | 17.69 | 2.72 | 11.33 | 5.00 | 38.65 | 5.29 | 35.38 |
| ELF-02_zirc30 | 3.2 | 14.5 | | | 2027.13 | 7.22 | 0.0400 | 23.57 | < DL | 22.45 | 0.0005 | 7.23 | 0.00037 | 19.44 | 3.17 | 14.47 | < DL | 44.90 | 7.51 | 38.89 |
| ELF-02_zirc31 | 2.3 | 26.1 | | | 415.62 | 1.59 | 0.7208 | 1.71 | 0.2338 | 2.16 | 0.0024 | 1.62 | 0.00414 | 2.53 | 15.50 | 3.24 | 213.33 | 4.32 | 83.79 | 5.07 |
| ELF-02_zirc32 | 2.9 | 15.0 | | | 2284.82 | 31.37 | 0.0400 | 28.65 | < DL | 27.90 | 0.0004 | 7.50 | 0.00033 | 20.36 | 2.86 | 15.01 | < DL | 55.79 | 6.65 | 40.71 |
| ELF-02_zirc33 | 2.5 | 24.5 | | | 413.53 | 3.05 | 0.7110 | 1.72 | 0.2234 | 4.10 | 0.0024 | 3.31 | 0.00297 | 6.45 | 15.65 | 6.62 | 204.77 | 8.20 | 60.06 | 12.89 |
| ELF-02_zirc34 | 2.8 | 13.6 | | | 2278.68 | 6.79 | 0.0400 | 24.95 | < DL | 24.02 | 0.0004 | 6.79 | < DL | 21.93 | 2.84 | 13.57 | < DL | 48.05 | < DL | 43.87 |
| ELF-02_zirc4 | 2.6 | 8.2 | | | 942.45 | 1.58 | 0.5323 | 1.77 | 0.0741 | 2.77 | 0.0011 | 1.72 | 0.00188 | 2.58 | 6.84 | 3.44 | 72.60 | 5.55 | 38.04 | 5.15 |
| ELF-02_zirc5 | 2.1 | 6.7 | | | 303.05 | 2.88 | 0.0542 | 12.34 | 0.0247 | 12.11 | 0.0003 | 3.27 | 0.00132 | 9.65 | 21.47 | 6.54 | 24.81 | 24.22 | 26.82 | 19.29 |
| ELF-02_zirc6 | 2.9 | 12.0 | | | 2231.38 | 6.00 | 0.0400 | 30.16 | < DL | 29.57 | 0.0004 | 6.02 | < DL | 43.72 | 2.87 | 12.04 | < DL | 59.13 | < DL | 87.44 |
| ELF-02_zirc7 | 3.0 | 9.7 | | | 2169.23 | 4.14 | 0.0481 | 19.17 | 0.0030 | 18.73 | 0.0005 | 4.69 | 0.00015 | 6.56 | 2.97 | 9.37 | 3.02 | 37.47 | 2.98 | 13.12 |
| ELF-02_zirc8 | 2.2 | 15.9 | | | 2949.61 | 7.97 | 0.0400 | 22.51 | < DL | 21.07 | 0.0003 | 7.95 | 0.00073 | 18.18 | 2.20 | 15.91 | < DL | 42.14 | 14.74 | 36.36 |
| ELF-02_zirc9 | 3.0 | 14.4 | | | 2161.49 | 7.20 | 0.0400 | 24.89 | < DL | 23.84 | 0.0005 | 7.22 | < DL | 33.98 | 2.97 | 14.43 | < DL | 47.67 | < DL | 67.96 |
| LB005_zirc1 | 7.5 | 4.1 | | | 859.42 | 2.00 | 0.0519 | 8.45 | 0.0082 | 8.58 | 0.0012 | 1.99 | 0.00036 | 3.50 | 7.53 | 3.97 | 8.31 | 17.15 | 7.01 | 7.01 |
| LB005_zirc10 | 8.1 | 17.3 | | | 439.03 | 3.91 | 0.4024 | 7.19 | 0.1259 | 6.79 | 0.0023 | 5.44 | 0.00078 | 5.47 | 14.81 | 10.88 | 120.38 | 13.59 | 15.83 | 10.94 |
| LB005_zirc11 | 7.6 | 3.6 | | | 845.12 | 1.70 | 0.0503 | 7.32 | 0.0081 | 7.53 | 0.0012 | 1.72 | 0.00037 | 3.33 | 7.66 | 3.44 | 8.23 | 15.06 | 7.60 | 6.66 |

Appendix B: Eastern Sunda arc geochronology data - zircon

| Analysis ID | Pref_Age_Ma | 2s% | 206Pb/238U Age | 2s% | 238U/206Pb ratio | 1s% | 207Pb/206Pb ratio | 1s% | 207Pb/235U (calc) ratio | 1s% | 206Pb/238U ratio | 1s% | 208Pb/232Th ratio | 1s% | 206Pb/238U Age (Ma) | 2s% | 207Pb/235U (calc) Age (Ma) | 2s% | 208Pb/232Th Age (Ma) | 2s% |
|--------------|-------------|------|----------------|-------|------------------|-------|-------------------|-------|-------------------------|-------|------------------|-------|-------------------|-------|---------------------|-------|----------------------------|--------|----------------------|--------|
| LB005_zirc12 | 5.6 | 87.4 | 5.88 | 87.41 | 80.92 | 2.01 | 0.7853 | 2.85 | 1.3356 | 3.21 | 0.0124 | 2.07 | 0.01082 | 3.85 | 79.51 | 4.14 | 861.30 | 6.42 | 212.04 | 7.70 |
| LB005_zirc13 | 7.7 | 6.1 | 7.72 | 6.05 | 837.39 | 2.88 | 0.0500 | 12.85 | 0.0081 | 12.85 | 0.0012 | 2.91 | 0.00038 | 6.71 | 7.76 | 5.83 | 8.23 | 25.71 | 7.71 | 13.42 |
| LB005_zirc14 | 8.1 | 12.1 | 8.08 | 12.13 | 229.13 | 2.52 | 0.6090 | 1.63 | 0.3672 | 3.27 | 0.0043 | 2.88 | 0.00424 | 3.68 | 27.94 | 5.77 | 317.56 | 6.54 | 85.74 | 7.35 |
| LB005_zirc15 | 7.6 | 3.1 | 841.52 | 1.53 | 0.0446 | 6.82 | 0.0073 | 7.08 | 0.0073 | 7.08 | 0.0012 | 1.55 | 0.00040 | 3.55 | 7.65 | 3.11 | 7.36 | 14.16 | 8.10 | 7.10 |
| LB005_zirc16 | 7.2 | 13.5 | 7.21 | 13.50 | 781.36 | 5.78 | 0.1552 | 15.49 | 0.0273 | 14.59 | 0.0013 | 5.75 | 0.00050 | 12.11 | 8.36 | 11.51 | 27.37 | 29.19 | 10.04 | 24.23 |
| LB005_zirc17 | 7.6 | 7.1 | 853.33 | 3.10 | 0.0441 | 14.57 | 0.0071 | 14.45 | 0.0071 | 14.45 | 0.0012 | 3.56 | 0.00039 | 7.13 | 7.59 | 7.12 | 7.18 | 28.91 | 7.86 | 14.26 |
| LB005_zirc18 | 7.9 | 4.1 | 7.86 | 4.14 | 818.99 | 1.68 | 0.0487 | 8.90 | 0.0078 | 9.10 | 0.0012 | 2.00 | 0.00037 | 2.41 | 7.89 | 4.00 | 7.89 | 18.21 | 7.54 | 4.82 |
| LB005_zirc19 | 7.1 | 16.9 | 7.13 | 16.87 | 561.07 | 3.63 | 0.3475 | 10.57 | 0.0070 | 8.48 | 0.0018 | 3.77 | 0.00090 | 6.61 | 11.52 | 7.53 | 84.74 | 16.96 | 18.24 | 13.23 |
| LB005_zirc20 | 8.3 | 8.2 | 8.32 | 8.18 | 328.49 | 2.11 | 0.5014 | 2.04 | 0.1986 | 3.08 | 0.0030 | 2.13 | 0.00247 | 3.05 | 19.59 | 4.25 | 184.82 | 6.15 | 49.96 | 6.11 |
| LB005_zirc21 | 7.4 | 7.7 | 7.37 | 7.74 | 877.02 | 3.44 | 0.0469 | 16.10 | 0.0075 | 15.79 | 0.0011 | 3.75 | 0.00042 | 8.89 | 7.37 | 7.51 | 7.61 | 31.58 | 8.42 | 17.78 |
| LB005_zirc22 | 7.5 | 10.3 | 7.47 | 10.33 | 787.88 | 4.13 | 0.1145 | 12.45 | 0.0198 | 12.02 | 0.0013 | 4.77 | 0.00052 | 8.01 | 8.18 | 9.54 | 19.94 | 24.04 | 16.01 | 16.01 |
| LB005_zirc23 | 7.3 | 5.5 | 7.35 | 5.54 | 876.11 | 2.49 | 0.0480 | 11.30 | 0.0075 | 11.29 | 0.0011 | 2.68 | 0.00040 | 5.47 | 7.36 | 5.37 | 7.61 | 22.58 | 8.18 | 10.94 |
| LB005_zirc24 | 7.8 | 15.4 | 7.80 | 15.37 | 804.61 | 5.63 | 0.0746 | 21.03 | 0.0128 | 20.42 | 0.0013 | 7.40 | 0.00038 | 13.49 | 8.09 | 14.81 | 12.93 | 40.83 | 7.77 | 26.97 |
| LB005_zirc25 | 7.9 | 12.9 | 7.90 | 12.86 | 277.03 | 2.02 | 0.5899 | 2.52 | 0.2844 | 2.60 | 0.0036 | 2.52 | 0.00335 | 2.67 | 23.35 | 5.04 | 254.11 | 5.20 | 67.77 | 5.34 |
| LB015_zirc1 | 7.5 | 5.3 | 7.52 | 5.29 | 860.76 | 2.18 | 0.0470 | 11.84 | 0.0074 | 11.36 | 0.0012 | 2.55 | 0.00039 | 4.41 | 7.53 | 5.11 | 7.45 | 22.72 | 7.92 | 8.82 |
| LB015_zirc2 | 8.7 | 13.2 | 7.40 | 13.27 | 740.62 | 6.65 | 0.0400 | 29.22 | < DL | 28.57 | 0.0014 | 6.62 | 0.00078 | 15.22 | 8.74 | 13.25 | < DL | 57.14 | 15.79 | 30.44 |
| LB015_zirc3 | 7.7 | 22.5 | 839.86 | 11.24 | 0.0400 | 27.84 | < DL | 25.69 | < DL | 25.69 | 0.0012 | 11.27 | 0.00079 | 24.80 | 7.68 | 22.54 | < DL | 51.38 | 16.08 | 49.60 |
| LB015_zirc4 | 5.4 | 34.8 | 6.12 | 34.75 | 632.14 | 11.41 | 0.4215 | 15.01 | 0.0933 | 12.79 | 0.0016 | 8.24 | 0.00144 | 14.97 | 10.30 | 16.48 | 90.60 | 25.58 | 29.19 | 29.93 |
| LB015_zirc5 | 6.1 | 56.6 | 6.12 | 56.63 | 403.01 | 15.31 | 0.5300 | 15.46 | 0.1763 | 12.69 | 0.0024 | 9.21 | 0.00376 | 13.40 | 15.76 | 18.42 | 164.91 | 25.39 | 76.16 | 26.80 |
| LB015_zirc6 | 9.2 | 16.9 | 9.17 | 16.94 | 422.91 | 4.70 | 0.3652 | 8.62 | 0.1183 | 7.74 | 0.0024 | 5.14 | 0.00285 | 7.07 | 15.36 | 10.29 | 113.54 | 15.48 | 57.76 | 14.14 |
| LB015_zirc7 | 7.6 | 20.2 | 840.51 | 10.14 | 0.0400 | 36.16 | < DL | 34.82 | < DL | 34.82 | 0.0012 | 10.10 | < DL | 94.61 | 7.60 | 20.20 | < DL | 69.63 | < DL | 189.22 |
| LB026_zirc1 | 7.4 | 9.9 | 862.72 | 4.93 | 0.0400 | 22.36 | 0.0400 | 22.36 | < DL | 21.85 | 0.0012 | 4.94 | 0.00050 | 12.51 | 7.44 | 9.87 | < DL | 43.71 | 10.09 | 25.03 |
| LB026_zirc10 | 8.5 | 11.8 | 760.06 | 5.91 | 0.0400 | 27.29 | 0.0400 | 27.29 | < DL | 26.68 | 0.0013 | 5.91 | 0.00073 | 19.53 | 8.46 | 11.83 | < DL | 53.36 | 14.80 | 39.06 |
| LB026_zirc11 | 7.2 | 17.3 | 903.41 | 8.65 | 0.0400 | 79.28 | 0.0400 | 79.28 | < DL | 78.82 | 0.0011 | 8.63 | < DL | 40.67 | 7.18 | 17.26 | < DL | 157.64 | < DL | 81.33 |
| LB026_zirc12 | 8.1 | 15.5 | 796.52 | 7.74 | 0.0400 | 78.50 | 0.0400 | 78.50 | < DL | 78.16 | 0.0013 | 7.73 | < DL | 66.70 | 8.14 | 15.46 | < DL | 156.31 | < DL | 133.40 |
| LB026_zirc13 | 6.9 | 27.1 | 917.04 | 13.37 | 0.0400 | 49.74 | 0.0400 | 49.74 | < DL | 47.92 | 0.0011 | 13.55 | < DL | 20.83 | 6.94 | 27.10 | < DL | 95.84 | < DL | 41.67 |
| LB026_zirc14 | 8.1 | 16.1 | 800.13 | 8.08 | 0.0400 | 41.83 | 0.0400 | 41.83 | < DL | 41.12 | 0.0013 | 8.06 | < DL | 25.18 | 8.10 | 16.11 | < DL | 82.23 | < DL | 50.36 |
| LB026_zirc15 | 7.9 | 11.3 | 810.15 | 4.77 | 0.0477 | 22.14 | 0.0477 | 22.14 | 0.0081 | 21.67 | 0.0012 | 5.48 | 0.00051 | 13.74 | 7.93 | 10.96 | 8.20 | 43.34 | 10.36 | 27.49 |
| LB026_zirc16 | 11.6 | 17.9 | 372.03 | 5.22 | 0.3120 | 10.59 | 0.1158 | 9.33 | 0.1158 | 9.33 | 0.0027 | 6.30 | 0.00485 | 7.81 | 17.39 | 12.61 | 111.26 | 18.66 | 98.13 | 15.63 |
| LB026_zirc17 | 8.1 | 14.5 | 798.01 | 7.28 | 0.0400 | 25.87 | 0.0400 | 25.87 | < DL | 24.95 | 0.0013 | 7.26 | < DL | 31.50 | 8.12 | 14.51 | < DL | 49.91 | < DL | 63.00 |
| LB026_zirc18 | 7.2 | 10.7 | 868.50 | 4.33 | 0.0645 | 17.28 | 0.0645 | 17.28 | 0.0102 | 16.91 | 0.0011 | 5.16 | 0.00034 | 9.57 | 7.41 | 10.33 | 10.33 | 33.82 | 6.82 | 19.14 |
| LB026_zirc19 | 7.7 | 13.2 | 841.25 | 6.63 | 0.0400 | 26.26 | 0.0400 | 26.26 | < DL | 25.53 | 0.0012 | 6.61 | < DL | 21.18 | 7.69 | 13.23 | < DL | 51.06 | < DL | 42.35 |
| LB026_zirc20 | 8.4 | 10.3 | 767.55 | 5.60 | 0.0400 | 29.06 | 0.0400 | 29.06 | < DL | 28.75 | 0.0013 | 5.17 | 0.00049 | 13.19 | 8.37 | 10.34 | < DL | 57.49 | 9.97 | 26.39 |
| LB026_zirc21 | 7.9 | 12.8 | 664.05 | 7.94 | 0.0400 | 48.41 | 0.0400 | 48.41 | < DL | 47.82 | 0.0015 | 7.96 | < DL | 23.83 | 9.65 | 15.93 | < DL | 95.63 | < DL | 47.86 |
| LB026_zirc22 | 8.8 | 14.6 | 728.51 | 7.29 | 0.0400 | 25.49 | 0.0400 | 25.49 | < DL | 41.73 | 0.0012 | 6.41 | < DL | 22.13 | 7.89 | 12.82 | < DL | 83.46 | < DL | 44.26 |
| LB026_zirc23 | 11.1 | 18.9 | 585.20 | 9.48 | 0.0400 | 78.65 | 0.0400 | 78.65 | < DL | 78.12 | 0.0014 | 7.32 | < DL | 57.69 | 8.76 | 14.64 | < DL | 49.09 | < DL | 115.37 |
| LB026_zirc24 | 12.2 | 20.7 | 535.21 | 10.42 | 0.0400 | 33.52 | 0.0400 | 33.52 | < DL | 31.97 | 0.0019 | 10.36 | 0.00204 | 18.47 | 11.08 | 18.91 | < DL | 156.24 | 41.31 | 36.95 |
| LB026_zirc25 | 8.4 | 19.9 | 768.45 | 10.41 | 0.0400 | 29.23 | 0.0400 | 29.23 | < DL | 27.53 | 0.0013 | 9.95 | 0.00151 | 19.32 | 8.36 | 19.90 | < DL | 63.95 | < DL | 64.37 |
| LB026_zirc3 | 8.6 | 19.7 | 753.44 | 13.03 | 0.0400 | 42.23 | 0.0400 | 42.23 | < DL | 41.09 | 0.0013 | 9.87 | < DL | 31.42 | 8.56 | 19.74 | < DL | 82.18 | < DL | 62.84 |
| LB026_zirc4 | 8.2 | 14.8 | 777.83 | 7.35 | 0.0400 | 42.50 | 0.0400 | 42.50 | < DL | 41.89 | 0.0013 | 7.38 | < DL | 36.77 | 8.21 | 14.76 | < DL | 83.77 | < DL | 77.54 |
| LB026_zirc5 | 9.3 | 15.7 | 691.07 | 7.75 | 0.0400 | 26.05 | 0.0400 | 26.05 | < DL | 24.89 | 0.0014 | 7.84 | 0.00086 | 22.72 | 9.31 | 15.68 | < DL | 49.78 | 17.37 | 45.43 |
| LB026_zirc6 | 9.2 | 12.3 | 702.65 | 6.17 | 0.0400 | 22.50 | 0.0400 | 22.50 | < DL | 21.78 | 0.0014 | 6.17 | < DL | 43.11 | 9.17 | 12.35 | < DL | 43.56 | < DL | 86.23 |
| LB026_zirc7 | 9.8 | 10.3 | 660.44 | 5.12 | 0.0400 | 43.51 | 0.0400 | 43.51 | < DL | 43.24 | 0.0015 | 5.13 | < DL | 25.44 | 9.83 | 10.26 | < DL | 86.47 | < DL | 50.88 |

Appendix B: Eastern Sunda arc geochronology data - zircon

| Analysis ID | Pref_Age_Ma | 2s% | 208Pb/238U Age (Ma) | 2s% | 238U/208Pb ratio | 1s% | 207Pb/208Pb ratio | 1s% | 207Pb/235U (calc) ratio | 1s% | 206Pb/238U ratio | 1s% | 208Pb/232Th ratio | 1s% | 206Pb/238U Age (Ma) | 2s% | 207Pb/235U (calc) Age (Ma) | 2s% | 208Pb/232Th Age (Ma) | 2s% |
|---------------|-------------|-------|---------------------|-----|------------------|-------|-------------------|--------|-------------------------|--------|------------------|-------|-------------------|-------|---------------------|-------|----------------------------|--------|----------------------|-------|
| LB026_zirc8 | 10.9 | 22.6 | | | 609.90 | 11.45 | 0.0400 | 40.55 | <DL | 39.02 | 0.0017 | 11.32 | 0.00187 | 19.83 | 10.89 | 22.85 | <DL | 78.03 | 37.94 | 39.66 |
| LB026_zirc9 | 7.8 | 11.7 | | | 824.68 | 5.82 | 0.0400 | 27.84 | <DL | 27.26 | 0.0012 | 5.83 | 0.00070 | 17.82 | 7.85 | 11.66 | <DL | 54.53 | 14.15 | 35.63 |
| NAF-01_zirc1 | 6.1 | 13.2 | | | 1068.39 | 6.08 | 0.0400 | 31.84 | <DL | 31.38 | 0.0010 | 6.58 | 0.00039 | 13.48 | 6.12 | 13.17 | <DL | 62.76 | 7.94 | 26.95 |
| NAF-01_zirc10 | 5.3 | 14.5 | | | 1203.42 | 7.28 | 0.0400 | 32.90 | <DL | 32.13 | 0.0008 | 7.24 | 0.00037 | 19.33 | 5.33 | 14.48 | <DL | 64.26 | 7.45 | 38.66 |
| NAF-01_zirc11 | 5.5 | 4.2 | | | 1148.51 | 2.04 | 0.0618 | 8.00 | 0.0073 | 7.84 | 0.0009 | 2.02 | 0.00031 | 5.14 | 5.62 | 4.05 | 7.39 | 15.68 | 6.20 | 10.28 |
| NAF-01_zirc12 | 5.6 | 6.1 | | | 1054.92 | 2.57 | 0.1229 | 9.52 | 0.0157 | 9.89 | 0.0010 | 2.54 | 0.00048 | 7.02 | 6.15 | 5.08 | 15.80 | 19.77 | 14.05 | 9.67 |
| NAF-01_zirc13 | 6.3 | 11.7 | | | 1055.48 | 6.21 | 0.0400 | 29.69 | <DL | 29.17 | 0.0010 | 5.85 | 0.00031 | 15.02 | 6.25 | 11.69 | <DL | 58.34 | 6.22 | 30.05 |
| NAF-01_zirc15 | 6.1 | 6.6 | | | 1064.80 | 3.03 | 0.0376 | 15.40 | 0.0049 | 15.17 | 0.0009 | 3.31 | 0.00029 | 14.67 | 6.09 | 6.62 | 4.95 | 30.34 | 5.94 | 29.34 |
| NAF-01_zirc16 | 5.0 | 5.9 | | | 1228.91 | 2.55 | 0.0893 | 8.63 | 0.0100 | 8.60 | 0.0008 | 2.77 | 0.00055 | 6.53 | 5.28 | 5.54 | 10.10 | 17.20 | 11.23 | 13.06 |
| NAF-01_zirc17 | 7.0 | 20.2 | | | 931.93 | 10.14 | 0.0400 | 28.93 | <DL | 27.15 | 0.0011 | 10.09 | 0.00079 | 22.47 | 7.00 | 20.18 | <DL | 54.30 | 16.06 | 44.93 |
| NAF-01_zirc18 | 8.3 | 15.7 | | | 779.79 | 7.23 | 0.0400 | 27.95 | <DL | 27.11 | 0.0013 | 7.86 | 0.00075 | 15.25 | 8.27 | 15.72 | <DL | 47.64 | 6.26 | 11.40 |
| NAF-01_zirc19 | 5.5 | 6.1 | | | 1098.33 | 2.52 | 0.1065 | 7.90 | 0.0134 | 7.87 | 0.0009 | 2.80 | 0.00042 | 7.19 | 5.91 | 5.60 | 13.55 | 15.75 | 14.38 | 14.38 |
| NAF-01_zirc2 | 6.0 | 33.1 | | | 649.84 | 7.76 | 0.3592 | 17.49 | 0.0763 | 12.91 | 0.0016 | 10.00 | 0.00263 | 11.94 | 10.00 | 19.99 | 74.70 | 25.82 | 53.21 | 23.87 |
| NAF-01_zirc20 | 5.8 | 8.7 | | | 708.08 | 2.46 | 0.3399 | 4.60 | 0.0636 | 5.32 | 0.0014 | 2.90 | 0.00082 | 6.71 | 9.18 | 5.79 | 62.63 | 10.65 | 18.55 | 13.42 |
| NAF-01_zirc21 | 5.3 | 7.2 | | | 1221.25 | 3.60 | 0.0316 | 20.09 | 0.0035 | 19.91 | 0.0008 | 3.59 | 0.00050 | 11.54 | 5.31 | 7.18 | 3.56 | 39.83 | 10.15 | 23.08 |
| NAF-01_zirc22 | 6.5 | 25.7 | | | 583.88 | 6.97 | 0.3704 | 12.83 | 0.0852 | 11.20 | 0.0017 | 7.74 | 0.00213 | 10.60 | 11.03 | 15.49 | 83.00 | 22.39 | 43.15 | 21.19 |
| NAF-01_zirc23 | 5.7 | 15.0 | | | 1136.64 | 7.52 | 0.0400 | 25.59 | <DL | 24.51 | 0.0009 | 7.51 | <DL | 34.82 | 5.69 | 15.02 | <DL | 49.02 | <DL | 49.64 |
| NAF-01_zirc24 | 5.9 | 13.7 | | | 1082.47 | 6.82 | 0.0400 | 24.76 | <DL | 23.85 | 0.0009 | 6.83 | <DL | 20.06 | 5.93 | 13.67 | <DL | 47.69 | <DL | 60.13 |
| NAF-01_zirc25 | 5.7 | 13.6 | | | 1134.75 | 6.79 | 0.0400 | 35.94 | <DL | 35.38 | 0.0009 | 6.80 | 0.00049 | 14.51 | 5.67 | 13.61 | <DL | 70.76 | 9.88 | 29.02 |
| NAF-01_zirc26 | 6.6 | 8.6 | | | 971.04 | 4.32 | 0.0400 | 19.79 | <DL | 19.36 | 0.0010 | 4.32 | 0.00030 | 14.42 | 6.62 | 8.63 | <DL | 38.73 | 5.98 | 28.84 |
| NAF-01_zirc27 | 7.1 | 14.8 | | | 854.72 | 5.20 | 0.0889 | 18.48 | 0.0143 | 17.86 | 0.0012 | 7.05 | 0.00056 | 17.03 | 7.51 | 14.09 | 14.40 | 35.73 | 11.38 | 34.06 |
| NAF-01_zirc28 | 6.1 | 11.6 | | | 1059.94 | 5.50 | 0.0627 | 24.55 | 0.0070 | 24.04 | 0.0010 | 5.26 | 0.00051 | 17.62 | 6.20 | 11.12 | 7.11 | 48.08 | 10.33 | 35.24 |
| NAF-01_zirc29 | 5.8 | 16.5 | | | 1122.23 | 7.24 | 0.0400 | 28.13 | <DL | 27.30 | 0.0009 | 8.63 | 0.00045 | 14.95 | 5.79 | 16.46 | <DL | 54.59 | 9.14 | 29.91 |
| NAF-01_zirc3 | 6.1 | 15.1 | | | 1018.80 | 6.38 | 0.0885 | 25.58 | 0.0091 | 24.77 | 0.0010 | 7.18 | 0.00059 | 13.07 | 6.25 | 14.35 | 9.18 | 49.55 | 12.00 | 26.13 |
| NAF-01_zirc30 | 5.7 | 8.4 | | | 1133.60 | 4.04 | 0.0487 | 18.44 | 0.0059 | 18.05 | 0.0009 | 4.03 | 0.00018 | 16.33 | 5.69 | 8.06 | 5.99 | 36.10 | 3.71 | 32.67 |
| NAF-01_zirc31 | 5.5 | 18.9 | | | 445.08 | 3.50 | 0.5373 | 4.70 | 0.1635 | 4.79 | 0.0023 | 3.75 | 0.00223 | 4.92 | 14.57 | 7.50 | 153.76 | 9.58 | 45.13 | 9.83 |
| NAF-01_zirc32 | 5.6 | 10.2 | | | 950.51 | 4.10 | 0.1882 | 10.27 | 0.0273 | 9.51 | 0.0011 | 4.13 | 0.00058 | 8.51 | 6.78 | 8.27 | 27.35 | 19.02 | 11.76 | 17.02 |
| NAF-01_zirc33 | 5.5 | 4.5 | | | 974.02 | 1.51 | 0.1769 | 5.52 | 0.0238 | 5.69 | 0.0010 | 1.70 | 0.00093 | 7.02 | 6.63 | 3.41 | 23.91 | 11.39 | 18.87 | 14.03 |
| NAF-01_zirc4 | 5.7 | 11.1 | | | 1131.56 | 4.78 | 0.0454 | 22.63 | 0.0055 | 22.17 | 0.0009 | 5.55 | 0.00032 | 14.47 | 5.70 | 11.09 | 5.57 | 44.35 | 6.53 | 28.94 |
| NAF-01_zirc5 | 5.9 | 8.2 | | | 1083.47 | 3.89 | 0.0506 | 17.43 | 0.0064 | 17.06 | 0.0009 | 3.94 | 0.00031 | 9.00 | 5.98 | 7.89 | 6.51 | 34.12 | 6.38 | 18.00 |
| NAF-01_zirc6 | 5.6 | 7.4 | | | 1151.82 | 3.49 | 0.0462 | 16.25 | 0.0055 | 15.94 | 0.0009 | 3.60 | 0.00032 | 9.12 | 5.63 | 7.19 | 5.62 | 31.88 | 6.56 | 18.23 |
| NAF-01_zirc7 | 5.4 | 8.2 | | | 1183.14 | 3.30 | 0.0489 | 14.91 | 0.0058 | 14.75 | 0.0008 | 3.97 | 0.00032 | 10.33 | 5.46 | 7.94 | 5.83 | 29.50 | 6.52 | 20.66 |
| NAF-01_zirc8 | 5.7 | 16.2 | | | 1131.97 | 8.09 | 0.0400 | 26.42 | <DL | 25.20 | 0.0009 | 8.09 | <DL | 18.22 | 5.70 | 16.19 | <DL | 50.39 | 14.79 | 36.45 |
| NAF-01_zirc9 | 6.3 | 13.2 | | | 1023.45 | 6.25 | 0.0400 | 26.93 | <DL | 26.23 | 0.0010 | 6.60 | 0.00053 | 15.59 | 6.29 | 13.21 | <DL | 52.47 | 10.79 | 31.17 |
| NAF-02_zirc1 | 6.7 | 13.7 | | | 965.31 | 6.84 | 0.0400 | 28.61 | <DL | 27.82 | 0.0010 | 6.83 | 0.00055 | 19.33 | 6.70 | 13.66 | <DL | 55.63 | 11.11 | 38.66 |
| NAF-02_zirc10 | 6.2 | 11.3 | | | 1034.07 | 5.62 | 0.0400 | 134.71 | <DL | 134.62 | 0.0010 | 5.63 | 0.00031 | 15.57 | 6.23 | 11.25 | <DL | 269.23 | 6.22 | 31.15 |
| NAF-02_zirc11 | 4.9 | 30.1 | | | 1377.39 | 15.16 | 0.0400 | 130.58 | <DL | 129.74 | 0.0008 | 15.03 | <DL | 24.75 | 4.88 | 30.05 | <DL | 259.47 | <DL | 49.50 |
| NAF-02_zirc12 | 6.9 | 39.4 | | | 280.70 | 4.63 | 0.5989 | 7.48 | 0.2918 | 6.54 | 0.0035 | 5.01 | 0.00846 | 5.73 | 22.84 | 10.02 | 259.94 | 13.08 | 170.75 | 11.47 |
| NAF-02_zirc13 | 4.4 | 16.6 | | | 1143.11 | 6.41 | 0.2189 | 15.01 | 0.0262 | 13.65 | 0.0009 | 6.39 | 0.00044 | 16.75 | 5.62 | 12.78 | 26.29 | 27.29 | 8.92 | 33.51 |
| NAF-02_zirc14 | 6.5 | 9.4 | | | 985.60 | 6.12 | 0.0400 | 32.37 | <DL | 32.06 | 0.0010 | 4.69 | 0.00030 | 17.51 | 6.53 | 9.39 | <DL | 64.12 | 6.04 | 35.02 |
| NAF-02_zirc15 | 5.7 | 80.3 | | | 271.20 | 9.06 | 0.6524 | 11.05 | 0.3371 | 8.01 | 0.0038 | 8.58 | 0.01284 | 6.18 | 24.18 | 17.17 | 294.95 | 16.03 | 260.51 | 12.36 |
| NAF-02_zirc16 | 5.8 | 12.3 | | | 1108.87 | 6.18 | 0.0400 | 20.72 | <DL | 19.63 | 0.0009 | 6.17 | 0.00042 | 18.16 | 5.85 | 12.94 | <DL | 39.67 | 8.46 | 36.32 |
| NAF-02_zirc17 | 5.9 | 12.6 | | | 1114.93 | 6.35 | 0.0400 | 21.57 | <DL | 20.77 | 0.0009 | 6.30 | 0.00023 | 20.50 | 5.88 | 12.60 | <DL | 41.53 | 4.61 | 41.00 |
| NAF-02_zirc18 | 2.7 | 141.1 | | | 596.40 | 13.25 | 0.6412 | 21.03 | 0.1506 | 16.86 | 0.0017 | 13.55 | 0.00332 | 18.43 | 10.78 | 27.10 | 142.43 | 33.12 | 67.23 | 36.86 |

Appendix B: Eastern Sunda arc geochronology data - zircon

| Analysis ID | Pref_Age_Ma | 2s% | 206Pb/238U Age | 238U/206Pb ratio | 1s% | 207Pb/206Pb ratio | 1s% | 207Pb/235U (calc) ratio | 1s% | 206Pb/238U ratio | 1s% | 206Pb/238U Age (Ma) | 2s% | 207Pb/235U (calc) Age (Ma) | 2s% | 208Pb/232Th Age (Ma) | 2s% | | |
|---------------|-------------|------|----------------|------------------|-------|-------------------|-------|-------------------------|-------|------------------|-------|---------------------|--------|----------------------------|-------|----------------------|--------|--------|--|
| NAF-02_zirc19 | 5.7 | 12.9 | | 1124.21 | 6.44 | 0.0400 | 26.81 | < DL | 26.14 | 0.0009 | 6.46 | 0.00040 | 13.93 | 5.71 | 12.93 | < DL | 52.27 | 8.01 | |
| NAF-02_zirc20 | 4.8 | 17.5 | | 1336.18 | 8.69 | 0.0400 | 44.64 | < DL | 43.85 | 0.0007 | 8.74 | < DL | 20.49 | 4.77 | 17.47 | < DL | 87.70 | < DL | |
| NAF-02_zirc21 | 6.0 | 17.0 | | 1085.24 | 8.47 | 0.0400 | 50.62 | < DL | 49.96 | 0.0009 | 8.48 | 0.00069 | 18.81 | 6.04 | 16.97 | < DL | 99.93 | 13.96 | |
| NAF-02_zirc22 | 5.9 | 16.1 | | 1084.07 | 7.93 | 0.0400 | 64.84 | < DL | 64.35 | 0.0009 | 8.07 | 0.00059 | 25.26 | 5.87 | 16.13 | < DL | 128.70 | < DL | |
| NAF-02_zirc23 | 6.2 | 9.1 | | 1044.59 | 4.55 | 0.0400 | 20.59 | < DL | 20.13 | 0.0010 | 4.54 | 0.00045 | 13.18 | 6.21 | 9.08 | < DL | 40.26 | 9.12 | |
| NAF-02_zirc24 | 6.2 | 13.2 | | 1048.24 | 6.60 | 0.0400 | 42.07 | < DL | 41.58 | 0.0010 | 6.59 | 0.00029 | 21.57 | 6.17 | 13.17 | < DL | 83.16 | 5.90 | |
| NAF-02_zirc25 | 8.0 | 17.1 | | 833.45 | 8.83 | 0.0400 | 29.68 | < DL | 28.46 | 0.0012 | 8.57 | < DL | 33.32 | 7.95 | 17.15 | < DL | 56.92 | < DL | |
| NAF-02_zirc26 | 7.1 | 10.4 | | 917.70 | 5.21 | 0.0400 | 24.34 | < DL | 24.34 | 0.0011 | 5.20 | 0.00031 | 18.37 | 7.05 | 10.41 | < DL | 48.68 | 6.34 | |
| NAF-02_zirc27 | 5.8 | 16.0 | | 1095.87 | 8.00 | 0.0400 | 21.54 | < DL | 20.04 | 0.0009 | 8.02 | < DL | 35.80 | 5.85 | 16.04 | < DL | 40.09 | < DL | |
| NAF-02_zirc28 | 6.5 | 11.1 | | 986.35 | 5.56 | 0.0400 | 32.67 | < DL | 32.23 | 0.0010 | 5.57 | 0.00059 | 15.80 | 6.54 | 11.13 | < DL | 64.47 | 12.01 | |
| NAF-02_zirc29 | 6.3 | 12.2 | | 1011.18 | 7.20 | 0.0400 | 24.22 | < DL | 23.48 | 0.0010 | 6.10 | 0.00038 | 17.88 | 6.29 | 12.19 | < DL | 46.97 | 7.68 | |
| NAF-02_zirc30 | 6.5 | 13.1 | 6.52 | 843.85 | 8.12 | 0.1639 | 14.55 | 0.0267 | 13.55 | 0.0012 | 5.52 | 0.00075 | 15.29 | 7.66 | 11.03 | 26.76 | 27.09 | 15.27 | |
| NAF-02_zirc31 | 7.1 | 17.8 | | 894.55 | 8.73 | 0.0400 | 43.72 | < DL | 42.86 | 0.0011 | 8.91 | 0.00050 | 24.64 | 7.13 | 17.82 | < DL | 85.72 | 10.20 | |
| NAF-02_zirc32 | 6.2 | 13.3 | 6.18 | 842.68 | 5.34 | 0.1959 | 13.02 | 0.0319 | 11.97 | 0.0012 | 5.32 | 0.00111 | 10.96 | 7.62 | 10.64 | 31.93 | 23.94 | 22.47 | |
| NAF-02_zirc33 | 6.7 | 13.3 | | 958.78 | 6.60 | 0.0400 | 23.36 | < DL | 22.44 | 0.0010 | 6.67 | 0.00064 | 17.73 | 6.69 | 13.34 | < DL | 44.88 | 13.07 | |
| NAF-02_zirc34 | 5.9 | 9.1 | | 1099.04 | 5.51 | 0.0400 | 23.28 | < DL | 22.88 | 0.0009 | 4.54 | 0.00035 | 11.95 | 5.89 | 9.08 | < DL | 45.75 | 7.13 | |
| NAF-02_zirc35 | 7.2 | 25.7 | | 880.27 | 12.65 | 0.0400 | 77.51 | 0.0011 | 76.47 | 0.0011 | 12.83 | < DL | 40.13 | 7.17 | 25.66 | < DL | 152.93 | < DL | |
| NAF-02_zirc36 | 6.0 | 22.9 | | 1068.45 | 11.50 | 0.0400 | 40.82 | < DL | 39.27 | 0.0009 | 11.44 | < DL | 28.78 | 6.02 | 22.88 | < DL | 78.54 | < DL | |
| NAF-02_zirc37 | 6.1 | 11.2 | | 1064.34 | 5.60 | 0.0400 | 24.07 | < DL | 23.46 | 0.0009 | 5.58 | 0.00026 | 18.48 | 6.10 | 11.16 | < DL | 46.92 | 5.23 | |
| NAF-02_zirc38 | 6.9 | 42.8 | 6.86 | 424.81 | 8.74 | 0.4784 | 14.72 | 0.1533 | 12.33 | 0.0024 | 8.38 | 0.00844 | 9.92 | 15.13 | 16.75 | 144.82 | 24.66 | 170.34 | |
| NAF-02_zirc39 | 6.2 | 10.5 | | 1038.46 | 5.61 | 0.0400 | 24.48 | < DL | 23.95 | 0.0010 | 5.27 | 0.00034 | 17.68 | 6.23 | 10.54 | < DL | 47.91 | 6.97 | |
| NAF-02_zirc40 | 6.2 | 11.7 | | 1038.40 | 5.84 | 0.0400 | 29.94 | < DL | 29.40 | 0.0010 | 5.87 | 0.00028 | 19.54 | 6.23 | 11.75 | < DL | 58.80 | 5.64 | |
| NAF-02_zirc41 | 6.6 | 20.2 | 6.58 | 514.17 | 4.68 | 0.4229 | 8.52 | 0.1125 | 7.84 | 0.0020 | 4.97 | 0.00153 | 7.07 | 12.57 | 9.94 | 108.28 | 15.68 | 30.94 | |
| NAF-02_zirc42 | 8.5 | 58.8 | 8.50 | 155.85 | 4.17 | 0.6755 | 6.90 | 0.5914 | 5.92 | 0.0064 | 4.51 | 0.01574 | 5.60 | 41.26 | 9.03 | 471.78 | 11.84 | 316.47 | |
| NAF-02_zirc43 | 6.2 | 7.8 | | 1043.78 | 3.88 | 0.0400 | 22.74 | < DL | 22.54 | 0.0010 | 3.88 | 0.00038 | 9.73 | 6.17 | 7.77 | < DL | 45.07 | 7.73 | |
| NAF-02_zirc44 | 6.1 | 12.9 | | 1054.50 | 57.65 | 0.0400 | 27.78 | < DL | 27.06 | 0.0010 | 6.43 | < DL | 401.39 | 6.13 | 12.86 | < DL | 54.13 | < DL | |
| NAF-02_zirc45 | 6.5 | 18.7 | | 986.45 | 9.32 | 0.0400 | 40.67 | < DL | 39.67 | 0.0010 | 9.35 | < DL | 25.90 | 6.49 | 18.69 | < DL | 79.33 | < DL | |
| NAF-02_zirc46 | 6.5 | 14.0 | | 995.98 | 7.03 | 0.0400 | 90.26 | < DL | 90.00 | 0.0010 | 7.02 | < DL | 31.45 | 6.47 | 14.05 | < DL | 179.99 | < DL | |
| NAF-02_zirc47 | 12.8 | 42.0 | 12.83 | 42.00 | | | | | | | | | | | | | | | |
| NAF-02_zirc48 | 6.2 | 10.4 | | 1039.91 | 8.85 | 0.0400 | 21.03 | < DL | 20.43 | 0.0010 | 5.20 | 0.00321 | 3.99 | 56.91 | 6.82 | 597.47 | 9.28 | 644.53 | |
| NAF-02_zirc49 | 7.3 | 13.2 | | 873.42 | 6.70 | 0.0400 | 33.20 | < DL | 32.57 | 0.0011 | 6.59 | 0.00057 | 19.68 | 6.20 | 10.41 | < DL | 40.85 | 6.53 | |
| NAF-02_zirc50 | 5.9 | 16.4 | | 1093.93 | 8.14 | 0.0400 | 28.93 | < DL | 27.78 | 0.0009 | 8.21 | 0.00067 | 17.92 | 5.87 | 16.41 | < DL | 55.57 | 13.57 | |
| NAF-02_zirc51 | 6.8 | 16.3 | | 958.40 | 8.23 | 0.0400 | 31.78 | < DL | 30.34 | 0.0010 | 9.94 | < DL | 30.16 | 6.82 | 16.34 | < DL | 120.08 | < DL | |
| NAF-02_zirc52 | 6.2 | 19.9 | | 1051.39 | 10.63 | 0.0400 | 49.53 | < DL | 48.14 | 0.0009 | 6.70 | 0.00074 | 13.43 | 5.95 | 13.39 | < DL | 60.68 | 12.42 | |
| NAF-02_zirc53 | 5.9 | 13.4 | | 1079.52 | 6.68 | 0.0400 | 49.53 | < DL | 48.14 | 0.0009 | 6.70 | 0.00074 | 13.43 | 5.95 | 13.39 | < DL | 98.28 | 15.09 | |
| NAF-02_zirc54 | 6.2 | 16.6 | 6.24 | 531.41 | 4.66 | 0.4309 | 6.09 | 0.1095 | 5.61 | 0.0019 | 5.07 | 0.00192 | 6.60 | 12.16 | 10.13 | 105.49 | 11.22 | 38.93 | |
| NAF-02_zirc55 | 6.2 | 15.2 | | 1039.07 | 7.62 | 0.0400 | 24.97 | < DL | 23.91 | 0.0010 | 7.62 | < DL | 56.65 | 6.21 | 15.23 | < DL | 47.82 | < DL | |
| NAF-02_zirc56 | 6.8 | 16.5 | 6.83 | 883.60 | 6.71 | 0.0745 | 25.54 | 0.0111 | 24.67 | 0.0011 | 7.87 | 0.00048 | 16.72 | 7.08 | 15.74 | 11.17 | 49.34 | 9.83 | |
| NAF-02_zirc57 | 7.2 | 18.8 | | 895.45 | 8.32 | 0.0400 | 31.75 | < DL | 30.68 | 0.0011 | 9.38 | 0.00111 | 15.36 | 7.25 | 18.76 | < DL | 61.36 | 22.57 | |
| NAF-02_zirc58 | 7.3 | 19.8 | | 874.02 | 9.81 | 0.0400 | 23.02 | < DL | 20.95 | 0.0011 | 9.89 | 0.00131 | 18.17 | 7.25 | 19.78 | < DL | 41.90 | 26.57 | |
| NAF-02_zirc59 | 6.8 | 12.4 | | 946.12 | 8.70 | 0.0400 | 36.77 | < DL | 36.28 | 0.0011 | 6.19 | 0.00057 | 15.20 | 6.84 | 12.37 | < DL | 72.55 | 11.54 | |
| NAF-02_zirc60 | 6.0 | 8.8 | | 1075.45 | 3.80 | 0.0453 | 17.95 | 0.0058 | 17.60 | 0.0009 | 4.42 | 0.00030 | 11.88 | 6.01 | 8.83 | 5.84 | 35.20 | 6.08 | |
| NAF-02_zirc61 | 7.2 | 15.2 | 7.22 | 876.68 | 7.23 | 0.0543 | 31.67 | 0.0084 | 30.86 | 0.0011 | 7.25 | 0.00029 | 22.83 | 7.30 | 14.51 | 8.49 | 61.72 | 5.87 | |
| NAF-02_zirc62 | 6.9 | 10.3 | 6.86 | 917.19 | 4.28 | 0.0686 | 16.62 | 0.0101 | 16.25 | 0.0011 | 4.93 | 0.00043 | 10.10 | 7.06 | 9.86 | 10.25 | 32.50 | 8.81 | |
| NAF-02_zirc63 | 6.1 | 13.2 | | 1053.52 | 6.58 | 0.0400 | 66.43 | < DL | 66.15 | 0.0009 | 6.60 | < DL | 32.63 | 6.08 | 13.21 | < DL | 132.29 | < DL | |

Appendix B: Eastern Sunda arc geochronology data - zircon

| Analysite ID | Pref_Age_Ma | 2s% | 206Pb/238U Age | 2s% | 238U/206Pb ratio | 1s% | 207Pb/206Pb ratio | 1s% | 207Pb/235U (calc) ratio | 1s% | 206Pb/238U ratio | 1s% | 206Pb/232Th ratio | 1s% | 208Pb/238U Age (Ma) | 2s% | 207Pb/235U (calc) Age (Ma) | 2s% | 208Pb/232Th Age (Ma) | 2s% |
|---------------|-------------|------|----------------|-------|------------------|-------|-------------------|-------|-------------------------|-------|------------------|-------|-------------------|-------|---------------------|-------|----------------------------|-------|----------------------|-------|
| NAF-03_zirc18 | 6.0 | 14.4 | | | 1089.52 | 7.20 | 0.0400 | 24.72 | < DL | 23.70 | 0.0009 | 7.18 | < DL | 25.62 | 5.99 | 14.37 | < DL | 47.39 | < DL | 51.24 |
| NAF-03_zirc19 | 5.8 | 30.8 | 5.82 | 30.78 | 568.70 | 7.07 | 0.4264 | 12.89 | 0.1023 | 10.87 | 0.0017 | 7.48 | 0.00240 | 10.88 | 11.22 | 14.96 | 98.88 | 21.73 | 48.66 | 21.77 |
| NAF-03_zirc20 | 6.7 | 20.9 | | | 974.22 | 10.33 | 0.0400 | 32.41 | < DL | 30.72 | 0.0010 | 10.44 | < DL | 28.15 | 6.66 | 20.89 | < DL | 61.43 | < DL | 58.30 |
| NAF-03_zirc21 | 7.5 | 12.9 | 7.53 | 12.86 | 792.88 | 5.76 | 0.1070 | 18.09 | 0.0184 | 17.34 | 0.0013 | 5.86 | 0.00069 | 11.59 | 8.16 | 11.71 | 18.53 | 34.69 | 13.91 | 23.18 |
| NAF-03_zirc22 | 6.1 | 11.9 | | | 1060.13 | 5.96 | 0.0400 | 36.03 | < DL | 35.56 | 0.0009 | 5.93 | < DL | 20.66 | 6.08 | 11.86 | < DL | 71.13 | < DL | 41.33 |
| NAF-03_zirc23 | 7.0 | 10.0 | | | 924.25 | 4.99 | 0.0400 | 22.36 | < DL | 21.85 | 0.0011 | 4.99 | < DL | 26.53 | 6.96 | 9.98 | < DL | 43.69 | < DL | 53.05 |
| NAF-03_zirc24 | 6.6 | 8.3 | 6.56 | 8.33 | 978.05 | 3.76 | 0.0466 | 17.61 | 0.0065 | 17.26 | 0.0010 | 4.04 | 0.00035 | 11.12 | 6.58 | 8.07 | 6.59 | 34.53 | 7.17 | 22.23 |
| NAF-03_zirc25 | 6.4 | 9.0 | | | 1012.96 | 4.61 | 0.0400 | 20.08 | < DL | 19.62 | 0.0010 | 4.50 | 0.00031 | 16.45 | 6.38 | 9.07 | < DL | 39.23 | 6.32 | 32.90 |
| NAF-03_zirc26 | 6.9 | 15.8 | | | 1004.38 | 4.21 | 0.0412 | 20.85 | 0.0057 | 20.47 | 0.0010 | 4.50 | 0.00035 | 10.97 | 6.43 | 8.99 | 5.79 | 40.95 | 7.06 | 21.94 |
| NAF-03_zirc27 | 5.8 | 14.3 | | | 931.32 | 13.00 | 0.0400 | 46.92 | < DL | 46.32 | 0.0011 | 7.88 | 0.00034 | 24.92 | 6.93 | 15.76 | < DL | 92.65 | 6.94 | 49.85 |
| NAF-03_zirc28 | 6.0 | 12.2 | | | 1117.21 | 7.14 | 0.0400 | 39.82 | < DL | 39.20 | 0.0009 | 7.14 | < DL | 26.81 | 5.78 | 14.29 | < DL | 78.40 | < DL | 53.61 |
| NAF-03_zirc29 | 5.8 | 13.0 | | | 1079.24 | 8.32 | 0.0400 | 22.55 | < DL | 21.75 | 0.0009 | 6.12 | 0.00036 | 20.09 | 5.96 | 12.24 | < DL | 43.50 | 7.25 | 40.18 |
| NAF-03_zirc30 | 6.2 | 10.1 | | | 1098.30 | 12.43 | 0.0400 | 33.33 | < DL | 32.72 | 0.0009 | 6.49 | 0.00051 | 18.15 | 5.77 | 12.98 | < DL | 65.45 | 10.34 | 36.29 |
| NAF-03_zirc31 | 6.4 | 8.3 | | | 1045.60 | 7.02 | 0.0400 | 24.68 | < DL | 24.20 | 0.0010 | 5.04 | 0.00028 | 17.24 | 6.17 | 10.07 | < DL | 48.40 | 5.35 | 34.48 |
| NAF-03_zirc32 | 6.3 | 17.0 | | | 1082.07 | 5.51 | 0.0400 | 23.36 | < DL | 22.75 | 0.0009 | 5.51 | 0.00053 | 16.17 | 5.95 | 11.03 | < DL | 45.49 | 10.78 | 32.34 |
| NAF-03_zirc33 | 6.1 | 12.9 | | | 1029.21 | 8.50 | 0.0400 | 39.67 | < DL | 38.82 | 0.0010 | 8.49 | < DL | 40.54 | 6.27 | 16.98 | < DL | 77.65 | < DL | 81.08 |
| NAF-03_zirc34 | 6.2 | 12.7 | 6.24 | 12.67 | 1053.60 | 6.69 | 0.0400 | 35.93 | < DL | 35.38 | 0.0010 | 6.46 | 0.00068 | 14.94 | 6.12 | 12.91 | < DL | 70.75 | 13.75 | 29.88 |
| NAF-03_zirc35 | 6.8 | 48.9 | | | 898.36 | 4.91 | 0.1480 | 13.42 | 0.0226 | 12.59 | 0.0011 | 5.64 | 0.00085 | 11.29 | 7.17 | 11.28 | 22.74 | 25.17 | 17.18 | 22.59 |
| NAF-03_zirc4 | 6.4 | 16.4 | 6.45 | 16.42 | 581.63 | 4.14 | 0.3769 | 8.03 | 0.0690 | 8.06 | 0.0017 | 4.82 | 0.00219 | 6.51 | 11.08 | 9.64 | 86.61 | 16.12 | 44.29 | 13.01 |
| NAF-03_zirc5 | 5.2 | 30.9 | 5.24 | 30.92 | 730.80 | 7.89 | 0.3742 | 16.50 | 0.0707 | 13.23 | 0.0014 | 7.72 | 0.00263 | 11.18 | 8.96 | 15.44 | 69.39 | 26.46 | 53.17 | 22.36 |
| NAF-03_zirc6 | 6.7 | 11.2 | | | 951.72 | 9.02 | 0.0400 | 20.31 | < DL | 19.58 | 0.0010 | 5.59 | < DL | 26.61 | 6.75 | 11.19 | < DL | 39.17 | < DL | 53.21 |
| NAF-03_zirc7 | 6.3 | 15.7 | | | 1027.39 | 7.23 | 0.0400 | 27.72 | < DL | 26.81 | 0.0010 | 7.83 | 0.00063 | 18.19 | 6.33 | 15.67 | < DL | 53.62 | 12.82 | 36.38 |
| NAF-03_zirc8 | 5.6 | 10.7 | | | 1150.98 | 5.36 | 0.0400 | 23.10 | < DL | 22.61 | 0.0009 | 5.34 | 0.00028 | 13.94 | 5.62 | 10.68 | < DL | 45.21 | 5.65 | 27.88 |
| NAF-03_zirc9 | 6.9 | 15.9 | | | 919.25 | 8.84 | 0.0400 | 29.46 | < DL | 28.48 | 0.0011 | 7.96 | 0.00029 | 21.38 | 6.85 | 15.93 | < DL | 56.96 | 5.81 | 42.76 |
| SLG-01_zirc1 | 13.4 | 7.0 | | | 479.30 | 2.97 | 0.0461 | 13.98 | 0.0132 | 13.73 | 0.0021 | 3.52 | 0.00074 | 11.26 | 13.39 | 7.04 | 13.27 | 27.45 | 15.02 | 22.51 |
| SLG-01_zirc10 | 14.4 | 6.3 | 14.43 | 6.33 | 402.51 | 2.54 | 0.1267 | 7.33 | 0.0433 | 7.03 | 0.0025 | 2.88 | 0.00164 | 6.24 | 16.06 | 5.76 | 43.05 | 14.06 | 33.13 | 12.48 |
| SLG-01_zirc11 | 13.0 | 7.2 | 13.04 | 7.18 | 346.18 | 2.38 | 0.2814 | 4.91 | 0.1109 | 4.73 | 0.0029 | 2.53 | 0.00329 | 5.58 | 18.55 | 5.06 | 106.80 | 9.46 | 66.64 | 11.16 |
| SLG-01_zirc12 | 19.6 | 15.6 | 19.63 | 15.57 | 242.49 | 5.81 | 0.2544 | 11.91 | 0.1413 | 10.89 | 0.0041 | 5.79 | 0.00520 | 10.46 | 26.61 | 11.57 | 134.19 | 21.78 | 105.09 | 20.93 |
| SLG-01_zirc13 | 14.2 | 4.9 | 14.18 | 4.86 | 427.62 | 2.18 | 0.0948 | 7.16 | 0.0304 | 6.97 | 0.0023 | 2.25 | 0.00126 | 6.06 | 15.11 | 4.50 | 30.43 | 13.94 | 25.59 | 12.13 |
| SLG-01_zirc14 | 15.0 | 8.5 | 15.05 | 8.53 | 432.98 | 4.18 | 0.0467 | 19.19 | 0.0149 | 18.90 | 0.0023 | 4.12 | 0.00085 | 14.45 | 15.05 | 8.23 | 13.52 | 16.40 | 17.20 | 28.89 |
| SLG-01_zirc15 | 13.8 | 4.3 | | | 467.88 | 1.84 | 0.0458 | 8.28 | 0.0134 | 8.20 | 0.0021 | 2.14 | 0.00061 | 6.43 | 13.79 | 4.28 | 13.52 | 16.40 | 12.40 | 12.85 |
| SLG-01_zirc16 | 14.2 | 7.8 | | | 454.84 | 3.87 | 0.0433 | 18.68 | 0.0131 | 18.33 | 0.0022 | 3.88 | 0.00113 | 10.79 | 14.16 | 7.75 | 13.19 | 36.66 | 22.91 | 21.57 |
| SLG-01_zirc17 | 13.6 | 7.2 | 13.62 | 7.21 | 474.20 | 3.24 | 0.0486 | 14.74 | 0.0140 | 14.59 | 0.0021 | 3.49 | 0.00087 | 10.34 | 13.66 | 6.98 | 14.11 | 29.17 | 17.56 | 20.68 |
| SLG-01_zirc18 | 13.7 | 6.9 | | | 469.76 | 3.21 | 0.0446 | 15.23 | 0.0130 | 15.08 | 0.0021 | 3.43 | 0.00069 | 11.16 | 13.72 | 6.86 | 13.10 | 30.17 | 14.02 | 22.32 |
| SLG-01_zirc19 | 13.1 | 5.6 | | | 490.33 | 2.80 | 0.0421 | 13.59 | 0.0117 | 13.52 | 0.0020 | 2.80 | 0.00063 | 10.03 | 13.14 | 5.61 | 11.83 | 27.04 | 12.76 | 20.05 |
| SLG-01_zirc2 | 14.3 | 8.0 | 14.28 | 8.00 | 440.71 | 3.13 | 0.0657 | 12.31 | 0.0203 | 11.99 | 0.0023 | 3.86 | 0.00106 | 8.60 | 14.64 | 7.72 | 20.37 | 23.99 | 21.47 | 17.21 |
| SLG-01_zirc20 | 14.1 | 6.5 | | | 458.36 | 3.09 | 0.0301 | 17.64 | 0.0090 | 17.54 | 0.0022 | 3.23 | 0.00093 | 9.95 | 14.10 | 6.46 | 9.12 | 35.08 | 18.79 | 19.91 |
| SLG-01_zirc21 | 13.4 | 9.0 | | | 482.59 | 4.25 | 0.0442 | 20.53 | 0.0127 | 20.22 | 0.0021 | 4.49 | 0.00063 | 15.49 | 13.37 | 8.98 | 12.77 | 40.45 | 12.72 | 30.99 |
| SLG-01_zirc22 | 14.0 | 13.8 | 13.95 | 13.77 | 406.79 | 5.99 | 0.1371 | 17.12 | 0.0459 | 16.22 | 0.0024 | 6.02 | 0.00173 | 15.31 | 15.76 | 12.03 | 45.52 | 32.45 | 35.14 | 30.62 |
| SLG-01_zirc23 | 13.8 | 5.9 | 13.75 | 5.89 | 467.05 | 2.58 | 0.0474 | 11.77 | 0.0139 | 11.74 | 0.0021 | 2.86 | 0.00064 | 10.00 | 13.77 | 5.72 | 13.99 | 23.49 | 12.96 | 20.01 |
| SLG-01_zirc24 | 13.5 | 7.1 | | | 482.57 | 3.03 | 0.0444 | 14.45 | 0.0126 | 14.20 | 0.0021 | 3.57 | 0.00063 | 11.49 | 13.47 | 7.14 | 12.76 | 28.39 | 12.72 | 22.97 |
| SLG-01_zirc25 | 13.5 | 5.4 | 13.49 | 5.40 | 477.35 | 2.39 | 0.0473 | 10.91 | 0.0136 | 10.74 | 0.0021 | 2.62 | 0.00068 | 8.64 | 13.51 | 5.24 | 13.73 | 21.47 | 13.69 | 17.28 |
| SLG-01_zirc26 | 14.1 | 5.7 | | | 457.81 | 2.74 | 0.0417 | 13.32 | 0.0125 | 13.26 | 0.0022 | 2.85 | 0.00079 | 9.58 | 14.09 | 5.71 | 12.59 | 26.52 | 15.95 | 19.16 |

Appendix B: Eastern Sunda arc geochronology data - zircon

| Analysis ID | Pref_Age_Ma | 2s% | 208Pb/238U Age (Ma) | 208Pb/238U ratio | 1s% | 207Pb/206Pb ratio | 1s% | 207Pb/235U (Calc) ratio | 1s% | 208Pb/238U ratio | 1s% | 208Pb/232Th ratio | 1s% | 206Pb/238U Age (Ma) | 2s% | 207Pb/235U (Calc) Age (Ma) | 2s% | 208Pb/232Th Age (Ma) | 2s% | |
|---------------|-------------|------|---------------------|------------------|---------|-------------------|--------|-------------------------|--------|------------------|--------|-------------------|---------|---------------------|---------|----------------------------|---------|----------------------|---------|-------|
| SLG-01_zirc27 | 13.6 | 4.1 | 13.64 | 4.14 | 473.04 | 1.92 | 0.0468 | 8.60 | 0.0136 | 8.51 | 0.0021 | 2.01 | 0.00072 | 6.11 | 13.65 | 4.02 | 13.68 | 17.01 | 14.56 | 12.22 |
| SLG-01_zirc28 | 14.1 | 7.8 | 14.09 | 7.79 | 441.66 | 3.66 | 0.0772 | 13.36 | 0.0239 | 12.94 | 0.0023 | 3.65 | 0.00097 | 10.03 | 14.66 | 7.31 | 23.97 | 25.88 | 19.74 | 20.06 |
| SLG-01_zirc29 | 13.3 | 8.8 | 13.32 | 8.83 | 466.85 | 4.25 | 0.0705 | 16.40 | 0.0211 | 16.70 | 0.0021 | 4.15 | 0.00073 | 14.15 | 13.74 | 8.30 | 21.17 | 33.40 | 14.85 | 28.30 |
| SLG-01_zirc30 | 13.4 | 7.2 | 14.22 | 5.83 | 480.23 | 3.62 | 0.0353 | 19.12 | 0.0102 | 18.94 | 0.0021 | 3.60 | 0.00078 | 11.99 | 13.44 | 7.19 | 10.12 | 37.89 | 15.77 | 23.97 |
| SLG-01_zirc31 | 13.9 | 6.5 | 13.88 | 6.51 | 355.11 | 2.45 | 0.0585 | 11.60 | 0.0172 | 11.36 | 0.0022 | 2.79 | 0.00085 | 8.51 | 14.40 | 5.59 | 17.34 | 22.72 | 17.21 | 17.02 |
| SLG-01_zirc32 | 12.0 | 11.9 | 12.05 | 11.85 | 402.05 | 3.39 | 0.2337 | 5.44 | 0.0901 | 5.38 | 0.0028 | 2.45 | 0.00298 | 5.27 | 18.18 | 4.91 | 87.56 | 10.75 | 60.29 | 10.54 |
| SLG-01_zirc33 | 14.2 | 9.8 | 14.17 | 9.78 | 452.51 | 4.56 | 0.0486 | 20.87 | 0.0147 | 20.42 | 0.0022 | 4.72 | 0.00066 | 16.76 | 14.21 | 9.44 | 14.82 | 40.83 | 13.42 | 33.51 |
| SLG-01_zirc34 | 14.9 | 6.3 | 433.28 | 3.12 | 485.43 | 3.12 | 0.0364 | 16.25 | 0.0115 | 16.01 | 0.0023 | 3.15 | 0.00076 | 9.92 | 14.86 | 6.29 | 11.63 | 32.03 | 15.41 | 19.84 |
| SLG-01_zirc4 | 13.3 | 5.1 | 485.43 | 2.54 | 0.0405 | 12.49 | 0.0114 | 12.47 | 0.0021 | 11.15 | 0.0022 | 2.54 | 0.00069 | 8.52 | 13.27 | 5.09 | 11.51 | 24.94 | 13.92 | 17.04 |
| SLG-01_zirc5 | 13.6 | 6.8 | 457.21 | 3.20 | 0.0795 | 11.51 | 0.0238 | 11.15 | 0.0022 | 11.15 | 0.0022 | 3.19 | 0.00107 | 9.90 | 14.16 | 6.39 | 23.92 | 22.30 | 21.77 | 19.79 |
| SLG-01_zirc6 | 13.2 | 4.2 | 489.35 | 2.11 | 0.0455 | 9.67 | 0.0127 | 9.55 | 0.0020 | 2.11 | 0.0020 | 2.11 | 0.00067 | 7.38 | 13.19 | 4.22 | 12.83 | 19.10 | 13.49 | 14.76 |
| SLG-01_zirc7 | 14.1 | 3.7 | 455.99 | 1.82 | 0.0462 | 8.15 | 0.0139 | 8.07 | 0.0022 | 1.83 | 0.0022 | 1.83 | 0.00069 | 6.88 | 14.13 | 3.65 | 13.98 | 16.15 | 14.08 | 13.75 |
| SLG-01_zirc8 | 13.2 | 5.2 | 488.73 | 2.59 | 0.0462 | 11.95 | 0.0129 | 11.76 | 0.0021 | 2.59 | 0.0021 | 2.59 | 0.00057 | 9.74 | 13.23 | 5.19 | 13.06 | 23.51 | 11.45 | 19.47 |
| SLG-01_zirc9 | 14.2 | 5.9 | 440.30 | 2.79 | 0.0730 | 10.37 | 0.0227 | 10.09 | 0.0023 | 2.79 | 0.0023 | 2.79 | 0.00102 | 8.20 | 14.70 | 5.57 | 22.78 | 20.18 | 20.57 | 16.40 |
| SLG-02_zirc1 | 12.8 | 13.2 | 336.70 | 3.88 | 0.3172 | 7.81 | 0.1261 | 7.96 | 0.0030 | 4.49 | 0.0030 | 4.49 | 0.00186 | 7.80 | 19.42 | 8.99 | 120.61 | 15.92 | 38.72 | 15.59 |
| SLG-02_zirc10 | 20.9 | 6.7 | 308.45 | 3.51 | 0.0378 | 16.20 | 0.0171 | 15.96 | 0.0032 | 3.36 | 0.0032 | 3.36 | 0.00100 | 6.28 | 20.91 | 6.72 | 17.27 | 31.91 | 20.21 | 12.56 |
| SLG-02_zirc11 | 14.3 | 9.9 | 453.39 | 5.35 | 0.0450 | 22.51 | 0.0400 | 22.51 | < DL | 22.15 | 0.0022 | 4.96 | 0.00042 | 16.92 | 14.26 | 9.92 | < DL | 44.30 | 8.57 | 33.84 |
| SLG-02_zirc2 | 14.2 | 7.4 | 454.10 | 3.99 | 0.0452 | 17.47 | 0.0452 | 17.47 | 0.0136 | 17.25 | 0.0022 | 3.70 | 0.00084 | 8.57 | 14.23 | 7.40 | 13.75 | 34.50 | 16.93 | 17.14 |
| SLG-02_zirc3 | 303.5 | 1.8 | 20.79 | 0.88 | 0.0524 | 2.88 | 0.0524 | 2.88 | 0.3458 | 3.11 | 0.0482 | 0.88 | 0.01465 | 2.31 | 303.55 | 1.76 | 301.44 | 6.22 | 294.81 | 4.61 |
| SLG-02_zirc4 | 15.2 | 17.6 | 432.09 | 6.73 | 0.0400 | 27.46 | 0.0400 | 27.46 | < DL | 26.74 | 0.0024 | 8.78 | 0.00105 | 18.53 | 15.15 | 17.56 | < DL | 53.49 | 21.34 | 37.05 |
| SLG-02_zirc5 | 989.4 | 2.0 | 989.45 | 2.02 | 5.23 | 1.01 | 0.1871 | 0.52 | 4.8600 | 2.51 | 0.1919 | 1.02 | 0.05792 | 2.58 | 1131.77 | 2.04 | 1795.36 | 5.02 | 1141.30 | 5.16 |
| SLG-02_zirc6 | 14.3 | 17.1 | 14.29 | 17.07 | 447.67 | 5.45 | 0.0766 | 19.80 | 0.0235 | 19.23 | 0.0023 | 8.31 | 0.00104 | 11.57 | 14.86 | 16.61 | 23.63 | 38.46 | 21.05 | 23.14 |
| SLG-02_zirc7 | 13.9 | 8.8 | 13.88 | 8.76 | 466.53 | 4.22 | 0.0509 | 18.83 | 0.0162 | 18.52 | 0.0022 | 4.21 | 0.00084 | 9.94 | 13.96 | 8.42 | 15.32 | 37.04 | 16.94 | 19.89 |
| SLG-02_zirc8 | 14.2 | 5.8 | 457.05 | 2.93 | 0.0451 | 13.73 | 0.0451 | 13.73 | 0.0136 | 13.64 | 0.0022 | 2.92 | 0.00061 | 7.13 | 14.15 | 5.85 | 13.69 | 27.28 | 12.31 | 14.26 |
| SLG-02_zirc9 | 607.8 | 1.4 | 607.80 | 1.40 | 10.11 | 0.69 | 0.0601 | 1.73 | 0.8145 | 2.12 | 0.0889 | 0.71 | 0.03066 | 1.52 | 607.82 | 1.42 | 604.96 | 4.24 | 612.19 | 3.05 |
| SPF-03_zirc1 | 3.5 | 40.1 | 3.51 | 40.06 | 225.25 | 9.63 | 0.7402 | 2.05 | 0.4488 | 10.01 | 0.0044 | 8.69 | 0.00919 | 12.69 | 28.52 | 17.38 | 376.44 | 20.03 | 185.34 | 25.38 |
| SPF-03_zirc10 | 3.4 | 34.2 | 3.43 | 34.16 | 1242.45 | 11.79 | 0.3099 | 22.29 | 0.0335 | 19.58 | 0.0008 | 10.92 | 0.00050 | 14.84 | 5.15 | 21.83 | 33.07 | 39.16 | 10.11 | 29.68 |
| SPF-03_zirc11 | 3.2 | 17.4 | 3.20 | 17.40 | 1312.31 | 5.21 | 0.3207 | 9.68 | 0.0331 | 8.74 | 0.0008 | 6.24 | 0.00036 | 12.92 | 4.90 | 12.47 | 33.07 | 17.48 | 7.35 | 25.84 |
| SPF-03_zirc12 | 2.6 | 26.3 | 2.57 | 26.31 | 801.11 | 5.64 | 0.5870 | 4.74 | 0.1011 | 4.45 | 0.0013 | 6.39 | 0.00122 | 8.00 | 8.14 | 12.77 | 97.82 | 8.90 | 24.67 | 16.00 |
| SPF-03_zirc13 | 3.1 | 13.3 | 3.12 | 13.31 | 1704.08 | 5.43 | 0.1816 | 13.74 | 0.0150 | 12.70 | 0.0006 | 5.45 | 0.00020 | 10.65 | 3.77 | 10.90 | 15.12 | 25.40 | 4.06 | 21.30 |
| SPF-03_zirc14 | 2.8 | 23.9 | 2.82 | 23.92 | 1184.68 | 5.46 | 0.4249 | 9.90 | 0.0487 | 8.81 | 0.0008 | 6.08 | 0.00053 | 9.14 | 5.41 | 12.16 | 48.31 | 17.61 | 10.73 | 18.29 |
| SPF-03_zirc15 | 2.5 | 8.5 | 2.57 | 8.54 | 2627.12 | 4.25 | 0.0435 | 20.43 | 0.0022 | 20.14 | 0.0004 | 4.25 | 0.00014 | 12.41 | 2.45 | 8.51 | 2.27 | 40.27 | 2.74 | 24.81 |
| SPF-03_zirc16 | 2.8 | 9.2 | 2.75 | 9.15 | 2084.66 | 4.03 | 0.1299 | 11.71 | 0.0068 | 11.09 | 0.0005 | 4.03 | 0.00017 | 6.24 | 3.08 | 8.07 | 8.70 | 22.19 | 3.36 | 12.48 |
| SPF-03_zirc17 | 2.9 | 13.6 | 2.94 | 13.59 | 2100.30 | 5.45 | 0.0853 | 18.91 | 0.0055 | 18.29 | 0.0005 | 6.45 | 0.00011 | 12.16 | 3.10 | 12.89 | 5.61 | 36.58 | 2.21 | 24.32 |
| SPF-03_zirc18 | 2.9 | 38.1 | 2.88 | 38.08 | 221.89 | 4.65 | 0.7594 | 1.49 | 0.4606 | 6.40 | 0.0045 | 5.29 | 0.00470 | 6.99 | 28.81 | 10.59 | 384.69 | 12.81 | 94.96 | 13.98 |
| SPF-03_zirc19 | 3.0 | 13.2 | 2.96 | 13.25 | 2087.68 | 5.99 | 0.0863 | 21.20 | 0.0059 | 20.45 | 0.0005 | 6.13 | 0.00016 | 16.44 | 3.13 | 12.26 | 5.93 | 40.89 | 3.20 | 32.87 |
| SPF-03_zirc2 | 3.0 | 5.5 | 2.97 | 5.48 | 1699.54 | 2.05 | 0.2200 | 4.57 | 0.0173 | 4.77 | 0.0006 | 2.17 | 0.00156 | 7.32 | 3.81 | 4.34 | 17.37 | 9.55 | 31.63 | 14.65 |
| SPF-03_zirc3 | 3.3 | 28.1 | 3.31 | 28.09 | 528.08 | 4.66 | 0.6226 | 4.36 | 0.1644 | 7.33 | 0.0019 | 4.95 | 0.00208 | 7.09 | 12.24 | 9.90 | 154.51 | 14.66 | 42.06 | 14.18 |
| SPF-03_zirc4 | 3.0 | 8.7 | 3.04 | 8.67 | 2119.13 | 4.14 | 0.0486 | 18.85 | 0.0032 | 18.56 | 0.0005 | 4.18 | 0.00021 | 10.02 | 3.05 | 8.35 | 3.24 | 37.11 | 4.16 | 20.05 |
| SPF-03_zirc5 | 2.7 | 13.0 | 2.98 | 13.00 | 2372.42 | 6.61 | 0.0400 | 31.07 | < DL | 30.49 | 0.0004 | 6.49 | 0.00019 | 12.62 | 2.73 | 12.97 | < DL | 60.98 | 3.78 | 25.23 |
| SPF-03_zirc6 | 3.0 | 8.7 | 197.69 | 2.97 | 0.1818 | 9.41 | 0.0140 | 8.16 | 0.0006 | 3.48 | 0.0006 | 3.48 | 0.00035 | 8.62 | 3.60 | 6.96 | 14.09 | 16.31 | 7.02 | 17.24 |
| SPF-03_zirc7 | 3.1 | 12.2 | 3.12 | 12.17 | 1567.73 | 4.27 | 0.2346 | 9.27 | 0.0204 | 8.67 | 0.0006 | 4.88 | 0.00044 | 6.65 | 4.10 | 9.75 | 20.55 | 17.33 | 8.94 | 13.29 |
| SPF-03_zirc8 | 3.6 | 20.3 | 3.62 | 20.31 | 1328.92 | 7.27 | 0.2469 | 15.19 | 0.0251 | 13.79 | 0.0008 | 7.90 | 0.00026 | 10.54 | 4.86 | 15.80 | 25.22 | 27.58 | 5.20 | 21.09 |
| SPF-03_zirc9 | 3.7 | 22.0 | 3.66 | 21.97 | 693.58 | 3.47 | 0.5262 | 6.03 | 0.1035 | 5.35 | 0.0014 | 3.48 | 0.00068 | 4.89 | 9.31 | 6.97 | 99.97 | 10.71 | 13.87 | 9.78 |

Appendix B: Eastern Sunda arc geochronology data - zircon

| Analysis ID | Pref_Age_1Ma | 2s% | 206Pb/238U Age (Ma) | 2s% | 238U/206Pb ratio | 1s% | 207Pb/206Pb ratio | 1s% | 207Pb/235U (calc) ratio | 1s% | 208Pb/238U ratio | 1s% | 208Pb/232Th ratio | 1s% | 208Pb/238U Age (Ma) | 2s% | 207Pb/235U (calc) Age (Ma) | 2s% | 208Pb/232Th Age (Ma) | 2s% |
|--------------|--------------|------|---------------------|-------|------------------|-------|-------------------|--------|-------------------------|--------|------------------|-------|-------------------|--------|---------------------|-------|----------------------------|--------|----------------------|--------|
| SPF-06_z1 | 2.9 | 10.4 | | | 2287.91 | 5.19 | 0.0400 | 30.91 | <DL | 30.58 | 0.0004 | 5.19 | 0.00019 | 11.64 | 2.85 | 10.38 | <DL | 61.15 | 3.84 | 23.29 |
| SPF-06_z10 | 3.0 | 10.7 | | | 2147.21 | 6.87 | 0.0400 | 71.41 | <DL | 71.22 | 0.0400 | 5.34 | 0.00021 | 14.72 | 3.00 | 10.67 | <DL | 142.44 | 4.32 | 29.44 |
| SPF-06_z11 | 4.2 | 32.4 | 4.23 | 32.45 | 1086.02 | 11.12 | 0.2984 | 22.16 | 0.0396 | 19.57 | 0.0010 | 10.71 | 0.00120 | 19.01 | 6.20 | 21.43 | 39.47 | 39.14 | 24.40 | 38.02 |
| SPF-06_z12 | 3.2 | 13.7 | 3.20 | 13.67 | 1098.20 | 3.33 | 0.4012 | 6.16 | 0.0506 | 5.37 | 0.0009 | 3.65 | 0.00136 | 6.03 | 5.81 | 7.31 | 50.11 | 10.73 | 27.59 | 12.06 |
| SPF-06_z13 | 2.9 | 11.5 | 2.94 | 11.53 | 2105.36 | 5.13 | 0.0821 | 18.42 | 0.0054 | 17.75 | 0.0005 | 5.40 | 0.00023 | 13.34 | 3.08 | 10.81 | 5.44 | 35.51 | 4.56 | 26.68 |
| SPF-06_z14 | 2.7 | 14.7 | 2.71 | 14.71 | 1900.06 | 5.53 | 0.2039 | 13.32 | 0.0147 | 12.21 | 0.0005 | 5.96 | 0.00055 | 10.17 | 3.39 | 11.92 | 14.82 | 24.42 | 11.08 | 20.33 |
| SPF-06_z15 | 4.1 | 51.8 | 4.15 | 51.76 | 86.54 | 6.05 | 0.7961 | 0.75 | 1.2655 | 6.20 | 0.0115 | 5.99 | 0.02159 | 6.75 | 73.92 | 11.97 | 830.39 | 12.39 | 432.95 | 13.50 |
| SPF-06_z16 | 3.0 | 35.4 | 3.00 | 35.41 | 185.78 | 3.84 | 0.7696 | 0.99 | 0.5995 | 3.81 | 0.0054 | 3.23 | 0.00705 | 5.09 | 34.67 | 6.46 | 451.18 | 7.62 | 142.35 | 10.19 |
| SPF-06_z17 | 2.9 | 14.9 | | | 2240.13 | 11.04 | 0.0400 | 34.31 | <DL | 33.58 | 0.0005 | 7.45 | <DL | 24.91 | 2.91 | 14.91 | <DL | 67.16 | <DL | 49.82 |
| SPF-06_z18 | 2.8 | 9.5 | 2.80 | 9.50 | 2253.97 | 4.57 | 0.0729 | 16.83 | 0.0044 | 16.42 | 0.0004 | 4.47 | 0.00019 | 16.99 | 2.89 | 8.94 | 4.48 | 32.83 | 3.82 | 33.99 |
| SPF-06_z19 | 3.0 | 18.1 | 2.98 | 18.13 | 1888.29 | 7.28 | 0.1487 | 18.27 | 0.0109 | 17.19 | 0.0005 | 8.16 | 0.00053 | 15.72 | 3.42 | 16.32 | 10.99 | 34.39 | 10.81 | 31.45 |
| SPF-06_z2 | 2.9 | 14.7 | 2.94 | 14.74 | 1401.38 | 4.31 | 0.3318 | 8.37 | 0.0320 | 7.62 | 0.0007 | 4.85 | 0.00074 | 7.65 | 4.61 | 9.89 | 32.02 | 15.24 | 14.96 | 15.30 |
| SPF-06_z3 | 2.7 | 50.3 | 2.67 | 50.29 | 244.64 | 6.31 | 0.7570 | 2.28 | 0.4195 | 7.29 | 0.0041 | 6.61 | 0.00962 | 5.67 | 26.30 | 13.21 | 355.73 | 14.57 | 194.16 | 11.34 |
| SPF-06_z4 | 2.8 | 9.1 | | | 2324.47 | 4.53 | 0.0400 | 27.34 | <DL | 27.00 | 0.0004 | 4.54 | 0.00013 | 17.08 | 2.77 | 9.08 | <DL | 53.99 | 2.65 | 34.16 |
| SPF-06_z5 | 2.9 | 18.3 | 2.91 | 18.33 | 1323.80 | 5.70 | 0.3602 | 9.48 | 0.0380 | 11.41 | 0.0007 | 5.63 | 0.00072 | 9.06 | 4.83 | 11.27 | 37.90 | 22.82 | 14.53 | 18.12 |
| SPF-06_z6 | 3.2 | 12.5 | | | 2007.63 | 6.33 | 0.0400 | 29.89 | <DL | 29.33 | 0.0005 | 6.26 | 0.00022 | 15.25 | 3.22 | 12.51 | <DL | 58.67 | 4.49 | 30.51 |
| SPF-06_z7 | 2.6 | 19.8 | 2.63 | 19.80 | 2096.57 | 7.79 | 0.1511 | 21.39 | 0.0097 | 20.06 | 0.0005 | 8.70 | 0.00041 | 16.17 | 3.04 | 17.40 | 9.81 | 40.12 | 8.36 | 32.34 |
| SPF-06_z8 | 2.4 | 17.8 | | | 2654.40 | 8.90 | 0.0400 | 25.32 | <DL | 23.84 | 0.0004 | 8.89 | <DL | 28.91 | 2.44 | 17.77 | <DL | 47.68 | <DL | 57.81 |
| SPF-06_z9 | 3.4 | 17.6 | 3.36 | 17.62 | 781.92 | 3.57 | 0.5168 | 4.87 | 0.0913 | 4.65 | 0.0013 | 3.47 | 0.00146 | 3.73 | 8.30 | 6.94 | 88.72 | 9.11 | 29.64 | 7.47 |
| UGO12184_z1 | 4.4 | 11.5 | 4.43 | 11.54 | 1221.79 | 4.53 | 0.1758 | 11.66 | 0.0195 | 10.77 | 0.0008 | 4.86 | 0.00061 | 9.66 | 5.30 | 9.71 | 19.64 | 21.53 | 12.34 | 19.32 |
| UGO12184_z10 | 4.4 | 18.3 | 4.37 | 18.27 | 936.43 | 4.60 | 0.3357 | 11.72 | 0.0486 | 7.91 | 0.0011 | 4.59 | 0.00117 | 7.41 | 6.91 | 9.18 | 48.18 | 15.81 | 23.67 | 14.83 |
| UGO12184_z11 | 27.0 | 92.6 | 26.98 | 92.64 | 9.64 | 2.89 | 0.8461 | 1.46 | 12.0986 | 2.56 | 0.1036 | 3.08 | 0.36240 | 2.84 | 635.42 | 6.16 | 2611.93 | 5.12 | 6268.36 | 5.68 |
| UGO12184_z12 | 21.6 | 8.6 | 21.58 | 8.57 | 300.05 | 3.62 | 0.0469 | 17.07 | 0.0213 | 16.70 | 0.0034 | 4.17 | 0.00173 | 11.68 | 3.29 | 8.34 | 21.36 | 33.39 | 35.05 | 23.37 |
| UGO12184_z13 | 6.9 | 14.7 | | | 940.81 | 13.37 | 0.0400 | 24.78 | <DL | 23.69 | 0.0011 | 7.36 | 0.00083 | 17.81 | 6.86 | 14.71 | <DL | 47.37 | 16.74 | 35.61 |
| UGO12184_z14 | 4.0 | 19.6 | 3.97 | 19.57 | 1195.15 | 7.08 | 0.2520 | 15.69 | 0.0285 | 14.03 | 0.0008 | 7.05 | 0.00102 | 15.15 | 5.37 | 14.11 | 28.50 | 28.07 | 20.59 | 30.30 |
| UGO12184_z15 | 4.3 | 10.2 | 4.32 | 10.18 | 1441.57 | 4.77 | 0.0791 | 17.48 | 0.0075 | 16.84 | 0.0007 | 4.75 | 0.00027 | 14.49 | 4.50 | 9.51 | 7.56 | 33.68 | 5.38 | 28.97 |
| UGO12184_z16 | 4.3 | 7.9 | 4.27 | 7.90 | 1503.08 | 3.78 | 0.0462 | 17.94 | 0.0042 | 17.55 | 0.0007 | 3.81 | 0.00027 | 10.39 | 4.27 | 7.61 | 4.26 | 35.11 | 5.56 | 20.77 |
| UGO12184_z17 | 4.5 | 18.8 | 4.48 | 18.84 | 1019.34 | 6.47 | 0.2741 | 13.86 | 0.0363 | 12.29 | 0.0010 | 6.54 | 0.00122 | 11.23 | 6.30 | 13.09 | 36.19 | 24.59 | 24.79 | 22.47 |
| UGO12184_z18 | 4.7 | 17.5 | | | 1382.04 | 8.78 | 0.0400 | 45.81 | <DL | 44.97 | 0.0007 | 8.75 | <DL | 23.55 | 4.71 | 17.49 | <DL | 89.95 | <DL | 47.10 |
| UGO12184_z19 | 4.3 | 10.3 | 4.30 | 10.18 | 1478.18 | 6.11 | 0.0400 | 23.28 | <DL | 22.72 | 0.0007 | 5.14 | 0.00022 | 16.86 | 4.35 | 10.28 | <DL | 45.43 | 4.45 | 33.73 |
| UGO12184_z2 | 3.4 | 33.0 | | | 1974.72 | 16.32 | 0.0400 | 50.66 | <DL | 47.90 | 0.0005 | 16.52 | 0.00055 | 29.59 | 3.39 | 33.04 | <DL | 95.81 | 11.23 | 59.18 |
| UGO12184_z20 | 4.9 | 13.0 | 4.27 | 13.00 | 1329.46 | 6.48 | 0.0400 | 22.25 | <DL | 21.30 | 0.0008 | 6.48 | 0.00044 | 18.89 | 4.86 | 12.96 | <DL | 42.59 | 8.93 | 37.78 |
| UGO12184_z21 | 4.5 | 24.7 | | | 1477.60 | 18.53 | 0.0400 | 37.85 | <DL | 35.79 | 0.0007 | 12.33 | <DL | 46.78 | 4.48 | 24.65 | <DL | 71.58 | <DL | 93.56 |
| UGO12184_z22 | 4.8 | 51.3 | 4.77 | 51.29 | 444.74 | 11.52 | 0.5749 | 11.19 | 0.1746 | 8.94 | 0.0022 | 6.88 | 0.00655 | 9.70 | 14.41 | 13.76 | 163.40 | 17.88 | 132.30 | 19.40 |
| UGO12184_z23 | 3.6 | 16.8 | | | 1758.01 | 8.30 | 0.0400 | 24.27 | <DL | 22.79 | 0.0006 | 8.41 | <DL | 186.15 | 3.61 | 16.81 | <DL | 45.57 | <DL | 372.29 |
| UGO12184_z24 | 6.0 | 56.3 | 5.97 | 56.27 | 257.57 | 3.83 | 0.6484 | 7.95 | 0.3535 | 7.16 | 0.0039 | 5.64 | 0.01083 | 6.13 | 24.96 | 11.29 | 307.34 | 14.32 | 218.31 | 12.26 |
| UGO12184_z25 | 5.0 | 17.0 | | | 1305.10 | 8.53 | 0.0400 | 22.31 | <DL | 20.63 | 0.0008 | 8.51 | <DL | 22.81 | 4.95 | 17.03 | <DL | 41.27 | <DL | 45.62 |
| UGO12184_z26 | 22.4 | 3.3 | 287.54 | 1.62 | 287.54 | 1.62 | 0.0462 | 7.62 | 0.0222 | 7.54 | 0.0035 | 1.65 | 0.00114 | 4.66 | 22.44 | 3.30 | 22.33 | 15.09 | 23.06 | 9.32 |
| UGO12184_z27 | 5.1 | 19.5 | 4.56 | 19.13 | 1275.84 | 9.68 | 0.0400 | 32.66 | <DL | 31.18 | 0.0008 | 9.76 | 0.00065 | 22.79 | 5.09 | 19.51 | <DL | 62.36 | 13.23 | 45.59 |
| UGO12184_z28 | 4.6 | 19.1 | 4.60 | 19.12 | 1478.12 | 14.12 | 0.2816 | 13.79 | 0.0394 | 12.20 | 0.0010 | 6.49 | 0.00160 | 12.07 | 6.50 | 12.99 | 39.23 | 24.39 | 32.49 | 24.14 |
| UGO12184_z29 | 3.9 | 11.4 | | | 1647.42 | 5.74 | 0.0400 | 22.53 | <DL | 21.80 | 0.0006 | 5.70 | 0.00019 | 19.68 | 3.93 | 11.40 | <DL | 43.59 | 3.90 | 39.36 |
| UGO12184_z3 | 6.1 | 24.2 | | | 1092.17 | 12.28 | 0.0400 | 105.07 | <DL | 104.37 | 0.0009 | 12.09 | <DL | 221.15 | 6.11 | 24.18 | <DL | 208.75 | <DL | 442.29 |
| UGO12184_z30 | 5.4 | 20.2 | | | 1199.35 | 10.15 | 0.0400 | 24.67 | <DL | 22.52 | 0.0008 | 10.10 | 0.00167 | 17.53 | 5.36 | 20.20 | <DL | 45.03 | 33.82 | 35.07 |
| UGO12184_z31 | 4.8 | 18.5 | | | 1355.54 | 9.30 | 0.0400 | 33.98 | <DL | 32.71 | 0.0008 | 9.23 | 0.00061 | 19.06 | 4.84 | 18.47 | <DL | 65.42 | 12.27 | 38.11 |
| UGO12184_z32 | 4.5 | 17.9 | | | 1422.12 | 8.85 | 0.0400 | 31.14 | <DL | 29.84 | 0.0007 | 8.95 | <DL | 27.13 | 4.50 | 17.90 | <DL | 59.67 | <DL | 54.26 |

Appendix B: Eastern Sunda arc geochronology data - zircon

| Analysis ID | Pref_Age_Ma | 2s% | 206Pb/238U Age (Ma) | 2s% | 238U/206Pb ratio | 1s% | 207Pb/206Pb ratio | 1s% | 207Pb/235U (calc) ratio | 1s% | 206Pb/238U ratio | 1s% | 208Pb/232Th ratio | 1s% | 206Pb/238U Age (Ma) | 2s% | 207Pb/235U (calc) Age (Ma) | 2s% | 208Pb/232Th Age (Ma) | 2s% |
|--------------|-------------|--------|---------------------|---------|------------------|--------|-------------------|--------|-------------------------|--------|------------------|-------|-------------------|-------|---------------------|-------|----------------------------|---------|----------------------|-------|
| UG012184 z33 | 3.9 | 13.7 | | 1622.01 | 6.83 | < DL | 0.0400 | 43.07 | < DL | 42.53 | 0.0006 | 6.86 | < DL | 29.24 | 3.94 | 13.71 | < DL | 85.06 | < DL | 58.47 |
| UG012184 z34 | 5.4 | 22.3 | | 1207.19 | 11.16 | < DL | 0.0400 | 54.35 | < DL | 53.21 | 0.0008 | 11.14 | < DL | 30.46 | 5.36 | 22.27 | < DL | 106.42 | < DL | 60.91 |
| UG012184 z35 | 6.3 | 16.4 | 6.34 | 614.11 | 4.45 | 0.3595 | 0.0400 | 8.67 | 0.0797 | 7.46 | 0.0016 | 4.91 | 0.0403 | 6.63 | 10.51 | 9.83 | 0.0403 | 77.85 | 14.92 | 81.53 |
| UG012184 z36 | 5.1 | 26.0 | | 1256.06 | 12.73 | 0.3595 | 0.0400 | 63.84 | < DL | 62.53 | 0.0008 | 12.99 | 0.00125 | 21.61 | 5.09 | 25.98 | < DL | 125.06 | < DL | 43.21 |
| UG012184 z37 | 4.8 | 22.7 | | 1332.28 | 16.26 | 0.0400 | 0.0400 | 39.40 | < DL | 37.74 | 0.0008 | 11.36 | 0.00050 | 27.12 | 4.84 | 22.73 | < DL | 75.47 | < DL | 54.24 |
| UG012184 z38 | 4.6 | 15.8 | | 1419.55 | 7.92 | 0.0400 | 0.0400 | 26.56 | < DL | 25.37 | 0.0007 | 7.91 | < DL | 33.06 | 4.55 | 15.82 | < DL | 50.74 | < DL | 66.12 |
| UG012184 z39 | 4.5 | 36.2 | 4.54 | 488.63 | 4.72 | 0.5646 | 0.0400 | 8.27 | 0.1559 | 7.82 | 0.0020 | 5.23 | 0.00397 | 5.91 | 13.20 | 10.47 | 147.13 | 15.64 | 80.34 | 11.82 |
| UG012184 z4 | 4.9 | 14.3 | | 1304.81 | 7.17 | 0.0400 | 0.0400 | 21.08 | < DL | 19.84 | 0.0008 | 7.16 | < DL | 20.42 | 4.95 | 14.32 | < DL | 39.69 | < DL | 40.84 |
| UG012184 z40 | 3.0 | 440.5 | 3.04 | 440.48 | 1.73 | 0.8327 | 0.0400 | 27.24 | 3.0664 | 2.82 | 0.0268 | 2.06 | 0.13189 | 2.84 | 170.70 | 4.13 | 1424.33 | 5.63 | 2511.23 | 5.69 |
| UG012184 z41 | 5.0 | 19.1 | | 1324.72 | 9.70 | 0.0400 | 0.0400 | 27.24 | < DL | 25.53 | 0.0008 | 9.54 | < DL | 27.06 | 4.98 | 19.08 | < DL | 51.05 | < DL | 54.12 |
| UG012184 z42 | 3.1 | 59.0 | | 650.05 | 10.41 | 0.5908 | 0.0400 | 11.82 | 0.1250 | 9.39 | 0.0015 | 7.23 | 0.00534 | 9.53 | 9.95 | 14.45 | 119.57 | 18.78 | 108.03 | 19.06 |
| UG012184 z5 | 4.6 | 9.6 | | 1385.91 | 4.81 | 0.0400 | 0.0400 | 20.35 | < DL | 19.78 | 0.0007 | 4.81 | 0.00028 | 9.99 | 4.64 | 9.62 | < DL | 39.57 | 5.61 | 19.97 |
| UG012184 z6 | 8.0 | 26.7 | | 804.29 | 13.26 | 0.0400 | 0.0400 | 50.36 | < DL | 48.58 | 0.0012 | 13.34 | 0.00289 | 20.11 | 7.98 | 26.69 | < DL | 97.16 | 58.49 | 40.22 |
| UG012184 z7 | 4.2 | 24.1 | | 1575.67 | 12.21 | 0.0400 | 0.0400 | 69.79 | < DL | 68.74 | 0.0007 | 12.05 | 0.00105 | 21.50 | 4.21 | 24.10 | < DL | 137.48 | 21.23 | 43.01 |
| UG012184 z8 | 4.3 | 22.3 | 4.35 | 910.38 | 6.38 | 0.3503 | 0.0400 | 12.59 | 0.0519 | 10.85 | 0.0011 | 6.39 | 0.00229 | 11.28 | 7.07 | 12.78 | 51.39 | 21.69 | 46.37 | 22.55 |
| UG012184 z9 | 4.4 | 12.0 | | 1465.93 | 6.02 | 0.0400 | 0.0400 | 37.99 | < DL | 37.52 | 0.0007 | 6.00 | < DL | 20.69 | 4.41 | 11.99 | < DL | 75.04 | < DL | 41.37 |
| UG012186 z1 | 5.0 | 113.5 | 4.98 | 113.52 | 4.85 | 0.7408 | 0.0400 | 7.34 | 0.6480 | 6.53 | 0.0063 | 5.30 | 0.02165 | 6.50 | 40.42 | 10.59 | 507.24 | 13.07 | 434.18 | 13.00 |
| UG012186 z10 | 4.7 | 14.8 | | 1385.42 | 7.42 | 0.0400 | 0.0400 | 46.12 | < DL | 45.53 | 0.0007 | 7.41 | 0.00087 | 17.14 | 4.68 | 14.81 | < DL | 91.06 | 17.63 | 34.28 |
| UG012186 z11 | 4.1 | 12.1 | | 1580.29 | 5.62 | 0.0400 | 0.0400 | 25.36 | < DL | 24.74 | 0.0006 | 6.03 | 0.00030 | 15.14 | 4.11 | 12.05 | < DL | 49.48 | 6.13 | 30.28 |
| UG012186 z12 | 76.4 | 35.9 | 76.44 | 35.85 | 7.32 | 2.41 | 0.8216 | 1.14 | 15.0815 | 2.60 | 0.1377 | 2.56 | 0.40885 | 2.94 | 831.48 | 5.12 | 2820.40 | 5.19 | 6947.95 | 5.89 |
| UG012186 z13 | 4.9 | 18.4 | | 1286.95 | 9.14 | 0.0400 | 0.0400 | 28.96 | < DL | 27.45 | 0.0008 | 9.22 | 0.00083 | 21.22 | 11871.48 | 2.99 | 6607.02 | 4.00 | 65410.11 | 6.29 |
| UG012186 z15 | 3.7 | 22.7 | | 1760.67 | 12.12 | 0.0400 | 0.0400 | 43.25 | < DL | 41.74 | 0.0006 | 11.36 | < DL | 48.84 | 3.67 | 22.73 | < DL | 83.47 | < DL | 97.67 |
| UG012186 z16 | 23.1 | 109.58 | 23.11 | 109.58 | 3.42 | 0.8445 | 0.0400 | 1.69 | 10.7040 | 3.97 | 0.0948 | 3.80 | 0.35689 | 5.36 | 583.58 | 7.60 | 2497.77 | 7.93 | 6186.26 | 10.73 |
| UG012186 z17 | 7.2 | 71.7 | | 174.89 | 11.65 | 0.6639 | 0.0400 | 7.83 | 0.5393 | 6.22 | 0.0058 | 7.00 | 0.02047 | 6.84 | 37.11 | 14.00 | 437.95 | 12.44 | 410.73 | 13.28 |
| UG012186 z18 | 5.0 | 15.5 | 5.03 | 15.55 | 1023.63 | 6.10 | 0.2020 | 14.68 | 0.0267 | 13.40 | 0.0010 | 6.21 | 0.00084 | 16.31 | 6.27 | 12.41 | 26.78 | 26.81 | 17.05 | 32.62 |
| UG012186 z19 | 4.2 | 63.8 | 4.19 | 63.82 | 312.20 | 4.91 | 0.6776 | 7.31 | 0.2990 | 6.55 | 0.0032 | 5.35 | 0.01491 | 6.98 | 20.78 | 10.70 | 265.58 | 13.10 | 300.06 | 13.97 |
| UG012186 z2 | 4.4 | 17.5 | | 1481.34 | 8.77 | 0.0400 | 0.0400 | 27.76 | < DL | 26.35 | 0.0007 | 8.77 | < DL | 28.85 | 4.35 | 17.54 | < DL | 52.69 | < DL | 57.70 |
| UG012186 z20 | 8.5 | 34.1 | 8.47 | 34.07 | 151.23 | 2.82 | 0.6806 | 3.69 | 0.6055 | 3.84 | 0.0066 | 3.30 | 0.01544 | 6.42 | 42.40 | 6.61 | 480.73 | 7.68 | 310.48 | 12.84 |
| UG012186 z21 | 4.8 | 11.3 | | 1354.41 | 5.66 | 0.0400 | 0.0400 | 23.23 | < DL | 22.54 | 0.0007 | 5.66 | < DL | 27.34 | 4.76 | 11.32 | < DL | 45.08 | < DL | 54.68 |
| UG012186 z3 | 23.2 | 75.8 | 23.20 | 75.77 | 13.67 | 7.55 | 0.8257 | 1.43 | 8.1059 | 6.69 | 0.0727 | 6.73 | 0.27588 | 6.11 | 452.65 | 13.45 | 2242.90 | 13.38 | 4935.28 | 12.21 |
| UG012186 z4 | 4.2 | 12.8 | | 1524.96 | 6.38 | 0.0400 | 0.0400 | 26.90 | < DL | 26.13 | 0.0007 | 6.42 | < DL | 24.14 | 4.23 | 12.84 | < DL | 52.26 | < DL | 48.28 |
| UG012186 z5 | 4.5 | 28.4 | 4.49 | 28.42 | 992.72 | 9.22 | 0.3007 | 19.19 | 0.0415 | 16.84 | 0.0010 | 9.25 | 0.00107 | 19.77 | 6.62 | 18.50 | 41.25 | 33.67 | 21.77 | 39.54 |
| UG012186 z6 | 4.4 | 8.9 | | 1491.35 | 4.46 | 0.0400 | 0.0400 | 23.09 | < DL | 22.67 | 0.0007 | 4.45 | 0.00024 | 12.90 | 4.36 | 8.90 | < DL | 45.34 | 4.95 | 25.79 |
| UG012186 z7 | 4.3 | 132.0 | 4.35 | 132.00 | 74.67 | 2.19 | 0.8012 | 3.07 | 1.4567 | 2.57 | 0.0134 | 2.51 | 0.03432 | 3.56 | 86.03 | 5.03 | 912.63 | 5.14 | 683.91 | 7.12 |
| UG012186 z8 | 4.7 | 12.5 | | 1377.91 | 6.13 | 0.0400 | 0.0400 | 31.06 | < DL | 30.45 | 0.0007 | 6.25 | 0.00039 | 17.24 | 4.68 | 12.50 | < DL | 60.91 | 7.92 | 34.48 |
| UG012186 z9 | 10.6 | 61.8 | 10.63 | 61.84 | 50.49 | 6.88 | 0.7784 | 2.27 | 2.1685 | 5.84 | 0.0201 | 5.95 | 0.04902 | 6.01 | 128.15 | 11.89 | 1170.99 | 11.68 | 970.09 | 12.01 |
| UG012190 z1 | 4.4 | 27.6 | | 1448.89 | 13.78 | 0.0400 | 0.0400 | 944.29 | < DL | 944.19 | 0.0007 | 13.82 | < DL | 39.44 | 4.43 | 27.65 | < DL | 1885.38 | < DL | 76.87 |
| UG012190 z10 | 8.9 | 48.1 | 8.93 | 48.05 | 147.63 | 3.17 | 0.6762 | 5.58 | 0.6372 | 4.86 | 0.0068 | 3.47 | 0.01407 | 4.65 | 43.48 | 6.95 | 500.57 | 9.73 | 283.12 | 9.29 |
| UG012190 z11 | 4.5 | 13.4 | | 1435.92 | 6.68 | 0.0400 | 0.0400 | 125.11 | < DL | 124.93 | 0.0007 | 6.70 | < DL | 46.78 | 4.47 | 13.40 | < DL | 249.86 | < DL | 93.56 |
| UG012190 z12 | 7.5 | 27.7 | 7.51 | 27.65 | 394.80 | 21.08 | 0.4752 | 9.59 | 0.1638 | 7.92 | 0.0025 | 5.47 | 0.00607 | 7.54 | 16.40 | 10.95 | 154.03 | 15.84 | 122.68 | 15.09 |
| UG012190 z13 | 4.2 | 19.0 | | 1554.87 | 9.57 | 0.0400 | 0.0400 | 33.55 | < DL | 32.18 | 0.0006 | 9.50 | < DL | 26.05 | 4.17 | 18.99 | < DL | 64.36 | < DL | 52.10 |
| UG012190 z14 | 5.9 | 19.0 | | 1099.18 | 9.01 | 0.0400 | 0.0400 | 29.81 | < DL | 28.78 | 0.0009 | 9.51 | 0.00075 | 16.25 | 5.87 | 19.02 | < DL | 57.56 | < DL | 32.50 |
| UG012190 z15 | 4.8 | 18.7 | | 1332.70 | 9.35 | 0.0400 | 0.0400 | 40.94 | < DL | 39.87 | 0.0008 | 9.35 | < DL | 37.84 | 4.84 | 18.71 | < DL | 79.74 | < DL | 75.68 |
| UG012190 z16 | 3.7 | 13.6 | | 1748.14 | 6.77 | 0.0400 | 0.0400 | 34.37 | < DL | 33.70 | 0.0006 | 6.78 | < DL | 35.16 | 3.88 | 13.55 | < DL | 67.41 | < DL | 70.33 |

Appendix B: Eastern Sunda arc geochronology data - zircon

| Analysis ID | Pref Age Ma | 2s% Age | 206Pb/238U Age (Ma) | 2s% Age | 238U/206Pb ratio | 1s% ratio | 207Pb/206Pb ratio | 1s% ratio | 207Pb/235U (calc) ratio | 1s% ratio | 206Pb/238U ratio | 1s% ratio | 208Pb/232Th ratio | 1s% ratio | 206Pb/238U Age (Ma) | 2s% Age | 207Pb/235U (calc) Age (Ma) | 2s% Age | 208Pb/232Th Age (Ma) | 2s% Age |
|--------------|-------------|---------|---------------------|---------|------------------|-----------|-------------------|-----------|-------------------------|-----------|------------------|-----------|-------------------|-----------|---------------------|---------|----------------------------|---------|----------------------|---------|
| UGO12190 Z17 | 4.5 | 15.6 | | | 1427.87 | 7.86 | 0.0400 | 22.52 | <DL | 21.14 | 0.0007 | 7.79 | 0.00048 | 20.18 | 4.54 | 15.58 | <DL | 42.28 | 9.83 | 40.36 |
| UGO12190 Z18 | 4.7 | 12.9 | | | 1381.13 | 6.45 | 0.0400 | 35.97 | <DL | 35.39 | 0.0007 | 6.45 | <DL | 28.55 | 4.68 | 12.89 | <DL | 70.79 | <DL | 57.10 |
| UGO12190 Z19 | 4.9 | 18.4 | | | 1309.72 | 9.16 | 0.0400 | 59.70 | <DL | 58.99 | 0.0008 | 9.18 | <DL | 39.51 | 4.88 | 18.37 | <DL | 117.98 | <DL | 79.03 |
| UGO12190 Z2 | 10.2 | 64.3 | 10.16 | 64.31 | 173.60 | 8.51 | 0.6184 | 10.81 | 0.5060 | 11.04 | 0.0057 | 9.86 | 0.00728 | 10.58 | 36.56 | 19.71 | 415.75 | 22.07 | 147.05 | 21.17 |
| UGO12190 Z20 | 4.7 | 19.9 | | | 1349.54 | 9.93 | 0.0400 | 24.87 | <DL | 22.81 | 0.0007 | 9.96 | <DL | 144.26 | 4.74 | 19.93 | <DL | 45.61 | <DL | 288.53 |
| UGO12190 Z21 | 4.4 | 12.4 | | | 1452.08 | 6.18 | 0.0400 | 22.03 | <DL | 21.15 | 0.0007 | 6.19 | 0.00040 | 19.83 | 4.41 | 12.39 | <DL | 42.31 | 8.16 | 39.66 |
| UGO12190 Z22 | 5.0 | 27.8 | 4.99 | 27.83 | 345.97 | 2.80 | 0.6254 | 4.46 | 0.2469 | 3.55 | 0.0029 | 2.80 | 0.00665 | 4.18 | 18.66 | 5.60 | 224.05 | 7.10 | 134.26 | 8.36 |
| UGO12190 Z23 | 3.7 | 12.3 | | | 1712.72 | 8.18 | 0.0400 | 39.37 | <DL | 38.89 | 0.0006 | 6.13 | <DL | 24.44 | 3.74 | 12.27 | <DL | 77.79 | <DL | 48.89 |
| UGO12190 Z24 | 5.1 | 11.5 | | | 1271.49 | 5.77 | 0.0400 | 35.80 | <DL | 35.34 | 0.0008 | 5.75 | 0.00041 | 18.96 | 5.06 | 11.50 | <DL | 70.68 | 8.22 | 37.92 |
| UGO12190 Z25 | 4.0 | 18.6 | | | 1617.76 | 9.35 | 0.0400 | 32.85 | <DL | 31.51 | 0.0006 | 9.30 | <DL | 28.22 | 4.03 | 18.59 | <DL | 63.02 | <DL | 56.44 |
| UGO12190 Z26 | 4.4 | 11.0 | | | 1481.07 | 5.52 | 0.0400 | 21.24 | <DL | 20.53 | 0.0007 | 5.49 | <DL | 38.72 | 4.36 | 10.97 | <DL | 41.06 | <DL | 77.43 |
| UGO12190 Z27 | 3.9 | 13.1 | | | 1637.06 | 6.52 | 0.0400 | 44.49 | <DL | 44.01 | 0.0006 | 6.53 | <DL | 24.17 | 3.92 | 13.06 | <DL | 88.02 | <DL | 48.34 |
| UGO12190 Z28 | 5.4 | 16.7 | | | 1197.97 | 11.40 | 0.0400 | 29.87 | <DL | 28.68 | 0.0008 | 8.37 | 0.00058 | 23.22 | 5.40 | 16.73 | <DL | 57.37 | 11.83 | 46.43 |
| UGO12190 Z29 | 4.3 | 13.3 | | | 1493.45 | 8.58 | 0.0400 | 22.94 | <DL | 22.17 | 0.0007 | 6.64 | 0.00029 | 16.56 | 4.34 | 13.29 | <DL | 44.33 | 5.86 | 33.12 |
| UGO12190 Z3 | 4.4 | 12.2 | | | 1460.34 | 23.05 | 0.0400 | 22.30 | <DL | 21.46 | 0.0007 | 6.08 | <DL | 20.35 | 4.45 | 12.16 | <DL | 42.92 | <DL | 40.70 |
| UGO12190 Z30 | 4.5 | 15.2 | | | 1424.14 | 31.77 | 0.0400 | 24.94 | <DL | 23.77 | 0.0007 | 7.58 | <DL | 219.65 | 4.54 | 15.17 | <DL | 47.54 | <DL | 439.30 |
| UGO12190 Z31 | 4.6 | 17.4 | | | 1382.12 | 8.77 | 0.0400 | 23.72 | <DL | 22.07 | 0.0007 | 8.72 | 0.00026 | 8.77 | 4.64 | 17.43 | <DL | 44.14 | 5.23 | 17.53 |
| UGO12190 Z32 | 4.5 | 26.7 | 4.53 | 26.65 | 806.46 | 7.08 | 0.3969 | 12.22 | 0.0653 | 10.39 | 0.0012 | 8.12 | 0.00389 | 8.96 | 7.87 | 16.24 | 64.24 | 20.78 | 74.68 | 17.92 |
| UGO12190 Z4 | 4.3 | 16.8 | | | 1485.08 | 8.41 | 0.0400 | 30.98 | <DL | 29.83 | 0.0007 | 8.40 | <DL | 22.20 | 4.35 | 16.80 | <DL | 59.67 | <DL | 44.40 |
| UGO12190 Z5 | 4.6 | 15.1 | | | 1392.18 | 7.49 | 0.0400 | 26.99 | <DL | 25.92 | 0.0007 | 7.54 | <DL | 60.21 | 4.60 | 15.08 | <DL | 51.85 | <DL | 120.41 |
| UGO12190 Z6 | 4.4 | 11.2 | | | 1483.40 | 6.10 | 0.0400 | 30.75 | <DL | 30.25 | 0.0007 | 5.59 | <DL | 22.50 | 4.35 | 11.19 | <DL | 60.50 | <DL | 45.01 |
| UGO12190 Z7 | 6.0 | 13.3 | | | 1094.24 | 6.70 | 0.0400 | 21.10 | <DL | 20.04 | 0.0009 | 6.66 | <DL | 22.60 | 5.96 | 13.31 | <DL | 40.07 | <DL | 45.20 |
| UGO12190 Z8 | 4.1 | 17.9 | | | 1581.89 | 8.96 | 0.0400 | 24.38 | <DL | 22.68 | 0.0006 | 8.97 | <DL | 24.63 | 4.07 | 17.94 | <DL | 45.36 | <DL | 49.25 |
| UGO12190 Z9 | 4.2 | 19.2 | | | 1556.43 | 9.69 | 0.0400 | 34.33 | <DL | 32.83 | 0.0006 | 9.60 | <DL | 38.09 | 4.16 | 19.21 | <DL | 65.87 | <DL | 76.18 |
| UGO12193 Z1 | 3.2 | 76.0 | 3.24 | 75.97 | 540.36 | 7.94 | 0.6232 | 12.66 | 0.1581 | 10.04 | 0.0019 | 7.94 | 0.00416 | 12.62 | 11.99 | 15.88 | 149.04 | 20.09 | 84.24 | 25.23 |
| UGO12193 Z10 | | | 160.30 | 36.66 | | 4.18 | 0.8498 | 1.71 | 28.2056 | 2.61 | 0.2414 | 2.49 | 1.09684 | 3.58 | 1393.90 | 4.99 | 3426.27 | 5.21 | 15008.44 | 7.17 |
| UGO12193 Z11 | 4.4 | 20.0 | | | 1461.51 | 9.96 | 0.0400 | 57.80 | <DL | 56.96 | 0.0007 | 9.98 | <DL | 26.06 | 4.39 | 19.95 | <DL | 113.91 | <DL | 52.12 |
| UGO12193 Z12 | | | 12.17 | 61.61 | 74.48 | 3.08 | 0.7294 | 4.55 | 1.3396 | 4.63 | 0.0134 | 3.40 | 0.03759 | 4.77 | 86.04 | 6.80 | 863.06 | 9.25 | 747.94 | 9.55 |
| UGO12193 Z13 | | | 13.52 | 143.70 | 18.17 | 2.72 | 0.8280 | 2.41 | 6.2138 | 2.99 | 0.0554 | 2.82 | 0.15413 | 4.01 | 347.39 | 5.65 | 2006.40 | 5.98 | 2905.61 | 8.02 |
| UGO12193 Z14 | | | 25.18 | 101.99 | 12.61 | 2.19 | 0.8289 | 2.21 | 8.9676 | 2.85 | 0.0797 | 2.27 | 0.32936 | 4.25 | 494.42 | 4.53 | 2334.71 | 5.70 | 5770.83 | 8.51 |
| UGO12193 Z15 | 3.6 | 17.8 | | | 1816.99 | 8.96 | 0.0400 | 29.75 | <DL | 28.39 | 0.0006 | 8.91 | <DL | 32.01 | 3.59 | 17.82 | <DL | 56.78 | <DL | 64.02 |
| UGO12193 Z16 | 9.9 | 39.1 | | | 650.86 | 19.43 | 0.0400 | 42.68 | <DL | 38.00 | 0.0015 | 19.56 | 0.00437 | 24.64 | 9.92 | 39.12 | <DL | 76.01 | 88.36 | 49.29 |
| UGO12193 Z17 | 4.2 | 23.4 | | | 1534.15 | 11.66 | 0.0400 | 36.75 | <DL | 34.87 | 0.0006 | 11.72 | <DL | 21.85 | 4.16 | 23.43 | <DL | 69.75 | <DL | 43.70 |
| UGO12193 Z19 | 6.2 | 37.5 | 6.18 | 37.50 | 583.44 | 9.44 | 0.3943 | 18.02 | 0.0916 | 15.33 | 0.0017 | 9.62 | 0.00323 | 14.32 | 11.04 | 19.23 | 89.00 | 30.66 | 65.38 | 28.64 |
| UGO12193 Z2 | 3.4 | 32.9 | | | 1923.54 | 16.48 | 0.0400 | 45.22 | <DL | 42.16 | 0.0005 | 16.44 | <DL | 32.31 | 3.42 | 32.88 | <DL | 84.31 | <DL | 64.63 |
| UGO12193 Z22 | 4.7 | 21.5 | | | 1351.42 | 10.53 | 0.0400 | 29.98 | <DL | 28.10 | 0.0007 | 10.73 | <DL | 79.94 | 4.67 | 21.46 | <DL | 56.19 | <DL | 159.87 |
| UGO12193 Z20 | 6.0 | 24.7 | | | 1081.24 | 12.40 | 0.0400 | 82.05 | <DL | 81.13 | 0.0009 | 12.37 | 0.00171 | 19.47 | 6.02 | 24.73 | <DL | 162.27 | 34.55 | 38.94 |
| UGO12193 Z23 | 5.1 | 17.6 | | | 1249.63 | 8.80 | 0.0400 | 35.71 | <DL | 34.62 | 0.0008 | 8.81 | <DL | 36.08 | 5.14 | 17.63 | <DL | 69.24 | <DL | 72.16 |
| UGO12193 Z4 | 5.4 | 25.7 | 5.39 | 25.73 | 917.58 | 12.54 | 0.2369 | 19.06 | 0.0358 | 17.14 | 0.0011 | 10.43 | 0.00163 | 15.35 | 7.11 | 20.85 | 35.72 | 34.28 | 33.05 | 30.70 |
| UGO12193 Z5 | 4.3 | 14.9 | | | 1519.12 | 7.45 | 0.0400 | 22.14 | <DL | 20.87 | 0.0007 | 7.15 | 0.00041 | 20.65 | 4.26 | 14.86 | <DL | 69.24 | <DL | 41.30 |
| UGO12193 Z6 | 4.0 | 14.3 | | | 1568.64 | 6.93 | 0.0400 | 31.07 | <DL | 30.49 | 0.0006 | 7.45 | 0.00020 | 21.25 | 4.04 | 14.30 | <DL | 60.97 | 4.00 | 42.50 |
| UGO12193 Z7 | 4.3 | 14.6 | | | 1523.40 | 7.31 | 0.0400 | 26.69 | <DL | 25.69 | 0.0007 | 7.29 | <DL | 24.48 | 4.26 | 14.59 | <DL | 51.37 | <DL | 48.96 |
| UGO12193 Z8 | 3.6 | 24.0 | | | 1777.51 | 11.95 | 0.0400 | 35.06 | <DL | 32.97 | 0.0006 | 11.98 | <DL | 28.85 | 3.61 | 23.95 | <DL | 65.93 | <DL | 57.70 |
| UGO12193 Z9 | 3.8 | 18.1 | | | 1725.00 | 13.86 | 0.0400 | 32.98 | <DL | 31.73 | 0.0006 | 9.05 | <DL | 27.70 | 3.81 | 18.11 | <DL | 63.45 | <DL | 55.40 |
| UGO12195 Z1 | | | 47.92 | 70.47 | 9.90 | 1.66 | 0.8174 | 2.39 | 11.4047 | 2.43 | 0.1011 | 1.98 | 0.50404 | 3.66 | 621.10 | 3.97 | 2556.81 | 4.86 | 8273.27 | 7.33 |

Appendix B: Eastern Sunda arc geochronology data - zircon

| Analysis ID | Pref Age Ma | 2s% | 206Pb/238U Age (Ma) | 2s% | 238U/206Pb ratio | 1s% | 207Pb/206Pb ratio | 1s% | 207Pb/235U (calc) ratio | 1s% | 206Pb/238U ratio | 1s% | 208Pb/232Th ratio | 1s% | 206Pb/238U Age (Ma) | 2s% | 207Pb/235U Age (Ma) | 2s% | 208Pb/232Th Age (Ma) | 2s% |
|--------------|----------------|-------|------------------------|--------|---------------------|-------|----------------------|--------|----------------------------|--------|---------------------|-------|----------------------|-------|------------------------|-------|------------------------|--------|-------------------------|--------|
| UG012195 z10 | 10.2 | 88.3 | 10.23 | 88.32 | 56.65 | 2.65 | 0.7713 | 3.92 | 1.8855 | 3.29 | 0.0177 | 3.05 | 0.06615 | 3.52 | 112.92 | 6.09 | 1075.99 | 6.59 | 1298.32 | 7.04 |
| UG012195 z11 | 6.3 | 16.3 | | | 1024.43 | 8.14 | 0.0400 | 51.41 | <DL | 50.77 | 0.0010 | 8.14 | 0.00111 | 20.27 | 6.29 | 16.27 | <DL | 101.54 | 22.52 | 40.53 |
| UG012195 z12 | 5.1 | 24.0 | 5.06 | 24.02 | 988.30 | 16.06 | 0.2151 | 22.00 | 0.0288 | 19.96 | 0.0010 | 9.28 | 0.00184 | 17.88 | 6.43 | 18.57 | 28.81 | 39.93 | 37.18 | 35.76 |
| UG012195 z13 | | | | | 290.31 | 14.74 | 0.9857 | 20.81 | 0.4879 | 14.87 | 0.0035 | 14.78 | 0.02330 | 16.84 | 22.83 | 29.56 | 403.46 | 28.75 | 466.96 | 33.69 |
| UG012195 z14 | 4.3 | 14.2 | | | 1495.80 | 7.09 | 0.0400 | 37.02 | <DL | 36.35 | 0.0007 | 7.08 | <DL | 27.78 | 4.32 | 14.15 | <DL | 72.70 | <DL | 55.55 |
| UG012195 z15 | 4.2 | 11.2 | 4.23 | 11.23 | 1402.64 | 5.34 | 0.1036 | 16.60 | 0.0100 | 15.81 | 0.0007 | 5.10 | 0.00025 | 14.33 | 4.56 | 10.20 | 10.06 | 31.61 | 5.05 | 28.67 |
| UG012195 z16 | 11.4 | 60.3 | 11.38 | 60.34 | 170.58 | 26.05 | 0.6014 | 11.49 | 0.4886 | 9.21 | 0.0059 | 7.10 | 0.01405 | 9.75 | 38.01 | 14.20 | 403.98 | 18.41 | 282.75 | 19.51 |
| UG012195 z17 | 4.4 | 21.2 | 4.36 | 21.21 | 970.59 | 6.61 | 0.3188 | 13.41 | 0.0443 | 11.70 | 0.0010 | 6.61 | 0.00181 | 11.35 | 6.65 | 13.23 | 43.98 | 36.61 | 22.70 | 22.70 |
| UG012195 z18 | 4.8 | 14.9 | | | 1346.79 | 7.40 | 0.0400 | 30.16 | <DL | 29.24 | 0.0007 | 7.43 | 0.00037 | 21.00 | 4.77 | 14.85 | <DL | 58.48 | 7.51 | 41.99 |
| UG012195 z19 | 10.3 | 29.3 | 10.33 | 29.26 | 289.38 | 5.91 | 0.4692 | 10.43 | 0.2197 | 8.63 | 0.0034 | 5.93 | 0.00786 | 8.32 | 22.19 | 11.86 | 201.63 | 17.27 | 158.63 | 16.63 |
| UG012195 z20 | 7.3 | 31.9 | 7.30 | 31.94 | 454.06 | 8.21 | 0.4275 | 13.19 | 0.1323 | 11.13 | 0.0022 | 7.99 | 0.00416 | 11.71 | 14.11 | 15.98 | 126.15 | 22.27 | 84.25 | 23.41 |
| UG012195 z21 | 4.1 | 12.0 | | | 1556.19 | 6.01 | 0.0400 | 100.20 | <DL | 100.02 | 0.0006 | 6.01 | 0.00050 | 16.01 | 4.14 | 12.02 | <DL | 200.04 | 10.19 | 32.01 |
| UG012195 z22 | 4.3 | 14.1 | 4.32 | 14.05 | 1288.47 | 5.22 | 0.1570 | 13.80 | 0.0166 | 12.84 | 0.0008 | 6.26 | 0.00048 | 10.79 | 5.03 | 12.52 | 16.73 | 25.69 | 9.72 | 21.57 |
| UG012195 z23 | 6.8 | 19.0 | | | 952.67 | 10.69 | 0.0400 | 31.48 | <DL | 30.61 | 0.0011 | 9.52 | 0.00031 | 21.52 | 6.80 | 19.05 | <DL | 61.22 | 6.28 | 43.04 |
| UG012195 z24 | 6.8 | 112.8 | 6.81 | 112.78 | 333.08 | 21.36 | 0.5602 | 27.22 | 0.2347 | 13.64 | 0.0030 | 11.78 | 0.01392 | 12.02 | 19.44 | 23.57 | 214.11 | 27.28 | 280.13 | 24.05 |
| UG012195 z25 | 5.0 | 17.1 | | | 1279.77 | 8.53 | 0.0400 | 30.79 | <DL | 29.59 | 0.0008 | 8.54 | <DL | 62.92 | 5.02 | 17.09 | <DL | 58.19 | <DL | 125.83 |
| UG012195 z26 | 4.2 | 20.3 | | | 1524.13 | 10.17 | 0.0400 | 50.38 | <DL | 49.36 | 0.0007 | 10.15 | <DL | 30.26 | 4.21 | 20.30 | <DL | 98.71 | <DL | 60.51 |
| UG012195 z27 | 4.4 | 5.2 | | | 1459.73 | 2.56 | 0.0400 | 12.05 | 0.0043 | 11.80 | 0.0007 | 2.61 | 0.00025 | 7.20 | 4.41 | 5.23 | 4.39 | 23.80 | 5.05 | 14.40 |
| UG012195 z28 | 5.1 | 14.7 | | | 1275.76 | 7.40 | 0.0400 | 25.19 | <DL | 24.10 | 0.0008 | 7.34 | 0.00076 | 20.10 | 5.08 | 14.68 | <DL | 48.19 | 15.48 | 40.20 |
| UG012195 z29 | 4.2 | 12.7 | | | 1526.23 | 8.83 | 0.0400 | 22.17 | <DL | 21.26 | 0.0007 | 6.34 | <DL | 42.86 | 4.24 | 12.68 | <DL | 42.52 | <DL | 85.73 |
| UG012195 z30 | 5.2 | 17.4 | | | 1231.76 | 8.67 | 0.0400 | 76.67 | <DL | 76.18 | 0.0008 | 8.69 | 0.00050 | 26.37 | 5.22 | 17.38 | <DL | 152.37 | 10.19 | 52.73 |
| UG012195 z31 | 4.6 | 16.7 | | | 1402.79 | 8.33 | 0.0400 | 42.39 | <DL | 41.57 | 0.0007 | 8.35 | <DL | 26.20 | 4.57 | 16.69 | <DL | 83.14 | <DL | 52.41 |
| UG012195 z32 | 27.88 | 82.73 | | | 1166.87 | 12.62 | 0.8204 | 2.06 | 8.5836 | 6.01 | 0.0755 | 5.76 | 0.46233 | 6.21 | 469.17 | 11.52 | 2294.82 | 12.02 | 7703.15 | 12.43 |
| UG012195 z33 | 5.5 | 25.7 | | | 13.27 | 7.64 | 0.0400 | 36.26 | <DL | 33.95 | 0.0008 | 12.84 | 0.00117 | 24.49 | 5.48 | 25.68 | <DL | 67.89 | 23.72 | 48.97 |
| UG012195 z34 | 4.5 | 19.0 | | | 1447.17 | 9.56 | 0.0400 | 31.52 | <DL | 30.06 | 0.0007 | 9.50 | <DL | 23.19 | 4.51 | 19.00 | <DL | 60.11 | <DL | 46.38 |
| UG012196 z1 | 5.0 | 11.7 | | | 1290.90 | 5.87 | 0.0400 | 24.01 | <DL | 23.30 | 0.0008 | 5.86 | <DL | 25.81 | 4.98 | 11.73 | <DL | 46.59 | <DL | 51.63 |
| UG012196 z2 | 4.7 | 16.6 | | | 1393.48 | 8.40 | 0.0400 | 26.40 | <DL | 25.09 | 0.0007 | 8.30 | <DL | 25.66 | 4.67 | 16.61 | <DL | 51.32 | <DL | 51.32 |
| UG012196 z3 | 4.3 | 24.4 | | | 1478.05 | 9.80 | 0.0400 | 53.17 | <DL | 52.34 | 0.0007 | 12.21 | <DL | 30.33 | 4.28 | 24.42 | <DL | 104.69 | <DL | 60.65 |
| UG012196 z4 | 4.4 | 13.5 | | | 1453.74 | 24.58 | 0.0400 | 26.71 | <DL | 25.85 | 0.0007 | 6.77 | <DL | 28.57 | 4.44 | 13.53 | <DL | 51.70 | <DL | 57.15 |
| UG012196 z5 | 5.6 | 21.2 | 5.58 | 21.24 | 831.25 | 7.38 | 0.2717 | 15.88 | 0.0451 | 14.10 | 0.0012 | 7.36 | 0.00146 | 16.38 | 7.80 | 14.71 | 44.79 | 28.19 | 28.54 | 32.77 |
| UG012196 z6 | 1.6 | 684.9 | 1.63 | 684.87 | 61.35 | 5.00 | 0.8300 | 4.96 | 1.8703 | 3.96 | 0.0163 | 4.67 | 0.02209 | 6.27 | 104.42 | 9.94 | 1070.64 | 7.92 | 442.81 | 12.54 |
| UG012196 z7 | 14.4 | 58.9 | 14.37 | 58.89 | 87.80 | 4.81 | 0.8933 | 6.52 | 1.0596 | 6.47 | 0.0113 | 6.12 | 0.02857 | 6.83 | 72.36 | 12.25 | 733.62 | 12.94 | 531.50 | 13.67 |
| UG012196 z8 | 1.8 | 605.8 | 1.83 | 605.78 | 62.82 | 4.08 | 0.8280 | 5.06 | 1.8239 | 4.98 | 0.0159 | 4.90 | 0.03599 | 5.00 | 101.70 | 9.79 | 1054.08 | 9.96 | 716.74 | 9.99 |
| UG012196 z9 | 5.5 | 15.6 | | | 1176.55 | 7.84 | 0.0400 | 40.82 | <DL | 40.09 | 0.0009 | 7.82 | <DL | 28.77 | 5.51 | 15.63 | <DL | 80.18 | <DL | 57.54 |
| UG012196 z10 | 5.0 | 20.6 | | | 1290.40 | 10.32 | 0.0400 | 93.06 | <DL | 92.50 | 0.0008 | 10.30 | <DL | 24.80 | 5.03 | 20.61 | <DL | 185.00 | <DL | 49.60 |
| UG012196 z11 | 4.1 | 41.3 | 4.11 | 41.27 | 862.73 | 10.41 | 0.3815 | 20.04 | 0.0605 | 17.05 | 0.0011 | 10.65 | 0.00170 | 17.31 | 7.30 | 21.31 | 59.64 | 34.10 | 34.51 | 34.61 |
| UG012196 z12 | 5.9 | 17.0 | | | 1111.07 | 8.66 | 0.0400 | 26.97 | <DL | 25.61 | 0.0009 | 8.51 | <DL | 65.18 | 5.92 | 17.01 | <DL | 51.21 | <DL | 130.35 |
| UG012196 z13 | 4.5 | 12.9 | | | 1422.47 | 6.44 | 0.0400 | 32.19 | <DL | 31.58 | 0.0007 | 6.44 | <DL | 29.87 | 4.53 | 12.88 | <DL | 63.15 | <DL | 59.74 |
| UG012196 z14 | 4.2 | 12.3 | | | 1342.06 | 5.31 | 0.1413 | 15.04 | 0.0143 | 14.09 | 0.0007 | 5.31 | 0.00069 | 11.77 | 4.80 | 10.63 | 14.40 | 28.18 | 13.93 | 23.54 |
| UG012196 z15 | 4.3 | 13.9 | | | 1481.57 | 6.77 | 0.0400 | 29.07 | <DL | 28.31 | 0.0007 | 6.93 | 0.00042 | 15.85 | 4.34 | 13.87 | <DL | 56.62 | 8.51 | 31.70 |
| UG012196 z16 | 6.8 | 25.3 | | | 957.42 | 12.73 | 0.0400 | 25.53 | <DL | 22.22 | 0.0011 | 12.66 | 0.00179 | 20.01 | 6.82 | 25.32 | <DL | 44.44 | 36.21 | 40.02 |
| UG012196 z17 | 4.6 | 13.5 | | | 1404.27 | 6.80 | 0.0400 | 24.43 | <DL | 23.50 | 0.0007 | 6.74 | <DL | 32.86 | 4.61 | 13.48 | <DL | 46.99 | <DL | 65.72 |
| UG012196 z18 | 5.0 | 17.6 | | | 1297.21 | 10.95 | 0.0400 | 24.69 | <DL | 23.71 | 0.0008 | 8.82 | 0.00042 | 19.02 | 4.99 | 17.85 | <DL | 47.42 | 8.51 | 38.05 |
| UG012196 z19 | 347.9 | 1.9 | 347.93 | 1.94 | 18.06 | 0.86 | 0.0546 | 3.48 | 0.3983 | 3.45 | 0.0055 | 0.96 | 0.01735 | 3.26 | 348.42 | 1.92 | 340.41 | 6.52 | 348.74 | 6.52 |
| UG012196 z20 | 4.7 | 13.1 | | | 1376.99 | 6.52 | 0.0400 | 24.54 | <DL | 23.67 | 0.0007 | 6.53 | 0.00035 | 18.28 | 4.67 | 13.06 | <DL | 47.33 | 7.04 | 36.56 |

Appendix B: Eastern Sunda arc geochronology data - zircon

| Analysis ID | Pref Age Ma | 2s% | 208Pb/238U Age (Ma) | 2s% | 238U/206Pb ratio | 1s% | 207Pb/208Pb ratio | 1s% | 207Pb/235U (calc) ratio | 1s% | 206Pb/238U ratio | 1s% | 208Pb/232Th ratio | 1s% | 206Pb/238U Age (Ma) | 2s% | 207Pb/235U (calc) Age (Ma) | 2s% | 208Pb/232Th Age (Ma) | 2s% |
|--------------|-------------|-------|---------------------|--------|------------------|-------|-------------------|--------|-------------------------|--------|------------------|-------|-------------------|--------|---------------------|-------|----------------------------|--------|----------------------|--------|
| UG012196_z7 | 4.5 | 14.3 | | | 1456.08 | 7.15 | 0.0400 | 21.57 | < DL | 20.37 | 0.0007 | 7.13 | 0.00045 | 18.07 | 4.46 | 14.26 | < DL | 40.75 | 9.06 | 36.14 |
| UG012196_z8 | 3.8 | 13.8 | | | 1695.61 | 6.90 | 0.0400 | 38.56 | < DL | 37.95 | 0.0006 | 6.90 | < DL | 22.93 | 3.80 | 13.79 | < DL | 75.90 | < DL | 45.86 |
| UG012196_z9 | 4.0 | 154.5 | 3.99 | 154.49 | 103.98 | 4.97 | 0.7985 | 4.85 | 1.0310 | 5.65 | 0.0096 | 5.74 | 0.02746 | 5.54 | 61.70 | 11.47 | 719.41 | 11.29 | 549.11 | 11.08 |
| UG012197_z1 | 5.0 | 50.7 | 4.98 | 50.69 | 427.71 | 12.51 | 0.7772 | 10.92 | 0.1822 | 8.82 | 0.0024 | 6.71 | 0.00483 | 9.41 | 15.16 | 13.42 | 169.91 | 17.65 | 97.77 | 18.82 |
| UG012197_z10 | 3.7 | 21.0 | | | 1712.62 | 10.69 | 0.0400 | 30.25 | < DL | 28.39 | 0.0006 | 10.49 | < DL | 139.10 | 3.69 | 20.99 | < DL | 56.78 | < DL | 278.21 |
| UG012197_z11 | 4.8 | 21.5 | 4.83 | 21.48 | 984.95 | 12.67 | 0.2474 | 15.50 | 0.0342 | 13.89 | 0.0010 | 8.53 | 0.00138 | 12.62 | 6.47 | 17.06 | 34.13 | 27.77 | 27.86 | 25.24 |
| UG012197_z12 | 4.5 | 14.9 | | | 1445.26 | 6.97 | 0.0400 | 30.87 | < DL | 30.09 | 0.0007 | 7.43 | 0.00024 | 24.29 | 4.50 | 14.86 | < DL | 60.17 | 4.83 | 48.58 |
| UG012197_z13 | 4.5 | 21.8 | | | 1427.01 | 10.90 | 0.0400 | 30.37 | < DL | 28.39 | 0.0007 | 10.90 | < DL | 30.21 | 4.47 | 14.86 | < DL | 56.79 | < DL | 60.41 |
| UG012197_z14 | 3.5 | 20.7 | | | 1826.91 | 10.22 | 0.0400 | 130.05 | < DL | 129.65 | 0.0005 | 10.33 | < DL | 27.10 | 3.48 | 20.66 | < DL | 259.30 | < DL | 54.21 |
| UG012197_z15 | 5.6 | 20.6 | | | 1157.99 | 18.40 | 0.0400 | 33.05 | < DL | 31.50 | 0.0009 | 10.28 | 0.00057 | 26.75 | 5.56 | 20.56 | < DL | 62.99 | 11.64 | 53.49 |
| UG012197_z16 | 4.4 | 13.6 | | | 1471.00 | 6.80 | 0.0400 | 22.53 | < DL | 21.50 | 0.0007 | 6.80 | < DL | 35.86 | 4.39 | 13.59 | < DL | 42.89 | < DL | 71.72 |
| UG012197_z17 | 6.4 | 7.9 | 6.40 | 7.85 | 888.04 | 3.17 | 0.1378 | 9.82 | 0.0216 | 9.30 | 0.0011 | 3.41 | 0.00095 | 9.73 | 7.24 | 6.82 | 21.71 | 18.59 | 19.22 | 19.47 |
| UG012197_z18 | 5.1 | 17.5 | | | 1275.56 | 8.73 | 0.0400 | 37.25 | < DL | 36.22 | 0.0008 | 8.73 | < DL | 51.62 | 5.06 | 17.47 | < DL | 72.44 | < DL | 103.23 |
| UG012197_z19 | 6.3 | 24.2 | | | 1021.13 | 12.27 | 0.0400 | 36.45 | < DL | 34.31 | 0.0010 | 12.12 | < DL | 31.00 | 6.32 | 24.24 | < DL | 68.62 | < DL | 62.00 |
| UG012197_z2 | 10.5 | 39.4 | 10.51 | 39.38 | 335.88 | 19.83 | 0.4132 | 17.63 | 0.1669 | 14.91 | 0.0030 | 9.56 | 0.01191 | 12.27 | 19.60 | 19.13 | 156.76 | 29.82 | 239.93 | 24.54 |
| UG012197_z20 | 5.2 | 17.0 | | | 1240.04 | 8.23 | 0.0400 | 30.41 | < DL | 29.27 | 0.0008 | 8.49 | 0.00048 | 26.08 | 5.16 | 16.99 | < DL | 58.54 | 9.78 | 52.17 |
| UG012197_z21 | 4.6 | 11.4 | | | 1401.54 | 5.68 | 0.0400 | 63.21 | < DL | 62.96 | 0.0007 | 5.69 | 0.00030 | 17.48 | 4.59 | 11.37 | < DL | 125.91 | 6.05 | 34.96 |
| UG012197_z22 | 5.1 | 23.7 | | | 1268.97 | 11.79 | 0.0400 | 31.86 | < DL | 29.60 | 0.0008 | 11.87 | < DL | 29.15 | 5.12 | 23.75 | < DL | 59.20 | < DL | 58.30 |
| UG012197_z23 | 3.9 | 24.4 | | | 1685.38 | 12.13 | 0.0400 | 29.10 | < DL | 28.45 | 0.0006 | 12.22 | < DL | 148.31 | 3.88 | 24.43 | < DL | 52.91 | < DL | 296.61 |
| UG012197_z24 | 6.8 | 47.3 | | | 929.82 | 23.02 | 0.0400 | 41.60 | < DL | 34.20 | 0.0011 | 23.65 | < DL | 43.72 | 6.83 | 47.30 | < DL | 68.39 | < DL | 87.43 |
| UG012197_z25 | 4.2 | 13.6 | | | 1524.68 | 6.77 | 0.0400 | 24.46 | < DL | 23.52 | 0.0007 | 6.78 | 0.00032 | 18.39 | 4.22 | 13.56 | < DL | 47.04 | 6.56 | 36.78 |
| UG012197_z26 | 4.0 | 16.6 | | | 1615.36 | 15.97 | 0.0400 | 31.52 | < DL | 30.42 | 0.0006 | 8.31 | 0.00035 | 17.82 | 4.02 | 16.63 | < DL | 60.83 | 7.04 | 35.65 |
| UG012197_z4 | 6.3 | 48.4 | 6.30 | 48.39 | 344.03 | 6.47 | 0.5740 | 10.62 | 0.2250 | 8.59 | 0.0029 | 6.44 | 0.01126 | 8.25 | 18.92 | 12.88 | 206.08 | 17.19 | 227.00 | 16.51 |
| UG012197_z5 | 4.0 | 22.1 | | | 1655.23 | 11.16 | 0.0400 | 20.36 | < DL | 17.17 | 0.0006 | 11.04 | < DL | 82.79 | 3.98 | 22.07 | < DL | 34.33 | < DL | 165.57 |
| UG012197_z6 | 6.5 | 14.8 | | | 996.05 | 9.44 | 0.0400 | 22.62 | < DL | 21.43 | 0.0010 | 7.41 | 0.00070 | 18.37 | 6.45 | 14.82 | < DL | 42.85 | 14.10 | 36.73 |
| UG012197_z7 | 5.0 | 25.2 | | | 1273.31 | 12.43 | 0.0400 | 36.00 | < DL | 33.74 | 0.0008 | 12.60 | 0.00142 | 22.33 | 5.03 | 25.19 | < DL | 67.47 | 28.79 | 44.66 |
| UG012197_z8 | 4.4 | 9.2 | | | 1477.15 | 4.61 | 0.0400 | 20.43 | < DL | 19.92 | 0.0007 | 4.62 | 0.00025 | 13.33 | 4.39 | 9.24 | < DL | 39.84 | 4.98 | 26.65 |
| UG012198_z1 | 4.6 | 16.4 | | | 1408.68 | 8.20 | 0.0400 | 70.21 | < DL | 69.74 | 0.0007 | 8.18 | < DL | 21.84 | 4.60 | 16.36 | < DL | 139.47 | < DL | 43.67 |
| UG012198_z10 | 4.9 | 24.9 | 4.90 | 24.91 | 712.04 | 6.02 | 0.4082 | 11.09 | 0.0782 | 9.43 | 0.0014 | 6.50 | 0.00144 | 8.94 | 9.04 | 12.99 | 76.41 | 18.86 | 29.12 | 17.88 |
| UG012198_z11 | 6.9 | 10.7 | 6.89 | 10.69 | 850.59 | 4.41 | 0.1218 | 13.30 | 0.0197 | 12.62 | 0.0012 | 4.84 | 0.00049 | 8.66 | 7.61 | 9.68 | 19.77 | 25.25 | 9.83 | 17.32 |
| UG012198_z12 | 6.6 | 12.7 | | | 1142.63 | 6.49 | 0.0400 | 22.40 | < DL | 21.50 | 0.0009 | 6.44 | < DL | 24.25 | 5.68 | 12.88 | < DL | 43.00 | < DL | 48.50 |
| UG012198_z13 | 6.5 | 15.6 | | | 975.89 | 7.27 | 0.0400 | 24.70 | < DL | 23.92 | 0.0010 | 6.36 | 0.00032 | 14.48 | 6.65 | 12.73 | < DL | 47.83 | 6.39 | 28.95 |
| UG012198_z14 | 6.1 | 13.9 | 6.50 | 15.60 | 729.21 | 5.24 | 0.2599 | 11.38 | 0.0489 | 10.21 | 0.0014 | 5.86 | 0.00077 | 8.22 | 8.91 | 11.71 | 48.50 | 20.42 | 15.52 | 16.43 |
| UG012198_z15 | 10.0 | 18.2 | | | 1045.92 | 6.96 | 0.0400 | 24.87 | < DL | 23.93 | 0.0010 | 6.93 | 0.00040 | 11.64 | 6.13 | 13.85 | < DL | 47.87 | 8.07 | 23.28 |
| UG012198_z16 | 5.9 | 14.0 | | | 663.85 | 12.51 | 0.0400 | 32.34 | < DL | 31.14 | 0.0015 | 9.08 | < DL | 26.94 | 9.98 | 18.17 | < DL | 62.28 | < DL | 53.88 |
| UG012198_z17 | 6.7 | 15.4 | | | 1097.02 | 6.61 | 0.0400 | 26.98 | < DL | 26.22 | 0.0009 | 7.02 | 0.00025 | 14.70 | 5.94 | 14.04 | < DL | 52.44 | 5.13 | 29.41 |
| UG012198_z18 | 6.5 | 11.9 | | | 956.85 | 7.69 | 0.0400 | 23.85 | < DL | 22.61 | 0.0010 | 7.70 | 0.00082 | 14.85 | 6.71 | 15.40 | < DL | 45.21 | 16.64 | 29.71 |
| UG012198_z19 | 6.1 | 24.3 | | | 990.36 | 5.36 | 0.0400 | 23.94 | < DL | 23.39 | 0.0010 | 5.95 | 0.00038 | 7.20 | 6.54 | 11.90 | < DL | 46.78 | 7.72 | 14.39 |
| UG012198_z20 | 6.1 | 24.3 | 6.85 | 29.01 | 1056.81 | 12.17 | 0.0400 | 26.36 | < DL | 23.53 | 0.0010 | 12.13 | 0.00129 | 19.15 | 6.12 | 24.27 | < DL | 47.07 | 26.03 | 38.31 |
| UG012198_z21 | 7.3 | 38.3 | | | 647.85 | 9.37 | 0.2947 | 19.70 | 0.0628 | 17.34 | 0.0016 | 9.76 | 0.00219 | 14.18 | 9.89 | 19.53 | 61.87 | 34.69 | 44.29 | 28.36 |
| UG012198_z22 | 5.5 | 10.5 | | | 874.50 | 19.17 | 0.0400 | 94.46 | < DL | 92.53 | 0.0011 | 19.17 | < DL | 45.24 | 7.32 | 38.35 | < DL | 185.05 | < DL | 90.48 |
| UG012198_z23 | 5.5 | 62.3 | 5.50 | 62.34 | 1168.80 | 5.26 | 0.0400 | 22.97 | < DL | 22.41 | 0.0009 | 5.26 | 0.00033 | 12.02 | 5.52 | 10.53 | < DL | 44.82 | 6.82 | 24.03 |
| UG012198_z24 | 6.0 | 6.9 | | | 342.34 | 6.60 | 0.6059 | 11.54 | 0.2422 | 8.49 | 0.0029 | 6.73 | 0.00577 | 8.16 | 18.80 | 13.46 | 220.18 | 16.99 | 116.55 | 16.31 |
| UG012198_z25 | 6.0 | 6.9 | | | 1084.73 | 3.46 | 0.0321 | 19.20 | 0.0040 | 18.94 | 0.0009 | 3.46 | 0.00028 | 6.52 | 5.96 | 6.92 | 4.10 | 37.88 | 5.60 | 13.04 |
| UG012198_z26 | 6.2 | 15.9 | | | 1037.94 | 7.19 | 0.0400 | 28.50 | < DL | 27.62 | 0.0010 | 7.94 | 0.00022 | 22.76 | 6.23 | 15.88 | < DL | 55.24 | 4.55 | 45.53 |

Appendix B: Eastern Sunda arc geochronology data - zircon

| Analysis ID | Pref Age Ma | 2s% Age | 206Pb/238U Age | 2s% Age | 238U/206Pb ratio | 1s% | 207Pb/206Pb ratio | 1s% | 207Pb/235U (calc) ratio | 1s% | 206Pb/238U ratio | 1s% | 208Pb/232Th ratio | 1s% | 206Pb/238U Age (Ma) | 2s% Age (Ma) | 207Pb/235U (calc) Age (Ma) | 2s% Age (Ma) | 208Pb/232Th Age (Ma) | 2s% Age (Ma) |
|--------------|----------------|------------|-------------------|------------|---------------------|-------|----------------------|--------|----------------------------|--------|---------------------|-------|----------------------|--------|------------------------|-----------------|----------------------------------|-----------------|-------------------------|-----------------|
| UG012198_z25 | 6.0 | 11.0 | | | 1080.03 | 5.50 | 0.0400 | 25.31 | < DL | 24.75 | 0.0009 | 5.49 | 0.00037 | 12.59 | 5.99 | 10.98 | < DL | 49.51 | 7.57 | 25.18 |
| UG012198_z26 | 6.6 | 8.6 | 6.55 | 8.63 | 906.33 | 3.93 | 0.1087 | 12.26 | 0.0163 | 11.71 | 0.0011 | 3.91 | 0.00041 | 6.83 | 7.12 | 7.81 | 16.46 | 23.43 | 8.38 | 13.66 |
| UG012198_z27 | 5.9 | 8.4 | | | 1087.87 | 4.20 | 0.0442 | 20.16 | 0.0055 | 19.77 | 0.0009 | 4.22 | 0.00028 | 7.84 | 5.90 | 8.43 | 5.59 | 39.54 | 5.77 | 15.69 |
| UG012198_z28 | 6.9 | 10.4 | | | 933.91 | 5.05 | 0.0400 | 27.88 | < DL | 27.45 | 0.0011 | 5.19 | 0.00028 | 14.65 | 6.91 | 10.38 | < DL | 54.91 | 5.74 | 29.31 |
| UG012198_z29 | 5.8 | 10.0 | | | 1106.11 | 5.14 | 0.0400 | 25.60 | < DL | 25.14 | 0.0009 | 5.00 | 0.00028 | 10.78 | 5.81 | 10.00 | < DL | 50.29 | 5.74 | 21.57 |
| UG012198_z3 | 6.6 | 10.8 | | | 964.93 | 6.87 | 0.0400 | 27.25 | < DL | 26.76 | 0.0010 | 5.40 | 0.00032 | 13.29 | 6.63 | 10.80 | < DL | 53.52 | 6.52 | 26.59 |
| UG012198_z30 | 6.9 | 21.8 | | | 921.12 | 10.91 | 0.0400 | 30.01 | < DL | 28.00 | 0.0011 | 10.91 | < DL | 27.39 | 6.93 | 21.82 | < DL | 56.01 | < DL | 54.78 |
| UG012198_z31 | 5.6 | 12.6 | | | 1151.40 | 6.28 | 0.0400 | 54.50 | < DL | 54.15 | 0.0009 | 6.29 | 0.00031 | 11.75 | 5.61 | 12.57 | < DL | 108.31 | 6.25 | 23.51 |
| UG012198_z32 | 6.7 | 11.3 | | | 952.77 | 5.63 | 0.0400 | 22.44 | < DL | 21.76 | 0.0010 | 5.65 | 0.00041 | 15.16 | 6.73 | 11.30 | < DL | 43.53 | 6.27 | 30.32 |
| UG012198_z33 | 6.0 | 8.8 | | | 1079.81 | 4.07 | 0.0418 | 19.98 | 0.0053 | 19.62 | 0.0009 | 4.38 | 0.00029 | 10.13 | 5.97 | 8.75 | 5.33 | 39.23 | 5.92 | 20.25 |
| UG012198_z34 | 6.0 | 12.2 | | | 1063.50 | 6.07 | 0.0400 | 21.19 | < DL | 20.35 | 0.0009 | 6.08 | < DL | 21.20 | 6.04 | 12.16 | < DL | 40.70 | < DL | 42.40 |
| UG012198_z35 | 6.3 | 13.7 | | | 1027.18 | 6.93 | 0.0400 | 29.84 | < DL | 29.21 | 0.0010 | 6.84 | 0.00032 | 14.63 | 6.25 | 13.69 | < DL | 58.41 | 6.51 | 29.25 |
| UG012198_z36 | 6.4 | 13.6 | | | 1000.93 | 6.06 | 0.0400 | 27.12 | < DL | 26.56 | 0.0010 | 6.82 | 0.00045 | 10.33 | 6.43 | 13.64 | < DL | 53.11 | 9.21 | 20.67 |
| UG012198_z37 | 5.9 | 13.9 | | | 1090.25 | 12.38 | 0.0400 | 28.72 | < DL | 27.90 | 0.0009 | 6.97 | 0.00041 | 15.44 | 5.91 | 13.93 | < DL | 55.80 | 8.25 | 30.89 |
| UG012198_z38 | 6.2 | 12.9 | | | 1040.03 | 6.45 | 0.0400 | 24.36 | < DL | 23.54 | 0.0010 | 6.46 | 0.00028 | 18.46 | 6.18 | 12.92 | < DL | 47.08 | 5.77 | 36.92 |
| UG012198_z39 | 5.3 | 12.5 | | | 1210.69 | 5.84 | 0.0400 | 24.06 | < DL | 23.39 | 0.0008 | 6.25 | 0.00030 | 11.53 | 5.35 | 12.51 | < DL | 46.78 | 6.17 | 23.05 |
| UG012198_z4 | 5.4 | 12.2 | | | 1196.97 | 6.56 | 0.0400 | 24.73 | < DL | 24.19 | 0.0008 | 6.10 | 0.00027 | 12.34 | 5.44 | 12.19 | < DL | 48.38 | 5.46 | 24.68 |
| UG012198_z40 | 5.4 | 12.2 | | | 1201.42 | 6.11 | 0.0400 | 21.45 | < DL | 20.61 | 0.0008 | 6.11 | 0.00032 | 13.89 | 5.37 | 12.23 | < DL | 41.21 | 6.54 | 24.21 |
| UG012198_z41 | 6.3 | 12.0 | | | 1030.34 | 5.75 | 0.0400 | 35.56 | < DL | 35.12 | 0.0010 | 9.98 | 0.00031 | 12.80 | 6.27 | 11.97 | < DL | 70.25 | 6.35 | 27.78 |
| UG012198_z42 | 7.9 | 19.6 | | | 830.10 | 12.91 | 0.0400 | 31.03 | < DL | 29.80 | 0.0012 | 9.78 | 0.00097 | 14.32 | 7.87 | 19.57 | < DL | 59.61 | 19.69 | 28.64 |
| UG012198_z5 | 7.4 | 24.3 | | | 857.77 | 11.74 | 0.0400 | 47.68 | < DL | 46.12 | 0.0011 | 12.16 | < DL | 34.33 | 7.39 | 24.32 | < DL | 92.24 | < DL | 68.66 |
| UG012198_z6 | 5.6 | 11.3 | 5.56 | 11.27 | 1139.22 | 5.29 | 0.0630 | 21.69 | 0.0076 | 21.08 | 0.0009 | 5.35 | 0.00022 | 11.87 | 5.68 | 10.70 | 7.69 | 42.15 | 4.39 | 23.75 |
| UG012198_z7 | 6.6 | 15.7 | | | 975.76 | 8.12 | 0.0400 | 31.65 | < DL | 30.85 | 0.0010 | 7.85 | 0.00032 | 14.14 | 6.60 | 15.71 | < DL | 61.69 | 6.59 | 28.28 |
| UG012198_z8 | 6.7 | 12.5 | | | 966.56 | 6.25 | 0.0400 | 25.83 | < DL | 25.11 | 0.0010 | 6.25 | 0.00034 | 12.38 | 6.69 | 12.49 | < DL | 50.22 | 6.92 | 24.77 |
| UG012198_z9 | 5.9 | 14.4 | | | 1105.34 | 7.25 | 0.0400 | 30.73 | < DL | 29.92 | 0.0009 | 7.19 | 0.00051 | 12.30 | 5.85 | 14.37 | < DL | 59.83 | 10.41 | 24.60 |
| BHF-01 z1 | 3.6 | 13.3 | 3.63 | 13.34 | 1045.74 | 3.36 | 0.3724 | 6.62 | 0.0493 | 5.67 | 0.0010 | 3.94 | 0.00031 | 5.62 | 6.19 | 7.87 | 48.89 | 11.33 | 6.37 | 11.24 |
| BHF-01 z2 | 4.4 | 17.7 | | | 1464.06 | 8.76 | 0.0400 | 27.68 | < DL | 26.30 | 0.0007 | 8.83 | 0.00070 | 18.15 | 4.42 | 17.65 | < DL | 52.60 | 14.19 | 36.30 |
| BHF-01 z3 | 4.5 | 17.7 | | | 1440.99 | 8.87 | 0.0400 | 59.32 | < DL | 56.68 | 0.0007 | 8.86 | < DL | 26.63 | 4.48 | 17.72 | < DL | 117.36 | < DL | 53.27 |
| BHF-01 z4 | 4.0 | 14.5 | | | 1598.61 | 7.28 | 0.0400 | 30.22 | < DL | 29.39 | 0.0006 | 7.27 | < DL | 51.01 | 4.04 | 14.54 | < DL | 58.78 | < DL | 102.02 |
| BHF-01 z5 | 4.8 | 20.0 | | | 1351.76 | 10.01 | 0.0400 | 36.41 | < DL | 35.05 | 0.0007 | 10.00 | < DL | 43.10 | 4.78 | 19.99 | < DL | 70.10 | < DL | 86.21 |
| BHF-01 z6 | 4.8 | 41.0 | 4.82 | 41.03 | 491.37 | 6.16 | 0.5469 | 10.30 | 0.1541 | 8.45 | 0.0020 | 6.15 | 0.00566 | 8.13 | 13.14 | 12.30 | 145.50 | 16.90 | 114.45 | 16.25 |
| BHF-01 z7 | 3.6 | 17.3 | | | 1760.25 | 8.56 | 0.0400 | 29.69 | < DL | 28.45 | 0.0006 | 8.66 | < DL | 29.09 | 3.57 | 17.33 | < DL | 56.90 | < DL | 58.17 |
| BHF-01 z8 | 4.7 | 21.7 | | | 1368.09 | 10.89 | 0.0400 | 41.06 | < DL | 39.63 | 0.0007 | 10.87 | < DL | 38.69 | 4.73 | 21.74 | < DL | 79.27 | < DL | 77.39 |
| BHF-01 z9 | 2.5 | 79.2 | 2.49 | 78.15 | 461.08 | 6.03 | 0.6965 | 7.70 | 0.2092 | 6.15 | 0.0022 | 4.96 | 0.00644 | 6.29 | 14.06 | 9.92 | 192.91 | 12.29 | 130.17 | 12.57 |
| BHF-04 z1 | 4.8 | 21.3 | | | 1353.63 | 10.67 | 0.0400 | 27.24 | < DL | 25.21 | 0.0007 | 10.63 | < DL | 28.55 | 4.79 | 21.26 | < DL | 50.43 | < DL | 57.09 |
| BHF-04 z10 | 3.8 | 12.5 | | | 1675.14 | 6.27 | 0.0400 | 23.36 | < DL | 22.57 | 0.0006 | 6.27 | 0.00025 | 20.90 | 3.84 | 12.54 | < DL | 45.14 | 5.04 | 41.80 |
| BHF-04 z11 | 3.9 | 15.2 | | | 1660.25 | 7.59 | 0.0400 | 23.82 | < DL | 22.65 | 0.0006 | 7.58 | < DL | 31.59 | 3.88 | 15.16 | < DL | 45.29 | < DL | 63.18 |
| BHF-04 z12 | 3.4 | 12.8 | | | 1866.65 | 6.32 | 0.0400 | 27.28 | < DL | 26.58 | 0.0005 | 6.40 | 0.00021 | 25.15 | 3.43 | 12.79 | < DL | 53.15 | 4.16 | 50.31 |
| BHF-04 z13 | 4.4 | 20.3 | | | 1480.98 | 10.21 | 0.0400 | 126.05 | < DL | 125.65 | 0.0007 | 10.17 | < DL | 105.51 | 4.38 | 20.34 | < DL | 251.30 | < DL | 211.02 |
| BHF-04 z14 | 3.7 | 17.1 | | | 1742.98 | 8.52 | 0.0400 | 38.06 | < DL | 37.14 | 0.0006 | 8.53 | < DL | 44.14 | 3.70 | 17.05 | < DL | 74.27 | < DL | 88.28 |
| BHF-04 z15 | 4.4 | 10.8 | | | 1459.86 | 11.22 | 0.0400 | 32.26 | < DL | 31.85 | 0.0007 | 5.42 | 0.00027 | 17.60 | 4.41 | 10.84 | < DL | 63.69 | 5.47 | 35.21 |
| BHF-04 z16 | 3.8 | 15.8 | | | 1703.07 | 7.89 | 0.0400 | 34.78 | < DL | 33.92 | 0.0006 | 7.91 | < DL | 24.78 | 3.77 | 15.81 | < DL | 67.83 | < DL | 49.57 |
| BHF-04 z17 | 3.1 | 24.8 | | | 2112.53 | 12.42 | 0.0400 | 57.87 | < DL | 56.55 | 0.0005 | 12.38 | < DL | 25.20 | 3.07 | 24.77 | < DL | 113.11 | < DL | 50.40 |
| BHF-04 z18 | 4.0 | 16.3 | | | 1610.18 | 8.16 | 0.0400 | 34.59 | < DL | 33.66 | 0.0006 | 8.15 | < DL | 30.40 | 4.01 | 16.30 | < DL | 67.32 | < DL | 60.79 |
| BHF-04 z19 | 3.3 | 12.7 | 3.32 | 12.66 | 1739.51 | 6.68 | 0.1276 | 16.51 | 0.0100 | 15.64 | 0.0006 | 5.58 | 0.00024 | 21.39 | 3.70 | 11.17 | 10.15 | 31.28 | 4.77 | 42.78 |

Appendix B: Eastern Sunda arc geochronology data - zircon

| Analysis ID | Pref Age Ma | 2s% | 206Pb/238U Age (Ma) | 2s% | 238U/206Pb ratio | 1s% | 207Pb/206Pb ratio | 1s% | 207Pb/235U (calc) ratio | 1s% | 206Pb/238U ratio | 1s% | 208Pb/232Th ratio | 208Pb/232Th ratio | 1s% | 206Pb/238U Age (Ma) | 2s% | 207Pb/235U(calc) Age (Ma) | 2s% | 208Pb/232Th Age (Ma) | 2s% |
|-------------|----------------|------|------------------------|-------|---------------------|-------|----------------------|--------|----------------------------|--------|---------------------|-------|----------------------|----------------------|------|------------------------|-------|------------------------------|-------|-------------------------|-------|
| BHF-04 22 | 4.2 | 18.2 | | | 1547.52 | 9.16 | 0.0400 | 46.02 | < DL | 45.14 | 0.0007 | 9.10 | < DL | 34.52 | 4.19 | 18.21 | < DL | 90.28 | < DL | 69.05 | |
| BHF-04 20 | 3.6 | 17.7 | | | 1788.00 | 8.86 | 0.0400 | 74.44 | < DL | 73.93 | 0.0006 | 8.86 | < DL | 35.02 | 3.58 | 17.72 | < DL | 147.87 | < DL | 70.04 | |
| BHF-04 21 | 3.3 | 17.6 | | | 1940.06 | 8.79 | 0.0400 | 38.97 | < DL | 38.00 | 0.0005 | 8.79 | < DL | 40.79 | 3.32 | 17.58 | < DL | 76.01 | < DL | 81.58 | |
| BHF-04 22 | 4.2 | 14.7 | | | 1547.35 | 7.40 | 0.0400 | 38.57 | < DL | 37.90 | 0.0007 | 7.37 | < DL | 32.68 | 4.20 | 14.75 | < DL | 75.79 | < DL | 65.37 | |
| BHF-04 23 | 4.1 | 16.2 | | | 1570.94 | 8.12 | 0.0400 | 26.91 | < DL | 25.72 | 0.0006 | 8.12 | 0.00052 | 20.55 | 4.09 | 16.25 | < DL | 51.43 | 10.52 | 41.10 | |
| BHF-04 24 | 3.2 | 22.0 | | | 2027.71 | 10.98 | 0.0400 | 30.76 | < DL | 28.79 | 0.0005 | 10.98 | < DL | 30.64 | 3.18 | 21.95 | < DL | 57.57 | < DL | 61.29 | |
| BHF-04 25 | 3.9 | 17.5 | | | 1656.66 | 8.75 | 0.0400 | 36.00 | < DL | 34.96 | 0.0006 | 8.74 | < DL | 59.28 | 3.90 | 17.48 | < DL | 69.93 | < DL | 118.55 | |
| BHF-04 26 | 3.7 | 14.0 | | | 1734.26 | 6.98 | 0.0400 | 23.81 | < DL | 22.83 | 0.0006 | 6.99 | < DL | 28.91 | 3.70 | 13.99 | < DL | 45.66 | < DL | 57.82 | |
| BHF-04 27 | 3.5 | 18.1 | | | 1857.83 | 9.08 | 0.0400 | 39.55 | < DL | 38.54 | 0.0005 | 9.07 | 0.00036 | 17.41 | 3.46 | 18.14 | < DL | 77.07 | 7.34 | 34.83 | |
| BHF-04 28 | 3.2 | 17.5 | | | 2012.06 | 8.71 | 0.0400 | 25.51 | < DL | 24.03 | 0.0005 | 8.75 | 0.00082 | 16.22 | 3.17 | 17.50 | < DL | 48.07 | 16.54 | 32.43 | |
| BHF-04 29 | 4.6 | 26.5 | | | 1382.29 | 13.22 | 0.0400 | 107.13 | < DL | 106.33 | 0.0007 | 13.26 | 0.00126 | 25.25 | 4.60 | 26.52 | < DL | 212.65 | 25.61 | 50.50 | |
| BHF-04 30 | 4.8 | 22.2 | | | 1366.00 | 11.09 | 0.0400 | 42.84 | < DL | 41.42 | 0.0007 | 11.11 | < DL | 40.30 | 4.76 | 22.22 | < DL | 82.84 | < DL | 80.59 | |
| BHF-04 31 | 4.5 | 17.8 | | | 1425.42 | 8.85 | 0.0400 | 36.22 | < DL | 35.16 | 0.0007 | 8.89 | < DL | 30.16 | 4.47 | 17.79 | < DL | 70.31 | < DL | 60.31 | |
| BHF-04 32 | 4.0 | 18.9 | | | 1584.91 | 9.41 | 0.0400 | 28.46 | < DL | 26.91 | 0.0006 | 9.44 | < DL | 31.91 | 4.03 | 18.88 | < DL | 53.82 | < DL | 63.82 | |
| BHF-04 33 | 3.8 | 17.6 | | | 1687.72 | 8.83 | 0.0400 | 24.34 | < DL | 22.76 | 0.0006 | 8.82 | < DL | 28.56 | 3.81 | 17.63 | < DL | 45.51 | < DL | 57.11 | |
| BHF-04 34 | 4.4 | 20.9 | | | 1479.62 | 10.49 | 0.0400 | 45.22 | < DL | 44.03 | 0.0007 | 10.45 | < DL | 49.37 | 4.39 | 20.90 | < DL | 88.05 | < DL | 98.75 | |
| BHF-04 35 | 3.3 | 17.3 | 3.25 | 17.28 | 1346.31 | 5.65 | 0.0400 | 11.76 | 0.0302 | 10.45 | 0.0007 | 5.66 | 0.00023 | 6.50 | 4.77 | 11.32 | 30.20 | 20.90 | 4.57 | 13.00 | 43.40 |
| BHF-04 36 | 3.9 | 17.3 | | | 1672.67 | 8.69 | 0.0400 | 27.66 | < DL | 26.33 | 0.0006 | 8.65 | 0.00051 | 21.70 | 3.88 | 17.30 | < DL | 52.66 | 10.40 | 43.40 | |
| BHF-04 37 | 3.7 | 15.4 | | | 1748.36 | 7.69 | 0.0400 | 33.14 | < DL | 32.28 | 0.0006 | 7.69 | 0.00022 | 12.29 | 3.67 | 15.39 | < DL | 64.57 | 24.58 | 24.58 | |
| BHF-04 38 | 4.1 | 15.8 | | | 1567.90 | 7.80 | 0.0400 | 34.67 | < DL | 33.80 | 0.0006 | 7.92 | < DL | 134.41 | 4.09 | 15.83 | < DL | 67.60 | < DL | 268.81 | |
| BHF-04 39 | 1.6 | 79.5 | 1.62 | 79.47 | 1052.86 | 8.06 | 0.6262 | 12.99 | 0.0808 | 10.32 | 0.0009 | 8.08 | 0.00272 | 12.12 | 6.09 | 16.16 | 78.87 | 20.64 | 55.15 | 24.25 | 64.20 |
| BHF-04 40 | 4.1 | 14.8 | | | 1584.54 | 7.38 | 0.0400 | 30.95 | < DL | 30.11 | 0.0006 | 7.38 | < DL | 32.10 | 4.07 | 14.77 | < DL | 60.22 | < DL | 64.20 | |
| BHF-04 41 | 3.5 | 19.5 | | | 1832.71 | 9.73 | 0.0400 | 37.65 | < DL | 36.41 | 0.0005 | 9.73 | < DL | 31.66 | 3.52 | 19.47 | < DL | 72.82 | < DL | 63.31 | |
| BHF-04 42 | 3.6 | 12.6 | | | 1806.49 | 6.30 | 0.0400 | 24.92 | < DL | 24.17 | 0.0006 | 6.29 | 0.00042 | 19.03 | 3.58 | 12.58 | < DL | 48.35 | 8.58 | 38.07 | |
| BHF-04 43 | 3.7 | 12.8 | | | 1766.65 | 6.42 | 0.0400 | 29.88 | < DL | 29.24 | 0.0006 | 6.40 | 0.00017 | 25.88 | 3.67 | 12.80 | < DL | 58.48 | 3.45 | 51.76 | |
| BHF-04 44 | 3.8 | 14.0 | | | 1513.60 | 6.08 | 0.1357 | 17.54 | 0.0122 | 16.54 | 0.0007 | 6.09 | 0.00040 | 18.64 | 4.25 | 12.18 | 12.34 | 33.08 | 8.01 | 37.28 | |
| BHF-04 45 | 4.3 | 27.9 | | | 1543.11 | 14.25 | 0.0400 | 90.76 | < DL | 89.67 | 0.0007 | 13.93 | < DL | 39.52 | 4.29 | 27.87 | < DL | 179.34 | < DL | 79.04 | |
| BHF-04 46 | 3.3 | 20.3 | | | 1980.08 | 10.17 | 0.0400 | 26.13 | < DL | 24.14 | 0.0005 | 10.15 | 0.00072 | 22.20 | 3.27 | 20.30 | < DL | 48.28 | 14.51 | 44.41 | |
| BHF-04 47 | 3.8 | 17.6 | | | 1691.33 | 8.79 | 0.0400 | 259.09 | < DL | 258.95 | 0.0006 | 8.79 | < DL | 26.77 | 3.81 | 17.58 | < DL | 517.90 | < DL | 53.54 | |
| BHF-04 48 | 3.4 | 14.9 | | | 1884.96 | 7.46 | 0.0400 | 41.46 | < DL | 40.82 | 0.0005 | 7.45 | < DL | 70.57 | 3.43 | 14.91 | < DL | 81.65 | < DL | 141.14 | |
| BHF-04 49 | 3.4 | 10.7 | | | 1876.15 | 5.13 | 0.0400 | 24.48 | < DL | 24.00 | 0.0005 | 5.37 | 0.00024 | 16.50 | 3.43 | 10.74 | < DL | 47.99 | 4.83 | 33.01 | |
| JEM-02 1 | 6.9 | 9.2 | 6.93 | 9.15 | 928.40 | 3.51 | 0.0485 | 15.84 | 0.0071 | 15.56 | 0.0011 | 4.47 | 0.00043 | 7.97 | 6.95 | 8.94 | 7.20 | 31.12 | 8.69 | 15.94 | |
| JEM-02 10 | 7.0 | 7.4 | 7.00 | 7.35 | 909.90 | 3.52 | 0.0551 | 15.20 | 0.0083 | 14.90 | 0.0011 | 3.52 | 0.00038 | 11.13 | 7.08 | 7.03 | 8.35 | 28.79 | 7.79 | 22.26 | |
| JEM-02 11 | 7.1 | 5.0 | 7.11 | 4.98 | 905.07 | 2.29 | 0.0479 | 10.43 | 0.0072 | 10.33 | 0.0011 | 2.41 | 0.00037 | 6.81 | 7.13 | 4.82 | 7.31 | 20.66 | 7.41 | 13.62 | |
| JEM-02 12 | 7.1 | 8.5 | 7.13 | 8.46 | 903.92 | 4.03 | 0.0486 | 18.58 | 0.0073 | 18.22 | 0.0011 | 4.07 | 0.00038 | 10.65 | 7.16 | 8.14 | 7.42 | 36.44 | 7.61 | 21.31 | |
| JEM-02 13 | 7.0 | 4.9 | | | 923.22 | 2.45 | 0.0426 | 11.78 | 0.0063 | 11.66 | 0.0011 | 2.44 | 0.00032 | 6.61 | 6.98 | 4.87 | 6.36 | 23.31 | 6.40 | 13.22 | |
| JEM-02 14 | 6.7 | 5.0 | 6.68 | 5.04 | 959.60 | 2.43 | 0.0499 | 10.88 | 0.0071 | 10.75 | 0.0010 | 2.43 | 0.00033 | 7.68 | 6.71 | 4.85 | 7.17 | 21.50 | 6.78 | 15.36 | |
| JEM-02 15 | 6.7 | 11.3 | 6.70 | 11.32 | 793.99 | 4.67 | 0.1862 | 11.70 | 0.0324 | 12.15 | 0.0013 | 4.55 | 0.00088 | 12.93 | 8.14 | 9.10 | 32.35 | 24.31 | 17.80 | 25.86 | |
| JEM-02 16 | 6.6 | 6.4 | 6.62 | 6.44 | 971.10 | 3.10 | 0.0478 | 14.32 | 0.0067 | 14.08 | 0.0010 | 3.10 | 0.00036 | 10.56 | 6.64 | 6.20 | 6.79 | 28.17 | 7.33 | 21.13 | |
| JEM-02 17 | 7.1 | 7.5 | | | 911.28 | 3.51 | 0.0398 | 17.75 | 0.0060 | 17.49 | 0.0011 | 3.74 | 0.00032 | 12.18 | 7.07 | 7.48 | 6.03 | 34.97 | 6.51 | 24.36 | |
| JEM-02 23 | 7.3 | 12.4 | | | 882.83 | 6.17 | 0.0400 | 38.72 | < DL | 38.26 | 0.0011 | 6.18 | 0.00039 | 16.79 | 7.30 | 12.35 | < DL | 76.53 | 7.83 | 33.58 | |
| JEM-02 24 | 6.9 | 6.0 | | | 935.42 | 2.63 | 0.0469 | 12.20 | 0.0068 | 12.04 | 0.0011 | 2.89 | 0.00042 | 7.80 | 6.88 | 5.78 | 6.91 | 24.08 | 8.57 | 15.61 | |
| JEM-02 25 | 7.6 | 12.1 | | | 842.86 | 6.93 | 0.0400 | 27.03 | < DL | 26.41 | 0.0012 | 6.03 | 0.00042 | 15.52 | 7.63 | 12.05 | < DL | 52.82 | 8.57 | 31.05 | |
| JEM-02 26 | 7.1 | 6.8 | | | 906.22 | 3.20 | 0.0434 | 15.45 | 0.0065 | 15.21 | 0.0011 | 3.40 | 0.00038 | 10.98 | 7.11 | 6.81 | 6.61 | 30.43 | 7.69 | 21.96 | |
| JEM-02 27 | 7.2 | 9.0 | 7.24 | 8.96 | 851.17 | 3.97 | 0.0796 | 14.52 | 0.0127 | 14.07 | 0.0012 | 4.21 | 0.00046 | 10.95 | 7.56 | 8.43 | 12.85 | 28.14 | 9.25 | 21.90 | |

Appendix B: Eastern Sunda arc geochronology data - zircon

| Analysis ID | Pref Age Ma | 2s% | 206Pb/238U Age (Ma) | 2s% | 238U/206Pb ratio | 1s% | 207Pb/206Pb ratio | 1s% | 206Pb/238U ratio | 1s% | 206Pb/238U ratio | 1s% | 208Pb/232Th ratio | 1s% | 206Pb/238U Age (Ma) | 2s% | 207Pb/235U(calc) Age (Ma) | 2s% | 208Pb/232Th Age (Ma) | 2s% |
|-------------|----------------|------|------------------------|-------|---------------------|------|----------------------|-------|---------------------|-------|---------------------|------|----------------------|-------|------------------------|-------|------------------------------|-------|-------------------------|-------|
| JEM-02-28 | 6.9 | 8.2 | 6.92 | 8.21 | 932.76 | 3.60 | 0.0479 | 16.56 | 0.0070 | 16.26 | 0.0011 | 3.98 | 0.0027 | 15.04 | 6.93 | 7.96 | 7.10 | 32.52 | 5.46 | 30.08 |
| JEM-02-29 | 6.8 | 4.1 | | | 951.99 | 1.99 | 0.0445 | 9.32 | 0.0064 | 9.27 | 0.0011 | 2.04 | 0.00032 | 5.90 | 6.78 | 4.08 | 6.47 | 18.54 | 6.52 | 11.79 |
| PCT-01-z1 | 28.7 | 4.3 | 28.66 | 4.30 | 220.59 | 2.02 | 0.0604 | 8.29 | 0.0374 | 8.22 | 0.0045 | 2.05 | 0.00161 | 7.16 | 29.17 | 4.11 | 37.28 | 16.45 | 32.51 | 14.32 |
| PCT-01-z10 | 27.4 | 2.9 | 27.41 | 2.93 | 223.65 | 1.32 | 0.0853 | 5.62 | 0.0521 | 5.66 | 0.0045 | 1.32 | 0.00187 | 3.90 | 28.82 | 2.64 | 51.60 | 11.33 | 37.78 | 7.79 |
| PCT-01-z11 | 27.8 | 5.2 | 27.81 | 5.21 | 210.76 | 2.06 | 0.1191 | 6.16 | 0.0772 | 6.06 | 0.0048 | 2.40 | 0.00286 | 5.52 | 30.61 | 4.79 | 75.47 | 12.12 | 57.85 | 11.04 |
| PCT-01-z12 | 27.8 | 3.5 | 27.85 | 3.53 | 218.22 | 1.40 | 0.0932 | 5.99 | 0.0583 | 6.11 | 0.0046 | 1.60 | 0.00203 | 4.99 | 29.59 | 3.19 | 57.53 | 12.22 | 41.18 | 9.97 |
| PCT-01-z13 | 25.9 | 21.0 | 25.94 | 20.98 | 39.50 | 1.40 | 0.7184 | 1.41 | 2.5006 | 2.37 | 0.0254 | 1.59 | 0.06702 | 2.25 | 161.84 | 3.19 | 1272.20 | 4.74 | 1314.98 | 4.51 |
| PCT-01-z14 | 28.7 | 5.7 | 28.72 | 5.72 | 205.32 | 2.58 | 0.1129 | 7.92 | 0.0751 | 7.69 | 0.0049 | 2.58 | 0.00241 | 7.40 | 31.34 | 5.16 | 73.53 | 15.39 | 48.70 | 14.81 |
| PCT-01-z15 | 27.0 | 5.5 | 26.96 | 5.46 | 217.63 | 2.35 | 0.1180 | 8.44 | 0.0740 | 8.00 | 0.0046 | 2.36 | 0.00240 | 6.82 | 29.63 | 4.71 | 72.47 | 15.99 | 48.60 | 13.63 |
| PCT-01-z16 | 27.0 | 3.6 | 27.04 | 3.61 | 211.41 | 1.58 | 0.1351 | 4.53 | 0.0871 | 4.39 | 0.0047 | 1.57 | 0.00300 | 4.77 | 30.44 | 3.15 | 84.80 | 8.78 | 60.62 | 9.54 |
| PCT-01-z17 | 27.6 | 3.8 | 27.59 | 3.76 | 226.47 | 1.73 | 0.0709 | 7.56 | 0.0428 | 8.38 | 0.0044 | 1.75 | 0.00173 | 5.82 | 28.47 | 3.50 | 42.59 | 16.76 | 35.06 | 11.63 |
| PCT-01-z18 | 29.6 | 4.4 | 29.56 | 4.40 | 205.21 | 2.00 | 0.0954 | 6.59 | 0.0636 | 6.51 | 0.0049 | 2.03 | 0.00221 | 6.09 | 31.50 | 4.06 | 62.60 | 13.03 | 44.75 | 12.19 |
| PCT-01-z19 | 26.9 | 6.5 | 26.94 | 6.53 | 220.87 | 2.72 | 0.1045 | 8.83 | 0.0642 | 8.57 | 0.0045 | 3.01 | 0.00271 | 7.51 | 29.07 | 6.03 | 63.18 | 17.14 | 54.88 | 15.01 |
| PCT-01-z2 | 27.5 | 3.2 | 27.48 | 3.17 | 220.60 | 1.37 | 0.0937 | 5.36 | 0.0580 | 5.78 | 0.0045 | 1.44 | 0.00193 | 4.06 | 29.22 | 2.87 | 57.26 | 11.56 | 39.05 | 8.12 |
| PCT-01-z20 | 28.5 | 3.4 | 28.52 | 3.43 | 216.80 | 1.56 | 0.0783 | 5.43 | 0.0493 | 5.49 | 0.0046 | 1.62 | 0.00200 | 5.03 | 29.70 | 3.25 | 48.85 | 10.99 | 40.48 | 10.07 |
| PCT-01-z21 | 28.1 | 4.4 | 28.12 | 4.37 | 224.71 | 2.10 | 0.0624 | 8.31 | 0.0379 | 8.24 | 0.0045 | 2.08 | 0.00173 | 6.43 | 28.69 | 4.17 | 37.76 | 16.48 | 35.01 | 12.87 |
| PCT-01-z22 | 33.8 | 29.0 | 33.76 | 29.04 | 16.30 | 0.98 | 0.7919 | 0.54 | 6.6519 | 1.96 | 0.0615 | 1.03 | 0.17238 | 2.17 | 384.56 | 2.06 | 2066.25 | 3.92 | 3223.63 | 4.33 |
| PCT-01-z23 | 27.7 | 2.6 | 27.72 | 2.63 | 219.67 | 1.21 | 0.0883 | 4.35 | 0.0554 | 4.79 | 0.0046 | 1.21 | 0.00174 | 3.26 | 29.30 | 2.41 | 54.75 | 9.57 | 35.33 | 6.52 |
| PCT-01-z24 | 28.4 | 3.1 | 28.42 | 3.06 | 215.70 | 1.32 | 0.0842 | 4.81 | 0.0531 | 5.10 | 0.0046 | 1.43 | 0.00182 | 3.31 | 29.84 | 2.86 | 52.58 | 10.20 | 36.88 | 6.63 |
| PCT-01-z25 | 30.1 | 7.7 | 30.05 | 7.70 | 205.05 | 2.99 | 0.0855 | 11.81 | 0.0574 | 12.12 | 0.0049 | 3.61 | 0.00284 | 8.73 | 31.60 | 7.23 | 56.69 | 24.24 | 57.44 | 17.46 |
| PCT-01-z26 | 27.7 | 5.8 | 27.72 | 5.80 | 220.35 | 2.42 | 0.0880 | 8.50 | 0.0531 | 8.33 | 0.0045 | 2.73 | 0.00208 | 7.12 | 29.17 | 5.47 | 52.54 | 16.66 | 42.21 | 14.25 |
| PCT-01-z27 | 28.9 | 3.2 | 28.86 | 3.21 | 207.05 | 1.44 | 0.1032 | 4.44 | 0.0679 | 4.56 | 0.0048 | 1.48 | 0.00236 | 3.56 | 31.08 | 2.96 | 66.75 | 9.12 | 47.83 | 7.11 |
| PCT-01-z28 | 28.4 | 3.2 | 28.35 | 3.24 | 220.97 | 1.38 | 0.0669 | 5.75 | 0.0413 | 5.80 | 0.0045 | 1.54 | 0.00177 | 4.72 | 29.10 | 3.08 | 41.08 | 11.60 | 35.87 | 9.43 |
| PCT-01-z29 | 28.7 | 4.3 | 28.68 | 4.30 | 166.30 | 1.63 | 0.2312 | 3.57 | 0.1886 | 4.02 | 0.0060 | 1.63 | 0.00682 | 4.10 | 38.68 | 3.25 | 176.30 | 8.05 | 137.85 | 8.20 |
| PCT-01-z3 | 28.3 | 5.2 | 28.32 | 5.16 | 218.01 | 2.19 | 0.0789 | 7.85 | 0.0493 | 7.74 | 0.0046 | 2.45 | 0.00227 | 6.25 | 29.52 | 4.90 | 48.86 | 15.48 | 45.98 | 12.50 |
| PCT-01-z30 | 30.9 | 6.8 | 30.86 | 6.84 | 159.74 | 2.37 | 0.2352 | 5.28 | 0.2016 | 6.03 | 0.0063 | 2.71 | 0.00631 | 6.35 | 40.48 | 5.42 | 186.48 | 12.07 | 127.50 | 12.69 |
| PCT-01-z31 | 47.2 | 56.1 | 47.24 | 56.06 | 8.28 | 5.07 | 0.8392 | 1.21 | 14.1448 | 5.87 | 0.1232 | 5.49 | 0.50779 | 5.51 | 748.69 | 10.98 | 2759.46 | 11.74 | 8323.78 | 11.03 |
| PCT-01-z32 | 26.9 | 3.8 | 26.87 | 3.79 | 231.29 | 1.55 | 0.0730 | 5.85 | 0.0430 | 6.11 | 0.0043 | 1.81 | 0.00165 | 4.32 | 27.80 | 3.62 | 42.77 | 12.23 | 33.50 | 8.63 |
| PCT-01-z33 | 28.7 | 4.4 | 28.69 | 4.38 | 197.41 | 1.70 | 0.1425 | 5.77 | 0.0886 | 6.18 | 0.0051 | 1.84 | 0.00358 | 5.54 | 32.63 | 3.68 | 95.45 | 12.36 | 72.40 | 11.09 |
| PCT-01-z34 | 27.8 | 5.7 | 27.76 | 5.73 | 188.96 | 1.91 | 0.1956 | 5.72 | 0.1416 | 6.48 | 0.0053 | 2.26 | 0.00377 | 6.52 | 34.18 | 4.52 | 134.44 | 12.96 | 76.27 | 13.03 |
| PCT-01-z35 | 33.0 | 7.3 | 33.01 | 7.29 | 178.63 | 2.93 | 0.1132 | 9.10 | 0.0867 | 8.79 | 0.0056 | 3.36 | 0.00353 | 7.94 | 36.04 | 6.72 | 84.40 | 17.57 | 71.40 | 15.87 |
| PCT-01-z36 | 29.1 | 4.0 | 29.09 | 3.99 | 216.93 | 1.80 | 0.0625 | 8.73 | 0.0393 | 8.36 | 0.0046 | 1.87 | 0.00201 | 5.01 | 29.69 | 3.74 | 39.18 | 16.73 | 40.65 | 10.03 |
| PCT-01-z37 | 31.8 | 30.9 | 31.79 | 30.92 | 34.86 | 1.95 | 0.7108 | 2.71 | 2.8269 | 3.22 | 0.0289 | 2.26 | 0.08213 | 3.26 | 183.86 | 4.53 | 1362.69 | 6.45 | 1599.94 | 6.52 |
| PCT-01-z38 | 27.8 | 5.1 | 27.77 | 5.06 | 226.81 | 2.37 | 0.0682 | 10.13 | 0.0412 | 10.17 | 0.0044 | 2.37 | 0.00189 | 7.52 | 28.55 | 4.74 | 40.96 | 20.33 | 38.37 | 15.04 |
| PCT-01-z4 | 28.0 | 6.1 | 28.02 | 6.09 | 223.74 | 2.69 | 0.0717 | 10.17 | 0.0440 | 9.96 | 0.0045 | 2.90 | 0.00222 | 8.70 | 28.53 | 4.76 | 43.76 | 19.93 | 44.91 | 17.41 |
| PCT-01-z5 | 28.5 | 6.5 | 28.55 | 6.51 | 213.06 | 2.76 | 0.0921 | 10.48 | 0.0590 | 11.02 | 0.0047 | 2.99 | 0.00227 | 12.19 | 30.29 | 5.99 | 58.18 | 22.03 | 46.00 | 24.37 |
| PCT-01-z6 | 28.0 | 3.0 | 27.98 | 3.02 | 222.30 | 1.41 | 0.0735 | 5.56 | 0.0451 | 5.69 | 0.0045 | 1.41 | 0.00170 | 4.10 | 28.96 | 2.82 | 44.83 | 11.37 | 34.37 | 8.21 |
| PCT-01-z7 | 27.1 | 19.1 | 27.09 | 19.10 | 54.88 | 4.66 | 0.6593 | 2.12 | 1.6333 | 5.35 | 0.0182 | 4.04 | 0.05013 | 5.68 | 116.52 | 8.08 | 983.14 | 10.70 | 991.40 | 11.35 |
| PCT-01-z8 | 27.8 | 4.4 | 27.80 | 4.36 | 222.20 | 1.85 | 0.0762 | 8.27 | 0.0468 | 8.76 | 0.0045 | 2.02 | 0.00174 | 6.93 | 28.88 | 4.08 | 46.43 | 17.53 | 35.25 | 13.85 |
| PCT-01-z9 | 27.8 | 3.4 | 27.81 | 3.44 | 227.42 | 1.56 | 0.0616 | 6.14 | 0.0371 | 6.19 | 0.0044 | 1.65 | 0.00150 | 4.85 | 28.35 | 3.30 | 36.95 | 12.38 | 30.43 | 9.69 |
| PCT-02-z1 | 27.0 | 4.9 | 27.03 | 4.85 | 237.20 | 2.06 | 0.0523 | 8.90 | 0.0301 | 8.84 | 0.0042 | 2.36 | 0.00144 | 4.79 | 27.22 | 4.71 | 30.07 | 17.68 | 29.12 | 9.58 |
| PNG-01-z1 | 27.0 | 36.2 | 26.99 | 36.21 | 23.97 | 1.63 | 0.7721 | 1.49 | 4.4011 | 2.57 | 0.0418 | 1.72 | 0.17125 | 2.86 | 263.84 | 3.45 | 1712.54 | 5.14 | 3204.02 | 5.73 |
| PNG-01-z2 | 24.3 | 8.7 | 24.26 | 8.71 | 210.51 | 3.09 | 0.2121 | 8.09 | 0.1377 | 8.56 | 0.0048 | 3.37 | 0.00489 | 8.06 | 30.67 | 6.74 | 131.03 | 17.12 | 98.81 | 16.13 |
| PNG-01-z3 | 26.5 | 12.8 | 26.48 | 12.83 | 245.26 | 5.51 | 0.0500 | 24.85 | 0.0284 | 24.31 | 0.0041 | 6.23 | 0.00216 | 14.81 | 26.59 | 12.45 | 28.45 | 48.62 | 43.79 | 29.63 |
| PNG-01-z4 | 25.6 | 6.7 | 25.64 | 6.74 | 220.66 | 2.90 | 0.1426 | 8.14 | 0.0882 | 7.80 | 0.0045 | 2.93 | 0.00315 | 7.64 | 86.80 | 15.59 | 86.80 | 15.59 | 63.84 | 15.29 |

Appendix B: Eastern Sunda arc geochronology data - zircon

| Analysis ID | Pref Age Ma | 2s% 208Pb/238U Age (Ma) | 2s% 238U/208Pb ratio | 1s% 207Pb/208Pb ratio | 1s% 207Pb/235U (calc) ratio | 1s% 206Pb/238U ratio | 1s% 208Pb/232Th ratio | 1s% 206Pb/238U Age (Ma) | 2s% 207Pb/235U (calc) Age (Ma) | 2s% 208Pb/232Th Age (Ma) | 2s% 208Pb/232Th | 2s% | | | | | | | |
|-------------|-------------|-------------------------|----------------------|-----------------------|-----------------------------|----------------------|-----------------------|-------------------------|--------------------------------|--------------------------|-----------------|------|---------|-------|--------|--------|-------|--------|-------|
| SINA-01 z1 | 24.5 | 8.6 | 24.50 | 8.57 | 263.13 | 4.12 | 0.0533 | 18.07 | 0.0279 | 17.69 | 0.0038 | 4.11 | 0.00138 | 16.19 | 24.72 | 27.99 | 35.38 | 27.90 | 32.38 |
| SINA-01 z11 | 24.2 | 3.2 | 24.16 | 3.25 | 267.16 | 1.43 | 0.0476 | 6.23 | 0.0244 | 6.31 | 0.0038 | 1.58 | 0.00130 | 3.62 | 24.20 | 24.52 | 12.63 | 26.31 | 7.23 |
| SINA-01 z12 | 24.5 | 5.0 | 24.54 | 5.05 | 254.11 | 2.23 | 0.0717 | 8.37 | 0.0386 | 8.25 | 0.0039 | 2.40 | 0.00147 | 8.60 | 25.35 | 38.48 | 16.51 | 29.74 | 17.19 |
| SINA-01 z14 | 26.2 | 5.1 | 26.18 | 5.15 | 245.44 | 2.29 | 0.0473 | 10.51 | 0.0263 | 10.41 | 0.0041 | 2.50 | 0.00161 | 8.79 | 26.20 | 26.39 | 20.81 | 32.60 | 17.58 |
| SINA-01 z15 | 25.4 | 6.6 | 25.32 | 6.66 | 253.92 | 3.29 | 0.0403 | 16.45 | 0.0218 | 16.21 | 0.0039 | 3.29 | 0.00143 | 13.03 | 25.37 | 21.86 | 32.43 | 28.87 | 26.07 |
| SINA-01 z16 | 24.5 | 6.0 | 24.45 | 6.02 | 264.33 | 2.87 | 0.0425 | 13.90 | 0.0222 | 13.71 | 0.0038 | 2.89 | 0.00113 | 10.74 | 24.46 | 22.28 | 27.43 | 22.84 | 21.48 |
| SINA-01 z19 | 23.9 | 7.6 | 23.85 | 7.62 | 266.16 | 3.15 | 0.0485 | 14.30 | 0.0247 | 14.07 | 0.0037 | 3.71 | 0.00163 | 10.96 | 23.91 | 24.73 | 28.14 | 32.97 | 21.93 |
| SINA-01 z22 | 25.5 | 8.4 | 25.43 | 8.43 | 252.43 | 3.87 | 0.0502 | 17.51 | 0.0274 | 17.16 | 0.0040 | 4.07 | 0.00138 | 15.59 | 25.57 | 27.47 | 34.33 | 27.99 | 31.18 |
| SINA-01 z20 | 26.4 | 6.1 | 26.35 | 6.14 | 242.60 | 3.87 | 0.0548 | 12.35 | 0.0309 | 12.14 | 0.0041 | 2.95 | 0.00194 | 10.71 | 26.63 | 30.86 | 24.29 | 39.34 | 21.43 |
| SINA-01 z21 | 24.0 | 6.5 | 24.00 | 6.50 | 262.74 | 3.08 | 0.0599 | 12.72 | 0.0313 | 12.47 | 0.0038 | 3.10 | 0.00156 | 12.77 | 24.41 | 31.30 | 24.94 | 31.61 | 25.53 |
| SINA-01 z22 | 25.5 | 5.2 | 25.47 | 5.17 | 251.10 | 2.48 | 0.0547 | 10.64 | 0.0300 | 10.49 | 0.0040 | 2.48 | 0.00187 | 8.58 | 25.73 | 29.97 | 20.98 | 37.86 | 17.17 |
| SINA-01 z23 | 24.1 | 7.6 | 24.11 | 7.64 | 265.68 | 3.64 | 0.0548 | 17.33 | 0.0284 | 16.34 | 0.0038 | 3.62 | 0.00165 | 11.77 | 24.36 | 28.41 | 32.69 | 33.52 | 23.55 |
| SINA-01 z24 | 23.8 | 8.3 | 23.83 | 8.35 | 262.49 | 3.47 | 0.0725 | 13.27 | 0.0381 | 12.92 | 0.0038 | 3.98 | 0.00168 | 13.50 | 24.64 | 37.92 | 25.84 | 33.94 | 27.00 |
| SINA-01 z25 | 23.0 | 6.8 | 22.98 | 6.75 | 237.07 | 2.84 | 0.1682 | 7.35 | 0.0875 | 7.00 | 0.0042 | 2.82 | 0.00421 | 7.19 | 27.15 | 94.47 | 14.00 | 85.22 | 14.37 |
| SINA-01 z27 | 24.8 | 9.6 | 24.80 | 9.64 | 189.67 | 2.91 | 0.2606 | 6.59 | 0.1887 | 10.12 | 0.0053 | 3.77 | 0.00752 | 10.26 | 175.54 | 175.54 | 20.23 | 151.84 | 20.52 |
| SINA-01 z29 | 24.7 | 4.7 | 24.66 | 4.71 | 255.61 | 2.25 | 0.0655 | 8.84 | 0.0352 | 8.73 | 0.0039 | 2.24 | 0.00171 | 8.26 | 25.27 | 35.12 | 17.46 | 34.66 | 16.53 |
| SINA-01 z30 | 25.4 | 6.4 | 25.49 | 6.45 | 247.88 | 2.89 | 0.0404 | 10.24 | 0.0220 | 10.17 | 0.0040 | 2.38 | 0.00141 | 8.06 | 25.43 | 22.11 | 20.35 | 28.49 | 16.12 |
| SINA-01 z31 | 25.5 | 6.4 | 25.49 | 6.45 | 247.88 | 2.89 | 0.0404 | 10.24 | 0.0220 | 10.17 | 0.0040 | 2.38 | 0.00141 | 8.06 | 25.43 | 22.11 | 20.35 | 28.49 | 16.12 |
| SINA-01 z32 | 24.7 | 5.3 | 24.73 | 5.28 | 250.68 | 2.34 | 0.0766 | 8.61 | 0.0420 | 8.47 | 0.0040 | 2.50 | 0.00164 | 8.69 | 25.71 | 41.77 | 16.94 | 33.26 | 17.38 |
| SINA-01 z33 | 22.9 | 6.8 | 22.88 | 6.78 | 164.09 | 1.68 | 0.3765 | 3.32 | 0.3154 | 3.31 | 0.0061 | 1.83 | 0.01256 | 3.05 | 39.18 | 278.35 | 6.62 | 253.04 | 6.10 |
| SINA-01 z34 | 23.8 | 6.4 | 23.83 | 6.35 | 265.07 | 2.79 | 0.0612 | 11.35 | 0.0317 | 11.15 | 0.0038 | 3.05 | 0.00190 | 9.57 | 24.29 | 31.71 | 22.30 | 38.39 | 19.13 |
| SINA-01 z4 | 24.9 | 5.1 | 24.95 | 5.12 | 253.75 | 2.45 | 0.0594 | 10.09 | 0.0320 | 9.94 | 0.0039 | 2.45 | 0.00147 | 9.59 | 25.36 | 31.98 | 19.89 | 29.77 | 19.18 |
| SINA-01 z5 | 23.7 | 3.8 | 23.68 | 3.82 | 270.55 | 1.83 | 0.0505 | 7.99 | 0.0256 | 7.97 | 0.0037 | 1.84 | 0.00121 | 6.08 | 23.80 | 25.65 | 15.95 | 24.41 | 12.15 |
| SINA-01 z6 | 25.6 | 6.0 | 25.62 | 5.96 | 243.69 | 2.86 | 0.0776 | 10.60 | 0.0443 | 10.37 | 0.0041 | 2.78 | 0.00143 | 7.79 | 26.66 | 44.04 | 20.75 | 28.99 | 15.57 |
| SINA-01 z7 | 25.6 | 9.6 | 25.46 | 9.60 | 254.36 | 4.80 | 0.0438 | 23.19 | 0.0239 | 22.76 | 0.0040 | 4.79 | 0.00115 | 19.97 | 25.56 | 23.98 | 45.52 | 23.27 | 39.94 |
| SINA-01 z8 | 24.6 | 5.2 | 24.57 | 5.23 | 262.02 | 2.53 | 0.0467 | 11.69 | 0.0244 | 11.55 | 0.0038 | 2.53 | 0.00144 | 10.40 | 24.58 | 24.47 | 23.09 | 29.14 | 20.80 |
| SINA-01 z9 | 23.9 | 5.6 | 23.92 | 5.63 | 269.95 | 2.83 | 0.0463 | 13.19 | 0.0235 | 13.00 | 0.0037 | 2.80 | 0.00156 | 10.04 | 23.93 | 23.62 | 26.01 | 31.50 | 20.08 |
| SINA-02 z1 | 25.2 | 5.9 | 25.22 | 5.88 | 247.54 | 2.73 | 0.0738 | 10.21 | 0.0411 | 9.99 | 0.0041 | 2.77 | 0.00267 | 9.19 | 26.12 | 40.85 | 19.98 | 54.02 | 18.37 |
| SINA-02 z10 | 24.4 | 7.2 | 24.41 | 7.18 | 259.36 | 3.39 | 0.0587 | 14.38 | 0.0310 | 14.08 | 0.0039 | 3.43 | 0.00166 | 12.74 | 24.79 | 31.01 | 28.16 | 33.57 | 25.48 |
| SINA-02 z11 | 24.3 | 7.5 | 24.29 | 7.46 | 214.50 | 3.00 | 0.2017 | 7.10 | 0.1311 | 6.69 | 0.0047 | 2.96 | 0.00719 | 7.67 | 30.21 | 125.09 | 13.38 | 145.12 | 15.33 |
| SINA-02 z12 | 24.5 | 5.0 | 24.45 | 4.98 | 254.61 | 2.36 | 0.0706 | 8.94 | 0.0381 | 8.80 | 0.0039 | 2.35 | 0.00153 | 8.93 | 25.22 | 37.98 | 17.60 | 31.03 | 17.85 |
| SINA-02 z14 | 26.0 | 7.6 | 26.04 | 7.63 | 242.36 | 3.63 | 0.0595 | 15.14 | 0.0339 | 14.80 | 0.0041 | 3.64 | 0.00176 | 13.25 | 26.47 | 33.88 | 29.60 | 35.65 | 26.50 |
| SINA-02 z15 | 24.2 | 8.9 | 24.16 | 8.92 | 256.26 | 3.49 | 0.0734 | 13.45 | 0.0390 | 13.09 | 0.0039 | 4.27 | 0.00143 | 12.31 | 25.01 | 38.81 | 26.18 | 29.00 | 24.61 |
| SINA-02 z17 | 25.0 | 5.5 | 25.02 | 5.52 | 256.31 | 2.52 | 0.0518 | 11.08 | 0.0280 | 10.93 | 0.0039 | 2.66 | 0.00161 | 9.52 | 25.19 | 28.01 | 21.86 | 32.56 | 19.03 |
| SINA-02 z18 | 24.1 | 5.5 | 24.06 | 5.54 | 263.32 | 2.42 | 0.0552 | 10.43 | 0.0289 | 10.29 | 0.0038 | 2.67 | 0.00134 | 8.96 | 24.32 | 28.90 | 20.58 | 27.21 | 17.92 |
| SINA-02 z19 | 25.8 | 4.8 | 24.87 | 4.81 | 249.87 | 2.11 | 0.0459 | 9.77 | 0.0254 | 9.70 | 0.0040 | 2.42 | 0.00144 | 7.51 | 25.78 | 25.50 | 19.40 | 29.21 | 15.02 |
| SINA-02 z22 | 24.2 | 5.9 | 24.20 | 5.87 | 251.71 | 2.64 | 0.0875 | 9.13 | 0.0478 | 8.91 | 0.0040 | 2.74 | 0.00167 | 10.00 | 25.52 | 47.42 | 17.82 | 33.72 | 20.00 |
| SINA-02 z20 | 24.2 | 7.1 | 24.21 | 7.12 | 258.32 | 3.36 | 0.0703 | 12.93 | 0.0376 | 12.61 | 0.0039 | 3.36 | 0.00171 | 13.36 | 24.96 | 37.48 | 25.21 | 34.60 | 26.73 |
| SINA-02 z21 | 23.7 | 4.9 | 23.72 | 4.89 | 262.97 | 4.22 | 0.0714 | 8.34 | 0.0376 | 8.23 | 0.0038 | 2.32 | 0.00146 | 7.62 | 24.49 | 37.43 | 16.46 | 29.51 | 15.24 |
| SINA-02 z22 | 25.0 | 5.7 | 24.96 | 5.71 | 255.92 | 2.35 | 0.0531 | 10.27 | 0.0287 | 10.14 | 0.0039 | 2.77 | 0.00161 | 8.92 | 25.17 | 28.73 | 20.28 | 32.58 | 17.84 |
| SINA-02 z23 | 24.0 | 6.2 | 24.02 | 6.20 | 263.38 | 2.74 | 0.0588 | 11.40 | 0.0308 | 11.21 | 0.0038 | 2.98 | 0.00155 | 10.54 | 24.40 | 30.83 | 22.41 | 31.46 | 21.08 |
| SINA-02 z24 | 25.0 | 5.2 | 24.98 | 5.18 | 252.52 | 2.32 | 0.0591 | 9.61 | 0.0322 | 9.48 | 0.0039 | 2.49 | 0.00162 | 7.92 | 25.38 | 32.21 | 18.96 | 32.89 | 15.85 |
| SINA-02 z25 | 25.0 | 3.9 | 24.95 | 3.86 | 248.49 | 1.82 | 0.0750 | 6.61 | 0.0448 | 6.59 | 0.0040 | 1.82 | 0.00195 | 5.93 | 25.88 | 41.62 | 13.71 | 39.50 | 11.85 |
| SINA-02 z26 | 24.6 | 4.3 | 24.63 | 4.28 | 256.44 | 1.98 | 0.0556 | 8.41 | 0.0298 | 8.35 | 0.0039 | 2.06 | 0.00147 | 7.24 | 24.91 | 29.77 | 16.18 | 29.82 | 14.48 |
| SINA-02 z27 | 24.6 | 4.8 | 24.61 | 4.79 | 261.79 | 2.24 | 0.0446 | 9.55 | 0.0237 | 9.49 | 0.0038 | 2.40 | 0.00132 | 7.39 | 24.62 | 23.75 | 16.98 | 26.74 | 14.79 |

Appendix B: Eastern Sunda arc geochronology data - zircon

| Analysis ID | Pref Age Ma | 2s% | 206Pb/238U Age (Ma) | 2s% | 238U/206Pb ratio | 1s% | 207Pb/206Pb ratio | 1s% | 207Pb/206Pb ratio | 1s% | 206Pb/238U ratio | 1s% | 206Pb/238U ratio | 1s% | 206Pb/238U Age (Ma) | 2s% | 207Pb/235U (calc) Age (Ma) | 2s% | 207Pb/235U (calc) Age (Ma) | 2s% | 208Pb/232Th Age (Ma) | 2s% |
|-------------|----------------|-------|------------------------|---------|---------------------|--------|----------------------|--------|----------------------|--------|---------------------|---------|---------------------|--------|------------------------|---------|-------------------------------|---------|-------------------------------|--------|-------------------------|-----|
| SINA-02_229 | 25.0 | 4.8 | | 259.16 | 2.42 | 0.0463 | 11.14 | 0.0249 | 11.01 | 0.0039 | 2.40 | 0.00128 | 10.00 | 24.96 | 4.80 | 25.01 | 22.03 | 25.01 | 22.03 | 25.90 | 20.00 | |
| SINA-02_23 | 23.8 | 4.8 | 23.79 | 270.90 | 2.27 | 0.0474 | 10.47 | 0.0241 | 10.37 | 0.0037 | 2.34 | 0.00151 | 7.64 | 23.82 | 4.68 | 24.16 | 20.74 | 24.16 | 20.74 | 30.54 | 15.29 | |
| SINA-02_230 | 24.7 | 4.9 | 24.70 | 252.56 | 2.15 | 0.0700 | 8.22 | 0.0384 | 8.12 | 0.0040 | 2.36 | 0.00192 | 7.89 | 25.46 | 4.72 | 38.27 | 16.24 | 38.27 | 16.24 | 38.80 | 15.79 | |
| SINA-02_231 | 24.6 | 5.1 | | 261.99 | 2.55 | 0.0458 | 11.86 | 0.0243 | 11.72 | 0.0038 | 2.54 | 0.00154 | 9.85 | 24.57 | 5.07 | 24.37 | 23.43 | 24.37 | 23.43 | 31.16 | 19.71 | |
| SINA-02_233 | 24.0 | 4.6 | 24.01 | 263.45 | 2.05 | 0.0629 | 8.12 | 0.0332 | 8.05 | 0.0038 | 2.22 | 0.00164 | 7.31 | 24.51 | 4.44 | 33.18 | 16.11 | 33.18 | 16.11 | 33.13 | 14.62 | |
| SINA-02_234 | 23.5 | 4.0 | 23.45 | 266.65 | 1.90 | 0.0690 | 7.19 | 0.0360 | 7.15 | 0.0038 | 1.90 | 0.00154 | 6.90 | 24.14 | 3.79 | 35.88 | 14.30 | 35.88 | 14.30 | 31.22 | 13.80 | |
| SINA-02_235 | 25.0 | 5.7 | 24.99 | 253.75 | 2.46 | 0.0577 | 10.29 | 0.0316 | 10.15 | 0.0039 | 2.75 | 0.00156 | 8.97 | 25.34 | 5.49 | 31.55 | 20.29 | 31.55 | 20.29 | 31.60 | 17.95 | |
| SINA-02_26 | 24.9 | 5.8 | 24.94 | 253.46 | 2.53 | 0.0608 | 10.32 | 0.0330 | 10.16 | 0.0039 | 2.81 | 0.00153 | 9.84 | 25.40 | 5.62 | 32.98 | 20.32 | 32.98 | 20.32 | 31.06 | 19.68 | |
| SINA-02_27 | 21.7 | 10.8 | 21.66 | 124.27 | 1.79 | 0.0589 | 3.07 | 0.0426 | 3.55 | 0.0081 | 1.88 | 0.01917 | 3.39 | 51.88 | 3.75 | 454.57 | 7.10 | 454.57 | 7.10 | 384.85 | 6.77 | |
| SINA-02_28 | 25.6 | 4.7 | 25.64 | 243.88 | 2.20 | 0.0689 | 8.42 | 0.0389 | 8.31 | 0.0041 | 2.21 | 0.00208 | 7.35 | 26.39 | 4.43 | 38.72 | 16.62 | 38.72 | 16.62 | 42.09 | 14.69 | |
| SINA-02_29 | 24.7 | 5.1 | 24.72 | 256.59 | 2.34 | 0.0616 | 9.53 | 0.0329 | 9.40 | 0.0039 | 2.44 | 0.00154 | 9.62 | 25.20 | 4.88 | 32.92 | 18.80 | 32.92 | 18.80 | 31.22 | 19.24 | |
| LB010_z_3 | 20.0 | 5.9 | | 321.66 | 2.63 | 0.0452 | 12.24 | 0.0191 | 12.04 | 0.0031 | 2.95 | 0.00087 | 9.40 | 20.00 | 5.91 | 19.24 | 24.08 | 19.24 | 24.08 | 17.64 | 18.79 | |
| LB011_z_1 | 7.4 | 10.7 | 7.43 | 846.13 | 5.05 | 0.0669 | 19.89 | 0.0189 | 19.89 | 0.0012 | 5.05 | 0.00037 | 18.43 | 7.63 | 10.10 | 0.00 | 0.00 | 0.00 | 0.00 | 7.45 | 36.87 | |
| LB011_z_3 | 24.3 | 4.4 | | 264.53 | 2.17 | 0.0366 | 11.01 | 0.0189 | 10.90 | 0.0038 | 2.18 | 0.00132 | 8.13 | 24.33 | 4.36 | 19.02 | 21.79 | 19.02 | 21.79 | 26.64 | 16.27 | |
| LB043_z_1 | 6.5 | 16.4 | | 1022.04 | 9.64 | 0.0400 | 32.35 | < DL | 31.26 | 0.0010 | 8.22 | 0.00049 | 18.76 | 6.49 | 16.43 | < DL | 62.53 | < DL | 62.53 | 9.92 | 37.53 | |
| LB043_z_10 | 7.6 | 13.4 | | 844.94 | 6.70 | 0.0400 | 25.13 | < DL | 24.31 | 0.0012 | 6.70 | < DL | 28.96 | 7.63 | 13.40 | < DL | 48.63 | < DL | 48.63 | < DL | 57.93 | |
| LB043_z_2 | 7.9 | 12.7 | | 826.90 | 6.32 | 0.0400 | 29.08 | < DL | 28.42 | 0.0012 | 6.34 | 0.00070 | 15.37 | 7.88 | 12.68 | < DL | 56.83 | < DL | 56.83 | 14.14 | 30.73 | |
| LB043_z_3 | 6.8 | 15.7 | | 890.62 | 6.44 | 0.0396 | 21.75 | 0.0141 | 20.83 | 0.0011 | 7.34 | 0.00030 | 21.82 | 7.25 | 14.67 | 14.27 | 41.66 | 14.27 | 41.66 | 6.06 | 43.63 | |
| LB043_z_4 | 8.9 | 15.0 | | 673.87 | 7.51 | 0.1080 | 21.42 | 0.0224 | 20.44 | 0.0015 | 6.78 | 0.00101 | 15.08 | 9.66 | 13.57 | 22.49 | 40.87 | 22.49 | 40.87 | 20.56 | 30.15 | |
| LB043_z_5 | 6.9 | 16.4 | | 933.74 | 8.75 | 0.0400 | 44.80 | < DL | 44.10 | 0.0011 | 8.22 | 0.00038 | 22.58 | 6.86 | 16.44 | < DL | 88.19 | < DL | 88.19 | 7.78 | 45.16 | |
| LB043_z_6 | 6.9 | 20.3 | 6.92 | 696.21 | 7.35 | 0.2487 | 16.43 | 0.0486 | 14.75 | 0.0014 | 7.40 | 0.00110 | 17.29 | 9.30 | 14.80 | 48.15 | 29.50 | 48.15 | 29.50 | 22.38 | 34.58 | |
| LB043_z_7 | 7.7 | 15.6 | | 836.88 | 7.78 | 0.0400 | 34.39 | < DL | 33.52 | 0.0012 | 7.81 | 0.00085 | 19.92 | 7.66 | 15.62 | < DL | 67.04 | < DL | 67.04 | 17.31 | 39.84 | |
| LB043_z_8 | 7.8 | 11.0 | 7.85 | 815.87 | 5.29 | 0.0529 | 23.28 | 0.0089 | 22.72 | 0.0012 | 5.28 | 0.00072 | 13.40 | 7.91 | 10.56 | 8.97 | 45.44 | 8.97 | 45.44 | 14.63 | 26.81 | |
| LB043_z_9 | 7.1 | 13.4 | 7.13 | 739.67 | 5.45 | 0.1933 | 13.18 | 0.0364 | 12.21 | 0.0014 | 5.40 | 0.00084 | 11.29 | 8.77 | 10.81 | 36.30 | 24.42 | 36.30 | 24.42 | 17.03 | 22.58 | |
| LB044_z_1 | 20.0 | 2.7 | 20.03 | 322.10 | 1.23 | 0.0465 | 4.05 | 0.0200 | 4.41 | 0.0031 | 1.32 | 0.00102 | 3.55 | 20.03 | 2.64 | 20.13 | 8.81 | 20.13 | 8.81 | 20.70 | 7.09 | |
| LB044_z_2 | 20.7 | 2.6 | | 310.42 | 1.19 | 0.0458 | 4.14 | 0.0202 | 4.54 | 0.0032 | 1.28 | 0.00105 | 3.23 | 20.75 | 2.56 | 20.28 | 9.08 | 20.28 | 9.08 | 21.34 | 6.46 | |
| LB044_z_3 | 21.3 | 11.9 | 21.34 | 298.56 | 5.58 | 0.0571 | 23.68 | 0.0262 | 23.06 | 0.0034 | 5.72 | 0.00208 | 19.29 | 21.63 | 11.43 | 26.27 | 46.12 | 26.27 | 46.12 | 42.16 | 38.59 | |
| LB044_z_4 | 20.6 | 8.2 | 20.62 | 312.02 | 3.14 | 0.0496 | 18.02 | 0.0222 | 14.92 | 0.0032 | 3.97 | 0.00105 | 10.48 | 20.70 | 7.93 | 22.26 | 29.84 | 22.26 | 29.84 | 21.17 | 20.96 | |
| LB044_z_5 | 22.2 | 11.3 | 22.24 | 289.98 | 4.58 | 0.0489 | 19.47 | 0.0233 | 19.10 | 0.0035 | 5.55 | 0.00107 | 12.32 | 22.31 | 11.10 | 23.41 | 38.21 | 23.41 | 38.21 | 21.62 | 24.64 | |
| LB010_z_1 | 17.4 | 8.4 | 17.38 | 370.22 | 3.88 | 0.0543 | 16.35 | 0.0204 | 16.04 | 0.0027 | 4.07 | 0.00095 | 10.70 | 17.56 | 8.13 | 20.52 | 32.07 | 20.52 | 32.07 | 19.34 | 21.41 | |
| LB010_z_2 | 17.6 | 5.5 | | 365.33 | 2.74 | 0.0429 | 12.71 | 0.0162 | 12.59 | 0.0027 | 2.73 | 0.00095 | 7.06 | 17.64 | 5.46 | 16.31 | 25.17 | 16.31 | 25.17 | 19.22 | 14.13 | |
| LB010_z_4 | 17.1 | 6.1 | 17.05 | 376.99 | 2.79 | 0.0471 | 12.50 | 0.0172 | 12.37 | 0.0027 | 2.98 | 0.00071 | 10.20 | 17.07 | 5.87 | 17.29 | 24.73 | 17.29 | 24.73 | 14.45 | 20.41 | |
| LB010_z_5 | 11.4 | 20.5 | 11.43 | 193.34 | 2.52 | 0.5883 | 4.50 | 0.4094 | 5.36 | 0.0052 | 3.00 | 0.0667 | 5.34 | 33.52 | 6.01 | 348.41 | 10.73 | 348.41 | 10.73 | 134.73 | 10.69 | |
| LB010_z_6 | 946.9 | 2.4 | 946.88 | 6.14 | 1.25 | 0.1014 | 1.25 | 2.2714 | 2.41 | 0.1643 | 1.23 | 0.03174 | 3.07 | 980.46 | 2.47 | 1203.46 | 4.81 | 1203.46 | 4.81 | 633.41 | 6.14 | |
| LB011_z_2 | 7.6 | 17.3 | | 849.30 | 8.64 | 0.0400 | 25.30 | < DL | 23.88 | 0.0012 | 8.64 | 0.00049 | 23.72 | 7.58 | 17.28 | < DL | 47.76 | < DL | 47.76 | 9.86 | 47.44 | |
| LB011_z_5 | 8.6 | 16.7 | 8.63 | 838.94 | 6.18 | 0.0400 | 23.94 | < DL | 23.23 | 0.0012 | 6.17 | 0.00051 | 14.49 | 7.70 | 12.33 | < DL | 46.47 | < DL | 46.47 | 10.41 | 28.98 | |
| LB011_z_6 | 22.9 | 8.5 | | 626.20 | 6.93 | 0.1818 | 17.23 | 0.0404 | 15.96 | 0.0016 | 6.84 | 0.00122 | 11.53 | 10.41 | 13.69 | 40.18 | 31.91 | 40.18 | 31.91 | 24.63 | 23.06 | |
| LB011_z_7 | 5.0 | 162.3 | 4.96 | 283.43 | 3.64 | 0.0423 | 17.37 | 0.0207 | 17.12 | 0.0036 | 4.25 | 0.00091 | 14.39 | 22.89 | 8.49 | 20.82 | 34.25 | 20.82 | 34.25 | 18.42 | 28.79 | |
| NEF-01_z_1 | 3.0 | 22.7 | | 254.27 | 30.31 | 0.6838 | 18.00 | 0.3697 | 14.00 | 0.0040 | 11.35 | 0.00032 | 28.93 | 25.52 | 23.14 | 319.45 | 27.99 | 319.45 | 27.99 | 147.16 | 34.74 | |
| NEF-01_z_2 | 4.4 | 31.4 | 4.36 | 2137.66 | 11.21 | 0.0400 | 44.92 | < DL | 43.52 | 0.0005 | 11.57 | 0.00029 | 4.67 | 3.05 | 22.71 | < DL | 87.04 | < DL | 87.04 | 6.43 | 57.85 | |
| NEF-01_z_3 | 3.5 | 82.5 | 3.52 | 391.48 | 2.91 | 0.6286 | 4.95 | 0.2236 | 6.86 | 0.0026 | 3.27 | 0.00286 | 4.67 | 16.56 | 6.55 | 204.87 | 13.72 | 204.87 | 13.72 | 57.97 | 9.34 | |
| NEF-03_z_1 | 24.2 | 6.8 | 24.20 | 343.55 | 7.74 | 0.6920 | 8.41 | 0.2809 | 11.21 | 0.0030 | 7.47 | 0.00158 | 8.25 | 19.19 | 14.95 | 251.38 | 22.42 | 251.38 | 22.42 | 31.94 | 16.50 | |
| NEF-03_z_2 | 14.6 | 7.8 | 14.60 | 259.02 | 3.27 | 0.0756 | 11.87 | 0.0410 | 11.75 | 0.0039 | 3.21 | 0.00174 | 9.85 | 25.12 | 6.41 | 40.82 | 23.50 | 40.82 | 23.50 | 35.17 | 19.30 | |
| NEF-03_z_2 | | | | 407.11 | 3.14 | 0.1080 | 8.73 | 0.0370 | 8.52 | 0.0025 | 3.66 | 0.00187 | 7.55 | 15.83 | 7.31 | 36.86 | 17.03 | 36.86 | 17.03 | 37.86 | 15.11 | |

Appendix B: Eastern Sunda arc geochronology data - zircon

| Analysis ID | Pref Age Ma | 2s% | 206Pb/238U Age (Ma) | 2s% | 238U/206Pb ratio | 1s% | 207Pb/206Pb ratio | 1s% | 207Pb/235U (calc)/ratio | 1s% | 206Pb/238U ratio | 1s% | 208Pb/232Th ratio | 1s% | 206Pb/238U Age (Ma) | 2s% | 207Pb/235U(calc) Age (Ma) | 2s% | 208Pb/232Th Age (Ma) | 2s% |
|--------------|----------------|------|------------------------|-------|---------------------|------|----------------------|-------|----------------------------|-------|---------------------|------|----------------------|-------|------------------------|-------|------------------------------|-------|-------------------------|-------|
| NEF-03_z_3 | 10.1 | 15.0 | 10.10 | 14.97 | 390.34 | 5.76 | 0.3603 | 4.43 | 0.1297 | 4.26 | 0.0026 | 6.64 | 0.00548 | 14.68 | 16.75 | 13.29 | 123.82 | 6.52 | 110.72 | 29.37 |
| NEF-03_z_4 | 10.9 | 3.5 | 10.85 | 3.45 | 574.07 | 1.63 | 0.0730 | 5.88 | 0.0074 | 6.19 | 0.0017 | 1.63 | 0.00074 | 4.69 | 11.23 | 3.27 | 17.94 | 12.37 | 15.07 | 9.37 |
| NEF-03_z_5 | 10.1 | 7.7 | 10.12 | 7.73 | 586.48 | 2.94 | 0.1343 | 7.52 | 0.0336 | 7.07 | 0.0018 | 3.59 | 0.00062 | 4.92 | 11.39 | 7.18 | 33.57 | 14.14 | 12.54 | 9.84 |
| NEF-03_z_6 | 20.4 | 5.3 | 20.44 | 5.31 | 240.14 | 1.91 | 0.2364 | 3.86 | 0.1369 | 4.02 | 0.0042 | 2.14 | 0.00524 | 4.59 | 26.88 | 4.28 | 130.30 | 8.04 | 105.86 | 9.18 |
| NEF-03_z_7 | 22.2 | 4.3 | 22.16 | 4.30 | 277.34 | 1.80 | 0.0843 | 5.95 | 0.0427 | 5.88 | 0.0036 | 2.05 | 0.00180 | 5.66 | 23.27 | 4.09 | 42.43 | 11.75 | 36.38 | 11.32 |
| NEF-03_z_8 | 23.9 | 6.5 | 23.89 | 6.49 | 264.73 | 2.44 | 0.0658 | 10.76 | 0.0347 | 9.89 | 0.0038 | 3.12 | 0.00161 | 11.02 | 24.49 | 6.23 | 34.66 | 19.78 | 32.53 | 22.03 |
| NEF-03_z_9 | 22.3 | 4.9 | 22.30 | 4.94 | 288.06 | 1.87 | 0.1073 | 5.91 | 0.0556 | 6.32 | 0.0038 | 2.31 | 0.00224 | 5.72 | 24.15 | 4.62 | 54.97 | 12.65 | 45.32 | 11.45 |
| NEF-01_z_1 | 14.1 | 15.7 | 14.11 | 15.69 | 454.99 | 6.53 | 0.0533 | 22.61 | 0.0161 | 22.06 | 0.0022 | 7.70 | 0.00088 | 12.16 | 14.23 | 15.40 | 16.21 | 44.12 | 17.92 | 24.33 |
| NEF-01_z_10 | 13.4 | 6.6 | 13.46 | 6.63 | 483.46 | 3.27 | 0.0458 | 15.04 | 0.0313 | 14.83 | 0.0021 | 3.28 | 0.00076 | 6.84 | 13.37 | 6.56 | 13.37 | 29.66 | 15.41 | 13.68 |
| NEF-01_z_11 | 14.5 | 13.0 | 14.47 | 12.97 | 447.39 | 5.58 | 0.0483 | 25.48 | 0.0151 | 24.95 | 0.0023 | 6.30 | 0.00065 | 12.64 | 14.49 | 12.60 | 15.21 | 49.91 | 13.14 | 25.29 |
| NEF-01_z_12 | 12.5 | 17.3 | 12.46 | 17.34 | 471.01 | 7.81 | 0.1274 | 22.55 | 0.0380 | 21.31 | 0.0022 | 7.67 | 0.00139 | 19.36 | 13.88 | 15.34 | 37.87 | 42.63 | 28.16 | 38.71 |
| NEF-01_z_13 | 13.6 | 3.8 | 13.64 | 3.81 | 468.51 | 1.83 | 0.0525 | 7.71 | 0.0154 | 7.63 | 0.0021 | 1.83 | 0.00070 | 3.84 | 13.74 | 3.67 | 15.47 | 15.27 | 14.10 | 7.67 |
| NEF-01_z_14 | 14.5 | 8.5 | 14.48 | 8.46 | 448.55 | 4.20 | 0.0403 | 20.90 | 0.0126 | 20.58 | 0.0022 | 4.23 | 0.00074 | 8.63 | 14.48 | 8.46 | 12.72 | 41.16 | 15.09 | 17.25 |
| NEF-01_z_15 | 15.7 | 10.6 | 15.70 | 10.63 | 412.93 | 5.32 | 0.0440 | 24.71 | 0.0149 | 24.25 | 0.0024 | 5.31 | 0.00107 | 11.43 | 15.67 | 10.61 | 14.99 | 48.51 | 21.66 | 22.86 |
| NEF-01_z_16 | 13.6 | 7.1 | 13.56 | 7.12 | 472.30 | 3.35 | 0.0535 | 14.28 | 0.0158 | 14.04 | 0.0021 | 3.43 | 0.00076 | 7.02 | 13.69 | 6.86 | 15.90 | 28.08 | 15.40 | 14.04 |
| NEF-01_z_17 | 13.5 | 6.0 | 13.50 | 6.00 | 479.96 | 2.77 | 0.0455 | 12.50 | 0.0133 | 12.37 | 0.0021 | 3.00 | 0.00065 | 5.64 | 13.50 | 6.00 | 13.37 | 24.74 | 13.17 | 11.27 |
| NEF-01_z_18 | 13.7 | 7.0 | 13.70 | 7.00 | 470.37 | 3.15 | 0.0457 | 14.38 | 0.0135 | 14.19 | 0.0021 | 3.48 | 0.00072 | 6.68 | 13.70 | 6.97 | 13.62 | 28.39 | 14.58 | 13.37 |
| NEF-01_z_2 | 13.4 | 7.9 | 13.39 | 7.86 | 479.14 | 3.81 | 0.0544 | 16.06 | 0.0159 | 15.75 | 0.0021 | 3.77 | 0.00073 | 8.49 | 13.53 | 7.54 | 15.99 | 31.51 | 14.82 | 16.97 |
| NEF-01_z_3 | 13.8 | 10.1 | 13.80 | 10.12 | 464.00 | 5.02 | 0.0421 | 24.86 | 0.0142 | 26.02 | 0.0021 | 5.06 | 0.00085 | 14.51 | 13.84 | 10.12 | 0.00 | 0.00 | 17.30 | 29.02 |
| NEF-01_z_4 | 13.5 | 7.4 | 13.51 | 7.43 | 457.43 | 3.49 | 0.0793 | 12.38 | 0.0241 | 12.06 | 0.0022 | 3.48 | 0.00070 | 7.78 | 14.10 | 6.97 | 24.20 | 24.13 | 14.18 | 15.57 |
| NEF-01_z_5 | 13.8 | 6.4 | 13.82 | 6.36 | 466.29 | 2.63 | 0.0486 | 11.74 | 0.0142 | 11.54 | 0.0022 | 3.10 | 0.00063 | 6.69 | 13.86 | 6.19 | 14.36 | 23.08 | 12.85 | 13.37 |
| NEF-01_z_6 | 13.5 | 4.4 | 13.48 | 4.44 | 477.34 | 1.99 | 0.0469 | 8.93 | 0.0135 | 8.83 | 0.0021 | 2.16 | 0.00070 | 4.49 | 13.49 | 4.31 | 13.60 | 17.66 | 14.17 | 8.99 |
| NEF-01_z_7 | 14.4 | 8.4 | 14.40 | 8.44 | 445.11 | 4.09 | 0.0531 | 17.54 | 0.0166 | 17.19 | 0.0023 | 4.05 | 0.00081 | 8.25 | 14.29 | 8.11 | 16.74 | 34.39 | 16.46 | 16.49 |
| NEF-01_z_8 | 14.1 | 8.9 | 14.11 | 8.91 | 453.86 | 4.64 | 0.0565 | 18.03 | 0.0142 | 26.02 | 0.0022 | 4.26 | 0.00078 | 11.57 | 14.29 | 8.53 | 0.00 | 0.00 | 15.74 | 23.13 |
| NEF-01_z_9 | 14.3 | 11.9 | 14.30 | 11.89 | 454.59 | 5.69 | 0.0464 | 26.55 | 0.0169 | 16.37 | 0.0022 | 5.74 | 0.00077 | 13.93 | 14.30 | 11.48 | 14.29 | 52.04 | 15.52 | 27.87 |
| NEF-02_z_1 | 14.9 | 8.7 | 14.86 | 8.73 | 430.14 | 3.83 | 0.0529 | 16.75 | 0.0151 | 24.29 | 0.0021 | 6.26 | 0.00108 | 10.86 | 14.99 | 8.44 | 16.98 | 32.74 | 21.87 | 21.71 |
| NEF-02_z_2 | 13.7 | 12.9 | 13.69 | 12.91 | 472.94 | 5.82 | 0.0508 | 24.82 | 0.0142 | 24.29 | 0.0021 | 6.26 | 0.00092 | 15.74 | 13.77 | 12.51 | 15.17 | 48.58 | 18.63 | 31.47 |
| NEF-02_z_3 | 15.1 | 10.2 | 15.10 | 10.20 | 428.74 | 4.97 | 0.0403 | 24.48 | 0.0130 | 24.04 | 0.0023 | 5.09 | 0.00118 | 11.91 | 15.10 | 10.19 | 13.11 | 48.07 | 23.91 | 23.82 |
| SINA-04_z_1 | 27.5 | 13.3 | 234.34 | 6.85 | 234.34 | 6.85 | 0.0444 | 31.78 | 0.0261 | 31.15 | 0.0043 | 6.67 | 0.00239 | 18.29 | 27.55 | 13.34 | 26.20 | 62.31 | 60.44 | 36.57 |
| SINA-04_z_10 | 25.4 | 9.9 | 25.43 | 9.90 | 247.57 | 4.64 | 0.0691 | 17.78 | 0.0389 | 17.30 | 0.0041 | 4.69 | 0.00242 | 13.44 | 26.18 | 9.38 | 38.76 | 34.59 | 48.98 | 26.89 |
| SINA-04_z_11 | 26.1 | 18.9 | 26.14 | 18.92 | 59.36 | 2.50 | 0.6504 | 2.45 | 1.5143 | 3.47 | 0.0168 | 2.29 | 0.04646 | 3.52 | 107.60 | 4.59 | 936.17 | 6.94 | 920.57 | 7.03 |
| SINA-04_z_13 | 24.2 | 4.8 | 24.18 | 4.79 | 261.69 | 2.25 | 0.0616 | 8.92 | 0.0328 | 8.75 | 0.0038 | 2.29 | 0.00136 | 7.44 | 24.65 | 4.58 | 32.79 | 17.51 | 27.54 | 14.88 |
| SINA-04_z_14 | 25.4 | 8.1 | 25.35 | 8.09 | 208.45 | 3.25 | 0.1913 | 8.12 | 0.1292 | 8.48 | 0.0048 | 3.24 | 0.00553 | 7.79 | 31.02 | 6.49 | 123.36 | 16.95 | 111.83 | 15.57 |
| SINA-04_z_15 | 24.6 | 7.8 | 24.63 | 7.82 | 258.73 | 3.47 | 0.0547 | 14.74 | 0.0289 | 14.41 | 0.0039 | 3.77 | 0.00172 | 11.33 | 24.89 | 7.55 | 28.89 | 28.82 | 34.89 | 22.65 |
| SINA-04_z_16 | 30.1 | 12.4 | 30.05 | 12.45 | 146.83 | 3.99 | 0.2861 | 8.39 | 0.2762 | 7.30 | 0.0068 | 4.19 | 0.01242 | 8.36 | 43.83 | 8.38 | 247.62 | 14.60 | 250.26 | 16.73 |
| SINA-04_z_17 | 26.4 | 18.2 | 26.44 | 18.19 | 50.13 | 2.74 | 0.6801 | 1.75 | 1.8624 | 3.25 | 0.0200 | 2.59 | 0.08551 | 4.07 | 127.68 | 5.18 | 1067.85 | 6.49 | 1663.09 | 8.15 |
| SINA-04_z_18 | 25.0 | 6.2 | 24.96 | 6.24 | 247.80 | 2.89 | 0.0801 | 11.30 | 0.0454 | 11.19 | 0.0041 | 2.89 | 0.00204 | 9.05 | 26.06 | 5.77 | 45.04 | 22.37 | 41.29 | 18.10 |
| SINA-04_z_19 | 23.7 | 8.2 | 23.74 | 8.22 | 224.51 | 2.84 | 0.1815 | 7.82 | 0.1079 | 8.48 | 0.0044 | 3.49 | 0.00345 | 5.96 | 28.61 | 6.98 | 104.03 | 16.96 | 69.76 | 11.92 |
| SINA-04_z_20 | 25.7 | 7.6 | 25.75 | 7.63 | 249.89 | 3.68 | 0.0522 | 16.10 | 0.0289 | 15.75 | 0.0040 | 3.67 | 0.00145 | 13.81 | 25.93 | 7.33 | 28.94 | 31.50 | 29.37 | 27.62 |
| SINA-04_z_21 | 29.8 | 13.1 | 29.84 | 13.07 | 209.66 | 6.31 | 0.0674 | 24.21 | 0.0444 | 23.51 | 0.0046 | 6.70 | 0.00330 | 16.87 | 30.64 | 12.39 | 44.14 | 47.02 | 66.81 | 33.74 |
| SINA-04_z_22 | 27.2 | 8.2 | 27.16 | 8.21 | 218.10 | 3.76 | 0.1172 | 11.03 | 0.0751 | 10.61 | 0.0046 | 3.10 | 0.00275 | 9.38 | 29.81 | 7.40 | 73.54 | 21.21 | 55.73 | 18.75 |
| SINA-04_z_23 | 26.6 | 8.1 | 26.61 | 8.06 | 239.40 | 3.79 | 0.0548 | 16.26 | 0.0311 | 15.88 | 0.0042 | 3.87 | 0.00244 | 14.86 | 26.89 | 7.75 | 31.33 | 31.77 | 49.45 | 29.72 |
| SINA-04_z_24 | 26.2 | 12.9 | 26.21 | 12.88 | 198.10 | 4.82 | 0.2039 | 11.85 | 0.1466 | 10.15 | 0.0051 | 5.19 | 0.00745 | 11.41 | 32.70 | 10.39 | 138.88 | 20.30 | 150.53 | 22.82 |
| SINA-04_z_25 | 27.2 | 8.9 | 27.24 | 8.91 | 201.51 | 3.51 | 0.1641 | 9.13 | 0.1138 | 8.56 | 0.0050 | 3.86 | 0.00437 | 9.98 | 31.99 | 7.72 | 109.40 | 17.12 | 86.36 | 19.97 |
| SINA-04_z_25 | 22.9 | 11.1 | 22.91 | 11.10 | 181.24 | 3.55 | 0.3246 | 5.87 | 0.2410 | 7.26 | 0.0055 | 4.08 | 0.00804 | 7.04 | 35.28 | 8.16 | 219.25 | 14.53 | 162.37 | 14.07 |

Appendix B: Eastern Sunda arc geochronology data - zircon

| Analysis ID | Pref Age Ma | 2s% | 208Pb/238U Age | 2s% | 238U/206Pb ratio | 1s% | 207Pb/208Pb ratio | 1s% | 207Pb/235U (calc) ratio | 1s% | 206Pb/238U ratio | 1s% | 208Pb/232Th ratio | 1s% | 206Pb/238U Age (Ma) | 2s% | 208Pb/232Th Age (Ma) | 2s% | 207Pb/235U (calc) Age (Ma) | 2s% | 208Pb/232Th Age (Ma) | 2s% |
|--------------|-------------|------|----------------|-------|------------------|-------|-------------------|-------|-------------------------|-------|------------------|-------|-------------------|-------|---------------------|-------|----------------------|--------|----------------------------|-------|----------------------|--------|
| SINA-04_z_26 | 25.0 | 4.1 | 25.01 | 4.14 | 248.25 | 1.91 | 0.0762 | 6.72 | 0.0415 | 6.61 | 0.0040 | 1.96 | 0.00182 | 6.62 | 25.98 | 3.92 | 36.80 | 13.24 | 41.27 | 0.00 | 36.80 | 13.24 |
| SINA-04_z_27 | 26.3 | 10.5 | 24.39 | 4.23 | 249.39 | 4.23 | 0.0966 | 19.27 | 0.0539 | 12.88 | 0.0041 | 5.25 | 0.00117 | 15.96 | 26.32 | 10.50 | 70.64 | 31.92 | 26.32 | 0.00 | 70.64 | 31.92 |
| SINA-04_z_28 | 24.7 | 10.6 | 24.70 | 10.57 | 243.36 | 4.18 | 0.0966 | 13.42 | 0.0539 | 12.88 | 0.0041 | 5.00 | 0.00347 | 10.26 | 26.37 | 9.99 | 23.25 | 20.52 | 53.33 | 25.75 | 23.25 | 20.52 |
| SINA-04_z_29 | 26.1 | 5.6 | 26.06 | 5.61 | 240.74 | 2.52 | 0.0683 | 9.61 | 0.0393 | 9.39 | 0.0042 | 2.68 | 0.00184 | 8.12 | 26.79 | 5.35 | 37.30 | 16.25 | 39.17 | 18.78 | 37.30 | 16.25 |
| SINA-04_z_3 | 24.4 | 6.7 | 24.43 | 6.73 | 263.79 | 2.64 | 0.0519 | 11.49 | 0.0265 | 11.28 | 0.0038 | 3.28 | 0.00144 | 8.16 | 24.59 | 6.57 | 29.20 | 16.31 | 26.51 | 22.57 | 29.20 | 16.31 |
| SINA-04_z_31 | 23.4 | 9.6 | 23.42 | 9.62 | 242.38 | 4.27 | 0.1413 | 11.05 | 0.0800 | 10.43 | 0.0041 | 4.26 | 0.00410 | 11.81 | 26.60 | 8.52 | 82.89 | 23.62 | 78.18 | 20.85 | 82.89 | 23.62 |
| SINA-04_z_33 | 26.7 | 10.7 | 26.67 | 10.66 | 195.36 | 3.54 | 0.2038 | 11.50 | 0.1400 | 12.84 | 0.0052 | 3.83 | 0.00738 | 11.01 | 33.26 | 7.67 | 148.59 | 22.01 | 133.07 | 25.69 | 148.59 | 22.01 |
| SINA-04_z_34 | 25.3 | 7.7 | 25.30 | 7.74 | 248.47 | 3.55 | 0.0678 | 13.96 | 0.0371 | 13.57 | 0.0040 | 3.67 | 0.00198 | 12.05 | 25.99 | 7.35 | 40.07 | 24.09 | 37.01 | 27.15 | 40.07 | 24.09 |
| SINA-04_z_35 | 24.2 | 7.0 | 24.24 | 7.04 | 259.14 | 3.11 | 0.0689 | 11.90 | 0.0359 | 11.90 | 0.0039 | 3.36 | 0.00167 | 10.19 | 24.95 | 6.72 | 33.86 | 20.39 | 35.79 | 23.16 | 33.86 | 20.39 |
| SINA-04_z_36 | 23.8 | 11.1 | 23.81 | 11.08 | 253.57 | 4.56 | 0.0982 | 18.76 | 0.0527 | 17.82 | 0.0040 | 4.96 | 0.00169 | 15.03 | 25.48 | 9.91 | 34.32 | 30.07 | 52.13 | 35.64 | 34.32 | 30.07 |
| SINA-04_z_37 | 27.1 | 7.4 | 27.08 | 7.36 | 212.17 | 3.19 | 0.1329 | 9.09 | 0.0839 | 8.64 | 0.0047 | 3.26 | 0.00432 | 8.27 | 30.39 | 6.52 | 87.31 | 16.53 | 81.79 | 17.27 | 87.31 | 16.53 |
| SINA-04_z_4 | 25.3 | 5.9 | 25.30 | 5.89 | 255.10 | 2.87 | 0.0449 | 13.42 | 0.0240 | 13.19 | 0.0039 | 2.95 | 0.00098 | 15.01 | 25.31 | 5.89 | 19.86 | 30.01 | 24.04 | 26.38 | 19.86 | 30.01 |
| SINA-04_z_5 | 22.8 | 5.5 | 22.76 | 5.55 | 261.86 | 2.38 | 0.1061 | 7.31 | 0.0552 | 7.07 | 0.0038 | 2.56 | 0.00208 | 7.10 | 24.62 | 5.13 | 42.04 | 14.21 | 54.60 | 14.14 | 42.04 | 14.21 |
| SINA-04_z_6 | 25.0 | 7.7 | 24.98 | 7.67 | 237.11 | 3.26 | 0.1058 | 12.13 | 0.0621 | 11.69 | 0.0042 | 3.41 | 0.00266 | 9.77 | 27.00 | 6.83 | 53.82 | 19.55 | 61.22 | 23.38 | 53.82 | 19.55 |
| SINA-04_z_7 | 23.5 | 5.7 | 23.50 | 5.67 | 271.67 | 2.73 | 0.0521 | 11.84 | 0.0276 | 12.23 | 0.0037 | 2.73 | 0.00124 | 8.12 | 23.67 | 5.45 | 25.18 | 16.25 | 23.67 | 5.45 | 25.18 | 16.25 |
| SINA-04_z_8 | 25.0 | 6.7 | 24.99 | 6.73 | 231.64 | 2.95 | 0.1256 | 8.50 | 0.0728 | 8.11 | 0.0043 | 3.01 | 0.00345 | 7.73 | 27.76 | 6.03 | 69.81 | 15.46 | 71.33 | 16.23 | 69.81 | 15.46 |
| SINA-04_z_9 | 26.5 | 13.5 | 24.28 | 13.46 | 242.68 | 6.22 | 0.0501 | 25.59 | 0.0276 | 25.00 | 0.0041 | 6.54 | 0.00236 | 17.87 | 26.59 | 13.08 | 47.87 | 35.73 | 27.66 | 50.01 | 47.87 | 35.73 |
| SINA-05_z_1 | 25.2 | 7.5 | 25.51 | 7.4 | 255.91 | 3.74 | 0.0418 | 18.27 | 0.0225 | 17.95 | 0.0039 | 3.74 | 0.00146 | 15.28 | 25.23 | 7.48 | 29.51 | 30.56 | 22.84 | 35.90 | 29.51 | 30.56 |
| SINA-05_z_10 | 25.3 | 5.4 | 25.46 | 5.37 | 254.46 | 2.97 | 0.0418 | 12.41 | 0.0225 | 12.23 | 0.0039 | 2.72 | 0.00137 | 11.46 | 25.28 | 5.44 | 27.85 | 22.92 | 22.55 | 24.46 | 27.85 | 22.92 |
| SINA-05_z_11 | 25.7 | 10.1 | 25.14 | 4.87 | 251.14 | 4.97 | 0.0316 | 28.56 | 0.0175 | 28.15 | 0.0040 | 5.02 | 0.00154 | 19.46 | 17.58 | 56.29 | 31.10 | 38.93 | 17.58 | 56.29 | 31.10 | 38.93 |
| SINA-05_z_12 | 26.6 | 24.6 | 230.48 | 10.34 | 230.48 | 10.34 | 0.0915 | 31.93 | 0.0549 | 30.61 | 0.0044 | 11.68 | < DL | 52.41 | 28.24 | 23.37 | < DL | 104.82 | 54.31 | 61.23 | < DL | 104.82 |
| SINA-05_z_13 | 25.6 | 4.6 | 249.85 | 2.19 | 249.85 | 2.19 | 0.0523 | 9.32 | 0.0287 | 9.18 | 0.0040 | 2.22 | 0.00123 | 9.05 | 28.75 | 4.44 | 24.87 | 18.11 | 28.75 | 4.44 | 24.87 | 18.11 |
| SINA-05_z_15 | 25.6 | 5.2 | 251.64 | 2.58 | 251.64 | 2.58 | 0.0460 | 11.89 | 0.0251 | 11.70 | 0.0040 | 2.58 | 0.00127 | 10.63 | 25.61 | 5.16 | 23.39 | 21.26 | 25.14 | 23.39 | 25.72 | 21.26 |
| SINA-05_z_16 | 25.8 | 4.9 | 247.68 | 2.33 | 247.68 | 2.33 | 0.0517 | 10.04 | 0.0288 | 9.88 | 0.0040 | 2.36 | 0.00136 | 9.20 | 25.97 | 4.72 | 27.62 | 18.40 | 28.83 | 19.76 | 27.62 | 18.40 |
| SINA-05_z_17 | 24.1 | 9.7 | 24.07 | 9.71 | 262.80 | 4.63 | 0.0587 | 19.20 | 0.0310 | 18.76 | 0.0038 | 4.64 | 0.00213 | 13.93 | 24.44 | 9.28 | 43.15 | 27.86 | 31.01 | 37.51 | 43.15 | 27.86 |
| SINA-05_z_18 | 24.0 | 5.6 | 23.98 | 5.57 | 267.04 | 2.68 | 0.0489 | 11.90 | 0.0259 | 11.68 | 0.0037 | 2.68 | 0.00147 | 8.03 | 24.08 | 5.37 | 29.78 | 16.05 | 25.99 | 23.36 | 29.78 | 16.05 |
| SINA-05_z_19 | 23.8 | 9.9 | 23.80 | 9.93 | 265.17 | 4.09 | 0.0583 | 17.01 | 0.0284 | 16.59 | 0.0038 | 4.81 | 0.00154 | 12.91 | 24.16 | 9.61 | 31.24 | 25.82 | 29.40 | 33.17 | 31.24 | 25.82 |
| SINA-05_z_2 | 24.5 | 5.7 | 24.54 | 5.75 | 258.59 | 2.75 | 0.0569 | 11.49 | 0.0304 | 11.26 | 0.0039 | 2.75 | 0.00102 | 11.70 | 24.86 | 5.50 | 20.63 | 23.40 | 30.37 | 22.51 | 20.63 | 23.40 |
| SINA-05_z_20 | 23.8 | 8.0 | 23.78 | 7.97 | 268.63 | 3.82 | 0.0492 | 17.33 | 0.0250 | 16.97 | 0.0037 | 3.84 | 0.00093 | 16.82 | 23.86 | 7.68 | 18.86 | 33.63 | 25.02 | 33.93 | 18.86 | 33.63 |
| SINA-05_z_21 | 24.9 | 8.2 | 24.87 | 8.19 | 250.28 | 3.59 | 0.0696 | 13.65 | 0.0389 | 13.26 | 0.0040 | 3.91 | 0.00208 | 10.53 | 25.62 | 7.82 | 42.08 | 21.06 | 38.74 | 26.52 | 42.08 | 21.06 |
| SINA-05_z_22 | 24.7 | 7.7 | 25.39 | 3.71 | 259.39 | 3.71 | 0.0485 | 17.26 | 0.0245 | 16.92 | 0.0038 | 3.85 | 0.00127 | 16.23 | 24.67 | 7.71 | 25.73 | 32.47 | 24.59 | 33.93 | 25.73 | 32.47 |
| SINA-05_z_23 | 25.3 | 6.1 | 25.35 | 6.12 | 254.76 | 2.93 | 0.0477 | 13.46 | 0.0254 | 13.21 | 0.0039 | 2.96 | 0.00205 | 10.38 | 25.39 | 5.91 | 41.57 | 20.76 | 25.47 | 26.42 | 41.57 | 20.76 |
| SINA-05_z_24 | 25.5 | 6.6 | 25.54 | 6.60 | 251.11 | 3.02 | 0.0496 | 13.41 | 0.0274 | 13.16 | 0.0040 | 3.19 | 0.00153 | 13.83 | 25.64 | 6.39 | 30.98 | 27.65 | 27.45 | 26.31 | 30.98 | 27.65 |
| SINA-05_z_25 | 25.5 | 5.7 | 253.26 | 2.62 | 253.26 | 2.62 | 0.0412 | 11.09 | 0.0223 | 10.94 | 0.0040 | 2.86 | 0.00145 | 9.65 | 25.49 | 5.72 | 29.40 | 19.31 | 22.43 | 21.89 | 29.40 | 19.31 |
| SINA-05_z_26 | 23.3 | 6.9 | 23.26 | 6.94 | 277.77 | 3.36 | 0.0496 | 14.72 | 0.0250 | 14.49 | 0.0036 | 3.35 | 0.00167 | 11.83 | 23.35 | 6.70 | 33.80 | 23.66 | 25.07 | 28.98 | 33.80 | 23.66 |
| SINA-05_z_27 | 24.0 | 9.8 | 24.01 | 9.78 | 260.23 | 4.65 | 0.0750 | 16.98 | 0.0404 | 16.48 | 0.0039 | 4.60 | 0.00203 | 14.81 | 24.91 | 9.20 | 41.18 | 29.63 | 40.17 | 32.97 | 41.18 | 29.63 |
| SINA-05_z_28 | 25.3 | 9.4 | 25.33 | 9.38 | 257.94 | 4.42 | 0.0523 | 19.69 | 0.0287 | 19.29 | 0.0040 | 4.51 | 0.00156 | 14.47 | 25.51 | 9.02 | 31.53 | 28.94 | 28.73 | 38.58 | 31.53 | 28.94 |
| SINA-05_z_29 | 24.7 | 6.2 | 24.65 | 6.16 | 259.77 | 2.61 | 0.0496 | 11.60 | 0.0285 | 11.39 | 0.0038 | 3.00 | 0.00138 | 8.92 | 24.75 | 6.00 | 27.96 | 17.83 | 26.55 | 22.79 | 27.96 | 17.83 |
| SINA-05_z_3 | 24.4 | 3.8 | 24.39 | 3.84 | 263.68 | 1.81 | 0.0479 | 7.92 | 0.0252 | 7.85 | 0.0038 | 1.86 | 0.00133 | 5.92 | 24.43 | 15.71 | 26.92 | 11.84 | 25.24 | 15.71 | 26.92 | 11.84 |
| SINA-05_z_30 | 24.3 | 5.4 | 22.14 | 6.25 | 278.12 | 2.80 | 0.0827 | 10.28 | 0.0406 | 9.97 | 0.0036 | 2.92 | 0.00191 | 7.66 | 23.20 | 5.84 | 38.77 | 15.33 | 24.43 | 24.17 | 38.77 | 15.33 |
| SINA-05_z_31 | 24.3 | 6.2 | 24.56 | 2.96 | 285.13 | 2.48 | 0.0463 | 11.38 | 0.0241 | 11.20 | 0.0038 | 2.68 | 0.00144 | 10.66 | 24.28 | 5.36 | 29.22 | 20.13 | 24.17 | 22.41 | 29.22 | 20.13 |
| SINA-05_z_32 | 23.4 | 6.2 | 23.41 | 6.16 | 274.56 | 2.96 | 0.0501 | 13.14 | 0.0249 | 12.89 | 0.0037 | 2.97 | 0.00146 | 10.67 | 23.52 | 5.94 | 29.54 | 21.34 | 25.00 | 25.78 | 29.54 | 21.34 |
| SINA-05_z_33 | 26.6 | 8.6 | 26.56 | 8.59 | 242.80 | 4.27 | 0.0523 | 17.90 | 0.0300 | 17.55 | 0.0042 | 4.13 | 0.00135 | 13.67 | 26.75 | 8.26 | 27.27 | 27.35 | 29.97 | 35.10 | 27.27 | 27.35 |
| SINA-05_z_34 | 25.7 | 6.8 | 251.30 | 3.39 | 251.30 | 3.39 | 0.0452 | 15.65 | 0.0251 | 15.43 | 0.0040 | 3.39 | 0.00108 | 15.58 | 25.68 | 6.79 | 21.96 | 31.15 | 25.16 | 30.86 | 25.68 | 31.15 |
| SINA-05_z_35 | 26.0 | 7.7 | 247.49 | 3.73 | 247.49 | 3.73 | 0.0360 | 19.29 | 0.0202 | 19.04 | 0.0040 | 3.86 | 0.00175 | 14.05 | 26.02 | 7.72 | 35.48 | 28.10 | 20.32 | 38.09 | 35.48 | 28.10 |

Appendix B: Eastern Sunda arc geochronology data - zircon

| Analysis ID | Pref Age Ma | 2s% 208Pb/238U Age (Ma) | 2s% 238U/206Pb ratio | 1s% 207Pb/206Pb ratio | 1s% 207Pb/235U (calc) ratio | 1s% 208Pb/238U ratio | 1s% 208Pb/232Th ratio | 1s% 208Pb/238U Age (Ma) | 2s% 207Pb/238U Age (Ma) | 2s% 207Pb/235U (calc) Age (Ma) | 2s% 208Pb/232Th Age (Ma) | 2s% 208Pb/232Th Age (Ma) | | | | | | | | |
|--------------|-------------|-------------------------|----------------------|-----------------------|-----------------------------|----------------------|-----------------------|-------------------------|-------------------------|--------------------------------|--------------------------|--------------------------|---------|-------|-------|-------|--------|-------|--------|-------|
| SINA-05_z_36 | 24.9 | 5.8 | 24.92 | 5.76 | 258.17 | 2.57 | 0.0471 | 11.32 | 0.0254 | 11.23 | 0.0039 | 2.80 | 0.00144 | 8.67 | 24.94 | 5.61 | 25.43 | 22.46 | 29.17 | 17.34 |
| SINA-05_z_37 | 25.2 | 7.3 | 255.53 | 3.69 | 0.0457 | 16.98 | 0.0457 | 16.98 | 0.0250 | 16.72 | 0.0039 | 3.67 | 0.00119 | 16.64 | 25.21 | 7.33 | 25.05 | 33.43 | 33.27 | 24.18 |
| SINA-05_z_38 | 25.4 | 9.0 | 195.34 | 3.39 | 0.2260 | 7.71 | 0.0051 | 3.45 | 0.1584 | 7.08 | 0.0051 | 3.45 | 0.00887 | 9.75 | 32.81 | 6.91 | 149.29 | 14.16 | 178.98 | 19.51 |
| SINA-05_z_39 | 24.6 | 8.7 | 261.54 | 3.58 | 0.0399 | 20.21 | 0.0038 | 4.35 | 0.0165 | 19.94 | 0.0038 | 4.35 | 0.00174 | 12.61 | 24.63 | 8.70 | 16.61 | 39.89 | 35.20 | 25.23 |
| SINA-05_z_4 | 23.5 | 6.9 | 268.49 | 3.28 | 0.0641 | 13.01 | 0.0327 | 12.68 | 0.0326 | 12.68 | 0.0037 | 3.27 | 0.00158 | 12.88 | 24.07 | 6.54 | 32.61 | 25.35 | 32.04 | 25.75 |
| SINA-05_z_40 | 25.3 | 5.8 | 252.45 | 2.77 | 0.0546 | 11.79 | 0.0294 | 11.56 | 0.0294 | 11.56 | 0.0040 | 2.77 | 0.00119 | 13.61 | 25.52 | 5.54 | 29.40 | 23.11 | 24.18 | 27.22 |
| SINA-05_z_41 | 23.5 | 3.4 | 273.55 | 1.42 | 0.0458 | 6.07 | 0.0230 | 6.08 | 0.0230 | 6.08 | 0.0037 | 1.69 | 0.00114 | 4.22 | 23.54 | 3.38 | 23.08 | 12.16 | 23.06 | 8.44 |
| SINA-05_z_5 | 24.4 | 5.6 | 262.29 | 2.69 | 0.0532 | 11.56 | 0.0277 | 11.34 | 0.0277 | 11.34 | 0.0038 | 2.71 | 0.00123 | 11.10 | 24.62 | 5.42 | 27.77 | 22.68 | 25.00 | 22.21 |
| SINA-05_z_6 | 26.9 | 9.5 | 222.59 | 4.34 | 0.1008 | 14.15 | 0.0228 | 13.54 | 0.0228 | 13.54 | 0.0045 | 4.36 | 0.00324 | 12.44 | 28.84 | 8.72 | 61.81 | 27.09 | 65.66 | 24.86 |
| SINA-05_z_7 | 24.0 | 4.4 | 268.17 | 2.13 | 0.0452 | 9.79 | 0.0264 | 9.67 | 0.0264 | 9.67 | 0.0037 | 2.20 | 0.00119 | 6.96 | 24.00 | 4.39 | 22.88 | 19.33 | 24.20 | 13.93 |
| SINA-05_z_8 | 24.9 | 5.6 | 250.33 | 2.65 | 0.0723 | 9.87 | 0.0402 | 9.62 | 0.0402 | 9.62 | 0.0040 | 2.65 | 0.00161 | 9.08 | 25.75 | 5.30 | 40.02 | 19.24 | 32.58 | 18.17 |
| SINA-05_z_9 | 25.7 | 4.5 | 248.36 | 2.15 | 0.0552 | 8.95 | 0.0301 | 8.82 | 0.0301 | 8.82 | 0.0040 | 2.16 | 0.00138 | 6.05 | 26.00 | 4.32 | 30.14 | 17.63 | 27.97 | 12.11 |
| SING-01_z_1 | 26.7 | 4.4 | 240.82 | 2.19 | 0.0446 | 9.59 | 0.0252 | 9.58 | 0.0252 | 9.58 | 0.0041 | 2.20 | 0.00120 | 8.18 | 26.68 | 4.40 | 25.26 | 19.15 | 24.37 | 16.36 |
| SING-01_z_2 | 24.9 | 8.0 | 261.63 | 4.12 | 0.0308 | 23.34 | 0.0168 | 23.02 | 0.0168 | 23.02 | 0.0039 | 4.00 | 0.00162 | 14.67 | 24.86 | 8.00 | 16.93 | 46.05 | 32.81 | 29.34 |
| SING-01_z_3 | 26.3 | 10.3 | 246.15 | 4.84 | 0.0461 | 23.06 | 0.0264 | 22.58 | 0.0264 | 22.58 | 0.0041 | 5.13 | 0.00079 | 26.58 | 26.26 | 10.27 | 26.49 | 45.16 | 16.02 | 53.17 |
| SING-01_z_4 | 30.7 | 4.5 | 210.81 | 2.22 | 0.0417 | 10.15 | 0.0272 | 10.13 | 0.0272 | 10.13 | 0.0048 | 2.23 | 0.00126 | 7.79 | 30.68 | 4.50 | 27.25 | 20.26 | 25.51 | 15.59 |
| SING-02_z_1 | 14.5 | 10.5 | 446.94 | 4.81 | 0.0400 | 25.75 | < DL | 25.34 | < DL | 25.34 | 0.0022 | 5.23 | 0.00059 | 19.99 | 14.48 | 10.45 | < DL | 50.68 | 12.05 | 39.99 |
| SING-02_z_10 | 14.1 | 10.5 | 455.20 | 5.66 | 0.0400 | 30.13 | < DL | 29.71 | < DL | 29.71 | 0.0022 | 5.23 | 0.00044 | 25.17 | 14.12 | 10.47 | < DL | 59.42 | 8.95 | 50.34 |
| SING-02_z_11 | 15.3 | 6.3 | 419.98 | 2.98 | 0.0434 | 14.20 | 0.0142 | 13.96 | 0.0142 | 13.96 | 0.0024 | 3.15 | 0.00067 | 11.92 | 15.34 | 6.30 | 14.28 | 27.93 | 13.51 | 21.83 |
| SING-02_z_12 | 14.0 | 29.9 | 247.96 | 7.26 | 0.4109 | 13.34 | 0.2257 | 11.30 | 0.0400 | 11.30 | 0.0040 | 7.54 | 0.00543 | 11.24 | 25.94 | 15.08 | 206.62 | 22.60 | 109.72 | 22.48 |
| SING-02_z_13 | 14.6 | 20.7 | 386.35 | 8.26 | 0.1982 | 20.08 | 0.0762 | 18.44 | 0.0762 | 18.44 | 0.0028 | 8.26 | 0.00351 | 16.07 | 18.10 | 16.53 | 74.57 | 36.88 | 70.95 | 32.15 |
| SING-02_z_14 | 14.2 | 10.4 | 446.95 | 4.99 | 0.0640 | 19.78 | 0.0197 | 19.27 | 0.0197 | 19.27 | 0.0023 | 4.96 | 0.00099 | 10.74 | 14.51 | 9.92 | 19.82 | 38.54 | 20.07 | 21.49 |
| SING-02_z_15 | 15.4 | 13.8 | 420.33 | 6.90 | 0.0400 | 30.44 | < DL | 29.73 | < DL | 29.73 | 0.0024 | 6.88 | < DL | < DL | 15.36 | 13.77 | < DL | 59.47 | < DL | 54.87 |
| SING-02_z_16 | 13.3 | 8.5 | 476.56 | 4.04 | 0.0607 | 16.40 | 0.0174 | 16.04 | 0.0174 | 16.04 | 0.0021 | 4.04 | 0.00069 | 12.79 | 13.51 | 8.08 | 17.53 | 32.08 | 14.00 | 25.58 |
| SING-02_z_17 | 18.5 | 15.3 | 331.63 | 7.09 | 0.0880 | 24.49 | 0.0374 | 23.50 | 0.0374 | 23.50 | 0.0030 | 7.07 | 0.00365 | 14.50 | 19.56 | 14.15 | 37.25 | 47.01 | 73.82 | 28.99 |
| SING-02_z_18 | 15.1 | 7.1 | 428.92 | 3.51 | 0.0403 | 17.47 | 0.0128 | 17.18 | 0.0128 | 17.18 | 0.0023 | 3.53 | 0.00064 | 12.73 | 15.08 | 7.06 | 12.93 | 34.35 | 12.87 | 25.46 |
| SING-02_z_19 | 15.3 | 6.8 | 418.90 | 3.28 | 0.0511 | 14.43 | 0.0167 | 14.13 | 0.0167 | 14.13 | 0.0024 | 3.26 | 0.00074 | 12.51 | 15.44 | 6.51 | 16.85 | 28.26 | 14.96 | 25.01 |
| SING-02_z_2 | 14.8 | 9.5 | 437.39 | 4.73 | 0.0394 | 24.08 | 0.0122 | 23.65 | 0.0122 | 23.65 | 0.0023 | 4.76 | 0.00115 | 12.42 | 14.83 | 9.52 | 12.34 | 47.31 | 23.34 | 24.84 |
| SING-02_z_20 | 15.8 | 12.9 | 405.39 | 7.23 | 0.0516 | 27.74 | 0.0179 | 27.08 | 0.0179 | 27.08 | 0.0025 | 6.21 | 0.00094 | 19.84 | 15.92 | 12.43 | 17.98 | 54.16 | 19.02 | 39.67 |
| SING-02_z_21 | 13.8 | 9.2 | 466.69 | 4.51 | 0.0400 | 28.08 | < DL | 27.76 | < DL | 27.76 | 0.0021 | 4.61 | 0.00082 | 15.09 | 13.82 | 9.21 | < DL | 55.52 | 16.70 | 30.18 |
| SING-02_z_22 | 14.1 | 13.5 | 455.94 | 6.81 | 0.0400 | 30.27 | < DL | 29.54 | < DL | 29.54 | 0.0022 | 6.76 | < DL | < DL | 14.14 | 13.51 | < DL | 59.08 | < DL | 67.12 |
| SING-02_z_23 | 14.1 | 6.0 | 454.89 | 2.96 | 0.0463 | 13.77 | 0.0139 | 13.52 | 0.0139 | 13.52 | 0.0022 | 3.00 | 0.00088 | 9.72 | 14.13 | 6.01 | 14.03 | 27.04 | 17.80 | 19.43 |
| SING-02_z_24 | 15.8 | 34.3 | 200.69 | 7.39 | 0.4487 | 13.14 | 0.3064 | 10.99 | 0.0050 | 7.97 | 0.0050 | 7.97 | 0.01530 | 10.22 | 32.09 | 15.94 | 271.42 | 21.98 | 307.74 | 20.44 |
| SING-02_z_25 | 15.0 | 10.0 | 428.78 | 5.00 | 0.0400 | 30.04 | < DL | 29.66 | < DL | 29.66 | 0.0023 | 5.00 | 0.00113 | 16.24 | 15.02 | 10.01 | < DL | 59.32 | 22.82 | 32.48 |
| SING-02_z_26 | 13.9 | 7.1 | 465.59 | 3.36 | 0.0447 | 15.87 | 0.0130 | 15.58 | 0.0130 | 15.58 | 0.0022 | 3.57 | 0.00077 | 10.19 | 13.89 | 7.14 | 13.14 | 31.16 | 15.65 | 20.37 |
| SING-02_z_27 | 14.9 | 10.9 | 432.31 | 4.46 | 0.0477 | 21.22 | 0.0141 | 20.80 | 0.0141 | 20.80 | 0.0023 | 5.47 | 0.00082 | 17.21 | 14.86 | 10.94 | 14.23 | 41.60 | 16.66 | 34.43 |
| SING-02_z_28 | 15.0 | 10.8 | 433.87 | 5.47 | 0.0400 | 27.98 | < DL | 27.49 | < DL | 27.49 | 0.0023 | 5.42 | 0.00093 | 20.33 | 14.97 | 10.84 | < DL | 54.98 | 18.82 | 40.67 |
| SING-02_z_29 | 14.4 | 15.5 | 446.34 | 7.81 | 0.0400 | 42.90 | < DL | 42.22 | < DL | 42.22 | 0.0022 | 7.77 | < DL | < DL | 14.42 | 15.54 | < DL | 64.44 | < DL | 76.38 |
| SING-02_z_3 | 14.4 | 7.3 | 445.83 | 3.46 | 0.0492 | 15.58 | 0.0151 | 15.26 | 0.0151 | 15.26 | 0.0022 | 3.50 | 0.00067 | 11.90 | 14.44 | 7.00 | 15.22 | 30.53 | 13.62 | 23.80 |
| SING-02_z_30 | 15.6 | 12.4 | 409.96 | 5.49 | 0.0399 | 27.78 | 0.0136 | 27.27 | 0.0136 | 27.27 | 0.0024 | 6.21 | 0.00070 | 17.64 | 15.59 | 12.43 | 13.76 | 54.54 | 14.21 | 35.27 |
| SING-02_z_31 | 14.4 | 24.0 | 352.27 | 8.28 | 0.2074 | 20.00 | 0.0826 | 18.24 | 0.0028 | 18.24 | 0.0028 | 10.21 | 0.00313 | 17.20 | 18.08 | 20.03 | 80.56 | 36.48 | 63.40 | 34.41 |
| SING-02_z_4 | 14.0 | 6.9 | 460.13 | 3.09 | 0.0460 | 14.48 | 0.0136 | 14.22 | 0.0136 | 14.22 | 0.0022 | 3.46 | 0.00077 | 9.19 | 13.97 | 6.92 | 13.67 | 28.44 | 15.66 | 18.37 |
| SING-02_z_5 | 17.2 | 12.4 | 376.32 | 6.19 | 0.0400 | 25.95 | < DL | 25.25 | < DL | 25.25 | 0.0027 | 6.18 | 0.00159 | 17.73 | 17.20 | 12.35 | < DL | 50.51 | 32.16 | 35.45 |
| SING-02_z_6 | 15.3 | 13.6 | 420.67 | 7.32 | 0.0400 | 27.56 | < DL | 26.99 | < DL | 26.99 | 0.0024 | 6.78 | 0.00076 | 21.34 | 15.30 | 13.56 | < DL | 53.98 | 15.49 | 42.69 |
| SING-02_z_7 | 15.2 | 17.2 | 378.35 | 7.46 | 0.1392 | 21.55 | 0.0507 | 19.90 | 0.0507 | 19.90 | 0.0027 | 7.49 | 0.00261 | 17.20 | 17.17 | 14.97 | 50.20 | 39.80 | 52.76 | 34.39 |

Appendix B: Eastern Sunda arc geochronology data - zircon

| Analysis ID | Prif Age Ma | 2s% Age | 206Pb/238U Age (Ma) | 2s% Age (Ma) | 238U/206Pb ratio | 1s% ratio | 207Pb/206Pb ratio | 1s% ratio | 207Pb/235U (calc) ratio | 1s% ratio | 208Pb/232Th ratio | 1s% ratio | 206Pb/238U Age (Ma) | 2s% Age (Ma) | 207Pb/235U (calc) Age (Ma) | 2s% Age (Ma) | 208Pb/232Th Age (Ma) | 2s% Age (Ma) |
|-------------|-------------|---------|---------------------|--------------|------------------|-----------|-------------------|-----------|-------------------------|-----------|-------------------|-----------|---------------------|--------------|----------------------------|--------------|----------------------|--------------|
| SING-02_z_8 | 14.4 | 8.9 | | | 445.98 | 4.04 | 0.0400 | 28.95 | < DL | 28.70 | 0.0022 | 4.47 | 14.41 | 8.94 | < DL | 57.41 | 16.08 | 27.32 |
| SING-02_z_9 | 15.4 | 13.0 | | | 417.90 | 6.52 | 0.0400 | 30.55 | < DL | 29.88 | 0.0024 | 6.52 | 15.42 | 13.05 | < DL | 59.77 | < DL | 62.52 |
| TR-02_z_1 | 15.3 | 8.2 | | | 411.10 | 3.85 | 0.0688 | 15.11 | 0.0222 | 14.68 | 0.0024 | 3.87 | 15.72 | 7.74 | 0.00886 | 22.30 | 17.51 | 24.34 |
| TR-02_z_10 | 18.8 | 22.3 | | | 316.64 | 10.10 | 0.0900 | 34.06 | 0.0379 | 32.64 | 0.0031 | 10.39 | 19.93 | 20.78 | 0.00270 | 37.75 | 54.72 | 47.83 |
| TR-02_z_12 | 18.0 | 46.7 | | | 142.87 | 5.25 | 0.5219 | 13.86 | 0.5988 | 7.72 | 0.0070 | 4.52 | 44.87 | 9.05 | 0.01601 | 417.61 | 322.00 | 12.21 |
| TR-02_z_13 | 15.0 | 14.4 | | | 378.83 | 6.26 | 0.1445 | 17.38 | 0.0543 | 16.29 | 0.0027 | 6.25 | 17.16 | 12.49 | 0.00170 | 53.69 | 34.44 | 29.12 |
| TR-02_z_14 | 15.5 | 13.4 | | | 408.90 | 6.49 | 0.0809 | 26.67 | 0.0200 | 25.92 | 0.0024 | 6.38 | 15.76 | 12.75 | 0.00207 | 20.16 | 41.88 | 30.53 |
| TR-02_z_15 | 15.1 | 8.7 | | | 407.22 | 4.07 | 0.0850 | 14.25 | 0.0280 | 13.74 | 0.0025 | 4.06 | 15.93 | 8.12 | 0.00111 | 28.06 | 27.47 | 20.92 |
| TR-02_z_16 | 14.2 | 10.3 | | | 417.40 | 4.66 | 0.1069 | 14.77 | 0.0351 | 14.09 | 0.0024 | 4.66 | 15.43 | 9.32 | 0.00167 | 35.02 | 33.80 | 27.02 |
| TR-02_z_17 | 14.2 | 12.3 | | | 402.68 | 5.10 | 0.1391 | 14.37 | 0.0475 | 13.52 | 0.0025 | 5.45 | 16.09 | 10.90 | 0.00191 | 47.15 | 38.78 | 26.72 |
| TR-02_z_18 | 14.7 | 25.7 | | | 246.06 | 6.42 | 0.3980 | 11.86 | 0.2185 | 10.11 | 0.0041 | 7.04 | 26.37 | 14.08 | 0.00774 | 200.70 | 156.31 | 19.93 |
| TR-02_z_19 | 13.0 | 20.5 | | | 502.60 | 10.38 | 0.0400 | 44.43 | < DL | 43.42 | 0.0020 | 10.27 | 13.01 | 20.55 | < DL | 86.83 | 29.48 | 53.99 |
| TR-02_z_2 | 15.0 | 9.8 | | | 430.96 | 5.76 | 0.0434 | 23.58 | 0.0137 | 23.12 | 0.0023 | 4.88 | 14.99 | 9.76 | 0.00146 | 46.23 | 28.86 | 27.70 |
| TR-02_z_20 | 19.7 | 22.9 | | | 316.75 | 10.45 | 0.0892 | 36.20 | 0.0379 | 34.70 | 0.0032 | 10.62 | 20.83 | 21.24 | 0.00358 | 37.79 | 72.36 | 39.61 |
| TR-02_z_21 | 12.2 | 12.2 | | | 517.56 | 7.47 | 0.0701 | 22.25 | 0.0186 | 21.54 | 0.0020 | 5.76 | 12.57 | 11.51 | 0.00120 | 18.66 | 43.08 | 31.38 |
| TR-02_z_22 | 13.7 | 14.1 | | | 416.19 | 6.21 | 0.1368 | 17.54 | 0.0448 | 16.50 | 0.0024 | 6.16 | 15.45 | 12.32 | 0.00163 | 44.52 | 32.96 | 31.46 |
| TR-02_z_23 | 16.0 | 26.8 | | | 208.91 | 6.26 | 0.4287 | 11.27 | 0.2787 | 9.52 | 0.0048 | 6.25 | 30.96 | 12.50 | 0.00873 | 249.65 | 176.17 | 20.41 |
| TR-02_z_24 | 14.0 | 11.7 | | | 445.29 | 5.46 | 0.0768 | 20.18 | 0.0236 | 19.48 | 0.0023 | 5.46 | 14.51 | 10.92 | 0.00117 | 23.64 | 38.96 | 33.26 |
| TR-02_z_25 | 13.0 | 11.8 | | | 491.57 | 5.55 | 0.0519 | 24.65 | 0.0143 | 24.06 | 0.0020 | 5.88 | 13.12 | 11.35 | 0.00088 | 14.43 | 48.12 | 17.91 |
| TR-02_z_26 | 14.8 | 6.4 | | | 433.81 | 3.07 | 0.0481 | 13.95 | 0.0151 | 13.69 | 0.0023 | 3.09 | 14.87 | 6.18 | 0.00085 | 15.26 | 27.37 | 22.22 |
| TR-02_z_27 | 14.8 | 17.8 | | | 434.17 | 7.84 | 0.0400 | 35.01 | < DL | 34.18 | 0.0023 | 8.91 | 14.82 | 17.82 | 0.00083 | 14.82 | 16.89 | 62.26 |
| TR-02_z_28 | 16.0 | 9.1 | | | 401.64 | 4.31 | 0.0479 | 19.78 | 0.0162 | 19.37 | 0.0025 | 4.37 | 16.06 | 8.75 | 0.00101 | 16.36 | 20.48 | 28.84 |
| TR-02_z_29 | 13.0 | 21.8 | | | 493.38 | 10.60 | 0.0400 | 45.13 | 0.0020 | 10.90 | 0.0020 | 10.90 | 12.99 | 21.79 | 0.00139 | 24.38 | 28.23 | 48.75 |
| TR-02_z_3 | 14.0 | 13.2 | | | 450.66 | 6.12 | 0.0657 | 24.41 | 0.0022 | 6.26 | 0.00113 | 15.24 | 14.32 | 12.52 | 0.00113 | 0.00 | 22.94 | 30.49 |
| TR-02_z_30 | 11.4 | 36.8 | | | 579.42 | 19.21 | 0.0400 | 48.25 | 0.0018 | 18.38 | 0.00301 | 35.74 | 11.36 | 36.76 | 0.00301 | < DL | 60.82 | 71.48 |
| TR-02_z_31 | 16.8 | 12.8 | | | 384.38 | 6.35 | 0.0400 | 31.52 | < DL | 30.91 | 0.0026 | 6.40 | 16.80 | 12.80 | 0.00135 | < DL | 27.40 | 40.40 |
| TR-02_z_32 | 16.3 | 18.8 | | | 385.24 | 11.76 | 0.0805 | 29.71 | 0.0283 | 28.60 | 0.0026 | 8.85 | 17.02 | 17.69 | 0.00158 | 28.33 | 31.91 | 41.41 |
| TR-02_z_33 | 14.2 | 10.5 | | | 434.86 | 5.25 | 0.0739 | 18.62 | 0.0232 | 18.01 | 0.0023 | 4.95 | 14.74 | 9.91 | 0.00109 | 23.31 | 22.18 | 35.31 |
| TR-02_z_34 | 14.6 | 14.3 | | | 429.01 | 6.11 | 0.0702 | 23.52 | 0.0226 | 22.77 | 0.0023 | 6.84 | 15.07 | 13.67 | 0.00122 | 22.73 | 24.67 | 37.58 |
| TR-02_z_4 | 15.4 | 7.4 | | | 408.73 | 3.22 | 0.0633 | 12.90 | 0.0211 | 12.58 | 0.0024 | 3.57 | 15.71 | 7.13 | 0.00077 | 21.16 | 15.67 | 22.77 |
| TR-02_z_5 | 13.7 | 24.3 | | | 279.97 | 6.65 | 0.3661 | 12.91 | 0.1745 | 11.11 | 0.0036 | 6.85 | 22.95 | 13.71 | 0.00603 | 163.28 | 121.81 | 23.29 |
| TR-02_z_6 | 12.9 | 17.5 | | | 497.50 | 8.70 | 0.0400 | 39.23 | < DL | 38.28 | 0.0020 | 8.73 | 12.88 | 17.46 | 0.00210 | < DL | 42.53 | 38.97 |
| TR-02_z_7 | 15.1 | 11.1 | | | 423.34 | 4.71 | 0.0508 | 21.12 | 0.0162 | 20.64 | 0.0024 | 5.38 | 15.20 | 10.75 | 0.00104 | 16.27 | 21.11 | 27.94 |
| TR-02_z_8 | 13.0 | 13.5 | | | 497.25 | 6.71 | 0.0400 | 32.03 | < DL | 31.36 | 0.0020 | 6.75 | 13.05 | 13.51 | 0.00105 | < DL | 21.23 | 46.17 |
| TR-02_z_9 | 16.8 | 12.6 | | | 361.80 | 5.86 | 0.0920 | 19.73 | 0.0028 | 5.80 | 0.00217 | 14.16 | 17.80 | 11.61 | 0.00217 | 0.00 | 44.00 | 28.32 |
| TR-03_z_1 | 13.4 | 18.9 | | | 472.13 | 9.79 | 0.0565 | 31.45 | 0.0169 | 30.62 | 0.0021 | 9.19 | 13.62 | 18.38 | 0.00090 | 16.98 | 18.32 | 38.51 |
| TR-03_z_2 | 19.6 | 19.4 | | | 204.41 | 6.08 | 0.3466 | 10.69 | 0.2277 | 9.30 | 0.0049 | 6.04 | 31.56 | 12.08 | 0.00905 | 208.27 | 182.70 | 21.81 |
| TR-04_z_1 | 23.3 | 3.9 | | | 275.09 | 1.88 | 0.0493 | 8.18 | 0.0246 | 8.09 | 0.0036 | 1.90 | 23.43 | 3.81 | 0.00110 | 24.71 | 16.19 | 10.52 |
| TR-04_z_10 | 23.0 | 6.6 | | | 277.81 | 2.87 | 0.0494 | 12.77 | 0.0242 | 12.54 | 0.0036 | 3.23 | 23.12 | 6.46 | 0.00129 | 24.23 | 25.07 | 16.88 |
| TR-04_z_11 | 23.7 | 5.7 | | | 271.00 | 2.70 | 0.0468 | 12.35 | 0.0237 | 12.14 | 0.0037 | 2.74 | 23.74 | 5.48 | 0.00149 | 23.79 | 24.28 | 20.19 |
| TR-04_z_12 | 24.0 | 8.2 | | | 269.32 | 3.55 | 0.0458 | 16.60 | 0.0237 | 16.34 | 0.0037 | 4.08 | 23.96 | 8.16 | 0.00101 | 23.76 | 32.69 | 20.56 |
| TR-04_z_13 | 9.8 | 8.5 | | | 657.41 | 4.15 | 0.0455 | 19.33 | 0.0096 | 19.00 | 0.0015 | 4.25 | 9.81 | 8.50 | 0.00045 | 9.71 | 9.06 | 25.02 |
| TR-04_z_14 | 21.2 | 14.2 | | | 291.81 | 6.68 | 0.0825 | 22.01 | 0.0395 | 21.24 | 0.00211 | 17.58 | 22.26 | 13.38 | 0.00211 | 39.38 | 42.48 | 35.17 |
| TR-04_z_15 | 22.1 | 10.0 | | | 281.47 | 4.70 | 0.0753 | 16.50 | 0.0371 | 16.02 | 0.0036 | 4.71 | 22.92 | 9.43 | 0.00143 | 37.03 | 29.00 | 29.54 |
| TR-04_z_16 | 24.4 | 4.7 | | | 261.73 | 2.25 | 0.0558 | 9.35 | 0.0291 | 9.19 | 0.0038 | 2.26 | 24.65 | 4.51 | 0.00143 | 29.13 | 18.39 | 15.25 |

Appendix B: Eastern Sunda arc geochronology data - zircon

| Analysis ID | Pref Age Ma | 2s% | 206Pb/238U Age (Ma) | 2s% | 238U/206Pb ratio | 1s% | 207Pb/206Pb ratio | 1s% | 207Pb/235U (calc) ratio | 1s% | 206Pb/238U ratio | 1s% | 208Pb/232Th ratio | 1s% | 206Pb/238U Age (Ma) | 2s% | 207Pb/235U (calc) Age (Ma) | 2s% | 208Pb/232Th Age (Ma) | 2s% |
|---------------|-------------|------|---------------------|-------|------------------|-------|-------------------|-------|-------------------------|-------|------------------|-------|-------------------|-------|---------------------|-------|----------------------------|-------|----------------------|--------|
| TR-04_z_17 | 24.9 | 5.5 | 24.89 | 5.54 | 256.54 | 2.67 | 0.0503 | 11.79 | 0.0267 | 11.58 | 0.0039 | 2.67 | 0.00119 | 9.92 | 25.01 | 5.34 | 26.76 | 23.15 | 24.01 | 19.85 |
| TR-04_z_18 | 22.9 | 7.2 | 22.85 | 7.24 | 267.82 | 3.07 | 0.0878 | 10.42 | 0.0446 | 10.07 | 0.0037 | 3.41 | 0.00188 | 9.96 | 24.11 | 6.82 | 44.33 | 20.14 | 38.11 | 19.93 |
| TR-04_z_19 | 25.9 | 6.6 | 25.43 | 6.6 | 251.43 | 3.24 | 0.0456 | 15.07 | 0.0250 | 14.80 | 0.0040 | 3.28 | 0.00135 | 11.99 | 25.87 | 6.56 | 25.02 | 29.59 | 27.23 | 23.98 |
| TR-04_z_2 | 24.5 | 8.0 | 24.51 | 8.01 | 262.85 | 3.94 | 0.0480 | 17.47 | 0.0252 | 17.17 | 0.0038 | 3.87 | 0.00115 | 13.65 | 24.56 | 7.74 | 25.30 | 34.35 | 27.30 | 27.30 |
| TR-04_z_20 | 23.7 | 7.8 | 23.7 | 7.8 | 274.17 | 3.94 | 0.0406 | 19.25 | 0.0208 | 18.96 | 0.0037 | 3.92 | 0.00138 | 10.74 | 23.72 | 7.85 | 20.86 | 37.92 | 27.92 | 21.47 |
| TR-04_z_21 | 24.9 | 14.4 | 24.9 | 14.4 | 261.98 | 6.83 | 0.0400 | 29.27 | < DL | 28.55 | 0.0039 | 7.21 | 0.00287 | 20.06 | 24.85 | 14.41 | < DL | 57.11 | 58.01 | 40.12 |
| TR-04_z_22 | 26.2 | 12.8 | 26.17 | 12.84 | 231.13 | 5.90 | 0.0950 | 19.68 | 0.0571 | 18.91 | 0.0043 | 5.91 | 0.00223 | 16.09 | 27.87 | 11.83 | 56.35 | 37.81 | 45.25 | 32.19 |
| TR-04_z_23 | 23.6 | 13.4 | 23.56 | 13.38 | 269.99 | 6.15 | 0.0511 | 27.55 | 0.0251 | 26.90 | 0.0037 | 6.45 | 0.00158 | 18.93 | 23.70 | 12.91 | 25.18 | 53.81 | 32.04 | 37.86 |
| TR-04_z_24 | 25.3 | 7.8 | 25.27 | 7.76 | 254.43 | 3.43 | 0.0477 | 15.63 | 0.0257 | 15.33 | 0.0039 | 3.77 | 0.00198 | 12.94 | 25.31 | 7.54 | 25.74 | 30.66 | 40.18 | 25.87 |
| TR-04_z_25 | 24.2 | 8.8 | 24.18 | 8.81 | 261.48 | 3.92 | 0.0606 | 15.96 | 0.0319 | 15.55 | 0.0038 | 4.23 | 0.00178 | 13.65 | 24.82 | 8.46 | 31.84 | 31.10 | 36.01 | 27.31 |
| TR-04_z_26 | 23.5 | 5.9 | 23.5 | 5.9 | 274.63 | 2.85 | 0.0438 | 13.42 | 0.0244 | 13.42 | 0.0037 | 2.97 | 0.00140 | 10.85 | 23.55 | 5.93 | 0.00 | 28.26 | 21.69 | 21.69 |
| TR-04_z_27 | 21.3 | 7.8 | 21.32 | 7.84 | 302.07 | 3.80 | 0.0504 | 16.90 | 0.0224 | 16.54 | 0.0033 | 3.77 | 0.00123 | 13.21 | 21.43 | 7.54 | 22.47 | 33.08 | 24.91 | 26.42 |
| TR-04_z_28 | 21.5 | 4.6 | 21.5 | 4.6 | 300.33 | 2.31 | 0.0450 | 10.66 | 0.0203 | 10.51 | 0.0033 | 2.31 | 0.00116 | 7.56 | 21.52 | 4.61 | 20.38 | 21.02 | 23.55 | 15.12 |
| TR-04_z_29 | 23.2 | 6.5 | 23.2 | 6.5 | 277.39 | 3.16 | 0.0435 | 15.06 | 0.0215 | 14.80 | 0.0036 | 3.27 | 0.00137 | 11.65 | 23.25 | 6.54 | 21.64 | 29.61 | 27.83 | 23.30 |
| TR-04_z_3 | 25.0 | 6.3 | 25.0 | 6.3 | 257.24 | 3.02 | 0.0478 | 13.45 | 0.0258 | 13.28 | 0.0039 | 3.04 | 0.00124 | 9.28 | 25.03 | 6.07 | 25.90 | 26.56 | 25.17 | 18.55 |
| TR-04_z_30 | 23.7 | 7.3 | 23.7 | 7.3 | 273.36 | 3.44 | 0.0444 | 16.28 | 0.0221 | 15.98 | 0.0037 | 3.66 | 0.00179 | 10.31 | 23.85 | 7.33 | 22.16 | 31.97 | 36.21 | 20.62 |
| TR-04_z_31 | 24.0 | 12.5 | 23.96 | 12.52 | 254.28 | 5.78 | 0.0947 | 19.25 | 0.0521 | 18.49 | 0.0040 | 5.77 | 0.00164 | 17.76 | 25.51 | 11.53 | 51.53 | 36.98 | 33.21 | 35.52 |
| TR-04_z_32 | 24.5 | 9.6 | 24.47 | 9.56 | 263.58 | 4.61 | 0.0524 | 20.09 | 0.0278 | 19.68 | 0.0038 | 4.60 | 0.00181 | 15.96 | 24.66 | 9.19 | 27.84 | 39.36 | 36.57 | 31.92 |
| TR-04_z_33 | 22.8 | 5.9 | 22.8 | 5.9 | 283.32 | 2.95 | 0.0459 | 13.68 | 0.0224 | 13.44 | 0.0035 | 2.95 | 0.00107 | 12.98 | 22.79 | 5.90 | 22.49 | 26.89 | 21.66 | 25.96 |
| TR-04_z_34 | 23.5 | 11.2 | 23.48 | 11.15 | 269.41 | 5.01 | 0.0640 | 19.95 | 0.0331 | 19.43 | 0.0037 | 5.33 | 0.00215 | 13.88 | 24.01 | 10.67 | 33.05 | 38.86 | 43.45 | 27.76 |
| TR-04_z_4 | 24.4 | 15.0 | 24.38 | 15.02 | 256.56 | 7.11 | 0.0631 | 28.83 | 0.0341 | 28.03 | 0.0039 | 7.14 | 0.00166 | 24.73 | 24.90 | 14.29 | 34.02 | 56.05 | 33.52 | 49.45 |
| TR-04_z_5 | 22.6 | 5.6 | 22.64 | 5.59 | 285.58 | 2.66 | 0.0466 | 12.17 | 0.0224 | 11.97 | 0.0035 | 2.70 | 0.00130 | 8.70 | 22.64 | 5.41 | 22.45 | 23.94 | 26.33 | 17.41 |
| TR-04_z_6 | 26.2 | 9.8 | 26.18 | 9.80 | 247.18 | 4.18 | 0.0576 | 17.78 | 0.0327 | 17.39 | 0.0041 | 4.73 | 0.00207 | 9.88 | 26.55 | 9.46 | 32.66 | 34.79 | 42.01 | 19.76 |
| TR-04_z_7 | 8.1 | 18.1 | 7.75 | 18.93 | 775.93 | 8.95 | 0.0400 | 28.19 | < DL | 26.77 | 0.0013 | 9.06 | 0.00084 | 23.03 | 8.11 | 18.12 | < DL | 53.55 | 17.05 | 46.06 |
| TR-04_z_8 | 23.9 | 8.2 | 23.89 | 8.22 | 269.66 | 3.97 | 0.0486 | 17.85 | 0.0251 | 17.54 | 0.0037 | 3.97 | 0.00155 | 13.27 | 23.95 | 7.93 | 25.20 | 35.07 | 31.32 | 26.55 |
| TR-04_z_9 | 23.1 | 22.7 | 23.11 | 22.72 | 237.99 | 10.30 | 0.1429 | 27.55 | 0.0813 | 25.83 | 0.0041 | 9.86 | < DL | 63.96 | 26.32 | 19.71 | 79.38 | 51.67 | < DL | 127.92 |
| UG012183_z_1 | 4.1 | 25.1 | 1572.91 | 12.51 | 1572.91 | 12.51 | 0.0400 | 49.38 | < DL | 47.79 | 0.0006 | 12.55 | < DL | 34.42 | 4.07 | 25.09 | < DL | 95.57 | < DL | 68.84 |
| UG012183_z_2 | 4.1 | 23.7 | 1592.96 | 11.86 | 1592.96 | 11.86 | 0.0400 | 31.67 | < DL | 29.46 | 0.0006 | 11.83 | 0.00089 | 20.25 | 4.10 | 23.66 | < DL | 58.92 | 18.03 | 40.49 |
| UG012183_z_3 | 4.4 | 24.7 | 1468.21 | 12.27 | 1468.21 | 12.27 | 0.0400 | 34.32 | < DL | 32.09 | 0.0007 | 12.35 | < DL | 70.07 | 4.41 | 24.70 | < DL | 64.19 | < DL | 140.14 |
| UG012183_z_4 | 5.5 | 29.2 | 1181.38 | 14.84 | 1181.38 | 14.84 | 0.0400 | 40.41 | < DL | 37.76 | 0.0008 | 14.61 | 0.00171 | 19.22 | 5.46 | 29.21 | < DL | 75.53 | 34.57 | 38.44 |
| UG012183_z_5 | 4.3 | 15.2 | 1538.03 | 7.62 | 1538.03 | 7.62 | 0.0400 | 30.93 | < DL | 30.06 | 0.0007 | 7.58 | 0.00015 | 25.09 | 4.27 | 15.15 | < DL | 60.12 | 2.95 | 50.17 |
| UG012183_z_6 | 4.8 | 26.5 | 1344.83 | 13.17 | 1344.83 | 13.17 | 0.0400 | 46.01 | < DL | 44.11 | 0.0008 | 13.26 | < DL | 37.98 | 4.83 | 26.52 | < DL | 88.21 | < DL | 75.96 |
| UG012185_z_10 | 6.3 | 34.5 | 492.20 | 7.09 | 492.20 | 7.09 | 0.4615 | 12.27 | 0.1336 | 10.23 | 0.0021 | 8.24 | 0.00386 | 9.51 | 13.24 | 16.49 | 127.30 | 20.45 | 78.12 | 19.03 |
| UG012185_z_11 | 4.1 | 14.7 | 1568.49 | 7.37 | 1568.49 | 7.37 | 0.0400 | 25.93 | < DL | 24.91 | 0.0006 | 7.37 | 0.00034 | 22.81 | 4.10 | 14.75 | < DL | 49.81 | 6.99 | 45.62 |
| UG012185_z_12 | 3.8 | 11.1 | 1668.48 | 5.64 | 1668.48 | 5.64 | 0.0527 | 20.45 | 0.0043 | 19.97 | 0.0006 | 5.36 | 0.00018 | 15.12 | 3.86 | 39.94 | 4.38 | 39.94 | 3.67 | 30.25 |
| UG012185_z_14 | 3.9 | 25.7 | 1273.72 | 9.60 | 1273.72 | 9.60 | 0.2278 | 22.39 | 0.0241 | 20.23 | 0.0008 | 9.71 | 0.00118 | 17.99 | 5.02 | 19.43 | 24.19 | 40.46 | 23.97 | 35.98 |
| UG012185_z_15 | 6.3 | 34.5 | 848.85 | 14.65 | 848.85 | 14.65 | 0.1746 | 36.75 | 0.0280 | 33.91 | 0.0012 | 14.27 | 0.00204 | 23.25 | 7.47 | 28.53 | 28.03 | 67.83 | 41.24 | 46.49 |
| UG012185_z_16 | 4.0 | 28.5 | 809.90 | 6.40 | 809.90 | 6.40 | 0.4396 | 11.46 | 0.0734 | 9.63 | 0.0012 | 6.39 | 0.00245 | 9.26 | 7.99 | 12.77 | 71.90 | 19.26 | 49.57 | 18.53 |
| UG012185_z_17 | 4.4 | 11.1 | 1447.55 | 5.31 | 1447.55 | 5.31 | 0.0550 | 22.92 | 0.0051 | 22.35 | 0.0007 | 5.30 | 0.00016 | 18.24 | 4.43 | 10.59 | 5.18 | 44.70 | 3.26 | 36.49 |
| UG012185_z_18 | 4.3 | 10.1 | 1494.25 | 5.69 | 1494.25 | 5.69 | 0.0400 | 24.02 | < DL | 23.53 | 0.0007 | 5.06 | 0.00029 | 15.16 | 4.31 | 10.13 | < DL | 47.06 | 5.79 | 30.33 |
| UG012185_z_19 | 4.1 | 12.5 | 1585.07 | 6.25 | 1585.07 | 6.25 | 0.0400 | 28.26 | < DL | 27.60 | 0.0006 | 6.25 | 0.00024 | 22.65 | 4.06 | 12.49 | < DL | 55.19 | 4.76 | 45.30 |
| UG012185_z_2 | 4.2 | 18.6 | 1523.11 | 9.31 | 1523.11 | 9.31 | 0.0400 | 25.95 | < DL | 24.27 | 0.0007 | 9.31 | < DL | 49.59 | 4.24 | 18.61 | < DL | 48.54 | < DL | 99.18 |
| UG012185_z_20 | 4.0 | 18.7 | 1599.35 | 9.32 | 1599.35 | 9.32 | 0.0400 | 35.57 | < DL | 34.35 | 0.0006 | 9.35 | 0.00073 | 21.32 | 4.00 | 18.70 | < DL | 68.71 | 14.82 | 42.63 |
| UG012185_z_21 | 4.5 | 15.1 | 1448.25 | 7.56 | 1448.25 | 7.56 | 0.0400 | 25.81 | < DL | 24.72 | 0.0007 | 7.57 | < DL | 26.33 | 4.48 | 15.14 | < DL | 49.43 | < DL | 52.67 |

Appendix B: Eastern Sunda arc geochronology data - zircon

| Analysis ID | Pref Age Ma | 2s% | 206Pb/238U Age (Ma) | 2s% | 238U/206Pb ratio | 1s% | 207Pb/206Pb ratio | 1s% | 207Pb/235U (calc) ratio | 1s% | 208Pb/238U ratio | 1s% | 208Pb/232Th ratio | 1s% | 206Pb/238U Age (Ma) | 2s% | 207Pb/235U (calc) Age (Ma) | 2s% | 208Pb/232Th Age (Ma) | 2s% |
|---------------|-------------|-------|---------------------|--------|------------------|-------|-------------------|--------|-------------------------|--------|------------------|-------|-------------------|-------|---------------------|-------|----------------------------|--------|----------------------|--------|
| UG012185_z_22 | 5.2 | 30.0 | 5.22 | 30.04 | 478.31 | 6.52 | 0.5287 | 7.73 | 0.1536 | 6.38 | 0.0021 | 6.75 | 0.00452 | 6.59 | 13.40 | 13.49 | 145.12 | 12.77 | 91.43 | 13.19 |
| UG012185_z_23 | 4.8 | 16.6 | 4.76 | 16.56 | 1224.44 | 7.39 | 0.1176 | 22.62 | 0.0131 | 21.42 | 0.0008 | 7.41 | 0.00034 | 24.65 | 5.24 | 14.81 | 13.18 | 42.85 | 6.80 | 49.30 |
| UG012185_z_24 | 3.6 | 18.1 | 3.60 | 18.01 | 1808.01 | 9.04 | 0.0400 | 43.69 | <DL | 42.77 | 0.0006 | 9.04 | 0.00061 | 19.75 | 3.56 | 18.08 | <DL | 85.54 | 12.35 | 39.50 |
| UG012185_z_25 | 4.8 | 14.3 | 4.83 | 14.31 | 1279.11 | 7.14 | 0.0790 | 24.44 | 0.0084 | 23.56 | 0.0008 | 6.69 | 0.00027 | 19.59 | 5.03 | 13.37 | 8.51 | 47.12 | 5.46 | 39.17 |
| UG012185_z_26 | 4.2 | 15.6 | 4.23 | 15.59 | 1439.83 | 7.22 | 0.0925 | 24.53 | 0.0088 | 23.50 | 0.0007 | 7.17 | 0.00044 | 19.74 | 4.49 | 14.34 | 8.87 | 46.99 | 8.97 | 39.47 |
| UG012185_z_27 | 4.4 | 15.1 | 4.40 | 15.09 | 1475.91 | 7.59 | 0.0400 | 32.47 | <DL | 31.61 | 0.0007 | 7.57 | 0.00034 | 25.34 | 4.35 | 15.14 | <DL | 63.23 | 6.86 | 50.68 |
| UG012185_z_3 | 4.3 | 13.7 | 4.30 | 13.68 | 1495.98 | 6.88 | 0.0400 | 27.12 | <DL | 26.28 | 0.0007 | 6.85 | 0.00032 | 20.97 | 4.34 | 13.70 | <DL | 52.55 | 6.47 | 41.95 |
| UG012185_z_4 | 4.1 | 11.3 | 4.10 | 11.34 | 1480.32 | 5.04 | 0.0906 | 17.24 | 0.0083 | 16.55 | 0.0007 | 5.27 | 0.00025 | 13.44 | 4.38 | 10.53 | 8.40 | 33.10 | 4.99 | 26.88 |
| UG012185_z_5 | 5.4 | 23.5 | 5.41 | 23.53 | 742.91 | 6.85 | 0.3446 | 13.43 | 0.0651 | 11.64 | 0.0017 | 7.02 | 0.00173 | 13.39 | 8.70 | 14.04 | 64.04 | 23.29 | 34.97 | 26.77 |
| UG012185_z_6 | 4.2 | 11.6 | 4.20 | 11.61 | 1537.39 | 5.81 | 0.0400 | 26.21 | <DL | 25.60 | 0.0007 | 5.81 | 0.00023 | 20.04 | 4.20 | 11.62 | <DL | 51.20 | 4.75 | 40.08 |
| UG012185_z_7 | 4.6 | 18.9 | 4.60 | 18.92 | 1392.79 | 9.21 | 0.0400 | 38.99 | <DL | 37.92 | 0.0007 | 9.45 | 0.00043 | 22.47 | 4.62 | 18.90 | <DL | 75.84 | 8.76 | 44.93 |
| UG012185_z_8 | 4.8 | 20.8 | 4.80 | 20.81 | 1345.75 | 10.26 | 0.0400 | 118.20 | <DL | 117.77 | 0.0007 | 10.41 | <DL | 34.26 | 4.77 | 20.82 | <DL | 235.53 | <DL | 68.52 |
| UG012185_z_9 | 5.3 | 15.6 | 5.30 | 15.64 | 981.00 | 6.22 | 0.1996 | 15.10 | 0.0275 | 13.84 | 0.0010 | 6.22 | 0.00061 | 14.33 | 6.57 | 12.44 | 27.52 | 27.68 | 12.37 | 28.65 |
| UG012187_z_1 | 3.9 | 12.0 | 3.91 | 11.99 | 1562.38 | 5.55 | 0.0877 | 19.34 | 0.0076 | 18.58 | 0.0006 | 5.55 | 0.00025 | 15.82 | 4.13 | 11.11 | 7.74 | 37.16 | 5.11 | 31.63 |
| UG012187_z_10 | 4.0 | 19.7 | 4.00 | 19.71 | 1618.56 | 16.45 | 0.0400 | 34.47 | <DL | 33.10 | 0.0006 | 9.85 | <DL | 32.78 | 4.01 | 19.71 | <DL | 66.19 | <DL | 65.56 |
| UG012187_z_11 | 5.0 | 16.8 | 5.00 | 16.83 | 1303.83 | 8.44 | 0.0400 | 47.01 | <DL | 46.29 | 0.0008 | 8.41 | <DL | 27.98 | 4.97 | 16.82 | <DL | 92.59 | <DL | 55.96 |
| UG012187_z_12 | 4.2 | 12.7 | 4.20 | 12.71 | 1518.68 | 6.35 | 0.0400 | 23.41 | <DL | 22.58 | 0.0007 | 6.36 | 0.00028 | 22.34 | 4.22 | 12.72 | <DL | 45.16 | 5.74 | 44.68 |
| UG012187_z_13 | 5.4 | 14.2 | 5.40 | 14.21 | 1184.86 | 7.10 | 0.0400 | 24.80 | <DL | 23.81 | 0.0008 | 7.11 | 0.00045 | 20.01 | 5.44 | 14.22 | <DL | 47.61 | 9.08 | 40.02 |
| UG012187_z_14 | 4.1 | 12.5 | 4.10 | 12.51 | 1573.08 | 6.26 | 0.0400 | 24.56 | <DL | 23.79 | 0.0006 | 6.26 | 0.00041 | 16.28 | 4.09 | 12.53 | <DL | 47.99 | 8.37 | 32.56 |
| UG012187_z_15 | 4.0 | 11.7 | 4.00 | 11.73 | 1568.52 | 5.51 | 0.0731 | 20.89 | 0.0064 | 20.20 | 0.0006 | 5.52 | 0.00022 | 19.48 | 4.11 | 11.03 | 6.49 | 40.40 | 4.45 | 38.95 |
| UG012187_z_16 | 6.4 | 22.2 | 6.39 | 22.20 | 758.83 | 10.64 | 0.2438 | 18.18 | 0.0432 | 16.34 | 0.0013 | 8.19 | 0.00140 | 15.51 | 8.53 | 16.38 | 42.90 | 32.69 | 28.28 | 31.03 |
| UG012187_z_17 | 5.8 | 29.2 | 5.81 | 29.17 | 768.54 | 9.65 | 0.2963 | 19.98 | 0.0547 | 17.57 | 0.0013 | 9.61 | 0.00309 | 15.83 | 8.50 | 19.22 | 54.06 | 35.15 | 62.46 | 31.66 |
| UG012187_z_18 | 3.8 | 24.8 | 3.80 | 24.81 | 1697.70 | 12.45 | 0.0400 | 39.43 | <DL | 37.45 | 0.0006 | 12.41 | <DL | 32.50 | 3.83 | 24.83 | <DL | 74.91 | <DL | 65.00 |
| UG012187_z_19 | 6.0 | 20.9 | 6.00 | 20.91 | 1064.67 | 10.35 | 0.0400 | 25.59 | <DL | 23.46 | 0.0009 | 10.44 | <DL | 53.10 | 6.00 | 20.87 | <DL | 46.92 | <DL | 106.20 |
| UG012187_z_2 | 4.5 | 20.7 | 4.50 | 20.71 | 1188.58 | 8.42 | 0.1847 | 21.18 | 0.0212 | 19.49 | 0.0008 | 8.43 | 0.00091 | 20.33 | 5.42 | 16.87 | 21.26 | 38.97 | 18.43 | 40.67 |
| UG012187_z_3 | 5.0 | 12.0 | 5.00 | 12.01 | 1291.63 | 5.98 | 0.0400 | 29.98 | <DL | 29.42 | 0.0008 | 5.99 | <DL | 28.90 | 4.99 | 11.97 | <DL | 58.84 | <DL | 57.79 |
| UG012187_z_4 | 4.0 | 24.0 | 4.00 | 24.01 | 1642.30 | 12.10 | 0.0400 | 69.47 | <DL | 68.44 | 0.0006 | 11.99 | <DL | 34.58 | 4.00 | 23.97 | <DL | 136.89 | <DL | 69.15 |
| UG012187_z_5 | 4.6 | 16.9 | 4.60 | 16.91 | 1403.19 | 8.41 | 0.0400 | 29.43 | <DL | 28.23 | 0.0007 | 8.45 | <DL | 32.87 | 4.56 | 16.89 | <DL | 56.47 | <DL | 65.75 |
| UG012187_z_6 | 2.8 | 125.4 | 2.84 | 125.42 | 846.75 | 18.64 | 0.5489 | 31.30 | 0.0903 | 25.19 | 0.0012 | 18.70 | <DL | 46.98 | 7.80 | 37.40 | 87.78 | 50.37 | <DL | 83.96 |
| UG012187_z_7 | 4.1 | 19.2 | 4.10 | 19.21 | 1574.09 | 9.62 | 0.0400 | 49.03 | <DL | 48.11 | 0.0006 | 9.60 | <DL | 31.91 | 4.12 | 19.20 | <DL | 96.21 | <DL | 63.83 |
| UG012187_z_8 | 4.5 | 18.5 | 4.50 | 18.51 | 1445.46 | 9.27 | 0.0400 | 61.68 | <DL | 61.00 | 0.0007 | 9.27 | <DL | 40.01 | 4.46 | 18.53 | <DL | 122.00 | <DL | 80.03 |
| UG012187_z_9 | 4.5 | 13.9 | 4.50 | 13.91 | 1452.25 | 7.04 | 0.0400 | 54.65 | <DL | 54.22 | 0.0007 | 6.97 | <DL | 28.13 | 4.48 | 13.95 | <DL | 108.44 | <DL | 56.25 |
| UG012188_z_1 | 4.9 | 18.2 | 4.90 | 18.21 | 1320.07 | 9.06 | 0.0400 | 39.09 | <DL | 38.05 | 0.0008 | 9.08 | 0.00084 | 18.84 | 4.85 | 18.17 | <DL | 76.11 | 17.09 | 37.68 |
| UG012188_z_10 | 4.2 | 12.9 | 4.20 | 12.93 | 1466.00 | 6.02 | 0.0835 | 21.44 | 0.0071 | 19.76 | 0.0007 | 6.01 | 0.00035 | 16.22 | 4.42 | 12.02 | 0.00 | 7.12 | 32.44 | 7.12 |
| UG012188_z_11 | 4.2 | 11.9 | 4.20 | 11.93 | 1496.54 | 10.45 | 0.0783 | 20.48 | 0.0071 | 18.76 | 0.0007 | 5.98 | 0.00037 | 15.05 | 4.33 | 11.16 | 7.22 | 39.51 | 7.56 | 30.10 |
| UG012188_z_12 | 3.7 | 21.8 | 3.74 | 21.79 | 1304.37 | 7.97 | 0.2455 | 17.80 | 0.0262 | 16.05 | 0.0008 | 7.99 | 0.00092 | 14.49 | 5.00 | 15.97 | 26.30 | 32.10 | 18.63 | 28.99 |
| UG012188_z_13 | 4.9 | 33.2 | 4.90 | 33.24 | 1092.80 | 13.70 | 0.1749 | 35.35 | 0.0225 | 32.61 | 0.0009 | 13.74 | 0.00114 | 25.44 | 5.85 | 27.48 | 22.59 | 65.22 | 23.13 | 50.88 |
| UG012188_z_14 | 3.5 | 18.9 | 3.46 | 18.91 | 1652.12 | 8.32 | 0.1481 | 22.44 | 0.0125 | 20.97 | 0.0006 | 8.13 | 0.00030 | 13.33 | 3.97 | 16.26 | 12.57 | 41.93 | 6.16 | 26.66 |
| UG012188_z_15 | 3.9 | 21.6 | 3.90 | 21.61 | 1671.25 | 11.11 | 0.0400 | 53.78 | <DL | 52.70 | 0.0006 | 10.79 | 0.00044 | 26.80 | 3.88 | 21.58 | <DL | 105.40 | 8.94 | 53.60 |
| UG012188_z_16 | 5.9 | 15.1 | 5.89 | 15.07 | 968.29 | 6.24 | 0.1489 | 17.07 | 0.0217 | 15.97 | 0.0011 | 6.56 | 0.00094 | 11.39 | 6.77 | 13.13 | 21.76 | 31.94 | 19.00 | 22.78 |
| UG012188_z_17 | 4.9 | 65.0 | 4.94 | 64.98 | 306.54 | 7.00 | 0.6511 | 8.95 | 0.2963 | 8.65 | 0.0033 | 7.43 | 0.00192 | 10.43 | 21.01 | 14.87 | 263.50 | 17.30 | 240.21 | 20.86 |
| UG012188_z_18 | 4.6 | 17.7 | 4.60 | 17.71 | 1395.81 | 8.86 | 0.0400 | 34.53 | <DL | 33.45 | 0.0007 | 8.85 | 0.00049 | 17.88 | 4.63 | 17.69 | <DL | 66.89 | 9.86 | 35.77 |
| UG012188_z_19 | 4.2 | 15.1 | 4.21 | 15.06 | 1319.87 | 6.40 | 0.1592 | 17.00 | 0.0167 | 15.89 | 0.0008 | 6.38 | 0.00047 | 15.27 | 4.91 | 12.76 | 16.82 | 31.78 | 9.50 | 30.54 |
| UG012188_z_2 | 4.5 | 12.0 | 4.45 | 12.00 | 1142.99 | 4.63 | 0.2137 | 10.96 | 0.0256 | 10.03 | 0.0009 | 4.66 | 0.00075 | 8.47 | 5.65 | 9.33 | 25.67 | 20.06 | 15.10 | 16.94 |
| UG012188_z_20 | 4.2 | 11.6 | 4.20 | 11.61 | 1519.82 | 5.79 | 0.0400 | 33.61 | <DL | 33.14 | 0.0007 | 5.79 | 0.00031 | 18.46 | 4.24 | 11.59 | <DL | 66.28 | 6.34 | 36.91 |

Appendix B: Eastern Sunda arc geochronology data - zircon

| Analysis ID | Pref Age Ma | 2s% | 208Pb/238U Age (Ma) | 2s% | 238U/208Pb ratio | 1s% | 207Pb/206Pb ratio | 1s% | 207Pb/235U (calc) ratio | 1s% | 206Pb/238U ratio | 1s% | 208Pb/232Th ratio | 1s% | 206Pb/238U Age (Ma) | 2s% | 207Pb/235U Age (Ma) | 2s% | 208Pb/232Th Age (Ma) | 2s% |
|---------------|----------------|-------|------------------------|---------|---------------------|--------|----------------------|-------|----------------------------|-------|---------------------|-------|----------------------|-------|------------------------|-------|------------------------|--------|-------------------------|--------|
| UG012188_z_21 | 5.0 | 11.4 | | 1294.99 | 5.66 | <DL | 0.0400 | 25.69 | <DL | 25.09 | 0.0008 | 5.69 | 0.00038 | 17.26 | 4.99 | 11.38 | <DL | 50.18 | 7.69 | 34.53 |
| UG012188_z_22 | 4.7 | 24.8 | 4.71 | 1108.39 | 9.70 | 0.0218 | 0.1763 | 24.23 | 0.0218 | 22.36 | 0.0009 | 10.55 | 0.00059 | 18.46 | 5.64 | 21.09 | 21.86 | 44.73 | 11.87 | 36.91 |
| UG012188_z_23 | 4.3 | 10.4 | | 1507.57 | 5.31 | <DL | 0.0400 | 35.67 | <DL | 35.32 | 0.0007 | 5.18 | 0.00021 | 18.78 | 4.28 | 10.37 | <DL | 70.85 | 4.16 | 37.96 |
| UG012188_z_24 | 4.7 | 20.9 | | 1372.66 | 10.50 | <DL | 0.0400 | 31.97 | <DL | 30.25 | 0.0007 | 10.44 | 0.00109 | 18.74 | 4.74 | 20.88 | <DL | 60.49 | 22.16 | 37.47 |
| UG012188_z_25 | 4.2 | 13.2 | 4.22 | 1461.33 | 6.15 | 0.0076 | 0.0803 | 22.35 | 0.0076 | 21.53 | 0.0007 | 6.16 | 0.00024 | 14.34 | 4.41 | 12.32 | 7.69 | 43.06 | 4.79 | 28.67 |
| UG012188_z_26 | 4.5 | 11.9 | | 1416.48 | 6.51 | <DL | 0.0400 | 23.90 | <DL | 23.20 | 0.0007 | 5.93 | 0.00036 | 17.48 | 4.50 | 11.85 | <DL | 46.40 | 7.23 | 34.96 |
| UG012188_z_27 | 4.4 | 11.2 | 4.38 | 1419.67 | 5.29 | 0.0077 | 0.0800 | 19.01 | 0.0077 | 18.34 | 0.0007 | 5.24 | 0.00028 | 13.11 | 4.57 | 10.49 | 7.81 | 36.67 | 5.73 | 26.23 |
| UG012188_z_3 | 4.8 | 11.6 | | 1335.00 | 6.81 | <DL | 0.0400 | 26.50 | <DL | 25.90 | 0.0007 | 5.82 | 0.00033 | 18.83 | 4.83 | 11.63 | <DL | 51.90 | 6.69 | 37.65 |
| UG012188_z_4 | 9.5 | 48.8 | 9.45 | 213.07 | 10.73 | 0.5858 | 9.23 | | | | 0.0046 | 11.28 | 0.00917 | 10.95 | 29.67 | 22.55 | 0.00 | 185.03 | 21.90 | |
| UG012188_z_5 | 3.5 | 97.8 | 3.47 | 636.61 | 13.35 | 0.1247 | 0.5653 | 22.50 | 0.1247 | 18.01 | 0.0016 | 13.58 | 0.00462 | 18.50 | 10.12 | 27.15 | 119.33 | 36.01 | 93.35 | 37.00 |
| UG012188_z_6 | 4.6 | 15.2 | | 1387.99 | 7.65 | <DL | 0.0400 | 33.19 | <DL | 32.34 | 0.0007 | 7.62 | 0.00049 | 19.24 | 4.62 | 15.23 | <DL | 64.88 | 9.86 | 38.49 |
| UG012188_z_7 | 4.7 | 18.8 | | 1417.80 | 9.39 | 0.0400 | 0.0400 | 41.50 | 0.0400 | 41.50 | 0.0007 | 9.42 | 0.00055 | 25.42 | 4.65 | 18.83 | 0.00 | | | |
| UG012188_z_8 | 4.0 | 66.9 | 3.98 | 213.83 | 5.08 | 0.7329 | 4.58 | | 0.4715 | 6.54 | 0.0047 | 4.74 | 0.01029 | 6.88 | 30.03 | 9.48 | 392.22 | 13.08 | 207.49 | 13.77 |
| UG012188_z_9 | 4.8 | 24.8 | | 1348.77 | 12.37 | <DL | 0.0400 | 52.66 | <DL | 51.23 | 0.0007 | 12.40 | <DL | 41.71 | 4.75 | 24.80 | <DL | 102.46 | <DL | 83.43 |
| UG012189_z_1 | 4.8 | 14.2 | | 1334.05 | 7.14 | <DL | 0.0400 | 27.98 | <DL | 28.48 | 0.0008 | 7.12 | <DL | 82.01 | 4.84 | 14.25 | <DL | 52.96 | <DL | 164.01 |
| UG012189_z_10 | 5.0 | 23.3 | | 1260.27 | 11.56 | <DL | 0.0400 | 35.86 | <DL | 33.96 | 0.0008 | 11.67 | <DL | 67.39 | 5.03 | 23.34 | <DL | 67.91 | <DL | 134.79 |
| UG012189_z_11 | 6.9 | 90.6 | 6.90 | 385.76 | 16.11 | 0.5077 | 27.58 | | 0.1872 | 22.47 | 0.0026 | 15.41 | 0.00452 | 22.92 | 16.57 | 30.82 | 174.20 | 44.94 | 91.40 | 45.84 |
| UG012189_z_12 | 4.4 | 11.9 | | 1468.34 | 5.93 | <DL | 0.0400 | 28.06 | <DL | 27.47 | 0.0007 | 5.93 | <DL | 51.83 | 4.39 | 11.86 | <DL | 54.93 | <DL | 103.65 |
| UG012189_z_2 | 4.4 | 17.8 | | 1465.70 | 8.88 | <DL | 0.0400 | 49.25 | <DL | 48.47 | 0.0007 | 8.88 | <DL | 35.18 | 4.39 | 17.76 | <DL | 96.94 | <DL | 70.35 |
| UG012189_z_3 | 4.2 | 14.3 | | 1515.61 | 7.14 | <DL | 0.0400 | 25.87 | <DL | 24.91 | 0.0007 | 7.14 | <DL | 27.73 | 4.25 | 14.28 | <DL | 49.82 | <DL | 55.47 |
| UG012189_z_4 | 3.8 | 44.5 | 3.80 | 839.43 | 9.77 | 0.4460 | 17.47 | | 0.0729 | 14.56 | 0.0012 | 9.69 | 0.00185 | 14.65 | 7.69 | 19.39 | 71.42 | 29.13 | 37.42 | 29.29 |
| UG012189_z_5 | 4.9 | 15.5 | 4.93 | 1110.61 | 6.48 | 0.1638 | 17.25 | | 0.0201 | 16.03 | 0.0009 | 6.53 | 0.00051 | 17.06 | 5.79 | 13.06 | 20.17 | 32.07 | 10.24 | 34.11 |
| UG012189_z_6 | 4.4 | 11.0 | | 1465.75 | 5.00 | 0.0049 | 24.78 | | 0.0040 | 24.29 | 0.0007 | 5.52 | 0.00030 | 12.69 | 4.37 | 11.04 | 4.03 | 48.59 | 6.05 | 25.38 |
| UG012189_z_7 | 5.1 | 13.7 | | 1276.61 | 6.90 | <DL | 0.0400 | 25.42 | <DL | 24.52 | 0.0008 | 6.86 | <DL | 33.18 | 5.05 | 13.72 | <DL | 49.04 | <DL | 66.37 |
| UG012189_z_8 | 6.6 | 32.6 | 6.59 | 598.51 | 9.40 | 0.3460 | 18.26 | | 0.0784 | 15.78 | 0.0016 | 9.94 | 0.00354 | 16.71 | 10.62 | 19.89 | 76.60 | 31.55 | 71.72 | 33.42 |
| UG012189_z_9 | 3.8 | 286.3 | 3.82 | 286.30 | 3.50 | 0.8259 | 3.20 | | 2.7037 | 4.20 | 0.0241 | 3.65 | 0.05813 | 4.95 | 153.40 | 7.30 | 1329.48 | 8.41 | 1145.26 | 9.89 |
| UG012191_z_1 | 6.4 | 11.9 | 6.36 | 969.93 | 5.53 | 0.0638 | 19.63 | | 0.0010 | 5.52 | 0.0010 | 5.52 | 0.00030 | 12.05 | 6.67 | 11.05 | 0.00 | 6.01 | 24.10 | |
| UG012191_z_10 | 6.0 | 10.2 | 5.97 | 1023 | 4.05 | 0.0182 | 11.18 | | 0.0182 | 11.18 | 0.0010 | 4.63 | 0.00045 | 6.50 | 6.67 | 9.26 | 18.32 | 22.36 | 9.15 | 12.99 |
| UG012191_z_11 | 4.9 | 14.9 | 4.85 | 1251.45 | 6.91 | 0.0103 | 21.98 | | 0.0103 | 21.98 | 0.0008 | 6.85 | 0.00026 | 13.23 | 5.18 | 13.69 | 10.45 | 43.96 | 5.31 | 26.47 |
| UG012191_z_12 | 6.3 | 17.8 | 6.27 | 1012.15 | 9.23 | 0.0492 | 38.76 | | 0.0687 | 37.85 | 0.0010 | 8.56 | 0.00040 | 14.28 | 6.30 | 17.12 | 6.81 | 75.70 | 8.15 | 28.55 |
| UG012191_z_13 | 6.5 | 16.0 | 6.55 | 1596 | 9.89 | 0.0578 | 29.85 | | 0.0081 | 29.05 | 0.0010 | 7.67 | 0.00043 | 12.78 | 6.65 | 15.34 | 8.18 | 58.10 | 8.75 | 25.55 |
| UG012191_z_14 | 7.1 | 11.7 | 7.10 | 1169 | 5.39 | 0.0882 | 18.68 | | 0.0137 | 17.95 | 0.0012 | 5.42 | 0.00048 | 9.58 | 7.50 | 10.83 | 13.85 | 35.89 | 9.80 | 19.15 |
| UG012191_z_15 | 5.2 | 12.9 | 5.24 | 1287 | 6.18 | 0.0513 | 27.62 | | 0.0056 | 26.96 | 0.0008 | 6.18 | 0.00030 | 9.78 | 5.28 | 12.35 | 5.69 | 53.92 | 6.16 | 19.56 |
| UG012191_z_16 | 5.6 | 10.2 | 5.57 | 1147.98 | 4.91 | 0.0063 | 21.54 | | 0.0063 | 21.02 | 0.0009 | 4.91 | 0.00034 | 9.59 | 5.62 | 9.82 | 6.38 | 42.05 | 6.91 | 19.18 |
| UG012191_z_17 | 22.7 | 8.2 | 22.66 | 251.68 | 3.42 | 0.1362 | 9.42 | | 0.0762 | 9.48 | 0.0040 | 3.68 | 0.00330 | 8.62 | 25.56 | 7.35 | 74.52 | 18.95 | 66.72 | 17.25 |
| UG012191_z_18 | 6.4 | 12.6 | | 1011.94 | 6.32 | <DL | 0.0400 | 31.19 | <DL | 30.58 | 0.0010 | 6.32 | 0.00032 | 12.54 | 6.23 | 12.64 | <DL | 61.16 | 6.50 | 25.07 |
| UG012191_z_19 | 6.2 | 9.5 | 6.21 | 1039.14 | 4.41 | 0.0489 | 20.27 | | 0.0064 | 19.83 | 0.0010 | 4.56 | 0.00037 | 9.16 | 6.23 | 9.16 | 6.48 | 39.66 | 7.50 | 17.41 |
| UG012191_z_2 | 5.9 | 15.3 | | 1093.32 | 6.86 | <DL | 0.0400 | 36.48 | <DL | 35.86 | 0.0009 | 7.63 | 0.00038 | 12.91 | 5.95 | 15.26 | <DL | 71.73 | 7.70 | 25.82 |
| UG012191_z_20 | 6.5 | 19.9 | | 969.90 | 8.91 | 0.0400 | 45.81 | | <DL | 44.90 | 0.0010 | 9.93 | 0.00041 | 18.29 | 6.48 | 19.87 | <DL | 89.81 | 8.24 | 36.59 |
| UG012191_z_21 | 5.6 | 19.8 | 5.57 | 1136.10 | 7.61 | 0.0693 | 29.51 | | 0.0085 | 28.56 | 0.0009 | 9.56 | 0.00047 | 14.24 | 5.73 | 19.12 | 8.62 | 57.12 | 9.43 | 28.49 |
| UG012191_z_22 | 5.8 | 28.3 | 5.79 | 459.69 | 4.91 | 0.1528 | 6.98 | | 0.1528 | 6.98 | 0.0022 | 4.96 | 0.00198 | 7.50 | 13.98 | 9.93 | 144.37 | 13.97 | 40.12 | 14.99 |
| UG012191_z_23 | 7.0 | 19.7 | | 919.54 | 13.52 | <DL | 0.0400 | 34.14 | <DL | 33.11 | 0.0011 | 9.07 | 0.00030 | 22.87 | 6.97 | 19.75 | <DL | 66.22 | 6.18 | 45.73 |
| UG012191_z_24 | 6.5 | 8.5 | 6.54 | 971.69 | 4.74 | 0.0580 | 17.10 | | 0.0082 | 16.67 | 0.0010 | 4.07 | 0.00030 | 6.63 | 6.63 | 8.15 | 8.25 | 33.34 | 6.12 | 13.25 |
| UG012191_z_25 | 6.4 | 12.5 | | 1007.95 | 6.15 | 0.0400 | 63.04 | | <DL | 62.76 | 0.0010 | 6.27 | 0.00026 | 18.28 | 6.42 | 12.54 | <DL | 125.52 | 5.21 | 36.56 |
| UG012191_z_26 | 5.6 | 8.5 | 5.64 | 1082.04 | 3.93 | 0.0874 | 13.63 | | | | 0.0009 | 3.93 | 0.00032 | 7.81 | 5.95 | 7.87 | 0.00 | 6.58 | 15.63 | |

Appendix B: Eastern Sunda arc geochronology data - zircon

| Analysis ID | Pref Age Ma | 2s% Age | 206Pb/238U Age | 2s% Age | 238U/206Pb ratio | 1s% ratio | 207Pb/206Pb ratio | 1s% ratio | 207Pb/235U (Calc)ratio | 1s% ratio | 206Pb/238U ratio | 1s% ratio | 208Pb/232Th ratio | 1s% ratio | 206Pb/238U Age (Ma) | 2s% Age (Ma) | 207Pb/235U(calc) Age (Ma) | 2s% Age (Ma) | 208Pb/232Th Age (Ma) | 2s% Age (Ma) |
|---------------|----------------|------------|-------------------|------------|---------------------|--------------|----------------------|--------------|---------------------------|--------------|---------------------|--------------|----------------------|--------------|------------------------|-----------------|------------------------------|-----------------|-------------------------|-----------------|
| UG012191_z_27 | 6.1 | 9.2 | 6.06 | 9.21 | 1055.23 | 3.91 | 0.0581 | 16.47 | 0.0010 | 4.44 | 0.0033 | 7.04 | 0.00033 | 7.04 | 6.15 | 8.87 | 0.00 | 6.60 | 14.08 | |
| UG012191_z_28 | 5.4 | 16.1 | 5.39 | 16.08 | 1089.22 | 7.74 | 0.1209 | 20.54 | 0.0152 | 19.44 | 0.0009 | 7.25 | 0.00045 | 12.91 | 5.96 | 14.51 | 15.31 | 38.87 | 9.07 | 25.82 |
| UG012191_z_29 | 4.8 | 18.4 | 4.81 | 18.35 | 1142.16 | 7.70 | 0.1663 | 20.18 | 0.0199 | 18.71 | 0.0009 | 7.69 | 0.00046 | 15.12 | 5.67 | 15.37 | 19.97 | 37.43 | 9.36 | 30.24 |
| UG012191_z_3 | 6.1 | 16.9 | | | 1053.37 | 8.40 | 0.0400 | 29.97 | < DL | 28.80 | 0.0009 | 8.43 | 0.00028 | 25.71 | 6.08 | 16.86 | < DL | 57.61 | 5.61 | 51.43 |
| UG012191_z_30 | 6.0 | 16.4 | 5.99 | 16.40 | 991.22 | 7.39 | 0.1146 | 22.87 | 0.0159 | 21.69 | 0.0010 | 7.35 | 0.00036 | 20.64 | 6.56 | 14.71 | 16.03 | 43.38 | 7.24 | 41.27 |
| UG012191_z_31 | 5.8 | 11.6 | 5.82 | 11.61 | 849.01 | 4.31 | 0.2298 | 9.82 | 0.0367 | 8.94 | 0.0012 | 4.44 | 0.00062 | 8.02 | 7.59 | 8.89 | 36.62 | 17.88 | 12.52 | 16.04 |
| UG012191_z_32 | 7.5 | 19.3 | | | 857.39 | 9.66 | 0.0400 | 35.25 | < DL | 33.93 | 0.0012 | 9.66 | 0.00038 | 20.67 | 7.51 | 19.31 | < DL | 67.87 | 7.66 | 41.34 |
| UG012191_z_33 | 6.9 | 18.3 | 6.89 | 18.34 | 801.53 | 7.80 | 0.1646 | 20.28 | 0.0288 | 18.83 | 0.0013 | 7.71 | 0.00103 | 14.38 | 8.11 | 15.41 | 28.79 | 37.65 | 20.95 | 28.76 |
| UG012191_z_4 | 5.9 | 10.9 | 5.86 | 10.92 | 1108.82 | 5.24 | 0.0512 | 23.31 | 0.0663 | 22.78 | 0.0009 | 5.25 | 0.00029 | 8.86 | 5.89 | 10.49 | 6.36 | 45.53 | 5.90 | 17.73 |
| UG012191_z_5 | 7.1 | 15.4 | 7.06 | 15.43 | 761.22 | 6.11 | 0.1768 | 15.78 | 0.0315 | 14.60 | 0.0013 | 6.45 | 0.00072 | 10.56 | 8.46 | 12.90 | 31.54 | 29.19 | 14.54 | 21.13 |
| UG012191_z_6 | 6.9 | 15.5 | 6.87 | 15.47 | 596.33 | 4.64 | 0.3377 | 9.09 | 0.0765 | 7.96 | 0.0017 | 4.63 | 0.00091 | 7.01 | 10.88 | 9.26 | 74.88 | 15.92 | 18.50 | 14.01 |
| UG012191_z_7 | 23.2 | 7.4 | 23.18 | 7.40 | 276.60 | 3.17 | 0.0524 | 13.88 | 0.0259 | 13.59 | 0.0036 | 3.59 | 0.00143 | 10.56 | 23.36 | 7.17 | 25.93 | 27.18 | 28.97 | 21.12 |
| UG012191_z_8 | 21.5 | 4.5 | 21.48 | 4.45 | 291.86 | 2.01 | 0.0687 | 7.50 | 0.0320 | 7.37 | 0.0034 | 2.12 | 0.00126 | 5.59 | 22.10 | 4.25 | 32.03 | 14.74 | 25.51 | 11.19 |
| UG012191_z_9 | 5.9 | 26.1 | 5.86 | 26.07 | 302.75 | 2.93 | 0.6190 | 4.32 | 0.2818 | 4.66 | 0.0033 | 2.89 | 0.00391 | 4.95 | 21.25 | 5.77 | 252.05 | 9.33 | 79.17 | 9.89 |
| UG012192_z_1 | 6.5 | 17.0 | 6.50 | 17.02 | 905.92 | 7.62 | 0.1133 | 24.02 | 0.0111 | 7.64 | 0.0011 | 7.64 | 0.00070 | 12.75 | 7.11 | 15.27 | 0.00 | 14.15 | 14.15 | 25.50 |
| UG012192_z_10 | 5.6 | 29.1 | 5.60 | 29.09 | 552.44 | 6.35 | 0.4586 | 10.26 | 0.1162 | 8.56 | 0.0018 | 7.40 | 0.00192 | 8.07 | 11.70 | 14.79 | 111.59 | 17.17 | 38.97 | 16.13 |
| UG012192_z_11 | 30.66 | | 30.66 | 7.89 | 157.63 | 2.81 | 0.2462 | 5.82 | 0.2123 | 6.41 | 0.0064 | 3.10 | 0.00733 | 5.22 | 40.96 | 6.19 | 195.48 | 12.81 | 148.09 | 10.43 |
| UG012192_z_2 | 21.34 | 88.80 | 21.34 | 88.80 | 13.02 | 3.17 | 0.8325 | 1.50 | 9.0662 | 4.20 | 0.0766 | 3.37 | 0.18577 | 3.10 | 812.00 | 3.97 | 2338.64 | 8.40 | 1476.13 | 7.55 |
| UG012192_z_3 | 69.35 | 36.17 | 69.35 | 36.17 | 7.49 | 2.16 | 0.8253 | 0.93 | 15.3651 | 2.46 | 0.1342 | 1.98 | 0.46771 | 3.10 | 1424.00 | 5.36 | 2839.39 | 4.91 | 3463.75 | 6.19 |
| UG012192_z_4 | 5.5 | 182.4 | 5.51 | 182.36 | 367.3 | 2.37 | 0.8220 | 2.51 | 3.0651 | 2.68 | 0.0274 | 2.59 | 0.04271 | 3.59 | 174.13 | 5.18 | 1424.00 | 5.36 | 847.77 | 7.18 |
| UG012192_z_5 | 8.73 | 18.19 | 8.73 | 18.19 | 549.69 | 6.47 | 0.2516 | 14.25 | 0.0655 | 12.79 | 0.0018 | 6.71 | 0.00133 | 10.50 | 11.79 | 13.43 | 62.48 | 25.56 | 27.03 | 21.00 |
| UG012192_z_6 | 4.7 | 24.5 | 4.67 | 24.55 | 820.91 | 8.12 | 0.3725 | 12.75 | 0.0619 | 10.95 | 0.0012 | 6.70 | 0.00060 | 11.66 | 7.96 | 13.40 | 61.00 | 21.90 | 12.11 | 23.31 |
| UG012192_z_7 | 6.3 | 21.6 | 6.27 | 21.56 | 600.90 | 5.70 | 0.3767 | 10.46 | 0.0843 | 9.00 | 0.0017 | 6.48 | 0.00114 | 8.79 | 10.78 | 12.96 | 82.19 | 18.00 | 23.09 | 17.58 |
| UG012192_z_8 | 5.9 | 17.5 | 5.92 | 17.48 | 710.04 | 6.06 | 0.3185 | 11.02 | 0.0694 | 9.67 | 0.0014 | 5.48 | 0.00114 | 8.05 | 9.04 | 10.95 | 59.50 | 19.35 | 23.05 | 16.10 |
| UG012192_z_9 | 5.4 | 27.2 | 5.44 | 27.15 | 676.21 | 7.09 | 0.3907 | 13.17 | 0.0788 | 11.23 | 0.0015 | 7.08 | 0.00094 | 13.63 | 9.64 | 14.15 | 76.98 | 22.46 | 18.98 | 27.27 |
| UG012194_z_1 | 5.7 | 13.6 | 5.70 | 13.65 | 1050.20 | 6.20 | 0.0987 | 20.60 | 0.0128 | 19.69 | 0.0009 | 6.24 | 0.00031 | 12.55 | 6.11 | 12.49 | 12.93 | 39.37 | 6.24 | 25.11 |
| UG012194_z_10 | 5.6 | 14.7 | 5.57 | 14.66 | 1048.37 | 7.46 | 0.1253 | 19.29 | 0.0163 | 18.22 | 0.0010 | 6.50 | 0.00046 | 11.78 | 6.19 | 12.99 | 16.39 | 36.45 | 9.28 | 23.56 |
| UG012194_z_11 | 9.6 | 9.5 | 9.60 | 9.46 | 666.27 | 4.49 | 0.0519 | 19.91 | 0.0105 | 19.46 | 0.0015 | 4.55 | 0.00060 | 17.99 | 9.67 | 9.09 | 10.57 | 38.91 | 12.18 | 35.99 |
| UG012194_z_12 | 6.8 | 38.8 | | | 939.74 | 14.70 | 0.0400 | 78.30 | < DL | 77.20 | 0.0011 | 19.38 | 0.00038 | 25.57 | 6.81 | 38.76 | < DL | 154.40 | 7.78 | 51.14 |
| UG012194_z_2 | 0.05 | 54405.69 | 0.05 | 54405.69 | 26.32 | 6.07 | 0.8513 | 5.23 | 4.5863 | 5.85 | 0.0379 | 6.07 | 0.07450 | 5.49 | 239.91 | 12.14 | 1746.79 | 11.71 | 1456.50 | 10.99 |
| UG012194_z_3 | 2.95 | 148.45 | 2.95 | 148.45 | 271.81 | 5.35 | 0.7385 | 9.82 | 0.3750 | 7.78 | 0.0037 | 5.21 | 0.00391 | 6.23 | 23.62 | 10.42 | 323.36 | 15.56 | 79.13 | 12.47 |
| UG012194_z_4 | 20.7 | 4.3 | 20.75 | 4.32 | 309.78 | 2.09 | 0.0503 | 9.06 | 0.0223 | 8.94 | 0.0032 | 2.08 | 0.00126 | 7.45 | 20.85 | 4.17 | 22.36 | 17.87 | 25.55 | 14.91 |
| UG012194_z_5 | 7.4 | 17.8 | 7.36 | 17.76 | 834.57 | 6.96 | 0.0786 | 25.58 | 0.0132 | 24.65 | 0.0012 | 8.48 | 0.00053 | 12.46 | 7.68 | 16.96 | 13.33 | 49.30 | 10.79 | 24.92 |
| UG012194_z_6 | 8.2 | 37.9 | | | 803.50 | 20.93 | 0.0400 | 44.96 | < DL | 42.30 | 0.0013 | 18.93 | 0.00057 | 28.23 | 8.15 | 37.86 | < DL | 84.61 | 11.53 | 56.47 |
| UG012194_z_7 | 6.2 | 13.4 | 6.2 | 13.4 | 1039.16 | 9.67 | 0.0400 | 46.18 | < DL | 45.71 | 0.0010 | 6.68 | 0.00036 | 13.18 | 6.19 | 13.36 | < DL | 91.43 | 7.27 | 26.35 |
| UG012194_z_8 | 6.2 | 7.9 | 6.2 | 7.9 | 1046.73 | 3.95 | 0.0438 | 18.94 | 0.0057 | 18.56 | 0.0010 | 3.95 | 0.00031 | 9.70 | 6.17 | 7.90 | 5.81 | 37.17 | 6.31 | 19.40 |
| UG012194_z_9 | 5.9 | 12.8 | 5.9 | 12.8 | 1099.16 | 7.14 | 0.0400 | 56.71 | < DL | 56.38 | 0.0009 | 6.38 | 0.00022 | 18.74 | 5.87 | 12.75 | < DL | 112.75 | 4.47 | 37.49 |
| UG012199_z_1 | 9.8 | 39.7 | 9.77 | 39.71 | 506.49 | 14.27 | 0.2433 | 31.87 | 0.0650 | 28.58 | 0.0020 | 14.95 | 0.00145 | 27.69 | 13.02 | 29.91 | 63.90 | 57.17 | 29.41 | 55.39 |
| UG012199_z_2 | 17.3 | 45.0 | 17.26 | 44.99 | 84.39 | 5.14 | 0.6644 | 5.60 | 1.0718 | 5.50 | 0.0121 | 5.60 | 0.04438 | 5.30 | 77.42 | 12.87 | 739.61 | 11.00 | 880.14 | 10.61 |
| UG012199_z_3 | 7.8 | 36.7 | 7.84 | 36.67 | 204.75 | 6.50 | 0.6388 | 5.30 | 0.4267 | 8.09 | 0.0048 | 5.64 | 0.00905 | 7.28 | 31.17 | 11.28 | 360.81 | 16.19 | 182.70 | 14.57 |
| UG012199_z_4 | 9.7 | 21.2 | 9.69 | 21.16 | 444.19 | 6.82 | 0.3045 | 13.37 | 0.0950 | 11.86 | 0.0022 | 7.29 | 0.00224 | 9.70 | 14.39 | 14.58 | 92.13 | 23.71 | 45.42 | 19.41 |
| UG012199_z_5 | 9.2 | 20.4 | | | 690.79 | 9.51 | 0.0400 | 33.22 | < DL | 31.91 | 0.0014 | 10.20 | 0.00105 | 24.99 | 9.25 | 20.40 | < DL | 63.82 | 21.17 | 49.98 |
| UG012199_z_6 | 9.6 | 11.0 | 9.57 | 11.01 | 442.82 | 3.40 | 0.3191 | 6.75 | 0.1008 | 6.02 | 0.0023 | 3.54 | 0.00249 | 5.21 | 14.61 | 7.09 | 97.48 | 12.04 | 50.38 | 10.42 |
| UG012199_z_7 | 10.3 | 17.8 | 10.25 | 17.79 | 630.16 | 7.69 | 0.0512 | 34.33 | 0.0114 | 33.54 | 0.0016 | 8.62 | 0.00045 | 9.95 | 10.32 | 17.23 | 11.49 | 67.07 | 9.02 | 19.89 |
| UG012199_z_8 | 7.5 | 11.3 | 7.51 | 11.32 | 735.88 | 4.08 | 0.1544 | 10.77 | 0.0288 | 10.20 | 0.0014 | 5.10 | 0.00050 | 5.77 | 8.71 | 10.21 | 28.86 | 20.41 | 10.18 | 11.53 |

Appendix B: Eastern Sunda arc geochronology data - zircon

| Analysis ID | Pref Age Ma | 2σ _s | 208Pb/238U Age (Ma) | 2σ _s | 238U/206Pb ratio | 1σ _s | 207Pb/206Pb ratio | 1σ _s | 207Pb/235U (calc) ratio | 1σ _s | 206Pb/238U ratio | 1σ _s | 208Pb/232Th ratio | 1σ _s | 206Pb/238U Age (Ma) | 2σ _s | 207Pb/235U(calc) Age (Ma) | 2σ _s | 208Pb/232Th Age (Ma) | 2σ _s |
|--------------|----------------|-----------------|------------------------|-----------------|---------------------|-----------------|----------------------|-----------------|----------------------------|-----------------|---------------------|-----------------|----------------------|-----------------|------------------------|-----------------|------------------------------|-----------------|-------------------------|-----------------|
| UG012200_Z_1 | 8.3 | 8.5 | | 4.28 | 783.49 | 0.0386 | 21.55 | 0.0069 | 21.23 | 0.0013 | 4.27 | 0.00036 | 6.85 | 8.27 | 6.53 | 42.46 | 6.93 | 42.46 | 7.39 | 13.69 |
| UG012200_Z_2 | 8.7 | 17.2 | | 740.30 | 8.50 | 0.0400 | 58.83 | < DL | 58.25 | 0.0014 | 8.60 | 0.00043 | 25.72 | 8.73 | 17.19 | < DL | 116.51 | < DL | 8.63 | 51.44 |
| UG012200_Z_3 | 8.5 | 8.3 | 8.45 | 8.25 | 704.57 | 0.0102 | 11.59 | 0.0222 | 11.08 | 0.0014 | 3.73 | 0.00044 | 4.96 | 9.20 | 7.46 | 22.28 | 22.28 | 22.16 | 8.97 | 9.92 |
| UG012200_Z_4 | 9.2 | 10.4 | 9.22 | 10.39 | 568.75 | 4.00 | 0.1901 | 11.00 | 0.0452 | 10.29 | 0.0017 | 4.06 | 0.00065 | 8.05 | 11.27 | 8.11 | 44.93 | 20.58 | 13.15 | 16.09 |
| UG012200_Z_5 | 8.1 | 7.5 | 8.08 | 7.49 | 528.77 | 2.06 | 0.3164 | 3.86 | 0.0838 | 4.17 | 0.0019 | 2.84 | 0.00039 | 4.46 | 12.28 | 5.69 | 81.74 | 8.33 | 7.99 | 8.92 |
| UG012200_Z_6 | 8.0 | 10.7 | 7.98 | 10.71 | 802.94 | 5.14 | 0.0510 | 23.06 | 0.0086 | 22.53 | 0.0012 | 5.15 | 0.00048 | 16.11 | 8.03 | 10.29 | 8.74 | 45.06 | 9.82 | 32.23 |
| UG012200_Z_7 | 8.9 | 5.6 | 8.87 | 5.65 | 726.59 | 2.73 | 0.0480 | 12.02 | 0.0091 | 11.90 | 0.0014 | 2.73 | 0.00040 | 3.25 | 8.89 | 5.46 | 9.24 | 23.80 | 8.14 | 6.50 |
| UG012200_Z_8 | 9.0 | 22.0 | | 352.13 | 5.46 | 0.4480 | 7.95 | 0.1741 | 10.44 | 0.0028 | 5.93 | 0.0064 | 11.12 | 18.23 | 11.85 | 162.93 | 20.87 | 12.87 | 22.25 | 22.25 |
| BHF-02_Zr1 | 3.8 | 9.4 | | 1681.20 | 5.05 | 0.0435 | 22.80 | 0.0036 | 22.37 | 0.0006 | 4.71 | 0.00018 | 12.53 | 3.82 | 9.41 | 3.60 | 44.73 | 3.55 | 25.06 | 25.06 |
| BHF-02_Zr10 | 4.4 | 21.6 | | 1475.53 | 10.92 | 0.0400 | 54.49 | < DL | 53.43 | 0.0007 | 10.80 | < DL | 56.86 | 4.38 | 21.61 | < DL | 106.86 | < DL | 113.73 | < DL |
| BHF-02_Zr11 | 3.9 | 14.0 | | 1680.20 | 12.29 | 0.0400 | 37.70 | < DL | 37.08 | 0.0006 | 7.00 | 0.00029 | 22.48 | 3.89 | 14.01 | < DL | 74.15 | < DL | 5.84 | 44.96 |
| BHF-02_Zr12 | 4.2 | 24.5 | 4.17 | 24.46 | 1265.34 | 9.95 | 0.1691 | 26.75 | 0.0179 | 24.78 | 0.0008 | 10.17 | 0.00066 | 26.92 | 4.93 | 20.35 | 18.02 | 49.56 | 13.32 | 53.84 |
| BHF-02_Zr13 | 3.1 | 10.9 | 3.15 | 10.86 | 1947.24 | 5.23 | 0.0835 | 18.07 | 0.0059 | 17.42 | 0.0005 | 5.05 | 0.00014 | 14.68 | 3.30 | 10.09 | 6.02 | 34.85 | 2.93 | 29.36 |
| BHF-02_Zr14 | 4.0 | 13.4 | | 1603.09 | 6.74 | 0.0400 | 33.19 | < DL | 32.54 | 0.0006 | 6.70 | 0.00024 | 30.43 | 4.04 | 13.41 | < DL | 65.08 | < DL | 60.86 | 60.86 |
| BHF-02_Zr15 | 5.3 | 40.0 | 5.30 | 39.97 | 424.22 | 5.57 | 0.9588 | 9.37 | 0.1809 | 7.84 | 0.0023 | 5.94 | 0.00672 | 7.28 | 15.11 | 11.89 | 168.80 | 15.29 | 195.68 | 14.56 |
| BHF-02_Zr16 | 3.6 | 10.0 | 3.64 | 10.02 | 1736.76 | 4.64 | 0.0631 | 18.11 | 0.0051 | 18.59 | 0.0006 | 4.76 | 0.00019 | 8.39 | 3.72 | 9.53 | 5.19 | 37.19 | 3.79 | 16.78 |
| BHF-02_Zr17 | 3.8 | 13.2 | 3.83 | 13.21 | 1654.55 | 6.29 | 0.0613 | 26.04 | 0.0052 | 25.32 | 0.0006 | 6.28 | 0.00025 | 15.81 | 3.91 | 12.55 | 5.23 | 50.64 | 5.14 | 31.62 |
| BHF-02_Zr18 | 3.9 | 19.4 | 3.90 | 19.43 | 1570.52 | 8.96 | 0.1131 | 27.35 | 0.0104 | 25.96 | 0.0007 | 8.73 | 0.00066 | 17.48 | 4.26 | 17.45 | 10.50 | 51.93 | 13.42 | 34.95 |
| BHF-02_Zr19 | 3.4 | 9.3 | 3.42 | 9.26 | 1872.54 | 4.44 | 0.0515 | 19.92 | 0.0038 | 19.48 | 0.0005 | 4.44 | 0.00020 | 13.76 | 3.44 | 8.88 | 3.87 | 38.96 | 4.02 | 27.52 |
| BHF-02_Zr2 | 3.1 | 15.6 | 3.14 | 15.55 | 1913.71 | 7.11 | 0.0661 | 23.98 | 0.0070 | 22.95 | 0.0005 | 7.13 | < DL | 35.67 | 3.36 | 14.25 | 7.04 | 45.91 | < DL | 71.34 |
| BHF-02_Zr20 | 4.1 | 16.6 | | 1468.26 | 8.12 | 0.0400 | 32.27 | < DL | 31.27 | 0.0007 | 8.12 | 0.00037 | 25.73 | 4.35 | 16.24 | < DL | 62.54 | < DL | 7.50 | 51.46 |
| BHF-02_Zr21 | 4.9 | 24.2 | 4.93 | 24.16 | 935.68 | 10.65 | 0.2694 | 18.20 | 0.0397 | 16.22 | 0.0011 | 8.42 | 0.00132 | 12.98 | 6.87 | 16.84 | 39.54 | 32.43 | 26.80 | 25.95 |
| BHF-02_Zr22 | 4.1 | 13.4 | | 1598.18 | 6.71 | 0.0400 | 32.51 | < DL | 31.85 | 0.0006 | 6.69 | 0.00019 | 24.42 | 4.06 | 13.37 | < DL | 63.70 | < DL | 3.76 | 48.85 |
| BHF-02_Zr23 | 4.9 | 18.8 | 4.90 | 18.85 | 1124.18 | 7.94 | 0.1682 | 20.65 | 0.0210 | 19.16 | 0.0008 | 7.86 | 0.00059 | 17.85 | 5.80 | 15.72 | 21.09 | 38.32 | 11.91 | 36.71 |
| BHF-02_Zr24 | 5.5 | 21.3 | 5.54 | 21.28 | 1008.95 | 10.13 | 0.1523 | 24.90 | 0.0211 | 23.24 | 0.0010 | 9.08 | 0.00108 | 16.61 | 6.39 | 18.16 | 21.21 | 46.49 | 21.94 | 33.22 |
| BHF-02_Zr25 | 3.8 | 18.8 | | 1694.87 | 9.34 | 0.0400 | 33.29 | < DL | 31.97 | 0.0006 | 9.40 | 0.00032 | 29.04 | 3.82 | 18.81 | < DL | 63.95 | < DL | 6.43 | 58.09 |
| BHF-02_Zr26 | 3.4 | 33.2 | 3.36 | 33.23 | 1486.57 | 12.72 | 0.2188 | 30.00 | 0.0201 | 27.21 | 0.0007 | 12.76 | 0.00069 | 24.05 | 4.31 | 25.52 | 20.24 | 54.41 | 13.95 | 48.10 |
| BHF-02_Zr3 | 3.4 | 16.1 | 3.40 | 16.11 | 1460.26 | 9.84 | 0.0400 | 43.57 | 0.0224 | 10.53 | 0.0007 | 6.63 | 0.00038 | 9.37 | 4.47 | 13.27 | 22.51 | 21.06 | 7.64 | 18.74 |
| BHF-02_Zr6 | 3.8 | 19.6 | | 1695.48 | 9.84 | 0.0400 | 38.83 | < DL | 37.47 | 0.0006 | 10.33 | < DL | 61.82 | 3.80 | 19.61 | < DL | 84.97 | < DL | < DL | 123.64 |
| BHF-02_Zr15 | 4.1 | 20.7 | | 1582.12 | 10.35 | 0.0400 | 31.85 | < DL | 30.03 | 0.0005 | 10.74 | 0.00031 | 30.37 | 4.09 | 20.66 | < DL | 74.93 | < DL | < DL | 122.13 |
| BHF-02_Zr6 | 3.4 | 9.8 | | 1675.54 | 4.21 | 0.1407 | 11.91 | 0.0116 | 11.24 | 0.0006 | 4.26 | 0.00023 | 8.23 | 3.84 | 8.52 | 11.74 | 22.49 | 4.60 | 16.46 | 16.46 |
| BHF-02_Zr8 | 3.9 | 63.8 | 3.90 | 63.78 | 1133.32 | 21.30 | 0.3127 | 41.26 | 0.0401 | 36.02 | 0.0009 | 20.24 | 0.00076 | 36.54 | 5.89 | 40.47 | 39.96 | 72.04 | 15.34 | 73.09 |
| BHF-02_Zr9 | 3.3 | 21.8 | | 1958.85 | 11.00 | 0.0400 | 94.72 | < DL | 94.09 | 0.0005 | 10.88 | < DL | 54.40 | 3.32 | 21.77 | < DL | 188.17 | < DL | < DL | 108.79 |
| BHF-03_Zr10 | 3.5 | 11.2 | 3.53 | 11.19 | 1798.70 | 4.99 | 0.0639 | 20.24 | 0.0049 | 19.67 | 0.0006 | 5.34 | 0.00019 | 19.93 | 3.61 | 10.68 | 4.99 | 39.35 | 3.81 | 39.87 |
| BHF-03_Zr11 | 3.7 | 7.4 | 3.66 | 7.41 | 1725.16 | 3.54 | 0.0651 | 14.06 | 0.0052 | 13.70 | 0.0006 | 3.51 | 0.00019 | 9.80 | 3.75 | 7.02 | 5.31 | 27.41 | 3.93 | 19.60 |
| BHF-03_Zr11 | 3.8 | 18.5 | 3.80 | 18.54 | 1670.33 | 10.61 | 0.0576 | 37.81 | 0.0048 | 36.79 | 0.0006 | 8.84 | 0.00013 | 40.78 | 3.86 | 17.68 | 4.85 | 73.59 | 2.66 | 81.55 |
| BHF-03_Zr12 | 5.6 | 27.0 | 5.64 | 27.05 | 588.99 | 5.79 | 0.4488 | 10.39 | 0.1101 | 8.76 | 0.0018 | 6.04 | 0.00506 | 8.39 | 11.50 | 12.08 | 106.08 | 17.52 | 102.33 | 16.78 |
| BHF-03_Zr13 | 3.7 | 13.0 | | 1730.59 | 6.50 | 0.0445 | 31.44 | 0.0036 | 30.79 | 0.0006 | 6.51 | 0.00023 | 23.90 | 3.73 | 13.03 | 3.66 | 61.59 | 4.69 | 47.79 | 47.79 |
| BHF-03_Zr14 | 3.0 | 13.9 | 3.00 | 13.88 | 1940.28 | 10.51 | 0.1240 | 18.46 | 0.0088 | 17.47 | 0.0005 | 6.15 | 0.00021 | 17.19 | 3.33 | 12.30 | 8.94 | 34.95 | 4.25 | 34.39 |
| BHF-03_Zr15 | 3.7 | 13.8 | 3.71 | 13.81 | 1694.67 | 7.32 | 0.0651 | 26.34 | 0.0053 | 25.57 | 0.0006 | 6.54 | 0.00021 | 24.20 | 3.80 | 13.08 | 5.36 | 51.14 | 4.21 | 48.41 |
| BHF-03_Zr16 | 4.2 | 13.9 | 4.18 | 13.88 | 1457.97 | 7.40 | 0.0856 | 22.83 | 0.0082 | 21.96 | 0.0007 | 6.43 | 0.00036 | 19.24 | 4.40 | 12.86 | 8.28 | 43.92 | 7.31 | 38.49 |
| BHF-03_Zr17 | 2.4 | 30.4 | 2.42 | 30.40 | 927.67 | 5.60 | 0.5606 | 7.07 | 0.0835 | 5.85 | 0.0011 | 4.27 | 0.00184 | 6.32 | 6.94 | 8.53 | 81.41 | 11.70 | 12.64 | 12.64 |
| BHF-03_Zr18 | 3.9 | 18.6 | | 1653.03 | 9.28 | 0.0400 | 35.78 | < DL | 34.59 | 0.0006 | 9.28 | 0.00056 | 22.26 | 3.90 | 18.56 | < DL | 69.17 | < DL | 11.26 | 44.53 |
| BHF-03_Zr19 | 4.9 | 22.7 | 4.94 | 22.73 | 834.37 | 8.40 | 0.3360 | 13.52 | 0.0563 | 11.79 | 0.0012 | 6.79 | 0.00330 | 11.07 | 7.79 | 13.58 | 55.62 | 23.58 | 66.80 | 22.13 |

Appendix B: Eastern Sunda arc geochronology data - zircon

| Analysis ID | Pref Age Ma | 2s% | 206Pb/238U Age (Ma) | 2s% | 206Pb/238U Age (Ma) | 1s% | 207Pb/206Pb ratio | 1s% | 207Pb/235U (calc) ratio | 1s% | 206Pb/238U ratio | 1s% | 208Pb/232Th ratio | 1s% | 206Pb/238U Age (Ma) | 2s% | 207Pb/235U Age (Ma) | 2s% | 208Pb/232Th Age (Ma) | 2s% |
|-------------|----------------|------|------------------------|-------|------------------------|-------|----------------------|--------|----------------------------|--------|---------------------|-------|----------------------|-------|------------------------|-------|------------------------|--------|-------------------------|--------|
| BHF-03_z12 | 3.7 | 10.7 | 1758.44 | 5.91 | 0.0400 | 29.89 | 1s% | 0.0006 | 5.36 | 0.0028 | 16.28 | < DL | 0.00028 | 16.28 | 3.65 | 10.72 | < DL | 58.89 | 5.69 | 32.57 |
| BHF-03_z20 | 3.7 | 13.3 | 1590.10 | 6.16 | 0.1252 | 17.52 | 0.0006 | 5.87 | 0.00041 | 15.69 | 4.07 | 11.73 | 0.00041 | 15.69 | 4.07 | 11.73 | 0.00041 | 58.89 | 8.34 | 31.39 |
| BHF-03_z21 | 3.7 | 15.1 | 1654.96 | 7.15 | 0.0665 | 28.50 | 0.0035 | 20.84 | 0.00035 | 20.84 | 4.15 | 14.25 | 0.00035 | 20.84 | 4.15 | 14.25 | 0.00035 | 55.27 | 7.13 | 41.69 |
| BHF-03_z22 | 3.7 | 74.2 | 282.84 | 4.29 | 0.7084 | 6.57 | 0.0035 | 4.83 | 0.00252 | 5.37 | 22.78 | 9.66 | 0.00252 | 5.37 | 22.78 | 9.66 | 0.00252 | 10.48 | 252.18 | 10.75 |
| BHF-03_z23 | 3.4 | 10.0 | 1911.42 | 5.00 | 0.0444 | 24.13 | 0.0032 | 23.85 | 0.00016 | 17.85 | 3.38 | 10.00 | 0.00016 | 17.85 | 3.38 | 10.00 | 0.00016 | 47.31 | 3.32 | 35.71 |
| BHF-03_z24 | 3.5 | 20.3 | 1729.88 | 9.42 | 0.0875 | 33.14 | 0.0070 | 31.81 | < DL | 40.95 | 3.75 | 18.81 | < DL | 40.95 | 3.75 | 18.81 | 7.07 | 63.62 | < DL | 81.91 |
| BHF-03_z25 | 3.4 | 14.4 | 1855.01 | 6.80 | 0.0691 | 26.61 | 0.0052 | 25.78 | 0.00013 | 30.51 | 3.50 | 13.56 | 0.00013 | 30.51 | 3.50 | 13.56 | 5.30 | 51.56 | 2.65 | 61.03 |
| BHF-03_z26 | 3.7 | 10.4 | 1729.19 | 5.20 | 0.0400 | 45.72 | < DL | 45.45 | 0.0006 | 5.20 | 0.00021 | 17.82 | 0.00021 | 17.82 | 3.72 | 10.40 | < DL | 90.89 | 4.25 | 35.64 |
| BHF-03_z27 | 3.7 | 13.6 | 1754.25 | 6.83 | 0.0400 | 34.32 | < DL | 33.68 | 0.0006 | 6.80 | 0.00032 | 23.57 | 0.00032 | 23.57 | 3.66 | 13.60 | < DL | 67.35 | 6.58 | 47.14 |
| BHF-03_z28 | 3.8 | 12.3 | 1640.30 | 6.23 | 0.0779 | 21.33 | 0.0066 | 20.60 | 0.00037 | 15.79 | 3.93 | 11.51 | 0.00037 | 15.79 | 3.93 | 11.51 | 6.65 | 41.19 | 7.47 | 31.58 |
| BHF-03_z29 | 4.0 | 12.8 | 1608.82 | 6.41 | 0.0400 | 72.23 | < DL | 71.97 | 0.0006 | 6.41 | 0.00025 | 22.56 | 0.00025 | 22.56 | 4.01 | 12.81 | < DL | 143.93 | 5.06 | 45.12 |
| BHF-03_z3 | 3.6 | 18.0 | 1725.15 | 8.39 | 0.0834 | 30.02 | 0.0067 | 28.88 | 0.00029 | 29.61 | 3.73 | 16.70 | 0.00029 | 29.61 | 3.73 | 16.70 | 6.81 | 57.77 | 5.78 | 59.23 |
| BHF-03_z30 | 3.5 | 11.1 | 1833.60 | 5.55 | 0.0367 | 29.45 | 0.0028 | 28.96 | 0.00023 | 18.37 | 3.49 | 11.13 | 0.00023 | 18.37 | 3.49 | 11.13 | 2.79 | 57.91 | 5.51 | 36.75 |
| BHF-03_z31 | 3.2 | 18.5 | 1977.47 | 9.28 | 0.0615 | 36.53 | 0.0043 | 35.49 | 0.0005 | 5.79 | 0.00014 | 39.82 | 0.00014 | 39.82 | 3.23 | 17.58 | 4.34 | 70.98 | 2.74 | 79.65 |
| BHF-03_z32 | 3.6 | 17.1 | 1557.03 | 7.35 | 0.1467 | 20.49 | 0.0130 | 19.20 | 0.0006 | 7.34 | 0.00053 | 17.69 | 0.00053 | 17.69 | 4.15 | 14.69 | 13.08 | 38.39 | 10.68 | 35.38 |
| BHF-03_z33 | 3.5 | 25.1 | 1450.07 | 9.61 | 0.2119 | 23.22 | 0.0199 | 21.15 | 0.0007 | 9.74 | 0.00085 | 23.07 | 0.00085 | 23.07 | 4.41 | 19.47 | 19.98 | 42.30 | 17.27 | 46.14 |
| BHF-03_z34 | 3.4 | 13.9 | 1864.12 | 6.59 | 0.0640 | 26.73 | 0.0048 | 25.95 | 0.0005 | 6.57 | 0.00022 | 22.74 | 0.00022 | 22.74 | 3.47 | 13.14 | 4.86 | 51.90 | 4.49 | 45.48 |
| BHF-03_z35 | 4.0 | 13.4 | 1523.44 | 6.16 | 0.0980 | 20.44 | < DL | 44.33 | 0.0007 | 6.12 | 0.00018 | 25.51 | 0.00018 | 25.51 | 4.24 | 12.25 | 0.00 | 51.90 | 3.57 | 51.01 |
| BHF-03_z36 | 4.1 | 14.6 | 1577.33 | 7.29 | 0.0400 | 44.90 | < DL | 44.33 | 0.0006 | 7.28 | 0.00023 | 30.30 | 0.00023 | 30.30 | 4.09 | 14.56 | < DL | 88.66 | 4.58 | 60.61 |
| BHF-03_z4 | 3.5 | 14.1 | 1780.92 | 22.00 | 0.0648 | 27.07 | 0.0050 | 26.28 | 0.0006 | 6.69 | 0.00027 | 18.73 | 0.00027 | 18.73 | 3.58 | 13.38 | 5.06 | 52.55 | 5.52 | 37.46 |
| BHF-03_z5 | 3.4 | 16.1 | 1912.44 | 8.06 | 0.0400 | 30.24 | < DL | 29.18 | 0.0005 | 8.06 | < DL | 32.01 | < DL | 32.01 | 3.40 | 16.12 | < DL | 58.36 | < DL | 64.03 |
| BHF-03_z6 | 3.8 | 14.3 | 1647.78 | 22.27 | 0.0710 | 26.13 | 0.0059 | 25.29 | 0.0006 | 6.75 | 0.00037 | 37.02 | 0.00037 | 37.02 | 3.91 | 13.49 | 5.98 | 50.58 | < DL | 74.04 |
| BHF-03_z7 | 3.0 | 14.5 | 2056.26 | 11.89 | 0.0692 | 26.84 | 0.0046 | 26.00 | 0.0005 | 6.85 | 0.00020 | 27.79 | 0.00020 | 27.79 | 3.12 | 13.70 | 4.70 | 52.00 | 4.04 | 55.58 |
| BHF-03_z8 | 2.7 | 24.4 | 2472.14 | 12.11 | 0.0400 | 95.86 | < DL | 95.10 | 0.0004 | 12.21 | < DL | 35.40 | < DL | 35.40 | 2.66 | 24.42 | < DL | 190.20 | < DL | 70.80 |
| BHF-03_z9 | 3.8 | 13.5 | 1661.90 | 6.40 | 0.0522 | 28.94 | 0.0043 | 28.25 | 0.0006 | 6.46 | 0.00038 | 18.14 | 0.00038 | 18.14 | 3.84 | 12.92 | 4.35 | 56.50 | 7.72 | 36.28 |
| GBF-01_z1 | 2.2 | 19.8 | 2432.52 | 8.12 | 0.1816 | 20.64 | 0.0103 | 19.04 | 0.0004 | 8.10 | 0.00017 | 16.63 | 0.00017 | 16.63 | 2.76 | 16.20 | 10.38 | 38.09 | 3.52 | 33.27 |
| GBF-01_z10 | 3.1 | 46.7 | 756.06 | 9.35 | 0.5525 | 11.05 | 0.1003 | 8.99 | 0.0013 | 8.87 | 0.00137 | 8.97 | 0.00137 | 8.97 | 8.55 | 17.73 | 97.08 | 17.97 | 27.73 | 17.95 |
| GBF-01_z11 | 2.3 | 27.8 | 1382.00 | 8.88 | 0.4498 | 10.71 | 0.0448 | 9.01 | 0.0007 | 5.97 | 0.00075 | 8.21 | 0.00075 | 8.21 | 4.64 | 11.95 | 44.51 | 18.03 | 15.14 | 16.41 |
| GBF-01_z12 | 3.4 | 22.4 | 1870.34 | 11.21 | 0.0400 | 34.94 | < DL | 33.13 | 0.0005 | 11.21 | 0.00017 | 28.63 | 0.00017 | 28.63 | 3.45 | 22.42 | < DL | 66.26 | 3.48 | 57.26 |
| GBF-01_z13 | 2.4 | 47.4 | 1682.14 | 13.85 | 0.3436 | 27.32 | 0.0284 | 23.60 | 0.0004 | 14.09 | 0.00044 | 23.10 | 0.00044 | 23.10 | 3.79 | 28.18 | 28.42 | 47.21 | 8.84 | 46.20 |
| GBF-01_z14 | 3.2 | 22.3 | 1576.03 | 13.01 | 0.2245 | 19.22 | 0.0201 | 17.42 | 0.0006 | 8.61 | 0.00038 | 17.12 | 0.00038 | 17.12 | 4.13 | 17.22 | 20.21 | 34.84 | 7.60 | 34.24 |
| GBF-01_z15 | 2.5 | 32.9 | 1570.50 | 9.47 | 0.3511 | 18.54 | 0.0311 | 16.01 | 0.0006 | 9.47 | 0.00052 | 13.25 | 0.00052 | 13.25 | 4.11 | 18.95 | 31.06 | 32.03 | 10.47 | 26.50 |
| GBF-01_z16 | 2.9 | 13.3 | 2109.93 | 6.13 | 0.0932 | 20.92 | 0.0062 | 20.05 | 0.0005 | 6.12 | 0.00021 | 12.70 | 0.00021 | 12.70 | 3.08 | 12.25 | 6.26 | 40.11 | 4.34 | 25.40 |
| GBF-01_z2 | 4.4 | 72.2 | 279.89 | 4.52 | 0.6882 | 7.59 | 0.3372 | 9.14 | 0.0036 | 6.62 | 0.00434 | 6.88 | 0.00434 | 6.88 | 23.41 | 13.24 | 295.03 | 18.28 | 87.75 | 13.77 |
| GBF-01_z3 | 4.0 | 69.1 | 280.59 | 4.13 | 0.6979 | 6.72 | 0.0152 | 13.85 | 0.0035 | 4.93 | 0.00470 | 5.42 | 0.00470 | 5.42 | 22.53 | 9.85 | 0.00 | 95.11 | 10.83 | 10.83 |
| GBF-01_z4 | 2.4 | 17.7 | 2090.75 | 6.64 | 0.2315 | 15.28 | 0.0162 | 13.85 | 0.0005 | 6.64 | 0.00029 | 10.40 | 0.00029 | 10.40 | 3.08 | 13.29 | 15.35 | 27.70 | 5.88 | 20.80 |
| GBF-01_z5 | 2.7 | 17.9 | 2448.66 | 18.89 | 0.0400 | 36.06 | < DL | 34.97 | 0.0004 | 8.96 | 0.00015 | 18.43 | 0.00015 | 18.43 | 2.72 | 17.93 | < DL | 69.93 | 2.95 | 36.85 |
| GBF-01_z6 | 2.8 | 16.8 | 2157.74 | 7.85 | 0.0781 | 29.16 | 0.0050 | 28.12 | 0.0005 | 7.87 | 0.00021 | 12.89 | 0.00021 | 12.89 | 3.06 | 15.74 | 5.07 | 56.23 | 4.29 | 25.79 |
| GBF-01_z7 | 2.7 | 12.8 | 2344.07 | 6.10 | 0.0615 | 25.27 | 0.0036 | 24.57 | 0.0004 | 6.10 | 0.00015 | 14.14 | 0.00015 | 14.14 | 2.84 | 12.20 | 3.66 | 49.13 | 3.08 | 28.27 |
| GBF-01_z8 | 5.3 | 46.1 | 106.27 | 6.83 | 0.7697 | 1.65 | 0.9976 | 5.67 | 0.0094 | 5.33 | 0.00886 | 5.41 | 0.00886 | 5.41 | 60.37 | 10.65 | 702.60 | 178.82 | 10.82 | 178.82 |
| GBF-01_z9 | 2.7 | 17.7 | 2112.24 | 7.64 | 0.1463 | 21.29 | 0.0096 | 19.94 | 0.0005 | 7.62 | 0.00027 | 14.14 | 0.00027 | 14.14 | 3.07 | 15.23 | 9.68 | 39.88 | 5.50 | 28.28 |
| GBF-03_z1 | 2.8 | 7.0 | 2036.97 | 2.50 | 0.1320 | 7.80 | 0.0090 | 7.54 | 0.0005 | 3.17 | 0.00021 | 5.76 | 0.00021 | 5.76 | 3.19 | 6.34 | 9.05 | 15.09 | 4.26 | 11.53 |
| GBF-03_z2 | 2.5 | 16.3 | 2053.18 | 6.43 | 0.1849 | 16.22 | 0.0125 | 14.97 | 0.0005 | 6.70 | 0.00097 | 14.19 | 0.00097 | 14.19 | 3.08 | 13.39 | 12.61 | 29.95 | 19.73 | 28.37 |
| GBF-03_z3 | 2.7 | 19.7 | 2046.99 | 8.19 | 0.1713 | 21.27 | 0.0118 | 19.70 | 0.0005 | 8.16 | 0.00053 | 14.37 | 0.00053 | 14.37 | 3.18 | 16.32 | 11.87 | 39.40 | 10.79 | 28.74 |
| GBF-03_z4 | 2.9 | 23.2 | 1015.92 | 4.49 | 0.4677 | 8.23 | 0.0632 | 6.96 | 0.0010 | 4.86 | 0.00448 | 11.75 | 0.00448 | 11.75 | 6.28 | 9.73 | 62.24 | 13.91 | 90.55 | 23.50 |

Appendix B: Eastern Sunda arc geochronology data - zircon

| Analysis ID | Prf Age Ma | 2s% | 206Pb/238U Age | 2s% | 206Pb/238U Age (Ma) | 238U/206Pb ratio | 1s% | 207Pb/206Pb ratio | 1s% | 207Pb/235U (calc) ratio | 1s% | 208Pb/238U ratio | 1s% | 208Pb/232Th ratio | 1s% | 206Pb/238U Age (Ma) | 2s% | 207Pb/235U(calc) Age (Ma) | 2s% | 208Pb/232Th Age (Ma) | 2s% |
|-------------|---------------|------|-------------------|-------|------------------------|---------------------|--------|----------------------|---------|----------------------------|--------|---------------------|----------|----------------------|--------|------------------------|---------|------------------------------|---------|-------------------------|-------|
| GBF-03_zf5 | 3.1 | 23.9 | 3.12 | 23.87 | 512.81 | 3.21 | 0.6381 | 3.33 | 0.1714 | 4.51 | 0.0019 | 3.64 | 0.00655 | 2.72 | 12.41 | 7.29 | 160.65 | 9.02 | 132.28 | 5.44 | |
| GBF-03_zf6 | 78.3 | 28.6 | 7.03 | 28.55 | 7.03 | 4.06 | 0.8244 | 0.52 | 16.3349 | 4.00 | 0.1426 | 3.69 | 0.029130 | 4.39 | 859.50 | 7.39 | 2886.61 | 8.00 | 5182.04 | 8.77 | |
| JER-01_zr1 | 16.6 | 9.7 | 389.64 | 4.85 | 0.0400 | 35.57 | < DL | 0.0026 | 4.85 | 0.0098 | 14.51 | 0.0098 | 14.51 | 0.0098 | 14.51 | 16.57 | 9.69 | < DL | 70.55 | 19.91 | 29.03 |
| JER-01_zr10 | 12.6 | 9.8 | 503.75 | 4.52 | 0.0606 | 18.79 | 4.34 | 0.0020 | 4.67 | 0.0072 | 11.79 | 12.81 | 12.81 | 12.81 | 12.81 | 16.54 | 36.61 | 16.54 | 36.61 | 14.56 | 23.57 |
| JER-01_zr11 | 13.1 | 25.5 | 509.99 | 13.04 | 0.0400 | 69.04 | < DL | 0.0165 | 18.78 | 0.0020 | 12.77 | 0.00103 | 43.82 | 13.15 | 25.53 | < DL | 135.56 | < DL | 135.56 | 20.78 | 87.64 |
| JER-01_zr12 | 14.1 | 8.9 | 449.81 | 4.23 | 0.0510 | 19.20 | 0.0510 | 19.20 | 0.0165 | 18.78 | 0.0022 | 4.26 | 0.00980 | 12.99 | 8.53 | 14.23 | 15.58 | 37.57 | 18.19 | 25.98 | |
| JER-01_zr13 | 15.8 | 13.8 | 391.45 | 6.69 | 0.0821 | 22.63 | 0.0821 | 22.63 | 0.0293 | 31.81 | 0.0026 | 6.43 | 0.00123 | 20.02 | 12.86 | 16.54 | 29.37 | 43.62 | 24.94 | 40.04 | |
| JER-01_zr14 | 13.3 | 16.4 | 471.86 | 8.67 | 0.0577 | 33.38 | 0.0577 | 33.38 | 0.0167 | 32.49 | 0.0021 | 7.82 | 0.00119 | 25.50 | 15.64 | 16.86 | 64.98 | 16.86 | 64.98 | 24.16 | 51.00 |
| JER-01_zr15 | 15.0 | 11.6 | 431.24 | 5.80 | 0.0385 | 30.01 | 0.0385 | 30.01 | 0.0124 | 29.49 | 0.0023 | 5.81 | 0.00097 | 21.52 | 11.61 | 12.46 | 12.46 | 12.46 | 12.46 | 19.73 | 43.04 |
| JER-01_zr16 | 14.2 | 6.0 | 453.23 | 3.02 | 0.0429 | 14.67 | 0.0429 | 14.67 | 0.0130 | 14.44 | 0.0022 | 3.02 | 0.00664 | 9.22 | 14.24 | 13.14 | 13.14 | 13.14 | 13.14 | 12.95 | 18.44 |
| JER-01_zr17 | 14.1 | 6.7 | 453.94 | 3.12 | 0.0531 | 13.69 | 0.0531 | 13.69 | 0.0161 | 13.42 | 0.0022 | 3.22 | 0.00070 | 9.84 | 14.19 | 6.45 | 16.23 | 26.85 | 14.28 | 19.67 | |
| JER-01_zr18 | 15.1 | 11.2 | 415.33 | 5.24 | 0.0684 | 20.41 | 0.0684 | 20.41 | 0.0225 | 19.80 | 0.0024 | 5.30 | 0.00075 | 20.30 | 15.57 | 10.61 | 22.59 | 39.60 | 15.10 | 40.61 | |
| JER-01_zr19 | 14.1 | 14.7 | 450.47 | 9.60 | 0.0554 | 30.26 | 0.0554 | 30.26 | 0.0169 | 29.49 | 0.0022 | 7.03 | 0.00099 | 22.58 | 14.29 | 14.07 | 17.03 | 58.99 | 20.10 | 45.15 | |
| JER-01_zr20 | 15.4 | 9.0 | 416.57 | 4.07 | 0.0486 | 18.74 | 0.0486 | 18.74 | 0.0160 | 18.36 | 0.0024 | 4.37 | 0.00081 | 15.89 | 18.71 | 41.49 | 16.10 | 36.72 | 16.50 | 31.78 | |
| JER-01_zr21 | 13.4 | 7.9 | 471.32 | 6.78 | 0.0606 | 15.56 | 0.0606 | 15.56 | 0.0176 | 15.18 | 0.0021 | 3.76 | 0.00086 | 10.51 | 13.68 | 7.51 | 17.75 | 30.36 | 17.36 | 21.01 | |
| JER-01_zr22 | 15.3 | 13.6 | 421.66 | 9.93 | 0.0253 | 42.94 | 0.0253 | 42.94 | 0.0084 | 42.43 | 0.0024 | 6.78 | 0.00081 | 18.71 | 15.32 | 8.48 | 8.48 | 84.87 | 16.51 | 37.42 | |
| JER-01_zr3 | 18.9 | 19.6 | 314.20 | 8.73 | 0.1117 | 27.71 | 0.1117 | 27.71 | 0.0497 | 26.33 | 0.0032 | 8.81 | 0.00124 | 31.59 | 20.57 | 17.62 | 49.28 | 52.66 | 25.16 | 63.19 | |
| JER-01_zr4 | 14.5 | 8.1 | 430.98 | 3.85 | 0.0651 | 15.46 | 0.0651 | 15.46 | 0.0207 | 15.05 | 0.0023 | 3.86 | 0.00067 | 13.91 | 14.85 | 7.71 | 20.82 | 30.09 | 13.49 | 27.82 | |
| JER-01_zr5 | 14.9 | 7.6 | 428.31 | 3.59 | 0.0520 | 15.96 | 0.0520 | 15.96 | 0.0167 | 15.63 | 0.0023 | 3.67 | 0.00081 | 12.05 | 15.03 | 7.35 | 16.81 | 31.25 | 16.37 | 24.10 | |
| JER-01_zr6 | 19.6 | 60.7 | 79.63 | 7.39 | 0.6490 | 8.66 | 1.1066 | 8.66 | 0.1006 | 8.21 | 0.0126 | 6.92 | 0.05372 | 9.02 | 80.61 | 13.84 | 753.65 | 16.42 | 1060.58 | 18.04 | |
| JER-01_zr7 | 15.8 | 21.0 | 360.44 | 9.51 | 0.1098 | 30.01 | 0.1098 | 30.01 | 0.0406 | 28.53 | 0.0027 | 9.45 | 0.00226 | 24.92 | 17.20 | 18.91 | 40.40 | 57.06 | 45.78 | 49.83 | |
| JER-01_zr8 | 14.8 | 8.7 | 433.07 | 4.20 | 0.0493 | 19.25 | 0.0493 | 19.25 | 0.0156 | 18.85 | 0.0023 | 4.20 | 0.00067 | 15.20 | 14.86 | 8.41 | 15.74 | 37.69 | 13.60 | 30.39 | |
| JER-01_zr9 | 15.1 | 7.8 | 427.79 | 3.45 | 0.0429 | 16.83 | 0.0429 | 16.83 | 0.0138 | 16.54 | 0.0023 | 3.89 | 0.00084 | 11.13 | 15.10 | 7.78 | 13.90 | 33.09 | 17.09 | 22.26 | |
| LB009_zr1 | 6.4 | 8.3 | 980.20 | 4.11 | 0.0589 | 16.87 | 0.0589 | 16.87 | 0.0079 | 16.48 | 0.0010 | 3.95 | 0.00030 | 12.70 | 7.96 | 7.96 | 7.96 | 32.96 | 6.02 | 25.39 | |
| LB009_zr10 | 6.5 | 8.2 | 984.89 | 3.69 | 0.0473 | 17.22 | 0.0473 | 17.22 | 0.0066 | 16.89 | 0.0010 | 3.99 | 0.00040 | 9.52 | 6.56 | 7.99 | 6.66 | 33.77 | 8.10 | 19.05 | |
| LB009_zr11 | 7.6 | 9.6 | 852.14 | 4.61 | 0.0468 | 21.64 | 0.0468 | 21.64 | 0.0075 | 21.20 | 0.0012 | 4.61 | 0.00037 | 13.83 | 7.57 | 9.21 | 7.61 | 42.41 | 7.59 | 27.65 | |
| LB009_zr12 | 7.9 | 15.8 | 822.08 | 8.51 | 0.0316 | 40.72 | 0.0316 | 40.72 | 0.0054 | 40.12 | 0.0012 | 7.91 | 0.00033 | 26.30 | 7.91 | 15.82 | 5.44 | 80.24 | 6.70 | 52.61 | |
| LB009_zr13 | 7.5 | 15.0 | 851.15 | 7.47 | 0.0400 | 36.00 | < DL | 35.25 | < DL | 35.25 | 0.0012 | 7.49 | 0.00034 | 29.31 | 7.55 | 14.98 | < DL | 70.50 | 6.95 | 58.61 | |
| LB009_zr14 | 5.9 | 12.1 | 1037.57 | 5.82 | 0.0773 | 21.05 | 0.0773 | 21.05 | 0.0102 | 20.33 | 0.0010 | 5.67 | 0.00035 | 18.48 | 6.18 | 11.33 | 10.26 | 40.66 | 7.11 | 36.96 | |
| LB009_zr15 | 6.5 | 11.1 | 988.26 | 5.31 | 0.0487 | 24.54 | 0.0487 | 24.54 | 0.0067 | 24.01 | 0.0010 | 5.32 | 0.00032 | 15.32 | 6.51 | 10.64 | 6.80 | 48.02 | 6.41 | 30.65 | |
| LB009_zr16 | 6.7 | 11.0 | 924.11 | 5.11 | 0.0828 | 18.35 | 0.0828 | 18.35 | 0.0123 | 17.70 | 0.0011 | 5.10 | 0.00023 | 22.25 | 6.99 | 10.21 | 12.40 | 35.40 | 4.72 | 44.51 | |
| LB009_zr17 | 6.7 | 7.9 | 963.91 | 3.90 | 0.0372 | 19.46 | 0.0372 | 19.46 | 0.0053 | 19.16 | 0.0010 | 3.93 | 0.00030 | 12.21 | 6.68 | 7.86 | 5.34 | 38.33 | 6.03 | 24.41 | |
| LB009_zr18 | 7.5 | 11.4 | 854.23 | 5.46 | 0.0536 | 24.01 | 0.0536 | 24.01 | 0.0086 | 23.44 | 0.0012 | 5.45 | 0.00045 | 15.49 | 7.56 | 10.89 | 8.73 | 46.87 | 9.02 | 30.98 | |
| LB009_zr19 | 7.4 | 12.7 | 875.89 | 6.13 | 0.0471 | 28.79 | 0.0471 | 28.79 | 0.0074 | 28.17 | 0.0011 | 6.14 | 0.00045 | 15.66 | 7.37 | 12.27 | 7.50 | 56.35 | 9.08 | 31.33 | |
| LB009_zr2 | 7.0 | 8.7 | 923.14 | 4.35 | 0.0374 | 22.73 | 0.0374 | 22.73 | 0.0055 | 22.36 | 0.0011 | 4.34 | 0.00027 | 15.42 | 6.97 | 8.69 | 5.61 | 44.72 | 5.41 | 30.85 | |
| LB009_zr20 | 6.1 | 13.3 | 1017.46 | 15.45 | 0.0729 | 23.79 | 0.0729 | 23.79 | 0.0098 | 23.02 | 0.0010 | 6.23 | 0.00065 | 14.53 | 6.32 | 12.45 | 9.90 | 46.03 | 13.10 | 29.07 | |
| LB009_zr21 | 6.7 | 5.7 | 965.15 | 2.71 | 0.0418 | 13.30 | 0.0418 | 13.30 | 0.0059 | 13.11 | 0.0010 | 2.83 | 0.00035 | 6.16 | 6.68 | 5.65 | 5.88 | 26.22 | 7.19 | 12.33 | |
| LB009_zr22 | 6.6 | 15.8 | 943.87 | 9.59 | 0.0723 | 22.37 | 0.0723 | 22.37 | 0.0104 | 21.65 | 0.0011 | 7.64 | 0.00044 | 14.87 | 6.86 | 15.27 | 10.48 | 43.30 | 8.85 | 29.74 | |
| LB009_zr3 | 8.8 | 22.1 | 657.30 | 9.80 | 0.1449 | 26.61 | 0.1449 | 26.61 | 0.0313 | 24.91 | 0.0016 | 9.52 | 0.00144 | 18.86 | 10.02 | 19.04 | 31.34 | 49.82 | 29.19 | 37.72 | |
| LB009_zr4 | 6.7 | 14.7 | 917.50 | 7.18 | 0.0860 | 24.22 | 0.0860 | 24.22 | 0.0130 | 23.29 | 0.0011 | 6.78 | 0.00046 | 17.89 | 7.01 | 13.56 | 13.13 | 46.58 | 9.23 | 35.78 | |
| LB009_zr5 | 6.3 | 9.2 | 1026.53 | 4.82 | 0.0400 | 31.46 | < DL | 31.16 | < DL | 31.16 | 0.0010 | 4.61 | 0.00028 | 15.72 | 6.30 | 9.22 | < DL | 62.32 | 5.60 | 31.45 | |
| LB009_zr6 | 7.1 | 9.9 | 900.91 | 4.96 | 0.0401 | 25.09 | 0.0401 | 25.09 | 0.0061 | 24.65 | 0.0011 | 4.96 | 0.00036 | 16.52 | 7.14 | 9.91 | 6.17 | 49.30 | 7.21 | 33.05 | |
| LB009_zr7 | 6.9 | 10.5 | 938.75 | 5.27 | 0.0421 | 26.07 | 0.0421 | 26.07 | 0.0061 | 25.58 | 0.0011 | 5.27 | 0.00038 | 18.72 | 6.87 | 10.53 | 6.21 | 51.17 | 7.71 | 37.44 | |
| LB009_zr8 | 7.8 | 10.5 | 836.48 | 5.24 | 0.0275 | 31.93 | 0.0275 | 31.93 | 0.0046 | 31.53 | 0.0012 | 5.25 | 0.00053 | 12.65 | 7.76 | 10.50 | 4.63 | 63.06 | 10.78 | 25.31 | |

Appendix B: Eastern Sunda arc geochronology data - zircon

| Analysis ID | Pref Age Ma | 2s% | 208Pb/238U Age (Ma) | 2s% | 238U/208Pb ratio | 1s% | 207Pb/206Pb ratio | 1s% | 207Pb/235U (calc) ratio | 1s% | 206Pb/238U ratio | 1s% | 208Pb/232Th ratio | 1s% | 208Pb/238U Age (Ma) | 2s% | 207Pb/235U (calc) Age (Ma) | 2s% | 208Pb/232Th Age (Ma) | 2s% |
|-------------|----------------|-------|------------------------|-------|---------------------|-------|----------------------|-------|----------------------------|-------|---------------------|-------|----------------------|-------|------------------------|-------|-------------------------------|-------|-------------------------|--------|
| LB009_zr9 | 6.4 | 7.9 | 6.39 | 7.90 | 1002.82 | 3.77 | 0.0549 | 16.37 | 0.0074 | 16.01 | 0.0010 | 3.78 | 0.00032 | 6.75 | 6.46 | 7.56 | 7.52 | 32.01 | 6.55 | 13.49 |
| LB018_zr10 | 7.8 | 7.7 | 827.74 | 3.85 | 0.0460 | 17.78 | 0.0012 | 8.13 | 0.0076 | 17.78 | 0.0012 | 3.84 | 0.00041 | 12.10 | 7.78 | 7.67 | 7.67 | 35.56 | 8.39 | 24.19 |
| LB018_zr11 | 9.2 | 47.6 | 195.56 | 6.40 | 0.6140 | 8.12 | 0.0051 | 7.80 | 0.4230 | 6.57 | 0.0051 | 7.80 | 0.01471 | 6.32 | 32.65 | 15.60 | 358.23 | 13.13 | 295.94 | 12.65 |
| LB018_zr12 | 6.8 | 20.8 | 838.34 | 8.38 | 0.1473 | 23.69 | 0.0012 | 23.69 | 0.0088 | 19.76 | 0.0011 | 9.06 | 0.00082 | 17.64 | 7.77 | 18.12 | 0.00 | 16.63 | 35.29 | 16.63 |
| LB018_zr13 | 8.1 | 12.4 | 791.67 | 6.22 | 0.0400 | 34.45 | 0.0013 | 34.45 | < DL | 33.92 | 0.0013 | 6.22 | 0.00027 | 25.21 | 8.11 | 12.45 | < DL | 67.93 | 5.42 | 50.43 |
| LB018_zr14 | 7.3 | 14.5 | 845.34 | 12.32 | 0.0788 | 24.94 | 0.0012 | 24.94 | 0.0128 | 24.05 | 0.0012 | 6.77 | 0.00048 | 22.05 | 7.66 | 13.54 | 12.90 | 48.10 | 9.64 | 44.10 |
| LB018_zr15 | 7.2 | 9.9 | 882.36 | 4.73 | 0.0569 | 20.26 | 0.0011 | 20.26 | 0.0088 | 19.76 | 0.0011 | 4.73 | 0.00036 | 17.64 | 7.29 | 9.46 | 8.88 | 39.52 | 7.27 | 34.48 |
| LB018_zr16 | 7.3 | 13.6 | 868.75 | 6.46 | 0.0516 | 26.68 | 0.0012 | 26.68 | 0.0097 | 25.94 | 0.0012 | 6.45 | 0.00042 | 23.67 | 7.44 | 12.90 | 9.79 | 51.87 | 8.60 | 47.34 |
| LB018_zr17 | 6.7 | 11.5 | 943.71 | 5.66 | 0.0567 | 23.62 | 0.0011 | 23.62 | 0.0082 | 23.03 | 0.0011 | 5.50 | 0.00053 | 16.50 | 6.80 | 11.01 | 8.26 | 46.05 | 10.67 | 33.00 |
| LB018_zr18 | 7.4 | 9.0 | 851.53 | 4.20 | 0.0645 | 16.85 | 0.0012 | 16.85 | 0.0104 | 16.39 | 0.0012 | 4.27 | 0.00026 | 17.31 | 7.58 | 8.54 | 10.46 | 32.78 | 5.36 | 34.61 |
| LB018_zr19 | 7.5 | 12.7 | 855.56 | 15.67 | 0.0240 | 41.20 | 0.0038 | 40.74 | 0.0038 | 40.74 | 0.0012 | 6.33 | 0.00078 | 15.39 | 7.50 | 12.66 | 3.90 | 81.48 | 15.81 | 30.79 |
| LB018_zr20 | 8.4 | 20.2 | 707.75 | 17.36 | 0.1076 | 26.49 | 0.0014 | 26.49 | 0.0209 | 25.21 | 0.0014 | 9.31 | 0.00057 | 21.92 | 9.07 | 18.62 | 21.03 | 50.43 | 11.64 | 43.84 |
| LB018_zr21 | 7.6 | 9.2 | 845.74 | 4.58 | 0.0423 | 22.60 | 0.0012 | 22.60 | 0.0068 | 22.19 | 0.0012 | 4.59 | 0.00048 | 14.58 | 7.61 | 9.17 | 6.89 | 44.37 | 9.67 | 29.17 |
| LB018_zr22 | 6.1 | 31.9 | 944.59 | 11.38 | 0.1330 | 30.23 | 0.0011 | 30.23 | 0.0192 | 28.44 | 0.0011 | 14.89 | 0.00051 | 25.07 | 6.80 | 29.79 | 19.29 | 56.88 | 10.32 | 50.15 |
| LB018_zr23 | 7.9 | 8.9 | 817.35 | 4.29 | 0.0522 | 19.10 | 0.0012 | 19.10 | 0.0087 | 18.67 | 0.0012 | 4.26 | 0.00037 | 14.75 | 7.93 | 8.51 | 8.83 | 37.34 | 7.51 | 29.50 |
| LB018_zr24 | 8.0 | 15.8 | 756.71 | 7.37 | 0.0973 | 24.23 | 0.0013 | 24.23 | 0.0176 | 23.17 | 0.0013 | 7.24 | 0.00092 | 15.23 | 8.56 | 14.48 | 17.71 | 46.35 | 18.67 | 30.58 |
| LB018_zr25 | 8.0 | 10.0 | 807.95 | 4.43 | 0.0475 | 20.65 | 0.0012 | 20.65 | 0.0080 | 20.23 | 0.0012 | 4.85 | 0.00038 | 15.36 | 7.98 | 9.70 | 8.09 | 40.46 | 7.78 | 30.73 |
| LB018_zr26 | 7.1 | 9.5 | 909.33 | 4.71 | 0.0447 | 22.45 | 0.0011 | 22.45 | 0.0067 | 22.01 | 0.0011 | 4.74 | 0.00033 | 17.15 | 7.12 | 9.48 | 6.81 | 44.02 | 6.72 | 34.30 |
| LB018_zr27 | 7.8 | 23.2 | 825.17 | 7.72 | 0.0419 | 33.76 | 0.0012 | 33.76 | 0.0069 | 33.11 | 0.0012 | 11.59 | 0.00025 | 28.72 | 7.80 | 23.17 | 7.03 | 66.22 | 5.01 | 57.45 |
| LB018_zr28 | 7.5 | 8.8 | 858.84 | 4.41 | 0.0388 | 22.68 | 0.0012 | 22.68 | 0.0061 | 22.30 | 0.0012 | 4.41 | 0.00047 | 13.16 | 7.50 | 8.83 | 6.22 | 44.60 | 9.52 | 26.32 |
| LB018_zr29 | 9.0 | 20.2 | 677.44 | 10.31 | 0.1030 | 29.74 | 0.0015 | 29.74 | 0.0204 | 28.35 | 0.0015 | 9.19 | 0.00156 | 18.73 | 9.71 | 18.38 | 20.47 | 56.70 | 31.68 | 37.46 |
| LB018_zr30 | 6.9 | 10.1 | 837.40 | 5.19 | 0.0420 | 25.77 | 0.0012 | 25.77 | 0.0069 | 25.28 | 0.0012 | 5.50 | 0.00049 | 14.34 | 7.68 | 11.01 | 7.01 | 50.57 | 9.86 | 28.69 |
| LB018_zr31 | 7.5 | 9.4 | 930.99 | 4.82 | 0.0497 | 22.14 | 0.0011 | 22.14 | 0.0072 | 21.65 | 0.0011 | 4.85 | 0.00052 | 13.74 | 6.90 | 9.70 | 7.33 | 43.31 | 10.59 | 27.47 |
| LB018_zr32 | 7.1 | 8.4 | 851.84 | 4.46 | 0.0611 | 18.47 | 0.0012 | 18.47 | 0.0052 | 18.47 | 0.0012 | 4.47 | 0.00035 | 15.75 | 7.62 | 8.93 | 0.00 | 0.00 | 7.04 | 31.50 |
| LB018_zr33 | 7.6 | 8.4 | 904.49 | 4.00 | 0.0515 | 17.92 | 0.0011 | 17.92 | 0.0051 | 17.92 | 0.0011 | 4.06 | 0.00032 | 12.77 | 7.14 | 8.12 | 0.00 | 0.00 | 6.48 | 25.53 |
| LB018_zr34 | 7.7 | 9.4 | 849.00 | 4.11 | 0.0460 | 19.41 | 0.0012 | 19.41 | 0.0076 | 21.70 | 0.0012 | 4.18 | 0.00043 | 12.97 | 7.60 | 8.37 | 0.00 | 0.00 | 8.73 | 25.95 |
| LB018_zr35 | 7.7 | 9.4 | 830.08 | 6.04 | 0.0462 | 22.14 | 0.0012 | 22.14 | 0.0076 | 21.70 | 0.0012 | 4.89 | 0.00031 | 21.70 | 7.75 | 9.37 | 7.65 | 43.40 | 6.23 | 43.41 |
| LB018_zr36 | 7.1 | 9.5 | 904.10 | 4.73 | 0.0277 | 28.62 | 0.0011 | 28.62 | 0.0042 | 28.26 | 0.0011 | 4.73 | 0.00043 | 13.36 | 7.12 | 9.47 | 4.21 | 56.53 | 8.67 | 26.71 |
| LB018_zr37 | 7.3 | 8.0 | 878.76 | 3.93 | 0.0462 | 18.53 | 0.0011 | 18.53 | 0.0072 | 18.17 | 0.0011 | 4.02 | 0.00038 | 12.90 | 7.35 | 8.03 | 7.24 | 36.34 | 7.64 | 25.81 |
| LB018_zr38 | 7.8 | 8.1 | 830.64 | 4.05 | 0.0347 | 21.94 | 0.0012 | 21.94 | 0.0057 | 21.61 | 0.0012 | 4.05 | 0.00041 | 12.70 | 7.76 | 8.10 | 5.76 | 43.23 | 8.22 | 25.39 |
| LB018_zr39 | 8.7 | 13.4 | 735.61 | 6.33 | 0.0529 | 28.12 | 0.0014 | 28.12 | 0.0097 | 27.45 | 0.0014 | 6.43 | 0.00057 | 19.41 | 8.75 | 12.86 | 9.80 | 54.89 | 11.49 | 38.82 |
| LB018_zr40 | 7.2 | 11.1 | 882.41 | 5.27 | 0.0591 | 22.17 | 0.0011 | 22.17 | 0.0091 | 21.59 | 0.0011 | 5.27 | 0.00038 | 19.08 | 7.29 | 10.54 | 9.20 | 43.19 | 7.63 | 38.16 |
| LB018_zr41 | 7.0 | 14.0 | 878.76 | 6.62 | 0.0688 | 22.79 | 0.0011 | 22.79 | 0.0135 | 21.90 | 0.0011 | 6.47 | 0.00033 | 27.61 | 7.36 | 12.93 | 13.62 | 43.81 | 6.61 | 55.22 |
| LB018_zr42 | 7.3 | 26.0 | 309.18 | 3.38 | 0.5635 | 5.97 | 0.0033 | 5.97 | 0.2461 | 5.43 | 0.0033 | 3.41 | 0.00457 | 4.79 | 20.96 | 6.81 | 223.39 | 10.86 | 92.52 | 9.57 |
| LB018_zr43 | 7.2 | 8.3 | 894.98 | 3.91 | 0.0477 | 18.17 | 0.0011 | 18.17 | 0.0073 | 17.81 | 0.0011 | 4.00 | 0.00034 | 14.07 | 7.22 | 8.00 | 7.37 | 35.61 | 6.99 | 28.13 |
| LB018_zr44 | 7.5 | 7.0 | 852.63 | 3.37 | 0.0495 | 15.34 | 0.0012 | 15.34 | 0.0131 | 17.67 | 0.0012 | 5.69 | 0.00034 | 16.91 | 8.03 | 11.39 | 13.25 | 35.35 | 6.97 | 33.83 |
| LB018_zr45 | 7.7 | 12.0 | 812.46 | 5.90 | 0.0687 | 24.39 | 0.0012 | 24.39 | 0.0079 | 15.05 | 0.0012 | 3.67 | 0.00036 | 10.02 | 7.56 | 6.74 | 8.02 | 30.09 | 7.20 | 20.04 |
| LB018_zr46 | 7.7 | 14.2 | 812.46 | 5.04 | 0.0688 | 23.75 | 0.0012 | 23.75 | 0.0108 | 23.70 | 0.0012 | 6.82 | 0.00052 | 16.09 | 7.89 | 13.64 | 10.87 | 47.39 | 10.44 | 32.18 |
| LB018_zr47 | 7.6 | 11.7 | 847.22 | 5.04 | 0.1126 | 29.95 | 0.0012 | 29.95 | 0.0076 | 23.26 | 0.0012 | 5.68 | 0.00048 | 13.32 | 7.60 | 11.36 | 7.72 | 46.52 | 9.70 | 26.63 |
| LB024_zr1 | 7.8 | 21.3 | 750.54 | 9.49 | 0.1126 | 29.95 | 0.0013 | 29.95 | 0.0203 | 28.43 | 0.0013 | 9.57 | < DL | 62.98 | 8.52 | 19.14 | 20.41 | 56.87 | < DL | 125.96 |
| LB024_zr10 | 6.3 | 14.7 | 990.89 | 6.99 | 0.0655 | 27.86 | 0.0013 | 27.86 | 0.0090 | 27.03 | 0.0013 | 6.74 | 0.00042 | 23.67 | 6.47 | 13.88 | 9.05 | 54.06 | 6.47 | 47.33 |
| LB024_zr11 | 8.0 | 14.0 | 797.84 | 6.72 | 0.0496 | 30.84 | 0.0013 | 30.84 | 0.0088 | 1.99 | 0.0013 | 6.74 | 0.00027 | 25.64 | 8.06 | 13.47 | 0.00 | 54.06 | 5.42 | 51.28 |
| LB024_zr12 | 11.6 | 115.0 | 25.86 | 1.73 | 4.2799 | 2.95 | 0.0388 | 2.95 | 4.2799 | 2.95 | 0.0388 | 1.99 | 0.20308 | 2.60 | 245.42 | 3.98 | 1689.50 | 5.89 | 3747.64 | 5.19 |
| LB024_zr13 | 7.0 | 7.4 | 912.88 | 3.56 | 0.0519 | 15.86 | 0.0011 | 15.86 | 0.0078 | 15.53 | 0.0011 | 3.56 | 0.00031 | 9.98 | 7.06 | 7.12 | 7.86 | 31.06 | 6.27 | 19.97 |

Appendix B: Eastern Sunda arc geochronology data - zircon

| Analysis ID | Pref Age Ma | 2s% | 208Pb/238U Age (Ma) | 2s% | 238U/206Pb ratio | 1s% | 207Pb/206Pb ratio | 1s% | 207Pb/235U (calc)/ratio | 1s% | 206Pb/238U ratio | 1s% | 208Pb/232Th ratio | 1s% | 206Pb/238U Age (Ma) | 2s% | 207Pb/235U (calc) Age (Ma) | 2s% | 208Pb/232Th Age (Ma) | 2s% | |
|-------------|----------------|------|------------------------|-------|---------------------|-------|----------------------|-------|----------------------------|-------|---------------------|-------|----------------------|-------|------------------------|-------|----------------------------------|-------|-------------------------|-------|-------|
| LB024_zr14 | 7.3 | 8.8 | | | 882.94 | 4.88 | 0.0439 | 21.39 | 0.0068 | 20.98 | 0.0011 | 4.42 | 0.00033 | 17.39 | 7.31 | 8.84 | 6.85 | 41.97 | 6.60 | 34.77 | |
| LB024_zr15 | 7.6 | 9.6 | 7.57 | 9.60 | 846.75 | 4.40 | 0.0510 | 19.81 | 0.0083 | 19.38 | 0.0012 | 4.63 | 0.00042 | 13.23 | 7.62 | 9.26 | 8.39 | 38.76 | 8.60 | 26.46 | |
| LB024_zr16 | 6.1 | 14.4 | 6.09 | 14.42 | 1012.18 | 12.50 | 0.0684 | 26.83 | 0.0090 | 25.99 | 0.0010 | 6.81 | 0.00037 | 17.86 | 6.27 | 13.61 | 9.09 | 51.99 | 7.55 | 35.32 | |
| LB024_zr17 | 6.8 | 7.1 | 6.85 | 7.09 | 938.91 | 3.41 | 0.0475 | 15.83 | 0.0069 | 15.53 | 0.0011 | 3.42 | 0.00032 | 7.14 | 6.86 | 6.83 | 6.96 | 31.06 | 6.55 | 14.29 | |
| LB024_zr18 | 7.3 | 20.4 | 7.32 | 20.36 | 797.77 | 8.49 | 0.1231 | 25.56 | 0.0207 | 24.17 | 0.0013 | 9.18 | 0.00111 | 15.59 | 8.11 | 18.35 | 20.77 | 48.33 | 22.44 | 31.18 | |
| LB024_zr19 | 6.9 | 17.5 | 6.94 | 17.46 | 887.36 | 8.11 | 0.0794 | 29.96 | 0.0123 | 28.87 | 0.0011 | 8.15 | 0.00065 | 20.23 | 7.24 | 16.29 | 12.39 | 57.75 | 13.17 | 40.47 | |
| LB024_zr20 | 7.3 | 9.5 | 7.27 | 9.47 | 876.20 | 4.63 | 0.0539 | 19.91 | 0.0084 | 19.44 | 0.0011 | 4.53 | 0.00044 | 13.45 | 7.34 | 9.07 | 8.45 | 38.89 | 8.91 | 26.90 | |
| LB024_zr21 | 6.3 | 16.7 | 6.32 | 16.73 | 986.11 | 7.86 | 0.0722 | 30.21 | 0.0100 | 29.21 | 0.0010 | 7.86 | < DL | 38.80 | 6.53 | 15.73 | 10.11 | 58.41 | < DL | 79.61 | |
| LB024_zr22 | 6.5 | 7.5 | 6.47 | 7.47 | 990.24 | 3.26 | 0.0487 | 14.97 | 0.0067 | 14.69 | 0.0010 | 3.62 | 0.00036 | 8.69 | 6.49 | 7.24 | 6.76 | 29.37 | 17.38 | 17.38 | |
| LB024_zr23 | 6.2 | 20.7 | | | 1052.83 | 10.48 | 0.0400 | 36.16 | < DL | 34.69 | 0.0010 | 10.34 | < DL | 47.54 | 6.22 | 20.68 | < DL | 69.38 | < DL | 95.07 | |
| LB024_zr24 | 7.2 | 9.8 | 7.16 | 9.83 | 885.96 | 4.72 | 0.0548 | 20.48 | 0.0084 | 20.00 | 0.0011 | 4.70 | 0.00035 | 14.16 | 7.24 | 9.40 | 8.50 | 39.99 | 7.15 | 28.32 | |
| LB024_zr25 | 6.5 | 16.7 | 6.53 | 16.66 | 952.80 | 7.81 | 0.0756 | 29.34 | 0.0108 | 28.33 | 0.0011 | 7.80 | < DL | 47.32 | 6.78 | 15.61 | 10.96 | 56.65 | < DL | 94.64 | |
| LB024_zr26 | 7.3 | 27.6 | 7.29 | 27.57 | 679.74 | 13.87 | 0.2376 | 21.34 | 0.0486 | 19.24 | 0.0015 | 10.87 | 0.00039 | 6.30 | 7.05 | 4.26 | 6.65 | 18.74 | 7.91 | 12.60 | |
| LB024_zr27 | 7.7 | 22.9 | 7.74 | 22.86 | 796.00 | 10.62 | 0.0852 | 37.75 | 0.0148 | 36.27 | 0.0013 | 10.60 | 0.00059 | 38.83 | 8.14 | 21.20 | 14.95 | 72.53 | 11.98 | 71.65 | |
| LB024_zr28 | 8.4 | 23.0 | 8.43 | 22.98 | 713.65 | 10.49 | 0.0953 | 35.96 | 0.0179 | 34.39 | 0.0014 | 10.53 | 0.00129 | 23.46 | 8.99 | 21.05 | 17.97 | 68.79 | 26.08 | 46.91 | |
| LB024_zr29 | 7.0 | 15.5 | 921.97 | 7.76 | 921.97 | 7.76 | 0.0400 | 39.15 | < DL | 38.41 | 0.0011 | 7.76 | < DL | 36.31 | 6.99 | 15.52 | < DL | 76.82 | < DL | 72.62 | |
| LB024_zr30 | 6.8 | 28.9 | 6.81 | 28.87 | 764.61 | 18.75 | 0.1984 | 28.13 | 0.0359 | 25.74 | 0.0013 | 11.48 | 0.00176 | 20.60 | 8.44 | 22.96 | 35.79 | 51.47 | 35.67 | 41.20 | |
| LB024_zr31 | 7.6 | 25.1 | 7.57 | 25.08 | 513.61 | 9.56 | 0.3625 | 12.36 | 0.0952 | 10.69 | 0.0020 | 8.20 | 0.00220 | 10.14 | 12.61 | 16.40 | 92.33 | 21.38 | 44.51 | 20.28 | |
| LB024_zr32 | 6.3 | 17.3 | 6.30 | 17.30 | 967.83 | 8.00 | 0.0876 | 28.11 | 0.0123 | 26.98 | 0.0010 | 8.00 | 0.00041 | 29.34 | 6.65 | 16.00 | 12.40 | 53.98 | 8.22 | 58.69 | |
| LB024_zr33 | 7.9 | 22.3 | 7.92 | 22.26 | 728.52 | 9.75 | 0.1252 | 29.48 | 0.0235 | 27.83 | 0.0014 | 9.85 | 0.00166 | 20.21 | 8.80 | 19.70 | 23.58 | 55.66 | 33.62 | 40.43 | |
| LB024_zr34 | 8.5 | 15.4 | 758.74 | 7.61 | 758.74 | 7.61 | 0.0397 | 38.78 | 0.0070 | 38.06 | 0.0013 | 7.72 | 0.00068 | 23.50 | 8.48 | 15.43 | 7.12 | 76.11 | 13.82 | 47.01 | |
| LB024_zr35 | 6.3 | 12.2 | 6.27 | 12.25 | 985.19 | 11.81 | 0.1018 | 18.19 | 0.0144 | 17.39 | 0.0010 | 5.58 | 0.00034 | 15.74 | 6.74 | 11.16 | 14.55 | 34.78 | 6.81 | 31.48 | |
| LB024_zr36 | 7.9 | 15.7 | 984.99 | 4.75 | 984.99 | 4.75 | 0.0421 | 23.41 | 0.0060 | 22.98 | 0.0010 | 4.81 | 0.00033 | 12.84 | 6.70 | 9.62 | 6.10 | 45.95 | 6.65 | 25.68 | |
| LB024_zr37 | 7.2 | 43.7 | 765.98 | 16.88 | 765.98 | 16.88 | 0.1789 | 42.95 | 0.0327 | 39.58 | 0.0013 | 18.50 | < DL | 43.70 | 7.86 | 15.66 | < DL | 75.41 | < DL | 87.40 | |
| LB024_zr38 | 7.1 | 8.0 | 907.51 | 4.13 | 907.51 | 4.13 | 0.0390 | 20.56 | 0.0058 | 20.22 | 0.0011 | 4.02 | 0.00036 | 36.77 | 8.64 | 36.99 | 32.70 | 79.17 | 22.29 | 73.54 | |
| LB024_zr39 | 6.6 | 10.4 | 968.62 | 4.65 | 968.62 | 4.65 | 0.0484 | 21.52 | 0.0068 | 21.07 | 0.0010 | 5.05 | 0.00033 | 17.26 | 6.62 | 10.10 | 6.86 | 42.14 | 6.75 | 34.52 | |
| LB024_zr40 | 8.1 | 14.0 | 766.17 | 6.97 | 766.17 | 6.97 | 0.0781 | 24.28 | 0.0080 | 23.37 | 0.0013 | 6.56 | 0.00082 | 15.21 | 8.48 | 13.13 | 0.00 | 16.85 | 16.85 | 30.43 | |
| LB024_zr41 | 7.0 | 11.4 | 7.00 | 11.37 | 910.96 | 5.44 | 0.0539 | 23.94 | 0.0080 | 23.37 | 0.0011 | 5.44 | 0.00039 | 15.59 | 7.07 | 10.88 | 8.14 | 46.73 | 7.92 | 31.19 | |
| LB024_zr42 | 7.3 | 13.0 | 7.30 | 13.04 | 861.60 | 6.44 | 0.0623 | 25.45 | 0.0098 | 24.73 | 0.0012 | 6.19 | 0.00049 | 19.51 | 7.45 | 12.39 | 9.91 | 49.47 | 9.89 | 39.02 | |
| LB024_zr43 | 6.2 | 13.3 | 1030.46 | 6.39 | 1030.46 | 6.39 | 0.0475 | 29.92 | 0.0063 | 29.27 | 0.0010 | 6.40 | 0.00032 | 23.07 | 6.24 | 12.80 | 6.33 | 58.54 | 6.52 | 46.14 | |
| LB024_zr44 | 7.0 | 9.5 | 928.68 | 4.73 | 928.68 | 4.73 | 0.0435 | 23.00 | 0.0058 | 23.00 | 0.0011 | 4.73 | 0.00028 | 14.45 | 6.95 | 9.46 | 0.00 | 5.22 | 28.90 | 5.22 | 28.90 |
| LB028_zr1 | 7.3 | 8.1 | 877.67 | 3.87 | 877.67 | 3.87 | 0.0519 | 17.27 | 0.0080 | 16.90 | 0.0011 | 3.87 | 0.00047 | 11.21 | 7.32 | 7.75 | 8.12 | 33.80 | 9.54 | 22.42 | |
| LB028_zr10 | 7.3 | 4.5 | 884.96 | 2.23 | 884.96 | 2.23 | 0.0461 | 10.32 | 0.0071 | 10.20 | 0.0011 | 2.25 | 0.00036 | 5.59 | 7.28 | 4.49 | 7.17 | 20.39 | 7.39 | 11.18 | |
| LB028_zr11 | 7.3 | 10.3 | 796.81 | 4.59 | 796.81 | 4.59 | 0.1224 | 13.80 | 0.0209 | 13.11 | 0.0013 | 4.59 | 0.00067 | 11.51 | 8.08 | 9.18 | 21.00 | 26.22 | 13.59 | 23.01 | |
| LB028_zr12 | 8.2 | 9.1 | 778.26 | 4.34 | 778.26 | 4.34 | 0.0595 | 18.17 | 0.0104 | 17.71 | 0.0013 | 4.34 | 0.00051 | 13.81 | 8.29 | 8.67 | 10.51 | 35.43 | 10.37 | 27.62 | |
| LB028_zr13 | 11.6 | 30.6 | 366.43 | 8.82 | 366.43 | 8.82 | 0.3294 | 17.37 | 0.0069 | 21.56 | 0.0012 | 10.35 | 0.00389 | 17.12 | 18.12 | 20.70 | 0.00 | 78.79 | 34.25 | 78.79 | |
| LB028_zr14 | 7.4 | 9.1 | 863.31 | 4.54 | 863.31 | 4.54 | 0.0439 | 21.98 | 0.0069 | 21.56 | 0.0012 | 4.54 | 0.00041 | 16.29 | 7.44 | 9.09 | 7.00 | 43.13 | 8.28 | 32.59 | |
| LB028_zr17 | 8.1 | 15.5 | 707.61 | 6.83 | 707.61 | 6.83 | 0.1293 | 20.10 | 0.0249 | 18.97 | 0.0014 | 6.82 | 0.00058 | 22.16 | 9.09 | 13.65 | 24.93 | 37.93 | 11.71 | 44.32 | |
| LB028_zr18 | 6.8 | 9.4 | 923.69 | 4.41 | 923.69 | 4.41 | 0.0689 | 17.25 | 0.0102 | 16.75 | 0.0011 | 4.41 | 0.00045 | 12.22 | 6.97 | 8.82 | 10.31 | 33.50 | 9.08 | 24.44 | |
| LB028_zr19 | 8.8 | 15.1 | 684.24 | 6.51 | 684.24 | 6.51 | 0.1005 | 21.46 | 0.0204 | 20.51 | 0.0015 | 6.97 | 0.00088 | 14.77 | 9.42 | 13.94 | 20.52 | 41.02 | 19.82 | 29.53 | |
| LB028_zr2 | 8.0 | 7.9 | 802.57 | 3.93 | 802.57 | 3.93 | 0.0315 | 22.31 | 0.0053 | 22.02 | 0.0012 | 3.93 | 0.00045 | 12.27 | 8.03 | 7.87 | 5.40 | 44.03 | 9.04 | 24.54 | |
| LB028_zr20 | 7.6 | 7.2 | 673.39 | 2.52 | 673.39 | 2.52 | 0.2087 | 6.32 | 0.0422 | 8.54 | 0.0015 | 2.92 | 0.00166 | 7.74 | 9.59 | 5.84 | 41.99 | 17.08 | 33.68 | 15.47 | |
| LB028_zr21 | 8.8 | 12.9 | 674.17 | 5.48 | 674.17 | 5.48 | 0.1119 | 17.02 | 0.0224 | 16.20 | 0.0015 | 5.87 | 0.00063 | 13.65 | 9.57 | 11.74 | 22.54 | 32.41 | 12.67 | 27.30 | |

Appendix B: Eastern Sunda arc geochronology data - zircon

| Analysis ID | Pref Age Ma | 2s% | 206Pb/238U Age (Ma) | 2s% | 238U/206Pb ratio | 1s% | 207Pb/206Pb ratio | 1s% | 207Pb/235U (calc) ratio | 1s% | 208Pb/238U ratio | 1s% | 208Pb/232Th ratio | 1s% | 208Pb/238U Age (Ma) | 2s% | 207Pb/235U Age (Ma) | 2s% | 208Pb/232Th Age (Ma) | 2s% |
|-------------|----------------|------|------------------------|-------|---------------------|-------|----------------------|-------|----------------------------|-------|---------------------|-------|----------------------|-------|------------------------|-------|------------------------|--------|-------------------------|-------|
| LB028_zr22 | 9.2 | 18.5 | 9.24 | 18.47 | 529.66 | 6.85 | 0.2356 | 14.34 | 0.0617 | 12.98 | 0.0019 | 7.32 | 0.00201 | 11.00 | 12.14 | 14.64 | 60.74 | 25.96 | 40.73 | 21.99 |
| LB028_zr23 | 7.6 | 7.6 | | | 850.22 | 3.79 | 0.0337 | 20.80 | 0.0054 | 20.51 | 0.0012 | 3.79 | 0.00040 | 11.70 | 7.57 | 7.58 | 5.47 | 41.02 | 8.04 | 23.40 |
| LB028_zr24 | 6.7 | 22.6 | | | 955.36 | 11.27 | 0.0400 | 76.47 | < DL | 75.65 | 0.0010 | 11.32 | 0.00062 | 28.55 | 6.73 | 22.64 | < DL | 151.29 | 12.57 | 59.10 |
| LB028_zr25 | 7.1 | 11.8 | 7.12 | 11.80 | 866.61 | 5.52 | 0.0752 | 20.81 | 0.0752 | 20.12 | 0.0011 | 5.53 | 0.00051 | 18.88 | 7.40 | 11.06 | 11.89 | 40.23 | 10.32 | 37.76 |
| LB028_zr26 | 15.3 | 52.1 | 15.34 | 52.13 | 47.55 | 6.26 | 0.7542 | 2.80 | 2.1263 | 6.81 | 0.0211 | 5.98 | 0.05752 | 6.63 | 134.53 | 11.96 | 1157.40 | 13.63 | 1133.57 | 13.25 |
| LB028_zr27 | 7.5 | 16.8 | 7.49 | 16.84 | 572.27 | 5.37 | 0.3091 | 11.00 | 0.0745 | 9.73 | 0.0017 | 5.38 | 0.00241 | 9.64 | 11.22 | 10.75 | 72.93 | 19.45 | 48.73 | 19.28 |
| LB028_zr28 | 7.7 | 9.9 | | | 840.69 | 4.66 | 0.0369 | 23.13 | 0.0060 | 22.76 | 0.0012 | 4.96 | 0.00046 | 12.15 | 7.71 | 9.92 | 6.03 | 45.52 | 9.31 | 24.30 |
| LB028_zr29 | 7.7 | 7.5 | 7.71 | 7.51 | 828.32 | 3.58 | 0.0541 | 15.65 | 0.0089 | 15.31 | 0.0012 | 3.60 | 0.00043 | 7.83 | 7.79 | 7.20 | 8.98 | 30.63 | 8.66 | 15.66 |
| LB028_zr3 | 7.9 | 10.4 | 7.90 | 10.38 | 811.84 | 4.62 | 0.0498 | 21.09 | 0.0083 | 20.63 | 0.0012 | 5.02 | 0.00046 | 12.39 | 7.93 | 10.04 | 8.43 | 41.27 | 9.37 | 24.79 |
| LB028_zr30 | 7.0 | 12.8 | | | 917.60 | 6.37 | 0.0432 | 31.24 | 0.0065 | 30.62 | 0.0011 | 6.38 | 0.00030 | 21.25 | 7.03 | 12.77 | 6.59 | 61.24 | 6.12 | 42.50 |
| LB028_zr31 | 7.2 | 14.3 | 7.18 | 14.33 | 838.31 | 6.43 | 0.1019 | 21.37 | 0.0169 | 20.41 | 0.0012 | 6.52 | 0.00052 | 16.75 | 7.72 | 13.05 | 17.07 | 40.81 | 10.63 | 33.51 |
| LB028_zr33 | 7.0 | 6.4 | | | 923.44 | 4.17 | 0.0370 | 16.62 | 0.0055 | 16.39 | 0.0011 | 3.18 | 0.00036 | 9.48 | 6.98 | 6.36 | 5.55 | 32.78 | 7.32 | 18.95 |
| LB028_zr4 | 7.3 | 9.4 | 7.28 | 9.36 | 858.51 | 4.41 | 0.0728 | 16.78 | 0.0116 | 16.26 | 0.0012 | 4.40 | 0.00027 | 18.12 | 7.53 | 8.80 | 11.67 | 32.52 | 5.49 | 36.24 |
| LB028_zr5 | 7.8 | 16.4 | 7.78 | 16.45 | 826.80 | 7.87 | 0.0580 | 33.37 | 0.0099 | 32.47 | 0.0012 | 7.84 | < DL | 38.91 | 7.90 | 15.69 | 10.00 | 64.94 | < DL | 77.82 |
| LB028_zr6 | 6.0 | 61.2 | 6.01 | 61.19 | 387.43 | 13.06 | 0.5528 | 14.98 | 0.1966 | 12.12 | 0.0026 | 8.97 | 0.00530 | 12.32 | 16.72 | 17.93 | 184.76 | 24.24 | 107.16 | 24.64 |
| LB028_zr7 | 10.6 | 24.5 | 10.64 | 24.51 | 542.20 | 10.28 | 0.1388 | 29.81 | 0.0346 | 27.97 | 0.0019 | 10.73 | 0.00215 | 19.33 | 12.05 | 21.46 | 34.55 | 55.94 | 43.63 | 38.66 |
| LB028_zr8 | 7.8 | 12.4 | 7.75 | 12.39 | 786.18 | 5.72 | 0.0872 | 20.14 | 0.0077 | 18.49 | 0.0013 | 5.73 | 0.00068 | 15.81 | 8.18 | 11.47 | 0.00 | 7.76 | 13.75 | 31.63 |
| LB028_zr9 | 7.5 | 8.5 | 7.52 | 8.48 | 853.49 | 4.08 | 0.0482 | 18.88 | 0.0090 | 20.70 | 0.0012 | 4.08 | 0.00047 | 13.19 | 7.54 | 8.17 | 7.54 | 36.99 | 9.61 | 26.39 |
| LB029_zr1 | 8.1 | 9.9 | 8.08 | 9.86 | 790.55 | 4.73 | 0.0518 | 21.17 | 0.0090 | 20.70 | 0.0013 | 4.73 | 0.00035 | 17.60 | 8.14 | 9.46 | 9.07 | 41.39 | 7.05 | 35.20 |
| LB029_zr10 | 7.3 | 9.8 | 7.30 | 9.81 | 853.37 | 4.61 | 0.0753 | 17.28 | 0.0119 | 16.73 | 0.0012 | 4.60 | 0.00037 | 12.71 | 7.58 | 9.20 | 12.03 | 33.46 | 7.53 | 25.42 |
| LB029_zr11 | 6.9 | 6.5 | 6.85 | 6.54 | 940.96 | 3.16 | 0.0462 | 14.82 | 0.0067 | 14.57 | 0.0011 | 3.16 | 0.00039 | 8.23 | 6.85 | 6.31 | 6.80 | 29.13 | 8.00 | 16.45 |
| LB029_zr12 | 7.0 | 11.0 | | | 912.13 | 5.48 | 0.0376 | 26.66 | 0.0056 | 28.17 | 0.0011 | 5.48 | 0.00045 | 14.75 | 7.04 | 10.97 | 5.70 | 56.35 | 9.20 | 29.50 |
| LB029_zr13 | 7.2 | 13.6 | 7.19 | 13.63 | 879.35 | 6.48 | 0.0624 | 26.62 | 0.0098 | 25.87 | 0.0011 | 6.47 | 0.00060 | 17.67 | 7.34 | 12.95 | 9.95 | 51.74 | 12.09 | 35.34 |
| LB029_zr14 | 7.4 | 7.3 | | | 866.17 | 3.61 | 0.0396 | 18.35 | 0.0063 | 18.05 | 0.0012 | 3.63 | 0.00038 | 9.49 | 7.43 | 7.26 | 6.34 | 36.11 | 7.69 | 18.98 |
| LB029_zr15 | 7.5 | 9.9 | 7.46 | 9.95 | 864.04 | 4.67 | 0.0532 | 20.37 | 0.0085 | 19.90 | 0.0012 | 4.78 | 0.00047 | 12.14 | 7.53 | 9.56 | 8.62 | 39.80 | 9.60 | 24.28 |
| LB029_zr16 | 7.8 | 10.2 | 7.80 | 10.18 | 817.21 | 4.86 | 0.0564 | 20.92 | 0.0095 | 20.40 | 0.0012 | 4.86 | 0.00038 | 14.79 | 7.90 | 9.72 | 9.56 | 40.80 | 7.68 | 29.59 |
| LB029_zr17 | 6.5 | 15.8 | 6.52 | 15.83 | 839.86 | 6.66 | 0.1595 | 17.95 | 0.0258 | 16.73 | 0.0012 | 6.69 | 0.00133 | 13.77 | 7.61 | 13.38 | 25.91 | 33.46 | 26.90 | 27.53 |
| LB029_zr18 | 6.8 | 15.9 | 6.76 | 15.87 | 951.67 | 7.76 | 0.0511 | 35.15 | 0.0075 | 34.31 | 0.0011 | 7.60 | 0.00042 | 21.47 | 6.80 | 15.20 | 7.56 | 68.63 | 8.52 | 42.95 |
| LB029_zr19 | 7.8 | 8.6 | | | 828.39 | 4.18 | 0.0225 | 27.90 | 0.0037 | 27.63 | 0.0012 | 4.32 | 0.00032 | 15.60 | 7.79 | 8.64 | 3.79 | 55.25 | 6.54 | 31.19 |
| LB029_zr2 | 7.7 | 15.4 | 7.71 | 15.44 | 820.92 | 6.55 | 0.0608 | 27.51 | 0.0103 | 26.75 | 0.0012 | 7.41 | 0.00032 | 24.72 | 7.86 | 14.83 | 10.41 | 53.51 | 6.41 | 49.45 |
| LB029_zr20 | 6.8 | 13.0 | 6.84 | 12.98 | 912.38 | 7.73 | 0.0765 | 22.73 | 0.0118 | 21.95 | 0.0011 | 6.07 | 0.00041 | 16.55 | 7.11 | 12.15 | 11.89 | 43.91 | 8.40 | 33.11 |
| LB029_zr21 | 7.5 | 11.2 | | | 860.84 | 6.97 | 0.0400 | 43.30 | < DL | 42.96 | 0.0012 | 5.62 | 0.00042 | 17.33 | 7.51 | 11.25 | < DL | 85.93 | 8.54 | 34.67 |
| LB029_zr22 | 8.7 | 53.9 | 8.65 | 53.91 | 103.21 | 6.99 | 0.7295 | 3.74 | 0.9752 | 8.31 | 0.0097 | 7.10 | 0.02751 | 7.61 | 62.13 | 14.20 | 691.16 | 16.62 | 550.05 | 15.23 |
| LB029_zr23 | 7.7 | 10.6 | | | 830.60 | 5.30 | 0.0363 | 28.21 | 0.0060 | 27.74 | 0.0012 | 5.31 | 0.00052 | 16.22 | 7.72 | 10.62 | 6.06 | 55.49 | 10.53 | 32.44 |
| LB029_zr24 | 7.8 | 12.9 | 7.83 | 12.95 | 809.55 | 6.31 | 0.0573 | 24.32 | 0.0095 | 23.70 | 0.0012 | 6.23 | 0.00057 | 12.90 | 7.94 | 12.45 | 9.61 | 47.40 | 11.61 | 25.80 |
| LB029_zr25 | 7.2 | 8.2 | 7.20 | 8.18 | 887.97 | 3.95 | 0.0512 | 17.65 | 0.0079 | 17.28 | 0.0011 | 3.93 | 0.00037 | 13.96 | 7.25 | 7.86 | 7.98 | 34.56 | 7.42 | 27.93 |
| LB029_zr26 | 7.0 | 9.9 | | | 916.27 | 4.93 | 0.0384 | 26.16 | 0.0055 | 25.73 | 0.0011 | 4.93 | 0.00034 | 17.13 | 7.02 | 9.86 | 5.52 | 51.47 | 6.87 | 34.26 |
| LB029_zr27 | 5.7 | 26.8 | 5.69 | 26.77 | 408.64 | 3.79 | 0.5504 | 6.49 | 0.1856 | 6.57 | 0.0024 | 4.29 | 0.00486 | 6.55 | 15.70 | 8.58 | 172.84 | 13.15 | 98.17 | 13.10 |
| LB029_zr28 | 7.4 | 8.5 | | | 873.76 | 4.26 | 0.0434 | 20.75 | 0.0068 | 20.37 | 0.0011 | 4.26 | 0.00045 | 12.82 | 7.38 | 8.52 | 6.91 | 40.73 | 9.06 | 25.64 |
| LB029_zr29 | 5.9 | 14.5 | 5.94 | 14.45 | 982.37 | 6.49 | 0.1131 | 20.29 | 0.0157 | 19.29 | 0.0010 | 6.49 | 0.00058 | 16.20 | 6.49 | 12.98 | 15.78 | 36.58 | 11.73 | 32.40 |
| LB029_zr3 | 6.8 | 80.9 | 6.85 | 80.86 | 184.84 | 7.84 | 0.6834 | 8.80 | 0.5137 | 7.43 | 0.0054 | 9.61 | 0.01693 | 9.39 | 35.02 | 19.21 | 420.91 | 14.86 | 340.33 | 18.78 |
| LB029_zr30 | 6.7 | 8.3 | 6.66 | 8.33 | 956.20 | 3.97 | 0.0544 | 17.34 | 0.0079 | 16.95 | 0.0010 | 3.99 | 0.00036 | 10.88 | 6.73 | 7.97 | 7.94 | 33.90 | 7.25 | 21.76 |
| LB029_zr31 | 7.0 | 6.1 | 6.95 | 6.07 | 915.83 | 2.78 | 0.0556 | 11.92 | 0.0084 | 11.69 | 0.0011 | 2.92 | 0.00036 | 6.50 | 7.04 | 5.83 | 8.46 | 23.39 | 7.36 | 13.00 |
| LB029_zr32 | 6.9 | 9.4 | 6.95 | 9.39 | 905.62 | 4.45 | 0.0632 | 18.16 | 0.0096 | 17.67 | 0.0011 | 4.46 | 0.00045 | 11.78 | 7.10 | 8.91 | 9.71 | 35.34 | 9.16 | 23.56 |
| LB029_zr33 | 6.5 | 10.8 | 6.52 | 10.79 | 972.21 | 5.14 | 0.0574 | 21.97 | 0.0090 | 21.41 | 0.0010 | 5.15 | 0.00038 | 14.73 | 6.61 | 10.30 | 8.11 | 42.82 | 7.68 | 29.47 |

Appendix B: Eastern Sunda arc geochronology data - zircon

| Analysis ID | Pref Age Ma | 2s% Age | ²⁰⁶ Pb/ ²³⁸ U Age (Ma) | 2s% | ²³⁸ U/ ²⁰⁶ Pb ratio | 1s% | ²⁰⁷ Pb/ ²⁰⁶ Pb ratio | 1s% | ²⁰⁷ Pb/ ²³⁵ U (calc) ratio | 1s% | ²⁰⁸ Pb/ ²³⁸ U ratio | 1s% | ²⁰⁸ Pb/ ²³² Th ratio | 1s% | ²⁰⁶ Pb/ ²³⁸ U Age (Ma) | 2s% | ²⁰⁷ Pb/ ²³⁵ U (calc) Age (Ma) | 2s% | ²⁰⁸ Pb/ ²³² Th Age (Ma) | 2s% |
|-------------|-------------|---------|--|-------|---|-------|--|-------|--|-------|---|-------|--|-------|--|-------|---|--------|---|-------|
| LB029_zr34 | 7.4 | 11.4 | 7.39 | 11.37 | 860.19 | 5.41 | 0.0620 | 22.24 | 0.0100 | 21.63 | 0.0012 | 5.40 | 0.00036 | 19.72 | 7.54 | 10.80 | 10.12 | 43.27 | 7.34 | 39.45 |
| LB029_zr35 | 7.1 | 16.2 | 7.10 | 16.17 | 823.62 | 6.93 | 0.1225 | 20.90 | 0.0205 | 19.78 | 0.0012 | 7.25 | 0.00060 | 18.55 | 7.85 | 14.49 | 20.59 | 39.55 | 12.24 | 37.10 |
| LB029_zr36 | 7.2 | 10.8 | 7.20 | 10.81 | 881.01 | 4.68 | 0.0613 | 18.43 | 0.0096 | 17.95 | 0.0011 | 5.20 | 0.00058 | 11.49 | 7.34 | 10.41 | 9.69 | 35.90 | 11.82 | 22.99 |
| LB029_zr37 | 7.3 | 9.9 | 7.33 | 9.91 | 878.28 | 4.77 | 0.0470 | 22.40 | 0.0074 | 21.94 | 0.0011 | 4.78 | 0.00039 | 16.54 | 7.34 | 9.55 | 7.47 | 43.87 | 7.92 | 33.08 |
| LB029_zr38 | 7.5 | 11.5 | 7.52 | 11.54 | 839.86 | 5.43 | 0.0592 | 23.14 | 0.0096 | 22.53 | 0.0012 | 5.50 | 0.00044 | 14.01 | 7.65 | 11.00 | 9.74 | 45.07 | 8.93 | 28.02 |
| LB029_zr39 | 7.1 | 8.1 | 7.09 | 8.11 | 889.59 | 3.42 | 0.0630 | 13.95 | 0.0098 | 13.61 | 0.0011 | 3.89 | 0.00038 | 9.78 | 7.24 | 7.79 | 9.90 | 27.22 | 7.65 | 19.57 |
| LB029_zr4 | 7.3 | 8.8 | 7.32 | 8.76 | 877.13 | 3.97 | 0.0475 | 18.50 | 0.0074 | 18.14 | 0.0011 | 4.24 | 0.00032 | 13.03 | 7.33 | 8.48 | 7.46 | 36.28 | 6.57 | 26.05 |
| LB029_zr40 | 7.1 | 12.3 | 7.06 | 12.30 | 890.14 | 5.80 | 0.0651 | 23.18 | 0.0102 | 22.51 | 0.0011 | 5.83 | 0.00051 | 16.20 | 7.23 | 11.66 | 10.32 | 45.02 | 10.30 | 32.39 |
| LB029_zr5 | 7.6 | 8.6 | 7.63 | 8.57 | 847.71 | 4.16 | 0.0481 | 19.12 | 0.0078 | 18.73 | 0.0012 | 4.12 | 0.00023 | 18.05 | 7.65 | 8.25 | 7.90 | 37.46 | 4.73 | 36.10 |
| LB029_zr6 | 8.0 | 11.2 | 8.03 | 11.23 | 775.15 | 5.28 | 0.0741 | 19.84 | 0.0130 | 19.20 | 0.0013 | 5.28 | 0.00078 | 12.73 | 8.33 | 10.56 | 13.16 | 38.39 | 15.81 | 25.46 |
| LB029_zr7 | 7.1 | 11.5 | 7.14 | 11.54 | 885.36 | 5.48 | 0.0614 | 22.70 | 0.0095 | 22.08 | 0.0011 | 5.49 | 0.00032 | 19.53 | 7.28 | 10.97 | 9.57 | 44.17 | 6.40 | 39.06 |
| LB029_zr8 | 7.4 | 9.2 | 7.09 | 9.21 | 870.41 | 3.88 | 0.0344 | 21.22 | 0.0054 | 20.91 | 0.0011 | 4.58 | 0.00029 | 14.70 | 7.37 | 9.16 | 5.45 | 41.82 | 5.93 | 29.39 |
| LB036_zr1 | 7.1 | 14.8 | 7.09 | 14.81 | 873.86 | 6.92 | 0.0786 | 25.55 | 0.0124 | 24.64 | 0.0011 | 6.92 | 0.00038 | 25.93 | 7.39 | 13.84 | 12.56 | 49.29 | 7.76 | 51.85 |
| LB036_zr10 | 6.0 | 14.9 | 5.95 | 14.85 | 1051.66 | 7.05 | 0.0684 | 27.64 | 0.0090 | 26.78 | 0.0010 | 7.01 | 0.00022 | 29.85 | 6.12 | 14.02 | 9.12 | 53.57 | 4.46 | 59.69 |
| LB036_zr11 | 7.5 | 21.9 | 860.47 | 43.15 | 0.0400 | 50.76 | <DL | 49.49 | 0.0012 | 10.96 | 0.0012 | 10.96 | 0.00048 | 31.22 | 7.50 | 21.92 | <DL | 98.97 | 9.80 | 62.44 |
| LB036_zr12 | 7.3 | 10.9 | 7.26 | 10.86 | 874.16 | 5.18 | 0.0577 | 22.05 | 0.0092 | 21.48 | 0.0011 | 5.18 | 0.00055 | 14.14 | 7.37 | 10.36 | 9.28 | 42.97 | 11.23 | 28.29 |
| LB036_zr13 | 7.1 | 15.4 | 7.08 | 15.41 | 860.58 | 8.07 | 0.0924 | 24.29 | 0.0150 | 23.29 | 0.0012 | 7.09 | 0.00054 | 20.79 | 7.52 | 14.18 | 15.07 | 46.57 | 10.96 | 41.56 |
| LB036_zr14 | 6.3 | 24.1 | 6.31 | 24.12 | 647.68 | 10.04 | 0.3381 | 13.91 | 0.0718 | 12.11 | 0.0016 | 7.47 | 0.00163 | 11.36 | 10.00 | 14.94 | 70.41 | 24.23 | 32.99 | 22.72 |
| LB036_zr15 | 7.0 | 11.3 | 7.00 | 11.34 | 890.78 | 5.32 | 0.0745 | 20.09 | 0.0119 | 19.44 | 0.0011 | 5.32 | 0.00044 | 13.21 | 7.26 | 10.64 | 11.97 | 38.87 | 8.90 | 26.43 |
| LB036_zr17 | 7.2 | 17.3 | 7.25 | 17.29 | 803.29 | 7.60 | 0.1279 | 22.54 | 0.0224 | 21.28 | 0.0013 | 7.63 | 0.00058 | 23.10 | 8.08 | 15.25 | 22.47 | 42.55 | 11.85 | 46.20 |
| LB036_zr18 | 7.6 | 8.9 | 7.60 | 8.89 | 825.28 | 4.21 | 0.0668 | 16.66 | 0.0114 | 16.20 | 0.0012 | 4.20 | 0.00043 | 11.68 | 7.81 | 8.41 | 11.52 | 32.39 | 8.65 | 23.37 |
| LB036_zr19 | 6.1 | 14.4 | 6.06 | 14.42 | 1019.66 | 8.55 | 0.0862 | 23.65 | 0.0120 | 22.74 | 0.0010 | 6.68 | 0.00051 | 15.90 | 6.39 | 13.37 | 12.07 | 45.47 | 10.32 | 31.79 |
| LB036_zr2 | 6.5 | 13.5 | 6.47 | 13.54 | 878.37 | 5.89 | 0.1463 | 16.23 | 0.0233 | 15.23 | 0.0011 | 5.83 | 0.00058 | 14.36 | 7.41 | 11.65 | 23.35 | 30.46 | 11.76 | 28.73 |
| LB036_zr20 | 8.0 | 12.9 | 8.00 | 12.86 | 787.87 | 6.12 | 0.0542 | 26.98 | 0.0095 | 26.32 | 0.0013 | 6.15 | 0.00074 | 16.59 | 8.09 | 12.31 | 9.65 | 52.63 | 15.09 | 33.17 |
| LB036_zr21 | 9.8 | 15.9 | 9.82 | 15.86 | 286.00 | 2.93 | 0.4919 | 5.02 | 0.2419 | 4.65 | 0.0035 | 3.00 | 0.00322 | 3.99 | 22.49 | 6.00 | 219.99 | 9.31 | 65.08 | 7.99 |
| LB036_zr3 | 7.4 | 7.1 | 7.40 | 7.13 | 863.13 | 2.99 | 0.0538 | 13.03 | 0.0086 | 12.78 | 0.0012 | 3.45 | 0.00037 | 7.93 | 7.47 | 6.90 | 8.73 | 25.55 | 7.59 | 15.86 |
| LB036_zr4 | 7.3 | 19.7 | 7.29 | 19.75 | 859.33 | 9.38 | 0.0700 | 36.29 | 0.0112 | 35.11 | 0.0012 | 9.30 | 0.00052 | 29.81 | 7.52 | 18.61 | 11.30 | 70.22 | 10.48 | 59.63 |
| LB036_zr5 | 6.4 | 15.5 | 6.40 | 15.48 | 963.23 | 7.19 | 0.0867 | 25.31 | 0.0125 | 24.32 | 0.0010 | 7.17 | 0.00049 | 19.26 | 6.75 | 14.33 | 12.59 | 48.65 | 9.92 | 38.52 |
| LB036_zr6 | 6.9 | 8.6 | 6.92 | 8.64 | 919.12 | 3.86 | 0.0572 | 15.85 | 0.0086 | 15.49 | 0.0011 | 4.16 | 0.00047 | 12.04 | 7.02 | 8.33 | 8.74 | 30.97 | 9.48 | 24.08 |
| LB036_zr7 | 7.1 | 30.8 | 923.49 | 12.77 | 0.0400 | 59.03 | <DL | 57.97 | 0.0011 | 15.41 | 0.0011 | 15.41 | 0.00043 | 37.49 | 7.09 | 30.82 | <DL | 115.95 | 8.76 | 74.97 |
| LB036_zr8 | 7.1 | 12.6 | 7.14 | 12.57 | 903.12 | 5.95 | 0.0500 | 27.12 | 0.0078 | 26.51 | 0.0011 | 6.05 | 0.00040 | 14.84 | 7.17 | 12.09 | 7.93 | 53.01 | 8.12 | 29.68 |
| LB036_zr9 | 6.1 | 9.9 | 6.11 | 9.89 | 1046.90 | 4.76 | 0.0517 | 21.29 | 0.0069 | 20.81 | 0.0010 | 4.74 | 0.00040 | 12.63 | 6.16 | 9.49 | 6.93 | 41.61 | 8.04 | 25.27 |

Appendix B: Eastern Sunda arc geochronology data - apatite

| Analysis ID | $^{238}\text{U}/^{206}\text{Pb}$ ratio | 1s% | $^{207}\text{Pb}/^{208}\text{Pb}$ ratio | 1s% | $^{207}\text{Pb}/^{235}\text{U}$ (calc) ratio | 1s% | $^{206}\text{Pb}/^{238}\text{U}$ ratio | 1s% | $^{208}\text{Pb}/^{232}\text{Th}$ ratio | 1s% | $^{206}\text{Pb}/^{238}\text{U}$ Age (Ma) | 2s% | $^{207}\text{Pb}/^{235}\text{U}$ (calc) Age (Ma) | 2s% | $^{208}\text{Pb}/^{232}\text{Th}$ Age (Ma) | 2s% |
|----------------|--|------|---|------|---|------|--|------|---|------|---|-------|--|-------|--|-------|
| LB014_322_ap1 | 29.69 | 1.55 | 0.7735 | 1.97 | 3.6939 | 1.70 | 0.0337 | 1.70 | 0.0091 | 2.14 | 213.54 | 3.40 | 1548.19 | 3.39 | 184.27 | 4.29 |
| LB014_322_ap10 | 23.14 | 2.39 | 0.8377 | 3.12 | 4.9955 | 2.52 | 0.0433 | 2.43 | 0.0166 | 3.28 | 273.14 | 4.87 | 1818.57 | 5.05 | 333.79 | 6.56 |
| LB014_322_ap11 | 21.25 | 2.28 | 0.7958 | 2.99 | 5.1606 | 2.33 | 0.0470 | 2.29 | 0.0199 | 3.07 | 296.35 | 4.58 | 1846.14 | 4.65 | 398.76 | 6.14 |
| LB014_322_ap12 | 25.63 | 1.74 | 0.8023 | 2.22 | 4.3306 | 1.80 | 0.0391 | 1.74 | 0.0111 | 2.26 | 247.27 | 3.48 | 1699.20 | 3.59 | 223.85 | 4.53 |
| LB014_322_ap13 | 32.20 | 2.29 | 0.8006 | 3.00 | 4.7297 | 2.42 | 0.0429 | 2.40 | 0.0101 | 3.28 | 270.90 | 4.80 | 1772.51 | 4.83 | 203.62 | 6.57 |
| LB014_322_ap14 | 33.12 | 2.49 | 0.7950 | 3.31 | 3.4109 | 2.56 | 0.0311 | 2.89 | 0.0081 | 3.39 | 197.38 | 5.79 | 1506.90 | 5.13 | 164.36 | 6.77 |
| LB014_322_ap15 | 37.83 | 2.81 | 0.7935 | 3.99 | 2.8621 | 3.32 | 0.0264 | 3.03 | 0.0100 | 3.58 | 167.80 | 6.06 | 1377.24 | 6.64 | 202.30 | 7.16 |
| LB014_322_ap16 | 29.08 | 1.73 | 0.8313 | 1.78 | 0.8313 | 1.73 | 0.0344 | 1.73 | 0.0125 | 2.18 | 217.93 | 3.47 | 1622.12 | 3.56 | 251.01 | 4.37 |
| LB014_322_ap17 | 28.11 | 1.70 | 0.8033 | 2.17 | 3.9462 | 1.70 | 0.0356 | 1.71 | 0.0083 | 2.28 | 225.30 | 3.41 | 1623.22 | 3.50 | 168.17 | 4.56 |
| LB014_322_ap18 | 28.02 | 1.73 | 0.8205 | 2.20 | 4.0409 | 1.78 | 0.0357 | 1.84 | 0.0089 | 2.19 | 226.23 | 3.68 | 1642.48 | 3.47 | 179.76 | 4.38 |
| LB014_322_ap19 | 28.08 | 3.96 | 0.8358 | 5.27 | 4.0596 | 3.82 | 0.0356 | 3.96 | 0.0092 | 5.23 | 225.76 | 7.92 | 1654.22 | 7.64 | 185.64 | 10.46 |
| LB014_322_ap2 | 31.95 | 1.71 | 0.8107 | 2.17 | 3.5059 | 1.74 | 0.0313 | 1.71 | 0.0095 | 2.16 | 198.72 | 3.41 | 1528.55 | 3.47 | 191.50 | 4.32 |
| LB014_322_ap20 | 34.35 | 1.75 | 0.8303 | 2.31 | 3.3423 | 1.83 | 0.0291 | 2.00 | 0.0086 | 2.15 | 184.66 | 4.00 | 1491.00 | 3.67 | 192.78 | 4.30 |
| LB014_322_ap21 | 13.59 | 1.74 | 0.8219 | 2.16 | 8.3419 | 1.72 | 0.0736 | 1.74 | 0.0138 | 2.17 | 457.58 | 3.48 | 2288.88 | 3.43 | 276.99 | 4.35 |
| LB014_322_ap22 | 15.74 | 2.32 | 0.8201 | 3.00 | 7.1763 | 2.37 | 0.0635 | 2.42 | 0.0218 | 3.09 | 386.97 | 4.84 | 2133.56 | 4.74 | 437.65 | 6.18 |
| LB014_322_ap24 | 24.84 | 1.65 | 0.8092 | 2.09 | 4.4967 | 1.75 | 0.0403 | 1.70 | 0.0154 | 2.18 | 254.47 | 3.41 | 1730.36 | 3.49 | 310.72 | 4.36 |
| LB014_322_ap25 | 36.96 | 1.67 | 0.8165 | 2.13 | 3.0810 | 1.86 | 0.0274 | 1.74 | 0.0079 | 2.17 | 174.08 | 3.47 | 1427.98 | 3.32 | 158.33 | 4.34 |
| LB014_322_ap26 | 26.96 | 2.32 | 0.7748 | 3.07 | 3.9767 | 2.37 | 0.0371 | 2.63 | 0.0114 | 2.81 | 234.59 | 5.27 | 1629.45 | 4.73 | 230.67 | 5.63 |
| LB014_322_ap27 | 14.81 | 1.62 | 0.8160 | 2.01 | 7.5851 | 1.61 | 0.0675 | 1.65 | 0.0357 | 2.06 | 420.86 | 3.30 | 2183.10 | 3.23 | 711.11 | 4.12 |
| LB014_322_ap28 | 26.99 | 1.63 | 0.7753 | 2.09 | 3.9678 | 1.66 | 0.0371 | 1.64 | 0.0170 | 2.12 | 334.73 | 3.27 | 1627.63 | 3.31 | 341.13 | 4.25 |
| LB014_322_ap29 | 17.25 | 1.49 | 0.8159 | 1.87 | 6.5164 | 1.59 | 0.0579 | 1.69 | 0.0234 | 2.01 | 363.09 | 3.37 | 2048.12 | 3.19 | 468.74 | 4.02 |
| LB014_322_ap3 | 18.09 | 2.16 | 0.8114 | 2.79 | 6.1584 | 2.20 | 0.0552 | 2.16 | 0.0199 | 2.73 | 346.54 | 4.32 | 1998.29 | 4.39 | 399.53 | 5.45 |
| LB014_322_ap30 | 42.23 | 2.52 | 0.8378 | 3.32 | 2.7320 | 3.25 | 0.0237 | 2.77 | 0.0058 | 3.36 | 150.85 | 5.53 | 1337.20 | 6.50 | 117.88 | 6.71 |
| LB014_322_ap31 | 15.97 | 2.01 | 0.8257 | 2.56 | 7.1753 | 2.08 | 0.0627 | 2.01 | 0.0199 | 2.63 | 391.75 | 4.01 | 2133.43 | 4.17 | 400.25 | 5.26 |
| LB014_322_ap32 | 22.83 | 2.79 | 0.8313 | 3.66 | 5.0012 | 2.94 | 0.0437 | 3.18 | 0.0123 | 3.55 | 275.65 | 6.35 | 1819.52 | 5.88 | 247.80 | 7.10 |
| LB014_322_ap33 | 29.73 | 1.72 | 0.7850 | 2.21 | 3.6470 | 1.73 | 0.0336 | 1.73 | 0.0083 | 2.18 | 213.12 | 3.45 | 1559.85 | 3.45 | 167.67 | 4.35 |
| LB014_322_ap34 | 16.11 | 2.21 | 0.8210 | 2.84 | 7.0021 | 2.63 | 0.0622 | 2.21 | 0.0186 | 2.74 | 389.09 | 4.42 | 2111.70 | 5.26 | 372.79 | 5.47 |
| LB014_322_ap36 | 28.04 | 2.96 | 0.7668 | 4.50 | 4.8649 | 2.52 | 0.0450 | 2.41 | 0.0103 | 3.12 | 283.88 | 4.81 | 1796.19 | 5.03 | 206.81 | 6.23 |
| LB014_322_ap37 | 28.94 | 2.76 | 0.7932 | 3.65 | 3.7811 | 2.93 | 0.0346 | 3.40 | 0.0179 | 4.55 | 225.69 | 6.80 | 1588.06 | 6.74 | 360.19 | 9.10 |
| LB014_322_ap39 | 29.11 | 3.63 | 0.7744 | 4.92 | 3.6745 | 4.51 | 0.0345 | 3.96 | 0.0087 | 4.58 | 219.44 | 5.48 | 1588.73 | 5.85 | 206.27 | 7.43 |
| LB014_322_ap4 | 28.96 | 1.60 | 0.7864 | 2.03 | 3.7463 | 1.61 | 0.0345 | 1.61 | 0.0104 | 2.12 | 218.83 | 3.23 | 1581.32 | 3.23 | 209.49 | 4.25 |
| LB014_322_ap40 | 32.00 | 2.38 | 0.8153 | 3.25 | 3.5080 | 2.38 | 0.0312 | 2.77 | 0.0122 | 3.26 | 198.14 | 5.53 | 1529.02 | 4.77 | 245.23 | 6.52 |
| LB014_322_ap5 | 20.05 | 1.71 | 0.8151 | 2.16 | 5.6010 | 1.70 | 0.0468 | 1.71 | 0.0220 | 2.37 | 313.48 | 3.43 | 1916.25 | 3.40 | 441.62 | 4.73 |
| LB014_322_ap6 | 23.68 | 1.79 | 0.8315 | 2.29 | 4.8550 | 1.79 | 0.0423 | 1.80 | 0.0158 | 2.59 | 266.90 | 3.60 | 1794.48 | 3.57 | 318.35 | 5.18 |
| LB014_322_ap7 | 21.20 | 2.20 | 0.8470 | 2.82 | 5.5015 | 2.19 | 0.0473 | 2.25 | 0.0163 | 2.94 | 297.62 | 4.51 | 1900.83 | 4.38 | 327.81 | 5.88 |
| LB014_322_ap8 | 5.09 | 2.87 | 0.9165 | 3.42 | 24.7482 | 2.75 | 0.1963 | 2.88 | 0.1088 | 3.95 | 1155.21 | 5.76 | 3298.33 | 5.50 | 2110.86 | 7.90 |
| LB014_322_ap9 | 12.23 | 2.45 | 0.8416 | 3.13 | 9.4937 | 2.63 | 0.0819 | 2.46 | 0.0114 | 3.38 | 507.53 | 4.92 | 2386.94 | 5.27 | 229.66 | 6.76 |
| LB025_323_ap1 | 7.86 | 3.20 | 0.8415 | 4.04 | 14.8181 | 3.22 | 0.1271 | 3.23 | 0.0851 | 4.12 | 771.08 | 6.46 | 2803.63 | 6.45 | 1655.30 | 8.23 |
| LB025_323_ap10 | 5.48 | 2.21 | 0.8552 | 2.72 | 21.5529 | 2.19 | 0.1827 | 2.21 | 0.1380 | 3.01 | 1081.53 | 4.42 | 3163.80 | 4.39 | 2621.06 | 6.02 |
| LB025_323_ap11 | 5.21 | 3.30 | 0.7760 | 4.13 | 20.3943 | 3.76 | 0.1910 | 3.32 | 0.1215 | 4.26 | 1127.00 | 6.63 | 3110.25 | 7.52 | 2324.88 | 8.51 |
| LB025_323_ap12 | 6.97 | 5.39 | 0.8507 | 6.78 | 16.8457 | 6.18 | 0.1438 | 5.38 | 0.0972 | 6.15 | 866.35 | 10.77 | 2926.09 | 12.36 | 1880.81 | 12.30 |
| LB025_323_ap13 | 2.52 | 2.98 | 0.7762 | 3.42 | 42.7654 | 3.00 | 0.3973 | 3.25 | 0.3973 | 3.25 | 2156.58 | 6.51 | 3836.97 | 6.00 | 2856.86 | 6.57 |
| LB025_323_ap14 | 2.34 | 2.80 | 0.8407 | 3.01 | 49.3154 | 2.51 | 0.4268 | 2.92 | 0.3203 | 3.74 | 2291.38 | 5.83 | 3978.59 | 5.02 | 5632.15 | 7.48 |
| LB025_323_ap15 | 8.63 | 4.43 | 0.8175 | 5.37 | 13.0619 | 4.35 | 0.1156 | 5.15 | 0.0683 | 6.22 | 704.96 | 10.30 | 2684.13 | 8.71 | 1338.57 | 12.44 |
| LB025_323_ap16 | 1.43 | 2.15 | 0.8439 | 2.10 | 81.4864 | 2.08 | 0.6987 | 2.22 | 0.6844 | 2.76 | 3415.64 | 4.45 | 4480.51 | 4.17 | 12408.73 | 5.52 |
| LB025_323_ap17 | 1.91 | 3.19 | 0.8113 | 2.88 | 58.6097 | 2.93 | 0.5242 | 3.10 | 0.2257 | 3.90 | 2716.77 | 6.20 | 4150.70 | 5.87 | 4125.43 | 7.80 |
| LB025_323_ap18 | 2.86 | 5.53 | 0.8370 | 6.26 | 40.0438 | 5.40 | 0.3444 | 5.74 | 0.5780 | 6.53 | 1908.01 | 11.48 | 3771.78 | 10.80 | 9245.96 | 13.06 |

Appendix B: Eastern Sunda arc geochronology data - apatite

| Analysis ID | ²³⁸ U/ ²⁰⁶ Pb ratio | 1s% | ²⁰⁷ Pb/ ²⁰⁸ Pb ratio | 1s% | ²⁰⁷ Pb/ ²³⁵ U (calc) ratio | 1s% | ²⁰⁶ Pb/ ²³⁸ U ratio | 1s% | ²⁰⁸ Pb/ ²³² Th ratio | 1s% | ²⁰⁶ Pb/ ²³⁸ U Age (Ma) | 2s% | ²⁰⁷ Pb/ ²³⁵ U (calc) Age (Ma) | 2s% | ²⁰⁸ Pb/ ²³² Th Age (Ma) | 2s% |
|----------------|---|------|--|------|--|------|---|------|--|------|--|-------|---|-------|---|-------|
| LB025_323_ap2 | 2.66 | 2.48 | 0.8253 | 2.77 | 42.7852 | 2.50 | 0.3762 | 2.55 | 0.2362 | 3.10 | 20388.45 | 5.10 | 3837.43 | 5.01 | 4286.24 | 6.21 |
| LB025_323_ap3 | 5.81 | 4.49 | 0.8489 | 5.57 | 20.1535 | 4.58 | 0.1722 | 4.58 | 0.1214 | 5.81 | 1024.21 | 8.99 | 3098.75 | 9.17 | 2322.60 | 11.62 |
| LB025_323_ap4 | 6.15 | 3.57 | 0.8194 | 4.47 | 18.3645 | 3.77 | 0.1628 | 3.49 | 0.1088 | 4.30 | 972.05 | 7.16 | 3009.03 | 7.53 | 2092.66 | 8.60 |
| LB025_323_ap5 | 6.15 | 3.92 | 0.7980 | 4.98 | 17.7193 | 3.91 | 0.1630 | 3.94 | 0.1006 | 5.07 | 973.20 | 7.89 | 2974.62 | 7.83 | 1943.54 | 10.14 |
| LB025_323_ap6 | 4.02 | 2.20 | 0.8087 | 2.58 | 27.8487 | 2.17 | 0.2491 | 2.19 | 0.1566 | 2.67 | 3413.78 | 4.33 | 3043.78 | 4.33 | 2948.59 | 5.35 |
| LB025_323_ap7 | 6.22 | 2.22 | 0.8649 | 2.70 | 19.1755 | 2.30 | 0.1607 | 2.23 | 0.1181 | 2.67 | 960.70 | 4.47 | 3050.69 | 4.59 | 2263.32 | 5.34 |
| LB025_323_ap8 | 13.97 | 6.06 | 0.8498 | 6.73 | 8.4047 | 4.90 | 0.0716 | 5.14 | 0.0503 | 6.22 | 445.74 | 10.27 | 2275.68 | 9.81 | 994.97 | 12.45 |
| LB025_323_ap9 | 4.09 | 2.55 | 0.7592 | 3.14 | 25.7349 | 2.57 | 0.2453 | 2.66 | 0.1541 | 2.96 | 1414.10 | 5.32 | 3336.52 | 5.14 | 2905.18 | 5.93 |
| LB027_324_ap1 | 0.76 | 4.41 | 0.8374 | 1.85 | 15.18271 | 4.34 | 1.3154 | 4.13 | 2.4412 | 4.40 | 5412.27 | 8.26 | 5106.67 | 8.68 | 25050.03 | 8.80 |
| LB027_324_ap10 | 0.28 | 2.90 | 0.8402 | 1.53 | 413.9674 | 3.05 | 3.5689 | 2.88 | 1.5920 | 3.34 | 9793.81 | 5.76 | 6120.93 | 6.10 | 19305.78 | 6.68 |
| LB027_324_ap11 | 0.57 | 3.01 | 0.8379 | 2.26 | 200.1977 | 2.98 | 1.7371 | 2.95 | 1.7924 | 3.00 | 6490.95 | 5.91 | 5385.89 | 5.95 | 20815.12 | 7.00 |
| LB027_324_ap12 | 1.18 | 6.11 | 0.7812 | 4.32 | 91.4012 | 4.41 | 0.8506 | 4.98 | 0.7784 | 5.16 | 3987.73 | 9.96 | 4595.77 | 8.83 | 11689.18 | 10.32 |
| LB027_324_ap13 | 0.36 | 5.22 | 0.8665 | 3.53 | 326.5587 | 6.19 | 2.7464 | 5.27 | 4.0441 | 7.93 | 8514.32 | 10.53 | 5880.76 | 12.38 | 32801.02 | 15.86 |
| LB027_324_ap2 | 0.21 | 2.65 | 0.8403 | 1.42 | 556.8825 | 2.66 | 4.8193 | 2.65 | 4.6658 | 3.00 | 11353.31 | 5.31 | 6421.43 | 5.32 | 35156.92 | 6.01 |
| LB027_324_ap3 | 1.34 | 3.70 | 0.8535 | 3.72 | 88.2252 | 3.84 | 0.7448 | 3.71 | 1.1775 | 5.04 | 3588.31 | 7.43 | 4550.25 | 7.67 | 15773.88 | 10.07 |
| LB027_324_ap4 | 0.23 | 1.51 | 0.8343 | 0.74 | 498.6720 | 1.46 | 4.3471 | 1.42 | 8.1982 | 2.05 | 10807.70 | 2.84 | 6309.54 | 2.92 | 44981.18 | 4.09 |
| LB027_324_ap5 | 0.56 | 1.69 | 0.8387 | 1.27 | 204.7118 | 1.71 | 1.7760 | 1.70 | 1.7479 | 2.10 | 6581.82 | 3.39 | 5408.41 | 3.42 | 20469.72 | 4.20 |
| LB027_324_ap6 | 1.07 | 4.28 | 0.7774 | 5.28 | 100.4163 | 4.08 | 0.9988 | 4.96 | 1.9379 | 6.09 | 4287.82 | 9.13 | 4890.29 | 8.17 | 21844.57 | 12.17 |
| LB027_324_ap7 | 0.88 | 3.49 | 0.8245 | 2.51 | 129.7228 | 3.25 | 1.1331 | 3.55 | 1.3056 | 4.40 | 4883.51 | 7.10 | 4948.04 | 6.50 | 16932.56 | 8.80 |
| LB027_324_ap8 | 0.27 | 4.07 | 0.8144 | 2.41 | 415.7562 | 4.74 | 3.7003 | 4.42 | 2.8287 | 6.53 | 9976.61 | 8.83 | 6125.30 | 9.48 | 27202.21 | 13.06 |
| LB031_325_ap9 | 0.53 | 2.30 | 0.8452 | 1.70 | 219.7567 | 2.52 | 1.8682 | 2.31 | 1.7901 | 3.06 | 6837.20 | 4.61 | 5480.09 | 5.04 | 20798.39 | 6.13 |
| LB031_325_ap10 | 7.11 | 2.15 | 0.8284 | 2.66 | 16.0807 | 2.11 | 0.1407 | 2.16 | 0.1432 | 3.08 | 848.41 | 4.32 | 2881.61 | 4.22 | 2712.17 | 6.17 |
| LB031_325_ap11 | 3.54 | 2.96 | 0.8300 | 3.44 | 32.3766 | 3.18 | 0.2836 | 3.04 | 0.2486 | 3.98 | 1609.37 | 6.08 | 3561.82 | 6.36 | 4800.18 | 7.95 |
| LB031_325_ap12 | 6.04 | 3.48 | 0.7797 | 4.40 | 17.8600 | 3.69 | 0.1656 | 3.48 | 0.1314 | 4.12 | 988.08 | 6.96 | 2982.23 | 7.37 | 2502.14 | 8.23 |
| LB031_325_ap13 | 6.26 | 4.87 | 0.7937 | 6.23 | 17.4282 | 4.77 | 0.1600 | 4.98 | 0.1404 | 6.14 | 986.62 | 9.95 | 2958.71 | 9.54 | 2862.64 | 12.29 |
| LB031_325_ap14 | 6.73 | 3.65 | 0.8323 | 4.65 | 16.9313 | 3.54 | 0.1478 | 3.65 | 0.1325 | 5.20 | 888.60 | 7.30 | 2930.95 | 7.09 | 2521.64 | 10.41 |
| LB031_325_ap15 | 7.87 | 3.60 | 0.8386 | 4.55 | 14.8921 | 3.50 | 0.1272 | 3.62 | 0.1091 | 4.51 | 772.11 | 7.23 | 2795.51 | 6.99 | 2098.17 | 9.03 |
| LB031_325_ap16 | 3.55 | 3.81 | 0.7384 | 4.62 | 28.8399 | 4.07 | 0.2825 | 4.07 | 0.2046 | 4.81 | 1603.71 | 8.14 | 3448.09 | 8.13 | 3773.59 | 9.62 |
| LB031_325_ap17 | 3.84 | 3.66 | 0.8041 | 4.41 | 28.8422 | 3.87 | 0.2605 | 3.84 | 0.1953 | 4.48 | 1492.30 | 7.67 | 3448.16 | 7.74 | 3616.12 | 8.97 |
| LB031_325_ap2 | 5.16 | 3.28 | 0.7440 | 4.13 | 19.9236 | 3.31 | 0.1939 | 3.30 | 0.1481 | 3.91 | 1142.21 | 6.60 | 3087.65 | 6.62 | 2817.44 | 7.83 |
| LB031_325_ap3 | 6.40 | 3.40 | 0.7974 | 4.28 | 17.1328 | 3.76 | 0.1559 | 3.41 | 0.1288 | 4.59 | 933.87 | 6.81 | 2942.30 | 7.52 | 2455.74 | 9.18 |
| LB031_325_ap4 | 3.81 | 4.84 | 0.7327 | 6.43 | 26.5457 | 5.08 | 0.2827 | 4.81 | 0.1947 | 5.92 | 1503.62 | 9.62 | 3366.86 | 10.16 | 3695.38 | 11.83 |
| LB031_325_ap5 | 6.26 | 4.18 | 0.8469 | 5.30 | 18.6703 | 4.67 | 0.1608 | 4.39 | 0.1826 | 5.60 | 961.38 | 8.78 | 3024.94 | 9.35 | 3399.02 | 11.20 |
| LB031_325_ap6 | 4.85 | 4.74 | 0.7578 | 6.01 | 21.3105 | 4.90 | 0.2045 | 4.78 | 0.1497 | 5.99 | 1199.24 | 9.56 | 3152.82 | 9.80 | 2826.86 | 11.99 |
| LB031_325_ap7 | 6.94 | 2.48 | 0.7518 | 3.16 | 14.9818 | 2.51 | 0.1441 | 2.85 | 0.1168 | 3.42 | 867.97 | 5.31 | 2814.09 | 5.02 | 2238.30 | 6.84 |
| LB031_325_ap8 | 0.84 | 2.43 | 0.8479 | 1.52 | 139.3708 | 2.34 | 1.1888 | 2.30 | 1.1772 | 2.74 | 5049.84 | 4.60 | 5020.35 | 4.67 | 15770.56 | 5.47 |
| LB031_325_ap9 | 5.69 | 4.19 | 0.6496 | 5.59 | 15.7121 | 5.12 | 0.1755 | 4.23 | 0.1324 | 5.49 | 1042.55 | 8.45 | 2859.45 | 10.23 | 2520.35 | 10.98 |
| LB034_328_ap1 | 14.26 | 1.91 | 0.8760 | 2.38 | 8.4541 | 1.83 | 0.0700 | 1.91 | 0.0165 | 2.32 | 436.12 | 3.82 | 2281.00 | 3.67 | 331.19 | 4.65 |
| LB034_328_ap10 | 6.76 | 2.52 | 0.8352 | 3.06 | 17.0983 | 2.41 | 0.1472 | 2.53 | 0.0253 | 3.71 | 884.98 | 5.05 | 2940.36 | 4.82 | 506.97 | 7.42 |
| LB034_328_ap11 | 9.65 | 3.18 | 0.7722 | 4.15 | 11.0202 | 3.18 | 0.1035 | 3.12 | 0.0403 | 4.25 | 634.93 | 6.24 | 2524.84 | 6.35 | 800.12 | 8.49 |
| LB034_328_ap12 | 19.17 | 1.58 | 0.8144 | 1.96 | 5.8853 | 1.81 | 0.0523 | 1.73 | 0.0191 | 2.29 | 328.43 | 3.47 | 1958.78 | 3.61 | 383.38 | 4.58 |
| LB034_328_ap14 | 18.67 | 1.66 | 0.7856 | 2.10 | 5.8095 | 1.73 | 0.0535 | 1.73 | 0.0181 | 2.31 | 336.20 | 3.46 | 1947.82 | 3.66 | 362.67 | 4.63 |
| LB034_328_ap15 | 13.87 | 1.75 | 0.7970 | 2.20 | 7.9373 | 2.07 | 0.0722 | 1.99 | 0.0169 | 2.48 | 449.27 | 3.98 | 2223.92 | 4.13 | 339.44 | 4.97 |
| LB034_328_ap16 | 16.43 | 1.96 | 0.7851 | 2.54 | 6.5671 | 1.97 | 0.0609 | 1.97 | 0.0203 | 2.45 | 381.02 | 3.95 | 2054.95 | 3.94 | 407.42 | 4.89 |
| LB034_328_ap17 | 22.71 | 4.06 | 0.7913 | 3.81 | 4.7765 | 4.09 | 0.0437 | 3.96 | 0.0175 | 3.48 | 275.75 | 7.93 | 1780.77 | 8.19 | 351.95 | 6.95 |
| LB034_328_ap18 | 7.47 | 2.21 | 0.8679 | 2.40 | 15.9461 | 2.29 | 0.1346 | 2.20 | 0.0242 | 2.76 | 813.90 | 4.41 | 2873.57 | 4.58 | 484.28 | 5.53 |
| LB034_328_ap19 | 29.28 | 2.60 | 0.8065 | 3.44 | 3.7891 | 2.54 | 0.0342 | 2.88 | 0.0104 | 3.12 | 216.79 | 5.76 | 1590.43 | 5.07 | 210.57 | 6.24 |
| LB034_328_ap2 | 16.07 | 1.80 | 0.8191 | 2.30 | 7.0297 | 2.12 | 0.0622 | 1.81 | 0.0208 | 2.39 | 388.99 | 3.63 | 2115.19 | 4.25 | 417.76 | 4.77 |
| LB034_328_ap20 | 20.76 | 1.85 | 0.7953 | 2.44 | 5.3080 | 1.87 | 0.0483 | 1.95 | 0.0149 | 2.31 | 303.92 | 3.89 | 1870.16 | 3.75 | 300.62 | 4.61 |

Appendix B: Eastern Sunda arc geochronology data - apatite

| Analysis ID | ²³⁸ U/ ²⁰⁶ Pb ratio | 1s% | ²⁰⁷ Pb/ ²⁰⁸ Pb ratio | 1s% | ²⁰⁷ Pb/ ²³⁵ U (calc) ratio | 1s% | ²⁰⁶ Pb/ ²³⁸ U ratio | 1s% | ²⁰⁸ Pb/ ²³² Th ratio | 1s% | ²⁰⁶ Pb/ ²³⁸ U Age (Ma) | 2s% | ²⁰⁷ Pb/ ²³⁵ U (calc) Age (Ma) | 2s% | ²⁰⁸ Pb/ ²³² Th Age (Ma) | 2s% |
|----------------|---|------|--|-------|--|------|---|------|--|-------|--|-------|---|-------|---|-------|
| LB034_328_ap21 | 13.92 | 2.63 | 0.8328 | 3.40 | 8.1988 | 2.52 | 0.0717 | 2.61 | 0.0221 | 3.10 | 446.35 | 5.22 | 2252.99 | 5.03 | 442.94 | 6.21 |
| LB034_328_ap22 | 17.66 | 2.47 | 0.8303 | 3.06 | 6.4232 | 2.47 | 0.0965 | 1.86 | 0.0168 | 2.92 | 354.08 | 5.78 | 2035.44 | 4.95 | 337.95 | 5.84 |
| LB034_328_ap23 | 20.05 | 1.63 | 0.8068 | 2.04 | 5.5509 | 1.83 | 0.0498 | 1.66 | 0.0124 | 2.27 | 313.57 | 3.32 | 1908.51 | 3.67 | 249.61 | 4.53 |
| LB034_328_ap24 | 24.10 | 1.45 | 0.8128 | 1.77 | 4.6742 | 1.49 | 0.0417 | 1.75 | 0.0157 | 2.11 | 263.16 | 3.51 | 1762.64 | 2.99 | 316.63 | 4.22 |
| LB034_328_ap25 | 25.71 | 2.24 | 0.7792 | 3.23 | 4.1934 | 2.25 | 0.0389 | 2.31 | 0.0287 | 2.87 | 245.81 | 4.63 | 1672.73 | 4.50 | 253.36 | 5.14 |
| LB034_328_ap26 | 14.99 | 1.94 | 0.8408 | 2.46 | 7.7624 | 1.90 | 0.0667 | 1.95 | 0.0189 | 2.57 | 416.18 | 3.90 | 2203.86 | 3.79 | 379.40 | 5.73 |
| LB034_328_ap3 | 16.07 | 1.41 | 0.8068 | 1.72 | 6.9234 | 1.55 | 0.0622 | 1.49 | 0.0236 | 1.83 | 388.95 | 2.97 | 2101.66 | 3.10 | 472.81 | 3.65 |
| LB034_328_ap4 | 11.57 | 2.00 | 0.8150 | 2.48 | 9.7925 | 2.28 | 0.0866 | 2.30 | 0.0169 | 2.86 | 535.14 | 4.60 | 2415.44 | 4.55 | 338.99 | 5.73 |
| LB034_328_ap5 | 32.74 | 3.12 | 0.7849 | 4.50 | 3.3067 | 3.28 | 0.0307 | 3.31 | 0.0095 | 4.67 | 194.65 | 6.63 | 1482.63 | 6.56 | 182.02 | 9.35 |
| LB034_328_ap6 | 13.36 | 3.66 | 0.7816 | 4.97 | 7.9132 | 4.01 | 0.0749 | 3.68 | 0.0199 | 4.83 | 485.62 | 7.37 | 2221.19 | 8.02 | 398.43 | 9.67 |
| LB034_328_ap7 | 8.70 | 2.19 | 0.7833 | 2.77 | 12.3721 | 2.32 | 0.1150 | 2.19 | 0.0381 | 2.63 | 701.49 | 4.38 | 2633.06 | 4.63 | 757.81 | 5.26 |
| LB034_328_ap8 | 11.59 | 2.99 | 0.7921 | 3.69 | 9.3954 | 3.82 | 0.0868 | 3.60 | 0.0179 | 4.02 | 530.52 | 7.21 | 2377.38 | 7.65 | 359.49 | 8.04 |
| LB037_329_ap9 | 27.59 | 2.36 | 0.7535 | 3.20 | 3.7368 | 2.41 | 0.0296 | 3.25 | 0.0073 | 3.71 | 187.99 | 6.50 | 1465.73 | 6.80 | 147.63 | 7.43 |
| LB037_329_ap10 | 16.80 | 2.10 | 0.8250 | 2.68 | 6.7902 | 2.04 | 0.0595 | 2.10 | 0.0183 | 2.59 | 372.68 | 4.20 | 2084.45 | 4.08 | 368.30 | 5.18 |
| LB037_329_ap11 | 21.68 | 3.42 | 0.7842 | 4.98 | 4.9921 | 3.95 | 0.0463 | 3.84 | 0.0068 | 4.37 | 291.51 | 7.68 | 1817.98 | 7.90 | 137.96 | 8.74 |
| LB037_329_ap12 | 12.15 | 1.70 | 0.8225 | 2.11 | 9.3415 | 1.87 | 0.0822 | 1.86 | 0.0256 | 2.18 | 509.26 | 3.72 | 2372.11 | 3.74 | 512.57 | 4.35 |
| LB037_329_ap13 | 17.58 | 1.90 | 0.8049 | 2.73 | 6.3136 | 2.06 | 0.0367 | 2.17 | 0.0149 | 2.57 | 355.76 | 4.34 | 2020.34 | 4.13 | 300.27 | 5.14 |
| LB037_329_ap14 | 8.90 | 1.74 | 0.8289 | 2.15 | 12.8834 | 1.80 | 0.1124 | 1.74 | 0.0334 | 2.18 | 686.76 | 3.49 | 2671.17 | 3.60 | 665.60 | 4.36 |
| LB037_329_ap15 | 19.46 | 4.12 | 0.8506 | 5.61 | 6.0511 | 4.10 | 0.0514 | 4.41 | 0.0060 | 4.86 | 323.20 | 8.83 | 1983.23 | 8.20 | 121.03 | 9.72 |
| LB037_329_ap16 | 26.97 | 6.42 | 0.8491 | 8.63 | 4.3062 | 6.08 | 0.0374 | 7.40 | 0.0054 | 7.98 | 236.80 | 14.80 | 1694.56 | 12.15 | 108.75 | 15.97 |
| LB037_329_ap17 | 1.85 | 5.53 | 0.7865 | 5.99 | 58.3593 | 6.02 | 0.5379 | 5.51 | 0.0240 | 5.79 | 2774.71 | 11.02 | 4146.43 | 12.04 | 480.36 | 11.58 |
| LB037_329_ap18 | 14.76 | 3.59 | 0.7498 | 5.60 | 7.0412 | 4.02 | 0.0680 | 3.85 | 0.0040 | 4.23 | 424.06 | 7.71 | 2116.64 | 8.05 | 81.84 | 8.47 |
| LB037_329_ap19 | 16.06 | 7.58 | 0.7379 | 10.11 | 6.3943 | 7.45 | 0.0622 | 7.41 | 0.0115 | 11.07 | 389.26 | 14.83 | 2031.49 | 14.90 | 231.61 | 22.14 |
| LB037_329_ap2 | 12.33 | 2.86 | 0.8487 | 3.74 | 8.6578 | 3.00 | 0.0796 | 3.25 | 0.0067 | 3.47 | 483.56 | 6.50 | 2302.65 | 6.00 | 136.12 | 6.95 |
| LB037_329_ap20 | 12.53 | 2.88 | 0.8338 | 4.06 | 9.5106 | 2.77 | 0.0811 | 3.37 | 0.0083 | 3.33 | 502.45 | 6.74 | 2388.57 | 5.54 | 167.62 | 6.66 |
| LB037_329_ap21 | 13.06 | 4.02 | 0.8338 | 2.29 | 8.8371 | 3.93 | 0.0765 | 3.93 | 0.0250 | 3.95 | 475.27 | 7.87 | 2321.33 | 7.86 | 500.89 | 7.91 |
| LB037_329_ap22 | 13.79 | 1.94 | 0.7734 | 2.49 | 7.7470 | 2.17 | 0.0725 | 1.95 | 0.0167 | 2.52 | 451.41 | 3.89 | 2202.08 | 4.34 | 334.72 | 5.05 |
| LB037_329_ap23 | 9.03 | 8.52 | 0.6856 | 10.32 | 10.4893 | 7.94 | 0.1112 | 7.61 | 0.0051 | 10.15 | 679.86 | 15.21 | 2478.97 | 15.89 | 103.20 | 20.30 |
| LB037_329_ap24 | 28.80 | 3.26 | 0.8520 | 4.30 | 4.0857 | 3.23 | 0.0347 | 3.26 | 0.0050 | 3.78 | 219.64 | 6.52 | 1651.45 | 6.46 | 101.15 | 7.57 |
| LB037_329_ap25 | 15.71 | 3.87 | 0.7872 | 5.12 | 6.9279 | 4.05 | 0.0635 | 3.88 | 0.0057 | 4.61 | 386.81 | 7.75 | 2102.23 | 8.11 | 114.89 | 9.23 |
| LB037_329_ap26 | 52.57 | 3.42 | 0.8121 | 4.69 | 2.1376 | 3.59 | 0.0190 | 3.46 | 0.0058 | 4.56 | 121.52 | 6.92 | 1161.05 | 7.18 | 118.02 | 9.12 |
| LB037_329_ap27 | 15.42 | 4.31 | 0.7338 | 5.90 | 6.5784 | 4.39 | 0.0651 | 4.34 | 0.0092 | 6.53 | 406.32 | 8.69 | 2056.46 | 8.78 | 185.34 | 13.05 |
| LB037_329_ap28 | 13.12 | 3.12 | 0.8302 | 4.08 | 8.7864 | 3.41 | 0.0763 | 3.60 | 0.0088 | 3.92 | 474.11 | 7.21 | 2316.08 | 6.83 | 177.98 | 7.85 |
| LB037_329_ap29 | 31.20 | 2.10 | 0.8231 | 2.74 | 3.6319 | 2.25 | 0.0319 | 2.18 | 0.0109 | 2.83 | 202.68 | 4.36 | 1556.56 | 4.50 | 220.36 | 5.65 |
| LB037_329_ap30 | 18.00 | 2.55 | 0.7550 | 3.39 | 5.7819 | 2.72 | 0.0554 | 2.88 | 0.0086 | 3.30 | 347.73 | 5.76 | 1943.71 | 5.43 | 174.06 | 6.60 |
| LB037_329_ap31 | 16.43 | 2.81 | 0.7809 | 3.73 | 6.5512 | 2.79 | 0.0608 | 3.00 | 0.0066 | 3.73 | 380.49 | 6.00 | 2052.81 | 5.58 | 132.55 | 7.47 |
| LB037_329_ap32 | 5.31 | 3.90 | 0.7513 | 4.99 | 19.4249 | 3.94 | 0.1878 | 3.98 | 0.0133 | 4.64 | 1109.56 | 7.96 | 3063.16 | 7.88 | 268.10 | 9.29 |
| LB037_329_ap33 | 38.14 | 2.73 | 0.8102 | 3.66 | 2.9289 | 2.67 | 0.0262 | 2.75 | 0.0072 | 3.36 | 166.65 | 5.49 | 1389.66 | 5.35 | 146.28 | 6.72 |
| LB037_329_ap34 | 23.91 | 3.53 | 0.7879 | 4.79 | 4.5201 | 3.49 | 0.0416 | 4.00 | 0.0054 | 4.12 | 262.95 | 8.01 | 1734.68 | 6.99 | 110.07 | 8.24 |
| LB037_329_ap35 | 18.72 | 4.29 | 0.7690 | 5.77 | 5.7789 | 4.21 | 0.0533 | 4.29 | 0.0026 | 4.86 | 334.44 | 8.59 | 1943.26 | 8.41 | 52.94 | 9.72 |
| LB037_329_ap36 | 16.71 | 3.87 | 0.8425 | 5.09 | 6.9051 | 3.88 | 0.0955 | 3.88 | 0.0287 | 4.50 | 372.75 | 7.76 | 2099.31 | 7.77 | 573.56 | 9.01 |
| LB037_329_ap37 | 12.05 | 4.95 | 0.7894 | 6.47 | 9.0386 | 4.77 | 0.0837 | 4.87 | 0.0050 | 5.77 | 518.17 | 9.74 | 2341.92 | 9.55 | 101.30 | 11.54 |
| LB037_329_ap38 | 36.42 | 2.89 | 0.8197 | 3.84 | 3.1122 | 3.09 | 0.0275 | 3.11 | 0.0052 | 3.47 | 174.77 | 6.21 | 1435.71 | 6.17 | 105.23 | 6.95 |
| LB037_329_ap39 | 12.70 | 3.90 | 0.8183 | 5.08 | 8.9198 | 3.75 | 0.0788 | 3.88 | 0.0074 | 4.48 | 488.84 | 7.76 | 2329.83 | 7.49 | 150.32 | 8.96 |
| LB037_329_ap40 | 18.25 | 5.72 | 0.9388 | 6.71 | 7.2014 | 5.33 | 0.0551 | 5.88 | 0.0073 | 5.91 | 345.66 | 11.77 | 2136.67 | 10.65 | 146.79 | 11.82 |
| LB037_329_ap5 | 14.13 | 2.94 | 0.8085 | 4.32 | 7.8747 | 3.46 | 0.0707 | 3.10 | 0.0237 | 3.95 | 440.20 | 6.19 | 2216.79 | 6.93 | 475.09 | 7.90 |
| LB037_329_ap6 | 18.72 | 3.23 | 0.8559 | 4.23 | 6.3261 | 3.07 | 0.0534 | 3.24 | 0.0058 | 3.74 | 335.62 | 6.49 | 2022.08 | 6.15 | 116.59 | 7.48 |
| LB037_329_ap7 | 15.81 | 5.79 | 0.8327 | 7.49 | 7.2252 | 5.45 | 0.0631 | 5.66 | 0.0114 | 6.42 | 384.67 | 11.32 | 2139.62 | 10.90 | 228.86 | 12.84 |

Appendix B: Eastern Sunda arc geochronology data - apatite

| Analysis ID | 238U/206Pb ratio | 1s% | 207Pb/206Pb ratio | 1s% | 207Pb/235U (calc)/ratio | 1s% | 206Pb/238U ratio | 1s% | 208Pb/232Th ratio | 1s% | 206Pb/238U Age (Ma) | 2s% | 207Pb/235U (calc) Age (Ma) | 2s% | 208Pb/232Th Age (Ma) | 2s% |
|-------------|------------------|-------|-------------------|------|-------------------------|-------|------------------|-------|-------------------|-------|---------------------|-------|----------------------------|-------|----------------------|-------|
| LB037_ap8 | 7.85 | 6.51 | 0.7839 | 8.68 | 13.8950 | 7.40 | 0.1287 | 6.65 | 0.0119 | 7.37 | 780.27 | 13.30 | 2742.58 | 14.80 | 239.77 | 14.74 |
| LB037_ap9 | 94.86 | 5.20 | 0.7643 | 6.39 | 1.1055 | 8.38 | 0.0105 | 5.13 | 0.0035 | 6.22 | 67.50 | 10.26 | 756.00 | 16.76 | 69.93 | 12.44 |
| LB042_ap1 | 5.29 | 1.80 | 0.8422 | 2.24 | 22.0030 | 1.92 | 0.1893 | 1.89 | 0.1445 | 2.53 | 1117.81 | 3.79 | 3183.86 | 3.83 | 2735.04 | 5.06 |
| LB042_ap10 | 6.40 | 2.67 | 0.8355 | 3.28 | 17.9794 | 2.64 | 0.1555 | 2.69 | 0.0934 | 3.68 | 931.85 | 5.37 | 2988.63 | 5.28 | 1810.11 | 7.37 |
| LB042_ap12 | 10.20 | 2.88 | 0.7719 | 3.70 | 10.4813 | 3.51 | 0.0981 | 2.88 | 0.0476 | 4.45 | 603.41 | 5.75 | 2478.27 | 7.03 | 943.17 | 8.90 |
| LB042_ap13 | 4.62 | 1.60 | 0.8166 | 1.89 | 24.3740 | 1.60 | 0.2164 | 1.61 | 0.0817 | 1.94 | 1262.76 | 3.21 | 3283.47 | 3.20 | 1592.26 | 3.87 |
| LB042_ap14 | 4.98 | 1.61 | 0.8492 | 1.86 | 23.5142 | 1.59 | 0.2009 | 1.62 | 0.1053 | 1.94 | 1179.92 | 3.23 | 3248.47 | 3.19 | 2030.20 | 3.88 |
| LB042_ap15 | 5.44 | 2.66 | 0.8215 | 3.27 | 20.8364 | 2.67 | 0.1846 | 2.66 | 0.0891 | 3.39 | 1091.95 | 5.32 | 3131.01 | 5.33 | 1730.05 | 6.74 |
| LB042_ap16 | 2.91 | 2.82 | 0.8242 | 3.23 | 39.0698 | 2.81 | 0.3441 | 2.82 | 0.2071 | 3.70 | 1906.43 | 5.65 | 3747.40 | 5.62 | 3844.71 | 7.40 |
| LB042_ap17 | 6.84 | 2.85 | 0.8289 | 3.55 | 17.1467 | 2.82 | 0.1502 | 3.16 | 0.1281 | 3.62 | 902.05 | 6.31 | 2943.08 | 5.63 | 2443.72 | 7.24 |
| LB042_ap18 | 3.60 | 2.47 | 0.8298 | 2.91 | 31.7666 | 2.48 | 0.2777 | 2.48 | 0.1446 | 3.14 | 1579.54 | 4.95 | 3543.09 | 4.95 | 2738.19 | 6.28 |
| LB042_ap19 | 5.32 | 5.00 | 0.7751 | 7.72 | 19.9509 | 5.49 | 0.1868 | 5.78 | 0.1378 | 6.22 | 1104.17 | 11.56 | 3088.98 | 10.98 | 2616.48 | 12.44 |
| LB042_ap2 | 6.18 | 3.71 | 0.8183 | 4.68 | 18.1557 | 3.68 | 0.1609 | 3.72 | 0.1221 | 4.60 | 961.57 | 7.44 | 2998.02 | 7.36 | 2335.29 | 9.21 |
| LB042_ap20 | 3.65 | 2.49 | 0.8528 | 2.90 | 32.2054 | 2.61 | 0.2742 | 2.58 | 0.1695 | 3.56 | 1561.86 | 5.16 | 3556.59 | 5.22 | 3173.09 | 7.12 |
| LB042_ap21 | 2.12 | 2.82 | 0.8432 | 3.03 | 55.0326 | 2.87 | 0.4733 | 2.82 | 0.3517 | 3.79 | 2499.22 | 5.65 | 4087.87 | 5.73 | 6108.67 | 7.58 |
| LB042_ap22 | 3.13 | 1.80 | 0.8102 | 2.03 | 35.7016 | 1.80 | 0.3194 | 1.81 | 0.2005 | 2.16 | 1786.59 | 3.63 | 3658.24 | 3.60 | 3704.47 | 4.32 |
| LB042_ap23 | 2.88 | 1.99 | 0.8111 | 2.24 | 38.7392 | 2.01 | 0.3471 | 2.02 | 0.2056 | 2.35 | 1920.82 | 4.05 | 3738.98 | 4.02 | 3790.56 | 4.70 |
| LB042_ap4 | 3.86 | 1.71 | 0.8449 | 1.95 | 30.2734 | 1.70 | 0.2597 | 1.71 | 0.1956 | 2.26 | 1488.26 | 3.43 | 3495.73 | 3.39 | 3000.32 | 4.53 |
| LB042_ap5 | 4.18 | 1.91 | 0.8141 | 2.23 | 26.8676 | 1.96 | 0.2395 | 1.91 | 0.1178 | 2.27 | 1384.13 | 3.83 | 3379.38 | 3.91 | 2256.45 | 4.54 |
| LB042_ap6 | 6.15 | 4.12 | 0.8311 | 5.15 | 18.6465 | 4.00 | 0.1627 | 4.12 | 0.0994 | 4.86 | 971.83 | 8.24 | 3023.71 | 8.01 | 1920.96 | 9.73 |
| LB042_ap8 | 3.24 | 2.23 | 0.8277 | 2.38 | 50.8977 | 2.25 | 0.4464 | 2.32 | 0.1919 | 2.76 | 2379.19 | 4.65 | 4010.03 | 4.49 | 3558.56 | 5.51 |
| LB042_ap9 | 2.04 | 2.75 | 0.8141 | 3.14 | 36.9144 | 2.75 | 0.3294 | 2.75 | 0.2007 | 3.70 | 1835.33 | 5.50 | 3691.25 | 5.51 | 3708.25 | 7.40 |
| ELF-03_ap1 | 3.07 | 3.18 | 0.7693 | 3.67 | 34.5927 | 3.42 | 0.3252 | 3.40 | 0.1550 | 3.83 | 1814.92 | 6.81 | 3627.09 | 6.84 | 2885.26 | 7.66 |
| ELF-03_ap10 | 5.10 | 7.69 | 0.8176 | 2.52 | 22.0336 | 7.96 | 0.2006 | 8.24 | 0.0435 | 9.46 | 1178.37 | 16.48 | 3185.21 | 15.91 | 863.30 | 18.92 |
| ELF-03_ap11 | 0.12 | 5.03 | 0.8356 | 1.60 | 987.2680 | 5.61 | 8.6415 | 5.36 | 1.0279 | 5.38 | 14608.00 | 10.72 | 7002.06 | 11.22 | 14330.58 | 10.76 |
| ELF-03_ap12 | 5.39 | 6.23 | 0.8307 | 3.27 | 21.5784 | 5.41 | 0.1903 | 7.23 | 0.0255 | 7.83 | 1122.95 | 14.47 | 3164.94 | 10.81 | 509.99 | 15.86 |
| ELF-03_ap13 | 1.97 | 5.71 | 0.8646 | 5.93 | 60.3263 | 5.17 | 0.5073 | 5.89 | 0.1156 | 5.08 | 2644.98 | 11.78 | 4179.53 | 10.34 | 2217.35 | 10.17 |
| ELF-03_ap15 | 0.22 | 8.12 | 0.8575 | 4.46 | 548.3792 | 8.18 | 4.6480 | 8.24 | 0.4924 | 6.88 | 11158.42 | 16.48 | 6405.84 | 16.36 | 8115.38 | 13.76 |
| ELF-03_ap16 | 0.68 | 9.81 | 0.7360 | 6.98 | 151.1819 | 17.38 | 1.5462 | 13.03 | 0.6894 | 9.11 | 6029.75 | 26.06 | 5102.38 | 34.76 | 10628.95 | 18.21 |
| ELF-03_ap17 | 0.23 | 3.97 | 0.8074 | 2.14 | 483.8061 | 3.76 | 4.3550 | 3.79 | 0.8136 | 3.68 | 10817.22 | 7.58 | 6278.87 | 7.53 | 12066.74 | 7.36 |
| ELF-03_ap18 | 0.42 | 5.19 | 0.8205 | 1.85 | 266.5745 | 7.20 | 2.3572 | 6.91 | 0.4072 | 6.19 | 7807.30 | 13.83 | 5675.38 | 14.40 | 6924.68 | 12.38 |
| ELF-03_ap19 | 0.91 | 3.17 | 0.8475 | 2.87 | 127.2762 | 3.53 | 1.0953 | 3.17 | 0.2258 | 3.32 | 4768.27 | 6.33 | 4928.86 | 7.06 | 4126.20 | 6.64 |
| ELF-03_ap2 | 2.02 | 5.62 | 0.7735 | 5.90 | 52.6279 | 5.23 | 0.4945 | 6.43 | 0.0741 | 8.82 | 2650.18 | 12.86 | 4043.33 | 10.46 | 1449.71 | 17.64 |
| ELF-03_ap20 | 0.50 | 5.88 | 0.8334 | 1.78 | 227.8615 | 4.47 | 1.9923 | 4.52 | 0.8369 | 3.37 | 7065.48 | 9.04 | 5516.70 | 8.94 | 12325.95 | 6.74 |
| ELF-03_ap21 | 64.87 | 7.31 | 0.7920 | 6.05 | 1.6746 | 11.08 | 0.0149 | 10.53 | 0.0549 | 14.53 | 95.09 | 21.05 | 998.94 | 22.15 | 1084.30 | 29.06 |
| ELF-03_ap22 | 1.55 | 5.05 | 0.8364 | 2.66 | 74.1670 | 4.60 | 0.6435 | 4.79 | 0.1043 | 4.39 | 3202.69 | 9.59 | 4386.16 | 9.21 | 2011.75 | 8.78 |
| ELF-03_ap23 | 7.77 | 6.35 | 0.8303 | 3.62 | 14.6887 | 6.91 | 0.1281 | 6.70 | 0.0174 | 7.50 | 776.75 | 13.41 | 2795.29 | 13.83 | 350.18 | 15.00 |
| ELF-03_ap24 | 0.30 | 4.24 | 0.8312 | 2.01 | 384.7071 | 3.82 | 3.3703 | 3.63 | 0.4024 | 3.45 | 9507.32 | 7.25 | 6046.69 | 7.63 | 6854.26 | 6.89 |
| ELF-03_ap25 | 0.29 | 3.59 | 0.8464 | 1.68 | 403.9436 | 3.39 | 3.4760 | 3.43 | 0.8190 | 2.88 | 9861.41 | 6.87 | 6096.10 | 6.79 | 12127.56 | 5.76 |
| ELF-03_ap26 | 6.00 | 10.86 | 0.8053 | 3.58 | 16.3954 | 8.18 | 1.6588 | 7.66 | 0.0317 | 9.78 | 988.80 | 15.32 | 3010.12 | 16.37 | 631.76 | 19.56 |
| ELF-03_ap27 | 0.31 | 4.04 | 0.8036 | 2.45 | 359.2762 | 3.98 | 3.2583 | 3.81 | 0.6482 | 3.20 | 9339.98 | 7.62 | 5977.43 | 7.95 | 10128.45 | 6.39 |
| ELF-03_ap28 | 0.27 | 4.15 | 0.8169 | 2.51 | 415.2542 | 4.13 | 3.6903 | 4.10 | 0.4084 | 4.19 | 9962.90 | 8.20 | 6124.08 | 8.27 | 6942.05 | 8.39 |
| ELF-03_ap29 | 1.05 | 7.26 | 0.8021 | 2.15 | 104.4284 | 10.79 | 0.9187 | 7.97 | 0.1249 | 12.55 | 4200.88 | 15.84 | 4729.69 | 21.57 | 2385.64 | 25.11 |
| ELF-03_ap3 | 2.33 | 6.33 | 0.8198 | 3.25 | 47.9632 | 6.16 | 0.4259 | 6.05 | 0.0940 | 7.30 | 2287.31 | 12.10 | 3950.93 | 12.31 | 1634.88 | 14.59 |
| ELF-03_ap4 | 0.33 | 7.11 | 0.8279 | 4.18 | 350.7583 | 6.94 | 3.0907 | 6.57 | 0.5880 | 5.35 | 9081.12 | 13.14 | 5953.14 | 13.88 | 9501.44 | 10.70 |
| ELF-03_ap30 | 0.22 | 4.95 | 0.8300 | 2.40 | 525.1698 | 4.57 | 4.5915 | 4.55 | 0.9069 | 3.81 | 11095.86 | 9.10 | 6362.05 | 9.14 | 13083.59 | 7.82 |
| ELF-03_ap31 | 0.08 | 11.35 | 0.8512 | 3.80 | 1567.8928 | 11.36 | 13.0596 | 12.96 | 1.9051 | 6.40 | 17039.79 | 25.92 | 7471.32 | 22.72 | 21617.15 | 12.80 |
| ELF-03_ap33 | 0.07 | 6.19 | 0.8700 | 1.56 | 1765.4436 | 8.49 | 14.6985 | 8.44 | 4.2218 | 8.18 | 17750.55 | 16.89 | 7569.14 | 16.97 | 33502.94 | 16.36 |
| ELF-03_ap34 | 0.28 | 6.68 | 0.8449 | 4.07 | 409.7563 | 6.54 | 3.5394 | 6.59 | 0.7427 | 7.33 | 9752.02 | 13.17 | 6110.58 | 13.08 | 11288.30 | 14.86 |

Appendix B: Eastern Sunda arc geochronology data - apatite

| Analysis ID | 238U/206Pb ratio | 1s% | 207Pb/206Pb ratio | 1s% | 207Pb/235U (calc) ratio | 1s% | 206Pb/238U ratio | 1s% | 206Pb/235U ratio | 1s% | 208Pb/232Th ratio | 1s% | 206Pb/238U Age (Ma) | 2s% | 207Pb/235U (calc) Age (Ma) | 2s% | 208Pb/232Th Age (Ma) | 2s% | |
|-------------|------------------|-------|-------------------|-------|-------------------------|-------|------------------|-------|------------------|-------|-------------------|-------|---------------------|-------|----------------------------|--------|----------------------|--------|--|
| ELF-03_ap65 | 0.24 | 5.14 | 0.8174 | 2.41 | 472.0778 | 5.56 | 4.1912 | 4.76 | 0.8308 | 4.06 | 10617.03 | 9.52 | 6254.01 | 11.12 | 12258.17 | 8.12 | 12258.17 | 8.12 | |
| ELF-03_ap66 | 26.21 | 14.44 | 0.7943 | 4.77 | 4.2643 | 23.00 | 0.0400 | 21.86 | 0.0086 | 23.52 | 252.97 | 43.72 | 1686.51 | 46.00 | 174.01 | 47.05 | 174.01 | 47.05 | |
| ELF-03_ap5 | 2.07 | 6.25 | 0.8248 | 2.63 | 55.2340 | 5.29 | 0.4860 | 5.47 | 0.0989 | 6.56 | 2553.41 | 10.93 | 4091.51 | 10.57 | 1911.59 | 13.12 | 1911.59 | 13.12 | |
| ELF-03_ap6 | | | | | | | | | | | | | | | | | | | |
| ELF-03_ap7 | 0.05 | 10.47 | 0.8349 | 4.71 | 2196.9424 | 10.74 | 19.4599 | 10.80 | 3.7451 | 6.00 | 19463.23 | 21.59 | 7813.65 | 21.48 | 31562.51 | 11.99 | 31562.51 | 11.99 | |
| ELF-03_ap8 | 0.87 | 2.79 | 0.8706 | 2.45 | 138.6883 | 3.37 | 1.1528 | 2.80 | 0.6901 | 3.10 | 4942.84 | 5.61 | 5015.40 | 6.75 | 10637.28 | 6.75 | 10637.28 | 6.75 | |
| ELF-03_ap9 | 1.02 | 6.33 | 0.8374 | 5.90 | 113.2284 | 6.78 | 0.9810 | 6.36 | 0.5942 | 6.30 | 4406.65 | 12.72 | 4811.09 | 13.56 | 9453.74 | 12.61 | 9453.74 | 12.61 | |
| GBF-04_ap10 | 1.03 | 14.17 | 0.7759 | 22.00 | 104.1320 | 12.53 | 0.9870 | 12.60 | 0.6282 | 14.29 | 4426.30 | 25.20 | 4726.83 | 25.06 | 9880.92 | 28.58 | 9880.92 | 28.58 | |
| GBF-04_ap11 | 2.80 | 11.58 | 1.0342 | 12.64 | 51.3155 | 10.39 | 0.3614 | 11.52 | 0.4371 | 12.41 | 1988.97 | 23.04 | 4018.17 | 20.78 | 7350.75 | 24.82 | 7350.75 | 24.82 | |
| GBF-04_ap12 | 0.20 | 11.22 | 0.9140 | 6.47 | 629.9209 | 11.07 | 4.9990 | 11.19 | 3.9572 | 84.72 | 11549.26 | 22.38 | 6546.36 | 22.14 | 32448.68 | 169.45 | 32448.68 | 169.45 | |
| GBF-04_ap13 | 0.87 | 5.33 | 0.8196 | 3.77 | 129.9166 | 5.41 | 1.1528 | 5.81 | 1.7490 | 6.90 | 4942.80 | 11.63 | 4949.55 | 10.82 | 20497.83 | 13.79 | 20497.83 | 13.79 | |
| GBF-04_ap14 | 0.88 | 6.68 | 0.7581 | 6.20 | 118.8094 | 6.66 | 1.1342 | 6.73 | 0.4117 | 6.73 | 4887.00 | 13.46 | 4859.52 | 13.32 | 6988.73 | 13.46 | 6988.73 | 13.46 | |
| GBF-04_ap15 | 3.86 | 5.82 | 0.8302 | 7.14 | 29.3014 | 5.81 | 0.2574 | 6.73 | 0.3794 | 8.10 | 1476.50 | 13.45 | 3463.67 | 11.62 | 6519.31 | 16.19 | 6519.31 | 16.19 | |
| GBF-04_ap16 | 0.04 | 8.73 | 0.8312 | 2.00 | 2662.3613 | 7.77 | 23.5406 | 6.78 | 13.3284 | 8.58 | 20630.57 | 13.55 | 8008.68 | 15.54 | 53963.26 | 17.16 | 53963.26 | 17.16 | |
| GBF-04_ap17 | 7.86 | 5.19 | 0.8529 | 7.48 | 15.3508 | 5.02 | 0.1303 | 5.19 | 0.6319 | 7.33 | 789.38 | 10.38 | 2837.26 | 10.04 | 9926.85 | 14.67 | 9926.85 | 14.67 | |
| GBF-04_ap18 | 6.80 | 4.73 | 0.8139 | 5.83 | 16.4777 | 5.09 | 0.1485 | 5.14 | 1.0747 | 7.06 | 898.11 | 10.27 | 2904.93 | 15.52 | 14792.83 | 14.12 | 14792.83 | 14.12 | |
| GBF-04_ap19 | 1.71 | 8.05 | 0.8511 | 8.57 | 66.3837 | 7.76 | 0.5654 | 8.06 | 1.2348 | 12.73 | 2970.55 | 16.11 | 4304.87 | 15.52 | 16300.44 | 25.46 | 16300.44 | 25.46 | |
| GBF-04_ap20 | 1.19 | 12.83 | 0.7607 | 11.89 | 87.5199 | 12.17 | 0.8416 | 14.15 | 0.3528 | 10.75 | 3936.22 | 28.30 | 4552.19 | 24.35 | 6125.15 | 21.50 | 6125.15 | 21.50 | |
| GBF-04_ap21 | 0.86 | 10.23 | 0.8425 | 7.64 | 170.3263 | 16.67 | 1.4593 | 20.14 | 0.7623 | 10.46 | 5800.86 | 40.27 | 5222.69 | 33.34 | 11484.98 | 20.92 | 11484.98 | 20.92 | |
| GBF-04_ap22 | 0.95 | 5.69 | 0.8237 | 5.32 | 119.1092 | 5.61 | 1.0510 | 5.61 | 0.8146 | 5.91 | 4630.77 | 12.61 | 4862.06 | 11.21 | 12078.10 | 11.81 | 12078.10 | 11.81 | |
| GBF-04_ap23 | 0.01 | 4.33 | 0.8346 | 0.46 | 883.10728 | 4.03 | 77.7627 | 3.93 | 137.4183 | 6.38 | 28147.79 | 7.87 | 9231.65 | 8.06 | 99936.11 | 12.75 | 99936.11 | 12.75 | |
| GBF-04_ap24 | 5.18 | 5.09 | 0.7929 | 6.46 | 20.9679 | 5.07 | 0.1930 | 5.13 | 0.3444 | 6.33 | 1137.85 | 10.27 | 3137.11 | 10.14 | 5989.25 | 12.66 | 5989.25 | 12.66 | |
| GBF-04_ap25 | 0.09 | 6.98 | 0.8357 | 2.30 | 1372.0407 | 6.87 | 11.9231 | 6.80 | 19.6374 | 7.56 | 16496.44 | 13.60 | 7335.92 | 13.75 | 61359.03 | 15.12 | 61359.03 | 15.12 | |
| SPF-05_ap1 | 1.10 | 3.98 | 0.8589 | 3.82 | 107.7106 | 3.89 | 0.9084 | 4.00 | 0.0376 | 4.11 | 4169.37 | 7.99 | 4289.13 | 4.57 | 3770.59 | 5.26 | 3770.59 | 5.26 | |
| SPF-05_ap12 | 15.26 | 6.50 | 0.8359 | 7.85 | 7.4705 | 7.17 | 0.0655 | 7.58 | 0.0105 | 14.28 | 409.12 | 15.16 | 2169.46 | 14.33 | 212.12 | 28.56 | 212.12 | 28.56 | |
| SPF-05_ap13 | 1.61 | 3.07 | 0.7981 | 2.72 | 68.6850 | 2.79 | 0.6229 | 3.27 | 0.7552 | 4.37 | 3121.42 | 6.55 | 4309.27 | 5.58 | 11403.70 | 8.73 | 11403.70 | 8.73 | |
| SPF-05_ap14 | 41.95 | 6.28 | 0.8583 | 5.62 | 2.7944 | 6.30 | 0.0237 | 6.81 | 0.0051 | 7.32 | 150.83 | 13.63 | 1354.05 | 12.61 | 103.34 | 14.65 | 103.34 | 14.65 | |
| SPF-05_ap15 | 67.92 | 12.28 | 0.7969 | 8.80 | 1.6453 | 12.76 | 0.0148 | 14.89 | 0.0021 | 18.34 | 94.88 | 29.78 | 987.76 | 25.52 | 41.59 | 36.69 | 41.59 | 36.69 | |
| SPF-05_ap16 | 2.75 | 5.28 | 0.7570 | 6.06 | 38.2157 | 4.89 | 0.3671 | 6.43 | 0.1220 | 5.17 | 2015.60 | 12.86 | 3725.52 | 9.77 | 2332.52 | 10.34 | 2332.52 | 10.34 | |
| SPF-05_ap17 | 14.56 | 1.54 | 0.8063 | 1.89 | 7.6399 | 1.54 | 0.0682 | 1.56 | 0.0620 | 2.08 | 428.16 | 3.11 | 2189.56 | 3.09 | 1219.52 | 4.16 | 1219.52 | 4.16 | |
| SPF-05_ap18 | 4.61 | 3.26 | 0.8258 | 3.58 | 24.6707 | 3.33 | 0.2174 | 3.36 | 0.0555 | 3.66 | 1268.06 | 6.71 | 3295.27 | 6.66 | 1095.34 | 7.32 | 1095.34 | 7.32 | |
| SPF-05_ap19 | 0.71 | 7.79 | 0.8032 | 5.04 | 155.6679 | 7.43 | 1.4143 | 7.22 | 0.2119 | 4.55 | 5881.96 | 14.44 | 5131.88 | 14.86 | 3895.73 | 9.11 | 3895.73 | 9.11 | |
| SPF-05_ap20 | 0.97 | 4.05 | 0.8304 | 2.73 | 230.8341 | 3.99 | 2.0952 | 3.61 | 0.1609 | 2.77 | 7283.57 | 7.22 | 5529.80 | 7.19 | 3024.13 | 5.54 | 3024.13 | 5.54 | |
| SPF-05_ap21 | 29.10 | 3.72 | 0.8045 | 2.30 | 3.7997 | 3.88 | 0.0343 | 3.88 | 0.0279 | 4.51 | 217.54 | 7.76 | 1592.67 | 7.76 | 557.95 | 9.03 | 557.95 | 9.03 | |
| SPF-05_ap22 | 5.14 | 3.35 | 0.8241 | 4.20 | 22.1345 | 3.20 | 0.1952 | 3.56 | 0.0497 | 4.63 | 1149.42 | 7.13 | 3189.65 | 6.41 | 983.56 | 9.26 | 983.56 | 9.26 | |
| SPF-05_ap23 | 6.11 | 3.72 | 0.8507 | 4.64 | 19.1291 | 3.55 | 0.1641 | 3.70 | 0.0421 | 5.14 | 979.58 | 7.40 | 3048.35 | 7.11 | 835.49 | 10.27 | 835.49 | 10.27 | |
| SPF-05_ap24 | 8.12 | 3.55 | 0.7955 | 3.81 | 13.4471 | 4.24 | 0.1229 | 3.69 | 0.0462 | 6.67 | 747.40 | 7.39 | 2711.58 | 8.49 | 915.42 | 13.35 | 915.42 | 13.35 | |
| SPF-05_ap25 | 9.26 | 10.99 | 0.8265 | 4.79 | 12.1457 | 8.47 | 0.1069 | 8.91 | 0.0096 | 8.40 | 654.79 | 17.82 | 2615.73 | 16.95 | 193.53 | 16.81 | 193.53 | 16.81 | |
| SPF-05_ap26 | 11.43 | 7.67 | 0.6381 | 12.09 | 7.7995 | 12.53 | 0.0878 | 9.20 | 0.0167 | 13.23 | 542.80 | 18.39 | 2201.20 | 25.06 | 335.91 | 26.46 | 335.91 | 26.46 | |
| SPF-05_ap27 | 0.87 | 5.02 | 0.8527 | 4.56 | 133.4948 | 4.90 | 1.1501 | 5.06 | 0.3021 | 5.18 | 4934.91 | 10.13 | 4976.93 | 9.80 | 5351.26 | 10.36 | 5351.26 | 10.36 | |
| SPF-05_ap28 | 7.98 | 5.19 | 0.7890 | 6.72 | 13.6512 | 5.07 | 0.1263 | 5.18 | 0.0438 | 6.64 | 766.78 | 10.35 | 2725.82 | 10.13 | 868.62 | 13.28 | 868.62 | 13.28 | |
| SPF-05_ap29 | 2.88 | 3.95 | 0.7924 | 4.59 | 40.5393 | 3.89 | 0.3743 | 4.95 | 0.2995 | 4.41 | 2049.56 | 7.90 | 3783.97 | 7.78 | 5309.52 | 8.83 | 5309.52 | 8.83 | |
| SPF-05_ap30 | 4.66 | 4.53 | 0.8230 | 5.54 | 24.3573 | 4.41 | 0.2147 | 4.53 | 0.1352 | 5.19 | 1253.75 | 9.06 | 3282.80 | 8.82 | 2570.36 | 10.38 | 2570.36 | 10.38 | |
| SPF-05_ap31 | 2.35 | 2.21 | 0.8148 | 2.22 | 47.7739 | 2.37 | 0.4258 | 2.33 | 0.3366 | 3.14 | 2286.73 | 4.65 | 3946.99 | 4.75 | 5881.29 | 6.27 | 5881.29 | 6.27 | |
| SPF-05_ap4 | 1.49 | 7.96 | 0.7864 | 8.18 | 70.1465 | 9.78 | 0.6520 | 9.31 | 0.2395 | 11.63 | 3235.63 | 18.62 | 4330.35 | 19.57 | 4352.49 | 23.27 | 4352.49 | 23.27 | |

Appendix B: Eastern Sunda arc geochronology data - apatite

| Analysis ID | 238U/206Pb ratio | 1s% | 207Pb/206Pb ratio | 1s% | 207Pb/235U (calc) ratio | 1s% | 206Pb/238U ratio | 1s% | 206Pb/232Th ratio | 1s% | 206Pb/238U Age (Ma) | 2s% | 207Pb/235U (calc) Age (Ma) | 2s% | 208Pb/232Th Age (Ma) | 2s% |
|-------------|------------------|-------|-------------------|------|-------------------------|-------|------------------|-------|-------------------|-------|---------------------|-------|----------------------------|-------|----------------------|-------|
| SPF-05_ap6 | 3.82 | 3.98 | 0.8213 | 4.74 | 29.5983 | 4.06 | 0.2615 | 3.99 | 0.0545 | 5.06 | 1497.59 | 7.97 | 3473.57 | 8.11 | 1075.96 | 10.12 |
| SPF-05_ap7 | 164.04 | 5.63 | 0.7566 | 7.86 | 0.6327 | 5.61 | 0.0061 | 6.90 | 0.0108 | 9.89 | 39.13 | 13.79 | 497.79 | 11.22 | 217.94 | 19.78 |
| SPF-05_ap8 | 6.17 | 7.38 | 0.8399 | 9.08 | 18.9816 | 6.94 | 0.1639 | 7.25 | 0.1034 | 7.69 | 978.48 | 14.50 | 3040.88 | 13.88 | 1939.11 | 15.39 |
| SPF-05_ap9 | 4.02 | 3.66 | 0.8154 | 4.10 | 27.9764 | 4.29 | 0.2491 | 3.77 | 0.0742 | 4.86 | 1434.07 | 7.54 | 3418.27 | 8.59 | 1450.05 | 9.72 |
| NEF-02_ap1 | 5.40 | 3.05 | 0.8306 | 3.34 | 21.2266 | 3.37 | 0.1850 | 3.36 | 0.1082 | 3.91 | 1094.25 | 6.74 | 3149.00 | 6.74 | 2093.38 | 7.82 |
| NEF-02_ap10 | 6.02 | 5.11 | 0.6751 | 6.64 | 15.4259 | 5.30 | 0.1656 | 5.97 | 0.1318 | 7.36 | 987.76 | 11.94 | 2841.91 | 10.61 | 2509.40 | 14.72 |
| NEF-02_ap11 | 8.63 | 3.37 | 0.7996 | 4.04 | 12.8316 | 3.32 | 0.1162 | 3.65 | 0.1181 | 5.60 | 708.91 | 7.30 | 2667.36 | 6.63 | 2283.26 | 11.20 |
| NEF-02_ap12 | 0.39 | 13.19 | 0.8273 | 4.82 | 282.8744 | 23.20 | 2.4301 | 23.08 | 1.1031 | 21.13 | 794.83 | 46.16 | 5735.42 | 46.41 | 15069.08 | 42.26 |
| NEF-02_ap13 | 3.08 | 5.10 | 0.9046 | 7.49 | 40.4944 | 4.87 | 0.3248 | 5.14 | 0.0764 | 5.59 | 1812.99 | 10.27 | 3782.87 | 9.73 | 1492.09 | 11.18 |
| NEF-02_ap14 | 6.00 | 4.65 | 0.8109 | 5.82 | 18.6345 | 4.54 | 0.1689 | 4.73 | 0.1773 | 5.68 | 995.01 | 9.46 | 3023.09 | 9.09 | 3309.15 | 11.37 |
| NEF-02_ap15 | 4.32 | 3.94 | 0.7821 | 5.10 | 24.9355 | 4.48 | 0.2320 | 4.51 | 0.0689 | 5.74 | 1344.96 | 9.02 | 3305.69 | 8.97 | 1350.28 | 11.49 |
| NEF-02_ap16 | 0.35 | 4.11 | 0.8598 | 2.67 | 341.8013 | 4.03 | 2.8704 | 4.07 | 0.6742 | 3.51 | 8724.21 | 8.14 | 5926.94 | 8.06 | 10445.46 | 7.02 |
| NEF-02_ap17 | 0.43 | 2.37 | 0.8450 | 0.84 | 271.7250 | 2.78 | 2.3372 | 2.71 | 0.9818 | 3.00 | 7768.80 | 5.42 | 5694.74 | 5.56 | 13864.56 | 6.00 |
| NEF-02_ap18 | 3.00 | 1.85 | 0.8463 | 1.77 | 39.0161 | 1.98 | 0.3343 | 2.02 | 0.3899 | 2.62 | 1859.00 | 4.04 | 3746.04 | 3.95 | 6674.19 | 5.23 |
| NEF-02_ap19 | 12.46 | 5.66 | 0.7187 | 7.69 | 7.9171 | 5.80 | 0.0798 | 5.67 | 0.0774 | 7.53 | 494.91 | 11.33 | 2221.63 | 11.61 | 1511.37 | 15.06 |
| NEF-02_ap20 | 4.81 | 3.43 | 0.8383 | 2.72 | 23.6133 | 3.49 | 0.2035 | 3.81 | 0.1690 | 3.76 | 1194.06 | 7.61 | 3252.56 | 6.98 | 3185.10 | 7.52 |
| NEF-02_ap21 | 0.52 | 1.88 | 0.8306 | 1.36 | 218.3533 | 1.98 | 1.9087 | 1.90 | 1.3187 | 2.34 | 6885.17 | 3.79 | 5473.61 | 3.96 | 17046.84 | 4.68 |
| NEF-02_ap22 | 0.17 | 2.57 | 0.8369 | 0.98 | 886.5212 | 2.71 | 5.9695 | 2.62 | 5.1510 | 3.22 | 12515.98 | 5.25 | 6633.59 | 5.43 | 36822.46 | 6.45 |
| NEF-02_ap23 | 2.16 | 3.29 | 0.8382 | 3.59 | 53.4059 | 3.27 | 0.4627 | 3.32 | 0.3415 | 4.03 | 2451.29 | 6.64 | 4057.95 | 6.55 | 5955.08 | 8.07 |
| NEF-02_ap24 | 1.01 | 6.36 | 0.8546 | 7.43 | 116.5797 | 6.22 | 0.9921 | 6.34 | 0.2489 | 5.93 | 4442.75 | 12.67 | 4840.45 | 12.44 | 4505.98 | 11.87 |
| NEF-02_ap25 | 2.81 | 3.35 | 0.8288 | 3.80 | 40.6843 | 3.43 | 0.3565 | 3.37 | 0.3075 | 4.00 | 1965.63 | 6.75 | 3787.51 | 6.85 | 5435.10 | 8.01 |
| NEF-02_ap26 | 3.03 | 1.55 | 0.8456 | 1.63 | 38.6014 | 1.93 | 0.3308 | 1.70 | 0.3517 | 2.24 | 1842.09 | 3.40 | 3735.46 | 3.86 | 6108.44 | 4.48 |
| NEF-02_ap27 | 0.05 | 2.84 | 0.8350 | 0.64 | 2181.4342 | 2.53 | 19.0036 | 2.32 | 8.3584 | 2.02 | 19312.83 | 4.64 | 7806.47 | 5.06 | 45328.91 | 4.03 |
| NEF-02_ap28 | 16.65 | 3.21 | 0.7849 | 4.72 | 65.9301 | 3.48 | 0.6063 | 3.55 | 0.9007 | 4.77 | 377.58 | 7.10 | 2049.96 | 6.96 | 1002.76 | 9.54 |
| NEF-02_ap29 | 0.76 | 4.50 | 0.8402 | 3.03 | 66.9670 | 3.10 | 0.5504 | 3.16 | 0.4344 | 4.07 | 2890.98 | 6.33 | 4268.87 | 6.20 | 7311.59 | 8.13 |
| NEF-02_ap30 | 0.26 | 1.96 | 0.8374 | 0.85 | 150.2308 | 5.25 | 1.3039 | 4.95 | 0.8172 | 4.91 | 5380.11 | 9.89 | 5096.01 | 10.51 | 12107.14 | 9.82 |
| NEF-02_ap31 | 2.50 | 2.99 | 0.8011 | 3.31 | 44.4247 | 2.98 | 0.4026 | 2.97 | 0.3254 | 3.92 | 2181.13 | 5.94 | 3874.76 | 5.96 | 5710.18 | 7.84 |
| NEF-02_ap32 | 2.88 | 1.55 | 0.8388 | 1.67 | 40.2032 | 1.61 | 0.3471 | 1.57 | 0.2789 | 2.29 | 1920.50 | 3.15 | 3775.72 | 3.22 | 4986.00 | 4.58 |
| NEF-02_ap33 | 6.45 | 2.69 | 0.8311 | 3.27 | 17.8240 | 3.06 | 0.1547 | 3.01 | 0.1834 | 3.65 | 927.49 | 6.01 | 2980.28 | 6.12 | 3412.96 | 7.31 |
| NEF-02_ap34 | 1.15 | 1.91 | 0.8365 | 1.61 | 100.4451 | 2.06 | 0.8691 | 1.87 | 0.6447 | 2.28 | 4032.07 | 3.74 | 4690.58 | 4.12 | 10085.21 | 4.57 |
| NEF-02_ap35 | 2.89 | 1.71 | 0.8691 | 1.85 | 41.5928 | 1.70 | 0.3467 | 1.70 | 0.3615 | 2.13 | 1918.95 | 3.40 | 3809.40 | 3.40 | 6255.36 | 4.27 |
| NEF-02_ap36 | 1.42 | 1.67 | 0.8202 | 1.62 | 79.9201 | 1.67 | 0.7080 | 1.67 | 0.5612 | 1.99 | 3443.26 | 3.34 | 4461.05 | 3.34 | 9029.06 | 3.99 |
| NEF-02_ap37 | 1.57 | 6.88 | 0.8953 | 7.29 | 73.1516 | 6.70 | 0.5940 | 7.04 | 0.1254 | 8.86 | 3005.63 | 14.08 | 4372.35 | 13.39 | 2393.76 | 17.72 |
| NEF-02_ap38 | 13.86 | 3.16 | 0.8631 | 4.25 | 8.6307 | 3.27 | 0.0726 | 3.75 | 0.2006 | 4.33 | 451.55 | 7.49 | 2299.79 | 6.54 | 2302.41 | 8.66 |
| ELF-01 ap1 | 17.35 | 3.89 | 0.8557 | 5.60 | 6.8180 | 4.03 | 0.0579 | 4.21 | 0.0193 | 6.53 | 362.91 | 8.42 | 2088.07 | 8.06 | 386.76 | 13.07 |
| ELF-01 ap10 | 93.64 | 4.25 | 0.7517 | 9.20 | 1.1204 | 5.03 | 0.0108 | 4.20 | 0.0102 | 5.57 | 69.08 | 8.41 | 763.19 | 10.06 | 204.80 | 11.14 |
| ELF-01 ap11 | 66.28 | 7.20 | 0.7924 | 5.23 | 1.6790 | 6.56 | 0.0153 | 7.64 | 0.0087 | 6.04 | 97.82 | 15.29 | 1000.61 | 13.12 | 175.96 | 12.08 |
| ELF-01 ap12 | 11.36 | 3.02 | 0.8343 | 3.72 | 10.1474 | 2.86 | 0.0881 | 3.13 | 0.0412 | 3.93 | 544.40 | 6.25 | 2448.30 | 5.73 | 817.76 | 7.85 |
| ELF-01 ap13 | 3.74 | 1.44 | 0.8538 | 1.33 | 31.5766 | 1.47 | 0.2677 | 1.44 | 0.2006 | 1.65 | 1529.28 | 2.87 | 3537.18 | 2.94 | 3705.00 | 3.30 |
| ELF-01 ap14 | 16.46 | 2.62 | 0.8173 | 3.28 | 6.8632 | 2.90 | 0.0608 | 2.62 | 0.0411 | 3.06 | 380.56 | 5.24 | 2093.91 | 5.79 | 816.34 | 6.11 |
| ELF-01 ap15 | 70.85 | 3.51 | 0.8377 | 4.62 | 1.6284 | 3.92 | 0.0143 | 3.61 | 0.0110 | 6.52 | 91.53 | 7.21 | 981.25 | 7.84 | 222.14 | 13.04 |
| ELF-01 ap16 | 32.90 | 11.50 | 0.8231 | 3.90 | 3.4180 | 6.97 | 0.0303 | 7.01 | 0.0303 | 6.06 | 190.73 | 14.02 | 1508.53 | 13.94 | 604.12 | 12.11 |
| ELF-01 ap17 | 5.82 | 2.41 | 0.8577 | 2.81 | 19.9735 | 2.49 | 0.1689 | 2.48 | 0.0541 | 2.82 | 1006.29 | 4.97 | 3090.07 | 4.98 | 1068.71 | 5.64 |
| ELF-01 ap18 | 56.89 | 3.49 | 0.8215 | 4.68 | 1.9874 | 3.47 | 0.0175 | 3.54 | 0.0273 | 4.58 | 111.92 | 7.08 | 1111.23 | 6.95 | 545.15 | 9.15 |
| ELF-01 ap19 | 49.75 | 8.06 | 0.7074 | 8.75 | 1.9377 | 9.10 | 0.0200 | 9.34 | 0.0122 | 8.82 | 127.80 | 18.68 | 1094.19 | 18.20 | 245.48 | 17.64 |
| ELF-01 ap20 | 48.72 | 5.44 | 0.8316 | 6.66 | 2.3727 | 4.96 | 0.0206 | 5.99 | 0.0153 | 7.41 | 131.51 | 11.99 | 1234.41 | 9.92 | 308.45 | 14.83 |
| ELF-01 ap21 | 22.36 | 5.89 | 0.8252 | 3.10 | 5.0702 | 5.21 | 0.0446 | 5.26 | 0.0337 | 5.32 | 1831.14 | 10.43 | 2755.28 | 20.18 | 1279.52 | 18.05 |
| ELF-01 ap22 | 7.62 | 8.22 | 0.7792 | 6.08 | 14.0825 | 10.09 | 0.1319 | 10.42 | 0.0652 | 9.02 | 798.90 | 20.84 | 2755.28 | 20.18 | 1279.52 | 18.05 |
| ELF-01 ap22 | 37.87 | 3.96 | 0.7828 | 4.78 | 2.8506 | 3.95 | 0.0264 | 3.64 | 0.0120 | 5.00 | 168.00 | 7.29 | 1368.96 | 7.90 | 241.61 | 10.00 |

Appendix B: Eastern Sunda arc geochronology data - apatite

| Analysis ID | 238U/206Pb ratio | 1s% | 207Pb/206Pb ratio | 1s% | 207Pb/235U (calc)/ratio | 1s% | 206Pb/238U ratio | 1s% | 206Pb/232Th ratio | 1s% | 206Pb/238U Age (Ma) | 2s% | 207Pb/235U (calc) Age (Ma) | 2s% | 208Pb/232Th Age (Ma) | 2s% |
|-------------|------------------|-------|-------------------|------|-------------------------|-------|------------------|-------|-------------------|-------|---------------------|-------|----------------------------|-------|----------------------|-------|
| ELF-01 ap23 | 34.35 | 3.69 | 0.7382 | 4.94 | 2.9702 | 4.09 | 0.0292 | 4.67 | 0.0128 | 5.17 | 185.83 | 9.33 | 1400.03 | 8.17 | 257.24 | 10.34 |
| ELF-01 ap24 | 50.84 | 3.43 | 0.9675 | 3.37 | 2.3542 | 3.39 | 0.0197 | 3.45 | 0.0057 | 4.09 | 125.67 | 6.91 | 1228.82 | 6.77 | 115.67 | 8.18 |
| ELF-01 ap25 | 3.45 | 2.92 | 0.8106 | 3.37 | 32.1408 | 3.63 | 0.2896 | 3.37 | 0.2849 | 6.22 | 1639.53 | 6.75 | 3554.62 | 7.25 | 5081.50 | 12.44 |
| ELF-01 ap26 | 12.85 | 2.96 | 0.7812 | 3.38 | 8.4418 | 2.75 | 0.0779 | 2.89 | 0.0435 | 3.52 | 483.67 | 5.79 | 2279.89 | 5.50 | 863.37 | 7.04 |
| ELF-01 ap27 | 27.07 | 3.03 | 0.7705 | 4.00 | 3.9410 | 3.03 | 0.0371 | 3.11 | 0.0209 | 3.67 | 234.63 | 6.21 | 1622.13 | 6.06 | 419.14 | 7.33 |
| ELF-01 ap28 | 40.91 | 4.09 | 0.8421 | 5.45 | 2.8487 | 3.92 | 0.0244 | 4.12 | 0.0146 | 4.92 | 155.52 | 8.24 | 1368.46 | 7.84 | 294.15 | 9.85 |
| ELF-01 ap29 | 27.93 | 9.23 | 0.7769 | 7.39 | 3.8315 | 8.31 | 0.0361 | 7.30 | 0.0150 | 8.54 | 228.88 | 14.61 | 1599.39 | 16.62 | 302.30 | 17.07 |
| ELF-01 ap3 | 37.15 | 3.35 | 0.7621 | 3.83 | 2.8641 | 3.99 | 0.0271 | 3.50 | 0.0146 | 4.00 | 172.20 | 7.01 | 1372.53 | 7.98 | 294.02 | 8.00 |
| ELF-01 ap30 | 43.33 | 4.86 | 0.8598 | 3.37 | 2.7615 | 4.08 | 0.0232 | 4.26 | 0.0128 | 5.09 | 147.86 | 8.53 | 1345.21 | 8.18 | 256.81 | 10.17 |
| ELF-01 ap31 | 21.36 | 6.20 | 0.8435 | 3.41 | 5.4733 | 5.30 | 0.0466 | 5.20 | 0.0068 | 6.58 | 293.91 | 10.41 | 1896.41 | 10.61 | 138.10 | 13.16 |
| ELF-01 ap32 | 22.72 | 4.46 | 0.8162 | 5.99 | 4.9064 | 4.65 | 0.0437 | 5.11 | 0.0204 | 5.44 | 275.71 | 10.22 | 1803.36 | 9.30 | 408.77 | 10.89 |
| ELF-01 ap4 | 36.18 | 4.39 | 0.7864 | 5.92 | 2.9887 | 4.92 | 0.0279 | 4.81 | 0.0339 | 6.86 | 177.43 | 9.63 | 1404.75 | 9.84 | 676.25 | 13.71 |
| ELF-01 ap5 | 79.26 | 3.87 | 0.8234 | 5.88 | 1.4343 | 4.59 | 0.0126 | 4.25 | 0.0078 | 4.49 | 80.86 | 8.49 | 903.33 | 9.19 | 157.41 | 8.98 |
| ELF-01 ap7 | 104.36 | 4.95 | 0.7373 | 6.77 | 0.9758 | 4.93 | 0.0095 | 4.92 | 0.0065 | 6.31 | 61.22 | 9.84 | 691.43 | 9.86 | 131.29 | 12.63 |
| ELF-01 ap8 | 114.22 | 4.87 | 0.7449 | 7.02 | 0.9055 | 6.21 | 0.0087 | 5.51 | 0.0039 | 5.84 | 56.05 | 11.01 | 654.67 | 12.42 | 79.28 | 11.68 |
| ELF-01 ap9 | 89.63 | 5.66 | 0.7874 | 6.13 | 1.2183 | 7.59 | 0.0113 | 6.79 | 0.0064 | 8.49 | 72.46 | 13.58 | 809.01 | 15.19 | 128.86 | 16.99 |
| ELF-02 ap1 | 18.52 | 4.65 | 0.7917 | 3.14 | 5.7662 | 4.88 | 0.0533 | 4.50 | 0.0165 | 4.29 | 334.45 | 9.00 | 194.135 | 9.77 | 330.79 | 8.58 |
| ELF-02 ap10 | 14.07 | 8.91 | 0.6952 | 6.41 | 6.8730 | 9.98 | 0.0719 | 9.22 | 0.0736 | 12.38 | 447.37 | 18.43 | 2095.19 | 19.95 | 1440.03 | 24.76 |
| ELF-02 ap11 | 21.58 | 4.31 | 0.7989 | 1.30 | 5.1294 | 7.30 | 0.0465 | 7.24 | 0.0471 | 8.13 | 292.76 | 14.48 | 1840.98 | 14.59 | 933.39 | 16.26 |
| ELF-02 ap12 | 38.16 | 4.74 | 0.7751 | 6.51 | 2.7885 | 4.81 | 0.0282 | 4.80 | 0.0432 | 8.66 | 168.84 | 9.60 | 1352.46 | 9.62 | 857.96 | 17.31 |
| ELF-02 ap13 | 7.17 | 5.22 | 0.8301 | 3.43 | 16.0369 | 5.21 | 0.1388 | 4.87 | 0.0358 | 7.02 | 843.49 | 9.75 | 2879.00 | 10.43 | 713.62 | 14.04 |
| ELF-02 ap14 | 27.95 | 3.66 | 0.8189 | 2.14 | 4.0357 | 3.76 | 0.0359 | 4.30 | 0.0236 | 4.42 | 227.47 | 8.60 | 1641.41 | 7.52 | 472.99 | 8.85 |
| ELF-02 ap15 | 72.54 | 2.48 | 0.8041 | 2.41 | 1.5243 | 2.79 | 0.0137 | 2.94 | 0.0147 | 3.95 | 88.02 | 5.88 | 940.23 | 5.59 | 294.82 | 7.91 |
| ELF-02 ap16 | 21.82 | 8.50 | 0.8058 | 3.20 | 5.0948 | 8.00 | 0.0247 | 7.22 | 0.0247 | 9.01 | 289.24 | 14.43 | 1835.24 | 15.99 | 493.83 | 18.02 |
| ELF-02 ap17 | 23.06 | 4.13 | 0.8152 | 5.61 | 4.8748 | 4.19 | 0.0433 | 4.28 | 1.4115 | 9.59 | 273.04 | 8.55 | 1797.92 | 8.39 | 17842.47 | 19.10 |
| ELF-02 ap18 | 66.28 | 5.28 | 0.8135 | 5.41 | 1.7073 | 5.87 | 0.0152 | 5.74 | 0.0118 | 5.65 | 96.95 | 11.47 | 1011.28 | 11.73 | 238.14 | 11.30 |
| ELF-02 ap19 | 6.96 | 3.43 | 0.8211 | 2.61 | 16.2951 | 3.91 | 0.1435 | 3.50 | 0.0360 | 3.75 | 864.66 | 6.99 | 2894.27 | 7.83 | 716.24 | 7.50 |
| ELF-02 ap2 | 14.58 | 5.17 | 0.7903 | 3.34 | 7.4786 | 4.90 | 0.0685 | 5.05 | 0.0233 | 5.44 | 426.92 | 10.11 | 2170.43 | 9.80 | 467.50 | 10.88 |
| ELF-02 ap20 | 63.42 | 6.55 | 0.7390 | 5.32 | 1.6346 | 6.52 | 0.0160 | 6.49 | 0.0145 | 6.94 | 102.20 | 12.99 | 983.64 | 13.04 | 292.60 | 13.88 |
| ELF-02 ap21 | 13.24 | 4.85 | 0.8759 | 4.16 | 9.0162 | 6.36 | 0.0752 | 6.04 | 0.0476 | 5.72 | 467.36 | 12.07 | 2339.65 | 12.73 | 943.30 | 11.44 |
| ELF-02 ap22 | 1.85 | 1.99 | 0.8362 | 1.92 | 62.6158 | 2.08 | 0.5429 | 1.98 | 0.2175 | 2.95 | 2795.46 | 3.96 | 4216.75 | 4.16 | 3989.20 | 5.91 |
| ELF-02 ap23 | 31.71 | 8.55 | 0.8431 | 2.39 | 3.6412 | 6.67 | 0.0313 | 6.29 | 0.0104 | 8.14 | 198.85 | 12.59 | 1558.59 | 13.34 | 210.25 | 16.27 |
| ELF-02 ap24 | 3.56 | 2.54 | 0.8654 | 2.90 | 33.0733 | 2.59 | 0.2803 | 2.89 | 0.9980 | 3.60 | 1693.04 | 5.79 | 3582.79 | 5.18 | 14029.36 | 7.20 |
| ELF-02 ap25 | 15.10 | 2.94 | 0.7663 | 3.00 | 7.0132 | 3.33 | 0.0660 | 3.27 | 0.0158 | 6.10 | 411.71 | 6.54 | 2113.10 | 6.67 | 317.52 | 12.19 |
| ELF-02 ap26 | 19.30 | 2.61 | 0.7815 | 3.33 | 5.4652 | 3.24 | 0.0515 | 2.96 | 0.0574 | 3.23 | 323.78 | 5.92 | 1895.15 | 6.48 | 1130.84 | 6.46 |
| ELF-02 ap27 | 15.56 | 3.53 | 0.8062 | 3.49 | 7.0291 | 3.31 | 0.0639 | 4.09 | 0.0790 | 7.06 | 399.31 | 8.18 | 2115.12 | 6.62 | 1540.92 | 14.12 |
| ELF-02 ap28 | 18.30 | 5.70 | 0.8055 | 2.88 | 6.0679 | 4.67 | 0.0552 | 5.28 | 0.0329 | 2.83 | 864.07 | 4.22 | 2893.35 | 4.26 | 656.86 | 5.67 |
| ELF-02 ap3 | 13.40 | 2.48 | 0.8337 | 2.38 | 8.6103 | 2.78 | 0.0749 | 2.55 | 0.0241 | 3.10 | 465.47 | 5.10 | 2297.65 | 5.55 | 482.68 | 6.20 |
| ELF-02 ap31 | 9.64 | 2.03 | 0.8065 | 2.27 | 11.3967 | 2.75 | 0.1034 | 2.43 | 4.2350 | 5.44 | 634.23 | 4.86 | 2556.16 | 5.49 | 33553.94 | 10.88 |
| ELF-02 ap32 | 8.01 | 4.96 | 0.8369 | 2.38 | 14.4354 | 5.43 | 0.8856 | 4.12 | 0.3440 | 6.15 | 4088.72 | 8.25 | 4688.20 | 8.62 | 5983.20 | 12.30 |
| ELF-02 ap33 | 10.39 | 2.12 | 0.8416 | 2.69 | 11.0975 | 2.61 | 0.0965 | 2.27 | 0.2831 | 2.76 | 593.84 | 4.53 | 2531.35 | 5.22 | 5052.83 | 5.52 |
| ELF-02 ap4 | 22.37 | 4.48 | 0.8601 | 2.55 | 5.3408 | 5.90 | 0.0449 | 5.18 | 0.0254 | 4.72 | 283.24 | 10.36 | 1875.42 | 11.80 | 507.61 | 9.43 |
| ELF-02 ap5 | 15.43 | 2.83 | 0.7595 | 3.58 | 6.8229 | 3.21 | 0.0652 | 3.07 | 1.0470 | 4.40 | 406.89 | 6.14 | 2088.70 | 6.42 | 14520.72 | 8.79 |
| ELF-02 ap6 | 14.76 | 6.32 | 0.7448 | 4.25 | 6.9404 | 7.58 | 0.0677 | 6.08 | 0.0202 | 9.56 | 422.25 | 12.17 | 2103.84 | 15.15 | 405.10 | 19.12 |
| ELF-02 ap7 | 19.90 | 27.78 | 0.7387 | 8.99 | 5.1740 | 22.20 | 0.0457 | 19.04 | 0.1630 | 21.41 | 287.85 | 38.07 | 1848.34 | 44.39 | 3406.49 | 42.83 |
| ELF-02 ap8 | | | | | | | | | | | | | | | | |
| ELF-02 ap9 | 6.31 | 4.04 | 0.7936 | 5.07 | 17.4535 | 4.06 | 0.1594 | 4.08 | 0.1423 | 7.40 | 953.50 | 8.15 | 2960.10 | 8.13 | 2686.54 | 14.80 |
| LB026 apt1 | 19.30 | 7.50 | 0.7928 | 6.26 | 5.6082 | 4.60 | 0.0514 | 5.98 | 0.0024 | 6.57 | 323.15 | 11.96 | 1917.35 | 9.20 | 49.56 | 13.14 |

Appendix B: Eastern Sunda arc geochronology data - apatite

| Analysis ID | 238U/206Pb ratio | 1s% | 207Pb/206Pb ratio | 1s% | 207Pb/235U (calc) ratio | 1s% | 206Pb/238U ratio | 1s% | 208Pb/232Th ratio | 1s% | 206Pb/238U Age (Ma) | 2s% | 207Pb/235U (calc) Age (Ma) | 2s% | 208Pb/232Th Age (Ma) | 2s% |
|-------------|------------------|-------|-------------------|-------|-------------------------|-------|------------------|-------|-------------------|-------|---------------------|-------|----------------------------|-------|----------------------|-------|
| LB026 ap10 | 6.39 | 8.18 | 0.9117 | 10.28 | 19.6412 | 8.08 | 0.1588 | 8.29 | 0.0140 | 9.59 | 939.19 | 16.57 | 3073.86 | 16.16 | 281.81 | 19.18 |
| LB026 ap11 | 33.27 | 8.84 | 0.7229 | 9.87 | 2.9865 | 7.27 | 0.0300 | 7.10 | 0.0041 | 8.84 | 190.54 | 14.21 | 1404.19 | 14.55 | 83.04 | 17.88 |
| LB026 ap12 | 7.23 | 7.80 | 0.7691 | 10.09 | 14.6498 | 7.75 | 0.1386 | 7.79 | 0.0037 | 10.09 | 836.47 | 15.58 | 2792.77 | 15.49 | 75.86 | 20.18 |
| LB026 ap13 | 10.64 | 3.90 | 0.7688 | 5.64 | 9.9401 | 4.16 | 0.0936 | 3.98 | 0.0486 | 4.61 | 576.61 | 7.97 | 2429.24 | 8.32 | 962.42 | 9.22 |
| LB026 ap14 | 2.01 | 11.93 | 0.7980 | 13.54 | 54.1752 | 11.90 | 0.4916 | 12.11 | 0.0198 | 10.35 | 2577.47 | 24.21 | 4072.21 | 23.79 | 397.09 | 20.70 |
| LB026 ap15 | 6.32 | 9.91 | 1.1687 | 11.54 | 25.8539 | 8.27 | 0.1534 | 10.05 | 0.0136 | 8.78 | 920.19 | 20.10 | 3341.03 | 16.53 | 274.15 | 17.56 |
| LB026 ap16 | 15.21 | 6.12 | 0.7651 | 8.27 | 6.8352 | 6.17 | 0.0653 | 6.17 | 0.0031 | 6.22 | 407.71 | 12.33 | 2090.30 | 12.35 | 62.80 | 12.45 |
| LB026 ap17 | 47.38 | 4.66 | 0.8064 | 6.98 | 2.3520 | 5.79 | 0.0212 | 5.27 | 0.0081 | 5.59 | 134.95 | 10.54 | 1228.17 | 11.58 | 163.41 | 11.18 |
| LB026 ap18 | 41.80 | 7.59 | 0.7040 | 10.78 | 2.3355 | 7.95 | 0.0241 | 7.67 | 0.0061 | 9.95 | 153.69 | 15.34 | 1223.15 | 15.89 | 122.88 | 19.91 |
| LB026 ap19 | 8.67 | 1.92 | 0.8122 | 2.31 | 12.9548 | 2.18 | 0.1156 | 2.06 | 0.0957 | 3.62 | 704.92 | 4.11 | 2676.37 | 4.36 | 1117.06 | 7.23 |
| LB026 ap20 | 23.11 | 1.33 | 0.8124 | 1.24 | 4.8567 | 1.35 | 0.0433 | 1.43 | 0.0909 | 1.83 | 273.55 | 2.86 | 1794.78 | 2.70 | 1762.73 | 3.67 |
| LB026 ap21 | 25.11 | 5.14 | 0.8068 | 5.96 | 4.4522 | 4.66 | 0.0397 | 5.22 | 0.0040 | 4.35 | 250.89 | 10.44 | 1722.10 | 9.31 | 80.61 | 8.89 |
| LB026 ap22 | 14.31 | 5.03 | 0.8309 | 6.28 | 8.0114 | 4.61 | 0.0697 | 5.05 | 0.0046 | 5.19 | 434.33 | 10.10 | 2232.31 | 9.22 | 92.12 | 10.38 |
| LB026 ap23 | 10.77 | 7.28 | 0.8475 | 9.39 | 10.8552 | 6.93 | 0.0927 | 7.23 | 0.0046 | 6.93 | 571.75 | 14.47 | 2510.80 | 13.86 | 92.54 | 13.87 |
| LB026 ap24 | 30.89 | 3.84 | 0.9062 | 5.93 | 4.0495 | 3.86 | 0.0326 | 4.34 | 0.0144 | 4.83 | 206.54 | 8.68 | 1644.19 | 7.72 | 290.01 | 9.66 |
| LB026 ap25 | 14.11 | 6.93 | 0.6672 | 9.68 | 6.4783 | 7.41 | 0.0710 | 6.97 | 0.0047 | 8.26 | 441.94 | 13.95 | 2042.96 | 14.82 | 94.39 | 16.53 |
| LB026 ap26 | 57.19 | 5.33 | 0.8625 | 7.12 | 2.0638 | 5.08 | 0.0176 | 5.31 | 0.0088 | 5.81 | 112.40 | 10.63 | 1136.87 | 10.16 | 176.93 | 11.61 |
| LB026 ap27 | 12.48 | 3.83 | 0.7799 | 4.65 | 8.6246 | 3.89 | 0.0903 | 4.91 | 0.0298 | 6.46 | 498.14 | 9.82 | 2299.15 | 7.78 | 596.08 | 12.91 |
| LB026 ap28 | 43.18 | 4.89 | 0.7698 | 6.62 | 2.4504 | 4.89 | 0.0231 | 5.20 | 0.0100 | 5.76 | 147.36 | 10.40 | 1257.55 | 9.77 | 201.54 | 11.53 |
| LB026 ap29 | 34.71 | 4.05 | 0.7446 | 5.51 | 2.9334 | 4.37 | 0.0287 | 4.14 | 0.0114 | 6.12 | 182.26 | 8.28 | 1390.57 | 8.74 | 228.98 | 12.24 |
| LB026 ap30 | 27.79 | 4.12 | 0.8135 | 5.40 | 4.0355 | 5.04 | 0.0561 | 4.95 | 0.0171 | 5.52 | 228.92 | 9.89 | 1641.37 | 10.08 | 344.58 | 11.03 |
| LB026 ap31 | 17.49 | 4.01 | 0.7610 | 5.16 | 5.9612 | 5.35 | 0.0372 | 5.00 | 0.0244 | 5.35 | 358.69 | 10.00 | 1970.19 | 10.70 | 487.81 | 10.69 |
| LB026 ap32 | 12.59 | 1.83 | 0.8089 | 2.04 | 8.8100 | 2.05 | 0.0793 | 1.84 | 0.0674 | 2.17 | 491.98 | 3.67 | 2318.53 | 4.10 | 1322.33 | 4.35 |
| LB026 ap33 | 45.32 | 2.50 | 0.8176 | 3.91 | 16.2906 | 5.47 | 0.1322 | 5.88 | 0.0247 | 3.51 | 140.53 | 11.76 | 2684.01 | 10.93 | 121.35 | 12.52 |
| LB026 ap34 | 26.23 | 3.75 | 0.7634 | 5.80 | 3.9624 | 3.42 | 0.0379 | 3.74 | 0.0161 | 4.07 | 239.77 | 7.48 | 1626.54 | 6.84 | 324.00 | 8.14 |
| LB026 ap35 | 26.53 | 3.21 | 0.7958 | 4.21 | 4.1273 | 3.76 | 0.0376 | 3.89 | 0.0105 | 4.52 | 237.64 | 7.78 | 1659.73 | 7.53 | 212.13 | 9.04 |
| LB026 ap4 | 12.93 | 2.18 | 0.7891 | 2.32 | 8.3792 | 2.36 | 0.0773 | 2.34 | 0.0644 | 2.37 | 479.74 | 4.68 | 2272.93 | 4.72 | 1265.92 | 4.74 |
| LB026 ap5 | 23.54 | 3.31 | 0.7824 | 2.72 | 4.5644 | 3.56 | 0.0423 | 3.78 | 0.0296 | 3.39 | 267.38 | 7.56 | 1742.79 | 7.12 | 591.87 | 6.79 |
| LB026 ap6 | 2.17 | 4.52 | 0.8149 | 3.77 | 51.7578 | 4.22 | 0.4606 | 4.71 | 0.0358 | 4.72 | 2442.40 | 9.42 | 4026.72 | 8.44 | 712.46 | 9.44 |
| LB026 ap7 | 16.88 | 4.06 | 0.7937 | 5.37 | 6.4895 | 3.99 | 0.0595 | 4.35 | 0.0045 | 5.22 | 372.58 | 8.69 | 2044.48 | 7.98 | 91.30 | 10.43 |
| LB026 ap8 | 82.56 | 3.71 | 0.7153 | 5.11 | 1.1973 | 3.81 | 0.0121 | 4.19 | 0.0029 | 4.73 | 77.55 | 8.38 | 799.34 | 7.61 | 57.86 | 9.46 |
| LB026 ap9 | 19.56 | 7.77 | 0.5931 | 11.33 | 4.0918 | 8.79 | 0.0509 | 7.79 | 0.0042 | 9.87 | 320.33 | 15.98 | 1652.88 | 17.57 | 84.44 | 19.74 |
| NAF-01 ap1 | 21.07 | 3.13 | 0.7984 | 3.15 | 5.2123 | 3.53 | 0.0475 | 3.66 | 0.0178 | 4.65 | 299.19 | 7.32 | 1854.63 | 7.06 | 358.55 | 9.30 |
| NAF-01 ap10 | 7.97 | 3.43 | 0.8259 | 1.41 | 14.2792 | 3.42 | 0.1254 | 3.52 | 0.0261 | 3.40 | 761.38 | 7.03 | 2768.43 | 6.85 | 521.98 | 6.80 |
| NAF-01 ap11 | 43.19 | 4.52 | 0.8073 | 7.80 | 2.6126 | 5.91 | 0.0233 | 5.78 | 0.0217 | 5.55 | 148.48 | 11.57 | 1304.19 | 11.82 | 434.19 | 11.09 |
| NAF-01 ap12 | 26.52 | 3.29 | 0.8135 | 4.23 | 4.2660 | 3.15 | 0.0377 | 3.33 | 0.0246 | 4.08 | 238.86 | 6.66 | 1686.83 | 6.30 | 492.42 | 8.16 |
| NAF-01 ap13 | 19.28 | 2.80 | 0.8238 | 2.57 | 5.8683 | 3.28 | 0.0519 | 3.12 | 0.0386 | 3.18 | 326.09 | 6.24 | 1956.55 | 6.55 | 767.99 | 6.36 |
| NAF-01 ap14 | 4.52 | 4.19 | 0.8284 | 1.65 | 25.2727 | 4.54 | 0.2208 | 4.47 | 0.1593 | 4.62 | 1286.18 | 8.94 | 3318.81 | 9.08 | 2995.64 | 9.24 |
| NAF-01 ap15 | 3.53 | 2.96 | 0.8401 | 3.06 | 32.7604 | 3.19 | 0.2837 | 3.36 | 0.0736 | 3.81 | 1610.08 | 6.72 | 3573.43 | 6.39 | 1439.47 | 7.62 |
| NAF-01 ap17 | 8.12 | 2.32 | 0.7769 | 3.33 | 13.1027 | 2.25 | 0.1233 | 3.50 | 0.0902 | 2.40 | 749.62 | 7.01 | 2687.08 | 4.50 | 1564.59 | 4.80 |
| NAF-01 ap18 | 10.73 | 2.55 | 0.8255 | 1.69 | 10.6195 | 2.67 | 0.0933 | 2.46 | 0.0878 | 2.64 | 575.18 | 4.93 | 2490.42 | 5.34 | 1704.98 | 5.27 |
| NAF-01 ap19 | 76.22 | 3.43 | 0.8425 | 4.10 | 1.4294 | 4.41 | 0.0132 | 4.34 | 0.0142 | 4.81 | 84.49 | 8.67 | 901.28 | 8.82 | 285.79 | 9.61 |
| NAF-01 ap20 | 23.15 | 2.17 | 0.8425 | 2.54 | 5.0222 | 2.23 | 0.0433 | 2.16 | 0.0326 | 2.41 | 273.55 | 4.32 | 1823.07 | 4.46 | 650.10 | 4.82 |
| NAF-01 ap21 | 2.03 | 2.74 | 0.8395 | 1.48 | 57.0325 | 2.58 | 0.4927 | 2.69 | 0.1200 | 3.09 | 2882.36 | 5.39 | 4123.47 | 5.16 | 2287.38 | 6.18 |
| NAF-01 ap22 | 32.06 | 2.72 | 0.8292 | 2.85 | 3.5096 | 2.86 | 0.0311 | 3.28 | 0.0245 | 3.75 | 197.16 | 6.55 | 1529.38 | 5.72 | 489.83 | 7.49 |
| NAF-01 ap23 | 18.29 | 1.66 | 0.7913 | 1.75 | 5.9372 | 1.87 | 0.0547 | 1.69 | 0.0352 | 1.89 | 343.42 | 3.37 | 1966.69 | 3.75 | 702.13 | 3.78 |
| NAF-01 ap23 | 19.92 | 2.70 | 0.8057 | 2.25 | 5.6235 | 3.10 | 0.0507 | 3.15 | 0.0265 | 3.60 | 318.56 | 6.29 | 1919.71 | 6.20 | 529.71 | 6.20 |

Appendix B: Eastern Sunda arc geochronology data - apatite

| Analysis ID | 238U/206Pb ratio | 1s% | 207Pb/206Pb ratio | 1s% | 207Pb/235U (calc)/ratio | 1s% | 206Pb/238U ratio | 1s% | 208Pb/232Th ratio | 1s% | 206Pb/238U Age (Ma) | 2s% | 207Pb/235U (calc) Age (Ma) | 2s% | 208Pb/232Th Age (Ma) | 2s% |
|-------------|------------------|-------|-------------------|------|-------------------------|------|------------------|------|-------------------|-------|---------------------|-------|----------------------------|-------|----------------------|-------|
| NAF-01 ap24 | 11.32 | 2.43 | 0.7945 | 2.01 | 9.6988 | 2.80 | 0.0883 | 2.85 | 0.0814 | 3.13 | 545.47 | 5.70 | 2406.60 | 5.60 | 1586.39 | 6.26 |
| NAF-01 ap25 | 21.59 | 1.82 | 0.8012 | 2.11 | 5.1291 | 2.15 | 0.0464 | 1.81 | 0.0273 | 2.16 | 292.28 | 3.62 | 1840.93 | 4.30 | 546.53 | 4.32 |
| NAF-01 ap26 | 14.25 | 2.52 | 0.8983 | 3.06 | 8.6311 | 3.37 | 0.0706 | 2.90 | 0.0293 | 3.02 | 439.61 | 5.80 | 2299.84 | 6.73 | 585.60 | 6.04 |
| NAF-01 ap27 | 16.57 | 1.50 | 0.8385 | 1.43 | 6.9442 | 1.68 | 0.0604 | 1.50 | 0.0479 | 1.67 | 377.77 | 3.01 | 2104.33 | 3.36 | 949.29 | 3.34 |
| NAF-01 ap28 | 3.27 | 6.84 | 0.7515 | 8.38 | 31.6499 | 4.92 | 0.3066 | 6.07 | 0.0410 | 6.80 | 1734.00 | 12.15 | 3539.47 | 9.84 | 2335.49 | 13.61 |
| NAF-01 ap29 | 11.99 | 4.75 | 0.8060 | 1.86 | 9.2522 | 4.37 | 0.0838 | 4.36 | 0.0410 | 4.69 | 519.06 | 8.72 | 2363.30 | 8.73 | 814.62 | 9.38 |
| NAF-01 ap3 | 10.27 | 1.79 | 0.8059 | 2.03 | 10.8027 | 2.02 | 0.0972 | 1.88 | 0.1302 | 2.11 | 597.95 | 3.76 | 2506.30 | 4.04 | 2480.10 | 4.21 |
| NAF-01 ap30 | 11.13 | 1.45 | 0.8149 | 1.32 | 10.0940 | 1.55 | 0.0899 | 1.55 | 0.0775 | 1.72 | 554.65 | 3.09 | 2443.42 | 3.10 | 1513.74 | 3.44 |
| NAF-01 ap31 | 2.99 | 2.00 | 0.8158 | 2.34 | 37.6091 | 2.57 | 0.3347 | 2.13 | 0.0817 | 2.49 | 1861.28 | 4.26 | 3709.69 | 5.14 | 1582.65 | 4.88 |
| NAF-01 ap32 | 24.27 | 1.90 | 0.8044 | 2.27 | 4.5524 | 2.21 | 0.0413 | 2.16 | 0.0403 | 2.41 | 260.71 | 4.32 | 1740.61 | 4.42 | 800.21 | 4.82 |
| NAF-01 ap33 | 13.63 | 4.62 | 0.8185 | 5.67 | 8.2040 | 4.29 | 0.0732 | 5.19 | 0.0509 | 5.78 | 455.32 | 10.39 | 2253.79 | 8.58 | 1006.01 | 11.55 |
| NAF-01 ap34 | 17.27 | 1.25 | 0.8293 | 1.12 | 6.6128 | 1.30 | 0.0579 | 1.25 | 0.0385 | 1.35 | 362.84 | 2.50 | 2061.06 | 2.61 | 764.92 | 2.70 |
| NAF-01 ap35 | 23.59 | 1.82 | 0.8177 | 2.03 | 4.7496 | 1.99 | 0.0423 | 1.86 | 0.0565 | 2.20 | 339.71 | 3.26 | 1776.03 | 3.97 | 1153.18 | 4.06 |
| NAF-01 ap36 | 18.45 | 1.50 | 0.8044 | 1.49 | 6.0115 | 1.73 | 0.0541 | 1.63 | 0.0575 | 2.20 | 267.26 | 3.72 | 1977.52 | 3.47 | 1133.62 | 4.39 |
| NAF-01 ap4 | 24.69 | 2.37 | 0.8267 | 2.87 | 4.5761 | 2.48 | 0.0404 | 2.37 | 0.0656 | 2.74 | 255.22 | 4.74 | 1744.93 | 4.97 | 1665.70 | 5.49 |
| NAF-01 ap5 | 37.75 | 3.34 | 0.7696 | 4.82 | 2.7873 | 3.70 | 0.0264 | 3.66 | 0.0061 | 4.34 | 167.99 | 7.31 | 1352.14 | 7.41 | 123.36 | 8.69 |
| NAF-01 ap6 | 19.38 | 2.69 | 0.8267 | 3.35 | 5.8471 | 2.84 | 0.0515 | 2.71 | 0.0673 | 3.11 | 323.96 | 5.41 | 1953.42 | 5.69 | 1320.36 | 6.23 |
| NAF-01 ap7 | 11.60 | 4.42 | 0.7947 | 2.16 | 9.4135 | 3.85 | 0.0965 | 3.75 | 0.0355 | 3.71 | 534.62 | 7.50 | 2379.15 | 7.71 | 706.72 | 7.42 |
| NAF-01 ap8 | 7.04 | 2.15 | 0.8096 | 1.78 | 15.9119 | 1.90 | 0.1421 | 2.20 | 0.1041 | 2.47 | 856.49 | 4.40 | 2871.52 | 3.81 | 2008.21 | 4.94 |
| NAF-01 ap9 | 11.76 | 1.46 | 0.8142 | 1.49 | 9.5382 | 1.48 | 0.0850 | 1.54 | 0.0836 | 1.63 | 528.07 | 3.08 | 2391.24 | 2.96 | 1627.17 | 3.26 |
| NAF-02 ap1 | 7.21 | 1.66 | 0.8341 | 1.10 | 15.8767 | 1.68 | 0.1383 | 1.62 | 0.0997 | 6.84 | 835.06 | 3.23 | 2869.41 | 3.37 | 1741.91 | 13.68 |
| NAF-02 ap10 | 12.19 | 4.30 | 0.8248 | 1.91 | 9.3339 | 4.25 | 0.0825 | 4.22 | 0.0739 | 3.14 | 511.14 | 8.45 | 2371.36 | 8.50 | 1444.61 | 6.28 |
| NAF-02 ap11 | 0.73 | 1.97 | 0.8368 | 0.64 | 156.7271 | 1.98 | 1.3601 | 1.93 | 3.6020 | 2.24 | 5535.65 | 3.85 | 5138.72 | 3.97 | 30941.84 | 4.47 |
| NAF-02 ap12 | 7.34 | 2.06 | 0.8034 | 2.22 | 14.9675 | 2.11 | 0.1358 | 2.19 | 0.0620 | 13.65 | 820.84 | 4.39 | 2813.18 | 4.23 | 1219.65 | 27.30 |
| NAF-02 ap13 | 7.97 | 1.29 | 0.8284 | 1.15 | 14.3372 | 1.43 | 0.1256 | 1.40 | 0.6266 | 1.84 | 762.73 | 2.80 | 2772.28 | 2.85 | 9861.64 | 3.69 |
| NAF-02 ap14 | 5.59 | 1.80 | 0.8324 | 2.02 | 20.3137 | 2.07 | 0.1787 | 1.83 | 0.7051 | 3.62 | 1059.75 | 3.66 | 3106.41 | 4.15 | 10816.75 | 7.25 |
| NAF-02 ap15 | 5.59 | 1.74 | 0.8373 | 1.17 | 20.7169 | 2.08 | 0.1791 | 1.87 | 0.2072 | 5.51 | 1061.82 | 3.74 | 3125.44 | 4.16 | 3816.30 | 11.02 |
| NAF-02 ap16 | 8.59 | 1.44 | 0.8131 | 1.32 | 13.0835 | 1.49 | 0.1163 | 1.51 | 0.2717 | 1.77 | 709.46 | 3.03 | 2685.69 | 2.97 | 4871.26 | 3.55 |
| NAF-02 ap17 | 4.84 | 2.27 | 0.8535 | 2.37 | 24.2465 | 2.32 | 0.2062 | 2.50 | 0.7709 | 3.11 | 1208.52 | 4.99 | 3278.36 | 4.63 | 11584.44 | 6.22 |
| NAF-02 ap18 | 7.90 | 1.82 | 0.8311 | 1.08 | 14.4856 | 1.86 | 0.1265 | 1.95 | 0.2328 | 2.94 | 767.79 | 3.90 | 2782.06 | 3.72 | 4242.99 | 5.89 |
| NAF-02 ap19 | 3.62 | 2.92 | 0.8517 | 1.47 | 32.7497 | 3.08 | 0.2743 | 2.89 | 1.1893 | 2.13 | 1562.44 | 5.78 | 3573.10 | 6.16 | 15683.24 | 4.26 |
| NAF-02 ap2 | 4.84 | 1.56 | 0.8318 | 1.43 | 23.0910 | 1.78 | 0.2024 | 1.56 | 0.4941 | 1.82 | 1188.04 | 3.12 | 3230.78 | 3.55 | 8138.91 | 3.65 |
| NAF-02 ap20 | 2.97 | 1.43 | 0.8431 | 1.20 | 39.0575 | 1.63 | 0.3364 | 1.49 | 0.6591 | 2.23 | 1869.44 | 2.97 | 3747.08 | 3.26 | 10261.66 | 4.46 |
| NAF-02 ap21 | 3.70 | 2.04 | 0.8327 | 1.31 | 31.0820 | 2.03 | 0.2703 | 2.06 | 0.2802 | 2.71 | 1542.31 | 4.11 | 3521.65 | 4.07 | 5006.97 | 5.41 |
| NAF-02 ap22 | 10.72 | 1.55 | 0.8141 | 1.63 | 10.5309 | 1.71 | 0.0934 | 1.53 | 0.3910 | 1.99 | 575.46 | 3.07 | 2482.64 | 3.42 | 6688.94 | 3.98 |
| NAF-02 ap23 | 9.68 | 1.80 | 0.8411 | 1.45 | 11.9471 | 1.82 | 0.1031 | 1.82 | 0.1756 | 4.66 | 632.56 | 3.64 | 2600.27 | 3.63 | 3278.79 | 9.31 |
| NAF-02 ap24 | 9.42 | 1.99 | 0.8263 | 1.57 | 12.0235 | 1.98 | 0.1061 | 2.19 | 0.2022 | 2.98 | 649.87 | 4.37 | 2606.24 | 3.95 | 3733.37 | 5.95 |
| NAF-02 ap25 | 7.20 | 1.50 | 0.8263 | 1.53 | 15.8507 | 1.51 | 0.1389 | 1.51 | 0.4218 | 3.45 | 838.37 | 3.02 | 2867.84 | 3.02 | 7134.10 | 6.91 |
| NAF-02 ap3 | 3.38 | 4.54 | 0.8345 | 1.36 | 34.2526 | 4.15 | 0.2961 | 4.13 | 0.3176 | 4.48 | 1672.00 | 8.26 | 3617.34 | 8.30 | 5590.30 | 8.96 |
| NAF-02 ap4 | 6.48 | 1.42 | 0.8226 | 1.25 | 17.4484 | 1.59 | 0.1543 | 1.44 | 0.4171 | 4.67 | 925.28 | 2.89 | 2959.82 | 3.17 | 7066.23 | 9.34 |
| NAF-02 ap5 | 4.65 | 1.52 | 0.8055 | 1.39 | 23.9630 | 1.65 | 0.2152 | 1.58 | 0.2682 | 1.82 | 1256.22 | 3.15 | 3266.89 | 3.29 | 4815.56 | 3.65 |
| NAF-02 ap6 | 8.42 | 1.45 | 0.8201 | 1.46 | 13.4501 | 1.61 | 0.1188 | 1.51 | 0.5216 | 2.59 | 723.48 | 3.01 | 2711.78 | 3.21 | 8508.78 | 5.18 |
| NAF-02 ap7 | 6.16 | 1.27 | 0.8297 | 1.08 | 18.5630 | 1.30 | 0.1624 | 1.31 | 0.5436 | 1.76 | 970.03 | 2.61 | 3019.38 | 2.60 | 8799.07 | 3.52 |
| NAF-02 ap8 | 6.72 | 3.01 | 0.8205 | 2.22 | 16.6076 | 3.47 | 0.1483 | 3.57 | 0.5866 | 4.92 | 891.14 | 7.13 | 2912.46 | 6.95 | 9356.46 | 9.85 |
| NAF-02 ap9 | 17.61 | 11.58 | 0.8341 | 2.30 | 6.5700 | 8.59 | 0.0583 | 8.13 | 0.0334 | 9.79 | 19.51 | 16.27 | 2055.33 | 17.18 | 665.87 | 19.57 |
| NAF-03 ap1 | 8.49 | 1.63 | 0.7841 | 1.76 | 12.6871 | 1.80 | 0.1181 | 1.71 | 0.2266 | 2.25 | 719.51 | 4.44 | 2656.70 | 3.60 | 4139.65 | 4.50 |
| NAF-03 ap10 | 11.42 | 1.97 | 0.7997 | 2.46 | 9.6785 | 2.01 | 0.0875 | 2.22 | 0.1414 | 2.22 | 540.72 | 4.44 | 2404.66 | 4.02 | 2680.94 | 4.56 |
| NAF-03 ap11 | 13.27 | 3.97 | 0.8103 | 2.12 | 8.4888 | 3.38 | 0.0756 | 3.48 | 0.0498 | 4.28 | 468.79 | 6.85 | 2284.72 | 6.76 | 984.22 | 8.54 |
| NAF-03 ap12 | 0.78 | 4.80 | 0.8305 | 3.77 | 147.3649 | 4.19 | 1.2953 | 4.25 | 0.2730 | 4.61 | 5556.06 | 8.51 | 5076.59 | 8.37 | 4883.00 | 9.23 |
| NAF-03 ap13 | 2.07 | 3.96 | 0.8151 | 3.94 | 55.3781 | 3.43 | 0.4905 | 3.58 | 0.1950 | 4.10 | 2572.75 | 7.15 | 4094.11 | 6.86 | 2991.24 | 8.20 |

Appendix B: Eastern Sunda arc geochronology data - apatite

| Analysis ID | 238U/206Pb ratio | 1s% | 207Pb/206Pb ratio | 1s% | 207Pb/235U (calc) ratio | 1s% | 206Pb/238U ratio | 1s% | 208Pb/232Th ratio | 1s% | 206Pb/238U Age (Ma) | 2s% | 207Pb/235U (calc) Age (Ma) | 2s% | 208Pb/232Th Age (Ma) | 2s% |
|-------------|------------------|-------|-------------------|-------|-------------------------|-------|------------------|-------|-------------------|-------|---------------------|-------|----------------------------|-------|----------------------|-------|
| NAF-03 ap14 | 1.86 | 5.95 | 0.7856 | 5.09 | 58.7531 | 6.23 | 0.6287 | 5.94 | 0.1629 | 6.48 | 2735.83 | 11.88 | 4153.14 | 12.45 | 3059.41 | 12.95 |
| NAF-03 ap15 | 1.06 | 1.98 | 0.8368 | 3.04 | 9.9227 | 2.21 | 0.0968 | 2.07 | 0.1048 | 2.71 | 530.77 | 4.13 | 2427.63 | 4.43 | 2019.96 | 5.42 |
| NAF-03 ap16 | 1.27 | 3.78 | 0.8267 | 3.84 | 89.8351 | 3.48 | 0.7863 | 4.01 | 0.1562 | 3.78 | 3739.90 | 8.02 | 4578.41 | 6.96 | 2942.67 | 7.56 |
| NAF-03 ap17 | 7.93 | 2.22 | 0.8237 | 2.58 | 14.4103 | 2.38 | 0.1262 | 2.22 | 0.1122 | 2.54 | 765.95 | 4.44 | 2777.11 | 4.77 | 2155.57 | 5.08 |
| NAF-03 ap18 | 0.87 | 2.62 | 0.8134 | 1.96 | 128.8346 | 2.73 | 1.1440 | 2.54 | 0.3070 | 2.46 | 4916.35 | 5.08 | 4941.12 | 5.46 | 5427.04 | 4.91 |
| NAF-03 ap19 | 1.26 | 2.51 | 0.8563 | 2.22 | 93.4694 | 2.57 | 0.7921 | 2.71 | 0.3344 | 2.78 | 3760.86 | 5.42 | 4618.24 | 5.15 | 5847.85 | 5.57 |
| NAF-03 ap2 | 7.77 | 4.18 | 0.8370 | 3.11 | 14.7373 | 4.77 | 0.1280 | 4.87 | 0.1655 | 3.56 | 776.22 | 9.73 | 2798.43 | 9.55 | 3448.66 | 7.11 |
| NAF-03 ap20 | 0.45 | 4.73 | 0.8283 | 2.54 | 256.9079 | 5.09 | 2.2467 | 4.93 | 1.3997 | 5.46 | 7591.58 | 9.85 | 5638.02 | 10.18 | 17743.50 | 10.93 |
| NAF-03 ap21 | 2.22 | 2.25 | 0.8170 | 2.10 | 50.5653 | 2.34 | 0.4491 | 2.25 | 0.2460 | 2.37 | 2391.43 | 4.50 | 4003.90 | 4.69 | 4457.54 | 4.73 |
| NAF-03 ap22 | 22.89 | 3.15 | 0.8248 | 1.72 | 4.9414 | 3.26 | 0.0495 | 3.26 | 0.0564 | 3.09 | 274.78 | 6.53 | 1809.36 | 6.52 | 1111.57 | 6.18 |
| NAF-03 ap23 | 0.55 | 2.81 | 0.8290 | 2.18 | 207.9629 | 3.33 | 1.8212 | 2.83 | 0.4224 | 2.85 | 6886.03 | 5.67 | 5424.34 | 6.66 | 7141.57 | 5.69 |
| NAF-03 ap24 | 8.49 | 1.77 | 0.8367 | 1.63 | 13.6237 | 1.98 | 0.1179 | 1.90 | 0.2412 | 2.24 | 718.39 | 4.80 | 2723.91 | 3.97 | 4379.29 | 4.48 |
| NAF-03 ap25 | 11.82 | 2.20 | 0.7975 | 2.79 | 9.3056 | 2.28 | 0.0847 | 2.40 | 0.0877 | 2.67 | 523.91 | 4.80 | 2368.57 | 4.55 | 1704.61 | 5.35 |
| NAF-03 ap26 | 18.35 | 2.22 | 0.8501 | 2.68 | 6.3725 | 2.47 | 0.0545 | 2.44 | 0.0496 | 3.04 | 341.87 | 4.88 | 2028.49 | 4.95 | 982.15 | 6.08 |
| NAF-03 ap27 | 23.72 | 3.86 | 0.7977 | 1.84 | 4.6524 | 3.30 | 0.0419 | 3.24 | 0.0228 | 5.47 | 264.51 | 6.48 | 1758.73 | 6.59 | 456.95 | 10.94 |
| NAF-03 ap28 | 2.04 | 2.41 | 0.8541 | 2.21 | 57.8128 | 2.54 | 0.4805 | 2.51 | 0.1841 | 2.51 | 2672.88 | 5.03 | 4611.20 | 5.37 | 4000.83 | 5.05 |
| NAF-03 ap29 | 4.25 | 3.44 | 0.8174 | 1.78 | 92.8165 | 2.69 | 0.7896 | 2.58 | 0.2182 | 2.53 | 3751.71 | 5.16 | 4611.20 | 5.37 | 4000.83 | 5.05 |
| NAF-03 ap30 | 13.48 | 2.34 | 0.8483 | 2.80 | 8.5941 | 2.77 | 0.0739 | 2.36 | 0.1632 | 2.86 | 1365.79 | 5.88 | 2295.94 | 5.54 | 3409.69 | 5.45 |
| NAF-03 ap6 | 0.82 | 4.34 | 0.8570 | 3.41 | 224.6565 | 4.00 | 1.9082 | 4.00 | 0.1105 | 3.31 | 6881.64 | 8.00 | 5502.38 | 8.00 | 2123.93 | 6.61 |
| NAF-03 ap7 | 3.54 | 2.57 | 0.8358 | 1.78 | 32.7201 | 2.70 | 0.2832 | 2.57 | 0.0856 | 4.39 | 1607.64 | 5.14 | 3572.21 | 5.40 | 1664.41 | 8.78 |
| NAF-03 ap8 | 0.77 | 3.98 | 0.8355 | 3.49 | 149.2968 | 3.91 | 1.2931 | 3.98 | 0.1730 | 3.96 | 5349.75 | 7.97 | 5089.72 | 7.83 | 3234.67 | 7.92 |
| NAF-03 ap9 | 0.43 | 2.55 | 0.8223 | 1.82 | 264.6135 | 2.68 | 2.3382 | 2.59 | 0.6179 | 2.50 | 7770.66 | 5.18 | 5667.91 | 5.36 | 9752.10 | 5.01 |
| SLG-1 ap1 | 2.13 | 4.32 | 0.8239 | 4.08 | 53.3967 | 3.64 | 0.4920 | 4.01 | 0.0977 | 4.48 | 2492.23 | 8.02 | 4057.78 | 7.27 | 1890.07 | 8.96 |
| SLG-1 ap10 | 1.77 | 6.24 | 0.8269 | 1.66 | 64.7494 | 5.37 | 0.5723 | 5.89 | 0.6291 | 8.71 | 2917.08 | 11.77 | 4250.24 | 10.73 | 9891.66 | 17.42 |
| SLG-1 ap11 | 57.16 | 9.54 | 0.6182 | 18.16 | 1.3991 | 11.70 | 0.0167 | 12.57 | 0.0206 | 11.53 | 106.91 | 25.13 | 888.54 | 23.40 | 412.60 | 23.06 |
| SLG-1 ap12 | 3.15 | 7.92 | 0.7466 | 9.58 | 33.2241 | 8.03 | 0.3129 | 7.92 | 0.2847 | 9.49 | 1754.75 | 15.83 | 3587.28 | 16.06 | 5078.08 | 18.99 |
| SLG-1 ap13 | 48.42 | 11.48 | 0.7639 | 15.18 | 2.1083 | 10.68 | 0.0201 | 10.82 | 0.1533 | 10.39 | 128.13 | 21.64 | 1151.51 | 21.37 | 2890.99 | 20.78 |
| SLG-1 ap15 | 2.13 | 5.38 | 0.8312 | 5.92 | 53.4286 | 5.30 | 0.4668 | 5.41 | 0.1666 | 5.56 | 2469.47 | 10.82 | 4058.37 | 10.60 | 3123.14 | 11.12 |
| SLG-1 ap16 | 2.11 | 10.69 | 0.7105 | 10.82 | 45.7534 | 9.53 | 0.4672 | 9.27 | 0.1246 | 12.15 | 2471.09 | 18.53 | 3904.03 | 19.06 | 2380.31 | 24.31 |
| SLG-1 ap17 | 31.63 | 8.60 | 0.8253 | 7.01 | 3.5634 | 5.10 | 0.0313 | 5.27 | 0.0291 | 9.02 | 198.62 | 10.54 | 1541.42 | 10.19 | 581.91 | 18.04 |
| SLG-1 ap18 | 3.66 | 9.06 | 0.7205 | 7.47 | 27.3741 | 6.22 | 0.2763 | 6.07 | 0.0379 | 6.66 | 1672.87 | 12.14 | 3386.94 | 12.43 | 753.44 | 13.32 |
| SLG-1 ap19 | 4.76 | 9.44 | 0.7907 | 9.81 | 22.8403 | 7.75 | 0.2096 | 7.88 | 0.0719 | 10.84 | 1226.84 | 15.76 | 3220.16 | 15.50 | 1406.63 | 21.88 |
| SLG-1 ap20 | 60.58 | 8.31 | 0.7102 | 10.69 | 1.6383 | 10.78 | 0.0168 | 10.72 | 0.0158 | 10.89 | 107.62 | 21.44 | 985.04 | 21.56 | 318.63 | 21.79 |
| SLG-1 ap21 | 6.52 | 8.70 | 0.8092 | 7.75 | 16.9043 | 5.99 | 0.1521 | 8.04 | 0.0590 | 7.19 | 912.51 | 16.08 | 2929.42 | 11.98 | 1143.02 | 14.39 |
| SLG-1 ap22 | 3.94 | 5.05 | 0.8183 | 5.41 | 28.6289 | 4.42 | 0.2536 | 4.61 | 0.0438 | 4.85 | 1457.07 | 9.21 | 3440.88 | 8.84 | 868.71 | 9.70 |
| SLG-1 ap23 | 3.72 | 4.90 | 0.7584 | 6.10 | 27.9557 | 4.96 | 0.2679 | 5.10 | 0.1934 | 5.77 | 1529.94 | 10.19 | 3417.54 | 9.92 | 3583.69 | 11.53 |
| SLG-1 ap24 | 6.11 | 6.07 | 0.7526 | 8.25 | 17.1022 | 8.28 | 0.1624 | 6.42 | 0.0312 | 7.52 | 970.22 | 12.83 | 2940.59 | 16.55 | 622.62 | 15.04 |
| SLG-1 ap25 | 3.28 | 6.31 | 0.8506 | 3.91 | 35.2356 | 6.23 | 0.3006 | 5.82 | 0.0401 | 5.04 | 1694.26 | 11.63 | 3645.27 | 12.46 | 796.61 | 10.08 |
| SLG-1 ap26 | 1.28 | 6.17 | 0.8845 | 6.86 | 94.1704 | 6.01 | 0.7747 | 6.48 | 0.3890 | 6.27 | 3897.78 | 12.97 | 4625.75 | 12.02 | 6386.25 | 12.54 |
| SLG-1 ap27 | 4.63 | 3.49 | 0.7891 | 4.20 | 23.6162 | 3.80 | 0.2165 | 3.65 | 0.1254 | 4.60 | 1263.41 | 7.29 | 3252.88 | 7.59 | 3295.31 | 9.19 |
| SLG-1 ap4 | 6.10 | 2.99 | 0.8264 | 3.80 | 18.6556 | 3.14 | 0.1638 | 3.40 | 0.1517 | 3.80 | 977.72 | 6.81 | 3024.18 | 6.28 | 2862.77 | 7.80 |
| SLG-1 ap4 | 3.32 | 4.35 | 0.8877 | 4.96 | 37.1126 | 4.44 | 0.3018 | 4.27 | 0.1390 | 4.46 | 1700.31 | 8.55 | 3696.55 | 8.89 | 2638.02 | 8.93 |
| SLG-1 ap5 | 6.78 | 3.15 | 0.8385 | 3.76 | 16.9624 | 3.56 | 0.1469 | 3.69 | 0.0527 | 4.27 | 883.36 | 7.39 | 2932.71 | 7.12 | 1040.74 | 8.54 |
| SLG-1 ap6 | 4.50 | 3.74 | 0.8620 | 4.51 | 26.3752 | 3.71 | 0.2219 | 3.76 | 0.0508 | 4.05 | 1291.78 | 7.51 | 3360.55 | 7.43 | 1004.03 | 8.11 |
| SLG-1 ap8 | 1.94 | 5.17 | 0.9204 | 4.85 | 65.8381 | 4.50 | 0.4715 | 4.28 | 0.4715 | 5.67 | 2862.64 | 8.56 | 4266.92 | 9.01 | 7830.01 | 11.34 |
| SLG-1 ap9 | 1.29 | 6.34 | 0.8897 | 7.16 | 95.0148 | 6.72 | 0.7739 | 7.68 | 0.2171 | 5.48 | 3695.02 | 15.36 | 4634.72 | 13.44 | 3983.10 | 10.96 |
| SLG-2 ap1 | 6.27 | 2.22 | 0.8398 | 1.84 | 18.4452 | 1.98 | 0.1593 | 2.19 | 0.0273 | 1.86 | 952.66 | 4.39 | 3013.25 | 3.95 | 545.66 | 3.71 |

Appendix B: Eastern Sunda arc geochronology data - apatite

| Analysis ID | 238U/206Pb ratio | 1s% | 207Pb/206Pb ratio | 1s% | 207Pb/235U (calc)/ratio | 1s% | 206Pb/238U ratio | 1s% | 206Pb/238U ratio | 1s% | 208Pb/232Th ratio | 1s% | 206Pb/238U Age (Ma) | 2s% | 207Pb/235U (calc) Age (Ma) | 2s% | 208Pb/232Th Age (Ma) | 2s% |
|-------------|------------------|------|-------------------|-------|-------------------------|------|------------------|------|------------------|-------|-------------------|-------|---------------------|-------|----------------------------|-------|----------------------|-----|
| SLG-2 ap10 | 5.69 | 4.57 | 0.8211 | 4.00 | 20.0201 | 3.67 | 0.1768 | 4.29 | 0.0114 | 5.23 | 1049.39 | 8.58 | 3092.33 | 7.35 | 228.83 | 10.45 | | |
| SLG-2 ap11 | 0.78 | 6.25 | 0.8770 | 4.62 | 152.9682 | 5.01 | 1.2735 | 5.85 | 0.0724 | 1.70 | 5294.57 | 11.70 | 5114.23 | 10.02 | 1417.57 | 9.86 | | |
| SLG-2 ap12 | 6.40 | 1.73 | 0.8517 | 1.86 | 18.3130 | 1.70 | 0.1560 | 1.80 | 0.0524 | 1.91 | 934.64 | 3.60 | 3006.32 | 3.40 | 1035.85 | 3.92 | | |
| SLG-2 ap13 | 3.53 | 2.01 | 0.8422 | 1.89 | 33.0016 | 2.29 | 0.2840 | 2.15 | 0.0995 | 2.94 | 1611.41 | 4.29 | 3580.85 | 4.58 | 1922.90 | 5.88 | | |
| SLG-2 ap14 | 1.83 | 3.17 | 0.8322 | 2.01 | 63.0269 | 2.94 | 0.5493 | 3.08 | 0.0533 | 3.47 | 282.29 | 6.17 | 4223.29 | 5.87 | 1051.91 | 6.95 | | |
| SLG-2 ap15 | 1.44 | 3.57 | 0.8240 | 3.69 | 78.4420 | 3.61 | 0.6948 | 3.61 | 0.0288 | 3.45 | 3401.00 | 7.22 | 4442.33 | 7.22 | 576.32 | 6.89 | | |
| SLG-2 ap17 | 0.95 | 2.94 | 0.7954 | 2.91 | 116.4777 | 3.22 | 1.0556 | 2.90 | 0.0543 | 2.74 | 4645.13 | 5.81 | 4839.57 | 6.43 | 1072.54 | 5.48 | | |
| SLG-2 ap18 | 2.52 | 2.75 | 0.8228 | 1.73 | 45.2256 | 2.57 | 0.3978 | 2.66 | 0.0506 | 2.24 | 2158.74 | 5.32 | 3892.51 | 5.15 | 1001.36 | 4.48 | | |
| SLG-2 ap19 | 13.28 | 5.76 | 0.7873 | 3.31 | 8.1815 | 6.83 | 0.0754 | 6.76 | 0.0117 | 5.42 | 468.45 | 13.52 | 2251.30 | 13.66 | 236.52 | 10.85 | | |
| SLG-2 ap2 | 4.81 | 3.00 | 0.8672 | 2.48 | 24.9912 | 2.80 | 0.2082 | 2.83 | 0.0341 | 3.43 | 1219.12 | 5.66 | 3307.87 | 5.60 | 680.01 | 6.86 | | |
| SLG-2 ap20 | 4.66 | 2.28 | 0.7877 | 2.64 | 23.3182 | 2.48 | 0.2147 | 2.37 | 0.0232 | 2.54 | 1253.72 | 4.75 | 3240.32 | 4.97 | 465.63 | 5.09 | | |
| SLG-2 ap21 | 2.47 | 5.10 | 0.7371 | 5.68 | 41.2476 | 5.37 | 0.4061 | 5.19 | 0.0258 | 5.28 | 2197.15 | 10.38 | 3801.14 | 10.75 | 517.05 | 10.57 | | |
| SLG-2 ap22 | 6.05 | 2.65 | 0.8575 | 3.07 | 19.4722 | 2.66 | 0.1651 | 2.77 | 0.0322 | 2.84 | 984.97 | 5.53 | 3065.51 | 5.33 | 642.08 | 5.69 | | |
| SLG-2 ap4 | 3.18 | 2.35 | 0.8212 | 1.94 | 35.6460 | 2.25 | 0.3148 | 2.38 | 0.0248 | 2.21 | 1764.30 | 4.76 | 3656.70 | 4.51 | 496.56 | 4.43 | | |
| SLG-2 ap26 | 4.40 | 7.35 | 0.8483 | 8.93 | 26.1980 | 7.20 | 0.2280 | 7.14 | 0.0326 | 13.63 | 1239.25 | 14.29 | 3353.96 | 14.40 | 650.80 | 27.27 | | |
| SLG-2 ap27 | 2.48 | 1.61 | 0.8287 | 1.61 | 46.2072 | 1.62 | 0.4033 | 1.67 | 0.0783 | 1.96 | 2184.40 | 3.35 | 3913.84 | 3.23 | 1528.82 | 3.92 | | |
| SLG-2 ap6 | 1.79 | 7.97 | 0.8158 | 3.71 | 64.7187 | 7.23 | 0.5706 | 8.02 | 0.0201 | 8.64 | 2810.08 | 16.04 | 4249.77 | 14.45 | 1119.22 | 17.29 | | |
| SLG-2 ap7 | 7.28 | 2.42 | 0.7989 | 2.26 | 15.1771 | 2.80 | 0.1374 | 2.91 | 0.0568 | 3.08 | 829.93 | 5.82 | 2826.42 | 5.60 | 403.38 | 6.17 | | |
| SLG-2 ap8 | 11.18 | 5.88 | 0.8136 | 4.94 | 10.0932 | 7.12 | 0.0900 | 6.91 | 0.0113 | 7.06 | 555.64 | 13.83 | 2443.35 | 14.23 | 227.76 | 14.12 | | |
| SLG-2 ap9 | 2.01 | 2.94 | 0.8176 | 2.07 | 55.8773 | 3.67 | 0.4956 | 3.71 | 0.0525 | 4.27 | 2594.84 | 7.43 | 4103.06 | 7.33 | 1037.88 | 8.54 | | |
| BHF-01 ap1 | 24.98 | 2.03 | 0.7880 | 2.63 | 4.3508 | 2.05 | 0.0401 | 2.03 | 0.0232 | 2.47 | 253.50 | 4.05 | 1703.05 | 4.11 | 465.29 | 4.94 | | |
| BHF-01 ap2 | 0.17 | 5.33 | 0.8415 | 2.73 | 674.6510 | 5.35 | 5.8380 | 5.38 | 0.8238 | 3.74 | 12393.19 | 10.77 | 6615.91 | 10.71 | 12180.39 | 7.49 | | |
| BHF-01 ap3 | 14.18 | 1.94 | 0.8408 | 2.50 | 8.1740 | 1.99 | 0.0705 | 1.94 | 0.0325 | 2.41 | 438.35 | 3.89 | 2250.47 | 3.98 | 648.85 | 4.82 | | |
| BHF-01 ap4 | 12.31 | 7.61 | 0.7845 | 11.91 | 8.8044 | 7.82 | 0.0816 | 7.04 | 0.0169 | 8.31 | 1049.42 | 14.07 | 2317.95 | 15.63 | 2822.76 | 16.62 | | |
| BHF-01 ap5 | 36.04 | 2.08 | 0.7987 | 2.71 | 3.0586 | 2.07 | 0.0278 | 2.20 | 0.0149 | 2.47 | 176.62 | 4.39 | 1422.38 | 4.14 | 339.14 | 4.83 | | |
| BHF-01 ap6 | 37.70 | 1.97 | 0.8196 | 2.55 | 2.9926 | 2.02 | 0.0285 | 2.08 | 0.0279 | 2.42 | 168.57 | 4.15 | 1405.74 | 4.05 | 299.69 | 4.84 | | |
| BHF-01 ap7 | 37.13 | 2.31 | 0.7776 | 3.05 | 2.8889 | 2.59 | 0.0270 | 2.45 | 0.0455 | 3.21 | 171.60 | 4.90 | 1379.01 | 5.18 | 902.63 | 6.42 | | |
| BHF-01 ap8 | 20.83 | 3.24 | 0.8887 | 5.56 | 5.8915 | 3.80 | 0.0482 | 3.77 | 0.0279 | 4.22 | 303.69 | 7.53 | 1959.98 | 7.60 | 558.18 | 8.44 | | |
| BHF-01 ap9 | 24.77 | 2.39 | 0.8013 | 3.13 | 4.4585 | 2.54 | 0.0404 | 2.37 | 0.0295 | 3.15 | 255.38 | 4.75 | 1723.28 | 5.08 | 589.53 | 6.29 | | |
| BHF-01 ap10 | 49.29 | 2.55 | 0.8118 | 2.93 | 2.2753 | 3.15 | 0.0203 | 2.94 | 0.0113 | 4.76 | 128.76 | 5.88 | 1204.65 | 6.30 | 228.35 | 9.53 | | |
| BHF-01 ap11 | 46.86 | 2.18 | 0.7928 | 2.87 | 2.3408 | 2.18 | 0.0214 | 2.40 | 0.0184 | 3.27 | 136.56 | 4.80 | 1224.76 | 4.36 | 368.95 | 6.54 | | |
| BHF-01 ap12 | 20.29 | 3.33 | 0.8154 | 2.87 | 5.5417 | 2.90 | 0.0483 | 3.46 | 0.0307 | 3.82 | 310.31 | 6.83 | 1907.10 | 5.79 | 612.87 | 7.64 | | |
| BHF-01 ap13 | 30.57 | 3.45 | 0.8285 | 3.43 | 3.7468 | 3.36 | 0.0327 | 3.64 | 0.0242 | 3.81 | 207.43 | 7.28 | 1581.43 | 6.73 | 485.39 | 7.63 | | |
| BHF-01 ap14 | 29.99 | 2.13 | 0.7979 | 2.77 | 3.6736 | 2.37 | 0.0384 | 2.13 | 0.0271 | 3.01 | 211.66 | 4.26 | 1565.85 | 4.75 | 542.24 | 6.02 | | |
| BHF-01 ap15 | 18.95 | 4.94 | 0.8286 | 3.46 | 6.0907 | 4.31 | 0.0536 | 4.52 | 0.0222 | 5.15 | 336.70 | 9.05 | 1988.91 | 8.62 | 445.69 | 10.29 | | |
| BHF-01 ap16 | 6.05 | 3.85 | 0.8349 | 1.48 | 19.1653 | 4.14 | 0.1674 | 4.37 | 0.1077 | 5.10 | 997.56 | 8.74 | 3050.17 | 8.28 | 2074.18 | 10.19 | | |
| BHF-01 ap17 | 29.61 | 2.78 | 0.8057 | 3.71 | 3.7341 | 2.85 | 0.0396 | 2.80 | 0.0242 | 3.27 | 213.14 | 5.60 | 1578.71 | 5.69 | 485.28 | 6.54 | | |
| BHF-01 ap18 | 34.20 | 2.98 | 0.7538 | 3.15 | 3.0253 | 2.61 | 0.0291 | 3.03 | 0.0116 | 3.67 | 184.97 | 6.06 | 1414.03 | 5.21 | 233.58 | 7.34 | | |
| BHF-01 ap19 | 58.90 | 2.66 | 0.7104 | 3.66 | 1.6658 | 3.14 | 0.0170 | 2.94 | 0.0114 | 4.24 | 108.79 | 5.87 | 995.60 | 6.28 | 228.96 | 8.47 | | |
| BHF-01 ap20 | 0.23 | 2.97 | 0.8228 | 1.65 | 493.3061 | 2.95 | 4.3489 | 2.94 | 6.4832 | 5.10 | 10809.86 | 5.88 | 6298.58 | 5.90 | 40796.23 | 10.20 | | |
| BHF-01 ap21 | 14.49 | 2.54 | 0.8092 | 2.62 | 7.6921 | 2.94 | 0.0691 | 2.96 | 0.0288 | 2.89 | 430.51 | 5.91 | 2195.68 | 5.88 | 575.24 | 5.78 | | |
| BHF-01 ap22 | 29.88 | 2.51 | 0.8090 | 3.30 | 3.7408 | 2.84 | 0.0395 | 2.97 | 0.0237 | 3.51 | 212.65 | 5.93 | 1580.15 | 5.69 | 474.91 | 7.02 | | |
| BHF-01 ap23 | 25.94 | 2.20 | 0.7795 | 2.91 | 4.1168 | 2.41 | 0.0384 | 2.44 | 0.0323 | 3.04 | 242.92 | 4.88 | 1657.63 | 4.82 | 644.06 | 6.08 | | |
| BHF-01 ap24 | 31.58 | 2.34 | 0.8050 | 3.07 | 3.5161 | 2.31 | 0.0317 | 2.34 | 0.0321 | 3.12 | 201.03 | 4.68 | 1530.84 | 4.61 | 639.91 | 6.24 | | |
| BHF-04 ap1 | 26.67 | 2.59 | 0.8213 | 3.42 | 8.2133 | 3.13 | 0.0375 | 3.09 | 0.0307 | 3.58 | 237.08 | 6.19 | 1682.83 | 6.27 | 612.08 | 7.17 | | |
| BHF-04 ap2 | 31.35 | 3.74 | 0.8258 | 3.38 | 3.6159 | 3.55 | 0.0318 | 3.38 | 0.0038 | 6.47 | 201.61 | 6.75 | 1553.04 | 7.09 | 77.04 | 12.94 | | |
| BHF-04 ap3 | 46.74 | 3.41 | 0.8196 | 4.64 | 2.3884 | 3.93 | 0.0211 | 4.05 | 0.0068 | 4.37 | 134.83 | 8.16 | 1239.14 | 7.86 | 138.06 | 8.74 | | |
| BHF-04 ap4 | 16.05 | 5.46 | 0.8780 | 3.32 | 7.5270 | 3.60 | 0.0620 | 4.05 | 0.0071 | 4.24 | 388.07 | 8.09 | 2176.20 | 7.20 | 143.38 | 8.48 | | |
| BHF-04 ap5 | 21.05 | 3.28 | 0.8104 | 4.35 | 5.3217 | 3.79 | 0.0476 | 3.54 | 0.0070 | 6.41 | 298.51 | 7.07 | 1872.36 | 7.58 | 140.74 | 12.82 | | |
| BHF-04 ap5 | 57.63 | 6.25 | 0.8035 | 5.69 | 1.9094 | 6.06 | 0.0172 | 7.40 | 0.0029 | 11.01 | 110.06 | 14.81 | 1084.36 | 12.13 | 57.79 | 22.02 | | |

Appendix B: Eastern Sunda arc geochronology data - apatite

| Analysis ID | 238U/206Pb ratio | 1s% | 207Pb/206Pb ratio | 1s% | 207Pb/235U (calc) ratio | 1s% | 206Pb/238U ratio | 1s% | 208Pb/232Th ratio | 1s% | 206Pb/238U Age (Ma) | 2s% | 207Pb/235U (calc) Age (Ma) | 2s% | 208Pb/232Th Age (Ma) | 2s% |
|-------------|------------------|-------|-------------------|-------|-------------------------|------|------------------|-------|-------------------|-------|---------------------|-------|----------------------------|-------|----------------------|-------|
| BHF-04 ap6 | 28.53 | 5.66 | 0.8037 | 3.77 | 3.8785 | 4.69 | 0.0350 | 4.27 | 0.0053 | 5.04 | 222.07 | 8.54 | 1609.22 | 9.37 | 107.42 | 10.09 |
| BHF-04 ap7 | 25.78 | 3.82 | 0.7799 | 5.71 | 4.2050 | 3.76 | 0.0390 | 4.27 | 0.0046 | 7.23 | 246.79 | 8.63 | 1674.99 | 7.53 | 93.07 | 14.46 |
| BHF-04 ap8 | 122.21 | 10.17 | 0.7270 | 6.98 | 0.8162 | 9.41 | 0.0081 | 11.22 | 0.0011 | 9.21 | 50.00 | 22.43 | 605.95 | 18.82 | 22.28 | 18.41 |
| BHF-04 ap9 | 16.45 | 2.47 | 0.8462 | 3.18 | 7.0893 | 2.69 | 0.0607 | 2.73 | 0.0114 | 3.84 | 379.87 | 5.47 | 2122.70 | 5.38 | 229.82 | 7.68 |
| BHF-04 ap10 | 2.44 | 5.18 | 0.8504 | 0.83 | 47.8979 | 4.16 | 0.0688 | 3.79 | 0.0098 | 9.04 | 2207.94 | 8.35 | 3949.57 | 8.33 | 1348.66 | 7.57 |
| BHF-04 ap11 | 91.74 | 10.71 | 0.7988 | 7.17 | 1.1942 | 9.55 | 0.0109 | 10.68 | 0.0034 | 9.04 | 69.89 | 21.36 | 797.91 | 19.10 | 68.33 | 18.08 |
| BHF-04 ap12 | 12.59 | 3.24 | 0.7537 | 3.77 | 8.2555 | 3.62 | 0.0794 | 3.46 | 0.0130 | 4.19 | 492.37 | 6.92 | 2259.44 | 7.23 | 262.36 | 8.38 |
| BHF-04 ap13 | 21.32 | 6.03 | 0.7349 | 8.64 | 4.7385 | 6.10 | 0.0256 | 7.49 | 0.0256 | 7.49 | 294.30 | 13.01 | 1774.08 | 12.20 | 511.47 | 14.97 |
| BHF-04 ap14 | 63.70 | 5.18 | 0.7976 | 6.66 | 1.7518 | 7.63 | 0.0159 | 7.16 | 0.0034 | 11.92 | 101.63 | 14.32 | 1027.82 | 15.26 | 67.92 | 23.85 |
| BHF-04 ap15 | 89.39 | 8.36 | 0.7163 | 6.03 | 1.1002 | 6.75 | 0.0111 | 6.80 | 0.0005 | 4.52 | 71.46 | 13.60 | 753.46 | 13.51 | 9.19 | 9.03 |
| BHF-04 ap16 | 22.05 | 2.20 | 0.7558 | 3.04 | 4.7310 | 2.44 | 0.0454 | 2.32 | 0.0097 | 2.79 | 286.36 | 4.63 | 1772.74 | 4.87 | 194.78 | 5.58 |
| BHF-04 ap17 | 0.33 | 4.12 | 0.8558 | 0.67 | 354.5889 | 4.29 | 3.0086 | 4.39 | 0.3884 | 4.55 | 8950.47 | 8.79 | 5964.13 | 8.58 | 6651.67 | 9.10 |
| BHF-04 ap18 | 11.35 | 3.52 | 0.7844 | 4.37 | 9.5499 | 4.07 | 0.0684 | 4.20 | 0.0161 | 4.77 | 545.94 | 8.40 | 2392.36 | 8.13 | 323.00 | 9.53 |
| BHF-04 ap19 | 44.28 | 3.79 | 0.7365 | 5.28 | 2.2910 | 4.14 | 0.0224 | 3.99 | 0.0073 | 5.42 | 143.05 | 7.97 | 1209.53 | 8.29 | 147.47 | 10.85 |
| BHF-04 ap20 | 8.30 | 4.16 | 0.7199 | 5.45 | 11.8995 | 4.59 | 0.1200 | 4.19 | 0.0149 | 4.79 | 730.76 | 8.38 | 2596.53 | 9.18 | 298.99 | 9.58 |
| BHF-04 ap21 | 22.26 | 3.02 | 0.8050 | 3.74 | 4.9929 | 3.26 | 0.0450 | 3.37 | 0.0080 | 3.70 | 283.83 | 6.73 | 1818.11 | 6.52 | 161.29 | 7.40 |
| BHF-04 ap22 | 22.42 | 2.87 | 0.8550 | 3.75 | 5.2720 | 2.90 | 0.0447 | 3.20 | 0.0070 | 4.01 | 281.62 | 6.40 | 1864.33 | 5.80 | 140.77 | 8.01 |
| BHF-04 ap24 | 21.90 | 3.77 | 0.8118 | 3.21 | 5.1199 | 3.33 | 0.0458 | 3.37 | 0.0119 | 3.66 | 288.44 | 6.75 | 1839.41 | 6.65 | 240.51 | 7.32 |
| BHF-04 ap25 | 10.33 | 9.21 | 0.8096 | 16.12 | 10.7845 | 6.71 | 0.0977 | 8.67 | 0.0260 | 9.39 | 600.63 | 17.34 | 2504.74 | 13.42 | 520.64 | 18.77 |
| BHF-04 ap26 | 110.85 | 3.78 | 0.7353 | 5.62 | 0.9160 | 4.41 | 0.0090 | 3.83 | 0.0021 | 5.52 | 58.06 | 7.66 | 660.26 | 8.82 | 42.83 | 11.04 |
| BHF-04 ap27 | 21.23 | 2.56 | 0.8025 | 3.37 | 5.2083 | 2.62 | 0.0471 | 2.78 | 0.0069 | 3.23 | 298.44 | 5.55 | 1853.97 | 5.24 | 138.38 | 6.46 |
| BHF-04 ap28 | 111.94 | 7.37 | 0.7512 | 5.59 | 0.9309 | 7.48 | 0.0090 | 6.97 | 0.0012 | 6.73 | 57.57 | 13.94 | 668.09 | 14.97 | 24.76 | 13.45 |
| BHF-04 ap29 | 22.19 | 5.73 | 0.7924 | 6.07 | 4.9401 | 5.45 | 0.0453 | 5.69 | 0.0156 | 5.89 | 285.48 | 11.37 | 1809.14 | 10.90 | 313.87 | 11.78 |
| BHF-04 ap30 | 17.27 | 3.66 | 0.8394 | 3.68 | 6.6477 | 3.68 | 0.0574 | 4.52 | 0.0105 | 5.56 | 359.94 | 9.04 | 2065.70 | 7.37 | 211.33 | 11.11 |
| BHF-04 ap31 | 4.20 | 4.41 | 0.8414 | 1.50 | 27.7083 | 3.28 | 0.2383 | 3.30 | 0.0951 | 4.30 | 1383.22 | 6.61 | 3408.83 | 6.56 | 1840.88 | 8.59 |
| BHF-04 ap32 | 12.64 | 5.17 | 0.8444 | 2.66 | 9.1903 | 3.94 | 0.0790 | 4.18 | 0.0136 | 4.83 | 489.93 | 8.36 | 2357.15 | 7.87 | 273.88 | 9.65 |
| BHF-04 ap33 | 3.96 | 1.03 | 0.8259 | 0.98 | 28.7282 | 1.12 | 0.2521 | 1.03 | 0.2062 | 1.67 | 1449.28 | 2.06 | 3444.28 | 2.25 | 22776.94 | 3.35 |
| BHF-04 ap34 | 16.39 | 5.01 | 0.7733 | 5.94 | 6.5122 | 4.62 | 0.0611 | 5.14 | 0.0114 | 5.76 | 382.46 | 10.27 | 2047.55 | 9.24 | 230.76 | 11.51 |
| JEM-02 ap1 | 40.53 | 3.16 | 0.8257 | 4.28 | 2.8087 | 3.96 | 0.0247 | 3.65 | 0.0162 | 4.37 | 157.08 | 7.30 | 1357.87 | 7.92 | 326.03 | 8.74 |
| JEM-02 ap2 | 19.05 | 3.16 | 0.8157 | 3.02 | 5.8912 | 3.51 | 0.0524 | 3.07 | 0.1346 | 3.80 | 328.96 | 6.14 | 1959.93 | 7.03 | 2559.40 | 7.61 |
| JEM-02 ap3 | 7.26 | 2.75 | 0.7814 | 3.23 | 14.7355 | 2.93 | 0.1372 | 3.16 | 0.1004 | 3.33 | 828.56 | 6.33 | 2798.31 | 5.87 | 1938.84 | 6.65 |
| JEM-02 ap5 | 29.52 | 1.96 | 0.7881 | 2.31 | 3.6727 | 2.08 | 0.0338 | 2.18 | 0.0445 | 2.58 | 214.33 | 4.37 | 1565.46 | 4.16 | 882.99 | 5.17 |
| JEM-02 ap6 | 49.83 | 2.21 | 0.8120 | 2.90 | 2.2480 | 2.37 | 0.0201 | 2.42 | 0.0239 | 2.64 | 128.24 | 4.84 | 1196.16 | 4.75 | 478.53 | 5.27 |
| JEM-02 ap7 | 11.06 | 1.78 | 0.8076 | 2.21 | 10.0748 | 1.78 | 0.0904 | 1.83 | 0.2812 | 2.23 | 557.61 | 3.66 | 2441.66 | 3.57 | 5022.03 | 4.46 |
| MLG-01 ap2 | 1.49 | 1.90 | 0.8255 | 1.87 | 76.2681 | 1.90 | 0.6702 | 1.90 | 0.4652 | 2.12 | 3006.64 | 3.80 | 4414.16 | 3.81 | 7743.16 | 4.23 |
| MLG-01 ap3 | 1.08 | 1.82 | 0.8327 | 1.66 | 105.8547 | 1.84 | 0.9215 | 1.83 | 0.7636 | 1.97 | 4210.20 | 3.67 | 4743.33 | 3.69 | 11728.86 | 3.94 |
| MLG-01 ap4 | 3.10 | 5.57 | 0.7541 | 5.63 | 32.9250 | 5.42 | 0.3185 | 6.27 | 0.2155 | 6.09 | 1782.18 | 12.54 | 3578.36 | 10.84 | 3955.53 | 12.19 |
| MLG-01 ap5 | 1.03 | 2.02 | 0.7911 | 1.85 | 105.8671 | 2.11 | 0.9713 | 2.02 | 0.6828 | 2.16 | 4375.16 | 4.05 | 4743.45 | 4.22 | 10549.76 | 4.31 |
| MLG-01 ap6 | 1.31 | 1.86 | 0.8206 | 1.77 | 86.7098 | 1.87 | 0.7673 | 1.87 | 0.5681 | 2.02 | 3670.98 | 3.74 | 4542.86 | 3.74 | 9119.29 | 4.03 |
| MLG-01 ap7 | 1.37 | 2.02 | 0.8252 | 2.14 | 83.2187 | 2.02 | 0.7319 | 2.11 | 0.5502 | 2.54 | 3540.58 | 4.22 | 4501.62 | 4.03 | 8886.01 | 5.08 |
| MLG-01 ap9 | 4.00 | 2.78 | 0.8081 | 3.44 | 27.8320 | 3.24 | 0.2500 | 3.02 | 0.2116 | 3.20 | 1438.59 | 6.05 | 3413.20 | 6.47 | 3980.80 | 6.40 |
| MLG-01 ap10 | 1.22 | 1.79 | 0.8231 | 1.69 | 92.9231 | 1.81 | 0.8186 | 1.80 | 0.6306 | 1.93 | 3855.32 | 3.60 | 4612.35 | 3.63 | 9910.30 | 3.86 |
| MLG-01 ap11 | 5.79 | 3.13 | 0.8054 | 3.55 | 19.1285 | 2.96 | 0.1711 | 3.59 | 0.1445 | 3.66 | 1017.93 | 7.17 | 3048.32 | 5.93 | 2736.12 | 7.33 |
| MLG-01 ap12 | 1.25 | 1.87 | 0.8376 | 1.78 | 91.8533 | 1.88 | 0.7959 | 1.88 | 0.5766 | 2.10 | 3774.55 | 3.77 | 4600.72 | 3.77 | 9228.76 | 4.19 |
| MLG-01 ap13 | 0.97 | 1.95 | 0.8352 | 1.65 | 119.3701 | 1.99 | 1.0376 | 1.86 | 0.7477 | 2.14 | 4588.39 | 3.73 | 4864.27 | 3.98 | 11316.87 | 4.28 |
| MLG-01 ap15 | 4.49 | 3.42 | 0.8242 | 4.34 | 25.2977 | 3.51 | 0.2230 | 3.45 | 0.1573 | 4.57 | 1297.76 | 6.91 | 3319.78 | 7.01 | 2961.61 | 9.14 |
| MLG-01 ap16 | 1.31 | 1.93 | 0.8512 | 1.63 | 89.3276 | 1.74 | 0.7614 | 1.85 | 0.6449 | 1.98 | 3649.35 | 3.70 | 4572.72 | 3.49 | 10087.62 | 3.95 |
| MLG-01 ap17 | 4.55 | 2.83 | 0.7721 | 3.47 | 23.4451 | 2.91 | 0.2206 | 2.83 | 0.1637 | 3.40 | 1285.00 | 5.65 | 3245.60 | 5.82 | 3073.82 | 6.80 |
| MLG-01 ap18 | 6.22 | 3.15 | 0.8204 | 3.92 | 18.2015 | 3.30 | 0.1610 | 3.15 | 0.1364 | 3.64 | 962.50 | 6.30 | 3000.44 | 6.60 | 2591.28 | 7.29 |

Appendix B: Eastern Sunda arc geochronology data - apatite

| Analysis ID | 238U/206Pb ratio | 1s% | 207Pb/206Pb ratio | 1s% | 207Pb/235U (calc)/ratio | 1s% | 206Pb/238U ratio | 1s% | 208Pb/232Th ratio | 1s% | 206Pb/238U Age (Ma) | 2s% | 207Pb/235U (calc) Age (Ma) | 2s% | 208Pb/232Th Age (Ma) | 2s% |
|-------------|------------------|------|-------------------|------|-------------------------|------|------------------|------|-------------------|------|---------------------|-------|----------------------------|-------|----------------------|-------|
| MLG-01 ap19 | 1.54 | 1.87 | 0.8176 | 1.85 | 73.0895 | 1.99 | 0.6490 | 1.86 | 0.4347 | 2.20 | 3224.13 | 3.72 | 4371.50 | 3.98 | 7316.69 | 4.40 |
| MLG-01 ap20 | 2.31 | 1.79 | 0.8299 | 1.88 | 49.5091 | 1.86 | 0.4331 | 1.79 | 0.2341 | 1.93 | 2319.89 | 3.57 | 3982.49 | 3.72 | 4283.92 | 3.86 |
| MLG-01 ap21 | 1.12 | 1.68 | 0.8196 | 1.52 | 101.1663 | 1.72 | 0.8949 | 1.69 | 0.5803 | 1.81 | 4120.17 | 3.38 | 4697.97 | 3.42 | 9276.39 | 3.62 |
| MLG-01 ap22 | 6.91 | 2.79 | 0.8073 | 3.53 | 16.0718 | 2.76 | 0.1453 | 2.79 | 0.0902 | 3.21 | 874.36 | 5.58 | 2881.08 | 5.52 | 1750.38 | 6.43 |
| MLG-01 ap23 | 4.92 | 2.81 | 0.8341 | 3.93 | 23.1641 | 3.79 | 0.2020 | 2.82 | 0.1598 | 3.54 | 1186.04 | 5.64 | 3233.86 | 5.58 | 3004.54 | 7.08 |
| MLG-01 ap26 | 1.64 | 1.69 | 0.8418 | 1.64 | 70.8697 | 1.72 | 0.6110 | 1.79 | 0.5909 | 1.87 | 3073.87 | 3.57 | 4340.62 | 3.45 | 9411.23 | 3.74 |
| MLG-01 ap27 | 0.98 | 1.88 | 0.8310 | 1.70 | 116.5953 | 1.91 | 0.1092 | 1.90 | 0.7361 | 1.99 | 4529.74 | 3.80 | 4840.58 | 3.82 | 11181.99 | 3.98 |
| MLG-01 ap28 | 0.98 | 1.55 | 0.8339 | 1.35 | 117.3748 | 1.58 | 0.1023 | 1.55 | 0.8073 | 1.64 | 4539.72 | 3.10 | 4847.29 | 3.16 | 11996.49 | 3.29 |
| MLG-01 ap29 | 1.00 | 1.72 | 0.8260 | 1.44 | 114.3614 | 1.67 | 1.0066 | 1.72 | 0.7762 | 1.83 | 4489.38 | 3.44 | 4821.11 | 3.35 | 11644.75 | 3.67 |
| MLG-01 ap30 | 1.77 | 1.99 | 0.8298 | 1.64 | 64.3693 | 2.06 | 0.5648 | 2.00 | 0.6333 | 1.92 | 2886.47 | 4.00 | 4244.36 | 4.13 | 9944.39 | 3.84 |
| MLG-01 ap31 | 1.53 | 1.79 | 0.8178 | 1.71 | 73.5124 | 1.77 | 0.6528 | 1.76 | 0.4090 | 2.08 | 3239.08 | 3.53 | 4377.28 | 3.54 | 6950.59 | 4.17 |
| MLG-01 ap32 | 1.65 | 1.89 | 0.8396 | 1.89 | 69.8941 | 1.88 | 0.6061 | 1.87 | 0.4067 | 2.22 | 3054.35 | 3.75 | 4326.74 | 3.76 | 6916.55 | 4.43 |
| PCT-01 ap2 | 12.98 | 2.88 | 0.9445 | 3.64 | 9.9929 | 2.86 | 0.0772 | 2.89 | 0.0567 | 3.38 | 479.20 | 5.77 | 2434.13 | 5.73 | 1117.59 | 6.76 |
| PCT-01 ap3 | 0.09 | 4.47 | 0.8539 | 0.36 | 1367.9635 | 3.89 | 1.16570 | 3.82 | 22.5455 | 3.64 | 16362.29 | 7.64 | 7332.92 | 7.78 | 64031.15 | 7.29 |
| PCT-01 ap4 | 2.89 | 3.52 | 0.8135 | 2.77 | 39.3043 | 3.50 | 0.3511 | 3.67 | 0.2067 | 3.08 | 1939.95 | 7.34 | 3753.32 | 7.01 | 3808.84 | 6.16 |
| PCT-01 ap6 | 6.75 | 3.62 | 0.8538 | 4.52 | 17.4710 | 3.47 | 0.1477 | 4.26 | 0.0937 | 5.61 | 887.88 | 8.51 | 2961.06 | 6.94 | 1815.36 | 11.21 |
| PCT-01 ap7 | 6.04 | 2.41 | 0.7904 | 3.02 | 17.9558 | 2.43 | 0.1649 | 2.48 | 0.0770 | 2.90 | 983.88 | 4.95 | 2986.30 | 4.86 | 1504.18 | 5.81 |
| PCT-01 ap8 | 0.08 | 2.76 | 0.8704 | 0.91 | 1521.0144 | 3.21 | 12.6841 | 2.83 | 7.7033 | 2.65 | 16865.29 | 5.65 | 7440.51 | 6.42 | 49857.97 | 5.29 |
| PCT-01 ap9 | 2.76 | 2.67 | 0.8604 | 3.00 | 42.9627 | 2.98 | 0.3626 | 2.74 | 0.2163 | 2.98 | 1994.40 | 5.48 | 3841.54 | 5.95 | 3988.93 | 5.96 |
| PCT-01 ap11 | 3.63 | 8.35 | 0.8433 | 4.63 | 30.8491 | 9.15 | 0.2684 | 9.65 | 0.1834 | 9.41 | 1532.44 | 19.30 | 3514.25 | 18.31 | 3412.97 | 18.82 |
| PCT-01 ap12 | 10.65 | 2.89 | 0.7973 | 3.73 | 10.3335 | 3.06 | 0.0942 | 3.06 | 0.0590 | 3.67 | 580.40 | 6.12 | 2465.11 | 6.12 | 1143.57 | 7.35 |
| PCT-01 ap14 | 4.40 | 4.45 | 0.8209 | 2.31 | 25.7191 | 4.09 | 0.2278 | 4.00 | 0.1365 | 3.61 | 1323.04 | 8.01 | 3335.92 | 8.19 | 2594.42 | 7.65 |
| PCT-01 ap15 | 0.08 | 5.34 | 0.8508 | 0.29 | 1553.0550 | 3.35 | 13.2420 | 3.33 | 9.1687 | 2.95 | 17122.87 | 6.67 | 7461.67 | 6.70 | 47012.23 | 5.90 |
| PCT-01 ap16 | 1.68 | 2.27 | 0.8457 | 1.37 | 69.6954 | 2.59 | 0.5964 | 2.22 | 0.4686 | 3.38 | 3015.21 | 4.44 | 4323.89 | 5.17 | 7790.55 | 6.76 |
| PCT-02 ap2 | 9.25 | 4.95 | 0.7345 | 6.64 | 10.9616 | 5.05 | 0.1083 | 4.99 | 0.0814 | 5.62 | 662.97 | 9.98 | 2519.88 | 10.09 | 1587.14 | 11.25 |
| PCT-02 ap3 | 5.25 | 7.80 | 0.7974 | 8.14 | 21.3175 | 9.60 | 0.1918 | 8.58 | 0.1502 | 9.69 | 1131.11 | 17.15 | 3153.14 | 19.19 | 2835.98 | 19.37 |
| PCT-02 ap4 | 0.68 | 2.47 | 0.8666 | 2.00 | 176.3904 | 2.43 | 1.4802 | 2.45 | 1.0881 | 2.55 | 5855.49 | 4.90 | 5258.01 | 4.85 | 14923.86 | 5.09 |
| PCT-02 ap5 | 11.65 | 4.74 | 0.7801 | 6.34 | 9.2038 | 4.72 | 0.0857 | 5.17 | 0.0709 | 6.33 | 529.87 | 10.34 | 2358.50 | 9.43 | 1388.42 | 12.67 |
| PCT-02 ap6 | 7.34 | 4.03 | 0.6982 | 5.41 | 13.0024 | 4.42 | 0.1359 | 4.40 | 0.0938 | 5.43 | 821.64 | 8.80 | 2679.83 | 8.84 | 1818.24 | 10.87 |
| PCT-02 ap7 | 5.97 | 6.20 | 0.7206 | 8.12 | 16.6079 | 6.33 | 0.1671 | 6.10 | 0.1276 | 8.44 | 996.17 | 12.21 | 2912.47 | 12.65 | 2433.72 | 16.87 |
| PCT-02 ap8 | 2.17 | 4.66 | 0.8078 | 5.98 | 51.7532 | 5.94 | 0.4656 | 4.92 | 0.3151 | 6.84 | 2464.15 | 9.83 | 4026.63 | 11.87 | 5551.93 | 13.67 |
| PCT-02 ap9 | 4.73 | 5.26 | 0.7865 | 6.52 | 23.2388 | 6.64 | 0.2097 | 5.39 | 0.1822 | 7.54 | 1227.16 | 10.78 | 3237.00 | 13.29 | 3392.45 | 15.07 |
| PCT-02 ap10 | 4.36 | 3.86 | 0.8048 | 4.67 | 25.4888 | 3.82 | 0.2303 | 4.06 | 0.1785 | 5.09 | 1335.83 | 8.12 | 3327.13 | 7.63 | 3328.62 | 10.17 |
| PCT-02 ap11 | 10.90 | 4.03 | 0.8004 | 5.30 | 10.1327 | 4.01 | 0.0920 | 4.06 | 0.0600 | 5.06 | 567.13 | 8.11 | 2446.96 | 8.02 | 1181.46 | 10.12 |
| PCT-02 ap12 | 3.48 | 3.94 | 0.8755 | 4.60 | 34.7819 | 3.74 | 0.2887 | 3.89 | 0.1975 | 4.50 | 1634.95 | 7.79 | 3632.47 | 7.48 | 3653.85 | 8.99 |
| PCT-02 ap13 | 0.55 | 2.85 | 0.8286 | 1.70 | 208.1163 | 2.81 | 1.8228 | 2.82 | 1.5208 | 2.87 | 6889.59 | 5.64 | 5425.08 | 5.62 | 18741.40 | 5.73 |
| PCT-02 ap14 | 11.31 | 5.49 | 0.8212 | 7.25 | 10.0531 | 5.33 | 0.0893 | 5.48 | 0.0697 | 6.53 | 551.37 | 10.96 | 2439.68 | 10.67 | 1346.25 | 13.05 |
| PCT-02 ap15 | 1.18 | 4.06 | 0.8424 | 2.79 | 97.5464 | 3.61 | 0.8417 | 4.45 | 0.6304 | 3.96 | 3936.82 | 8.90 | 4661.14 | 7.21 | 9909.03 | 7.92 |
| PCT-02 ap16 | 10.92 | 4.80 | 0.8363 | 8.11 | 10.5339 | 5.29 | 0.0916 | 5.21 | 0.0837 | 5.37 | 564.70 | 10.43 | 2482.91 | 10.59 | 1629.86 | 10.74 |
| PCT-02 ap17 | 0.51 | 3.95 | 0.8534 | 1.86 | 230.4922 | 3.62 | 1.9634 | 4.26 | 1.3406 | 3.76 | 7002.97 | 8.52 | 5528.30 | 7.24 | 17237.79 | 7.53 |
| PCT-02 ap18 | 0.79 | 3.08 | 0.8590 | 2.55 | 150.3147 | 3.53 | 1.2568 | 3.01 | 1.1211 | 3.96 | 5244.16 | 6.03 | 5096.58 | 7.05 | 15241.27 | 7.91 |
| PCT-02 ap19 | 1.74 | 4.90 | 0.8306 | 3.02 | 66.1274 | 6.52 | 0.5903 | 6.81 | 0.4171 | 7.18 | 2949.94 | 13.61 | 4271.30 | 13.04 | 7086.39 | 14.36 |
| PCT-02 ap20 | 11.17 | 4.72 | 0.7920 | 6.20 | 9.7977 | 4.61 | 0.0900 | 4.71 | 0.0704 | 5.73 | 555.55 | 9.42 | 5415.94 | 9.23 | 1379.68 | 11.46 |
| PCT-02 ap21 | 0.57 | 3.17 | 0.8479 | 2.00 | 207.2408 | 2.72 | 1.7724 | 2.90 | 1.3006 | 2.60 | 6573.41 | 5.80 | 5420.82 | 5.44 | 18887.88 | 5.19 |
| PCT-02 ap22 | 0.19 | 2.73 | 0.8423 | 0.85 | 596.4258 | 3.44 | 5.1354 | 3.26 | 3.5595 | 3.46 | 11894.30 | 6.52 | 6490.97 | 6.88 | 30753.75 | 6.93 |
| PCT-02 ap23 | 0.19 | 5.92 | 0.8381 | 1.05 | 615.1338 | 5.65 | 5.3151 | 5.57 | 4.0107 | 6.00 | 11880.34 | 11.14 | 6522.28 | 11.30 | 32666.22 | 12.00 |
| PCT-02 ap24 | 0.17 | 4.23 | 0.8487 | 1.36 | 896.5243 | 3.65 | 5.9629 | 3.61 | 3.745 | 3.65 | 12509.89 | 7.21 | 6648.26 | 7.30 | 31517.25 | 7.29 |
| PCT-02 ap25 | 7.86 | 5.05 | 0.8660 | 5.73 | 15.2911 | 5.10 | 0.1289 | 6.10 | 0.0803 | 6.66 | 781.63 | 12.21 | 2833.55 | 10.19 | 1566.14 | 13.31 |
| PCT-02 ap26 | 2.47 | 3.06 | 0.8351 | 3.03 | 46.6105 | 3.26 | 0.4056 | 3.20 | 0.3224 | 4.12 | 2194.81 | 6.40 | 3922.48 | 6.52 | 5664.74 | 8.24 |
| PCT-02 ap27 | 9.04 | 5.69 | 0.6955 | 7.86 | 10.6498 | 6.28 | 0.1102 | 5.71 | 0.0831 | 8.10 | 673.67 | 11.41 | 2493.06 | 12.56 | 1618.01 | 16.19 |

Appendix B: Eastern Sunda arc geochronology data - apatite

| Analysis ID | 238U/206Pb ratio | 1s% | 207Pb/206Pb ratio | 1s% | 207Pb/235U (calc) ratio | 1s% | 206Pb/238U ratio | 1s% | 208Pb/232Th ratio | 1s% | 206Pb/238U Age (Ma) | 2s% | 207Pb/235U (calc) Age (Ma) | 2s% | 208Pb/232Th Age (Ma) | 2s% |
|-------------|------------------|-------|-------------------|-------|-------------------------|-------|------------------|-------|-------------------|-------|---------------------|-------|----------------------------|-------|----------------------|-------|
| PCT-02 ap28 | 10.50 | 4.60 | 0.7088 | 6.91 | 9.3043 | 4.52 | 0.0952 | 5.31 | 0.0680 | 6.06 | 586.24 | 10.63 | 2368.44 | 9.03 | 1333.69 | 12.13 |
| PCT-02 ap29 | 0.17 | 2.83 | 0.8686 | 1.12 | 714.9444 | 2.33 | 6.0231 | 2.43 | 4.1979 | 2.11 | 1295.33 | 4.86 | 6674.73 | 4.66 | 33409.91 | 4.21 |
| PCT-02 ap30 | 0.32 | 2.88 | 0.8342 | 1.56 | 359.2184 | 2.37 | 1.7320 | 2.69 | 1.7320 | 2.91 | 9132.57 | 5.38 | 5977.27 | 4.75 | 20371.57 | 5.81 |
| PCT-02 ap31 | 10.04 | 4.75 | 0.7649 | 8.09 | 10.4025 | 5.44 | 0.0987 | 4.99 | 0.0793 | 5.82 | 607.02 | 9.97 | 2471.28 | 10.88 | 1546.97 | 11.65 |
| PCT-02 ap32 | 8.75 | 5.68 | 0.7431 | 8.24 | 11.7726 | 5.48 | 0.0893 | 6.92 | 0.0893 | 6.92 | 703.67 | 10.95 | 2586.49 | 11.85 | 1733.73 | 13.84 |
| PCT-02 ap33 | 4.14 | 5.08 | 0.8085 | 6.28 | 26.6983 | 6.02 | 0.2405 | 5.14 | 0.1670 | 6.46 | 1389.35 | 10.28 | 3372.47 | 12.04 | 3130.67 | 12.92 |
| PCT-02 ap34 | 0.32 | 3.64 | 0.8570 | 0.81 | 369.1597 | 2.99 | 3.1256 | 2.97 | 2.5525 | 2.96 | 9135.85 | 5.94 | 6004.91 | 5.98 | 25684.87 | 5.82 |
| PCT-02 ap35 | 7.99 | 4.85 | 0.8029 | 6.31 | 13.7878 | 4.76 | 0.1246 | 4.95 | 0.0847 | 5.98 | 757.13 | 9.90 | 2735.24 | 9.52 | 1647.88 | 11.96 |
| LB001_ap_1 | 0.81 | 4.77 | 0.8338 | 3.80 | 138.4616 | 4.65 | 1.2074 | 4.61 | 0.0658 | 4.89 | 5104.47 | 9.21 | 5013.75 | 9.31 | 1669.45 | 9.78 |
| LB001_ap_10 | 7.07 | 5.91 | 0.8922 | 8.17 | 17.5546 | 5.54 | 0.1425 | 5.76 | 0.0090 | 6.10 | 858.83 | 11.53 | 2965.65 | 11.08 | 181.53 | 12.20 |
| LB001_ap_11 | 5.97 | 3.26 | 0.8056 | 4.04 | 18.7013 | 3.19 | 0.1681 | 3.26 | 0.1134 | 3.67 | 1001.55 | 6.51 | 3026.54 | 6.38 | 2177.29 | 7.33 |
| LB001_ap_12 | 20.81 | 6.27 | 0.8201 | 5.97 | 5.4433 | 6.18 | 0.0481 | 6.72 | 0.0096 | 6.23 | 302.82 | 13.43 | 1891.70 | 12.35 | 193.01 | 12.46 |
| LB001_ap_13 | 11.77 | 9.48 | 0.7818 | 4.26 | 9.2291 | 9.48 | 0.0657 | 9.37 | 0.0141 | 10.74 | 530.02 | 18.74 | 2361.01 | 18.96 | 282.87 | 21.48 |
| LB001_ap_14 | 18.33 | 3.92 | 0.7263 | 4.79 | 5.4579 | 4.66 | 0.0546 | 3.89 | 0.0429 | 4.73 | 342.55 | 7.78 | 1894.00 | 9.33 | 852.32 | 9.46 |
| LB001_ap_15 | 2.47 | 4.58 | 0.8240 | 2.93 | 46.1766 | 5.28 | 0.4055 | 5.15 | 0.0573 | 3.11 | 2194.51 | 10.31 | 3913.18 | 10.56 | 1129.99 | 6.23 |
| LB001_ap_16 | 18.33 | 8.29 | 0.7583 | 11.43 | 5.7190 | 8.32 | 0.0547 | 8.69 | 0.0058 | 9.20 | 162.26 | 26.16 | 1280.16 | 27.86 | 83.26 | 12.67 |
| LB001_ap_17 | 38.63 | 16.41 | 0.7125 | 7.13 | 2.5281 | 13.93 | 0.0255 | 13.08 | 0.0041 | 6.34 | 162.26 | 26.16 | 1280.16 | 27.86 | 83.26 | 12.67 |
| LB001_ap_18 | 27.02 | 12.74 | 0.7503 | 8.13 | 4.0128 | 15.30 | 0.0384 | 19.41 | 0.0045 | 21.44 | 245.03 | 38.82 | 1636.80 | 30.61 | 90.81 | 42.87 |
| LB001_ap_19 | 5.69 | 2.05 | 0.8011 | 2.42 | 19.4390 | 2.05 | 0.1755 | 2.04 | 0.1219 | 2.53 | 1042.60 | 4.09 | 3063.86 | 4.09 | 2331.08 | 5.05 |
| LB001_ap_2 | 43.15 | 15.48 | 0.8141 | 14.58 | 2.5890 | 10.23 | 0.0228 | 14.47 | 0.0038 | 11.35 | 145.37 | 28.94 | 1297.54 | 20.47 | 76.04 | 22.71 |
| LB001_ap_20 | 2.20 | 11.08 | 0.8031 | 6.42 | 49.3617 | 11.56 | 0.4577 | 14.55 | 0.0485 | 15.12 | 2429.58 | 29.09 | 3979.52 | 23.13 | 959.51 | 24.89 |
| LB001_ap_3 | 22.67 | 9.54 | 0.7690 | 7.70 | 4.6619 | 13.48 | 0.0441 | 13.95 | 0.0081 | 12.44 | 278.34 | 27.91 | 1760.44 | 26.97 | 164.06 | 30.23 |
| LB001_ap_4 | 5.38 | 5.65 | 0.8192 | 4.35 | 20.9787 | 4.85 | 0.1856 | 4.75 | 0.0101 | 5.12 | 1097.67 | 9.51 | 3137.61 | 9.69 | 204.51 | 10.24 |
| LB001_ap_5 | 19.37 | 5.04 | 0.7657 | 4.07 | 5.5064 | 5.67 | 0.0511 | 5.12 | 0.0272 | 6.02 | 321.09 | 10.24 | 1901.59 | 11.34 | 543.02 | 12.08 |
| LB001_ap_6 | 15.76 | 7.64 | 0.8661 | 6.29 | 7.5941 | 7.51 | 0.0634 | 8.33 | 0.0056 | 9.04 | 396.25 | 16.67 | 2184.17 | 15.02 | 113.33 | 18.04 |
| LB001_ap_7 | 19.70 | 7.52 | 0.8974 | 9.78 | 6.3485 | 6.84 | 0.0514 | 7.46 | 0.0063 | 7.88 | 323.10 | 14.92 | 2025.18 | 13.69 | 127.57 | 15.76 |
| LB001_ap_8 | 3.38 | 6.61 | 0.8127 | 5.15 | 33.0622 | 6.33 | 0.2949 | 6.33 | 0.0194 | 4.29 | 1665.90 | 12.65 | 3582.46 | 12.67 | 389.09 | 8.58 |
| LB001_ap_9 | 15.41 | 8.41 | 0.8397 | 4.48 | 7.5927 | 8.68 | 0.0659 | 8.08 | 0.0064 | 6.80 | 411.61 | 16.15 | 2184.00 | 17.37 | 128.68 | 13.61 |
| LB010_ap_1 | 0.04 | 6.02 | 0.8531 | 1.42 | 3883.3625 | 5.34 | 27.8338 | 5.29 | 4.1781 | 4.03 | 21669.86 | 10.59 | 8221.49 | 10.67 | 33332.84 | 8.06 |
| LB010_ap_10 | 21.68 | 2.72 | 0.7990 | 3.72 | 5.0658 | 2.70 | 0.0461 | 2.76 | 0.0364 | 3.54 | 290.29 | 5.52 | 1830.39 | 5.40 | 725.54 | 7.07 |
| LB010_ap_11 | 6.07 | 4.00 | 0.8372 | 3.70 | 19.0423 | 3.91 | 0.1650 | 3.78 | 0.0257 | 4.03 | 984.46 | 7.56 | 3043.96 | 7.83 | 513.97 | 8.06 |
| LB010_ap_12 | 5.24 | 7.76 | 0.7686 | 4.18 | 20.4654 | 7.37 | 0.1908 | 8.44 | 0.0438 | 7.33 | 1125.48 | 16.88 | 3113.61 | 14.74 | 868.78 | 14.66 |
| LB010_ap_13 | 2.65 | 11.61 | 0.7011 | 5.35 | 35.7032 | 12.08 | 0.3646 | 10.12 | 0.0502 | 9.14 | 2004.13 | 20.24 | 3658.29 | 24.17 | 982.76 | 18.29 |
| LB010_ap_14 | 5.95 | 4.05 | 0.8542 | 4.92 | 20.1048 | 3.86 | 0.1691 | 4.04 | 0.0719 | 5.54 | 1007.31 | 8.07 | 3096.41 | 7.72 | 1407.13 | 11.09 |
| LB010_ap_15 | 1.06 | 1.94 | 0.8483 | 1.73 | 110.5764 | 1.92 | 0.9461 | 1.94 | 0.5872 | 2.20 | 4292.08 | 3.89 | 4787.24 | 3.84 | 9364.58 | 4.41 |
| LB010_ap_16 | 1.26 | 3.88 | 0.8640 | 2.55 | 94.4070 | 4.15 | 0.7918 | 4.04 | 0.1304 | 6.09 | 3759.58 | 8.08 | 4628.27 | 8.29 | 2485.05 | 12.19 |
| LB010_ap_17 | 2.30 | 9.04 | 0.8401 | 4.43 | 48.0097 | 4.67 | 0.4164 | 8.63 | 0.0430 | 10.35 | 2243.93 | 17.27 | 3951.89 | 9.34 | 853.28 | 20.70 |
| LB010_ap_18 | 1.45 | 2.18 | 0.8141 | 2.23 | 77.2063 | 2.23 | 0.6888 | 2.17 | 0.4505 | 2.43 | 3377.92 | 4.35 | 4426.41 | 4.46 | 7538.95 | 4.85 |
| LB010_ap_19 | 0.05 | 11.47 | 0.8340 | 0.68 | 2336.9400 | 5.31 | 20.4432 | 5.13 | 1.6270 | 3.47 | 19760.81 | 10.26 | 7876.35 | 10.62 | 19577.60 | 6.93 |
| LB010_ap_20 | 12.69 | 6.12 | 0.8211 | 3.97 | 8.8329 | 5.56 | 0.0785 | 5.71 | 0.0289 | 5.83 | 487.09 | 11.43 | 2320.89 | 11.12 | 577.61 | 11.65 |
| LB010_ap_21 | 3.48 | 3.49 | 0.7888 | 3.20 | 46.6468 | 3.72 | 0.4241 | 3.36 | 0.0950 | 3.25 | 2279.25 | 6.72 | 3603.62 | 7.45 | 1838.88 | 6.49 |
| LB010_ap_22 | 10.02 | 2.47 | 0.8338 | 3.08 | 11.4758 | 2.37 | 0.0998 | 2.47 | 0.0656 | 3.02 | 613.36 | 4.94 | 2562.62 | 4.75 | 1287.34 | 6.03 |
| LB010_ap_23 | 3.83 | 7.94 | 0.8214 | 4.87 | 33.7792 | 7.78 | 0.2645 | 8.96 | 0.0362 | 2.59 | 1613.89 | 15.30 | 3483.74 | 17.37 | 1122.30 | 16.36 |
| LB010_ap_24 | 19.59 | 1.95 | 0.7630 | 2.48 | 5.3663 | 2.11 | 0.0510 | 1.95 | 0.0382 | 2.59 | 320.92 | 3.91 | 1879.81 | 4.21 | 760.64 | 5.18 |
| LB010_ap_25 | 12.65 | 5.41 | 0.6568 | 7.48 | 7.1897 | 6.69 | 0.0796 | 5.39 | 0.0107 | 6.79 | 495.96 | 10.78 | 2135.22 | 13.37 | 216.41 | 13.59 |
| LB010_ap_26 | 11.79 | 8.29 | 0.8709 | 14.04 | 10.0659 | 10.68 | 0.0888 | 10.12 | 0.0129 | 9.41 | 558.28 | 20.24 | 2440.85 | 21.37 | 259.84 | 18.82 |
| LB010_ap_27 | 18.34 | 4.72 | 0.8240 | 3.48 | 6.1734 | 4.36 | 0.0521 | 4.36 | 0.0321 | 4.53 | 338.73 | 8.72 | 2000.69 | 8.72 | 640.75 | 9.06 |
| LB010_ap_28 | 5.66 | 5.62 | 0.8303 | 1.95 | 20.2796 | 4.42 | 0.1772 | 4.26 | 0.0302 | 5.18 | 1051.52 | 8.51 | 3104.78 | 8.83 | 603.03 | 10.36 |
| LB010_ap_3 | 20.55 | 2.30 | 0.8041 | 2.95 | 5.4032 | 2.43 | 0.0486 | 2.30 | 0.0278 | 2.79 | 306.14 | 4.61 | 1885.37 | 4.86 | 555.01 | 5.59 |

Appendix B: Eastern Sunda arc geochronology data - apatite

| Analysis ID | 238U/206Pb ratio | 1s% | 207Pb/206Pb ratio | 1s% | 207Pb/235U (calc) ratio | 1s% | 206Pb/238U ratio | 1s% | 208Pb/232Th ratio | 1s% | 206Pb/238U Age (Ma) | 2s% | 207Pb/235U (calc) Age (Ma) | 2s% | 208Pb/232Th Age (Ma) | 2s% |
|--------------|------------------|-------|-------------------|------|-------------------------|-------|------------------|-------|-------------------|-------|---------------------|-------|----------------------------|-------|----------------------|-------|
| LB010_ap_4 | 14.12 | 8.29 | 0.8054 | 2.52 | 7.8810 | 7.36 | 0.0717 | 7.25 | 0.0252 | 9.53 | 446.48 | 14.50 | 2217.51 | 14.72 | 504.90 | 19.06 |
| LB010_ap_5 | 4.43 | 3.26 | 0.7509 | 4.79 | 23.2625 | 4.16 | 0.2273 | 3.47 | 0.0563 | 4.40 | 1320.31 | 6.93 | 3237.99 | 8.32 | 1840.80 | 8.79 |
| LB010_ap_6 | 9.68 | 3.61 | 0.7248 | 4.78 | 10.3390 | 3.67 | 0.1036 | 3.89 | 0.0563 | 4.39 | 635.42 | 7.78 | 2465.60 | 7.33 | 1110.41 | 8.78 |
| LB010_ap_7 | 1.04 | 8.23 | 0.8138 | 2.12 | 107.3102 | 8.60 | 0.9488 | 8.53 | 0.1279 | 8.82 | 4301.29 | 17.05 | 4757.07 | 17.21 | 2438.73 | 17.63 |
| LB010_ap_8 | 11.41 | 2.26 | 0.8032 | 2.31 | 9.7236 | 2.46 | 0.0878 | 2.47 | 0.0224 | 3.31 | 542.50 | 4.95 | 2408.94 | 4.93 | 449.46 | 6.63 |
| LB010_ap_9 | 0.33 | 6.38 | 0.8426 | 4.57 | 345.1513 | 6.26 | 3.0028 | 6.34 | 0.2033 | 4.05 | 894.11 | 12.67 | 5948.49 | 12.52 | 3751.32 | 8.10 |
| LB011_ap_1 | 0.81 | 3.53 | 0.8333 | 1.60 | 142.1255 | 3.49 | 1.2357 | 3.48 | 0.7064 | 3.14 | 5186.43 | 6.96 | 5040.08 | 6.98 | 10831.42 | 6.27 |
| LB011_ap_10 | 1.50 | 3.90 | 0.8475 | 3.83 | 77.9231 | 4.11 | 0.6723 | 3.89 | 0.3912 | 4.74 | 3314.55 | 7.79 | 4435.67 | 8.21 | 6692.85 | 9.48 |
| LB011_ap_11 | 0.95 | 2.22 | 0.8153 | 1.80 | 118.4238 | 2.27 | 1.0553 | 2.22 | 0.6174 | 2.16 | 4644.09 | 4.43 | 4856.25 | 4.54 | 9745.73 | 4.31 |
| LB011_ap_12 | 1.78 | 3.21 | 0.8184 | 3.42 | 63.3793 | 3.17 | 0.5607 | 3.24 | 0.3333 | 4.42 | 2869.57 | 6.48 | 4228.86 | 6.34 | 5631.31 | 8.85 |
| LB011_ap_13 | 4.46 | 3.81 | 0.8054 | 4.63 | 24.8664 | 4.17 | 0.2239 | 3.83 | 0.1219 | 4.72 | 1302.29 | 7.66 | 3303.06 | 8.34 | 2331.64 | 9.44 |
| LB011_ap_14 | 1.85 | 3.07 | 0.8359 | 3.24 | 62.3562 | 2.98 | 0.5385 | 3.07 | 0.3226 | 3.80 | 2777.04 | 6.13 | 4212.63 | 5.95 | 5683.32 | 7.61 |
| LB011_ap_15 | 2.86 | 2.82 | 0.8133 | 3.17 | 39.3826 | 2.73 | 0.3501 | 2.80 | 0.2100 | 3.82 | 1934.90 | 5.60 | 3755.29 | 5.46 | 3863.64 | 7.64 |
| LB011_ap_16 | 1.32 | 3.27 | 0.8453 | 2.72 | 89.1062 | 3.28 | 0.7636 | 3.24 | 0.4475 | 4.09 | 3657.58 | 6.48 | 4570.23 | 6.55 | 7495.98 | 8.17 |
| LB011_ap_17 | 1.23 | 1.99 | 0.8355 | 1.87 | 93.6137 | 2.02 | 0.8125 | 2.00 | 0.5049 | 2.36 | 3833.82 | 4.00 | 4619.79 | 4.04 | 8285.10 | 4.72 |
| LB011_ap_18 | 0.91 | 2.23 | 0.8354 | 1.63 | 127.2510 | 2.14 | 1.1048 | 2.05 | 0.6351 | 2.00 | 4797.49 | 4.10 | 4928.66 | 4.28 | 9986.40 | 4.01 |
| LB011_ap_19 | 0.90 | 2.67 | 0.8159 | 2.13 | 125.5636 | 2.91 | 1.1181 | 2.66 | 0.6367 | 3.66 | 4838.05 | 5.32 | 4915.21 | 5.81 | 9986.46 | 7.32 |
| LB011_ap_2 | 3.12 | 2.88 | 0.8059 | 3.34 | 35.7302 | 3.02 | 0.3214 | 2.88 | 0.1829 | 4.18 | 1796.80 | 5.76 | 3659.03 | 6.03 | 3405.05 | 6.82 |
| LB011_ap_20 | 2.04 | 3.21 | 0.8060 | 3.50 | 54.3732 | 3.35 | 0.4894 | 3.35 | 0.2987 | 4.18 | 2568.11 | 6.70 | 4075.85 | 6.69 | 5298.20 | 8.35 |
| LB011_ap_21 | 2.85 | 3.85 | 0.7338 | 4.51 | 35.5245 | 4.22 | 0.3488 | 3.83 | 0.2008 | 5.10 | 1928.69 | 7.66 | 3653.33 | 8.44 | 3709.90 | 10.19 |
| LB011_ap_22 | 1.02 | 2.74 | 0.8421 | 2.75 | 113.4551 | 3.23 | 0.9738 | 2.93 | 0.5632 | 3.64 | 4383.24 | 5.85 | 4813.10 | 6.45 | 9055.09 | 7.28 |
| LB011_ap_23 | 1.96 | 3.91 | 0.7920 | 4.73 | 56.0767 | 3.97 | 0.5135 | 3.95 | 0.2871 | 4.95 | 2871.68 | 7.89 | 4106.61 | 7.95 | 5116.25 | 9.91 |
| LB011_ap_24 | 0.62 | 1.85 | 0.8346 | 1.43 | 185.5320 | 1.85 | 1.6125 | 1.86 | 0.7685 | 1.76 | 6190.49 | 3.72 | 5309.04 | 3.71 | 11727.44 | 3.52 |
| LB011_ap_25 | 0.66 | 2.12 | 0.8134 | 1.53 | 170.6870 | 1.87 | 1.5183 | 2.12 | 0.8870 | 2.34 | 5953.90 | 4.24 | 5224.83 | 3.74 | 12870.83 | 4.68 |
| LB011_ap_26 | 2.39 | 2.67 | 0.8072 | 2.85 | 46.6654 | 2.62 | 0.4182 | 2.67 | 0.2304 | 2.92 | 2252.46 | 5.34 | 3923.65 | 5.23 | 4202.54 | 5.84 |
| LB011_ap_27 | 2.36 | 4.02 | 0.7879 | 4.98 | 45.8150 | 4.43 | 0.4292 | 4.33 | 0.2587 | 4.74 | 2275.18 | 8.66 | 3905.37 | 8.86 | 4663.33 | 9.49 |
| LB011_ap_28 | 2.04 | 3.71 | 0.8127 | 4.54 | 55.0239 | 3.80 | 0.4913 | 3.72 | 0.2647 | 4.35 | 2576.22 | 7.43 | 4087.71 | 7.60 | 4760.86 | 8.69 |
| LB011_ap_29 | 1.60 | 3.87 | 0.8083 | 4.02 | 69.0968 | 3.89 | 0.6194 | 3.87 | 0.3862 | 4.92 | 3107.45 | 7.75 | 4315.25 | 7.78 | 6619.99 | 9.85 |
| LB011_ap_3 | 1.43 | 1.95 | 0.8425 | 1.89 | 81.1355 | 2.10 | 0.6987 | 2.00 | 0.3776 | 2.20 | 3415.58 | 4.01 | 4476.18 | 4.21 | 6492.70 | 4.41 |
| LB011_ap_30 | 2.04 | 3.35 | 0.7963 | 3.67 | 53.7180 | 3.44 | 0.4897 | 3.39 | 0.2735 | 4.07 | 2569.41 | 6.77 | 4063.76 | 6.88 | 4900.44 | 8.13 |
| LB011_ap_31 | 1.86 | 2.96 | 0.7952 | 3.14 | 58.9177 | 3.04 | 0.5377 | 2.96 | 0.3143 | 3.59 | 2773.76 | 5.91 | 4155.93 | 6.08 | 5539.23 | 7.19 |
| LB011_ap_32 | 3.01 | 3.78 | 0.8897 | 4.27 | 40.6821 | 3.66 | 0.3307 | 3.83 | 0.2183 | 4.65 | 1841.53 | 7.67 | 3787.45 | 7.33 | 4003.03 | 9.31 |
| LB011_ap_4 | 1.53 | 3.19 | 0.8279 | 3.23 | 75.2024 | 3.31 | 0.6518 | 3.33 | 0.3923 | 3.41 | 3235.25 | 6.65 | 4400.05 | 6.61 | 6708.14 | 6.81 |
| LB011_ap_5 | 1.80 | 2.26 | 0.8151 | 2.33 | 62.2828 | 2.23 | 0.5534 | 2.26 | 0.3351 | 2.39 | 2839.42 | 4.53 | 4211.42 | 4.46 | 5857.96 | 4.78 |
| LB011_ap_6 | 1.71 | 2.93 | 0.8184 | 3.06 | 65.8566 | 3.01 | 0.5638 | 2.95 | 0.3793 | 3.85 | 2964.23 | 5.90 | 4267.23 | 6.02 | 6518.14 | 7.69 |
| LB011_ap_7 | 4.78 | 2.82 | 0.8711 | 3.46 | 25.1758 | 2.67 | 0.2095 | 2.91 | 0.1328 | 3.18 | 1226.04 | 5.83 | 3315.06 | 5.33 | 2527.58 | 6.37 |
| LB011_ap_8 | 1.98 | 2.10 | 0.8534 | 2.15 | 59.4907 | 2.04 | 0.5057 | 2.09 | 0.3035 | 2.30 | 2638.14 | 4.19 | 4165.60 | 4.08 | 5372.18 | 4.61 |
| LB011_ap_9 | 1.01 | 2.19 | 0.8365 | 1.93 | 113.7762 | 2.33 | 0.9880 | 2.14 | 0.5949 | 2.59 | 4429.66 | 4.28 | 4815.95 | 4.66 | 9462.22 | 5.17 |
| NEF-01_ap_3 | 1.11 | 5.27 | 0.8054 | 5.00 | 100.5475 | 5.21 | 0.9058 | 5.24 | 0.1031 | 5.83 | 4157.32 | 10.47 | 4691.61 | 10.42 | 1988.35 | 11.66 |
| NEF-01_ap_4 | 6.41 | 4.33 | 0.7577 | 5.61 | 16.2870 | 4.44 | 0.7562 | 4.38 | 0.0970 | 5.45 | 935.37 | 8.76 | 2893.80 | 8.87 | 1875.81 | 10.90 |
| NEF-01_ap_5 | 1.18 | 5.06 | 0.7758 | 5.06 | 90.7315 | 5.09 | 0.9483 | 5.06 | 0.5103 | 5.67 | 3863.14 | 10.12 | 4688.38 | 10.17 | 8358.07 | 11.34 |
| NEF-01_ap_6 | 1.21 | 5.37 | 0.8108 | 5.27 | 92.4770 | 5.75 | 0.8282 | 5.35 | 0.4958 | 5.67 | 3889.44 | 10.71 | 4607.52 | 11.51 | 8161.22 | 11.35 |
| NEF-01_ap_7 | 3.36 | 4.67 | 0.7867 | 5.91 | 32.5669 | 6.08 | 0.3004 | 4.67 | 0.2689 | 6.54 | 1693.08 | 9.34 | 3567.59 | 12.16 | 4626.67 | 13.09 |
| NEF-03_ap_1 | 1.57 | 8.99 | 0.7911 | 7.70 | 69.5271 | 15.72 | 0.6513 | 15.90 | 0.5794 | 11.58 | 3233.14 | 31.80 | 4321.47 | 31.44 | 9284.67 | 23.07 |
| NEF-03_ap_10 | 0.08 | 11.53 | 0.8512 | 4.18 | 1401.2171 | 11.53 | 11.9252 | 11.56 | 1.9252 | 6.03 | 16501.17 | 23.13 | 7357.27 | 23.05 | 21756.92 | 12.16 |
| NEF-03_ap_11 | 0.29 | 5.42 | 0.8493 | 3.56 | 409.6751 | 6.01 | 3.4975 | 5.41 | 1.7992 | 5.27 | 9692.23 | 10.83 | 6110.38 | 12.02 | 20864.44 | 10.54 |
| NEF-03_ap_12 | 0.46 | 5.98 | 0.8200 | 4.08 | 243.3562 | 5.47 | 2.1488 | 5.61 | 0.4492 | 5.07 | 7394.14 | 11.21 | 5833.22 | 10.94 | 7520.63 | 10.13 |
| NEF-03_ap_14 | 0.72 | 4.77 | 0.8211 | 4.11 | 156.5821 | 4.69 | 1.3680 | 4.77 | 1.0681 | 4.92 | 5605.84 | 9.54 | 4178.78 | 9.38 | 14728.48 | 9.84 |
| NEF-03_ap_15 | 0.61 | 5.23 | 0.7924 | 4.33 | 178.8970 | 5.21 | 1.6401 | 5.26 | 0.1217 | 4.01 | 6258.35 | 10.53 | 5272.26 | 10.42 | 2328.23 | 8.02 |
| NEF-03_ap_16 | 0.84 | 4.92 | 0.8483 | 4.38 | 139.8428 | 4.80 | 1.1924 | 4.92 | 0.7492 | 4.97 | 5060.36 | 9.85 | 5023.75 | 9.60 | 11334.23 | 9.93 |

Appendix B: Eastern Sunda arc geochronology data - apatite

| Analysis ID | 238U/206Pb ratio | 1s% | 207Pb/206Pb ratio | 1s% | 207Pb/235U (calc)/ratio | 1s% | 206Pb/238U ratio | 1s% | 208Pb/232Th ratio | 1s% | 206Pb/238U Age (Ma) | 2s% | 207Pb/235U (calc) Age (Ma) | 2s% | 208Pb/232Th Age (Ma) | 2s% |
|--------------|------------------|-------|-------------------|-------|-------------------------|-------|------------------|-------|-------------------|-------|---------------------|-------|----------------------------|-------|----------------------|-------|
| NEF-03_ap_17 | 0.12 | 8.52 | 0.8069 | 3.62 | 958.9522 | 8.50 | 8.4329 | 8.42 | 0.8375 | 6.34 | 14466.99 | 16.83 | 6972.52 | 17.01 | 12332.00 | 12.68 |
| NEF-03_ap_18 | 0.32 | 4.03 | 0.8010 | 2.59 | 347.1668 | 4.43 | 3.1412 | 4.28 | 3.0720 | 5.04 | 9160.22 | 8.48 | 5942.71 | 8.87 | 28461.69 | 10.33 |
| NEF-03_ap_19 | 74.37 | 10.16 | 0.7811 | 14.75 | 1.4241 | 10.40 | 0.0132 | 11.58 | 0.0020 | 12.17 | 84.70 | 23.16 | 899.07 | 20.81 | 39.88 | 24.33 |
| NEF-03_ap_20 | 0.82 | 3.98 | 0.8269 | 3.34 | 139.4734 | 4.07 | 1.2193 | 3.81 | 1.0890 | 4.20 | 5139.99 | 7.62 | 5021.09 | 8.13 | 14932.85 | 8.40 |
| NEF-03_ap_21 | 1.82 | 4.52 | 0.8799 | 4.85 | 66.2455 | 4.34 | 0.5530 | 4.96 | 0.1298 | 6.29 | 2837.74 | 9.93 | 4273.09 | 8.69 | 2474.18 | 12.58 |
| NEF-03_ap_3 | 0.53 | 6.44 | 0.7873 | 5.62 | 204.7491 | 6.39 | 1.8864 | 6.44 | 0.1153 | 4.64 | 6833.28 | 12.88 | 5408.60 | 12.78 | 2211.19 | 9.28 |
| NEF-03_ap_4 | 0.01 | 5.20 | 0.8403 | 0.40 | 9517.1329 | 4.11 | 82.2447 | 3.99 | 189.6805 | 5.83 | 28504.57 | 7.98 | 9301.88 | 8.22 | 106428.94 | 11.66 |
| NEF-03_ap_7 | 0.33 | 6.62 | 0.8794 | 4.32 | 362.4741 | 6.55 | 2.9952 | 6.66 | 0.7384 | 4.82 | 8928.43 | 13.32 | 5986.40 | 13.09 | 11209.03 | 9.63 |
| NEF-03_ap_8 | 0.10 | 8.80 | 0.8399 | 3.72 | 1150.1917 | 11.22 | 9.8688 | 11.18 | 2.8668 | 5.64 | 15449.48 | 22.44 | 7156.98 | 22.44 | 27413.54 | 11.28 |
| NEF-03_ap_9 | 0.39 | 7.20 | 0.7889 | 3.16 | 275.1777 | 5.75 | 2.5346 | 5.56 | 0.9330 | 4.43 | 8139.28 | 11.12 | 5707.51 | 11.49 | 13389.74 | 8.85 |
| SEF-01_ap_1 | 10.43 | 3.66 | 0.7231 | 4.87 | 9.6395 | 4.53 | 0.0965 | 3.82 | 0.0296 | 5.13 | 594.08 | 7.64 | 2400.95 | 9.05 | 591.71 | 10.25 |
| SEF-01_ap_10 | 3.42 | 7.32 | 0.7987 | 7.46 | 32.0429 | 6.41 | 0.2912 | 6.19 | 0.0074 | 6.34 | 1647.76 | 12.39 | 3551.62 | 12.83 | 149.42 | 12.87 |
| SEF-01_ap_11 | 10.49 | 2.70 | 0.7995 | 3.45 | 10.4942 | 3.06 | 0.0953 | 2.99 | 0.0210 | 3.74 | 586.93 | 5.97 | 2479.41 | 6.11 | 420.52 | 7.49 |
| SEF-01_ap_12 | 3.66 | 1.46 | 0.8188 | 1.54 | 30.7703 | 1.45 | 0.2727 | 1.46 | 0.1477 | 1.61 | 1554.32 | 2.92 | 3511.73 | 2.91 | 2793.18 | 3.22 |
| SEF-01_ap_13 | 13.02 | 3.94 | 0.7956 | 3.91 | 8.4497 | 3.59 | 0.0771 | 3.87 | 0.0489 | 4.48 | 478.68 | 7.75 | 2280.53 | 7.18 | 967.41 | 8.96 |
| SEF-01_ap_14 | 4.85 | 4.09 | 0.8280 | 4.88 | 23.6450 | 4.73 | 0.2095 | 5.29 | 0.0361 | 5.30 | 1226.00 | 10.57 | 3253.87 | 9.47 | 718.10 | 10.61 |
| SEF-01_ap_15 | 1.10 | 3.81 | 0.8023 | 3.68 | 100.4411 | 3.75 | 0.9092 | 3.81 | 0.0367 | 3.89 | 4168.86 | 7.62 | 4690.54 | 7.50 | 731.46 | 7.78 |
| SEF-01_ap_16 | 8.53 | 4.67 | 0.7648 | 5.19 | 12.3916 | 4.79 | 0.1171 | 4.81 | 0.0184 | 5.15 | 714.06 | 9.63 | 2634.54 | 9.57 | 388.60 | 10.36 |
| SEF-01_ap_17 | 3.57 | 5.49 | 0.8142 | 7.97 | 31.5498 | 6.10 | 0.2802 | 5.49 | 0.0112 | 5.68 | 1592.54 | 10.97 | 3536.35 | 12.20 | 225.06 | 11.36 |
| SEF-01_ap_18 | 11.18 | 6.98 | 0.7975 | 9.26 | 9.7182 | 6.86 | 0.0888 | 7.02 | 0.0287 | 8.02 | 548.24 | 14.04 | 2408.43 | 13.72 | 574.17 | 16.05 |
| SEF-01_ap_19 | 6.79 | 3.72 | 0.8199 | 4.84 | 16.7478 | 4.22 | 0.1478 | 4.74 | 0.0237 | 4.21 | 888.79 | 9.49 | 2920.51 | 8.45 | 473.87 | 8.41 |
| SEF-01_ap_20 | 24.14 | 9.77 | 0.8187 | 13.11 | 4.7113 | 9.34 | 0.0419 | 9.74 | 0.0121 | 11.84 | 264.90 | 19.48 | 1769.24 | 18.68 | 243.64 | 23.69 |
| SEF-01_ap_3 | 3.51 | 5.42 | 0.8459 | 5.16 | 33.3044 | 5.30 | 0.2891 | 7.05 | 0.0377 | 6.01 | 1636.99 | 14.09 | 3589.66 | 10.60 | 750.62 | 12.02 |
| SEF-01_ap_4 | 4.62 | 2.06 | 0.7981 | 2.20 | 23.8995 | 2.24 | 0.2174 | 2.48 | 0.0218 | 5.47 | 1268.14 | 4.97 | 3264.30 | 4.48 | 1888.22 | 5.64 |
| SEF-01_ap_5 | 1.00 | 6.61 | 0.9198 | 8.37 | 127.7642 | 6.16 | 1.0037 | 8.25 | 0.0030 | 3.58 | 1607.60 | 7.84 | 3568.97 | 6.99 | 637.90 | 7.16 |
| SEF-01_ap_6 | 3.51 | 3.89 | 0.8253 | 3.94 | 32.6126 | 3.49 | 0.2832 | 3.92 | 0.0320 | 3.58 | 1607.60 | 7.84 | 3568.97 | 6.99 | 637.90 | 7.16 |
| SEF-01_ap_7 | 0.72 | 6.49 | 0.8241 | 4.74 | 157.1762 | 7.60 | 1.3861 | 5.78 | 0.0290 | 4.19 | 5606.18 | 11.56 | 5141.61 | 15.20 | 579.81 | 8.37 |
| SEF-01_ap_8 | 6.46 | 3.44 | 0.7527 | 4.38 | 16.0563 | 3.42 | 0.1551 | 3.43 | 0.0444 | 4.04 | 929.62 | 6.87 | 2880.28 | 6.85 | 880.76 | 8.09 |
| SEF-01_ap_9 | 5.98 | 9.41 | 0.7581 | 10.78 | 17.6447 | 7.44 | 0.1654 | 9.35 | 0.0513 | 8.35 | 986.66 | 18.71 | 2970.57 | 14.88 | 1014.18 | 16.70 |
| SEF-02_ap_1 | 32.11 | 4.45 | 0.7455 | 5.33 | 3.2041 | 4.41 | 0.0312 | 4.81 | 0.0175 | 5.53 | 197.74 | 9.62 | 1458.16 | 8.83 | 350.79 | 11.06 |
| SEF-02_ap_10 | 29.30 | 3.54 | 0.7681 | 4.75 | 3.6399 | 3.87 | 0.0341 | 4.10 | 0.0106 | 4.66 | 216.03 | 8.20 | 1558.30 | 7.74 | 213.41 | 9.33 |
| SEF-02_ap_11 | 39.59 | 7.60 | 0.7120 | 8.31 | 2.5074 | 7.39 | 0.0255 | 4.61 | 0.0063 | 5.48 | 162.32 | 9.23 | 1274.17 | 14.77 | 127.02 | 10.97 |
| SEF-02_ap_12 | 10.00 | 7.78 | 0.7854 | 10.24 | 10.8729 | 7.57 | 1.0107 | 9.53 | 0.0086 | 8.90 | 616.22 | 19.05 | 2512.32 | 15.15 | 173.31 | 17.79 |
| SEF-02_ap_13 | 0.67 | 6.55 | 0.8182 | 5.40 | 170.7505 | 6.36 | 1.5134 | 6.48 | 0.0200 | 4.68 | 5941.23 | 12.95 | 5225.21 | 12.73 | 400.68 | 9.35 |
| SEF-02_ap_14 | 0.39 | 6.89 | 0.8947 | 4.69 | 316.1094 | 6.74 | 2.5729 | 6.85 | 0.0516 | 4.25 | 8208.71 | 13.69 | 5847.84 | 13.47 | 1019.33 | 8.49 |
| SEF-02_ap_15 | 6.63 | 5.55 | 0.8194 | 7.03 | 17.0666 | 5.33 | 0.1517 | 6.03 | 0.0067 | 5.67 | 910.50 | 12.06 | 2938.59 | 10.66 | 134.47 | 11.33 |
| SEF-02_ap_3 | 10.64 | 5.52 | 0.7138 | 7.50 | 9.2760 | 5.68 | 0.0941 | 5.59 | 0.0127 | 6.72 | 579.54 | 11.17 | 2365.66 | 11.36 | 255.98 | 13.44 |
| SEF-02_ap_4 | 1.71 | 12.46 | 0.6862 | 13.79 | 56.2251 | 12.74 | 0.5973 | 12.45 | 0.0202 | 11.79 | 3019.10 | 24.90 | 4109.25 | 25.48 | 405.82 | 23.58 |
| SEF-02_ap_5 | 2.49 | 6.13 | 0.7946 | 8.70 | 44.4416 | 5.98 | 0.4017 | 6.39 | 0.0097 | 5.64 | 2176.90 | 12.78 | 3875.14 | 11.97 | 195.11 | 11.27 |
| SEF-02_ap_6 | 24.97 | 2.64 | 0.7849 | 3.46 | 4.3501 | 2.88 | 0.0403 | 3.12 | 0.0087 | 3.88 | 254.45 | 6.24 | 1702.91 | 5.77 | 175.71 | 7.77 |
| SEF-02_ap_7 | 6.73 | 4.28 | 0.7874 | 4.84 | 16.2563 | 4.27 | 0.1496 | 4.22 | 0.0119 | 4.96 | 898.50 | 8.43 | 2891.99 | 8.54 | 239.41 | 9.93 |
| SEF-02_ap_8 | 10.53 | 7.97 | 0.7511 | 9.26 | 9.8373 | 7.37 | 0.0944 | 7.10 | 0.0045 | 7.70 | 581.34 | 14.19 | 2419.65 | 14.73 | 91.42 | 15.40 |
| SEF-02_ap_9 | 10.56 | 4.60 | 0.8186 | 5.96 | 10.6678 | 4.82 | 0.0940 | 4.60 | 0.0075 | 6.99 | 378.15 | 14.75 | 2001.71 | 15.19 | 253.48 | 13.99 |
| SEF-04_ap_1 | 16.27 | 7.00 | 0.7456 | 5.49 | 6.1806 | 7.60 | 0.0604 | 7.38 | 0.0126 | 6.99 | 378.15 | 14.75 | 2001.71 | 15.19 | 253.48 | 13.99 |
| SEF-04_ap_10 | 3.12 | 6.32 | 0.7463 | 7.62 | 32.9030 | 6.42 | 0.3212 | 6.33 | 0.0097 | 6.51 | 1795.51 | 12.66 | 3577.70 | 12.85 | 196.51 | 13.02 |
| SEF-04_ap_11 | 0.10 | 3.72 | 0.8254 | 1.56 | 1132.3834 | 5.92 | 9.9619 | 5.57 | 0.3039 | 6.69 | 15435.39 | 11.13 | 7141.15 | 11.84 | 5379.31 | 13.38 |
| SEF-04_ap_12 | 3.18 | 6.76 | 0.8473 | 2.01 | 36.8001 | 7.96 | 0.3187 | 8.18 | 0.0234 | 8.20 | 1783.60 | 16.36 | 3688.19 | 15.92 | 468.00 | 16.40 |
| SEF-04_ap_13 | 14.74 | 4.34 | 0.7582 | 5.12 | 7.2065 | 4.55 | 0.0688 | 4.78 | 0.0072 | 5.63 | 429.12 | 9.55 | 2137.31 | 9.10 | 145.10 | 11.25 |

Appendix B: Eastern Sunda arc geochronology data - apatite

| Analysis ID | 238U/206Pb ratio | 1s% | 207Pb/206Pb ratio | 1s% | 207Pb/235U (calc) ratio | 1s% | 206Pb/238U ratio | 1s% | 208Pb/232Th ratio | 1s% | 206Pb/238U Age (Ma) | 2s% | 207Pb/235U Age (Ma) | 2s% | 208Pb/232Th Age (Ma) | 2s% |
|---------------|------------------|-------|-------------------|-------|-------------------------|-------|------------------|-------|-------------------|-------|---------------------|-------|---------------------|-------|----------------------|-------|
| SEF-04_ap_14 | 0.08 | 6.15 | 0.8618 | 2.22 | 1444.2971 | 10.37 | 12.2299 | 10.62 | 0.8409 | 8.48 | 16647.69 | 21.24 | 7388.00 | 20.73 | 12369.64 | 16.96 |
| SEF-04_ap_16 | 4.73 | 4.57 | 0.7899 | 3.71 | 22.6284 | 5.61 | 0.2083 | 5.91 | 0.0101 | 7.48 | 1219.88 | 11.82 | 3211.10 | 11.22 | 203.05 | 14.97 |
| SEF-04_ap_17 | 5.41 | 3.65 | 0.7907 | 3.78 | 20.2256 | 3.72 | 0.1851 | 3.97 | 0.0135 | 3.87 | 1094.75 | 7.94 | 3102.21 | 7.43 | 271.62 | 7.73 |
| SEF-04_ap_18 | 0.69 | 12.14 | 0.9004 | 9.42 | 178.5870 | 11.01 | 1.4381 | 11.32 | 0.0883 | 8.61 | 5745.14 | 22.65 | 5270.40 | 22.01 | 1339.10 | 17.21 |
| SEF-04_ap_19 | 1.14 | 3.51 | 0.7818 | 3.16 | 94.5793 | 3.80 | 0.8739 | 3.51 | 0.0547 | 4.06 | 4048.40 | 7.02 | 4630.10 | 7.59 | 1079.68 | 8.12 |
| SEF-04_ap_2 | 0.03 | 5.17 | 0.8511 | 0.77 | 3903.3191 | 4.28 | 32.8549 | 4.12 | 0.9962 | 3.52 | 22704.73 | 8.25 | 8370.71 | 8.57 | 14011.17 | 7.03 |
| SEF-04_ap_20 | 24.02 | 6.81 | 0.6817 | 11.09 | 3.8430 | 9.93 | 0.0428 | 10.40 | 0.0072 | 7.67 | 269.88 | 20.80 | 1601.81 | 19.85 | 146.04 | 15.35 |
| SEF-04_ap_21 | 2.80 | 11.49 | 0.8147 | 5.25 | 39.9884 | 7.90 | 0.3539 | 8.17 | 0.0280 | 5.08 | 1953.35 | 16.34 | 3770.41 | 15.80 | 559.64 | 10.17 |
| SEF-04_ap_23 | 16.77 | 5.77 | 0.8430 | 5.65 | 6.9080 | 6.00 | 0.0596 | 5.30 | 0.0135 | 5.60 | 373.15 | 10.59 | 2089.69 | 11.99 | 271.25 | 11.20 |
| SEF-04_ap_24 | 38.43 | 12.84 | 0.7867 | 4.22 | 2.8308 | 13.27 | 0.0263 | 10.94 | 0.0021 | 11.13 | 167.36 | 21.88 | 1363.73 | 26.53 | 43.26 | 22.26 |
| SEF-04_ap_25 | 21.76 | 3.99 | 0.8317 | 5.26 | 5.3086 | 4.51 | 0.0462 | 4.17 | 0.0061 | 5.09 | 291.36 | 8.34 | 1870.25 | 9.01 | 123.34 | 10.18 |
| SEF-04_ap_26 | 1.60 | 4.79 | 0.7969 | 4.27 | 69.1179 | 4.88 | 0.6282 | 4.85 | 0.0374 | 4.93 | 3142.26 | 9.69 | 4315.56 | 9.76 | 744.08 | 9.86 |
| SEF-04_ap_27 | 12.34 | 3.11 | 0.8129 | 2.72 | 9.0729 | 3.11 | 0.0809 | 3.53 | 0.0100 | 3.44 | 501.66 | 7.05 | 2345.38 | 6.21 | 201.10 | 6.88 |
| SEF-04_ap_28 | 9.21 | 2.88 | 0.7831 | 3.67 | 11.7738 | 2.83 | 0.1092 | 3.37 | 0.0279 | 3.33 | 668.10 | 6.74 | 2586.58 | 5.66 | 558.24 | 6.67 |
| SEF-04_ap_4 | 8.28 | 3.55 | 0.8146 | 4.52 | 13.5694 | 3.43 | 0.1189 | 3.80 | 0.0159 | 4.45 | 730.24 | 7.59 | 2720.13 | 6.86 | 319.70 | 8.90 |
| SEF-04_ap_5 | 4.36 | 5.08 | 0.7731 | 6.16 | 24.5167 | 5.21 | 0.2300 | 5.02 | 0.0165 | 7.50 | 1334.54 | 10.04 | 3289.16 | 10.42 | 330.94 | 15.00 |
| SEF-04_ap_6 | 13.26 | 4.99 | 0.7314 | 6.70 | 7.6423 | 5.08 | 0.0753 | 6.18 | 0.0154 | 6.28 | 468.17 | 12.37 | 2189.84 | 10.17 | 309.43 | 12.56 |
| SEF-04_ap_7 | 16.26 | 8.65 | 0.7116 | 13.57 | 6.0295 | 8.55 | 0.0615 | 10.84 | 0.0043 | 8.91 | 385.01 | 21.69 | 1980.12 | 17.10 | 87.14 | 17.81 |
| SEF-04_ap_8 | 8.44 | 3.10 | 0.8255 | 3.88 | 13.5484 | 3.11 | 0.1190 | 3.47 | 0.0173 | 4.13 | 725.06 | 6.94 | 2718.67 | 6.21 | 348.48 | 8.27 |
| SEF-04_ap_9 | 11.38 | 2.98 | 0.8114 | 3.81 | 9.8764 | 3.70 | 0.0880 | 2.98 | 0.0092 | 3.75 | 543.71 | 5.96 | 2423.31 | 7.40 | 184.81 | 7.50 |
| SING-01_ap_1 | 69.17 | 5.82 | 0.6821 | 8.28 | 1.3620 | 6.13 | 0.0145 | 5.82 | 0.0188 | 7.29 | 116.65 | 11.65 | 807.74 | 12.25 | 377.22 | 14.58 |
| SING-01_ap_2 | 58.62 | 6.76 | 0.6151 | 9.99 | 1.4453 | 7.53 | 0.0171 | 6.83 | 0.0179 | 9.15 | 108.14 | 13.65 | 972.93 | 15.05 | 360.48 | 18.31 |
| SING-01_ap_3 | 13.52 | 7.04 | 0.6788 | 10.43 | 6.9162 | 8.52 | 0.0741 | 6.88 | 0.0680 | 12.08 | 460.89 | 13.77 | 2100.74 | 17.04 | 1333.19 | 24.16 |
| SING-01_ap_4 | 9.30 | 5.80 | 0.7183 | 7.37 | 10.6715 | 5.91 | 0.1078 | 6.33 | 0.0604 | 6.58 | 659.93 | 12.85 | 1494.95 | 11.82 | 1189.54 | 13.17 |
| SING-01_ap_5 | 34.98 | 4.79 | 0.7315 | 6.59 | 2.8808 | 4.88 | 0.0286 | 4.77 | 0.0306 | 6.52 | 181.78 | 9.54 | 1376.89 | 9.77 | 610.28 | 13.04 |
| SING-02_ap_1 | 9.26 | 5.98 | 0.7806 | 7.28 | 11.6547 | 5.52 | 0.1085 | 5.57 | 0.0092 | 6.29 | 664.18 | 11.14 | 2577.07 | 11.04 | 185.19 | 12.57 |
| SING-02_ap_10 | 3.19 | 3.34 | 0.8249 | 2.81 | 35.8553 | 3.05 | 0.3154 | 3.68 | 0.0799 | 3.51 | 1767.14 | 7.37 | 3662.49 | 6.10 | 1558.52 | 7.02 |
| SING-02_ap_11 | 0.89 | 4.43 | 0.8279 | 3.29 | 128.6895 | 3.71 | 1.1270 | 4.40 | 0.0929 | 4.32 | 4865.18 | 8.41 | 4939.98 | 7.42 | 1800.77 | 8.65 |
| SING-02_ap_12 | 4.44 | 4.40 | 0.8275 | 4.51 | 26.9678 | 4.08 | 0.2260 | 4.29 | 0.0411 | 4.20 | 1313.73 | 8.98 | 3382.30 | 8.17 | 817.22 | 8.40 |
| SING-02_ap_13 | | | | | | | | | | | | | | | | |
| SING-02_ap_14 | 18.37 | 13.51 | 0.7844 | 18.17 | 5.9476 | 13.12 | 0.0553 | 13.41 | 0.0542 | 14.17 | 347.05 | 26.83 | 1968.21 | 26.23 | 1070.38 | 28.35 |
| SING-02_ap_15 | 10.50 | 3.39 | 0.7738 | 4.37 | 10.1772 | 3.36 | 0.0955 | 3.38 | 0.0227 | 4.50 | 587.91 | 6.76 | 2451.01 | 6.71 | 455.74 | 9.00 |
| SING-02_ap_16 | 0.13 | 2.49 | 0.8286 | 1.07 | 900.0942 | 2.48 | 8.0238 | 2.47 | 0.4949 | 2.48 | 14181.19 | 4.95 | 6918.36 | 4.96 | 8149.62 | 4.96 |
| SING-02_ap_17 | 10.31 | 4.11 | 0.8058 | 6.12 | 10.7995 | 4.66 | 0.0970 | 4.38 | 0.0141 | 6.00 | 596.72 | 8.77 | 2506.02 | 9.32 | 283.98 | 12.00 |
| SING-02_ap_18 | 1.64 | 3.04 | 0.7990 | 3.15 | 66.9787 | 3.00 | 0.6087 | 3.01 | 0.0764 | 3.36 | 3064.87 | 6.02 | 4284.10 | 6.00 | 1492.64 | 6.73 |
| SING-02_ap_2 | 9.17 | 6.22 | 0.8374 | 8.06 | 12.5230 | 6.02 | 0.1090 | 6.27 | 0.0305 | 7.49 | 666.80 | 12.54 | 2644.45 | 12.04 | 609.55 | 14.97 |
| SING-02_ap_3 | 0.33 | 3.01 | 0.8189 | 1.58 | 343.9997 | 2.94 | 3.0168 | 2.74 | 0.3671 | 2.05 | 8963.66 | 5.49 | 5933.44 | 5.89 | 6338.10 | 4.09 |
| SING-02_ap_4 | 84.75 | 4.50 | 0.6614 | 6.53 | 1.0913 | 5.39 | 0.0120 | 5.36 | 0.0031 | 7.22 | 76.79 | 10.72 | 749.14 | 10.78 | 61.96 | 14.45 |
| SING-02_ap_5 | | | | | | | | | | | | | | | | |
| SING-02_ap_6 | 0.58 | 3.98 | 0.8279 | 1.70 | 195.7988 | 3.66 | 1.7174 | 3.65 | 0.1246 | 4.25 | 6444.27 | 7.30 | 5363.44 | 7.32 | 2379.62 | 8.51 |
| SING-02_ap_7 | 19.51 | 5.28 | 0.8027 | 7.83 | 5.6564 | 5.08 | 0.0513 | 5.83 | 0.0121 | 6.28 | 322.22 | 11.66 | 1924.73 | 10.19 | 243.29 | 12.57 |
| SING-02_ap_8 | 27.94 | 9.13 | 0.8144 | 7.87 | 4.0727 | 8.15 | 0.0364 | 9.63 | 0.0033 | 11.82 | 230.54 | 19.27 | 1648.86 | 16.30 | 67.48 | 23.65 |
| SING-02_ap_9 | 0.09 | 7.58 | 0.8385 | 0.48 | 1255.5401 | 5.85 | 10.8630 | 5.79 | 1.1780 | 3.83 | 15944.64 | 11.59 | 7245.89 | 11.69 | 15778.26 | 7.65 |
| SLG-03_ap_1 | 37.72 | 22.05 | 0.7939 | 29.66 | 3.0847 | 20.99 | 0.0278 | 27.70 | 0.0063 | 41.85 | 177.04 | 55.39 | 1428.89 | 41.99 | 126.35 | 83.69 |
| SLG-03_ap_2 | 0.35 | 7.66 | 0.7944 | 5.19 | 314.7976 | 8.08 | 2.8893 | 7.61 | 0.2732 | 15.77 | 8755.68 | 15.21 | 5843.63 | 16.16 | 4896.03 | 31.54 |
| SLG-03_ap_3 | 0.26 | 7.51 | 0.8122 | 4.50 | 432.9831 | 7.48 | 3.8641 | 7.50 | 0.2417 | 8.89 | 10197.43 | 14.99 | 6166.43 | 14.96 | 4387.48 | 17.77 |
| SLG-03_ap_4 | 0.53 | 5.04 | 0.7789 | 3.29 | 202.4389 | 4.87 | 1.8682 | 4.47 | 5.5754 | 7.00 | 6832.69 | 8.94 | 5397.13 | 9.74 | 38174.89 | 14.01 |
| SLG-03_ap_5 | 2.02 | 9.33 | 0.8845 | 5.01 | 59.1921 | 9.63 | 0.4847 | 12.66 | 0.0243 | 7.97 | 2547.50 | 25.31 | 4160.57 | 19.27 | 487.14 | 15.94 |
| SLG-03_ap_8 | 0.03 | 14.48 | 0.7918 | 4.87 | 3655.5668 | 14.19 | 33.8993 | 14.24 | 11.5015 | 15.34 | 22863.56 | 28.49 | 8331.33 | 28.39 | 51198.54 | 30.88 |

Appendix B: Eastern Sunda arc geochronology data - apatite

| Analysis ID | 238U/206Pb ratio | 1s% | 207Pb/206Pb ratio | 1s% | 207Pb/235U (calc)/ratio | 1s% | 206Pb/238U ratio | 1s% | 208Pb/232Th ratio | 1s% | 206Pb/238U Age (Ma) | 2s% | 207Pb/235U (calc) Age (Ma) | 2s% | 208Pb/232Th Age (Ma) | 2s% |
|-------------|------------------|-------|-------------------|------|-------------------------|-------|------------------|-------|-------------------|-------|---------------------|-------|----------------------------|-------|----------------------|-------|
| SLG-03_ap_9 | 0.44 | 6.76 | 0.8972 | 6.17 | 286.2232 | 6.75 | 2.3265 | 6.73 | 0.5198 | 5.25 | 7747.97 | 13.46 | 5747.33 | 13.50 | 8483.93 | 10.51 |
| TR-01_ap_1 | 1.08 | 3.19 | 0.8316 | 2.98 | 106.7869 | 2.74 | 0.9294 | 3.09 | 0.6729 | 3.69 | 4236.50 | 6.17 | 4752.15 | 5.48 | 10430.42 | 7.39 |
| TR-01_ap_10 | 2.22 | 3.09 | 0.7825 | 3.78 | 48.4686 | 3.25 | 0.4509 | 3.09 | 0.3142 | 3.63 | 2399.43 | 6.19 | 3961.35 | 6.49 | 5537.82 | 7.25 |
| TR-01_ap_11 | 0.84 | 2.39 | 0.8320 | 2.06 | 136.5639 | 2.37 | 1.1924 | 2.40 | 0.8180 | 2.45 | 5060.35 | 4.79 | 4999.84 | 4.73 | 12115.61 | 4.91 |
| TR-01_ap_12 | 1.62 | 3.36 | 0.8209 | 3.28 | 70.1441 | 3.12 | 0.6158 | 3.47 | 0.4443 | 3.47 | 3093.07 | 6.94 | 4330.31 | 6.23 | 7451.94 | 6.94 |
| TR-01_ap_13 | 2.09 | 3.35 | 0.8192 | 3.65 | 54.4375 | 3.26 | 0.4820 | 3.35 | 0.3644 | 4.05 | 2536.08 | 6.69 | 4077.02 | 6.52 | 6298.75 | 8.09 |
| TR-01_ap_14 | 0.82 | 2.98 | 0.8507 | 2.62 | 143.6399 | 2.93 | 1.2246 | 2.99 | 0.8244 | 3.03 | 5154.27 | 5.99 | 5050.77 | 5.86 | 12187.14 | 6.06 |
| TR-01_ap_15 | 1.31 | 4.67 | 0.8288 | 4.75 | 87.3843 | 4.67 | 0.7645 | 4.71 | 0.5797 | 5.74 | 3860.66 | 9.42 | 4550.64 | 9.33 | 9288.72 | 11.48 |
| TR-01_ap_16 | 0.33 | 2.42 | 0.8449 | 1.49 | 348.4168 | 2.34 | 2.9979 | 2.35 | 2.2775 | 2.32 | 8833.19 | 4.70 | 5946.35 | 4.68 | 24061.94 | 4.64 |
| TR-01_ap_17 | 1.71 | 3.51 | 0.8084 | 3.64 | 65.2865 | 3.35 | 0.5652 | 3.43 | 0.4149 | 3.92 | 2969.72 | 6.87 | 4258.50 | 6.70 | 7035.38 | 7.85 |
| TR-01_ap_18 | 1.92 | 1.98 | 0.8276 | 2.01 | 59.4602 | 1.94 | 0.5195 | 1.97 | 0.2984 | 2.38 | 2697.00 | 3.94 | 4165.09 | 3.88 | 5293.24 | 4.76 |
| TR-01_ap_19 | 0.95 | 2.28 | 0.8334 | 2.03 | 119.8886 | 2.26 | 1.0448 | 2.29 | 0.7653 | 2.39 | 4611.18 | 4.57 | 4868.63 | 4.51 | 11520.00 | 4.78 |
| TR-01_ap_2 | 2.41 | 3.29 | 0.8548 | 3.60 | 49.0173 | 3.15 | 0.4148 | 3.28 | 0.3076 | 3.83 | 2236.67 | 6.56 | 3972.55 | 6.31 | 5436.17 | 7.66 |
| TR-01_ap_20 | 1.96 | 2.68 | 0.8268 | 2.73 | 58.1007 | 2.52 | 0.5087 | 2.58 | 0.3619 | 2.86 | 2655.34 | 5.17 | 4141.99 | 5.05 | 6260.29 | 5.71 |
| TR-01_ap_21 | 0.20 | 2.13 | 0.8371 | 1.09 | 580.7091 | 2.07 | 5.0309 | 2.06 | 3.2883 | 1.90 | 11683.54 | 4.11 | 6463.90 | 4.13 | 29510.61 | 3.80 |
| TR-01_ap_22 | 2.28 | 3.58 | 0.7923 | 4.01 | 47.8008 | 3.55 | 0.4372 | 3.61 | 0.2933 | 4.10 | 2338.28 | 7.22 | 3947.55 | 7.10 | 5212.62 | 8.20 |
| TR-01_ap_23 | 2.40 | 3.49 | 0.8048 | 3.86 | 46.5052 | 3.66 | 0.4178 | 3.46 | 0.3085 | 3.87 | 2250.59 | 6.92 | 3920.23 | 7.32 | 5450.48 | 7.73 |
| TR-01_ap_24 | 1.06 | 2.64 | 0.8332 | 2.25 | 107.8228 | 2.66 | 0.9357 | 2.68 | 0.6871 | 2.97 | 4257.78 | 5.36 | 4761.86 | 5.32 | 10600.93 | 5.94 |
| TR-01_ap_25 | 1.16 | 2.50 | 0.8351 | 2.35 | 99.3966 | 2.45 | 0.8633 | 2.50 | 0.6094 | 2.66 | 4012.05 | 4.99 | 4680.03 | 4.90 | 9645.13 | 5.32 |
| TR-01_ap_27 | 1.71 | 3.16 | 0.7774 | 3.35 | 62.8360 | 3.13 | 0.5857 | 3.16 | 0.4374 | 3.44 | 2971.89 | 6.32 | 4220.25 | 6.26 | 7354.13 | 6.88 |
| TR-01_ap_28 | 1.45 | 2.76 | 0.8507 | 2.73 | 81.2075 | 2.67 | 0.6910 | 2.77 | 0.5684 | 3.03 | 3386.32 | 5.53 | 4477.07 | 5.35 | 9127.97 | 6.07 |
| TR-01_ap_29 | 0.97 | 3.16 | 0.8022 | 2.96 | 113.3901 | 3.15 | 1.0238 | 3.19 | 0.7379 | 3.37 | 4544.59 | 6.39 | 4812.52 | 6.31 | 11202.44 | 6.73 |
| TR-01_ap_30 | 1.13 | 2.80 | 0.8211 | 2.67 | 100.6714 | 2.76 | 0.8908 | 2.86 | 0.6788 | 2.97 | 4106.43 | 5.72 | 4692.84 | 5.53 | 10501.06 | 5.94 |
| TR-01_ap_4 | 0.76 | 2.26 | 0.8381 | 1.78 | 151.0717 | 2.33 | 1.3078 | 2.15 | 0.9997 | 2.46 | 5390.99 | 4.30 | 5101.64 | 4.66 | 14046.48 | 4.81 |
| TR-01_ap_5 | 1.09 | 2.96 | 0.8466 | 2.37 | 106.5778 | 2.61 | 0.9124 | 2.56 | 0.7215 | 3.09 | 4179.56 | 5.12 | 4750.18 | 5.23 | 11010.41 | 6.18 |
| TR-01_ap_6 | 1.99 | 2.69 | 0.7931 | 2.89 | 55.0087 | 2.89 | 0.5025 | 2.73 | 0.3484 | 3.34 | 2624.40 | 5.47 | 4087.43 | 5.78 | 6059.03 | 6.69 |
| TR-01_ap_7 | 1.38 | 3.21 | 0.8009 | 2.88 | 79.2212 | 3.23 | 0.7191 | 3.42 | 0.5105 | 3.11 | 3492.82 | 6.85 | 4452.24 | 6.47 | 8359.91 | 6.23 |
| TR-01_ap_8 | 2.49 | 2.76 | 0.8287 | 3.07 | 45.8798 | 2.70 | 0.4019 | 2.79 | 0.2901 | 3.27 | 2177.94 | 5.58 | 3906.78 | 5.39 | 5162.66 | 6.54 |
| TR-02_ap_1 | 8.84 | 2.99 | 0.8412 | 2.58 | 13.1904 | 2.60 | 0.1129 | 2.98 | 0.0472 | 3.32 | 689.48 | 5.96 | 2693.37 | 5.20 | 934.54 | 6.64 |
| TR-02_ap_10 | 1.12 | 2.99 | 0.8421 | 1.10 | 104.4178 | 3.66 | 0.8964 | 3.33 | 0.3890 | 3.51 | 4125.48 | 6.67 | 4729.59 | 7.32 | 6660.58 | 7.02 |
| TR-02_ap_11 | 1.36 | 3.45 | 0.8272 | 1.59 | 84.4767 | 3.24 | 0.7375 | 3.54 | 0.3006 | 3.29 | 3561.47 | 7.08 | 4516.67 | 6.48 | 5327.61 | 6.57 |
| TR-02_ap_12 | 2.94 | 2.54 | 0.8251 | 2.00 | 38.5748 | 2.87 | 0.3396 | 2.49 | 0.1906 | 2.87 | 1884.82 | 4.97 | 3734.77 | 5.74 | 3535.65 | 5.74 |
| TR-02_ap_13 | 0.61 | 13.45 | 0.8829 | 5.26 | 186.4360 | 13.44 | 1.5720 | 13.07 | 0.4181 | 13.09 | 6089.83 | 26.14 | 5313.94 | 26.87 | 7080.31 | 26.17 |
| TR-02_ap_14 | 3.55 | 2.23 | 0.7904 | 1.80 | 30.9501 | 2.29 | 0.2821 | 2.29 | 0.1171 | 2.28 | 1601.75 | 4.59 | 3517.46 | 4.57 | 2244.68 | 4.55 |
| TR-02_ap_15 | 2.34 | 3.59 | 0.8093 | 2.25 | 47.7248 | 3.43 | 0.4257 | 3.46 | 0.1201 | 2.88 | 2286.39 | 6.92 | 3945.97 | 6.86 | 2288.09 | 5.77 |
| TR-02_ap_17 | 0.89 | 6.36 | 0.8343 | 1.00 | 129.9175 | 4.99 | 1.1291 | 5.06 | 0.3269 | 5.20 | 4871.42 | 10.13 | 4949.55 | 9.99 | 5733.12 | 10.39 |
| TR-02_ap_18 | 3.36 | 3.72 | 0.8235 | 2.67 | 33.8168 | 4.20 | 0.2973 | 4.21 | 0.1012 | 4.79 | 1677.95 | 8.43 | 3604.71 | 8.39 | 1954.38 | 9.58 |
| TR-02_ap_19 | 3.44 | 2.11 | 0.8449 | 2.35 | 33.9934 | 2.14 | 0.2914 | 2.12 | 0.1225 | 2.33 | 1648.49 | 4.25 | 3609.56 | 4.28 | 2342.02 | 4.67 |
| TR-02_ap_20 | 1.87 | 10.84 | 0.8345 | 5.80 | 61.3267 | 13.26 | 0.5335 | 4.96 | 0.1155 | 12.69 | 2756.25 | 9.83 | 4195.96 | 26.53 | 2215.37 | 25.38 |
| TR-02_ap_22 | 1.03 | 2.38 | 0.8542 | 2.13 | 114.5968 | 2.30 | 0.9640 | 2.38 | 0.1385 | 2.24 | 4851.12 | 4.76 | 4823.18 | 4.61 | 2629.68 | 4.48 |
| TR-02_ap_23 | 3.86 | 2.27 | 0.8179 | 2.62 | 30.9401 | 2.23 | 0.2732 | 2.28 | 0.0940 | 2.94 | 1957.15 | 4.46 | 3517.15 | 4.46 | 1821.21 | 5.88 |
| TR-02_ap_24 | 7.85 | 2.37 | 0.8229 | 1.98 | 14.5232 | 2.49 | 0.1278 | 2.53 | 0.0877 | 2.76 | 775.16 | 5.06 | 2784.52 | 4.97 | 1703.84 | 5.52 |
| TR-02_ap_25 | 2.11 | 3.86 | 0.8627 | 3.14 | 56.6525 | 4.20 | 0.4717 | 4.03 | 0.0817 | 3.98 | 2491.20 | 8.07 | 4116.80 | 8.40 | 1592.69 | 7.66 |
| TR-02_ap_3 | 3.44 | 2.28 | 0.8184 | 2.57 | 32.5971 | 3.24 | 0.2907 | 2.38 | 0.1271 | 3.30 | 1644.95 | 4.76 | 3568.50 | 6.49 | 2424.44 | 6.60 |
| TR-02_ap_4 | 5.86 | 2.37 | 0.7872 | 2.56 | 18.5997 | 2.39 | 0.1704 | 2.67 | 0.1386 | 3.01 | 1014.35 | 5.34 | 3021.29 | 4.78 | 2631.65 | 6.01 |
| TR-02_ap_5 | 26.81 | 5.10 | 0.6940 | 7.83 | 3.5833 | 5.60 | 0.0373 | 5.57 | 0.0047 | 5.68 | 236.26 | 11.14 | 1545.84 | 11.20 | 95.48 | 11.35 |
| TR-02_ap_6 | 24.88 | 3.78 | 0.7658 | 3.64 | 4.2477 | 4.37 | 0.0402 | 3.90 | 0.0187 | 4.20 | 4.002 | 7.81 | 1683.28 | 8.75 | 375.18 | 8.41 |
| TR-02_ap_7 | 4.97 | 2.47 | 0.8126 | 2.97 | 22.6353 | 2.43 | 0.2016 | 2.49 | 0.0712 | 2.96 | 1184.14 | 4.99 | 3211.39 | 4.86 | 1394.65 | 5.92 |
| TR-02_ap_8 | 0.99 | 3.73 | 0.8361 | 1.69 | 116.3104 | 4.03 | 1.0090 | 3.83 | 0.4093 | 3.42 | 4497.38 | 7.65 | 4838.12 | 8.05 | 6954.70 | 6.84 |

Appendix B: Eastern Sunda arc geochronology data - apatite

| Analysis ID | 238U/206Pb ratio | 1s% | 207Pb/206Pb ratio | 1s% | 207Pb/235U (calc)/ratio | 1s% | 206Pb/238U ratio | 1s% | 208Pb/232Th ratio | 1s% | 206Pb/238U Age (Ma) | 2s% | 207Pb/235U (calc) Age (Ma) | 2s% | 208Pb/232Th Age (Ma) | 2s% |
|-------------|------------------|-------|-------------------|-------|-------------------------|-------|------------------|-------|-------------------|-------|---------------------|-------|----------------------------|-------|----------------------|-------|
| TR-02_ap_9 | 7.38 | 2.61 | 0.7915 | 3.24 | 14.8367 | 2.81 | 0.1365 | 2.76 | 0.0517 | 3.82 | 824.59 | 5.52 | 2804.82 | 5.62 | 1021.89 | 7.64 |
| TR-03_ap_1 | 1.82 | 1.98 | 0.8191 | 1.55 | 62.0422 | 1.80 | 0.5508 | 1.60 | 0.5301 | 2.48 | 2828.45 | 3.20 | 4207.55 | 3.61 | 8621.96 | 4.97 |
| TR-03_ap_2 | 2.56 | 2.55 | 0.8138 | 2.85 | 44.0426 | 2.66 | 0.3926 | 2.57 | 0.2387 | 3.52 | 2134.87 | 5.14 | 3866.18 | 5.31 | 4338.35 | 7.05 |
| TR-03_ap_3 | 1.78 | 1.70 | 0.8087 | 1.70 | 62.7123 | 1.90 | 0.5630 | 1.71 | 0.6750 | 2.74 | 2878.92 | 3.41 | 4218.29 | 3.81 | 10455.98 | 5.48 |
| TR-03_ap_4 | 4.38 | 1.90 | 0.8029 | 2.20 | 25.2930 | 1.89 | 0.2283 | 1.91 | 0.2048 | 2.40 | 3325.52 | 3.83 | 3319.60 | 3.77 | 3776.34 | 4.79 |
| TR-03_ap_5 | 1.49 | 1.22 | 0.8365 | 1.03 | 77.2967 | 1.23 | 0.6706 | 1.27 | 1.2988 | 1.49 | 3308.03 | 2.55 | 4427.58 | 2.46 | 16872.43 | 2.98 |
| TR-03_ap_6 | 3.21 | 1.39 | 0.8244 | 1.46 | 35.4878 | 1.51 | 0.3115 | 1.45 | 0.3484 | 1.55 | 1746.27 | 2.90 | 3652.31 | 3.01 | 6058.95 | 3.10 |
| TR-03_ap_7 | 2.38 | 1.97 | 0.8286 | 1.77 | 47.9271 | 1.78 | 0.4208 | 2.22 | 0.4922 | 2.39 | 2264.32 | 4.45 | 3950.18 | 3.57 | 8113.25 | 4.76 |
| TR-04_ap_1 | 2.17 | 3.63 | 0.8325 | 3.99 | 53.6297 | 3.86 | 0.4689 | 4.13 | 0.0704 | 4.78 | 2478.64 | 8.25 | 4062.12 | 7.71 | 1379.49 | 9.56 |
| TR-04_ap_10 | 0.10 | 8.03 | 0.8563 | 0.92 | 1222.6086 | 4.87 | 10.3423 | 5.11 | 0.3493 | 5.06 | 15855.31 | 10.22 | 7218.93 | 9.75 | 6072.81 | 10.12 |
| TR-04_ap_11 | 6.13 | 8.10 | 0.7527 | 10.61 | 16.5906 | 8.42 | 0.1606 | 8.18 | 0.0273 | 12.60 | 960.33 | 16.35 | 2911.47 | 16.84 | 544.99 | 25.21 |
| TR-04_ap_12 | 2.80 | 8.09 | 0.8159 | 2.49 | 43.3220 | 7.73 | 0.3834 | 3.57 | 0.0297 | 6.40 | 2092.30 | 15.14 | 3849.81 | 15.46 | 593.75 | 12.81 |
| TR-04_ap_13 | 1.99 | 3.32 | 0.8283 | 3.49 | 57.3721 | 3.65 | 0.5039 | 3.60 | 0.0250 | 5.19 | 2630.38 | 7.19 | 4129.40 | 7.31 | 500.59 | 10.39 |
| TR-04_ap_14 | | | | | | | | | | | | | | | | |
| TR-04_ap_15 | 1.68 | 4.88 | 0.7705 | 5.36 | 63.5061 | 4.91 | 0.5682 | 4.79 | 0.0812 | 6.27 | 2886.12 | 9.57 | 4230.86 | 9.82 | 1581.93 | 12.54 |
| TR-04_ap_2 | 1.62 | 2.44 | 0.8040 | 2.35 | 67.6828 | 2.69 | 0.6145 | 2.67 | 0.1663 | 2.83 | 3088.01 | 5.34 | 4294.56 | 5.37 | 3117.71 | 5.67 |
| TR-04_ap_3 | 5.47 | 12.38 | 0.7911 | 6.13 | 19.6139 | 13.60 | 0.1841 | 14.05 | 0.0232 | 6.20 | 1089.35 | 28.09 | 3072.52 | 27.21 | 465.30 | 12.40 |
| TR-04_ap_5 | 10.31 | 8.15 | 0.7124 | 5.49 | 9.3876 | 9.19 | 0.0968 | 8.56 | 0.0304 | 7.24 | 589.56 | 17.12 | 2376.62 | 16.39 | 607.62 | 14.49 |
| TR-04_ap_6 | 1.60 | 2.35 | 0.8447 | 1.15 | 72.9719 | 2.52 | 0.6267 | 2.45 | 0.1581 | 2.44 | 3136.70 | 4.89 | 4369.89 | 5.03 | 2974.65 | 4.87 |
| TR-04_ap_7 | 1.15 | 10.63 | 0.8292 | 4.24 | 98.0114 | 8.29 | 0.8642 | 9.41 | 0.1674 | 7.91 | 4014.95 | 18.82 | 4665.92 | 16.57 | 3137.31 | 15.82 |
| TR-04_ap_8 | 2.41 | 11.84 | 0.7433 | 7.27 | 43.3408 | 6.39 | 0.4241 | 8.06 | 0.0578 | 7.19 | 2279.26 | 16.12 | 3850.24 | 12.79 | 1138.98 | 14.39 |
| TR-04_ap_9 | 5.13 | 4.63 | 0.7401 | 5.87 | 20.0407 | 4.72 | 0.1969 | 4.63 | 0.0445 | 5.54 | 1158.49 | 9.26 | 3093.32 | 9.44 | 882.98 | 11.08 |
| TR-05_ap_1 | 2.68 | 2.02 | 0.8275 | 2.10 | 42.5172 | 2.32 | 0.3732 | 2.20 | 0.0282 | 2.55 | 2044.27 | 4.40 | 3831.20 | 4.63 | 563.17 | 5.11 |
| TR-05_ap_10 | 9.96 | 3.93 | 0.8432 | 3.84 | 11.6794 | 4.96 | 0.1009 | 4.41 | 0.0584 | 5.25 | 619.87 | 8.83 | 2579.05 | 9.92 | 1150.20 | 10.51 |
| TR-05_ap_11 | 5.04 | 3.12 | 0.8265 | 3.88 | 22.6315 | 3.05 | 0.1988 | 3.14 | 0.0168 | 4.84 | 1168.99 | 6.27 | 3211.23 | 6.10 | 337.51 | 9.69 |
| TR-05_ap_12 | 7.79 | 4.19 | 0.7642 | 5.43 | 13.3754 | 4.40 | 0.1273 | 4.91 | 0.0079 | 4.65 | 172.51 | 9.83 | 2706.52 | 8.81 | 159.22 | 9.30 |
| TR-05_ap_13 | 3.28 | 7.16 | 0.8983 | 5.91 | 37.9188 | 4.80 | 0.3063 | 5.69 | 0.0157 | 5.03 | 1722.39 | 11.39 | 3717.80 | 9.60 | 316.66 | 10.05 |
| TR-05_ap_14 | 7.22 | 5.94 | 0.7398 | 7.88 | 14.0868 | 6.02 | 0.1393 | 6.12 | 0.0115 | 7.31 | 840.95 | 12.25 | 2755.57 | 12.04 | 231.12 | 14.63 |
| TR-05_ap_15 | 4.94 | 5.14 | 0.7436 | 6.58 | 20.7054 | 5.19 | 0.2025 | 5.27 | 0.0116 | 6.79 | 1188.62 | 10.53 | 3124.91 | 10.37 | 232.85 | 13.58 |
| TR-05_ap_16 | 7.17 | 2.47 | 0.8015 | 3.05 | 15.4225 | 2.42 | 0.1396 | 2.47 | 0.0097 | 3.04 | 842.63 | 4.94 | 2841.71 | 4.83 | 195.74 | 6.09 |
| TR-05_ap_18 | 5.63 | 2.47 | 0.7687 | 3.02 | 18.8365 | 2.45 | 0.1782 | 2.46 | 0.1645 | 3.00 | 1057.03 | 4.93 | 3033.48 | 4.90 | 342.53 | 5.89 |
| TR-05_ap_19 | 8.69 | 2.81 | 0.8103 | 3.52 | 12.9294 | 2.83 | 0.1151 | 2.78 | 0.0368 | 3.22 | 702.06 | 5.57 | 2674.52 | 5.65 | 732.01 | 6.45 |
| TR-05_ap_2 | 11.01 | 5.13 | 0.8202 | 6.39 | 10.1624 | 5.54 | 0.0898 | 6.38 | 0.0197 | 5.68 | 554.34 | 12.77 | 2449.66 | 11.07 | 395.47 | 11.35 |
| TR-05_ap_20 | 2.97 | 4.51 | 0.7721 | 6.63 | 35.7351 | 4.75 | 0.3354 | 4.61 | 0.0117 | 4.77 | 1864.47 | 9.22 | 3659.17 | 9.51 | 235.16 | 9.54 |
| TR-05_ap_21 | 1.18 | 5.94 | 0.7762 | 3.78 | 90.8725 | 5.37 | 0.8515 | 5.72 | 0.0593 | 5.59 | 3970.88 | 11.43 | 4589.94 | 10.74 | 1166.98 | 11.17 |
| TR-05_ap_22 | 4.90 | 3.89 | 0.8175 | 4.75 | 23.0766 | 3.88 | 0.2061 | 4.14 | 0.0163 | 4.42 | 1208.14 | 8.27 | 3230.18 | 7.76 | 328.94 | 8.84 |
| TR-05_ap_23 | 4.70 | 4.24 | 0.7273 | 5.29 | 21.3548 | 4.23 | 0.2126 | 4.42 | 0.0218 | 4.62 | 1242.59 | 8.84 | 3154.84 | 8.47 | 436.50 | 9.25 |
| TR-05_ap_24 | 4.91 | 3.93 | 0.7997 | 4.90 | 22.3911 | 3.86 | 0.2047 | 3.93 | 0.0048 | 4.55 | 1200.32 | 7.87 | 3200.85 | 7.72 | 96.99 | 9.11 |
| TR-05_ap_25 | 9.43 | 2.89 | 0.8089 | 3.36 | 11.8884 | 3.24 | 0.1085 | 3.51 | 0.0218 | 3.07 | 652.66 | 7.02 | 2595.65 | 6.47 | 436.54 | 6.14 |
| TR-05_ap_26 | 1.77 | 9.04 | 0.8476 | 3.66 | 65.4374 | 6.25 | 0.5596 | 7.02 | 0.0079 | 5.25 | 2865.12 | 14.05 | 4260.81 | 12.50 | 158.72 | 10.49 |
| TR-05_ap_27 | 5.06 | 3.50 | 0.8082 | 4.31 | 20.9256 | 3.41 | 0.1969 | 3.50 | 0.0152 | 3.89 | 1158.50 | 7.00 | 3181.45 | 6.82 | 306.58 | 7.77 |
| TR-05_ap_28 | 5.26 | 3.17 | 0.7983 | 3.93 | 21.9485 | 3.23 | 0.1884 | 3.19 | 0.0089 | 4.00 | 1116.09 | 6.39 | 3135.15 | 6.45 | 179.93 | 8.00 |
| TR-05_ap_29 | 1.53 | 2.49 | 0.8452 | 2.51 | 76.3250 | 2.44 | 0.6568 | 2.50 | 0.0659 | 3.19 | 3254.53 | 5.01 | 4414.90 | 4.88 | 1670.99 | 6.38 |
| TR-05_ap_3 | 26.06 | 9.35 | 0.8455 | 12.59 | 4.027 | 10.21 | 0.0382 | 9.92 | 0.0024 | 12.15 | 241.68 | 19.85 | 1712.85 | 20.43 | 48.35 | 24.30 |
| TR-05_ap_30 | 5.79 | 3.40 | 0.8092 | 3.65 | 19.0610 | 3.22 | 0.1714 | 3.96 | 0.0124 | 3.71 | 1019.59 | 7.91 | 3044.91 | 6.43 | 249.48 | 7.42 |
| TR-05_ap_4 | 10.86 | 7.38 | 0.8344 | 11.04 | 10.4570 | 7.71 | 0.0932 | 7.20 | 0.0108 | 7.71 | 574.48 | 14.41 | 2476.11 | 15.42 | 217.84 | 15.42 |
| TR-05_ap_5 | 1.12 | 3.42 | 0.8717 | 3.24 | 106.7293 | 3.33 | 0.8894 | 3.45 | 0.0447 | 3.07 | 4101.49 | 6.89 | 4751.61 | 6.65 | 885.43 | 6.13 |
| TR-05_ap_6 | 8.59 | 2.40 | 0.8352 | 2.87 | 13.3645 | 2.41 | 0.1160 | 2.55 | 0.0234 | 2.82 | 2705.76 | 5.09 | 2705.76 | 4.82 | 468.13 | 5.65 |
| TR-05_ap_7 | 9.65 | 5.08 | 0.7814 | 5.16 | 11.1614 | 4.16 | 0.1040 | 5.29 | 0.0187 | 4.89 | 637.99 | 10.57 | 2636.70 | 8.33 | 375.32 | 9.78 |
| TR-05_ap_8 | 9.15 | 3.96 | 0.8035 | 4.53 | 12.1940 | 3.84 | 0.1100 | 3.96 | 0.0071 | 4.41 | 673.01 | 7.91 | 2619.45 | 7.69 | 142.87 | 8.83 |

Appendix B: Eastern Sunda arc geochronology data - apatite

| Analysis ID | 238U/206Pb ratio | 1s% | 207Pb/206Pb ratio | 1s% | 206Pb/238U ratio | 1s% | 206Pb/238U ratio | 1s% | 208Pb/232Th ratio | 1s% | 206Pb/238U Age (Ma) | 2s% | 207Pb/235U (calc) Age (Ma) | 2s% | 208Pb/232Th Age (Ma) | 2s% |
|-------------|------------------|-------|-------------------|-------|------------------|-------|------------------|-------|-------------------|-------|---------------------|-------|----------------------------|-------|----------------------|-------|
| TR-05_ap_9 | 8.71 | 3.25 | 0.8256 | 4.09 | 13.1519 | 3.80 | 0.1153 | 3.24 | 0.0770 | 4.42 | 703.36 | 6.49 | 2690.61 | 7.61 | 1504.41 | 8.84 |
| BHF-02_ap1 | 142.60 | 8.02 | 0.7661 | 7.27 | 0.7630 | 9.27 | 0.0071 | 9.50 | 0.0028 | 9.43 | 45.90 | 19.00 | 575.73 | 18.55 | 57.53 | 18.85 |
| BHF-02_ap10 | 30.48 | 7.51 | 0.7661 | 3.27 | 3.5936 | 6.25 | 0.0329 | 6.60 | 0.0195 | 6.43 | 209.98 | 13.20 | 1548.12 | 12.49 | 392.04 | 12.98 |
| BHF-02_ap11 | 34.35 | 4.58 | 0.7888 | 5.37 | 3.1722 | 5.69 | 0.0292 | 5.45 | 0.0103 | 5.22 | 185.65 | 10.90 | 1450.42 | 11.37 | 207.25 | 10.44 |
| BHF-02_ap12 | 20.31 | 3.28 | 0.7865 | 4.03 | | | 0.0493 | 3.29 | 0.0139 | 5.12 | 310.22 | 6.57 | 0.00 | | 280.40 | 10.24 |
| BHF-02_ap13 | | | | | | | | | | | | | | | | |
| BHF-02_ap14 | 3.53 | 2.91 | 0.8090 | 3.05 | 31.6933 | 2.90 | 0.2833 | 2.90 | 0.1993 | 3.83 | 1606.02 | 5.81 | 3540.82 | 5.80 | 3683.97 | 7.66 |
| BHF-02_ap15 | 29.36 | 2.26 | 0.7777 | 2.47 | 3.6833 | 2.46 | 0.0341 | 2.26 | 0.0166 | 2.87 | 216.36 | 4.52 | 1567.76 | 4.91 | 334.60 | 5.74 |
| BHF-02_ap16 | 24.52 | 3.05 | 0.8205 | 3.64 | 4.6000 | 3.25 | 0.0407 | 3.21 | 0.0083 | 3.72 | 257.05 | 6.41 | 1749.27 | 6.50 | 167.44 | 7.43 |
| BHF-02_ap17 | 229.17 | 7.37 | 0.7065 | 5.41 | 0.4326 | 7.98 | 0.0044 | 7.01 | 0.0007 | 5.92 | 28.19 | 14.02 | 365.03 | 15.97 | 15.02 | 11.84 |
| BHF-02_ap18 | | | | | | | | | | | | | | | | |
| BHF-02_ap2 | 67.56 | 14.64 | 0.7297 | 5.43 | 1.4666 | 16.16 | 0.0141 | 16.67 | 0.0028 | 15.32 | 90.28 | 33.33 | 916.72 | 32.31 | 56.88 | 30.63 |
| BHF-02_ap21 | 27.20 | 2.82 | 0.7800 | 3.36 | 3.9763 | 2.87 | 0.0369 | 2.81 | 0.0115 | 3.57 | 233.69 | 5.62 | 1629.38 | 5.73 | 232.56 | 7.14 |
| BHF-02_ap22 | 14.21 | 9.47 | 0.8084 | 12.46 | | | 0.0709 | 9.46 | 0.0079 | 12.34 | 441.81 | 18.91 | 0.00 | | 160.31 | 24.68 |
| BHF-02_ap23 | | | | | | | | | | | | | | | | |
| BHF-02_ap24 | 71.53 | 10.50 | 0.7416 | 4.24 | 1.4411 | 5.46 | 0.0140 | 5.27 | 0.0050 | 6.31 | 89.54 | 10.54 | 906.19 | 10.91 | 100.49 | 12.61 |
| BHF-02_ap25 | 61.62 | 7.88 | 0.6848 | 7.17 | 1.5114 | 8.09 | 0.0163 | 7.11 | 0.0038 | 8.40 | 103.91 | 14.22 | 935.01 | 16.17 | 77.69 | 16.80 |
| BHF-02_ap27 | 31.60 | 2.42 | 0.8233 | 2.63 | 3.5925 | 2.52 | 0.0316 | 2.73 | 0.0134 | 4.21 | 200.75 | 5.47 | 1547.87 | 5.04 | 269.76 | 8.41 |
| BHF-02_ap28 | 38.12 | 6.47 | 0.7616 | 4.55 | 2.7664 | 5.40 | 0.0262 | 5.34 | 0.0077 | 6.24 | 166.88 | 10.67 | 1346.51 | 10.81 | 155.64 | 12.48 |
| BHF-02_ap29 | 49.12 | 4.65 | 0.7925 | 4.13 | 2.2255 | 5.14 | 0.0203 | 4.72 | 0.0078 | 5.30 | 129.71 | 9.45 | 1189.10 | 10.27 | 158.31 | 10.59 |
| BHF-02_ap3 | 17.24 | 3.32 | 0.7772 | 4.11 | 6.2898 | 3.57 | 0.0581 | 3.62 | 0.0182 | 4.79 | 363.84 | 7.24 | 2017.04 | 7.15 | 365.12 | 9.57 |
| BHF-02_ap30 | 39.85 | 2.70 | 0.8031 | 3.22 | | | 0.0251 | 2.95 | 0.0073 | 3.59 | 159.69 | 5.90 | 0.00 | | 146.74 | 7.18 |
| BHF-02_ap31 | 5.74 | 4.61 | 0.7931 | 5.66 | 19.0513 | 4.52 | 0.1754 | 4.61 | 0.0134 | 5.35 | 1041.55 | 9.22 | 3044.42 | 9.04 | 270.78 | 10.70 |
| BHF-02_ap32 | 41.29 | 3.11 | 0.8182 | 3.79 | 2.7412 | 3.03 | 0.0244 | 3.43 | 0.0093 | 4.94 | 155.33 | 6.86 | 1339.71 | 6.06 | 188.18 | 9.87 |
| BHF-02_ap33 | 34.94 | 3.02 | 0.7805 | 3.68 | 3.0990 | 3.11 | 0.0286 | 3.36 | 0.0059 | 5.25 | 181.93 | 6.72 | 1432.45 | 6.21 | 118.53 | 10.51 |
| BHF-02_ap4 | 30.70 | 11.45 | 0.8080 | 3.96 | 3.6335 | 7.80 | 0.0323 | 7.95 | 0.0137 | 6.14 | 205.02 | 15.89 | 1556.90 | 15.61 | 275.40 | 12.29 |
| BHF-02_ap5 | 35.65 | 9.50 | 0.7874 | 2.57 | 3.0863 | 7.21 | 0.0281 | 7.02 | 0.0082 | 7.72 | 178.50 | 14.05 | 1429.30 | 14.42 | 166.22 | 15.45 |
| BHF-02_ap6 | | | | | | | | | | | | | | | | |
| BHF-02_ap7 | 11.74 | 10.26 | 0.7810 | 2.27 | 9.1891 | 10.52 | 0.0641 | 10.10 | 0.0188 | 12.01 | 520.84 | 20.20 | 2357.03 | 21.04 | 378.37 | 24.03 |
| BHF-02_ap8 | 32.22 | 3.50 | 0.8065 | 4.37 | 3.4732 | 3.73 | 0.0310 | 3.50 | 0.0157 | 4.06 | 196.64 | 7.00 | 1521.16 | 7.45 | 316.72 | 8.11 |
| BHF-02_ap9 | 51.23 | 8.11 | 0.7978 | 6.30 | 2.2051 | 7.53 | 0.0198 | 7.14 | 0.0105 | 7.49 | 128.40 | 14.28 | 1182.67 | 15.05 | 211.93 | 14.99 |
| BHF-03_ap10 | 9.43 | 2.18 | 0.7916 | 2.21 | 11.6531 | 2.19 | 0.1060 | 2.19 | 0.2855 | 2.77 | 649.19 | 4.39 | 2576.94 | 4.38 | 5091.23 | 5.54 |
| BHF-03_ap11 | 21.02 | 3.82 | 0.7869 | 5.10 | 5.1012 | 4.57 | 0.0471 | 4.12 | 0.0370 | 5.50 | 296.96 | 8.24 | 1836.30 | 9.13 | 737.05 | 11.00 |
| BHF-03_ap13 | 26.14 | 4.97 | 0.8168 | 4.33 | 4.3018 | 5.64 | 0.0362 | 4.58 | 0.0253 | 5.06 | 241.95 | 9.16 | 1693.71 | 11.28 | 506.66 | 10.11 |
| BHF-03_ap14 | 23.67 | 5.40 | 0.8198 | 5.02 | 4.7272 | 5.44 | 0.0422 | 5.10 | 0.0739 | 5.98 | 266.26 | 10.21 | 1772.08 | 10.87 | 1444.88 | 11.96 |
| BHF-03_ap15 | 81.55 | 35.99 | 0.7431 | 17.57 | 1.2232 | 12.59 | 0.0120 | 12.49 | 0.0139 | 15.27 | 76.89 | 24.99 | 811.25 | 25.19 | 279.42 | 30.54 |
| BHF-03_ap16 | 26.05 | 7.32 | 0.8142 | 4.59 | 4.2884 | 5.28 | 0.0362 | 5.91 | 0.0495 | 4.93 | 241.96 | 11.81 | 1691.13 | 10.56 | 979.45 | 9.86 |
| BHF-03_ap17 | 4.23 | 8.91 | 0.7368 | 13.49 | 24.1150 | 6.90 | 0.2376 | 5.35 | 0.5369 | 12.75 | 1374.24 | 10.70 | 3273.05 | 13.81 | 8710.80 | 25.50 |
| BHF-03_ap18 | 26.67 | 2.72 | 0.8129 | 3.16 | 4.2195 | 2.85 | 0.0376 | 2.98 | 0.1560 | 3.65 | 237.78 | 5.96 | 1677.83 | 5.70 | 2973.33 | 7.30 |
| BHF-03_ap19 | 8.82 | 3.64 | 0.8189 | 4.39 | 12.9014 | 3.98 | 0.1137 | 3.95 | 0.0628 | 6.63 | 694.27 | 7.90 | 2672.48 | 7.95 | 1233.99 | 13.27 |
| BHF-03_ap20 | 136.57 | 7.22 | 0.8024 | 7.26 | 0.8216 | 7.58 | 0.0074 | 7.22 | 0.0101 | 7.79 | 47.41 | 14.44 | 608.92 | 15.16 | 204.05 | 15.58 |
| BHF-03_ap22 | 9.48 | 4.32 | 0.8049 | 1.90 | 11.8145 | 3.94 | 0.1066 | 4.37 | 0.1942 | 3.94 | 647.18 | 8.75 | 2589.81 | 7.89 | 3597.83 | 7.87 |
| BHF-03_ap21 | 17.82 | 3.21 | 0.8201 | 3.63 | 6.2851 | 4.55 | 0.0564 | 3.51 | 0.0985 | 4.01 | 353.60 | 7.03 | 2016.38 | 9.09 | 1904.39 | 8.03 |
| BHF-03_ap23 | 11.32 | 2.29 | 0.8177 | 2.38 | 10.0435 | 2.31 | 0.0883 | 2.31 | 0.0815 | 2.67 | 545.20 | 4.63 | 2438.79 | 4.61 | 1589.01 | 5.35 |
| BHF-03_ap24 | 4.11 | 8.61 | 0.8146 | 1.28 | 2.5486 | 10.34 | 0.2433 | 8.45 | 0.5504 | 8.49 | 1403.65 | 16.90 | 3396.93 | 17.27 | 8888.54 | 16.98 |
| BHF-03_ap3 | 20.18 | 10.94 | 0.7391 | 15.23 | 5.0803 | 11.17 | 0.0486 | 11.09 | 0.0621 | 12.49 | 312.03 | 22.19 | 1832.83 | 22.33 | 1221.57 | 24.98 |
| BHF-03_ap4 | 58.47 | 7.50 | 0.7009 | 5.39 | 1.6672 | 6.84 | 0.0172 | 6.84 | 0.0608 | 9.07 | 109.90 | 13.85 | 996.10 | 13.67 | 1196.31 | 18.14 |
| BHF-03_ap5 | 213.17 | 3.27 | 0.7220 | 4.20 | 0.4675 | 3.64 | 0.0047 | 3.27 | 0.0047 | 4.43 | 30.16 | 6.54 | 389.46 | 7.29 | 94.92 | 8.86 |
| BHF-03_ap6 | 10.30 | 2.87 | 0.8254 | 2.76 | 11.2116 | 2.92 | 0.0980 | 2.92 | 0.1667 | 4.30 | 602.75 | 5.85 | 2540.88 | 5.63 | 3125.68 | 8.59 |

Appendix B: Eastern Sunda arc geochronology data - apatite

| Analysis ID | 238U/206Pb ratio | 1s% | 207Pb/206Pb ratio | 1s% | 207Pb/235U (calc)/ratio | 1s% | 206Pb/238U ratio | 1s% | 208Pb/232Th ratio | 1s% | 206Pb/238U Age (Ma) | 2s% | 207Pb/235U (calc) Age (Ma) | 2s% | 208Pb/232Th Age (Ma) | 2s% |
|-------------|------------------|-------|-------------------|-------|-------------------------|-------|------------------|-------|-------------------|-------|---------------------|-------|----------------------------|-------|----------------------|--------|
| BHF-03_ap7 | 44.29 | 3.84 | 0.7895 | 4.94 | 2.442 | 3.78 | 0.0226 | 3.86 | 0.0181 | 4.55 | 144.15 | 7.71 | 1255.72 | 7.56 | 363.10 | 9.10 |
| BHF-03_ap8 | 25.90 | 6.35 | 0.7762 | 8.49 | 4.1412 | 7.53 | 0.0386 | 6.55 | 0.0152 | 7.51 | 243.87 | 13.11 | 1662.48 | 15.07 | 304.90 | 15.01 |
| BHF-03_ap9 | 14.60 | 8.07 | 0.7354 | 11.11 | 6.8709 | 8.30 | 0.0684 | 8.21 | 0.0074 | 10.11 | 426.74 | 16.42 | 2094.91 | 16.60 | 148.55 | 20.23 |
| GBF-03_ap10 | 1.34 | 6.97 | 0.7419 | 7.19 | 76.5267 | 8.78 | 0.7431 | 7.64 | 3.1280 | 12.04 | 3681.94 | 15.28 | 4417.55 | 17.55 | 28738.55 | 24.09 |
| GBF-03_ap11 | 0.52 | 11.28 | 0.9488 | 8.87 | 252.8399 | 10.89 | 1.9378 | 11.21 | 1.8769 | 11.71 | 6947.10 | 22.42 | 5621.88 | 21.79 | 21419.75 | 23.43 |
| GBF-03_ap12 | 0.34 | 16.85 | 0.8208 | 14.49 | 340.2805 | 19.25 | 3.0394 | 16.30 | 1.5233 | 16.07 | 8999.75 | 32.60 | 5922.43 | 38.50 | 18761.51 | 33.14 |
| GBF-03_ap13 | 0.40 | 11.58 | 0.7203 | 9.85 | 249.8617 | 13.92 | 2.5138 | 14.51 | 4.3486 | 17.08 | 8101.14 | 29.03 | 5609.89 | 27.84 | 33989.31 | 34.16 |
| GBF-03_ap3 | 3.11 | 6.73 | 0.8240 | 7.80 | 36.5551 | 6.69 | 0.3212 | 6.81 | 0.5954 | 8.66 | 1795.43 | 13.62 | 3681.58 | 13.38 | 9488.72 | 17.32 |
| GBF-03_ap4 | 0.01 | 5.12 | 0.8268 | 6.58 | 8154.4460 | 4.60 | 71.4780 | 4.67 | 95.9170 | 7.10 | 27611.73 | 9.35 | 9144.99 | 9.21 | 92711.43 | 14.21 |
| GBF-03_ap6 | 0.88 | 7.83 | 0.8203 | 6.48 | 167.5512 | 7.74 | 1.4937 | 8.66 | 4.7981 | 73.57 | 5890.49 | 17.33 | 5206.11 | 15.48 | 35625.04 | 147.15 |
| GBF-03_ap8 | 0.78 | 9.53 | 0.8337 | 9.33 | 147.8462 | 9.01 | 1.2717 | 10.91 | 0.5139 | 9.23 | 5289.32 | 21.82 | 5079.87 | 18.03 | 8405.70 | 18.47 |
| GBF-03_ap9 | 0.01 | 3.25 | 0.8247 | 0.45 | 13105.0669 | 3.07 | 114.8156 | 3.05 | 207.4982 | 4.21 | 30633.26 | 6.11 | 9626.68 | 6.14 | 108239.67 | 8.42 |
| JEM-01_ap1 | 0.23 | 3.51 | 0.8422 | 0.99 | 505.4005 | 3.65 | 4.3899 | 3.90 | 15.7213 | 3.77 | 10859.09 | 7.80 | 6323.12 | 7.29 | 57093.81 | 7.54 |
| JEM-01_ap3 | | | | | | | | | | | | | | | | |
| JEM-01_ap4 | | | | | | | | | | | | | | | | |
| JEM-01_ap5 | 0.89 | 1.48 | 0.8229 | 1.22 | 127.7462 | 1.76 | 1.1276 | 1.50 | 3.7553 | 3.17 | 4866.94 | 3.01 | 4932.57 | 3.52 | 31605.88 | 6.35 |
| JEM-01_ap6 | 25.03 | 6.05 | 0.7595 | 4.09 | 4.2788 | 7.58 | 0.0409 | 7.94 | 0.4641 | 9.19 | 258.30 | 15.88 | 1689.29 | 15.17 | 7727.16 | 18.38 |
| JER-01_ap1 | 3.10 | 2.81 | 0.8145 | 2.85 | 36.3730 | 3.16 | 0.3206 | 3.06 | 0.2202 | 3.80 | 1792.59 | 6.12 | 3676.65 | 6.32 | 4033.80 | 7.59 |
| JER-01_ap11 | 4.16 | 14.27 | 0.8224 | 5.87 | 26.8600 | 4.60 | 0.2370 | 4.74 | 0.0767 | 5.47 | 1371.14 | 9.47 | 3378.38 | 9.19 | 1498.13 | 10.95 |
| JER-01_ap12 | 25.90 | 8.37 | 0.7891 | 11.10 | 4.2925 | 8.06 | 0.0388 | 8.82 | 0.0271 | 9.00 | 245.55 | 17.64 | 1691.92 | 16.12 | 542.93 | 17.99 |
| JER-01_ap13 | 7.70 | 5.75 | 0.8058 | 7.01 | 14.6355 | 5.54 | 0.1308 | 5.03 | 0.0504 | 5.55 | 2791.83 | 10.06 | 3621.48 | 11.07 | 995.95 | 11.07 |
| JER-01_ap14 | 3.32 | 2.81 | 0.8215 | 2.90 | 34.3965 | 2.79 | 0.3016 | 2.81 | 0.1980 | 3.18 | 1699.99 | 5.62 | 3621.48 | 5.59 | 3662.21 | 6.35 |
| JER-01_ap15 | 3.27 | 4.75 | 0.7844 | 3.98 | 33.0665 | 4.69 | 0.3060 | 4.89 | 0.1067 | 6.37 | 1721.03 | 9.77 | 3583.19 | 9.38 | 2054.78 | 12.74 |
| JER-01_ap16 | 8.93 | 8.02 | 0.7683 | 10.38 | 12.1466 | 7.83 | 0.1116 | 8.30 | 0.0404 | 8.39 | 681.92 | 16.60 | 2615.79 | 15.65 | 803.23 | 16.77 |
| JER-01_ap17 | 7.55 | 5.61 | 0.7950 | 7.06 | 14.6065 | 6.18 | 0.1320 | 5.74 | 0.0518 | 6.30 | 798.04 | 11.48 | 2789.95 | 12.37 | 1023.80 | 12.61 |
| JER-01_ap18 | 5.59 | 2.98 | 0.7988 | 2.72 | 19.9226 | 2.54 | 0.1797 | 2.72 | 0.1030 | 2.94 | 1065.35 | 5.43 | 3087.61 | 5.09 | 1987.80 | 5.88 |
| JER-01_ap19 | 4.61 | 6.08 | 0.7631 | 7.28 | 22.7551 | 5.89 | 0.2155 | 5.93 | 0.0310 | 6.73 | 1258.21 | 11.85 | 3216.53 | 11.79 | 618.69 | 13.46 |
| JER-01_ap20 | 2.67 | 2.97 | 0.7980 | 3.05 | 41.4980 | 2.93 | 0.3774 | 2.97 | 0.2480 | 3.33 | 2063.93 | 5.93 | 3807.14 | 5.87 | 4491.37 | 6.67 |
| JER-01_ap21 | 3.10 | 3.22 | 0.8265 | 3.41 | 37.2410 | 3.15 | 0.3221 | 3.25 | 0.2066 | 3.56 | 1800.01 | 6.51 | 3699.96 | 6.31 | 3807.53 | 7.11 |
| JER-01_ap22 | 12.65 | 10.05 | 0.7038 | 13.61 | | | 0.0801 | 9.99 | 0.0279 | 12.65 | 496.94 | 19.99 | 0.00 | | 558.44 | 25.29 |
| JER-01_ap23 | 3.50 | 4.30 | 0.7919 | 4.69 | 31.4343 | 5.62 | 0.2858 | 4.96 | 0.1250 | 5.29 | 1620.39 | 9.92 | 3532.74 | 11.23 | 2387.52 | 10.57 |
| JER-01_ap24 | 3.85 | 2.57 | 0.8385 | 2.62 | 30.0927 | 2.53 | 0.2589 | 2.83 | 0.1600 | 3.03 | 1484.07 | 5.65 | 3489.84 | 5.06 | 3008.40 | 6.07 |
| JER-01_ap3 | 10.42 | 6.87 | 0.7991 | 7.34 | 10.5801 | 5.59 | 0.0958 | 5.73 | 0.0336 | 6.66 | 568.98 | 11.47 | 2486.96 | 11.18 | 670.84 | 13.33 |
| JER-01_ap6 | 2.90 | 2.76 | 0.8228 | 2.79 | 39.4348 | 2.78 | 0.3461 | 3.01 | 0.2308 | 3.09 | 1915.98 | 6.02 | 3756.60 | 5.55 | 4209.24 | 6.18 |
| JER-01_ap8 | 9.70 | 5.63 | 0.8221 | 7.18 | 11.6042 | 5.47 | 0.1026 | 5.67 | 0.0310 | 6.46 | 629.69 | 11.34 | 2573.01 | 10.93 | 618.44 | 12.92 |
| JER-01_ap9 | 4.67 | 5.97 | 0.7972 | 4.06 | 23.6669 | 5.05 | 0.2137 | 4.85 | 0.0694 | 5.09 | 1248.51 | 9.70 | 3254.77 | 10.10 | 1361.00 | 10.17 |
| LB002_ap1 | 2.05 | 3.44 | 0.8163 | 3.54 | 54.3929 | 3.39 | 0.4865 | 3.76 | 0.0304 | 3.59 | 2555.58 | 7.51 | 4076.21 | 6.77 | 607.97 | 7.17 |
| LB002_ap10 | 2.27 | 2.73 | 0.8276 | 2.58 | 50.2117 | 2.76 | 0.4427 | 2.95 | 0.0485 | 2.52 | 2362.58 | 5.90 | 3996.52 | 5.52 | 978.38 | 5.04 |
| LB002_ap11 | 5.11 | 2.58 | 0.8114 | 2.76 | 21.7567 | 2.57 | 0.1951 | 2.79 | 0.0241 | 3.03 | 1148.97 | 5.58 | 3172.93 | 5.15 | 482.96 | 6.06 |
| LB002_ap12 | 1.35 | 5.41 | 0.8125 | 5.14 | 86.5940 | 7.42 | 0.7561 | 7.04 | 0.0930 | 5.30 | 3629.76 | 14.08 | 4541.52 | 14.84 | 1802.56 | 10.61 |
| LB002_ap13 | 0.80 | 3.87 | 0.8370 | 3.14 | 145.9477 | 3.77 | 1.2468 | 3.83 | 0.1456 | 3.70 | 5216.36 | 7.65 | 5066.84 | 7.54 | 2754.91 | 7.41 |
| LB002_ap14 | 0.33 | 2.67 | 0.8343 | 1.28 | 349.6948 | 2.72 | 3.0459 | 2.45 | 0.7895 | 4.22 | 9010.22 | 4.91 | 5950.06 | 5.43 | 11795.53 | 8.43 |
| LB002_ap15 | 23.00 | 3.19 | 0.8218 | 4.20 | 4.9475 | 3.56 | 0.0436 | 3.87 | 0.0302 | 4.91 | 275.36 | 7.73 | 1810.41 | 7.13 | 603.32 | 9.82 |
| LB002_ap2 | 1.93 | 3.70 | 0.8246 | 3.31 | 59.3764 | 3.81 | 0.5165 | 3.82 | 0.0704 | 3.03 | 2884.24 | 7.64 | 4163.68 | 7.61 | 1379.72 | 6.05 |
| LB002_ap3 | 34.07 | 5.45 | 0.7826 | 3.05 | 3.1524 | 5.51 | 0.0292 | 5.66 | 0.0196 | 3.47 | 185.72 | 11.32 | 1445.58 | 11.02 | 393.47 | 6.94 |
| LB002_ap4 | 2.54 | 4.40 | 0.7992 | 1.68 | 43.8627 | 3.98 | 0.3993 | 4.35 | 0.2246 | 3.57 | 2165.89 | 8.70 | 3862.12 | 7.95 | 4110.81 | 7.13 |
| LB002_ap5 | 0.57 | 3.08 | 0.8225 | 2.21 | 201.1875 | 3.10 | 1.7473 | 3.08 | 0.2236 | 2.97 | 6514.83 | 6.17 | 5390.87 | 6.20 | 4090.79 | 5.94 |
| LB002_ap7 | 5.36 | 2.49 | 0.8314 | 2.58 | 21.3668 | 2.46 | 0.1869 | 2.69 | 0.0580 | 3.00 | 1104.33 | 5.39 | 3155.39 | 4.93 | 1143.19 | 5.99 |
| LB002_ap8 | 0.56 | 4.21 | 0.8301 | 2.25 | 205.1596 | 4.60 | 1.7908 | 4.42 | 0.0415 | 5.64 | 6616.21 | 8.85 | 5410.62 | 9.21 | 824.43 | 11.27 |

Appendix B: Eastern Sunda arc geochronology data - apatite

| Analysis ID | 238U/206Pb ratio | 1s% | 207Pb/235U (calc) ratio | 1s% | 206Pb/238U ratio | 1s% | 208Pb/232Th ratio | 1s% | 206Pb/238U Age (Ma) | 2s% | 207Pb/235U (calc) Age (Ma) | 2s% | 208Pb/232Th Age (Ma) | 2s% |
|-------------|------------------|-------|-------------------------|------|------------------|-------|-------------------|-------|---------------------|-------|----------------------------|-------|----------------------|-------|
| LB002_ap9 | 17.88 | 9.32 | 0.8135 | 2.54 | 6.3290 | 11.15 | 0.0561 | 10.56 | 0.0193 | 12.23 | 2022.48 | 22.31 | 387.58 | 24.46 |
| LB009_ap1 | 6.82 | 2.04 | 0.8231 | 1.58 | 16.6562 | 2.35 | 0.1465 | 2.36 | 0.0975 | 4.70 | 2915.26 | 4.70 | 1885.01 | 6.53 |
| LB009_ap10 | 1.45 | 2.03 | 0.8335 | 1.52 | 79.0987 | 2.04 | 0.6892 | 2.29 | 0.4786 | 2.29 | 3379.49 | 4.07 | 7928.09 | 4.57 |
| LB009_ap11 | 4.20 | 2.18 | 0.8206 | 2.06 | 26.9100 | 2.33 | 0.2381 | 2.22 | 0.2173 | 2.66 | 1976.65 | 4.45 | 3985.24 | 5.33 |
| LB009_ap12 | 8.04 | 2.04 | 0.8323 | 1.91 | 14.3214 | 2.03 | 0.1191 | 2.26 | 0.1191 | 2.66 | 2771.23 | 4.09 | 2281.25 | 5.21 |
| LB009_ap14 | 4.62 | 3.29 | 0.8420 | 3.96 | 24.9945 | 3.41 | 0.2155 | 3.31 | 0.1434 | 4.20 | 3308.00 | 6.81 | 2715.48 | 8.52 |
| LB009_ap15 | 20.86 | 2.47 | 0.8258 | 3.14 | 5.5375 | 2.53 | 0.0485 | 2.47 | 0.0198 | 3.63 | 1906.44 | 4.94 | 398.28 | 7.26 |
| LB009_ap2 | 12.77 | 3.14 | 0.8228 | 1.88 | 8.8729 | 3.15 | 0.0782 | 2.85 | 0.0225 | 3.00 | 2325.01 | 6.30 | 450.46 | 6.00 |
| LB009_ap3 | 4.98 | 1.93 | 0.8375 | 1.65 | 23.1815 | 2.04 | 0.2009 | 1.93 | 0.0916 | 2.53 | 3234.59 | 4.09 | 1776.45 | 5.05 |
| LB009_ap4 | 9.80 | 1.94 | 0.8134 | 1.74 | 11.6994 | 1.99 | 0.1041 | 1.92 | 0.0325 | 2.42 | 638.62 | 4.05 | 648.74 | 4.84 |
| LB009_ap5 | 4.00 | 2.20 | 0.8288 | 2.07 | 28.6657 | 2.18 | 0.2502 | 2.21 | 0.1829 | 2.62 | 1439.64 | 4.41 | 3445.04 | 5.24 |
| LB009_ap6 | 8.41 | 1.95 | 0.8247 | 1.76 | 13.5333 | 2.07 | 0.1187 | 2.02 | 0.0431 | 2.34 | 2717.61 | 4.14 | 855.96 | 4.68 |
| LB009_ap7 | 6.77 | 2.00 | 0.8160 | 1.84 | 16.7290 | 2.05 | 0.1480 | 2.05 | 0.0650 | 2.61 | 2919.43 | 4.11 | 1275.66 | 5.21 |
| LB009_ap8 | 9.84 | 2.03 | 0.8191 | 1.91 | 11.5437 | 2.02 | 0.1018 | 2.12 | 0.0464 | 2.62 | 2568.13 | 4.04 | 919.80 | 5.25 |
| LB009_ap9 | 4.25 | 2.02 | 0.8153 | 1.78 | 26.5597 | 2.01 | 0.2357 | 2.02 | 0.3501 | 2.37 | 3367.37 | 4.03 | 6084.30 | 4.74 |
| LB018_ap1 | 8.06 | 2.31 | 0.8283 | 2.37 | 14.3390 | 2.28 | 0.1239 | 2.33 | 0.0570 | 2.97 | 2772.40 | 4.56 | 1123.41 | 5.94 |
| LB018_ap2 | 5.26 | 3.31 | 0.7779 | 4.08 | 20.4252 | 3.86 | 0.1912 | 3.31 | 0.0941 | 5.55 | 1128.09 | 6.61 | 1822.20 | 11.11 |
| LB018_ap3 | 4.06 | 3.43 | 0.8231 | 3.52 | 27.7955 | 3.32 | 0.2451 | 3.61 | 0.0288 | 6.18 | 1413.34 | 7.22 | 576.12 | 12.37 |
| LB018_ap4 | 8.20 | 4.59 | 0.8316 | 5.36 | 13.9994 | 5.14 | 0.1222 | 4.54 | 0.0476 | 5.63 | 2749.67 | 10.28 | 942.51 | 11.25 |
| LB018_ap5 | 7.02 | 5.90 | 0.6967 | 9.54 | 13.5041 | 8.14 | 0.1395 | 7.44 | 0.0356 | 7.08 | 2715.57 | 16.28 | 708.46 | 14.17 |
| LB018_ap6 | 13.89 | 6.55 | 0.7573 | 8.95 | 7.4758 | 8.10 | 0.0723 | 6.78 | 0.0172 | 9.36 | 2170.09 | 16.20 | 345.64 | 18.72 |
| LB018_ap7 | 17.74 | 3.49 | 0.7765 | 4.05 | 6.0755 | 4.77 | 0.0566 | 4.02 | 0.0145 | 5.31 | 1986.73 | 8.05 | 292.69 | 10.61 |
| LB018_ap8 | 6.11 | 2.46 | 0.8115 | 3.29 | 18.3693 | 2.74 | 0.1645 | 2.52 | 0.0919 | 3.63 | 3009.28 | 5.49 | 1781.76 | 7.26 |
| LB018_ap9 | 20.17 | 4.93 | 0.7583 | 5.84 | 5.2045 | 5.44 | 0.0495 | 5.20 | 0.0137 | 6.72 | 311.28 | 10.40 | 274.96 | 13.44 |
| LB022_ap1 | 8.02 | 4.56 | 0.7987 | 4.98 | 13.7280 | 5.24 | 0.1252 | 5.72 | 0.0150 | 5.74 | 2731.13 | 10.48 | 302.18 | 11.49 |
| LB022_ap10 | 71.38 | 9.17 | 0.7654 | 4.84 | 1.4787 | 10.28 | 0.0140 | 11.01 | 0.0062 | 9.00 | 89.49 | 22.02 | 125.06 | 17.99 |
| LB022_ap11 | 9.87 | 4.42 | 0.7972 | 3.60 | 11.0693 | 4.58 | 0.1022 | 4.51 | 0.0229 | 4.87 | 627.28 | 9.01 | 458.74 | 9.74 |
| LB022_ap12 | 41.52 | 8.95 | 0.7955 | 3.36 | 2.6490 | 7.27 | 0.0240 | 7.40 | 0.0080 | 5.90 | 153.05 | 14.81 | 161.49 | 11.80 |
| LB022_ap14 | 8.21 | 2.59 | 0.8332 | 2.79 | 14.0298 | 2.63 | 0.1225 | 2.63 | 0.0229 | 3.44 | 745.20 | 5.26 | 458.18 | 6.89 |
| LB022_ap15 | 56.38 | 5.80 | 0.7919 | 2.26 | 1.9357 | 6.36 | 0.0178 | 5.46 | 0.0092 | 4.47 | 113.54 | 10.92 | 185.74 | 8.93 |
| LB022_ap3 | 26.46 | 3.58 | 0.8146 | 3.16 | 4.2741 | 3.95 | 0.0379 | 3.86 | 0.0087 | 3.92 | 1888.40 | 7.90 | 176.25 | 7.83 |
| LB022_ap4 | 30.48 | 6.47 | 0.7902 | 3.07 | 3.5549 | 5.38 | 0.0327 | 4.86 | 0.0118 | 4.24 | 207.39 | 9.71 | 238.02 | 8.48 |
| LB022_ap7 | 89.35 | 8.38 | 0.7670 | 5.64 | 1.1485 | 10.38 | 0.0110 | 10.33 | 0.0032 | 9.99 | 776.55 | 20.76 | 65.61 | 19.98 |
| LB022_ap5 | 20.62 | 6.32 | 0.8001 | 3.14 | 5.3539 | 5.16 | 0.0486 | 5.35 | 0.0162 | 4.39 | 305.92 | 10.69 | 325.11 | 8.78 |
| LB022_ap6 | 46.11 | 5.22 | 0.8113 | 3.68 | 2.4533 | 8.72 | 0.0217 | 7.37 | 0.0056 | 4.81 | 1258.41 | 17.45 | 113.73 | 9.62 |
| LB022_ap8 | 19.90 | 3.10 | 0.8109 | 3.67 | 2.7968 | 6.84 | 0.0302 | 5.15 | 0.0086 | 7.97 | 191.94 | 10.31 | 172.63 | 15.94 |
| LB022_ap9 | 0.18 | 2.93 | 0.8327 | 1.03 | 638.9646 | 2.95 | 5.5738 | 2.76 | 3.1807 | 2.33 | 12139.18 | 5.52 | 28995.58 | 4.67 |
| LB024_ap1 | 0.01 | 3.85 | 0.8433 | 0.44 | 14403.8688 | 3.88 | 123.9543 | 3.86 | 94.2472 | 4.33 | 31122.86 | 7.73 | 92359.14 | 8.67 |
| LB024_ap2 | 0.03 | 4.06 | 0.8488 | 0.89 | 3763.8048 | 4.10 | 32.1775 | 4.09 | 45.6119 | 6.88 | 22574.44 | 8.19 | 77873.92 | 13.76 |
| LB024_ap3 | 1.51 | 3.11 | 0.8346 | 2.66 | 74.9135 | 3.46 | 0.6935 | 3.45 | 0.3940 | 3.35 | 3280.77 | 6.90 | 6732.97 | 6.69 |
| LB024_ap4 | 0.05 | 3.23 | 0.8336 | 0.60 | 2146.9531 | 3.27 | 18.7229 | 3.27 | 21.364254 | 21.21 | 19221.74 | 6.53 | 155435.26 | 42.42 |
| LB024_ap5 | 0.02 | 10.40 | 0.8375 | 1.80 | 6873.5005 | 10.44 | 57.3846 | 10.47 | 66.7956 | 11.74 | 26217.82 | 20.93 | 85166.63 | 23.47 |
| LB024_ap6 | 0.04 | 2.81 | 0.8419 | 0.58 | 2639.3160 | 2.57 | 22.7772 | 2.55 | 20426.86 | 6.05 | 7999.85 | 5.13 | 104046.22 | 12.10 |
| LB024_ap7 | 0.02 | 6.74 | 0.8523 | 1.19 | 5888.3590 | 6.31 | 50.2214 | 6.30 | 85.7554 | 47.54 | 25374.03 | 12.61 | 90466.28 | 95.09 |
| LB024_ap8 | 0.05 | 3.20 | 0.8392 | 0.82 | 2481.4469 | 3.23 | 21.3823 | 3.22 | 1.1744 | 2.16 | 20037.15 | 6.44 | 15744.24 | 4.33 |
| LB029_ap1 | 11.12 | 6.09 | 0.8053 | 2.72 | 10.0286 | 6.53 | 0.0911 | 4.52 | 0.0881 | 4.52 | 561.84 | 14.19 | 1710.64 | 9.05 |
| LB029_ap2 | 5.69 | 7.82 | 0.7776 | 5.54 | 18.6174 | 8.54 | 0.1723 | 9.16 | 0.0522 | 7.92 | 1024.52 | 18.33 | 1030.95 | 15.84 |
| LB029_ap2 | 5.83 | 3.93 | 0.7860 | 4.89 | 18.6125 | 4.43 | 0.1721 | 3.90 | 0.0817 | 5.07 | 1023.88 | 7.80 | 1591.26 | 10.13 |

Appendix B: Eastern Sunda arc geochronology data - apatite

| Analysis ID | 238U/206Pb ratio | 1s% | 207Pb/206Pb ratio | 1s% | 207Pb/235U (calc) ratio | 1s% | 206Pb/238U ratio | 1s% | 208Pb/232Th ratio | 1s% | 206Pb/238U Age (Ma) | 2s% | 207Pb/235U (calc) Age (Ma) | 2s% | 208Pb/232Th Age (Ma) | 2s% |
|-------------|------------------|------|-------------------|------|-------------------------|------|------------------|------|-------------------|------|---------------------|-------|----------------------------|-------|----------------------|-------|
| LB030_ap1 | 5.51 | 4.30 | 0.7705 | 5.27 | 19.2056 | 4.31 | 0.1810 | 4.34 | 0.1552 | 5.17 | 1072.59 | 8.68 | 3052.20 | 8.62 | 2923.75 | 10.34 |
| LB030_ap10 | 5.58 | 3.55 | 0.8088 | 4.11 | 19.9828 | 3.47 | 0.1795 | 3.54 | 0.1453 | 4.21 | 1064.12 | 7.09 | 3090.52 | 6.94 | 2749.43 | 8.41 |
| LB030_ap11 | 2.93 | 3.38 | 0.8021 | 3.15 | 37.6230 | 3.03 | 0.3395 | 3.40 | 0.2969 | 3.91 | 1884.11 | 6.80 | 3710.06 | 6.06 | 5269.28 | 7.82 |
| LB030_ap12 | 6.16 | 3.95 | 0.8091 | 4.70 | 18.1233 | 3.92 | 0.1619 | 3.97 | 0.1479 | 5.03 | 967.40 | 7.94 | 2996.30 | 7.84 | 2796.65 | 10.07 |
| LB030_ap13 | 6.56 | 3.51 | 0.8296 | 4.11 | 17.4854 | 3.41 | 0.1527 | 3.64 | 0.1400 | 4.14 | 915.93 | 7.29 | 2961.85 | 6.83 | 2656.02 | 8.29 |
| LB030_ap14 | 3.45 | 4.04 | 0.8290 | 4.58 | 33.3208 | 4.00 | 0.2921 | 4.10 | 0.2490 | 4.56 | 1652.14 | 8.21 | 3590.14 | 8.00 | 4507.68 | 9.12 |
| LB030_ap15 | 5.60 | 4.09 | 0.7771 | 4.97 | 19.0502 | 4.09 | 0.1774 | 4.27 | 0.1424 | 5.46 | 1052.60 | 8.53 | 3044.36 | 8.18 | 2689.23 | 10.91 |
| LB030_ap16 | 4.66 | 6.11 | 0.7936 | 7.34 | 23.6670 | 7.12 | 0.2148 | 6.12 | 0.1806 | 7.11 | 1254.48 | 12.25 | 3254.78 | 14.25 | 3364.47 | 14.21 |
| LB030_ap17 | 4.99 | 3.35 | 0.8177 | 3.80 | 22.5913 | 3.28 | 0.2006 | 3.39 | 0.1689 | 3.94 | 1178.59 | 6.77 | 3209.50 | 6.55 | 3181.57 | 7.88 |
| LB030_ap2 | 4.27 | 3.35 | 0.7835 | 3.79 | 25.4802 | 3.32 | 0.2348 | 3.35 | 0.1927 | 4.11 | 1359.83 | 6.71 | 3326.80 | 6.65 | 3401.96 | 8.23 |
| LB030_ap3 | 3.70 | 3.32 | 0.8164 | 3.67 | 30.5400 | 3.26 | 0.2706 | 3.33 | 0.2290 | 3.94 | 1543.72 | 6.67 | 3504.35 | 6.53 | 4180.12 | 7.89 |
| LB030_ap4 | 5.46 | 4.40 | 0.8383 | 5.20 | 21.2472 | 4.29 | 0.1832 | 4.58 | 0.1830 | 5.51 | 1084.24 | 9.16 | 3149.94 | 8.58 | 3407.11 | 11.02 |
| LB030_ap5 | 3.93 | 3.31 | 0.7975 | 4.61 | 28.0560 | 3.70 | 0.2537 | 3.64 | 0.2086 | 4.07 | 1457.49 | 7.27 | 3421.12 | 7.40 | 3841.18 | 8.13 |
| LB030_ap6 | 4.44 | 3.83 | 0.8622 | 4.35 | 26.9892 | 3.67 | 0.2260 | 3.90 | 0.1937 | 4.71 | 1313.43 | 7.79 | 3383.07 | 7.34 | 3588.10 | 9.42 |
| LB030_ap7 | 6.64 | 4.20 | 0.8305 | 5.07 | 17.3013 | 4.09 | 0.1510 | 4.24 | 0.1318 | 4.80 | 906.60 | 8.47 | 2951.69 | 8.17 | 2509.34 | 9.59 |
| LB030_ap8 | 6.83 | 3.99 | 0.8362 | 4.75 | 16.8561 | 3.84 | 0.1463 | 3.98 | 0.1304 | 4.60 | 880.15 | 7.85 | 2926.69 | 7.67 | 2484.13 | 9.21 |
| LB030_ap9 | 4.37 | 3.44 | 0.8202 | 3.87 | 26.0240 | 3.35 | 0.2291 | 3.51 | 0.1706 | 4.07 | 1329.78 | 7.03 | 3347.44 | 6.71 | 3192.13 | 8.15 |
| LB036_ap1 | 0.01 | 4.83 | 0.8389 | 0.64 | 10807.9706 | 4.86 | 93.5487 | 4.85 | 63.9839 | 4.67 | 29325.39 | 9.69 | 9431.01 | 9.71 | 84612.37 | 9.33 |
| LB036_ap2 | 0.02 | 4.11 | 0.8473 | 0.66 | 6913.2823 | 3.95 | 58.5685 | 3.93 | 280.5705 | 8.38 | 26347.24 | 7.87 | 8977.35 | 7.90 | 114329.80 | 16.75 |
| LB036_ap4 | 0.04 | 3.67 | 0.8414 | 0.79 | 2854.0788 | 3.21 | 22.8858 | 3.17 | 55.4133 | 5.11 | 20458.24 | 6.34 | 8005.51 | 6.41 | 81742.38 | 10.22 |
| LB036_ap5 | 0.02 | 3.42 | 0.8397 | 0.59 | 7182.4746 | 3.38 | 62.0500 | 3.25 | 6.8983 | 5.01 | 26713.40 | 6.50 | 9016.13 | 6.77 | 41890.66 | 10.02 |
| LB036_ap6 | 0.04 | 4.26 | 0.8434 | 0.91 | 3040.0174 | 4.02 | 26.1254 | 3.77 | 81.5439 | 9.75 | 21276.13 | 7.54 | 8143.32 | 8.04 | 89457.61 | 19.50 |
| LB036_ap8 | 0.19 | 2.57 | 0.8296 | 1.11 | 602.0767 | 2.43 | 5.2608 | 2.25 | 11.1443 | 4.61 | 1824.65 | 4.50 | 6500.53 | 4.85 | 50611.08 | 9.21 |

Appendix B: Eastern Sunda arc geochronology data - rutile

| Analysis ID | 238U/206Pb ratio | 1s% | 207Pb/206Pb ratio | 1s% | 207Pb/235U (calc) ratio | 1s% | 206Pb/238U ratio | 1s% | 206Pb/238U Age (Ma) | 2s% | 207Pb/235U (calc) Age (Ma) | 2s% |
|-----------------|------------------|-------|-------------------|-------|-------------------------|-------|------------------|-------|---------------------|-------|----------------------------|-----|
| LB025_323_rut1 | 0.101 | 0.839 | 1169.516 | 1.78 | 9.941 | 1.65 | 15423.180 | 3.30 | 7173.89 | 3.55 | | |
| LB025_323_rut10 | 0.085 | 0.838 | 1362.507 | 1.69 | 11.811 | 1.57 | 16440.326 | 3.14 | 7328.85 | 3.37 | | |
| LB025_323_rut11 | 0.135 | 0.841 | 860.443 | 2.12 | 7.421 | 2.16 | 13735.388 | 4.31 | 6862.58 | 4.24 | | |
| LB025_323_rut12 | 0.103 | 0.839 | 1130.687 | 1.99 | 9.827 | 1.57 | 15355.491 | 3.14 | 7139.63 | 3.98 | | |
| LB025_323_rut13 | 0.089 | 0.839 | 1300.037 | 2.14 | 11.310 | 1.59 | 16182.881 | 3.19 | 7281.23 | 4.27 | | |
| LB025_323_rut14 | 0.166 | 0.841 | 701.649 | 1.99 | 6.076 | 1.53 | 12613.967 | 3.05 | 6655.69 | 3.98 | | |
| LB025_323_rut15 | 0.080 | 0.837 | 1443.334 | 1.61 | 12.522 | 1.35 | 16788.698 | 2.70 | 7387.32 | 3.22 | | |
| LB025_323_rut16 | 0.049 | 0.841 | 2375.579 | 2.10 | 20.570 | 1.63 | 19798.745 | 3.25 | 7893.00 | 4.19 | | |
| LB025_323_rut17 | 0.109 | 0.834 | 1066.100 | 2.03 | 9.164 | 1.80 | 14948.085 | 3.60 | 7070.40 | 4.06 | | |
| LB025_323_rut18 | 0.053 | 0.836 | 2203.127 | 1.91 | 19.178 | 1.47 | 19368.672 | 2.95 | 7816.51 | 3.83 | | |
| LB025_323_rut2 | 0.064 | 0.843 | 1856.846 | 1.76 | 15.678 | 1.62 | 18140.796 | 3.25 | 7644.06 | 3.51 | | |
| LB025_323_rut3 | 0.092 | 0.838 | 1258.414 | 1.78 | 10.881 | 1.83 | 15954.511 | 3.65 | 7248.21 | 3.57 | | |
| LB025_323_rut4 | 0.059 | 0.832 | 1942.029 | 2.05 | 17.052 | 1.64 | 18650.942 | 3.29 | 7688.48 | 4.10 | | |
| LB025_323_rut5 | 0.067 | 0.838 | 1744.570 | 1.44 | 14.928 | 1.28 | 17844.154 | 2.57 | 7579.67 | 2.88 | | |
| LB025_323_rut6 | 0.103 | 0.839 | 1150.480 | 1.82 | 9.738 | 1.64 | 15314.083 | 3.27 | 7157.24 | 3.64 | | |
| LB025_323_rut7 | 0.155 | 0.847 | 776.137 | 1.96 | 6.528 | 1.87 | 13013.006 | 3.74 | 6758.00 | 3.93 | | |
| LB025_323_rut8 | 0.137 | 0.839 | 862.962 | 1.64 | 7.322 | 1.53 | 13659.327 | 3.05 | 6865.54 | 3.27 | | |
| LB025_323_rut9 | 0.119 | 0.838 | 965.965 | 1.91 | 8.389 | 1.97 | 14436.741 | 3.93 | 6979.91 | 3.82 | | |
| LB032_326_rut1 | 0.111 | 0.831 | 1066.475 | 2.66 | 9.149 | 2.65 | 14938.588 | 5.31 | 7080.32 | 5.32 | | |
| LB032_326_rut10 | 1.381 | 0.823 | 84.486 | 1.57 | 0.727 | 1.51 | 3523.006 | 3.03 | 4516.78 | 3.14 | | |
| LB032_326_rut11 | 0.361 | 0.836 | 328.130 | 3.45 | 2.770 | 3.46 | 8554.608 | 6.92 | 5885.62 | 6.90 | | |
| LB032_326_rut12 | 0.317 | 0.845 | 377.960 | 2.05 | 3.180 | 2.05 | 9220.176 | 4.10 | 6028.77 | 4.11 | | |
| LB032_326_rut13 | 0.964 | 0.830 | 118.897 | 2.44 | 1.052 | 2.28 | 4634.773 | 4.56 | 4860.26 | 4.89 | | |
| LB032_326_rut14 | 0.378 | 0.832 | 85.236 | 2.66 | 0.735 | 3.09 | 3552.577 | 6.19 | 4525.65 | 5.31 | | |
| LB032_326_rut15 | 0.319 | 0.840 | 379.436 | 3.73 | 3.222 | 3.87 | 9285.283 | 7.75 | 6032.71 | 7.47 | | |
| LB032_326_rut17 | 1.229 | 0.834 | 94.108 | 2.88 | 0.828 | 3.19 | 3888.016 | 6.38 | 4625.08 | 5.75 | | |
| LB032_326_rut18 | 0.670 | 0.835 | 176.677 | 1.92 | 1.496 | 1.96 | 5895.957 | 3.92 | 5259.65 | 3.83 | | |
| LB032_326_rut19 | 0.204 | 0.841 | 587.287 | 1.83 | 4.945 | 1.68 | 11491.302 | 3.35 | 6475.32 | 3.66 | | |
| LB032_326_rut2 | 0.332 | 0.909 | 377.357 | 7.65 | 3.041 | 6.65 | 9002.061 | 13.30 | 6027.15 | 15.29 | | |
| LB032_326_rut3 | 0.454 | 0.843 | 263.006 | 1.52 | 2.216 | 1.26 | 7530.262 | 2.51 | 5061.75 | 3.03 | | |
| LB032_326_rut4 | 0.782 | 0.822 | 148.816 | 2.19 | 1.291 | 2.16 | 5343.823 | 4.33 | 5086.47 | 4.39 | | |
| LB032_326_rut5 | 1.088 | 0.823 | 107.431 | 2.61 | 0.929 | 2.23 | 4234.212 | 4.47 | 4758.20 | 5.22 | | |
| LB032_326_rut6 | 0.712 | 0.837 | 166.606 | 2.21 | 1.409 | 2.44 | 5668.825 | 4.89 | 5200.40 | 4.42 | | |
| LB032_326_rut9 | 2.252 | 0.830 | 52.170 | 4.00 | 0.446 | 3.59 | 2377.292 | 7.17 | 4034.63 | 8.01 | | |
| LB033_327_rut1 | 14.688 | 0.782 | 7.298 | 4.80 | 0.069 | 5.01 | 428.285 | 10.02 | 2148.54 | 9.59 | | |
| LB033_327_rut10 | 17.282 | 0.753 | 6.143 | 5.05 | 0.058 | 3.92 | 362.535 | 7.85 | 1966.38 | 10.11 | | |
| LB033_327_rut11 | 34.642 | 0.766 | 3.021 | 4.39 | 0.029 | 4.79 | 183.990 | 9.58 | 1412.88 | 8.78 | | |
| LB033_327_rut12 | 25.619 | 0.812 | 4.437 | 3.42 | 0.039 | 3.66 | 246.400 | 7.33 | 1719.36 | 6.83 | | |
| LB033_327_rut13 | 40.672 | 0.715 | 2.492 | 8.35 | 0.025 | 8.09 | 161.933 | 16.19 | 1289.65 | 16.70 | | |
| LB033_327_rut14 | 16.707 | 0.791 | 6.620 | 4.38 | 0.059 | 3.97 | 372.111 | 7.94 | 2062.03 | 8.76 | | |
| LB033_327_rut15 | 51.090 | 0.510 | 1.430 | 15.75 | 0.019 | 11.63 | 123.520 | 23.27 | 901.49 | 31.50 | | |
| LB033_327_rut16 | 16.215 | 0.812 | 7.058 | 2.80 | 0.062 | 2.63 | 387.730 | 5.27 | 2118.78 | 5.61 | | |
| LB033_327_rut17 | 33.840 | 0.771 | 3.171 | 5.01 | 0.030 | 4.45 | 188.019 | 8.91 | 1450.16 | 10.03 | | |
| LB033_327_rut18 | 35.411 | 0.741 | 2.955 | 4.69 | 0.028 | 4.58 | 180.951 | 9.16 | 1386.02 | 9.37 | | |
| LB033_327_rut19 | 4.032 | 0.836 | 29.337 | 1.99 | 0.249 | 1.82 | 1435.665 | 3.65 | 3464.85 | 3.99 | | |
| LB033_327_rut2 | 4.007 | 0.840 | 29.623 | 3.23 | 0.250 | 3.05 | 1438.817 | 6.09 | 3474.40 | 6.46 | | |
| LB033_327_rut20 | 1.339 | 0.821 | 87.804 | 2.81 | 0.755 | 2.53 | 3624.759 | 5.07 | 4555.45 | 5.63 | | |
| LB033_327_rut3 | 7.105 | 0.924 | 17.018 | 3.68 | 0.141 | 3.75 | 850.709 | 7.50 | 2935.83 | 7.35 | | |

Appendix B: Eastern Sunda arc geochronology data - rutile

| Analysis ID | 238U/206Pb ratio | 1s% | 207Pb/206Pb ratio | 1s% | 207Pb/235U (calc) ratio | 1s% | 206Pb/238U ratio | 1s% | 206Pb/238U Age (Ma) | 2s% | 207Pb/235U (calc) Age (Ma) | 2s% |
|------------------|------------------|-------|-------------------|--------|-------------------------|--------|------------------|-------|---------------------|-------|----------------------------|--------|
| LB033_327_rut4 | 16.589 | 3.21 | 0.732 | 4.69 | 6.243 | 3.53 | 0.061 | 3.43 | 379.460 | 6.86 | 2010.43 | 7.06 |
| LB033_327_rut5 | 13.371 | 2.89 | 0.823 | 1.79 | 4.482 | 2.56 | 0.075 | 2.63 | 464.156 | 5.25 | 2283.97 | 5.12 |
| LB033_327_rut6 | 29.402 | 5.40 | 0.754 | 7.35 | 3.621 | 5.71 | 0.034 | 6.19 | 216.844 | 12.38 | 1554.11 | 11.41 |
| LB033_327_rut7 | 20.073 | 2.70 | 0.813 | 3.30 | 2.87 | 2.87 | 0.050 | 2.81 | 317.021 | 5.61 | 1930.69 | 5.74 |
| LB033_327_rut8 | 8.332 | 2.77 | 0.804 | 1.93 | 13.470 | 2.67 | 0.120 | 2.39 | 729.388 | 4.78 | 2713.16 | 5.33 |
| LB033_327_rut9 | 12.781 | 3.83 | 0.830 | 2.50 | 9.212 | 4.06 | 0.078 | 3.81 | 485.363 | 7.62 | 2359.28 | 8.11 |
| LB041_330_rut1 | 32.831 | 4.62 | 0.885 | 5.57 | 3.803 | 6.36 | 0.031 | 6.97 | 198.406 | 9.97 | 1593.40 | 12.72 |
| LB041_330_rut10 | 303.412 | 6.86 | 0.711 | 9.66 | 0.333 | 7.02 | 0.003 | 6.91 | 21.135 | 13.83 | 291.87 | 14.05 |
| LB041_330_rut11 | 10.658 | 5.22 | 0.824 | 5.40 | 10.884 | 4.89 | 0.094 | 5.40 | 577.062 | 10.81 | 2513.24 | 9.77 |
| LB041_330_rut12 | 52.594 | 4.73 | 0.774 | 4.47 | 2.087 | 4.80 | 0.019 | 5.67 | 120.499 | 11.34 | 1144.66 | 9.60 |
| LB041_330_rut13 | 11.079 | 1.63 | 0.825 | 1.11 | 10.507 | 1.85 | 0.091 | 1.61 | 559.160 | 3.22 | 2480.55 | 3.70 |
| LB041_330_rut14 | 5.639 | 2.10 | 0.818 | 1.32 | 20.610 | 2.43 | 0.178 | 2.19 | 1056.834 | 4.37 | 3120.45 | 4.86 |
| LB041_330_rut15 | 1.976 | 1.59 | 0.824 | 1.36 | 59.134 | 1.71 | 0.511 | 1.54 | 2661.700 | 3.07 | 4159.60 | 3.42 |
| LB041_330_rut2 | 10.903 | 3.19 | 0.787 | 2.04 | 10.086 | 3.54 | 0.094 | 3.59 | 578.981 | 7.18 | 2442.68 | 7.09 |
| LB041_330_rut3 | 317.179 | 20.83 | 0.600 | 30.60 | 0.256 | 22.86 | 0.003 | 20.21 | 20.762 | 40.41 | 231.80 | 45.71 |
| LB041_330_rut4 | 22.877 | 6.03 | 0.796 | 4.11 | 4.810 | 5.52 | 0.044 | 7.49 | 274.707 | 14.99 | 1766.62 | 11.05 |
| LB041_330_rut5 | 136.752 | 11.04 | 0.577 | 14.99 | 0.601 | 16.76 | 0.008 | 10.35 | 48.360 | 20.71 | 33.51 | 33.51 |
| LB041_330_rut6 | 51.733 | 4.50 | 0.823 | 6.30 | 2.260 | 5.57 | 0.020 | 4.94 | 124.575 | 9.88 | 1199.93 | 11.15 |
| LB041_330_rut7 | 85.509 | 4.37 | 0.796 | 5.14 | 1.320 | 5.83 | 0.012 | 4.67 | 75.148 | 9.33 | 854.60 | 11.67 |
| LB041_330_rut8 | 204.043 | 4.08 | 0.595 | 4.71 | 0.419 | 4.14 | 0.005 | 4.32 | 32.017 | 8.64 | 355.04 | 8.28 |
| LB041_330_rut9 | 22.535 | 3.72 | 0.810 | 3.84 | 4.962 | 4.03 | 0.045 | 3.68 | 282.964 | 7.36 | 1812.84 | 8.06 |
| LB045_332_rut1 | 0.554 | 4.74 | 0.842 | 1.51 | 218.294 | 4.17 | 1.840 | 4.38 | 6729.754 | 8.76 | 5473.34 | 8.34 |
| LB045_332_rut10 | 1.127 | 2.39 | 0.833 | 2.52 | 104.683 | 2.34 | 0.894 | 2.41 | 4116.084 | 4.82 | 4732.14 | 4.69 |
| LB045_332_rut11 | 0.688 | 3.40 | 0.831 | 2.52 | 170.155 | 3.18 | 1.488 | 3.43 | 5876.916 | 6.86 | 5221.68 | 6.37 |
| LB045_332_rut12 | 2.080 | 5.00 | 0.824 | 3.64 | 57.223 | 6.82 | 0.492 | 5.76 | 2580.470 | 11.52 | 4126.80 | 13.63 |
| LB045_332_rut13 | 0.519 | 1.76 | 0.832 | 0.64 | 222.628 | 1.67 | 1.924 | 1.56 | 6915.728 | 3.11 | 5493.21 | 3.33 |
| LB045_332_rut14 | 0.579 | 3.07 | 0.841 | 0.69 | 201.042 | 3.66 | 1.756 | 3.04 | 6534.507 | 6.08 | 5390.14 | 6.72 |
| LB045_332_rut15 | 1.904 | 2.72 | 0.842 | 1.07 | 62.624 | 2.65 | 0.528 | 2.68 | 2733.253 | 5.35 | 4216.87 | 5.31 |
| LB045_332_rut16 | < DL | 0.41 | < DL | 145.48 | < DL | 119.35 | < DL | 96.43 | < DL | < DL | < DL | 238.71 |
| LB045_332_rut17 | 7.893 | 14.09 | 0.736 | 14.52 | 14.158 | 9.69 | 0.137 | 13.60 | 826.320 | 27.21 | 2760.35 | 19.38 |
| LB045_332_rut18 | 1.192 | 5.54 | 0.856 | 1.56 | 99.467 | 4.65 | 0.831 | 4.79 | 3900.899 | 9.59 | 4680.74 | 9.30 |
| LB045_332_rut19 | 0.423 | 1.90 | 0.844 | 0.91 | 282.513 | 2.06 | 2.390 | 1.74 | 7870.020 | 3.49 | 5734.13 | 4.11 |
| LB045_332_rut2 | 1.299 | 2.92 | 0.867 | 1.46 | 260.768 | 2.51 | 2.128 | 2.68 | 7350.952 | 5.35 | 5653.10 | 5.02 |
| LB045_332_rut3 | 1.077 | 5.27 | 0.835 | 0.99 | 110.575 | 5.08 | 0.942 | 4.99 | 4277.937 | 9.99 | 4787.23 | 10.16 |
| LB045_332_rut4 | 0.615 | 1.74 | 0.836 | 1.01 | 192.321 | 1.75 | 1.633 | 1.63 | 6240.506 | 3.27 | 5345.34 | 3.50 |
| LB045_332_rut5 | 2.502 | 8.47 | 0.906 | 4.25 | 50.986 | 8.05 | 0.403 | 8.16 | 2182.670 | 16.33 | 4011.75 | 16.11 |
| LB045_332_rut6 | 1.745 | 5.05 | 0.815 | 2.33 | 66.763 | 4.75 | 0.566 | 4.68 | 2893.028 | 9.36 | 4280.87 | 9.51 |
| LB045_332_rut7 | 5.560 | 5.36 | 0.837 | 6.66 | 20.770 | 5.28 | 0.182 | 5.45 | 1077.569 | 10.90 | 3127.92 | 10.56 |
| LB045_332_rut8 | 1.067 | 2.90 | 0.833 | 1.54 | 111.005 | 2.90 | 0.943 | 2.60 | 4282.117 | 5.20 | 4791.13 | 5.79 |
| ELF-03_333_rut1 | 50.516 | 7.05 | 0.724 | 5.30 | 2.030 | 7.41 | 0.020 | 8.82 | 127.527 | 17.65 | 1125.78 | 14.82 |
| ELF-03_333_rut10 | 1.617 | 7.50 | 0.802 | 2.86 | 68.813 | 6.24 | 0.629 | 5.42 | 3145.384 | 10.84 | 4311.14 | 12.47 |
| ELF-03_333_rut12 | 61.986 | 7.61 | 0.700 | 6.92 | 1.581 | 7.32 | 0.016 | 9.73 | 102.616 | 19.46 | 962.85 | 14.64 |
| ELF-03_333_rut13 | 47.197 | 5.85 | 0.761 | 7.22 | 2.287 | 6.15 | 0.021 | 5.69 | 135.612 | 11.38 | 1208.33 | 12.30 |
| ELF-03_333_rut14 | 8.095 | 5.21 | 0.812 | 2.31 | 14.588 | 6.38 | 0.128 | 7.05 | 774.289 | 14.09 | 2787.44 | 12.75 |
| ELF-03_333_rut15 | 42.689 | 4.22 | 0.821 | 3.48 | 2.725 | 3.68 | 0.024 | 3.81 | 150.803 | 7.62 | 1335.29 | 7.36 |
| ELF-03_333_rut16 | 364.934 | 14.26 | 0.609 | 21.18 | 0.237 | 15.79 | 0.003 | 14.37 | 17.967 | 28.73 | 216.18 | 31.57 |
| ELF-03_333_rut17 | 388.596 | 9.75 | 0.695 | 12.22 | 0.249 | 8.88 | 0.003 | 12.99 | 16.224 | 25.97 | 225.55 | 17.77 |
| ELF-03_333_rut18 | 20.057 | 3.75 | 0.800 | 2.65 | 5.691 | 4.90 | 0.050 | 4.75 | 311.730 | 9.51 | 1929.96 | 9.81 |
| ELF-03_333_rut2 | 2.974 | 3.35 | 0.835 | 1.04 | 39.759 | 3.67 | 0.339 | 3.71 | 1879.891 | 7.43 | 3764.72 | 7.35 |

Appendix B: Eastern Sunda arc geochronology data - rutile

| Analysis ID | 238U/206Pb ratio | 1s% | 207Pb/206Pb ratio | 1s% | 207Pb/235U (calc) ratio | 1s% | 206Pb/238U ratio | 1s% | 206Pb/238U Age (Ma) | 2s% | 207Pb/235U (calc) Age (Ma) | 2s% |
|-----------------|------------------|-------|-------------------|-------|-------------------------|-------|------------------|-------|---------------------|-------|----------------------------|-------|
| ELF-03_333_ru3 | 92.855 | 7.10 | 0.596 | 10.58 | 0.892 | 8.61 | 0.011 | 8.44 | 69.802 | 16.88 | 647.33 | 17.21 |
| ELF-03_333_ru4 | 6.929 | 5.26 | 0.828 | 4.24 | 16.753 | 6.92 | 0.144 | 5.23 | 10.46 | 10.46 | 2920.80 | 13.84 |
| ELF-03_333_ru5 | 9.780 | 5.95 | 0.783 | 3.91 | 11.273 | 7.33 | 0.104 | 6.04 | 637.626 | 12.08 | 2545.95 | 14.66 |
| ELF-03_333_ru6 | 8.662 | 3.00 | 0.811 | 1.29 | 13.210 | 2.80 | 0.116 | 2.84 | 704.915 | 5.60 | 2694.80 | 5.69 |
| ELF-03_333_ru7 | 9.786 | 15.93 | 0.845 | 4.16 | 12.147 | 9.23 | 0.102 | 9.23 | 627.348 | 18.46 | 2615.84 | 18.47 |
| ELF-03_333_ru8 | 98.140 | 2.78 | 0.790 | 3.53 | 1.876 | 5.57 | 0.017 | 2.76 | 109.881 | 5.52 | 1072.83 | 11.14 |
| ELF-03_333_ru9 | 503.762 | 31.77 | 0.262 | 42.20 | 17.894 | 36.34 | 0.002 | 21.99 | 13.379 | 43.98 | 71.91 | 72.69 |
| GBF-04_335_ru2 | 6.324 | 6.89 | 0.808 | 2.40 | 17.884 | 5.84 | 0.156 | 7.07 | 936.541 | 14.14 | 2984.06 | 11.69 |
| GBF-04_335_ru3 | 0.877 | 8.10 | 0.832 | 0.45 | 135.642 | 6.57 | 1.156 | 6.60 | 4951.443 | 13.19 | 4993.01 | 13.13 |
| GBF-04_335_ru4 | 1.079 | 1.74 | 0.825 | 0.74 | 108.218 | 1.71 | 0.929 | 1.68 | 4233.886 | 3.36 | 4765.54 | 3.41 |
| GBF-04_335_ru5 | 0.385 | 4.24 | 0.824 | 0.62 | 304.747 | 4.44 | 2.627 | 4.28 | 8305.121 | 8.56 | 5810.79 | 8.87 |
| GBF-04_335_ru6 | 1.412 | 6.23 | 0.845 | 1.61 | 84.186 | 5.29 | 0.707 | 5.05 | 3446.109 | 10.10 | 4513.21 | 10.59 |
| GBF-04_335_ru7 | 4.317 | 3.63 | 0.762 | 3.05 | 24.555 | 3.89 | 0.235 | 3.99 | 1362.978 | 7.99 | 3290.70 | 7.78 |
| GBF-04_335_ru8 | 1372.055 | 11.83 | 0.221 | 24.44 | 0.023 | 21.50 | 0.001 | 11.87 | 4.670 | 23.73 | 22.85 | 43.00 |
| GBF-04_335_ru9 | 0.958 | 4.34 | 0.836 | 1.19 | 123.151 | 5.06 | 1.043 | 5.14 | 4604.064 | 10.27 | 4895.67 | 10.11 |
| SFF-05_336_ru2 | 4.124 | 2.66 | 0.872 | 3.45 | 29.551 | 3.15 | 0.247 | 3.00 | 1422.000 | 5.99 | 3471.99 | 6.30 |
| SFF-05_336_ru3 | 0.835 | 1.93 | 0.835 | 2.10 | 140.314 | 2.40 | 1.222 | 2.04 | 5146.935 | 4.09 | 5027.15 | 4.80 |
| SFF-05_336_ru4 | 5.905 | 4.94 | 0.766 | 5.24 | 17.983 | 4.25 | 0.170 | 5.54 | 1009.557 | 11.08 | 2988.81 | 8.49 |
| SFF-05_336_ru5 | 3.316 | 2.97 | 0.808 | 2.09 | 33.980 | 3.74 | 0.305 | 3.29 | 1715.806 | 6.59 | 3609.47 | 7.48 |
| SFF-05_336_ru6 | 1.089 | 1.40 | 0.825 | 0.99 | 106.021 | 1.79 | 0.931 | 1.32 | 4240.533 | 2.64 | 4744.91 | 3.57 |
| NEF-02_337_ru1 | 287.019 | 5.84 | 0.657 | 8.08 | 0.333 | 9.78 | 0.004 | 7.32 | 23.094 | 14.63 | 291.73 | 19.56 |
| NEF-02_337_ru10 | 25.013 | 7.27 | 0.791 | 3.15 | 4.744 | 9.01 | 0.042 | 10.79 | 285.351 | 21.58 | 1775.10 | 18.01 |
| NEF-02_337_ru11 | 1.713 | 2.59 | 0.838 | 0.64 | 69.102 | 2.39 | 0.585 | 2.32 | 2969.150 | 4.65 | 4315.32 | 4.78 |
| NEF-02_337_ru12 | 12.291 | 3.55 | 0.807 | 2.74 | 9.401 | 3.16 | 0.083 | 4.00 | 511.742 | 8.00 | 2377.97 | 6.32 |
| NEF-02_337_ru13 | 6.515 | 5.31 | 0.781 | 2.92 | 17.007 | 5.74 | 0.155 | 6.20 | 928.289 | 12.39 | 2835.25 | 11.49 |
| NEF-02_337_ru14 | 17.048 | 5.70 | 0.829 | 2.67 | 6.844 | 5.69 | 0.059 | 5.92 | 366.829 | 11.84 | 2091.39 | 11.38 |
| NEF-02_337_ru15 | 77.526 | 5.20 | 0.709 | 8.04 | 1.312 | 7.91 | 0.013 | 5.78 | 83.964 | 11.56 | 850.85 | 15.82 |
| NEF-02_337_ru16 | 0.167 | 7.39 | 0.840 | 0.71 | 731.006 | 8.04 | 6.310 | 7.82 | 12823.558 | 15.64 | 6697.25 | 16.08 |
| NEF-02_337_ru17 | 7.735 | 1.85 | 0.840 | 1.56 | 15.367 | 1.90 | 0.131 | 1.93 | 793.771 | 3.85 | 2638.26 | 3.79 |
| NEF-02_337_ru2 | 1.522 | 2.66 | 0.835 | 1.00 | 76.489 | 2.51 | 0.658 | 2.54 | 3257.502 | 5.08 | 4417.06 | 5.02 |
| NEF-02_337_ru3 | 8.897 | 7.97 | 0.841 | 5.24 | 13.278 | 9.14 | 0.117 | 9.66 | 710.864 | 19.33 | 2699.63 | 18.28 |
| NEF-02_337_ru4 | 21.170 | 4.56 | 0.819 | 3.79 | 5.437 | 6.48 | 0.049 | 5.74 | 308.528 | 11.47 | 1890.69 | 12.97 |
| NEF-02_337_ru6 | 52.375 | 6.45 | 0.823 | 3.34 | 2.240 | 5.46 | 0.019 | 5.68 | 123.061 | 11.36 | 1193.77 | 10.92 |
| NEF-02_337_ru7 | 43.066 | 5.85 | 0.801 | 3.88 | 2.648 | 6.50 | 0.023 | 5.94 | 149.660 | 11.89 | 1314.08 | 13.01 |
| NEF-02_337_ru8 | 11.245 | 7.04 | 0.797 | 2.71 | 10.160 | 6.83 | 0.090 | 6.68 | 553.404 | 13.36 | 2449.44 | 13.67 |
| NEF-02_337_ru9 | 5.540 | 4.42 | 0.815 | 2.88 | 20.900 | 4.48 | 0.183 | 4.54 | 1084.316 | 9.08 | 3133.98 | 8.95 |
| ELF-01_ru1 | 9.518 | 7.39 | 0.907 | 8.75 | 14.402 | 7.82 | 0.106 | 7.73 | 648.101 | 15.47 | 2776.59 | 15.64 |
| ELF-01_ru10 | 208.136 | 5.46 | 0.703 | 6.63 | 0.370 | 5.42 | 0.005 | 8.71 | 24.170 | 17.42 | 319.52 | 12.01 |
| ELF-01_ru12 | 267.053 | 8.90 | 0.720 | 7.58 | 4.551 | 6.00 | 0.004 | 8.71 | 249.648 | 10.81 | 1740.41 | 12.47 |
| ELF-01_ru13 | 25.363 | 5.21 | 0.823 | 4.86 | 1.022 | 9.24 | 0.011 | 9.32 | 67.735 | 18.65 | 714.74 | 18.47 |
| ELF-01_ru14 | 94.554 | 8.26 | 0.689 | 5.28 | 0.398 | 6.23 | 0.039 | 5.40 | 23.613 | 23.34 | 340.25 | 19.27 |
| ELF-01_ru15 | 274.014 | 10.20 | 0.743 | 13.07 | 0.386 | 9.64 | 0.001 | 11.67 | 23.613 | 23.34 | 340.25 | 19.27 |
| ELF-01_ru16 | 1477.653 | 16.98 | 0.555 | 26.62 | 0.052 | 20.36 | 0.004 | 17.47 | 4.314 | 4.314 | 51.47 | 40.72 |
| ELF-01_ru17 | 387.292 | 9.01 | 0.666 | 9.96 | 0.322 | 9.86 | 0.003 | 8.39 | 17.112 | 16.78 | 283.16 | 19.73 |
| ELF-01_ru18 | 604.229 | 12.39 | 0.905 | 19.16 | 0.119 | 14.91 | 0.002 | 18.67 | 11.193 | 37.34 | 114.46 | 29.82 |
| ELF-01_ru19 | 468.331 | 9.05 | 0.743 | 10.60 | 0.230 | 9.92 | 0.020 | 8.00 | 13.931 | 15.99 | 201.82 | 19.85 |
| ELF-01_ru2 | 54.988 | 5.12 | 0.859 | 7.02 | 2.234 | 8.73 | 0.018 | 5.49 | 115.082 | 10.97 | 1191.63 | 17.45 |
| ELF-01_ru20 | 7.257 | 5.04 | 0.792 | 3.96 | 15.018 | 5.29 | 0.138 | 5.24 | 830.546 | 10.49 | 2816.41 | 10.58 |
| ELF-01_ru20 | 155.398 | 5.85 | 0.806 | 7.11 | 0.748 | 6.01 | 0.006 | 5.88 | 41.185 | 11.76 | 567.25 | 12.01 |

Appendix B: Eastern Sunda arc geochronology data - rutile

| Analysis ID | 238U/206Pb ratio | 1s% | 207Pb/206Pb ratio | 1s% | 207Pb/235U (calc) ratio | 1s% | 206Pb/238U ratio | 1s% | 206Pb/238U Age (Ma) | 2s% | 207Pb/235U (calc) Age (Ma) | 2s% |
|--------------|------------------|-------|-------------------|-------|-------------------------|-------|------------------|-------|---------------------|-------|----------------------------|-------|
| ELF-01_rut21 | 283.977 | 8.82 | 0.497 | 13.77 | 0.253 | 11.39 | 0.004 | 11.38 | 22.915 | 22.77 | 229.25 | 22.78 |
| ELF-01_rut22 | 59.512 | 3.85 | 0.789 | 3.37 | 1.845 | 3.99 | 0.017 | 1.845 | 107.515 | 7.97 | 1061.49 | 8.10 |
| ELF-01_rut23 | 127.412 | 9.33 | 0.859 | 10.98 | 0.974 | 7.59 | 0.008 | 7.34 | 50.700 | 14.67 | 680.28 | 15.17 |
| ELF-01_rut24 | 34.298 | 10.46 | 0.821 | 10.57 | 3.407 | 8.31 | 0.029 | 11.55 | 184.896 | 23.11 | 1506.01 | 16.63 |
| ELF-01_rut25 | 27.504 | 12.83 | 0.779 | 6.68 | 4.042 | 10.39 | 0.037 | 11.58 | 232.917 | 23.15 | 1642.70 | 20.78 |
| ELF-01_rut26 | 223.316 | 22.69 | 0.819 | 31.72 | 0.484 | 22.16 | 0.004 | 23.42 | 27.029 | 46.84 | 400.95 | 44.33 |
| ELF-01_rut27 | 237.288 | 18.00 | 0.569 | 27.85 | 0.339 | 25.43 | 0.001 | 18.16 | 25.958 | 36.32 | 296.40 | 50.87 |
| ELF-01_rut28 | 771.595 | 11.81 | 0.482 | 18.36 | 0.085 | 14.57 | 0.001 | 11.82 | 8.269 | 23.64 | 83.11 | 29.13 |
| ELF-01_rut29 | 18.787 | 5.61 | 0.794 | 3.97 | 5.824 | 7.09 | 0.052 | 6.24 | 329.049 | 12.49 | 1949.95 | 14.18 |
| ELF-01_rut30 | 244.126 | 14.86 | 0.356 | 26.05 | < DL | 21.53 | 0.004 | 14.92 | 25.989 | 29.85 | < DL | 43.06 |
| ELF-01_rut31 | 22.434 | 4.51 | 0.872 | 4.65 | 5.376 | 4.57 | 0.044 | 4.66 | 280.470 | 9.32 | 1881.11 | 9.14 |
| ELF-01_rut4 | 16.914 | 4.46 | 0.827 | 1.76 | 6.790 | 3.89 | 0.059 | 4.12 | 367.474 | 8.23 | 2084.46 | 7.77 |
| ELF-01_rut5 | 21.562 | 8.85 | 0.812 | 3.60 | 5.435 | 9.61 | 0.046 | 9.23 | 288.039 | 18.46 | 1890.44 | 19.22 |
| ELF-01_rut6 | 46.389 | 4.14 | 0.860 | 2.29 | 2.553 | 4.28 | 0.022 | 4.26 | 138.658 | 8.51 | 1287.34 | 8.57 |
| ELF-01_rut7 | 22.841 | 4.93 | 0.877 | 4.60 | 5.564 | 6.66 | 0.044 | 5.05 | 275.551 | 10.09 | 1910.60 | 13.31 |
| ELF-01_rut8 | 7.917 | 4.26 | 0.819 | 2.94 | 14.533 | 4.23 | 0.127 | 4.57 | 769.653 | 9.15 | 2785.13 | 8.46 |
| ELF-01_rut9 | 304.203 | 30.08 | 0.717 | 11.34 | 0.341 | 8.52 | 0.003 | 19.44 | 22.135 | 38.89 | 297.64 | 17.04 |
| ELF-02_rut1 | 108.766 | 4.43 | 0.851 | 3.16 | 1.094 | 4.12 | 0.009 | 4.48 | 58.865 | 8.95 | 750.40 | 8.25 |
| ELF-02_rut10 | 177.216 | 56.38 | 0.780 | 7.03 | 0.593 | 5.57 | 0.005 | 5.91 | 34.664 | 11.82 | 472.81 | 11.14 |
| ELF-02_rut11 | 1043.474 | 14.32 | 0.265 | 28.17 | 0.034 | 24.35 | 0.001 | 14.70 | 6.068 | 29.41 | 34.28 | 48.71 |
| ELF-02_rut12 | 570.012 | 7.37 | 0.559 | 11.92 | 0.137 | 9.39 | 0.002 | 8.00 | 11.276 | 16.00 | 130.23 | 18.77 |
| ELF-02_rut13 | 2299.075 | 8.00 | 0.105 | 21.40 | 0.006 | 20.21 | 0.000 | 8.02 | 2.796 | 16.04 | 6.34 | 40.42 |
| ELF-02_rut14 | 158.859 | 9.01 | 0.796 | 4.06 | 0.684 | 5.56 | 0.006 | 5.18 | 40.477 | 10.36 | 529.41 | 11.12 |
| ELF-02_rut15 | 134.577 | 6.51 | 0.625 | 8.68 | 0.647 | 6.93 | 0.007 | 6.54 | 47.308 | 13.08 | 506.92 | 13.85 |
| ELF-02_rut16 | 132.813 | 6.07 | 0.729 | 8.94 | 0.783 | 7.69 | 0.008 | 7.07 | 48.254 | 14.14 | 587.23 | 15.37 |
| ELF-02_rut17 | 1589.011 | 12.18 | 0.480 | 18.92 | 0.044 | 15.00 | 0.001 | 12.14 | 4.105 | 24.29 | 43.36 | 30.00 |
| ELF-02_rut18 | 2498.458 | 17.26 | 0.418 | 28.65 | 0.023 | 23.11 | 0.000 | 17.33 | 2.518 | 34.65 | 22.67 | 46.22 |
| ELF-02_rut19 | 95.845 | 5.11 | 0.746 | 5.96 | 1.078 | 6.43 | 0.011 | 5.52 | 67.383 | 11.03 | 742.53 | 12.86 |
| ELF-02_rut2 | 228.073 | 8.65 | 0.841 | 11.52 | 0.518 | 8.09 | 0.004 | 8.51 | 28.751 | 17.01 | 423.49 | 16.18 |
| ELF-02_rut20 | 2809.986 | 9.48 | 0.051 | 35.86 | < DL | 34.80 | 0.000 | 9.47 | 2.297 | 18.93 | < DL | 69.60 |
| ELF-02_rut21 | 2426.292 | 7.25 | 0.071 | 22.52 | < DL | 21.77 | 0.000 | 7.26 | 2.648 | 14.51 | < DL | 43.53 |
| ELF-02_rut22 | 122.886 | 4.82 | 0.831 | 4.54 | 0.916 | 6.14 | 0.008 | 5.65 | 51.610 | 11.30 | 660.08 | 12.27 |
| ELF-02_rut23 | 367.470 | 21.38 | 1.123 | 28.00 | 0.421 | 17.83 | 0.003 | 22.01 | 17.122 | 44.03 | 356.46 | 35.66 |
| ELF-02_rut24 | 44.224 | 6.64 | 0.915 | 10.75 | 2.891 | 6.29 | 0.023 | 7.33 | 146.111 | 14.67 | 1379.52 | 12.58 |
| ELF-02_rut25 | 482.854 | 14.20 | 0.735 | 19.76 | 0.214 | 14.30 | 0.002 | 14.66 | 13.018 | 29.32 | 197.03 | 28.59 |
| ELF-02_rut26 | 572.482 | 7.28 | 0.458 | 10.87 | 0.109 | 8.95 | 0.002 | 7.42 | 11.158 | 14.84 | 104.75 | 17.90 |
| ELF-02_rut27 | 19.267 | 4.66 | 0.782 | 4.20 | 5.550 | 3.98 | 0.052 | 4.61 | 324.081 | 9.22 | 1908.43 | 7.95 |
| ELF-02_rut28 | 1913.185 | 11.90 | 0.163 | 27.17 | 0.012 | 24.76 | 0.001 | 11.88 | 3.382 | 23.77 | 11.99 | 49.52 |
| ELF-02_rut29 | 57.865 | 3.90 | 0.856 | 3.04 | 2.032 | 3.71 | 0.017 | 4.00 | 110.158 | 8.00 | 1126.36 | 7.42 |
| ELF-02_rut3 | 516.066 | 7.83 | 0.478 | 11.84 | 0.125 | 9.61 | 0.002 | 7.92 | 12.478 | 15.84 | 119.97 | 19.22 |
| ELF-02_rut30 | 365.730 | 5.23 | 0.656 | 6.41 | 0.251 | 5.70 | 0.003 | 5.86 | 17.514 | 11.73 | 227.37 | 11.40 |
| ELF-02_rut31 | 1613.480 | 12.95 | 0.269 | 24.75 | < DL | 21.40 | 0.001 | 13.08 | 3.912 | 26.15 | < DL | 42.80 |
| ELF-02_rut32 | 266.009 | 4.10 | 0.664 | 4.29 | 0.340 | 4.45 | 0.004 | 4.35 | 24.181 | 8.69 | 297.53 | 8.90 |
| ELF-02_rut4 | 17.742 | 3.64 | 0.811 | 2.01 | 6.371 | 3.79 | 0.057 | 3.70 | 356.251 | 7.40 | 2028.22 | 7.57 |
| ELF-02_rut5 | 169.063 | 6.73 | 0.740 | 10.02 | 0.629 | 8.72 | 0.006 | 8.12 | 38.429 | 16.24 | 495.38 | 17.44 |
| ELF-02_rut6 | 19.641 | 4.15 | 0.785 | 4.03 | 5.732 | 4.30 | 0.051 | 4.11 | 321.934 | 8.23 | 1936.14 | 8.59 |
| ELF-02_rut7 | 69.805 | 4.98 | 0.804 | 3.15 | 1.591 | 5.12 | 0.014 | 5.02 | 91.854 | 10.04 | 966.51 | 10.23 |
| ELF-02_rut8 | 1309.426 | 14.15 | 0.359 | 12.14 | 0.038 | 10.31 | 0.001 | 7.47 | 4.977 | 14.93 | 37.76 | 20.62 |
| ELF-02_rut9 | 837.439 | 9.20 | 0.688 | 12.75 | 0.112 | 9.57 | 0.001 | 11.12 | 7.719 | 18.51 | 107.39 | 19.14 |
| LB005_rut1 | 62.830 | 10.79 | 0.813 | 12.79 | 1.914 | 10.94 | 0.016 | 13.66 | 103.729 | 27.33 | 1085.96 | 21.88 |

Appendix B: Eastern Sunda arc geochronology data - rutile

| Analysis ID | 238U/206Pb ratio | 1s% | 207Pb/206Pb ratio | 1s% | 207Pb/235U (calc) ratio | 1s% | 206Pb/238U ratio | 1s% | 206Pb/238U Age (Ma) | 2s% | 207Pb/235U (calc) Age (Ma) | 2s% |
|--------------|------------------|-------|-------------------|-------|-------------------------|-------|------------------|-------|---------------------|-------|----------------------------|--------|
| LB005_rut0 | 34.222 | 4.27 | 0.744 | 5.44 | 3.032 | 5.57 | 0.030 | 4.88 | 187.826 | 9.76 | 1415.82 | 11.15 |
| LB005_rut2 | 3.231 | 6.32 | 0.640 | 7.85 | 27.412 | 8.42 | 0.311 | 7.15 | 1743.494 | 14.29 | 3398.28 | 16.83 |
| LB005_rut3 | 10.760 | 12.52 | 0.841 | 8.62 | 10.876 | 6.50 | 0.093 | 6.72 | 570.447 | 13.45 | 2512.60 | 13.01 |
| LB005_rut4 | 5.782 | 9.78 | 0.825 | 11.66 | 19.833 | 12.10 | 0.174 | 8.36 | 1034.131 | 16.72 | 3083.25 | 24.20 |
| LB005_rut5 | 1159.858 | 22.91 | 0.077 | 74.84 | <DL | 71.29 | <DL | 22.91 | <DL | 45.81 | <DL | 142.59 |
| LB005_rut6 | 12.338 | 10.91 | 0.710 | 16.31 | 7.805 | 8.98 | 0.080 | 10.50 | 484.995 | 21.00 | 2208.78 | 17.97 |
| LB005_rut8 | 4.689 | 15.25 | 0.805 | 17.80 | 23.623 | 12.88 | 0.220 | 11.20 | 1280.551 | 22.41 | 3252.96 | 25.77 |
| LB005_rut9 | 23.738 | 12.32 | 0.924 | 17.06 | 5.069 | 11.84 | 0.040 | 13.09 | 250.362 | 26.17 | 1830.99 | 23.68 |
| NAF-01_rut1 | 150.134 | 7.07 | 0.708 | 8.11 | 0.077 | 7.93 | 0.007 | 9.35 | 43.754 | 18.70 | 503.67 | 15.86 |
| NAF-01_rut10 | 745.254 | 8.27 | 0.414 | 13.66 | 0.077 | 11.08 | 0.001 | 8.15 | 8.007 | 16.29 | 75.15 | 22.16 |
| NAF-01_rut11 | 2.824 | 6.25 | 0.837 | 1.06 | 41.383 | 6.71 | 0.358 | 6.59 | 1972.258 | 13.18 | 3804.38 | 13.42 |
| NAF-01_rut12 | 22.983 | 9.50 | 0.808 | 3.45 | 4.974 | 9.24 | 0.045 | 8.89 | 283.701 | 17.77 | 1814.87 | 18.47 |
| NAF-01_rut2 | 560.995 | 12.76 | 0.632 | 13.46 | 0.156 | 10.05 | 0.002 | 11.71 | 11.434 | 23.41 | 146.77 | 20.10 |
| NAF-01_rut3 | 10.594 | 7.24 | 0.781 | 2.85 | 10.241 | 8.61 | 0.095 | 8.53 | 585.861 | 17.05 | 2456.79 | 17.23 |
| NAF-01_rut4 | 21.694 | 5.32 | 0.768 | 3.39 | 4.933 | 6.45 | 0.046 | 5.91 | 291.811 | 11.82 | 1807.95 | 12.91 |
| NAF-01_rut5 | 154.655 | 10.77 | 0.647 | 9.78 | 0.553 | 7.37 | 0.006 | 11.06 | 40.697 | 22.13 | 447.05 | 14.73 |
| NAF-01_rut6 | 25.144 | 5.81 | 0.796 | 3.41 | 4.377 | 6.08 | 0.040 | 5.45 | 251.569 | 10.91 | 1707.92 | 12.16 |
| NAF-01_rut7 | 310.334 | 5.08 | 0.626 | 6.22 | 0.278 | 6.13 | 0.003 | 5.07 | 20.831 | 10.14 | 249.20 | 12.26 |
| NAF-01_rut8 | 32.684 | 6.31 | 0.772 | 4.54 | 3.314 | 7.47 | 0.031 | 7.07 | 197.995 | 14.13 | 1484.43 | 14.95 |
| NAF-01_rut9 | 14.222 | 6.85 | 0.823 | 2.20 | 7.990 | 6.58 | 0.070 | 6.72 | 438.288 | 13.44 | 2229.87 | 13.15 |
| NAF-02_rut1 | 27.077 | 3.82 | 0.629 | 1.31 | 4.179 | 3.74 | 0.037 | 4.04 | 233.633 | 8.07 | 1669.99 | 7.48 |
| NAF-02_rut10 | 81.334 | 5.56 | 0.747 | 3.36 | 1.293 | 7.21 | 0.012 | 6.81 | 79.389 | 13.62 | 842.46 | 14.42 |
| NAF-02_rut11 | 64.009 | 7.80 | 0.752 | 2.46 | 1.636 | 7.91 | 0.016 | 8.02 | 101.185 | 16.04 | 984.29 | 15.81 |
| NAF-02_rut12 | 13.607 | 6.26 | 0.835 | 1.47 | 8.832 | 5.56 | 0.075 | 5.57 | 466.418 | 11.13 | 2320.79 | 11.11 |
| NAF-02_rut13 | 17.676 | 3.93 | 0.800 | 2.89 | 6.290 | 4.41 | 0.057 | 4.35 | 355.208 | 8.69 | 2017.11 | 8.82 |
| NAF-02_rut14 | 844.384 | 21.77 | 0.317 | 25.08 | 0.063 | 21.21 | 0.001 | 22.81 | 8.576 | 45.61 | 62.41 | 42.42 |
| NAF-02_rut15 | 1072.768 | 12.50 | 0.072 | 41.30 | <DL | 39.55 | 0.001 | 12.54 | 5.972 | 25.07 | <DL | 79.10 |
| NAF-02_rut16 | 180.749 | 5.57 | 0.691 | 7.32 | 0.540 | 6.47 | 0.006 | 5.82 | 35.905 | 11.64 | 438.53 | 12.93 |
| NAF-02_rut17 | 7.618 | 4.16 | 0.832 | 0.92 | 15.231 | 3.41 | 0.131 | 3.82 | 792.328 | 7.63 | 2829.81 | 6.82 |
| NAF-02_rut18 | 135.783 | 11.01 | 0.763 | 4.10 | 0.785 | 7.72 | 0.007 | 7.22 | 47.072 | 14.44 | 586.12 | 15.44 |
| NAF-02_rut19 | 197.903 | 11.08 | 0.647 | 5.89 | 0.456 | 9.23 | 0.005 | 8.41 | 32.626 | 16.83 | 381.64 | 18.46 |
| NAF-02_rut2 | 272.447 | 8.42 | 0.680 | 11.52 | 0.344 | 8.75 | 0.004 | 8.46 | 23.405 | 16.92 | 299.91 | 17.50 |
| NAF-02_rut20 | 696.943 | 12.07 | 0.256 | 22.31 | 0.054 | 19.45 | 0.001 | 11.56 | 9.658 | 23.12 | 53.45 | 38.90 |
| NAF-02_rut21 | 6.012 | 7.87 | 0.639 | 1.78 | 18.650 | 9.28 | 0.171 | 10.97 | 1015.962 | 21.94 | 3023.89 | 18.55 |
| NAF-02_rut3 | 31.849 | 4.28 | 0.817 | 1.77 | 3.551 | 4.12 | 0.031 | 4.39 | 198.390 | 8.77 | 1538.77 | 8.24 |
| NAF-02_rut4 | 366.302 | 9.05 | 0.308 | 15.90 | 0.117 | 13.65 | 0.003 | 9.04 | 17.626 | 18.07 | 112.53 | 27.30 |
| NAF-02_rut5 | 1.072 | 5.26 | 0.841 | 2.45 | 118.151 | 4.11 | 0.952 | 5.17 | 4313.132 | 10.33 | 4863.93 | 8.23 |
| NAF-02_rut6 | 3.378 | 3.84 | 0.841 | 0.85 | 34.503 | 4.00 | 0.298 | 4.08 | 1680.911 | 8.17 | 3624.53 | 7.99 |
| NAF-02_rut7 | 71.545 | 7.72 | 0.749 | 10.61 | 1.460 | 7.74 | 0.014 | 7.60 | 91.380 | 15.19 | 914.08 | 15.47 |
| NAF-02_rut8 | 43.591 | 17.75 | 0.724 | 13.14 | 2.308 | 9.62 | 0.023 | 23.42 | 146.940 | 46.84 | 1214.63 | 19.25 |
| NAF-02_rut9 | 670.338 | 15.11 | 0.296 | 16.88 | 0.063 | 14.53 | 0.002 | 16.80 | 9.894 | 33.60 | 62.19 | 29.06 |
| NAF-03_rut1 | 70.111 | 4.69 | 0.778 | 3.74 | 1.530 | 4.82 | 0.014 | 5.11 | 91.645 | 10.21 | 942.44 | 9.64 |
| NAF-03_rut10 | 107.382 | 4.43 | 0.740 | 4.60 | 0.951 | 5.92 | 0.009 | 5.77 | 59.867 | 11.54 | 678.87 | 11.84 |
| NAF-03_rut11 | 556.178 | 13.88 | 0.565 | 21.25 | 0.144 | 21.51 | 0.002 | 18.58 | 10.818 | 37.17 | 136.29 | 43.02 |
| NAF-03_rut12 | 30.568 | 4.12 | 0.808 | 4.62 | 3.686 | 4.01 | 0.033 | 4.30 | 210.211 | 8.60 | 1568.27 | 8.03 |
| NAF-03_rut13 | 65.933 | 6.78 | 0.788 | 3.48 | 1.654 | 5.48 | 0.015 | 5.32 | 97.249 | 10.64 | 990.93 | 10.95 |
| NAF-03_rut14 | 1096.690 | 20.19 | 0.089 | 21.85 | <DL | 20.72 | 0.001 | 7.31 | 5.884 | 14.61 | <DL | 41.44 |
| NAF-03_rut15 | 0.555 | 2.06 | 0.832 | 0.69 | 207.927 | 2.06 | 1.813 | 1.77 | 6667.561 | 3.54 | 5424.16 | 4.12 |
| NAF-03_rut2 | 50.101 | 3.52 | 0.794 | 1.96 | 2.209 | 3.14 | 0.020 | 3.66 | 127.507 | 7.31 | 1183.75 | 6.28 |
| NAF-03_rut3 | 40.783 | 4.79 | 0.800 | 4.36 | 2.715 | 6.11 | 0.025 | 5.32 | 156.079 | 10.63 | 1332.64 | 12.21 |

Appendix B: Eastern Sunda arc geochronology data - rutile

| Analysis ID | 238U/206Pb ratio | 1s% | 207Pb/206Pb ratio | 1s% | 207Pb/235U (calc) ratio | 1s% | 206Pb/238U ratio | 1s% | 206Pb/238U Age (Ma) | 2s% | 207Pb/235U (calc) Age (Ma) | 2s% |
|-------------|------------------|-------|-------------------|-------|-------------------------|-------|------------------|-------|---------------------|-------|----------------------------|--------|
| NAF-03_ru4 | 41.466 | 13.97 | 0.769 | 25.39 | 2.530 | 11.88 | 0.023 | 12.86 | 146.870 | 25.72 | 1280.74 | 23.75 |
| NAF-03_ru5 | 204.668 | 5.44 | 0.718 | 7.48 | 0.485 | 8.84 | 0.005 | 5.81 | 31.516 | 11.62 | 401.45 | 14.97 |
| NAF-03_ru6 | 250.709 | 12.53 | 0.725 | 8.61 | 0.419 | 8.84 | 0.004 | 8.99 | 26.025 | 17.96 | 355.24 | 17.68 |
| NAF-03_ru7 | 270.999 | 10.13 | 0.544 | 9.95 | 0.277 | 7.75 | 0.004 | 10.10 | 23.562 | 20.20 | 15.50 | 248.01 |
| NAF-03_ru8 | 19.323 | 6.13 | 0.646 | 4.30 | 6.085 | 6.35 | 0.052 | 6.73 | 327.651 | 13.46 | 1988.08 | 12.71 |
| NAF-03_ru9 | 549.958 | 10.34 | 0.191 | 19.63 | 0.048 | 17.60 | 0.002 | 21.54 | 11.642 | 43.08 | 47.39 | 35.21 |
| SLG-01_ru1 | 9.499 | 4.14 | 0.821 | 0.95 | 11.854 | 4.33 | 0.105 | 4.27 | 643.741 | 8.53 | 2592.90 | 8.66 |
| SLG-01_ru10 | 9.980 | 2.94 | 0.831 | 0.88 | 11.477 | 3.07 | 0.100 | 3.00 | 615.755 | 5.99 | 2562.75 | 6.15 |
| SLG-01_ru11 | 21.369 | 3.67 | 0.811 | 2.27 | 5.360 | 3.65 | 0.047 | 3.89 | 293.018 | 7.77 | 1878.54 | 7.31 |
| SLG-01_ru13 | 3.388 | 5.18 | 0.848 | 0.67 | 35.558 | 5.65 | 0.298 | 5.57 | 1679.104 | 11.13 | 3654.25 | 11.30 |
| SLG-01_ru14 | 74.801 | 3.33 | 0.699 | 2.47 | 1.286 | 3.13 | 0.013 | 3.34 | 86.075 | 6.67 | 843.94 | 6.26 |
| SLG-01_ru15 | 3.614 | 2.96 | 0.848 | 1.04 | 33.592 | 2.84 | 0.278 | 3.00 | 1581.112 | 6.01 | 3597.84 | 5.68 |
| SLG-01_ru16 | 61.138 | 8.72 | 0.802 | 9.29 | 1.776 | 13.97 | 0.016 | 14.95 | 100.431 | 29.89 | 1036.72 | 27.95 |
| SLG-01_ru17 | 19.564 | 4.35 | 0.847 | 3.49 | 6.551 | 4.00 | 0.052 | 5.06 | 329.549 | 10.11 | 2052.84 | 8.01 |
| SLG-01_ru18 | 9.230 | 4.50 | 0.803 | 1.88 | 12.034 | 4.66 | 0.109 | 4.44 | 666.509 | 8.88 | 2607.02 | 9.33 |
| SLG-01_ru19 | 3.257 | 4.21 | 0.835 | 0.79 | 35.759 | 3.81 | 0.306 | 4.03 | 1719.587 | 8.07 | 3659.84 | 7.61 |
| SLG-01_ru2 | 26.107 | 3.29 | 0.780 | 2.01 | 4.363 | 3.31 | 0.039 | 3.41 | 244.586 | 6.82 | 1705.29 | 6.62 |
| SLG-01_ru20 | 10.718 | 3.06 | 0.803 | 1.18 | 10.354 | 2.94 | 0.093 | 3.09 | 571.488 | 6.18 | 2466.99 | 5.88 |
| SLG-01_ru3 | 1.555 | 9.17 | 0.829 | 1.17 | 77.632 | 7.83 | 0.630 | 8.36 | 3149.259 | 16.73 | 4431.92 | 15.67 |
| SLG-01_ru4 | 12.252 | 3.22 | 0.844 | 1.01 | 9.537 | 2.94 | 0.051 | 3.25 | 504.954 | 6.51 | 2391.09 | 5.87 |
| SLG-01_ru5 | 19.852 | 4.29 | 0.706 | 2.57 | 5.697 | 4.13 | 0.081 | 4.77 | 319.913 | 9.55 | 1930.90 | 8.25 |
| SLG-01_ru6 | 16.280 | 3.44 | 0.824 | 2.03 | 7.150 | 3.44 | 0.061 | 3.49 | 383.487 | 6.97 | 2130.29 | 6.88 |
| SLG-01_ru7 | 82.939 | 5.30 | 0.710 | 4.20 | 1.166 | 6.35 | 0.012 | 5.51 | 784.037 | 11.03 | 784.72 | 12.70 |
| SLG-01_ru8 | 8.356 | 3.58 | 0.827 | 0.87 | 13.794 | 3.27 | 0.121 | 3.64 | 734.698 | 7.27 | 2735.69 | 6.55 |
| SLG-01_ru9 | 8.035 | 3.30 | 0.832 | 1.44 | 14.331 | 3.06 | 0.125 | 3.26 | 758.859 | 6.52 | 2771.90 | 6.12 |
| SPF-06_ru10 | 2347.264 | 9.25 | 0.013 | 67.46 | < DL | 66.95 | 0.000 | 9.18 | 2.743 | 18.35 | < DL | 133.90 |
| SPF-06_ru11 | 1444.628 | 6.08 | 0.419 | 8.98 | 0.041 | 7.64 | 0.001 | 6.48 | 4.469 | 12.97 | 40.41 | 15.28 |
| SPF-06_ru12 | 1194.753 | 10.33 | 0.463 | 16.08 | 0.054 | 12.92 | 0.001 | 10.33 | 5.393 | 20.67 | 53.59 | 25.83 |
| SPF-06_ru13 | 137.526 | 4.71 | 0.762 | 2.12 | 0.758 | 4.33 | 0.007 | 4.23 | 46.695 | 8.47 | 572.95 | 8.66 |
| SPF-06_ru14 | 244.285 | 7.82 | 0.732 | 4.19 | 0.423 | 8.02 | 0.004 | 6.50 | 26.372 | 12.99 | 368.34 | 16.04 |
| SPF-06_ru15 | 932.250 | 14.71 | 0.881 | 20.98 | 0.102 | 15.43 | 0.001 | 15.13 | 6.687 | 30.27 | 98.32 | 30.85 |
| SPF-06_ru16 | 251.187 | 9.83 | 0.708 | 9.60 | 0.410 | 7.71 | 0.004 | 11.19 | 27.123 | 22.37 | 348.94 | 15.41 |
| SPF-06_ru17 | 1153.085 | 8.57 | 0.399 | 11.18 | 0.049 | 9.40 | 0.001 | 8.89 | 5.676 | 17.78 | 49.02 | 18.80 |
| SPF-06_ru18 | 930.539 | 18.56 | 0.614 | 27.66 | 0.087 | 20.69 | 0.001 | 18.77 | 6.679 | 37.54 | 84.88 | 41.38 |
| SPF-06_ru19 | 427.621 | 5.65 | 0.657 | 6.11 | 0.217 | 5.87 | 0.002 | 6.38 | 14.976 | 12.76 | 199.47 | 11.74 |
| SPF-06_ru2 | 2576.909 | 12.67 | 0.040 | 54.58 | < DL | 53.25 | 0.000 | 12.59 | 2.477 | 25.18 | < DL | 106.49 |
| SPF-06_ru20 | 453.451 | 7.22 | 0.611 | 6.28 | 0.190 | 9.52 | 0.002 | 6.80 | 14.172 | 13.61 | 176.35 | 19.04 |
| SPF-06_ru21 | 817.569 | 9.52 | 0.399 | 15.42 | 0.068 | 12.74 | 0.001 | 9.53 | 7.789 | 19.05 | 65.35 | 25.47 |
| SPF-06_ru22 | 419.639 | 8.73 | 0.642 | 13.39 | 0.227 | 9.37 | 0.002 | 10.49 | 16.000 | 20.97 | 207.53 | 18.74 |
| SPF-06_ru23 | 195.073 | 4.53 | 0.758 | 2.70 | 0.539 | 4.73 | 0.005 | 5.19 | 33.058 | 10.38 | 437.73 | 9.47 |
| SPF-06_ru24 | 379.426 | 3.78 | 0.713 | 3.37 | 0.257 | 4.10 | 0.003 | 4.00 | 17.047 | 7.99 | 232.30 | 8.21 |
| SPF-06_ru25 | 43.373 | 8.37 | 0.803 | 4.24 | 2.558 | 6.34 | 0.023 | 7.12 | 149.123 | 14.25 | 1288.63 | 12.68 |
| SPF-06_ru26 | 27.584 | 12.38 | 0.826 | 2.26 | 4.232 | 9.74 | 0.036 | 10.78 | 224.889 | 21.56 | 1680.18 | 19.47 |
| SPF-06_ru27 | 135.656 | 5.01 | 0.784 | 4.85 | 0.804 | 5.29 | 0.007 | 5.07 | 47.393 | 10.14 | 598.92 | 10.58 |
| SPF-06_ru28 | 1583.390 | 8.60 | 0.457 | 13.17 | 0.040 | 10.70 | 0.001 | 8.56 | 4.004 | 17.13 | 39.86 | 21.40 |
| SPF-06_ru29 | 316.272 | 8.27 | 0.889 | 5.64 | 0.301 | 11.15 | 0.003 | 9.38 | 20.547 | 18.75 | 267.36 | 22.30 |
| SPF-06_ru3 | 704.307 | 11.93 | 0.328 | 18.27 | 0.068 | 15.46 | 0.001 | 17.08 | 9.229 | 34.15 | 66.72 | 30.93 |
| SPF-06_ru30 | 46.509 | 3.42 | 0.816 | 2.51 | 2.429 | 3.40 | 0.021 | 3.52 | 137.042 | 7.04 | 1251.12 | 6.79 |
| SPF-06_ru4 | 307.945 | 9.75 | 0.842 | 5.35 | 0.384 | 8.22 | 0.003 | 7.50 | 21.015 | 15.01 | 329.79 | 16.45 |
| SPF-06_ru5 | 1406.328 | 11.01 | 0.479 | 17.02 | 0.048 | 13.55 | 0.001 | 11.12 | 4.566 | 22.24 | 47.45 | 27.10 |

Appendix B: Eastern Sunda arc geochronology data - rutile

| Analysis ID | 238U/206Pb ratio | 1s% | 207Pb/206Pb ratio | 1s% | 207Pb/235U (calc) ratio | 1s% | 206Pb/238U ratio | 1s% | 206Pb/238U Age (Ma) | 2s% | 207Pb/235U (calc) Age (Ma) | 2s% |
|----------------|------------------|-------|-------------------|--------|-------------------------|-------|------------------|-----------|---------------------|---------|----------------------------|-----|
| SF-06_rut6 | 1925.846 | 14.94 | 0.010 | 100.33 | 98.68 | 0.001 | 16.41 | 3.378 | 32.83 | < DL | 199.35 | |
| SF-06_rut7 | 687.793 | 16.04 | 0.633 | 24.00 | 17.89 | 0.001 | 17.65 | 8.866 | 35.30 | 120.42 | 35.77 | |
| SF-06_rut8 | 992.948 | 13.82 | 0.283 | 19.05 | 16.45 | 0.001 | 14.79 | 6.468 | 29.56 | 38.32 | 32.89 | |
| SF-06_rut9 | 334.298 | 7.22 | 0.626 | 7.21 | 7.60 | 0.003 | 7.55 | 19.486 | 15.09 | 238.40 | 15.21 | |
| UG012184_rut1 | 0.167 | 5.43 | 0.821 | 1.56 | 6.82 | 857 | 6.014 | 12557.398 | 9.08 | 6628.17 | 8.77 | |
| UG012184_rut10 | 0.848 | 4.52 | 0.823 | 1.59 | 139.788 | 4.08 | 1.177 | 5014.064 | 8.47 | 5023.36 | 8.16 | |
| UG012184_rut11 | 4.842 | 4.63 | 0.814 | 4.76 | 23.713 | 5.45 | 0.211 | 1234.695 | 10.38 | 3256.69 | 10.90 | |
| UG012184_rut12 | 0.288 | 4.64 | 0.822 | 2.21 | 408.042 | 5.29 | 3.567 | 9791.335 | 9.39 | 6106.33 | 10.58 | |
| UG012184_rut13 | 3.479 | 2.92 | 0.818 | 2.69 | 32.532 | 2.72 | 0.288 | 1630.591 | 6.27 | 3566.53 | 5.44 | |
| UG012184_rut14 | 2.513 | 2.62 | 0.851 | 2.28 | 47.337 | 2.90 | 0.403 | 2183.454 | 5.73 | 3937.87 | 5.81 | |
| UG012184_rut15 | 1.395 | 3.85 | 0.813 | 1.63 | 80.506 | 3.49 | 0.717 | 3483.912 | 6.75 | 4468.38 | 6.98 | |
| UG012184_rut16 | 1.279 | 14.71 | 0.804 | 4.97 | 88.685 | 11.73 | 0.807 | 3815.245 | 24.35 | 4565.47 | 23.45 | |
| UG012184_rut17 | 0.366 | 2.97 | 0.850 | 1.12 | 320.476 | 2.88 | 2.737 | 8497.422 | 5.35 | 5861.73 | 5.77 | |
| UG012184_rut18 | 1.477 | 3.49 | 0.848 | 3.04 | 79.916 | 3.34 | 0.682 | 3351.965 | 7.45 | 4461.00 | 6.68 | |
| UG012184_rut19 | 1.450 | 4.66 | 0.837 | 1.39 | 82.522 | 4.21 | 0.693 | 3394.853 | 8.79 | 4493.18 | 8.42 | |
| UG012184_rut2 | 3.196 | 4.88 | 0.793 | 2.23 | 34.290 | 5.19 | 0.312 | 1750.568 | 11.30 | 3618.41 | 10.39 | |
| UG012184_rut20 | 1.265 | 4.82 | 0.853 | 1.73 | 93.685 | 3.99 | 0.795 | 3770.941 | 8.32 | 4620.55 | 7.98 | |
| UG012184_rut21 | 2.096 | 6.81 | 0.834 | 2.63 | 56.267 | 5.37 | 0.489 | 2564.703 | 12.45 | 4109.99 | 10.74 | |
| UG012184_rut22 | 0.071 | 6.65 | 0.849 | 0.72 | 1735.428 | 6.03 | 14.098 | 17499.184 | 13.48 | 7574.34 | 12.06 | |
| UG012184_rut23 | 0.667 | 8.85 | 0.821 | 1.68 | 176.046 | 5.11 | 1.486 | 5969.864 | 11.62 | 5256.04 | 10.22 | |
| UG012184_rut24 | 0.760 | 4.39 | 0.836 | 0.91 | 158.462 | 5.03 | 1.328 | 5446.920 | 9.32 | 5149.83 | 10.05 | |
| UG012184_rut25 | 0.844 | 3.62 | 0.853 | 2.29 | 143.334 | 3.56 | 1.189 | 5051.287 | 7.25 | 5048.62 | 7.11 | |
| UG012184_rut26 | 1.495 | 7.83 | 0.851 | 1.81 | 82.695 | 8.11 | 0.667 | 3293.846 | 16.85 | 4495.28 | 16.22 | |
| UG012184_rut27 | 4.717 | 3.55 | 0.825 | 1.40 | 24.520 | 3.70 | 0.212 | 1240.086 | 7.26 | 3289.30 | 7.41 | |
| UG012184_rut28 | 0.978 | 5.02 | 0.828 | 1.24 | 118.023 | 5.04 | 1.024 | 4546.490 | 9.67 | 4652.84 | 10.07 | |
| UG012184_rut3 | 2.495 | 3.81 | 0.839 | 2.84 | 48.504 | 3.51 | 0.403 | 2181.138 | 7.76 | 3962.08 | 7.02 | |
| UG012184_rut4 | 2.185 | 4.76 | 0.777 | 2.53 | 49.830 | 4.26 | 0.461 | 2444.695 | 9.56 | 3988.92 | 8.51 | |
| UG012184_rut5 | 1.994 | 3.55 | 0.831 | 1.44 | 60.192 | 3.69 | 0.505 | 2634.942 | 7.30 | 4177.30 | 7.38 | |
| UG012184_rut6 | 3.898 | 5.16 | 0.853 | 4.25 | 30.896 | 5.07 | 0.264 | 1510.480 | 11.54 | 3515.42 | 10.15 | |
| UG012184_rut7 | 2.226 | 3.11 | 0.820 | 1.42 | 52.879 | 2.84 | 0.450 | 2396.877 | 6.23 | 4048.08 | 5.68 | |
| UG012184_rut8 | 1.544 | 3.09 | 0.828 | 1.17 | 76.374 | 3.04 | 0.652 | 3234.643 | 6.23 | 4415.54 | 6.07 | |
| UG012184_rut9 | 0.323 | 8.05 | 0.858 | 0.98 | 371.263 | 7.63 | 3.121 | 9128.548 | 14.94 | 6010.66 | 15.27 | |
| UG012186_rut1 | 2.068 | 5.43 | 0.861 | 1.40 | 59.454 | 4.61 | 0.488 | 2562.625 | 9.97 | 4164.98 | 9.22 | |
| UG012186_rut10 | 21.344 | 7.98 | 0.903 | 5.61 | 6.238 | 9.39 | 0.048 | 302.497 | 17.60 | 2009.77 | 18.78 | |
| UG012186_rut11 | 2.836 | 4.02 | 0.838 | 1.36 | 42.628 | 3.63 | 0.356 | 1983.605 | 7.56 | 3833.78 | 7.27 | |
| UG012186_rut12 | 0.404 | 3.54 | 0.814 | 2.26 | 293.124 | 2.85 | 2.485 | 8047.690 | 7.88 | 5771.44 | 5.71 | |
| UG012186_rut13 | 0.259 | 11.53 | 0.842 | 1.16 | 468.750 | 9.42 | 3.772 | 10073.745 | 19.10 | 6246.84 | 18.85 | |
| UG012186_rut14 | 5.259 | 8.99 | 0.855 | 5.27 | 24.952 | 12.61 | 0.197 | 1161.041 | 19.57 | 3306.33 | 25.22 | |
| UG012186_rut15 | 2.428 | 2.94 | 0.866 | 3.63 | 50.012 | 3.44 | 0.419 | 2256.519 | 5.87 | 3992.55 | 9.01 | |
| UG012186_rut16 | 23.802 | 4.86 | 0.840 | 5.22 | 5.082 | 4.50 | 0.042 | 267.938 | 11.39 | 1833.14 | 9.01 | |
| UG012186_rut17 | 2.024 | 5.76 | 0.834 | 0.82 | 58.849 | 6.31 | 0.499 | 2608.225 | 12.36 | 4154.77 | 12.63 | |
| UG012186_rut18 | 2.017 | 9.75 | 0.846 | 3.44 | 66.064 | 12.48 | 0.521 | 2704.719 | 27.05 | 4270.34 | 24.95 | |
| UG012186_rut19 | 2.847 | 3.86 | 0.844 | 0.95 | 40.875 | 3.61 | 0.354 | 1953.830 | 7.55 | 3792.15 | 7.21 | |
| UG012186_rut2 | 1.448 | 3.71 | 0.839 | 1.27 | 79.278 | 3.73 | 0.694 | 3396.964 | 7.33 | 4452.96 | 7.46 | |
| UG012186_rut20 | 5.150 | 4.82 | 0.832 | 1.55 | 23.297 | 6.50 | 0.198 | 1162.855 | 12.14 | 3239.43 | 13.01 | |
| UG012186_rut21 | 8.986 | 3.41 | 0.799 | 2.28 | 12.717 | 3.35 | 0.112 | 681.792 | 7.10 | 2668.92 | 6.70 | |
| UG012186_rut22 | 9.877 | 5.33 | 0.809 | 2.75 | 11.715 | 5.82 | 0.102 | 626.887 | 11.64 | 2581.88 | 12.11 | |
| UG012186_rut23 | 2.544 | 7.18 | 0.809 | 2.48 | 45.976 | 5.82 | 0.395 | 2144.554 | 14.07 | 3908.86 | 11.63 | |
| UG012186_rut24 | 5.696 | 3.95 | 0.842 | 1.73 | 20.529 | 3.54 | 0.177 | 1052.322 | 7.30 | 3116.60 | 7.08 | |
| UG012186_rut3 | 0.289 | 5.89 | 0.835 | 0.60 | 400.104 | 5.96 | 3.473 | 9656.841 | 11.90 | 6086.43 | 11.93 | |

Appendix B: Eastern Sunda arc geochronology data - rutile

| Analysis ID | 238U/206Pb ratio | 1s% | 207Pb/206Pb ratio | 1s% | 207Pb/235U (calc) ratio | 1s% | 206Pb/238U ratio | 1s% | 206Pb/238U Age (Ma) | 2s% | 207Pb/235U (calc) Age (Ma) | 2s% |
|----------------|------------------|-------|-------------------|-------|-------------------------|-------|------------------|-------|---------------------|-------|----------------------------|--------|
| UG012186_rut4 | 0.379 | 13.33 | 0.822 | 0.87 | 298.125 | 8.81 | 2.675 | 9.68 | 8390.589 | 19.37 | 5788.56 | 19.62 |
| UG012186_rut5 | 1.547 | 5.22 | 0.824 | 1.88 | 73.718 | 5.71 | 0.646 | 5.54 | 3213.370 | 11.08 | 4390.08 | 11.43 |
| UG012186_rut6 | 0.375 | 3.03 | 0.840 | 0.56 | 311.294 | 2.75 | 2.677 | 3.03 | 8393.282 | 6.06 | 5832.30 | 5.50 |
| UG012186_rut7 | 11.007 | 4.78 | 0.833 | 2.20 | 10.619 | 4.57 | 0.092 | 5.02 | 568.909 | 10.03 | 2490.34 | 9.15 |
| UG012186_rut8 | 8.387 | 5.06 | 0.828 | 2.87 | 14.339 | 4.77 | 0.119 | 4.96 | 725.708 | 9.91 | 2772.40 | 9.54 |
| UG012186_rut9 | 3.332 | 9.49 | 0.868 | 2.46 | 38.479 | 7.69 | 0.310 | 7.77 | 1740.686 | 15.54 | 3732.31 | 15.39 |
| UG012190_rut1 | 4.340 | 31.85 | 0.820 | 6.89 | 26.457 | 9.44 | 0.227 | 9.88 | 1316.871 | 19.76 | 3363.58 | 18.88 |
| UG012190_rut10 | 16.854 | 5.66 | 0.828 | 5.02 | 7.070 | 5.74 | 0.059 | 5.75 | 371.797 | 11.50 | 2120.25 | 11.49 |
| UG012190_rut11 | 39.957 | 14.77 | 0.867 | 15.75 | 2.800 | 13.39 | 0.027 | 22.53 | 168.862 | 45.06 | 1355.59 | 26.77 |
| UG012190_rut12 | 72.896 | 8.01 | 0.765 | 10.27 | 1.460 | 7.72 | 0.014 | 7.88 | 89.283 | 15.76 | 913.91 | 15.45 |
| UG012190_rut13 | 13.720 | 5.00 | 0.829 | 5.99 | 8.620 | 4.45 | 0.073 | 5.92 | 453.431 | 11.85 | 2286.71 | 8.91 |
| UG012190_rut14 | 11.966 | 4.63 | 0.824 | 4.58 | 9.510 | 4.79 | 0.084 | 5.04 | 520.263 | 10.08 | 2388.50 | 9.58 |
| UG012190_rut15 | 47.477 | 7.11 | 0.779 | 6.33 | 2.263 | 5.91 | 0.021 | 5.94 | 134.487 | 11.88 | 1200.75 | 11.82 |
| UG012190_rut16 | 6.863 | 5.00 | 0.803 | 2.11 | 16.274 | 4.32 | 0.146 | 4.25 | 878.878 | 8.50 | 2893.03 | 8.64 |
| UG012190_rut17 | 3.994 | 8.29 | 0.849 | 2.99 | 29.449 | 7.45 | 0.250 | 7.12 | 1437.907 | 14.25 | 3468.62 | 14.89 |
| UG012190_rut18 | 9.895 | 6.11 | 0.809 | 2.94 | 11.361 | 6.61 | 0.101 | 6.46 | 621.889 | 12.93 | 2563.20 | 13.22 |
| UG012190_rut19 | 4.378 | 6.91 | 0.829 | 2.03 | 26.012 | 8.43 | 0.229 | 8.13 | 1328.783 | 16.26 | 3346.98 | 16.87 |
| UG012190_rut20 | 3.210 | 4.62 | 0.801 | 1.42 | 34.633 | 4.27 | 0.312 | 4.65 | 1752.173 | 9.30 | 3628.24 | 8.54 |
| UG012190_rut21 | 0.506 | 3.72 | 0.843 | 0.72 | 228.205 | 3.25 | 1.970 | 3.90 | 7018.181 | 7.18 | 5518.22 | 6.49 |
| UG012190_rut22 | 14.956 | 4.37 | 0.831 | 2.73 | 7.636 | 4.59 | 0.067 | 4.59 | 416.412 | 9.79 | 2189.10 | 9.18 |
| UG012190_rut23 | 11.947 | 7.94 | 0.809 | 3.08 | 9.111 | 6.61 | 0.083 | 6.88 | 516.254 | 13.76 | 2349.22 | 13.23 |
| UG012190_rut24 | 4.701 | 6.83 | 0.810 | 2.85 | 23.435 | 7.57 | 0.209 | 6.81 | 1223.600 | 13.63 | 3245.18 | 15.14 |
| UG012190_rut25 | 9.446 | 6.00 | 0.848 | 3.87 | 12.309 | 5.52 | 0.105 | 5.57 | 645.688 | 11.14 | 2628.26 | 11.05 |
| UG012190_rut26 | 9.237 | 4.41 | 0.838 | 3.16 | 12.792 | 4.28 | 0.109 | 4.43 | 666.325 | 8.87 | 2664.42 | 8.56 |
| UG012190_rut27 | 28.122 | 12.34 | 0.687 | 14.16 | 3.535 | 8.19 | 0.036 | 9.96 | 225.093 | 19.91 | 1535.05 | 16.38 |
| UG012190_rut28 | 32.094 | 8.18 | 0.841 | 8.75 | 3.702 | 10.07 | 0.030 | 10.67 | 191.760 | 21.34 | 1571.79 | 20.14 |
| UG012190_rut29 | 184.060 | 22.56 | 0.660 | 35.78 | 0.529 | 26.28 | 0.005 | 24.84 | 34.913 | 49.68 | 431.48 | 52.57 |
| UG012190_rut30 | 713.328 | 28.38 | 0.208 | 61.19 | 0.529 | 54.21 | 0.001 | 28.86 | 8.879 | 57.72 | < DL | 108.41 |
| UG012190_rut31 | 18.186 | 9.13 | 0.791 | 7.66 | 5.977 | 7.33 | 0.056 | 8.25 | 351.930 | 16.50 | 1972.50 | 14.65 |
| UG012190_rut32 | 17.716 | 6.00 | 0.762 | 3.63 | 5.907 | 6.48 | 0.057 | 7.11 | 354.683 | 14.23 | 1962.30 | 12.95 |
| UG012190_rut33 | 5.645 | 5.15 | 0.862 | 1.76 | 21.103 | 4.85 | 0.176 | 4.97 | 1047.729 | 9.95 | 3143.33 | 9.69 |
| UG012190_rut4 | 5.221 | 6.45 | 0.805 | 2.15 | 22.010 | 7.40 | 0.190 | 7.47 | 1121.532 | 14.94 | 3184.18 | 14.80 |
| UG012190_rut5 | 12.255 | 4.34 | 0.800 | 4.79 | 9.183 | 4.82 | 0.082 | 4.39 | 506.466 | 8.77 | 2356.41 | 9.65 |
| UG012190_rut6 | 4.978 | 5.53 | 0.817 | 2.10 | 22.772 | 6.47 | 0.201 | 5.91 | 1178.802 | 11.82 | 3217.26 | 12.95 |
| UG012190_rut7 | 31.803 | 34.31 | 0.764 | 4.64 | 3.284 | 4.20 | 0.031 | 9.38 | 199.296 | 18.75 | 1477.36 | 8.41 |
| UG012190_rut8 | 7.549 | 3.14 | 0.829 | 1.45 | 15.074 | 2.81 | 0.132 | 3.24 | 799.488 | 6.47 | 2819.92 | 5.62 |
| UG012193_rut1 | 10.531 | 10.06 | 0.852 | 5.66 | 11.557 | 9.38 | 0.093 | 9.57 | 573.826 | 19.14 | 2569.20 | 18.76 |
| UG012193_rut10 | 1.671 | 4.89 | 0.877 | 4.16 | 77.040 | 4.64 | 0.597 | 4.85 | 3015.983 | 9.70 | 4424.25 | 9.29 |
| UG012193_rut11 | 11.216 | 5.47 | 0.769 | 3.69 | 9.781 | 6.04 | 0.089 | 5.87 | 549.576 | 11.74 | 2414.41 | 12.08 |
| UG012193_rut12 | 0.130 | 5.48 | 0.840 | 0.49 | 943.277 | 5.51 | 7.829 | 5.48 | 14040.188 | 10.95 | 6555.80 | 11.03 |
| UG012193_rut13 | 28.721 | 7.49 | 0.817 | 6.99 | 4.151 | 6.83 | 0.034 | 8.65 | 216.673 | 17.30 | 1664.41 | 13.66 |
| UG012193_rut14 | 15.616 | 8.47 | 0.795 | 6.93 | 7.203 | 5.97 | 0.063 | 9.16 | 395.693 | 18.33 | 2136.86 | 11.93 |
| UG012193_rut15 | 0.512 | 3.85 | 0.833 | 0.93 | 229.664 | 3.40 | 1.963 | 3.93 | 7002.618 | 7.66 | 5524.66 | 6.79 |
| UG012193_rut16 | 7.428 | 13.77 | 0.881 | 5.04 | 17.807 | 11.21 | 0.136 | 12.86 | 823.019 | 25.72 | 2979.37 | 22.41 |
| UG012193_rut17 | 1.513 | 3.49 | 0.848 | 1.99 | 78.658 | 3.14 | 0.661 | 3.57 | 3271.200 | 7.14 | 4445.09 | 6.29 |
| UG012193_rut18 | 3.262 | 4.03 | 0.832 | 2.13 | 35.839 | 3.81 | 0.307 | 3.98 | 1723.834 | 7.96 | 3662.03 | 7.61 |
| UG012193_rut2 | 10.443 | 5.00 | 0.843 | 4.81 | 12.275 | 5.39 | 0.098 | 5.48 | 603.803 | 10.97 | 2625.66 | 10.78 |
| UG012193_rut3 | 14.961 | 5.60 | 0.848 | 3.98 | 7.814 | 5.17 | 0.067 | 5.68 | 417.784 | 11.37 | 2209.80 | 10.34 |

Appendix B: Eastern Sunda arc geochronology data - rutile

| Analysis ID | 238U/206Pb ratio | 1s% | 207Pb/206Pb ratio | 1s% | 207Pb/235U (calc) ratio | 1s% | 206Pb/238U ratio | 1s% | 206Pb/238U Age (Ma) | 2s% | 207Pb/235U (calc) Age (Ma) | 2s% |
|----------------|------------------|-------|-------------------|-------|-------------------------|--------|------------------|-----------|---------------------|---------|----------------------------|-----|
| UG012193_rui4 | 2.959 | 4.89 | 0.842 | 2.54 | 41.121 | 0.335 | 5.18 | 1862.345 | 10.35 | 3798.08 | 9.77 | |
| UG012193_rui5 | 8.843 | 5.86 | 0.863 | 3.49 | 13.894 | 0.112 | 4.89 | 683.789 | 11.92 | 2742.47 | 12.54 | |
| UG012193_rui6 | 2.045 | 8.69 | 0.831 | 3.17 | 57.931 | 0.484 | 6.53 | 2544.934 | 13.07 | 4199.07 | 13.51 | |
| UG012193_rui7 | 5.729 | 4.13 | 0.830 | 1.66 | 20.581 | 0.176 | 4.25 | 1046.320 | 8.50 | 3119.07 | 8.06 | |
| UG012193_rui8 | 4.101 | 6.57 | 0.816 | 2.22 | 28.564 | 0.247 | 5.02 | 1424.661 | 10.05 | 3438.64 | 9.77 | |
| UG012193_rui9 | 0.940 | 3.80 | 0.826 | 2.20 | 123.407 | 1.068 | 3.80 | 4682.419 | 7.61 | 4897.76 | 7.28 | |
| UG012195_rui1 | 0.008 | 9.32 | 0.836 | 0.99 | 15549.382 | 9.327 | 133.932 | 31618.104 | 18.75 | 9800.32 | 18.53 | |
| UG012195_rui10 | 11.294 | 7.26 | 0.896 | 8.46 | 11.001 | 0.089 | 7.74 | 549.322 | 15.48 | 2523.26 | 13.98 | |
| UG012195_rui11 | 1.388 | 4.92 | 0.839 | 1.26 | 86.978 | 0.725 | 4.61 | 3513.119 | 9.22 | 4534.35 | 8.99 | |
| UG012195_rui12 | 0.228 | 6.94 | 0.835 | 1.24 | 504.971 | 4.365 | 5.00 | 10828.865 | 10.00 | 6322.26 | 9.86 | |
| UG012195_rui13 | 8.068 | 10.46 | 0.757 | 13.67 | 13.047 | 0.126 | 10.59 | 764.142 | 21.19 | 2683.08 | 21.19 | |
| UG012195_rui14 | 0.288 | 3.71 | 0.840 | 0.80 | 410.331 | 3.464 | 3.54 | 9644.538 | 7.08 | 6112.00 | 6.37 | |
| UG012195_rui15 | 5.179 | 17.00 | 1.139 | 19.53 | 30.875 | 0.192 | 16.79 | 1132.565 | 33.58 | 3515.09 | 29.08 | |
| UG012195_rui2 | 0.349 | 8.97 | 0.847 | 7.63 | 340.616 | 10.66 | 8.31 | 8778.172 | 16.62 | 5923.43 | 21.31 | |
| UG012195_rui3 | 3.407 | 5.47 | 0.796 | 4.33 | 32.845 | 0.300 | 5.96 | 1692.589 | 11.93 | 3575.98 | 9.39 | |
| UG012195_rui4 | 21.568 | 22.55 | 0.612 | 17.50 | 3.868 | 0.045 | 12.19 | 284.629 | 24.37 | 1607.03 | 26.71 | |
| UG012195_rui5 | 281.660 | 25.20 | 0.997 | 33.49 | < DL | < DL | < DL | < DL | < DL | < DL | < DL | |
| UG012195_rui6 | 0.728 | 8.14 | 0.850 | 2.58 | 168.302 | 1.358 | 8.70 | 5530.280 | 18.54 | 5210.63 | 17.40 | |
| UG012195_rui7 | 4.600 | 4.68 | 0.865 | 3.47 | 25.404 | 0.220 | 4.93 | 1283.068 | 9.87 | 3323.86 | 8.45 | |
| UG012195_rui8 | 3.663 | 8.23 | 0.860 | 3.35 | 37.572 | 0.290 | 7.52 | 1642.455 | 20.04 | 3708.71 | 15.05 | |
| UG012195_rui9 | 0.066 | 13.93 | 0.850 | 1.12 | 1855.740 | 15.045 | 9.31 | 17891.476 | 18.63 | 7642.36 | 19.20 | |
| UG012197_rui1 | 0.021 | 4.99 | 0.836 | 0.76 | 5482.127 | 4.45 | 4.74 | 47.344 | 8.63 | 8741.87 | 8.90 | |
| UG012197_rui10 | 0.132 | 3.27 | 0.844 | 1.22 | 892.409 | 3.33 | 7.667 | 13921.353 | 6.49 | 6899.57 | 6.67 | |
| UG012197_rui2 | 0.132 | 3.35 | 0.839 | 1.45 | 878.329 | 3.16 | 7.569 | 13847.711 | 6.13 | 6883.44 | 6.32 | |
| UG012197_rui3 | 0.345 | 3.59 | 0.848 | 0.93 | 347.325 | 3.41 | 2.914 | 8796.820 | 6.98 | 5943.18 | 6.82 | |
| UG012197_rui4 | 0.343 | 4.90 | 0.843 | 1.07 | 340.165 | 2.932 | 4.45 | 8825.815 | 8.90 | 5922.09 | 8.92 | |
| UG012197_rui5 | 104.204 | 4.98 | 0.777 | 4.80 | 1.033 | 0.010 | 5.30 | 61.888 | 10.59 | 720.37 | 9.48 | |
| UG012197_rui6 | 0.924 | 4.61 | 0.805 | 2.35 | 125.490 | 1.095 | 4.46 | 4768.586 | 8.91 | 4914.62 | 8.99 | |
| UG012197_rui7 | 0.079 | 7.82 | 0.843 | 0.65 | 1470.264 | 12.684 | 6.90 | 16865.084 | 13.79 | 7406.08 | 13.86 | |
| UG012197_rui8 | 960.613 | 7.23 | 0.901 | 11.06 | 0.073 | 0.001 | 7.15 | 6.844 | 14.30 | 71.99 | 17.43 | |
| UG012198_rui9 | 0.323 | 6.49 | 0.841 | 3.25 | 361.134 | 3.117 | 6.36 | 9122.654 | 12.72 | 5982.65 | 13.69 | |
| UG012198_rui10 | 8.077 | 3.68 | 0.840 | 2.56 | 14.867 | 0.125 | 4.20 | 759.342 | 8.40 | 2806.78 | 7.03 | |
| UG012198_rui11 | 25.472 | 3.74 | 0.780 | 3.12 | 4.396 | 0.139 | 6.99 | 840.423 | 13.99 | 2873.90 | 12.76 | |
| UG012198_rui12 | 323.078 | 5.57 | 0.838 | 5.95 | 0.273 | 0.003 | 5.63 | 19.904 | 11.26 | 244.82 | 11.87 | |
| UG012198_rui13 | 37.614 | 8.07 | 0.796 | 3.21 | 2.958 | 0.026 | 10.64 | 164.259 | 21.27 | 1386.79 | 20.23 | |
| UG012198_rui14 | 26.669 | 5.53 | 0.829 | 9.90 | 4.395 | 0.038 | 6.43 | 243.261 | 12.87 | 1711.32 | 13.34 | |
| UG012198_rui15 | 9.366 | 4.58 | 0.831 | 2.80 | 12.442 | 0.107 | 4.78 | 655.776 | 9.56 | 2638.38 | 9.22 | |
| UG012198_rui16 | 2.283 | 3.03 | 0.827 | 2.63 | 50.255 | 0.441 | 3.01 | 2355.943 | 6.01 | 3997.37 | 5.73 | |
| UG012198_rui17 | 10.695 | 12.65 | 0.826 | 3.71 | 10.733 | 0.094 | 10.66 | 579.879 | 21.33 | 2500.32 | 22.32 | |
| UG012198_rui18 | 15.170 | 3.51 | 0.839 | 0.97 | 7.575 | 0.066 | 3.49 | 410.059 | 6.99 | 2181.90 | 6.33 | |
| UG012198_rui19 | 120.211 | 25.65 | 0.843 | 11.83 | 0.743 | 0.008 | 31.05 | 48.231 | 62.11 | 563.92 | 61.08 | |
| UG012198_rui2 | 18.858 | 4.00 | 0.847 | 2.67 | 6.294 | 0.053 | 4.19 | 333.257 | 8.39 | 2017.66 | 7.44 | |
| UG012198_rui20 | 361.784 | 14.10 | 0.866 | 12.80 | 0.216 | 0.003 | 8.86 | 18.150 | 17.72 | 198.80 | 20.02 | |
| UG012198_rui21 | 134.543 | 8.39 | 0.756 | 9.74 | 0.829 | 0.008 | 8.63 | 48.487 | 17.27 | 612.82 | 16.09 | |
| UG012198_rui22 | 42.405 | 5.45 | 0.832 | 3.86 | 2.878 | 0.024 | 5.68 | 150.591 | 11.36 | 1376.27 | 9.91 | |
| UG012198_rui23 | 13.626 | 3.43 | 0.817 | 1.84 | 8.221 | 0.074 | 3.52 | 458.013 | 7.05 | 2255.68 | 6.55 | |
| UG012198_rui24 | 8.529 | 3.41 | 0.864 | 2.10 | 13.906 | 0.118 | 3.64 | 720.744 | 7.28 | 2743.33 | 7.16 | |
| UG012198_rui25 | 4.546 | 3.93 | 0.824 | 1.79 | 25.224 | 0.221 | 4.00 | 1287.231 | 8.00 | 3316.92 | 8.41 | |
| UG012198_rui26 | 22.281 | 7.53 | 0.838 | 2.70 | 5.264 | 0.045 | 8.68 | 283.735 | 17.36 | 1863.10 | 17.25 | |

Appendix B: Eastern Sunda arc geochronology data - rutile

| Analysis ID | 238U/206Pb ratio | 1s% | 207Pb/206Pb ratio | 1s% | 207Pb/235U (calc) ratio | 1s% | 206Pb/238U ratio | 1s% | 206Pb/238U Age (Ma) | 2s% | 207Pb/235U (calc) Age (Ma) | 2s% |
|----------------|------------------|-------|-------------------|-------|-------------------------|-------|------------------|-------|---------------------|-------|----------------------------|--------|
| UG012198_rui27 | 0.110 | 7.05 | 0.842 | 0.77 | 1089.443 | 7.58 | 9.231 | 7.42 | 14990.387 | 14.83 | 7101.93 | 15.16 |
| UG012198_rui28 | 1.850 | 4.02 | 0.831 | 1.77 | 65.287 | 3.87 | 0.541 | 4.13 | 2786.344 | 8.27 | 4258.51 | 7.74 |
| UG012198_rui29 | 11.237 | 4.95 | 0.752 | 3.83 | 9.559 | 4.31 | 0.089 | 5.40 | 549.281 | 10.79 | 2393.25 | 8.62 |
| UG012198_rui3 | 3.189 | 4.91 | 0.632 | 2.37 | 38.098 | 4.74 | 0.316 | 4.93 | 1770.326 | 9.87 | 3722.48 | 9.49 |
| UG012198_rui30 | 24.221 | 4.97 | 0.605 | 3.28 | 4.715 | 5.12 | 0.042 | 5.21 | 262.364 | 10.42 | 1769.85 | 10.24 |
| UG012198_rui4 | 1.974 | 5.92 | 0.796 | 2.55 | 57.897 | 7.87 | 0.526 | 8.35 | 2724.433 | 16.70 | 4198.49 | 15.74 |
| UG012198_rui5 | 81.746 | 4.63 | 0.786 | 4.31 | 1.347 | 4.78 | 0.012 | 5.79 | 77.430 | 11.59 | 866.44 | 9.55 |
| UG012198_rui6 | 8.419 | 4.57 | 0.685 | 2.77 | 13.655 | 4.49 | 0.120 | 5.05 | 730.107 | 10.10 | 2726.11 | 8.99 |
| UG012198_rui7 | 19.645 | 5.29 | 0.785 | 3.58 | 5.543 | 5.46 | 0.051 | 5.59 | 320.896 | 11.18 | 1907.23 | 10.91 |
| UG012198_rui8 | 5.606 | 4.66 | 0.629 | 1.91 | 20.984 | 4.31 | 0.178 | 4.48 | 1055.782 | 8.97 | 3137.84 | 8.61 |
| UG012198_rui9 | 46.868 | 6.26 | 0.802 | 5.42 | 2.347 | 6.89 | 0.021 | 6.98 | 135.687 | 13.96 | 1226.64 | 13.77 |
| BHF-01_rui1 | 1064.995 | 10.25 | 0.389 | 16.35 | 0.050 | 13.73 | 0.001 | 10.21 | 6.054 | 20.41 | 49.86 | 27.47 |
| BHF-01_rui4 | 980.102 | 21.36 | 0.040 | 96.44 | 0.026 | 94.03 | 0.001 | 21.92 | 6.700 | 43.83 | < DL | 188.07 |
| BHF-01_rui5 | 1327.172 | 11.10 | 0.248 | 21.11 | 0.028 | 18.63 | 0.001 | 11.00 | 4.906 | 21.99 | 25.87 | 37.26 |
| BHF-01_rui6 | 1574.597 | 14.49 | 0.202 | 30.44 | 0.018 | 27.24 | 0.001 | 14.50 | 4.125 | 28.99 | 17.96 | 54.48 |
| BHF-01_rui8 | 360.427 | 9.53 | 0.733 | 12.41 | 0.290 | 9.52 | 0.003 | 9.79 | 17.708 | 19.58 | 258.63 | 19.05 |
| BHF-01_rui11 | 1499.165 | 10.29 | 0.282 | 18.51 | 0.026 | 16.17 | 0.001 | 10.32 | 4.287 | 20.64 | 32.34 | 25.91 |
| BHF-01_rui12 | 1868.051 | 12.79 | 0.040 | 47.08 | 0.001 | 45.59 | 0.001 | 12.76 | 3.493 | 25.53 | < DL | 91.18 |
| BHF-01_rui13 | 893.076 | 9.85 | 0.330 | 16.65 | 0.051 | 14.31 | 0.001 | 9.88 | 7.176 | 19.77 | 50.31 | 28.63 |
| BHF-01_rui14 | 389.721 | 37.93 | 0.484 | 14.92 | 0.171 | 12.17 | 0.003 | 9.95 | 16.811 | 19.90 | 160.48 | 24.34 |
| BHF-01_rui15 | 1331.385 | 36.29 | 0.265 | 75.76 | 0.285 | 64.57 | 0.001 | 33.32 | 5.992 | 66.65 | < DL | 129.15 |
| BHF-01_rui16 | 1702.063 | 9.30 | 0.283 | 16.46 | 0.023 | 14.47 | 0.001 | 9.32 | 3.780 | 18.64 | 22.94 | 28.93 |
| BHF-01_rui17 | 210.682 | 8.23 | 0.903 | 10.06 | 0.594 | 9.83 | 0.005 | 8.21 | 30.299 | 16.42 | 473.46 | 19.65 |
| BHF-01_rui18 | 1842.031 | 16.29 | 0.023 | 93.29 | 0.017 | 91.98 | 0.001 | 16.39 | 3.464 | 32.77 | < DL | 183.96 |
| BHF-01_rui19 | 1524.552 | 11.17 | 0.192 | 23.56 | 0.017 | 21.31 | 0.001 | 11.26 | 4.172 | 22.52 | 17.36 | 42.62 |
| BHF-01_rui20 | 1529.047 | 10.32 | 0.036 | 45.64 | 0.036 | 44.73 | 0.001 | 10.36 | 4.184 | 20.73 | < DL | 89.46 |
| BHF-01_rui21 | 81.690 | 9.57 | 0.749 | 11.06 | 1.257 | 10.68 | 0.012 | 10.68 | 77.627 | 21.37 | 826.38 | 21.36 |
| BHF-01_rui22 | 213.851 | 26.91 | 0.645 | 14.41 | 0.415 | 11.17 | 0.005 | 10.49 | 29.833 | 20.97 | 352.28 | 22.35 |
| BHF-01_rui23 | 1066.624 | 15.17 | 0.363 | 25.73 | 0.047 | 21.41 | 0.001 | 14.73 | 6.201 | 29.47 | 46.33 | 42.82 |
| BHF-01_rui24 | 1719.284 | 12.00 | 0.262 | 22.50 | 0.021 | 19.69 | 0.001 | 12.03 | 3.787 | 24.05 | 21.17 | 39.38 |
| BHF-01_rui25 | 2212.399 | 13.37 | 0.064 | 45.99 | 0.064 | 44.28 | 0.000 | 13.42 | 2.987 | 26.85 | < DL | 88.56 |
| BHF-01_rui26 | 1870.041 | 12.17 | 0.271 | 22.59 | 0.020 | 19.67 | 0.001 | 12.18 | 3.438 | 24.36 | 20.04 | 39.35 |
| BHF-01_rui27 | 978.110 | 11.63 | 0.198 | 24.71 | 0.028 | 22.26 | 0.001 | 11.81 | 6.565 | 23.62 | 27.62 | 44.52 |
| BHF-01_rui28 | 46.185 | 5.45 | 0.851 | 3.92 | 2.548 | 5.96 | 0.022 | 6.23 | 138.924 | 12.47 | 1285.85 | 11.92 |
| BHF-01_rui29 | 778.499 | 11.63 | 0.552 | 17.08 | 0.099 | 13.44 | 0.001 | 11.69 | 8.590 | 23.37 | 95.98 | 26.88 |
| BHF-01_rui30 | 840.429 | 10.57 | 0.468 | 16.02 | 0.077 | 13.06 | 0.001 | 10.55 | 7.710 | 21.09 | 75.32 | 26.13 |
| BHF-01_rui31 | 49.500 | 7.90 | 0.762 | 3.20 | 2.122 | 6.06 | 0.020 | 6.07 | 128.994 | 12.14 | 1155.94 | 12.11 |
| BHF-01_rui32 | 907.946 | 11.12 | 0.427 | 17.50 | 0.064 | 14.41 | 0.001 | 11.13 | 7.044 | 22.26 | 63.24 | 28.82 |
| BHF-01_rui33 | 1486.006 | 22.04 | 0.147 | 55.09 | 0.001 | 50.50 | 0.001 | 22.94 | 4.038 | 45.89 | < DL | 100.99 |
| BHF-01_rui34 | 1533.146 | 12.60 | 0.208 | 25.96 | 0.001 | 23.24 | 0.001 | 12.61 | 4.163 | 25.22 | < DL | 46.48 |
| BHF-01_rui35 | 1377.442 | 15.01 | 0.255 | 28.87 | 0.001 | 25.18 | 0.001 | 14.96 | 4.692 | 29.93 | 50.37 | 50.37 |
| BHF-01_rui36 | 2045.669 | 13.56 | 0.194 | 28.85 | 0.000 | 25.96 | 0.000 | 13.57 | 3.172 | 27.14 | < DL | 51.92 |
| BHF-01_rui37 | 1103.589 | 22.56 | 0.345 | 41.24 | 0.001 | 34.31 | 0.001 | 23.26 | 5.562 | 46.52 | < DL | 68.63 |
| BHF-01_rui38 | 787.313 | 12.63 | 0.451 | 18.86 | 0.079 | 16.09 | 0.001 | 12.72 | 8.127 | 25.44 | 77.05 | 32.17 |
| BHF-01_rui39 | 721.646 | 11.85 | 0.396 | 19.62 | 0.074 | 16.26 | 0.001 | 11.94 | 8.826 | 23.88 | 72.90 | 32.52 |
| BHF-01_rui40 | 86.756 | 4.77 | 0.831 | 4.37 | 1.340 | 4.69 | 0.012 | 5.40 | 75.157 | 10.80 | 863.44 | 9.39 |
| BHF-04_rui3 | 114.480 | 5.47 | 0.850 | 5.75 | 1.025 | 6.32 | 0.009 | 5.77 | 56.258 | 11.55 | 716.33 | 12.64 |
| BHF-04_rui4 | 17.233 | 6.28 | 0.838 | 2.72 | 6.807 | 6.10 | 0.058 | 6.31 | 386.215 | 12.61 | 2086.67 | 12.21 |
| BHF-04_rui5 | 1018.010 | 8.97 | 0.377 | 13.17 | 0.051 | 11.31 | 0.001 | 8.41 | 6.340 | 16.83 | 50.74 | 22.63 |

Appendix B: Eastern Sunda arc geochronology data - rutile

| Analysis ID | 238U/206Pb ratio | 1s% | 207Pb/206Pb ratio | 1s% | 207Pb/235U (calc) ratio | 1s% | 206Pb/238U ratio | 1s% | 206Pb/238U Age (Ma) | 2s% | 207Pb/235U (calc) Age (Ma) | 2s% |
|--------------|------------------|-------|-------------------|-------|-------------------------|-------|------------------|-------|---------------------|-------|----------------------------|-------|
| BHF-04 rut6 | 155.790 | 6.73 | 0.723 | 6.60 | 0.647 | 7.39 | 0.007 | 6.58 | 41.915 | 13.16 | 506.49 | 14.77 |
| BHF-04 rut8 | 41.895 | 4.15 | 0.638 | 1.81 | 2.754 | 4.48 | 0.024 | 4.32 | 152.304 | 8.65 | 1343.24 | 8.96 |
| BHF-04 rut9 | 10.714 | 4.02 | 0.789 | 2.69 | 10.187 | 4.18 | 0.094 | 4.25 | 578.169 | 8.50 | 2451.93 | 8.36 |
| BHF-04 rut10 | 85.499 | 13.65 | 0.644 | 19.69 | 1.054 | 10.93 | 0.042 | 14.43 | 77.625 | 28.85 | 730.99 | 21.85 |
| BHF-04 rut11 | 562.221 | 15.70 | 0.440 | 22.65 | 0.108 | 18.33 | 0.002 | 14.23 | 11.516 | 28.46 | 104.18 | 36.66 |
| BHF-04 rut12 | 681.533 | 17.18 | 0.425 | 14.63 | 0.088 | 12.21 | 0.001 | 9.50 | 9.433 | 19.00 | 83.59 | 24.43 |
| BHF-04 rut13 | 481.276 | 9.47 | 0.539 | 11.58 | 0.155 | 9.52 | 0.002 | 9.50 | 13.567 | 19.00 | 146.53 | 19.05 |
| BHF-04 rut14 | 87.072 | 10.16 | 0.775 | 6.44 | 1.217 | 6.43 | 0.011 | 6.41 | 73.224 | 12.82 | 808.49 | 12.86 |
| BHF-04 rut15 | 47.343 | 4.48 | 0.792 | 2.309 | 2.309 | 4.76 | 0.021 | 4.66 | 135.106 | 9.33 | 1215.07 | 9.52 |
| BHF-04 rut16 | 58.504 | 5.14 | 0.731 | 1.728 | 1.728 | 5.39 | 0.017 | 5.54 | 110.168 | 11.08 | 1019.00 | 10.78 |
| BHF-04 rut17 | 1430.327 | 39.76 | 0.040 | 44.91 | 0.253 | 21.54 | 0.001 | 35.61 | 5.403 | 71.22 | 229.05 | 43.08 |
| BHF-04 rut18 | 36.852 | 6.65 | 0.763 | 5.53 | 2.892 | 7.10 | 0.028 | 6.89 | 175.787 | 13.77 | 1379.77 | 14.19 |
| BHF-04 rut19 | 223.327 | 5.99 | 0.694 | 8.18 | 0.433 | 6.38 | 0.004 | 6.52 | 28.731 | 13.04 | 365.13 | 12.76 |
| BHF-04 rut20 | 31.026 | 6.20 | 0.841 | 3.79 | 3.734 | 6.63 | 0.032 | 5.75 | 204.189 | 11.49 | 1578.71 | 13.27 |
| BHF-04 rut21 | 948.392 | 18.78 | 0.367 | 32.50 | 0.052 | 26.95 | 0.001 | 19.19 | 6.529 | 38.37 | 51.59 | 63.90 |
| BHF-04 rut22 | 38.989 | 4.76 | 0.795 | 4.42 | 2.836 | 5.18 | 0.026 | 5.70 | 165.252 | 11.40 | 1365.22 | 10.36 |
| JEM-02 rut1 | 366.559 | 6.20 | 0.468 | 8.21 | 0.178 | 7.93 | 0.003 | 6.38 | 17.751 | 12.76 | 166.58 | 15.87 |
| JEM-02 rut1 | 892.461 | 4.75 | 0.044 | 13.80 | 0.007 | 13.88 | 0.001 | 4.83 | 7.248 | 9.67 | 6.86 | 27.75 |
| PCT-01 rut2 | 0.063 | 6.26 | 0.863 | 0.68 | 1888.460 | 8.12 | 15.994 | 7.82 | 18261.783 | 15.64 | 7680.10 | 16.25 |
| PCT-01 rut4 | 1.541 | 4.00 | 0.635 | 1.62 | 75.509 | 4.18 | 0.660 | 4.12 | 3265.445 | 8.25 | 4404.13 | 8.35 |
| PCT-01 rut5 | 13.354 | 9.38 | 0.763 | 6.26 | 7.646 | 11.78 | 0.072 | 10.76 | 449.157 | 21.52 | 2190.27 | 23.56 |
| PCT-01 rut6 | 0.325 | 4.42 | 0.868 | 0.55 | 366.285 | 4.63 | 3.089 | 4.46 | 9078.834 | 8.92 | 5996.94 | 9.25 |
| PCT-01 rut7 | 0.534 | 3.87 | 0.845 | 0.64 | 219.903 | 3.84 | 1.885 | 3.87 | 6830.395 | 7.75 | 5480.76 | 7.67 |
| PCT-01 rut8 | 0.008 | 31.64 | 0.658 | 1.21 | 14579.326 | 21.23 | 122.741 | 22.33 | 31059.952 | 44.65 | 9734.91 | 42.46 |
| PCT-02 rut9 | 1.162 | 4.37 | 0.853 | 0.92 | 101.678 | 4.44 | 0.863 | 4.41 | 4011.901 | 8.82 | 4702.85 | 8.88 |
| PCT-02 rut2 | 0.592 | 3.72 | 0.857 | 0.68 | 202.957 | 3.78 | 1.704 | 3.78 | 6411.543 | 7.55 | 5399.71 | 7.56 |
| PCT-02 rut3 | 0.430 | 3.56 | 0.852 | 0.42 | 275.101 | 3.62 | 2.342 | 3.60 | 7778.359 | 7.20 | 5707.23 | 7.25 |
| PCT-02 rut4 | 0.458 | 3.79 | 0.845 | 0.73 | 256.899 | 3.71 | 2.204 | 3.77 | 7505.701 | 7.55 | 5637.99 | 7.41 |
| PCT-02 rut5 | 0.505 | 3.64 | 0.856 | 0.51 | 235.702 | 3.65 | 1.998 | 3.65 | 7077.422 | 7.30 | 5550.90 | 7.30 |
| PCT-02 rut6 | 0.977 | 4.19 | 0.846 | 0.86 | 120.429 | 4.26 | 1.034 | 4.32 | 4577.987 | 8.64 | 4873.16 | 8.51 |
| PCT-02 rut7 | 1.960 | 3.83 | 0.846 | 0.45 | 59.707 | 3.91 | 0.515 | 3.90 | 2678.795 | 7.80 | 4169.22 | 7.83 |
| PCT-02 rut8 | 11.469 | 3.53 | 0.806 | 0.49 | 9.725 | 3.60 | 0.088 | 3.57 | 541.929 | 7.14 | 2409.07 | 7.19 |
| PCT-02 rut9 | 0.711 | 3.99 | 0.854 | 0.38 | 166.182 | 4.14 | 1.414 | 4.10 | 5682.139 | 8.21 | 5197.83 | 8.28 |
| PCT-02 rut10 | 1.693 | 4.23 | 0.844 | 0.54 | 68.945 | 4.32 | 0.591 | 4.31 | 2995.357 | 8.62 | 4313.05 | 8.65 |
| PCT-02 rut11 | 0.527 | 3.91 | 0.850 | 0.65 | 225.076 | 4.03 | 1.923 | 3.92 | 6913.807 | 7.85 | 5504.26 | 8.06 |
| PCT-02 rut12 | 1.067 | 3.83 | 0.848 | 0.48 | 109.664 | 3.88 | 0.939 | 3.87 | 4268.715 | 7.74 | 4778.90 | 7.76 |
| PCT-02 rut13 | 2.552 | 4.49 | 0.841 | 0.43 | 45.507 | 4.53 | 0.391 | 4.52 | 2125.869 | 9.04 | 3898.68 | 9.06 |
| PCT-02 rut14 | 2.052 | 4.56 | 0.849 | 0.69 | 57.372 | 4.51 | 0.489 | 4.53 | 2564.380 | 9.07 | 4129.39 | 9.02 |
| PCT-02 rut15 | 0.765 | 3.60 | 0.850 | 0.58 | 155.025 | 3.65 | 1.321 | 3.62 | 5345.640 | 7.25 | 5127.70 | 7.31 |
| PCT-02 rut16 | 0.782 | 3.56 | 0.850 | 0.51 | 151.346 | 3.62 | 1.292 | 3.61 | 5345.640 | 7.22 | 5103.47 | 7.23 |
| PCT-02 rut17 | 1.297 | 3.64 | 0.848 | 0.37 | 90.162 | 3.68 | 0.772 | 3.67 | 3687.879 | 7.34 | 4582.06 | 7.37 |
| PCT-02 rut19 | 1.383 | 4.00 | 0.840 | 0.80 | 84.371 | 3.84 | 0.731 | 3.92 | 3538.533 | 7.84 | 4515.42 | 7.68 |
| PCT-02 rut20 | 0.588 | 5.99 | 0.851 | 0.35 | 206.803 | 5.84 | 1.768 | 5.78 | 6562.744 | 11.57 | 5418.69 | 11.68 |
| PCT-02 rut21 | 0.831 | 3.90 | 0.850 | 0.54 | 142.087 | 3.91 | 1.211 | 3.93 | 5114.355 | 7.86 | 5039.81 | 7.81 |
| PCT-02 rut22 | 0.272 | 5.69 | 0.858 | 0.41 | 435.442 | 5.28 | 3.685 | 5.20 | 9956.114 | 10.40 | 6172.17 | 10.56 |
| PCT-02 rut23 | 0.380 | 3.60 | 0.863 | 0.75 | 317.249 | 3.63 | 2.663 | 3.61 | 8369.055 | 7.22 | 5851.49 | 7.26 |
| PCT-02 rut24 | 1.502 | 3.64 | 0.847 | 0.36 | 77.749 | 3.68 | 0.666 | 3.67 | 3290.712 | 7.33 | 4433.44 | 7.35 |
| PCT-02 rut25 | 0.371 | 3.65 | 0.845 | 0.57 | 314.606 | 3.72 | 2.707 | 3.70 | 8445.694 | 7.40 | 5843.02 | 7.43 |
| PCT-02 rut26 | 0.193 | 3.65 | 0.853 | 0.39 | 609.608 | 3.68 | 5.184 | 3.67 | 11745.619 | 7.34 | 6513.13 | 7.37 |
| PCT-02 rut28 | 0.473 | 5.03 | 0.848 | 0.40 | 247.900 | 4.78 | 2.124 | 4.72 | 7344.172 | 9.44 | 5601.92 | 9.55 |

Appendix B: Eastern Sunda arc geochronology data - rutile

| Analysis ID | 238U/206Pb ratio | 1s% | 207Pb/206Pb ratio | 1s% | 207Pb/235U (calc) ratio | 1s% | 206Pb/238U ratio | 1s% | 206Pb/238U Age (Ma) | 2s% | 207Pb/235U (calc) Age (Ma) | 2s% |
|---------------|------------------|-------|-------------------|-------|-------------------------|-------|------------------|-------|---------------------|-------|----------------------------|-------|
| PCT-02 rut29 | 1.112 | 0.51 | 0.853 | 0.51 | 106.473 | 3.65 | 0.906 | 3.61 | 4157.687 | 7.21 | 4749.19 | 7.30 |
| PCT-02 rut30 | 0.875 | 3.53 | 0.852 | 3.53 | 135.206 | 3.60 | 1.152 | 3.60 | 4940.623 | 7.14 | 4989.77 | 7.19 |
| PCT-02 rut31 | 0.392 | 3.85 | 0.854 | 0.49 | 301.872 | 3.93 | 2.567 | 3.90 | 8198.844 | 7.80 | 5801.20 | 7.85 |
| PCT-02 rut32 | 0.698 | 10.96 | 0.848 | 0.43 | 179.923 | 6.62 | 1.550 | 6.55 | 6033.451 | 13.10 | 5278.04 | 13.25 |
| PCT-02 rut33 | 0.621 | 3.58 | 0.852 | 0.36 | 190.350 | 3.65 | 1.622 | 3.62 | 6212.767 | 7.24 | 5334.93 | 7.29 |
| PCT-02 rut34 | 6.711 | 3.70 | 0.826 | 1.02 | 17.220 | 3.81 | 0.151 | 3.77 | 907.917 | 7.55 | 2947.16 | 7.62 |
| PCT-02 rut36 | 1.389 | 3.58 | 0.844 | 0.60 | 84.153 | 3.64 | 0.723 | 3.63 | 3506.173 | 7.25 | 4512.82 | 7.28 |
| SINA-02 rut1 | 0.375 | 3.57 | 0.843 | 0.45 | 312.968 | 3.61 | 2.688 | 3.59 | 8413.333 | 7.19 | 5637.73 | 7.21 |
| SINA-02 rut3 | 0.035 | 6.20 | 0.844 | 0.53 | 3361.474 | 6.08 | 28.775 | 6.08 | 21876.902 | 12.16 | 8245.35 | 12.16 |
| SINA-02 rut4 | 2.067 | 4.90 | 0.831 | 0.72 | 55.306 | 4.82 | 0.481 | 4.66 | 2533.315 | 9.32 | 4092.81 | 9.64 |
| SINA-02 rut5 | 0.203 | 4.35 | 0.842 | 0.63 | 578.437 | 4.19 | 4.964 | 4.28 | 11511.520 | 8.56 | 6459.93 | 8.38 |
| SINA-02 rut6 | 0.050 | 3.64 | 0.853 | 0.44 | 2392.847 | 3.69 | 3.63 | 3.63 | 19693.313 | 7.26 | 7896.10 | 7.38 |
| SINA-02 rut7 | 1.102 | 5.12 | 0.832 | 1.05 | 107.003 | 5.79 | 0.935 | 5.44 | 4256.536 | 10.88 | 4754.19 | 11.58 |
| SINA-02 rut9 | 1.321 | 3.68 | 0.831 | 0.77 | 87.391 | 3.73 | 0.763 | 3.75 | 3654.038 | 7.50 | 4550.71 | 7.46 |
| SINA-02 rut10 | 0.112 | 4.47 | 0.856 | 0.52 | 1065.728 | 4.80 | 9.031 | 4.75 | 14863.325 | 9.51 | 7079.61 | 9.61 |
| SINA-01 rut1 | 0.389 | 4.44 | 0.852 | 0.56 | 295.971 | 4.51 | 2.510 | 4.44 | 8093.776 | 8.88 | 5781.22 | 9.02 |
| SINA-01 rut2 | 1.022 | 3.93 | 0.857 | 1.47 | 117.152 | 4.16 | 0.986 | 4.02 | 4421.999 | 8.05 | 4845.38 | 8.33 |
| SINA-01 rut3 | 0.333 | 4.01 | 0.840 | 0.56 | 348.607 | 3.94 | 3.013 | 3.91 | 8958.176 | 7.82 | 5946.90 | 7.88 |
| SINA-01 rut4 | 0.248 | 4.11 | 0.851 | 0.82 | 474.521 | 4.07 | 4.042 | 4.01 | 10428.585 | 8.01 | 6259.24 | 8.13 |
| SINA-01 rut5 | 0.997 | 3.70 | 0.846 | 0.71 | 118.997 | 3.73 | 3.76 | 3.71 | 4524.857 | 7.51 | 4861.11 | 7.46 |
| SINA-01 rut6 | 0.231 | 4.09 | 0.843 | 0.95 | 509.519 | 4.17 | 4.385 | 4.19 | 10853.660 | 8.37 | 6331.35 | 8.34 |
| SINA-01 rut8 | 0.658 | 4.52 | 0.851 | 1.20 | 185.086 | 5.61 | 1.564 | 4.97 | 6070.276 | 9.94 | 5306.50 | 11.23 |
| SINA-01 rut9 | 0.843 | 3.71 | 0.837 | 0.93 | 136.884 | 3.74 | 1.186 | 3.80 | 5040.727 | 7.46 | 5002.20 | 7.48 |
| SINA-01 rut10 | 0.579 | 3.77 | 0.837 | 1.34 | 202.266 | 3.81 | 1.749 | 3.80 | 6518.902 | 7.60 | 5396.27 | 7.62 |
| LB043_rut_1 | 4.580 | 3.36 | 0.863 | 2.99 | 26.738 | 3.56 | 0.217 | 3.68 | 1267.109 | 7.36 | 3373.94 | 7.11 |
| LB043_rut_11 | 33.860 | 5.19 | 0.808 | 2.68 | 3.341 | 4.49 | 0.029 | 4.70 | 187.287 | 9.41 | 1490.58 | 8.98 |
| LB043_rut_12 | 0.038 | 3.73 | 0.835 | 0.56 | 3120.024 | 3.69 | 28.575 | 3.70 | 21382.069 | 7.40 | 8169.69 | 7.38 |
| LB043_rut_13 | 8.542 | 7.43 | 0.812 | 2.10 | 13.466 | 6.54 | 6.24 | 6.24 | 725.253 | 12.47 | 2712.91 | 13.07 |
| LB043_rut_14 | 0.007 | 11.75 | 0.820 | 1.29 | 17298.038 | 11.83 | 151.156 | 11.87 | 32392.514 | 23.75 | 9908.52 | 23.67 |
| LB043_rut_15 | 29.528 | 6.10 | 0.800 | 3.58 | 3.787 | 5.97 | 0.035 | 5.87 | 218.915 | 11.73 | 1989.94 | 11.94 |
| LB043_rut_16 | 3.084 | 4.82 | 0.878 | 4.16 | 40.075 | 4.72 | 0.328 | 5.53 | 1830.727 | 11.06 | 3772.55 | 9.43 |
| LB043_rut_17 | 0.009 | 7.89 | 0.844 | 0.91 | 13451.138 | 7.90 | 115.711 | 7.88 | 30682.900 | 15.76 | 9663.14 | 15.79 |
| LB043_rut_18 | 11.091 | 4.18 | 0.814 | 3.40 | 10.057 | 5.10 | 0.090 | 4.87 | 555.005 | 9.74 | 2440.02 | 10.19 |
| LB043_rut_3 | 29.445 | 6.84 | 0.750 | 4.14 | 3.535 | 7.32 | 0.034 | 7.02 | 216.281 | 14.04 | 1535.03 | 14.64 |
| LB043_rut_4 | 7.749 | 4.51 | 0.776 | 5.05 | 13.947 | 6.08 | 0.130 | 4.67 | 786.669 | 9.34 | 2746.11 | 12.16 |
| LB043_rut_5 | 29.845 | 6.20 | 0.791 | 4.77 | 3.725 | 5.76 | 0.034 | 5.90 | 212.696 | 11.79 | 1576.72 | 11.52 |
| LB043_rut_6 | 3.191 | 2.64 | 0.849 | 1.71 | 38.088 | 2.85 | 0.317 | 2.78 | 1772.783 | 5.57 | 3722.47 | 5.70 |
| LB043_rut_7 | 257.687 | 15.56 | 0.919 | 24.32 | 0.286 | 18.86 | 0.004 | 16.08 | 24.438 | 32.16 | 255.35 | 37.71 |
| LB043_rut_8 | 10.244 | 5.44 | 0.822 | 7.77 | 11.302 | 6.20 | 0.099 | 5.45 | 609.421 | 10.89 | 2548.37 | 12.39 |
| LB043_rut_9 | 7.629 | 2.87 | 0.828 | 1.28 | 15.080 | 3.04 | 0.132 | 2.89 | 797.834 | 5.77 | 2820.32 | 6.07 |
| LB044_rut_1 | 0.070 | 2.68 | 0.847 | 0.40 | 1694.946 | 2.65 | 14.404 | 2.61 | 17628.530 | 5.22 | 7550.39 | 5.30 |
| LB044_rut_10 | 0.876 | 3.30 | 0.848 | 0.48 | 136.416 | 3.19 | 1.148 | 3.18 | 4928.331 | 6.36 | 4988.74 | 6.38 |
| LB044_rut_12 | 0.019 | 2.74 | 0.847 | 0.32 | 6220.664 | 2.82 | 52.622 | 2.71 | 25669.335 | 5.42 | 8670.18 | 5.64 |
| LB044_rut_13 | 30.653 | 6.08 | 0.725 | 7.77 | 3.310 | 6.55 | 0.033 | 7.23 | 209.166 | 14.47 | 1483.39 | 13.10 |
| LB044_rut_14 | 0.050 | 4.86 | 0.839 | 0.52 | 2402.684 | 4.82 | 20.350 | 4.57 | 19732.718 | 9.14 | 7904.52 | 9.64 |
| LB044_rut_15 | 0.401 | 2.44 | 0.845 | 0.38 | 294.074 | 2.42 | 2.499 | 2.42 | 8074.794 | 4.84 | 5774.71 | 4.87 |
| LB044_rut_16 | 0.074 | 2.73 | 0.847 | 0.41 | 1592.980 | 2.65 | 13.547 | 2.57 | 17259.645 | 5.14 | 7487.43 | 5.30 |
| LB044_rut_17 | 0.523 | 2.96 | 0.843 | 0.36 | 228.335 | 2.86 | 1.927 | 2.92 | 6923.765 | 5.84 | 5518.79 | 5.72 |
| LB044_rut_2 | 0.086 | 2.81 | 0.841 | 0.35 | 1385.644 | 2.76 | 11.719 | 2.75 | 16393.922 | 5.49 | 7345.93 | 5.51 |

Appendix B: Eastern Sunda arc geochronology data - rutile

| Analysis ID | 238U/206Pb ratio | 1s% | 207Pb/206Pb ratio | 1s% | 207Pb/235U (calc) ratio | 1s% | 206Pb/238U ratio | 1s% | 206Pb/238U Age (Ma) | 2s% | 207Pb/235U (calc) Age (Ma) | 2s% |
|---------------|------------------|-------|-------------------|-------|-------------------------|--------|------------------|-------|---------------------|-------|----------------------------|-------|
| LB044_rut_3 | 0.117 | 3.32 | 0.842 | 0.45 | 1001.112 | 8.520 | 3.40 | 3.32 | 14526.154 | 6.63 | 7016.16 | 6.79 |
| LB044_rut_4 | 0.084 | 3.49 | 0.848 | 0.31 | 1382.699 | 11.845 | 3.95 | 3.82 | 16457.460 | 7.64 | 7343.78 | 7.90 |
| LB044_rut_5 | 0.917 | 4.83 | 0.832 | 4.08 | 130.109 | 1.094 | 5.26 | 4.63 | 4765.534 | 9.26 | 4851.04 | 10.53 |
| LB044_rut_6 | 0.596 | 2.95 | 0.841 | 0.74 | 197.156 | 1.696 | 3.14 | 2.99 | 6392.497 | 5.98 | 5370.42 | 6.27 |
| LB044_rut_7 | 43.001 | 8.82 | 0.770 | 7.95 | 2.529 | 0.024 | 8.40 | 8.19 | 150.361 | 16.39 | 1280.32 | 16.79 |
| LB044_rut_9 | 1.829 | 7.69 | 0.842 | 4.21 | 64.337 | 0.555 | 6.63 | 8.00 | 2844.693 | 15.99 | 4243.86 | 13.27 |
| NEF-01_rut_10 | 61.814 | 5.18 | 0.794 | 5.55 | 1.813 | 0.016 | 6.87 | 5.56 | 105.366 | 11.12 | 1050.09 | 13.73 |
| NEF-01_rut_11 | 19.518 | 6.67 | 0.765 | 6.38 | 5.537 | 0.062 | 8.51 | 6.46 | 326.764 | 12.91 | 1906.29 | 17.02 |
| NEF-01_rut_12 | 37.333 | 4.29 | 0.772 | 4.37 | 2.917 | 0.027 | 5.03 | 5.17 | 173.330 | 10.35 | 1386.43 | 10.06 |
| NEF-01_rut_13 | 44.946 | 4.12 | 0.770 | 4.79 | 2.407 | 0.022 | 5.00 | 5.01 | 142.407 | 10.03 | 1244.72 | 10.01 |
| NEF-01_rut_14 | 20.349 | 4.40 | 0.812 | 2.03 | 5.640 | 0.060 | 4.79 | 4.95 | 311.971 | 9.89 | 1922.23 | 9.59 |
| NEF-01_rut_15 | 14.932 | 4.77 | 0.845 | 2.18 | 7.987 | 0.057 | 5.34 | 5.26 | 418.449 | 10.52 | 2229.51 | 10.68 |
| NEF-01_rut_16 | 9.454 | 4.30 | 0.831 | 2.06 | 12.555 | 0.107 | 4.96 | 4.40 | 654.084 | 8.79 | 2646.86 | 9.91 |
| NEF-01_rut_17 | 19.108 | 4.33 | 0.832 | 3.32 | 6.083 | 0.052 | 3.92 | 4.50 | 329.577 | 9.01 | 1987.79 | 7.85 |
| NEF-01_rut_18 | 18.436 | 5.29 | 0.821 | 2.34 | 6.132 | 0.055 | 5.82 | 5.87 | 342.993 | 11.74 | 1994.80 | 11.65 |
| NEF-01_rut_19 | 23.576 | 2.80 | 0.822 | 1.82 | 4.785 | 0.043 | 2.83 | 2.87 | 269.556 | 5.75 | 1782.31 | 5.66 |
| NEF-01_rut_20 | 65.355 | 10.75 | 0.795 | 8.61 | 1.695 | 0.015 | 7.59 | 6.98 | 96.932 | 13.96 | 1006.55 | 15.18 |
| NEF-01_rut_21 | 147.320 | 9.84 | 0.862 | 12.92 | 0.832 | 0.007 | 9.59 | 10.04 | 43.834 | 20.07 | 614.90 | 19.18 |
| NEF-01_rut_22 | 72.330 | 6.14 | 0.822 | 5.48 | 4.384 | 0.040 | 4.29 | 4.67 | 251.689 | 9.34 | 1709.24 | 8.58 |
| NEF-01_rut_23 | 9.153 | 3.69 | 0.797 | 2.28 | 12.329 | 0.110 | 3.91 | 3.77 | 88.222 | 14.70 | 976.98 | 13.17 |
| NEF-01_rut_24 | 145.635 | 7.62 | 0.887 | 8.25 | 0.655 | 0.007 | 8.92 | 9.25 | 44.364 | 18.50 | 511.72 | 17.84 |
| NEF-01_rut_3 | 16.170 | 3.55 | 0.798 | 2.63 | 6.969 | 0.063 | 3.76 | 4.16 | 394.570 | 8.32 | 2107.42 | 7.53 |
| NEF-01_rut_4 | 164.564 | 8.43 | 0.773 | 12.35 | 0.695 | 0.006 | 9.34 | 8.89 | 40.657 | 17.78 | 565.74 | 18.69 |
| NEF-01_rut_5 | 163.788 | 6.58 | 0.668 | 9.08 | 0.571 | 0.006 | 7.01 | 6.83 | 39.229 | 13.66 | 468.90 | 14.02 |
| NEF-01_rut_6 | 187.688 | 7.23 | 0.669 | 9.84 | 0.501 | 0.005 | 7.53 | 7.84 | 34.609 | 15.68 | 412.20 | 15.06 |
| NEF-01_rut_7 | 32.617 | 3.09 | 0.803 | 4.31 | 3.540 | 0.031 | 3.82 | 4.77 | 197.247 | 9.55 | 1536.13 | 7.64 |
| NEF-01_rut_8 | 29.669 | 6.88 | 0.823 | 4.74 | 3.886 | 0.034 | 6.40 | 5.45 | 216.641 | 10.89 | 1610.72 | 12.80 |
| NEF-01_rut_9 | 75.021 | 4.88 | 0.655 | 6.39 | 1.232 | 0.013 | 5.83 | 4.84 | 85.785 | 9.69 | 815.36 | 11.65 |
| NEF-03_rut_1 | 4.229 | 5.15 | 0.801 | 3.53 | 27.304 | 0.238 | 3.61 | 5.00 | 1377.957 | 10.00 | 3394.41 | 7.22 |
| NEF-03_rut_10 | 18.503 | 3.38 | 0.785 | 3.37 | 5.990 | 0.055 | 3.45 | 3.79 | 342.342 | 7.57 | 1974.37 | 6.90 |
| NEF-03_rut_11 | 22.389 | 4.11 | 0.769 | 5.05 | 4.857 | 0.045 | 4.10 | 4.50 | 281.834 | 9.01 | 1794.80 | 8.21 |
| NEF-03_rut_12 | 12.177 | 3.47 | 0.780 | 3.45 | 8.755 | 0.083 | 4.62 | 3.77 | 512.282 | 7.54 | 2312.83 | 9.24 |
| NEF-03_rut_13 | 17.700 | 4.49 | 0.817 | 5.18 | 6.521 | 0.057 | 5.11 | 4.58 | 358.837 | 9.16 | 2048.80 | 10.22 |
| NEF-03_rut_14 | 21.631 | 4.37 | 0.828 | 4.91 | 5.371 | 0.047 | 4.37 | 4.42 | 297.242 | 8.83 | 1880.31 | 8.75 |
| NEF-03_rut_15 | 36.342 | 7.93 | 0.743 | 10.10 | 2.997 | 0.028 | 8.58 | 8.05 | 178.740 | 16.10 | 1406.80 | 17.17 |
| NEF-03_rut_16 | 34.263 | 5.96 | 0.765 | 8.24 | 3.310 | 0.029 | 7.22 | 6.18 | 187.034 | 12.36 | 1483.31 | 14.44 |
| NEF-03_rut_2 | 3.548 | 3.35 | 0.834 | 2.31 | 33.412 | 0.284 | 3.21 | 3.38 | 1613.514 | 6.76 | 3992.84 | 6.42 |
| NEF-03_rut_3 | 40.751 | 4.89 | 0.765 | 6.04 | 2.658 | 0.025 | 4.98 | 5.05 | 158.307 | 10.11 | 1316.87 | 9.96 |
| NEF-03_rut_4 | 66.426 | 7.83 | 0.640 | 12.89 | 1.361 | 0.015 | 12.47 | 10.68 | 96.479 | 21.37 | 872.43 | 24.95 |
| NEF-03_rut_5 | 10.314 | 3.84 | 0.831 | 3.38 | 11.362 | 0.098 | 4.44 | 4.26 | 602.180 | 8.52 | 2553.30 | 8.88 |
| NEF-03_rut_6 | 29.693 | 4.27 | 0.818 | 4.94 | 3.919 | 0.034 | 4.40 | 4.58 | 213.309 | 9.17 | 1617.63 | 8.80 |
| NEF-03_rut_7 | 9.887 | 3.92 | 0.772 | 3.12 | 11.108 | 0.102 | 3.67 | 4.00 | 623.715 | 7.99 | 2532.22 | 7.34 |
| NEF-03_rut_8 | 43.126 | 3.92 | 0.787 | 3.66 | 2.528 | 0.023 | 4.20 | 4.41 | 147.361 | 8.82 | 1279.99 | 8.40 |
| NEF-03_rut_9 | 18.024 | 4.45 | 0.834 | 6.17 | 6.567 | 0.056 | 5.58 | 4.44 | 352.930 | 8.89 | 2064.89 | 11.16 |
| SEF-02_rut_1 | 32.170 | 14.56 | 0.829 | 20.86 | 2.768 | 0.032 | 20.56 | 18.68 | 202.600 | 37.36 | 1346.92 | 41.13 |
| SEF-02_rut_2 | 3.669 | 6.20 | 0.842 | 2.48 | 31.858 | 0.274 | 6.34 | 6.45 | 1561.480 | 12.90 | 3545.91 | 12.68 |
| SEF-02_rut_3 | 6.357 | 7.39 | 0.831 | 1.71 | 18.412 | 0.161 | 8.44 | 8.70 | 963.201 | 17.40 | 3011.51 | 16.87 |
| SINA-04_rut_1 | 0.955 | 3.01 | 0.847 | 0.70 | 127.668 | 1.054 | 3.18 | 3.03 | 4639.210 | 6.07 | 4931.96 | 6.37 |
| SINA-04_rut_2 | 0.154 | 8.74 | 0.849 | 0.74 | 783.684 | 6.619 | 7.73 | 7.97 | 13090.439 | 15.93 | 6767.81 | 15.45 |

Appendix B: Eastern Sunda arc geochronology data - rutile

| Analysis ID | 238U/206Pb ratio | 1s% | 207Pb/206Pb ratio | 1s% | 207Pb/235U (calc) ratio | 1s% | 206Pb/238U ratio | 1s% | 206Pb/238U Age (Ma) | 2s% | 207Pb/235U (calc) Age (Ma) | 2s% |
|-----------------|------------------|------|-------------------|-------|-------------------------|-------|------------------|------|---------------------|-------|----------------------------|-------|
| SINA-04_rut_3 | 0.904 | 3.69 | 0.840 | 1.31 | 135.419 | 3.72 | 1.122 | 3.71 | 4849.753 | 7.42 | 4991.35 | 7.43 |
| SINA-04_rut_4 | 0.742 | 3.22 | 0.844 | 1.10 | 158.322 | 3.35 | 1.359 | 3.31 | 5532.454 | 6.62 | 5148.94 | 6.71 |
| SINA-04_rut_5 | 0.487 | 3.61 | 0.836 | 1.72 | 239.866 | 3.68 | 2.072 | 3.66 | 7235.011 | 7.31 | 5586.61 | 7.36 |
| SINA-04_rut_6 | 0.431 | 5.13 | 0.835 | 0.80 | 271.977 | 5.99 | 2.378 | 5.93 | 7847.873 | 11.86 | 5695.68 | 11.99 |
| SINA-04_rut_7 | 0.126 | 3.93 | 0.848 | 0.36 | 935.014 | 3.76 | 7.981 | 3.66 | 14150.883 | 7.32 | 6946.88 | 7.51 |
| SINA-04_rut_8 | 0.732 | 6.66 | 0.844 | 0.94 | 160.078 | 5.96 | 1.381 | 6.11 | 5592.166 | 12.23 | 5160.06 | 11.91 |
| SINA-05_rut_1 | 1.315 | 3.08 | 0.855 | 1.02 | 93.057 | 3.04 | 0.764 | 3.02 | 3659.787 | 6.03 | 4613.80 | 6.08 |
| SINA-05_rut_2 | 0.038 | 5.31 | 0.845 | 0.35 | 3106.183 | 5.62 | 26.640 | 5.61 | 21397.247 | 11.21 | 8165.18 | 11.23 |
| SINA-05_rut_3 | 0.648 | 3.74 | 0.820 | 0.95 | 176.617 | 3.77 | 1.550 | 3.77 | 6033.839 | 7.55 | 5259.31 | 7.54 |
| SING-01_rut_1 | 16.647 | 6.50 | 0.815 | 4.40 | 6.975 | 8.66 | 0.062 | 7.48 | 384.795 | 14.96 | 2108.23 | 17.32 |
| SING-01_rut_2 | 397.823 | 6.63 | 0.152 | 14.61 | 0.053 | 13.63 | 0.003 | 7.38 | 16.159 | 14.75 | 52.30 | 27.26 |
| SING-01_rut_3 | 4.360 | 4.38 | 0.857 | 2.60 | 27.741 | 4.40 | 0.233 | 4.37 | 1351.621 | 8.74 | 3409.99 | 8.80 |
| SING-02_rut_10 | 10.156 | 5.14 | 0.815 | 4.55 | 11.266 | 4.92 | 0.100 | 6.56 | 612.649 | 13.12 | 2545.36 | 9.85 |
| SING-02_rut_11 | 8.634 | 5.24 | 0.835 | 2.12 | 13.542 | 5.77 | 0.116 | 5.90 | 706.163 | 11.80 | 2718.20 | 11.54 |
| SING-02_rut_12 | 8.089 | 4.78 | 0.820 | 2.06 | 14.102 | 5.35 | 0.124 | 5.44 | 754.002 | 10.88 | 2756.58 | 10.70 |
| SING-02_rut_13 | 13.976 | 4.77 | 0.837 | 8.16 | 8.354 | 7.62 | 0.073 | 5.29 | 452.489 | 10.58 | 2270.21 | 15.24 |
| SING-02_rut_14 | 17.629 | 5.33 | 0.840 | 4.51 | 6.704 | 4.33 | 0.057 | 5.86 | 359.139 | 11.72 | 2073.16 | 8.66 |
| SING-02_rut_15 | 19.452 | 4.16 | 0.771 | 4.27 | 5.494 | 4.89 | 0.052 | 4.24 | 324.275 | 8.48 | 1899.68 | 9.78 |
| SING-02_rut_2 | 8.416 | 5.42 | 0.825 | 3.05 | 13.546 | 5.13 | 0.119 | 5.29 | 724.870 | 10.57 | 2718.49 | 10.25 |
| SING-02_rut_3 | 18.856 | 4.80 | 0.783 | 3.44 | 5.708 | 5.29 | 0.053 | 5.65 | 332.600 | 11.30 | 1932.61 | 10.58 |
| SING-02_rut_4 | 4.211 | 3.34 | 0.836 | 1.48 | 27.555 | 3.32 | 0.238 | 3.37 | 1376.921 | 6.75 | 3403.41 | 6.63 |
| SING-02_rut_5 | 18.549 | 3.88 | 0.796 | 3.22 | 5.976 | 4.20 | 0.054 | 4.06 | 341.181 | 8.11 | 1972.40 | 8.39 |
| SING-02_rut_6 | 7.831 | 5.09 | 0.829 | 2.29 | 14.953 | 5.30 | 0.131 | 6.05 | 792.571 | 12.09 | 2812.27 | 10.61 |
| SING-02_rut_7 | 36.116 | 3.51 | 0.802 | 3.70 | 3.158 | 3.62 | 0.028 | 3.52 | 177.025 | 7.05 | 1446.90 | 7.24 |
| SING-02_rut_8 | 13.810 | 6.09 | 0.734 | 6.16 | 7.326 | 5.62 | 0.072 | 7.53 | 445.211 | 15.06 | 2152.01 | 11.25 |
| SING-02_rut_9 | 9.446 | 3.68 | 0.796 | 3.95 | 11.751 | 4.03 | 0.107 | 3.91 | 653.990 | 7.82 | 2584.78 | 8.05 |
| TR-04_rut_1 | 1.140 | 4.29 | 0.835 | 1.27 | 102.984 | 4.24 | 0.891 | 4.39 | 4105.931 | 8.78 | 4715.68 | 8.48 |
| TR-04_rut_10 | 0.838 | 2.56 | 0.826 | 0.77 | 139.664 | 2.52 | 1.199 | 2.52 | 5080.909 | 5.05 | 5022.46 | 5.04 |
| TR-04_rut_2 | 1.104 | 3.13 | 0.838 | 1.35 | 106.033 | 3.32 | 0.912 | 3.16 | 4179.040 | 6.33 | 4745.03 | 6.64 |
| TR-04_rut_3 | 1.474 | 7.71 | 0.793 | 1.77 | 75.622 | 7.43 | 0.691 | 7.68 | 3386.017 | 15.35 | 4405.63 | 14.87 |
| TR-04_rut_4 | 1.177 | 4.42 | 0.865 | 3.31 | 106.452 | 4.54 | 0.883 | 5.19 | 4080.990 | 10.39 | 4748.99 | 9.08 |
| TR-04_rut_5 | 1.027 | 4.33 | 0.825 | 1.42 | 111.874 | 4.31 | 0.985 | 4.18 | 4420.516 | 8.36 | 4798.97 | 8.62 |
| TR-04_rut_6 | 0.809 | 4.06 | 0.835 | 1.29 | 144.193 | 3.76 | 1.245 | 3.91 | 5214.264 | 7.82 | 5054.64 | 7.52 |
| TR-04_rut_7 | 2.716 | 3.37 | 0.823 | 1.94 | 41.944 | 3.37 | 0.370 | 3.51 | 2027.831 | 7.02 | 3817.74 | 6.73 |
| TR-04_rut_8 | 2.257 | 3.92 | 0.826 | 1.94 | 51.380 | 4.00 | 0.453 | 4.23 | 2406.575 | 8.45 | 4019.41 | 7.99 |
| TR-04_rut_9 | 2.011 | 3.69 | 0.834 | 1.56 | 57.708 | 3.53 | 0.500 | 3.72 | 2615.887 | 7.45 | 4135.22 | 7.06 |
| TR-05_rut_1 | 1.375 | 5.51 | 0.846 | 5.46 | 85.626 | 5.70 | 0.729 | 5.60 | 3529.784 | 11.20 | 4530.23 | 11.41 |
| TR-05_rut_2 | 0.719 | 3.41 | 0.822 | 1.57 | 160.502 | 3.63 | 1.410 | 3.39 | 5689.183 | 6.78 | 5162.73 | 7.25 |
| TR-05_rut_3 | 0.688 | 7.62 | 0.831 | 1.90 | 167.335 | 6.38 | 1.464 | 6.41 | 5812.572 | 12.81 | 5204.81 | 12.76 |
| TR-05_rut_4 | 0.378 | 6.62 | 0.836 | 0.68 | 308.936 | 5.55 | 2.681 | 5.32 | 8401.291 | 10.64 | 5824.61 | 11.11 |
| TR-05_rut_5 | 0.827 | 6.45 | 0.839 | 1.96 | 142.085 | 7.90 | 1.198 | 7.81 | 5039.738 | 15.62 | 5039.79 | 15.81 |
| UG012183_rut_1 | 16.030 | 5.07 | 0.779 | 5.57 | 6.812 | 5.84 | 0.063 | 5.23 | 395.385 | 10.46 | 2087.23 | 11.68 |
| UG012183_rut_10 | 11.675 | 4.68 | 0.806 | 4.94 | 9.615 | 4.82 | 0.087 | 4.79 | 535.154 | 9.56 | 2388.59 | 9.64 |
| UG012183_rut_11 | 152.472 | 6.55 | 0.861 | 8.26 | 0.784 | 8.08 | 0.007 | 7.10 | 42.397 | 14.20 | 587.80 | 16.15 |
| UG012183_rut_12 | 5.513 | 7.79 | 0.834 | 2.56 | 21.324 | 6.58 | 0.166 | 7.31 | 1099.759 | 14.62 | 3153.42 | 13.16 |
| UG012183_rut_13 | 11.450 | 6.82 | 0.947 | 7.05 | 11.402 | 6.68 | 0.086 | 8.29 | 532.935 | 16.98 | 2556.55 | 13.36 |
| UG012183_rut_14 | 4.282 | 2.88 | 0.818 | 2.05 | 26.835 | 3.10 | 0.237 | 3.08 | 1371.861 | 6.16 | 3377.46 | 6.19 |
| UG012183_rut_15 | 6.768 | 4.38 | 0.810 | 2.46 | 16.576 | 5.08 | 0.148 | 4.63 | 889.345 | 9.27 | 2910.62 | 10.15 |
| UG012183_rut_16 | 6.756 | 5.39 | 0.788 | 3.83 | 16.219 | 6.15 | 0.151 | 5.95 | 907.523 | 11.91 | 2889.81 | 12.30 |
| UG012183_rut_17 | 17.379 | 6.57 | 0.785 | 3.85 | 6.131 | 6.19 | 0.057 | 5.50 | 354.320 | 10.99 | 1894.67 | 12.38 |

Appendix B: Eastern Sunda arc geochronology data - rutile

| Analysis ID | 238U/206Pb ratio | 1s% | 207Pb/206Pb ratio | 1s% | 207Pb/235U (calc) ratio | 1s% | 206Pb/238U ratio | 1s% | 206Pb/238U Age (Ma) | 2s% | 207Pb/235U (calc) Age (Ma) | 2s% |
|-----------------|------------------|-------|-------------------|-------|-------------------------|-------|------------------|-------|---------------------|-------|----------------------------|--------|
| UG012183_rut_18 | 3.185 | 4.84 | 0.839 | 3.56 | 36.043 | 5.58 | 0.312 | 5.13 | 1750.928 | 10.26 | 3687.65 | 11.15 |
| UG012183_rut_19 | 5.625 | 7.01 | 0.830 | 2.42 | 20.110 | 6.91 | 0.175 | 6.73 | 1041.626 | 13.45 | 3096.68 | 13.83 |
| UG012183_rut_2 | 6.396 | 3.65 | 0.851 | 1.61 | 18.429 | 3.63 | 0.157 | 3.71 | 938.488 | 7.43 | 3012.41 | 7.27 |
| UG012183_rut_20 | 616.410 | 23.98 | 0.157 | 56.77 | < DL | 51.70 | 0.002 | 23.96 | 10.308 | 47.92 | < DL | 103.39 |
| UG012183_rut_21 | 23.614 | 11.25 | 0.809 | 6.50 | 4.769 | 8.59 | 0.043 | 8.16 | 268.901 | 16.33 | 1779.48 | 17.18 |
| UG012183_rut_22 | 9.889 | 8.29 | 0.841 | 7.19 | 11.712 | 8.50 | 0.101 | 9.40 | 622.139 | 18.80 | 2881.64 | 17.00 |
| UG012183_rut_23 | 16.273 | 3.75 | 0.797 | 3.16 | 6.783 | 4.36 | 0.062 | 3.87 | 386.601 | 7.74 | 2083.45 | 8.71 |
| UG012183_rut_25 | 4.595 | 4.41 | 0.828 | 2.41 | 25.146 | 3.47 | 0.218 | 4.27 | 1272.951 | 8.55 | 3313.90 | 6.94 |
| UG012183_rut_26 | 11.374 | 4.04 | 0.789 | 2.88 | 9.648 | 4.20 | 0.089 | 4.41 | 548.029 | 8.82 | 2401.79 | 8.39 |
| UG012183_rut_27 | 11.480 | 7.64 | 0.817 | 4.65 | 9.856 | 6.85 | 0.087 | 7.64 | 539.296 | 15.29 | 2421.43 | 13.71 |
| UG012183_rut_28 | 31.275 | 6.90 | 0.783 | 7.22 | 3.463 | 7.62 | 0.032 | 6.31 | 201.541 | 12.61 | 1518.80 | 15.24 |
| UG012183_rut_29 | 9.367 | 5.41 | 0.831 | 4.69 | 12.398 | 6.45 | 0.110 | 7.45 | 673.636 | 14.91 | 2635.02 | 12.90 |
| UG012183_rut_3 | 2.424 | 5.08 | 0.921 | 3.81 | 53.226 | 6.20 | 0.418 | 5.13 | 2249.561 | 10.25 | 4054.59 | 12.40 |
| UG012183_rut_30 | 4.857 | 7.42 | 0.804 | 3.31 | 23.589 | 6.39 | 0.204 | 7.20 | 1199.079 | 14.40 | 3251.58 | 12.78 |
| UG012183_rut_4 | 8.695 | 4.16 | 0.873 | 3.56 | 13.975 | 4.46 | 0.115 | 4.52 | 704.221 | 9.04 | 2747.99 | 8.93 |
| UG012183_rut_5 | 9.710 | 12.27 | 0.851 | 5.27 | 11.941 | 10.67 | 0.104 | 11.19 | 640.592 | 22.38 | 2599.78 | 21.34 |
| UG012183_rut_6 | 17.448 | 7.16 | 0.788 | 8.90 | 6.341 | 7.05 | 0.058 | 8.16 | 384.550 | 16.31 | 2024.11 | 14.11 |
| UG012183_rut_7 | 7.137 | 7.32 | 0.830 | 2.89 | 15.766 | 7.27 | 0.138 | 7.30 | 834.753 | 14.59 | 2862.70 | 14.54 |
| UG012183_rut_8 | 6.159 | 4.12 | 0.830 | 3.49 | 19.321 | 4.26 | 0.164 | 4.64 | 976.708 | 9.29 | 3068.00 | 8.52 |
| UG012183_rut_9 | 212.296 | 9.76 | 0.763 | 13.11 | 0.501 | 9.69 | 0.005 | 9.61 | 30.857 | 19.21 | 412.56 | 19.39 |
| UG012185_rut_1 | 3.224 | 2.56 | 0.833 | 0.70 | 35.808 | 2.55 | 0.311 | 2.53 | 1746.837 | 5.06 | 3661.17 | 5.11 |
| UG012185_rut_10 | 4.884 | 6.28 | 0.805 | 2.99 | 23.074 | 5.29 | 0.208 | 6.84 | 1219.591 | 13.68 | 3230.06 | 10.59 |
| UG012185_rut_11 | 2.896 | 6.83 | 0.853 | 2.82 | 42.473 | 7.01 | 0.356 | 7.86 | 1963.133 | 15.71 | 3630.17 | 14.02 |
| UG012185_rut_12 | 1.281 | 3.63 | 0.826 | 1.52 | 90.016 | 3.72 | 0.788 | 3.64 | 3745.588 | 7.29 | 4580.43 | 7.44 |
| UG012185_rut_13 | 3.254 | 5.22 | 0.840 | 2.32 | 36.597 | 6.07 | 0.313 | 5.31 | 1756.989 | 10.63 | 3682.71 | 12.13 |
| UG012185_rut_14 | 3.245 | 2.63 | 0.835 | 1.62 | 36.661 | 2.78 | 0.310 | 2.64 | 1742.862 | 5.28 | 3684.44 | 5.55 |
| UG012185_rut_15 | 2.528 | 4.56 | 0.845 | 2.60 | 46.618 | 4.59 | 0.396 | 4.88 | 2152.399 | 9.76 | 3922.65 | 9.19 |
| UG012185_rut_2 | 2.447 | 2.75 | 0.849 | 0.64 | 47.813 | 2.69 | 0.408 | 2.68 | 2207.818 | 5.36 | 3947.80 | 5.38 |
| UG012185_rut_3 | 2.022 | 2.39 | 0.853 | 0.68 | 58.782 | 2.43 | 0.496 | 2.39 | 2595.197 | 4.79 | 4153.64 | 4.86 |
| UG012185_rut_4 | 3.512 | 4.35 | 0.824 | 1.31 | 32.441 | 3.88 | 0.285 | 3.98 | 1615.384 | 7.96 | 3963.77 | 7.76 |
| UG012185_rut_5 | 1.485 | 3.33 | 0.837 | 1.25 | 78.624 | 3.42 | 0.679 | 3.42 | 3342.169 | 6.84 | 4444.66 | 6.84 |
| UG012185_rut_6 | 1.984 | 2.71 | 0.828 | 1.41 | 60.335 | 2.68 | 0.511 | 2.75 | 2682.903 | 5.51 | 4179.67 | 5.36 |
| UG012185_rut_7 | 1.205 | 2.88 | 0.843 | 0.83 | 99.063 | 2.96 | 0.835 | 2.93 | 3913.773 | 5.86 | 4676.65 | 5.93 |
| UG012185_rut_8 | 2.650 | 3.69 | 0.833 | 1.01 | 44.427 | 3.61 | 0.378 | 3.52 | 2066.811 | 7.03 | 3874.80 | 7.22 |
| UG012185_rut_9 | 9.655 | 4.04 | 0.883 | 2.91 | 12.678 | 4.49 | 0.104 | 4.32 | 635.606 | 8.65 | 2656.02 | 8.99 |
| UG012187_rut_1 | 196.597 | 15.91 | 0.737 | 22.44 | 0.514 | 16.23 | 0.005 | 16.24 | 32.010 | 32.48 | 421.40 | 32.46 |
| UG012187_rut_10 | 22.044 | 7.84 | 0.745 | 6.56 | 4.704 | 7.31 | 0.046 | 7.06 | 288.242 | 14.11 | 1767.90 | 14.62 |
| UG012187_rut_11 | 2.022 | 4.13 | 0.809 | 2.24 | 55.423 | 4.95 | 0.497 | 4.46 | 2601.654 | 8.92 | 4094.91 | 9.91 |
| UG012187_rut_12 | 11.041 | 16.98 | 1.402 | 20.29 | 17.117 | 13.44 | 0.090 | 17.36 | 302.206 | 12.51 | 1847.00 | 12.52 |
| UG012187_rut_13 | 20.855 | 6.30 | 0.779 | 7.88 | 5.166 | 6.26 | 0.048 | 6.25 | 460.355 | 13.75 | 2272.97 | 10.52 |
| UG012187_rut_14 | 13.702 | 6.41 | 0.820 | 5.28 | 8.380 | 5.26 | 0.074 | 6.88 | 2675.604 | 8.64 | 4148.99 | 9.02 |
| UG012187_rut_15 | 1.955 | 4.30 | 0.824 | 3.02 | 58.509 | 4.51 | 0.514 | 4.32 | 3271.133 | 6.51 | 4426.51 | 6.74 |
| UG012187_rut_2 | 1.522 | 3.54 | 0.834 | 1.02 | 77.214 | 3.37 | 0.661 | 3.26 | 479.416 | 6.51 | 2618.50 | 44.60 |
| UG012187_rut_3 | 12.888 | 26.72 | 1.147 | 32.88 | 12.182 | 22.30 | 0.077 | 26.69 | 2484.207 | 12.46 | 3988.64 | 10.89 |
| UG012187_rut_4 | 2.154 | 6.04 | 0.776 | 4.29 | 50.319 | 5.44 | 0.470 | 6.23 | 1601.060 | 15.77 | 3988.54 | 12.06 |
| UG012187_rut_5 | 3.541 | 7.11 | 0.831 | 6.56 | 32.588 | 6.03 | 0.282 | 7.88 | 75.009 | 5.15 | 862.88 | 10.76 |
| UG012187_rut_6 | 5.800 | 2.58 | 0.830 | 0.830 | 20.196 | 2.67 | 0.173 | 2.57 | 1028.382 | 11.24 | 2718.52 | 13.03 |
| UG012187_rut_7 | 85.895 | 5.48 | 0.825 | 6.45 | 1.339 | 5.38 | 0.012 | 5.62 | 806.058 | 11.92 | 2871.71 | 15.27 |
| UG012187_rut_8 | 7.533 | 6.08 | 0.796 | 5.33 | 13.546 | 6.52 | 0.133 | 5.96 | 929.307 | 14.78 | | |
| UG012187_rut_9 | 6.520 | 6.81 | 0.743 | 6.42 | 15.915 | 7.64 | 0.155 | 7.39 | | | | |

Appendix B: Eastern Sunda arc geochronology data - rutile

| Analysis ID | 238U/206Pb ratio | 1s% | 207Pb/206Pb ratio | 1s% | 207Pb/235U (calc) ratio | 1s% | 206Pb/238U ratio | 1s% | 206Pb/238U Age (Ma) | 2s% | 207Pb/235U (calc) Age (Ma) | 2s% |
|-----------------|------------------|-------|-------------------|---------|-------------------------|-------|------------------|----------|---------------------|-------|----------------------------|-------|
| UG012188_rut_10 | 2.715 | 3.33 | 0.838 | 42.927 | 3.52 | 0.369 | 3.33 | 2025.432 | 3840.71 | 6.65 | 3840.71 | 7.04 |
| UG012188_rut_11 | 1.266 | 6.96 | 0.853 | 96.429 | 6.08 | 0.797 | 5.83 | 3777.201 | 4649.56 | 11.67 | 4649.56 | 12.15 |
| UG012188_rut_11 | 11.536 | 2.95 | 0.817 | 9.722 | 3.51 | 0.087 | 3.08 | 540.344 | 2408.76 | 6.15 | 2408.76 | 7.02 |
| UG012188_rut_12 | 40.986 | 7.84 | 0.702 | 6.25 | 9.18 | 0.024 | 2.431 | 155.337 | 18.36 | 18.07 | 1251.86 | 18.36 |
| UG012188_rut_13 | 18.496 | 6.19 | 0.819 | 6.251 | 6.50 | 0.054 | 7.52 | 338.510 | 2011.61 | 15.04 | 2011.61 | 13.00 |
| UG012188_rut_14 | 6.620 | 9.89 | 0.832 | 17.604 | 7.39 | 0.152 | 7.19 | 914.032 | 2868.37 | 14.39 | 2868.37 | 14.78 |
| UG012188_rut_15 | 11.187 | 4.42 | 0.858 | 11.078 | 4.81 | 0.091 | 4.95 | 561.721 | 2529.67 | 9.89 | 2529.67 | 9.61 |
| UG012188_rut_16 | 8.479 | 3.62 | 0.827 | 13.716 | 3.52 | 0.119 | 3.68 | 727.260 | 2730.32 | 7.35 | 2730.32 | 7.05 |
| UG012188_rut_17 | 5.554 | 8.61 | 0.855 | 21.774 | 9.41 | 0.181 | 9.38 | 1071.316 | 3173.71 | 18.76 | 3173.71 | 18.82 |
| UG012188_rut_18 | 5.605 | 3.65 | 0.855 | 21.432 | 3.56 | 0.180 | 3.98 | 1065.435 | 3158.35 | 7.96 | 3158.35 | 7.13 |
| UG012188_rut_19 | 11.999 | 5.47 | 0.782 | 9.154 | 5.88 | 0.084 | 6.01 | 517.247 | 2353.50 | 12.02 | 2353.50 | 11.75 |
| UG012188_rut_2 | 114.236 | 6.33 | 0.932 | 1.153 | 5.81 | 0.009 | 6.38 | 57.059 | 778.44 | 12.77 | 778.44 | 11.62 |
| UG012188_rut_20 | 11.348 | 10.68 | 0.813 | 10.105 | 12.08 | 0.089 | 12.26 | 547.210 | 2444.45 | 24.52 | 2444.45 | 24.16 |
| UG012188_rut_21 | 8.272 | 6.95 | 0.843 | 13.622 | 6.99 | 0.119 | 7.08 | 725.877 | 2723.77 | 14.16 | 2723.77 | 13.99 |
| UG012188_rut_22 | 1.678 | 3.58 | 0.830 | 68.837 | 3.70 | 0.599 | 3.61 | 3024.644 | 4311.48 | 7.22 | 4311.48 | 7.39 |
| UG012188_rut_23 | 1.747 | 3.01 | 0.805 | 64.987 | 3.07 | 0.576 | 3.13 | 2831.949 | 4253.91 | 6.25 | 4253.91 | 6.13 |
| UG012188_rut_24 | 1.530 | 6.50 | 0.842 | 77.286 | 10.07 | 0.650 | 8.71 | 3229.730 | 4427.45 | 17.42 | 4427.45 | 20.14 |
| UG012188_rut_26 | 180.997 | 11.86 | 0.835 | 0.624 | 11.43 | 0.006 | 12.07 | 35.822 | 492.59 | 24.14 | 492.59 | 22.86 |
| UG012188_rut_27 | 22.982 | 5.38 | 0.812 | 5.006 | 5.66 | 0.044 | 5.28 | 275.457 | 1820.30 | 10.56 | 1820.30 | 11.31 |
| UG012188_rut_29 | 0.588 | 8.88 | 0.833 | 202.262 | 7.85 | 1.701 | 7.71 | 6404.615 | 5396.25 | 15.42 | 5396.25 | 15.70 |
| UG012188_rut_3 | 4.435 | 7.75 | 0.820 | 26.335 | 8.44 | 0.228 | 7.92 | 1322.218 | 3359.04 | 15.83 | 3359.04 | 16.88 |
| UG012188_rut_30 | 15.071 | 8.18 | 0.817 | 7.809 | 7.41 | 0.067 | 7.92 | 418.044 | 2209.22 | 15.84 | 2209.22 | 14.83 |
| UG012188_rut_31 | 3.758 | 3.72 | 0.826 | 29.979 | 4.04 | 0.265 | 3.71 | 1514.289 | 3486.12 | 7.41 | 3486.12 | 8.07 |
| UG012188_rut_32 | < DL | 31.45 | < DL | 0.121 | 26.02 | 0.001 | 31.53 | 5.088 | 116.36 | 63.06 | 116.36 | 52.04 |
| UG012188_rut_33 | 3.609 | 4.95 | 0.848 | 33.633 | 4.72 | 0.278 | 5.07 | 1583.286 | 3599.35 | 10.14 | 3599.35 | 9.43 |
| UG012188_rut_34 | 5.410 | 5.76 | 0.816 | 20.650 | 7.21 | 0.186 | 6.93 | 1100.044 | 3122.32 | 13.86 | 3122.32 | 14.42 |
| UG012188_rut_4 | 12.425 | 4.48 | 0.771 | 8.863 | 4.57 | 0.081 | 4.89 | 501.922 | 2323.98 | 9.79 | 2323.98 | 9.15 |
| UG012188_rut_5 | 308.331 | 17.01 | 0.894 | 26.55 | 14.35 | 0.003 | 12.68 | 20.487 | 236.92 | 25.36 | 236.92 | 28.70 |
| UG012188_rut_6 | 1.935 | 21.49 | 0.873 | 61.857 | 10.29 | 0.512 | 12.03 | 2664.012 | 4204.57 | 24.06 | 4204.57 | 20.58 |
| UG012188_rut_7 | 6.610 | 7.58 | 0.867 | 18.782 | 9.48 | 0.152 | 8.39 | 913.456 | 3000.71 | 16.78 | 3000.71 | 18.97 |
| UG012188_rut_8 | 11.379 | 4.60 | 0.893 | 11.252 | 6.27 | 0.089 | 4.89 | 547.759 | 2544.21 | 9.78 | 2544.21 | 12.54 |
| UG012188_rut_9 | 73.053 | 7.78 | 0.744 | 1.410 | 7.70 | 0.014 | 8.17 | 87.648 | 893.31 | 16.34 | 893.31 | 15.40 |
| UG012188_rut_1 | 2.429 | 9.07 | 0.846 | 49.148 | 8.89 | 0.411 | 8.73 | 2219.079 | 3975.20 | 17.47 | 3975.20 | 17.78 |
| UG012188_rut_10 | 13.439 | 9.21 | 0.782 | 8.29 | 9.96 | 0.076 | 9.63 | 473.686 | 2250.57 | 19.25 | 2250.57 | 19.92 |
| UG012188_rut_11 | 42.721 | 5.30 | 0.751 | 2.472 | 4.50 | 0.023 | 5.33 | 148.787 | 1263.77 | 10.66 | 1263.77 | 9.00 |
| UG012188_rut_12 | 3.912 | 6.36 | 0.855 | 30.430 | 6.44 | 0.257 | 6.26 | 1476.360 | 3500.81 | 12.53 | 3500.81 | 12.89 |
| UG012188_rut_13 | 31.790 | 17.12 | 0.747 | 3.313 | 10.33 | 0.032 | 7.03 | 205.551 | 1484.04 | 14.07 | 1484.04 | 20.65 |
| UG012188_rut_14 | 7.271 | 4.99 | 0.799 | 15.796 | 6.54 | 0.140 | 5.50 | 844.731 | 2864.53 | 10.99 | 2864.53 | 13.09 |
| UG012188_rut_15 | 5.617 | 3.79 | 0.819 | 20.928 | 4.10 | 0.178 | 4.26 | 1058.346 | 3135.26 | 8.53 | 3135.26 | 8.20 |
| UG012188_rut_16 | 5.090 | 4.17 | 0.782 | 21.916 | 4.03 | 0.197 | 4.51 | 1161.712 | 3180.03 | 9.02 | 3180.03 | 8.06 |
| UG012188_rut_17 | 2.338 | 4.89 | 0.833 | 49.352 | 5.10 | 0.429 | 5.18 | 2302.715 | 3979.33 | 10.37 | 3979.33 | 10.20 |
| UG012188_rut_18 | 1.371 | 4.19 | 0.833 | 86.146 | 3.40 | 0.737 | 3.51 | 3558.916 | 4536.31 | 7.02 | 4536.31 | 6.80 |
| UG012188_rut_19 | 1.703 | 5.22 | 0.851 | 69.808 | 5.06 | 0.596 | 5.14 | 3014.294 | 4325.50 | 10.27 | 4325.50 | 10.13 |
| UG012188_rut_2 | 159.144 | 17.74 | 0.236 | 0.209 | 30.35 | 0.006 | 17.18 | 41.647 | 192.64 | 34.37 | 192.64 | 60.70 |
| UG012188_rut_20 | 42.466 | 12.17 | 0.745 | 2.364 | 14.29 | 0.023 | 11.51 | 147.264 | 1231.70 | 23.01 | 1231.70 | 28.57 |
| UG012188_rut_21 | 3.830 | 4.19 | 0.832 | 30.427 | 4.42 | 0.266 | 3.94 | 1518.175 | 3500.71 | 7.88 | 3500.71 | 8.83 |
| UG012188_rut_3 | 20.982 | 7.47 | 0.922 | 8.74 | 8.38 | 0.048 | 10.24 | 304.397 | 2029.93 | 20.48 | 2029.93 | 16.76 |
| UG012188_rut_4 | 7.961 | 7.68 | 0.823 | 14.797 | 7.12 | 0.127 | 7.11 | 769.312 | 2802.30 | 14.23 | 2802.30 | 14.23 |
| UG012188_rut_5 | 4.337 | 3.74 | 0.819 | 26.818 | 3.65 | 0.231 | 4.14 | 1341.954 | 3376.83 | 8.28 | 3376.83 | 7.29 |
| UG012188_rut_6 | 7.305 | 3.72 | 0.806 | 15.383 | 3.33 | 0.138 | 3.96 | 834.555 | 2839.23 | 7.91 | 2839.23 | 6.65 |

Appendix B: Eastern Sunda arc geochronology data - rutile

| Analysis ID | ²³⁸ U/ ²⁰⁶ Pb ratio | 1s% | ²⁰⁷ Pb/ ²⁰⁶ Pb ratio | 1s% | ²⁰⁷ Pb/ ²³⁵ U (calc) ratio | 1s% | ²⁰⁶ Pb/ ²³⁸ U ratio | 1s% | ²⁰⁶ Pb/ ²³⁸ U Age (Ma) | 2s% | ²⁰⁷ Pb/ ²³⁵ U (calc) Age (Ma) | 2s% |
|-----------------|---|-------|--|-------|--|-------|---|-------|--|-------|---|-------|
| UG012189_rut_7 | 31.552 | 23.35 | 0.789 | 11.98 | 3.600 | 17.57 | 0.031 | 18.82 | 199.201 | 37.63 | 1549.61 | 35.14 |
| UG012189_rut_8 | 9.792 | 5.76 | 0.639 | 2.45 | 11.945 | 4.54 | 0.102 | 4.53 | 628.121 | 9.05 | 2600.08 | 9.09 |
| UG012189_rut_9 | 3.240 | 3.91 | 0.798 | 3.22 | 32.813 | 4.32 | 0.308 | 4.35 | 1731.017 | 8.70 | 3575.01 | 8.64 |
| UG012191_rut_1 | 2.590 | 4.63 | 0.837 | 1.35 | 46.417 | 5.43 | 0.388 | 5.33 | 2115.254 | 10.65 | 3896.69 | 10.86 |
| UG012191_rut_10 | 8.856 | 3.55 | 0.628 | 1.87 | 12.788 | 3.81 | 0.114 | 3.56 | 693.814 | 7.11 | 2664.16 | 7.61 |
| UG012191_rut_12 | 19.365 | 4.59 | 0.842 | 2.74 | 6.122 | 4.89 | 0.052 | 4.46 | 326.459 | 8.91 | 1983.43 | 9.79 |
| UG012191_rut_13 | 5.160 | 9.79 | 0.842 | 1.31 | 22.768 | 8.13 | 0.195 | 7.72 | 1150.664 | 15.45 | 3217.10 | 16.26 |
| UG012191_rut_14 | 5.005 | 3.71 | 0.840 | 2.45 | 23.641 | 3.67 | 0.203 | 4.43 | 1192.759 | 8.86 | 3263.72 | 7.35 |
| UG012191_rut_15 | 2.726 | 6.32 | 0.820 | 1.44 | 42.360 | 7.44 | 0.369 | 7.39 | 2022.838 | 14.79 | 3827.54 | 14.88 |
| UG012191_rut_16 | 29.506 | 7.09 | 0.739 | 9.38 | 3.654 | 7.15 | 0.034 | 8.23 | 212.653 | 16.47 | 1561.33 | 14.30 |
| UG012191_rut_18 | 18.891 | 7.56 | 0.751 | 3.74 | 5.450 | 11.72 | 0.052 | 14.01 | 326.330 | 28.01 | 1892.77 | 23.45 |
| UG012191_rut_19 | 684.219 | 9.03 | 0.617 | 12.82 | 0.126 | 9.77 | 0.001 | 9.03 | 9.403 | 18.06 | 120.14 | 19.55 |
| UG012191_rut_20 | 1.271 | 2.87 | 0.824 | 0.98 | 89.182 | 3.00 | 0.785 | 2.91 | 3736.565 | 5.81 | 4571.08 | 5.99 |
| UG012191_rut_21 | 4.044 | 5.66 | 0.847 | 1.44 | 28.854 | 5.72 | 0.246 | 5.96 | 1417.036 | 11.93 | 3448.56 | 11.44 |
| UG012191_rut_22 | 13.348 | 3.94 | 0.863 | 3.96 | 9.191 | 4.06 | 0.075 | 4.31 | 468.391 | 8.61 | 2357.17 | 8.13 |
| UG012191_rut_23 | 561.002 | 17.87 | 0.735 | 23.16 | 0.189 | 16.63 | 0.002 | 17.64 | 10.876 | 35.28 | 175.64 | 33.26 |
| UG012191_rut_24 | 15.326 | 5.02 | 0.824 | 5.81 | 7.747 | 4.22 | 0.065 | 5.78 | 404.927 | 11.55 | 2202.11 | 8.45 |
| UG012191_rut_25 | 20.139 | 10.12 | 0.731 | 4.05 | 5.191 | 7.73 | 0.051 | 8.20 | 319.677 | 16.40 | 1851.16 | 15.47 |
| UG012191_rut_26 | 37.742 | 7.42 | 0.784 | 8.65 | 3.046 | 6.90 | 0.027 | 7.49 | 173.187 | 14.98 | 1419.26 | 13.81 |
| UG012191_rut_27 | 2.093 | 3.05 | 0.863 | 1.40 | 403.679 | 5.61 | 0.492 | 5.68 | 9622.856 | 5.71 | 6095.44 | 5.62 |
| UG012191_rut_28 | 23.982 | 5.99 | 0.860 | 2.59 | 55.355 | 2.84 | 0.042 | 5.46 | 262.781 | 10.91 | 1805.62 | 10.75 |
| UG012191_rut_3 | 11.648 | 6.89 | 0.834 | 5.57 | 10.074 | 7.24 | 0.088 | 8.03 | 544.799 | 16.06 | 2441.62 | 14.47 |
| UG012191_rut_4 | 10.154 | 4.73 | 0.831 | 2.42 | 11.680 | 4.94 | 0.100 | 4.61 | 613.056 | 9.23 | 2577.51 | 9.87 |
| UG012191_rut_5 | 25.729 | 10.16 | 0.808 | 3.94 | 4.435 | 7.45 | 0.040 | 8.08 | 249.863 | 16.17 | 1718.81 | 14.91 |
| UG012191_rut_6 | 262.423 | 13.82 | 0.693 | 19.65 | 784.995 | 7.63 | 6.774 | 7.59 | 13219.957 | 15.18 | 6769.51 | 15.26 |
| UG012191_rut_7 | 0.148 | 11.63 | 0.843 | 0.64 | 0.371 | 14.38 | 0.005 | 17.37 | 29.306 | 34.74 | 340.70 | 36.86 |
| UG012191_rut_8 | 212.427 | 16.26 | 0.593 | 24.34 | 0.399 | 18.43 | 0.036 | 7.18 | 229.424 | 14.37 | 1627.44 | 11.01 |
| UG012191_rut_9 | 28.085 | 5.57 | 0.779 | 8.16 | 3.967 | 5.51 | 0.314 | 7.79 | 1759.260 | 15.59 | 3867.28 | 15.73 |
| UG012192_rut_1 | 3.234 | 8.16 | 0.817 | 1.47 | 36.030 | 7.87 | 0.036 | 8.31 | 3016.474 | 13.63 | 4374.55 | 12.88 |
| UG012192_rut_10 | 1.675 | 6.23 | 0.843 | 1.72 | 73.312 | 6.44 | 0.597 | 6.81 | 1914.871 | 7.55 | 3805.71 | 7.17 |
| UG012192_rut_11 | 2.918 | 3.42 | 0.843 | 1.08 | 41.438 | 3.58 | 0.346 | 3.78 | 4058.668 | 20.62 | 4728.41 | 18.31 |
| UG012192_rut_13 | 1.175 | 9.47 | 0.824 | 2.58 | 104.296 | 9.16 | 0.877 | 10.31 | 9749.314 | 30.69 | 6153.33 | 29.88 |
| UG012192_rut_14 | 1.964 | 3.40 | 0.832 | 0.85 | 59.898 | 3.42 | 0.513 | 3.44 | 2670.431 | 6.87 | 4172.42 | 6.83 |
| UG012192_rut_2 | 10.534 | 6.61 | 0.793 | 2.81 | 11.190 | 7.62 | 0.098 | 7.98 | 603.470 | 15.97 | 2539.07 | 15.24 |
| UG012192_rut_3 | 1.971 | 3.77 | 0.836 | 1.29 | 59.960 | 3.36 | 0.508 | 3.74 | 2648.388 | 7.48 | 4173.44 | 6.72 |
| UG012192_rut_4 | 8.971 | 3.45 | 0.800 | 1.58 | 12.152 | 3.72 | 0.110 | 3.59 | 672.202 | 7.18 | 2616.23 | 7.45 |
| UG012192_rut_6 | 0.318 | 3.89 | 0.831 | 0.70 | 371.931 | 4.43 | 3.176 | 4.16 | 9213.411 | 8.31 | 6012.48 | 8.86 |
| UG012192_rut_7 | 13.700 | 3.81 | 0.805 | 1.86 | 8.270 | 4.17 | 0.074 | 4.03 | 458.634 | 8.06 | 2261.01 | 8.34 |
| UG012194_rut_8 | 8.280 | 9.78 | 0.816 | 1.88 | 13.382 | 11.29 | 0.122 | 11.38 | 740.094 | 22.75 | 2706.98 | 22.58 |
| UG012194_rut_9 | 16.886 | 8.54 | 0.831 | 5.10 | 6.771 | 11.67 | 0.058 | 10.06 | 364.799 | 20.12 | 2081.89 | 23.34 |
| UG012194_rut_1 | 3.763 | 4.78 | 0.870 | 3.37 | 32.146 | 4.42 | 0.268 | 4.98 | 1533.111 | 9.96 | 3554.78 | 8.84 |
| UG012194_rut_10 | 45.773 | 4.54 | 0.779 | 3.96 | 2.377 | 4.86 | 0.022 | 4.49 | 139.377 | 8.97 | 1235.82 | 9.72 |
| UG012194_rut_11 | 7.159 | 3.54 | 0.826 | 2.71 | 16.097 | 3.76 | 0.142 | 3.85 | 854.437 | 7.69 | 2882.57 | 7.52 |
| UG012194_rut_12 | 1442.573 | 9.84 | < DL | 25.28 | < DL | 23.64 | 0.001 | 9.82 | 4.512 | 19.64 | < DL | 47.29 |
| UG012194_rut_13 | 7.391 | 5.73 | 0.796 | 2.90 | 15.312 | 7.58 | 0.140 | 8.53 | 846.476 | 17.07 | 2634.82 | 15.16 |
| UG012194_rut_14 | 3.943 | 3.41 | 0.823 | 1.14 | 28.970 | 3.43 | 0.256 | 3.33 | 1468.665 | 6.66 | 3462.50 | 6.86 |
| UG012194_rut_15 | 12.295 | 5.02 | 0.800 | 1.95 | 9.047 | 5.33 | 0.082 | 4.91 | 507.277 | 9.82 | 2342.80 | 10.67 |
| UG012194_rut_2 | 2.033 | 6.72 | 0.808 | 1.61 | 55.961 | 6.18 | 0.499 | 6.30 | 2607.569 | 12.59 | 4104.55 | 12.35 |

Appendix B: Eastern Sunda arc geochronology data - rutile

| Analysis ID | 238U/206Pb ratio | 1s% | 207Pb/206Pb ratio | 1s% | 207Pb/235U (calc) ratio | 1s% | 206Pb/238U ratio | 1s% | 206Pb/238U Age (Ma) | 2s% | 207Pb/235U (calc) Age (Ma) | 2s% |
|-----------------|------------------|-------|-------------------|-------|-------------------------|-------|------------------|-------|---------------------|-------|----------------------------|-------|
| UG012194_rut_3 | 14.951 | 4.62 | 0.827 | 5.55 | 7.873 | 4.52 | 0.067 | 4.76 | 420.988 | 9.52 | 2216.60 | 9.04 |
| UG012194_rut_4 | 1.766 | 5.55 | 0.844 | 1.55 | 67.530 | 5.21 | 0.844 | 5.45 | 2871.932 | 10.90 | 4292.30 | 10.41 |
| UG012194_rut_5 | 8.521 | 3.07 | 0.844 | 1.34 | 13.946 | 3.01 | 0.118 | 3.08 | 719.137 | 6.15 | 2746.06 | 6.02 |
| UG012194_rut_6 | 19.422 | 3.36 | 0.823 | 2.03 | 5.954 | 3.58 | 0.052 | 3.70 | 328.416 | 7.39 | 1989.16 | 7.16 |
| UG012194_rut_7 | 38.810 | 4.57 | 0.820 | 4.68 | 2.927 | 5.35 | 0.026 | 5.20 | 164.577 | 10.40 | 1388.81 | 10.69 |
| UG012194_rut_8 | 0.447 | 5.19 | 0.818 | 1.15 | 263.545 | 5.11 | 2.252 | 5.32 | 7602.386 | 10.65 | 5624.69 | 10.21 |
| UG012194_rut_9 | 4.295 | 5.55 | 0.852 | 1.95 | 27.868 | 6.75 | 0.237 | 6.43 | 1369.747 | 12.87 | 3414.48 | 13.51 |
| UG012199_rut_1 | 0.581 | 3.79 | 0.837 | 1.63 | 200.489 | 3.94 | 1.736 | 3.71 | 6488.354 | 7.42 | 5387.36 | 7.88 |
| UG012199_rut_10 | 1.281 | 3.03 | 0.801 | 2.65 | 89.078 | 3.02 | 0.783 | 3.33 | 3728.909 | 6.65 | 4599.91 | 6.05 |
| UG012199_rut_11 | 3.153 | 3.13 | 0.847 | 2.42 | 37.904 | 3.16 | 0.321 | 3.22 | 1792.526 | 6.44 | 3717.42 | 6.31 |
| UG012199_rut_12 | 0.370 | 3.73 | 0.834 | 1.19 | 315.774 | 3.71 | 2.743 | 3.46 | 8508.472 | 6.92 | 5846.77 | 7.41 |
| UG012199_rut_2 | 1.759 | 4.64 | 0.802 | 3.36 | 63.379 | 5.88 | 0.576 | 4.70 | 2930.753 | 9.40 | 4228.86 | 11.76 |
| UG012199_rut_3 | 2.369 | 3.64 | 0.827 | 2.58 | 48.636 | 3.68 | 0.426 | 3.68 | 2289.818 | 7.36 | 3964.79 | 7.36 |
| UG012199_rut_4 | 1.422 | 3.04 | 0.819 | 1.61 | 79.081 | 3.04 | 0.708 | 3.01 | 3450.749 | 6.03 | 4450.46 | 6.09 |
| UG012199_rut_5 | 2.846 | 2.63 | 0.822 | 1.46 | 40.421 | 2.64 | 0.355 | 2.63 | 1957.291 | 5.27 | 3781.07 | 5.27 |
| UG012199_rut_6 | 2.997 | 3.32 | 0.821 | 1.78 | 37.980 | 3.33 | 0.336 | 3.26 | 1885.967 | 6.51 | 3718.87 | 6.65 |
| UG012199_rut_7 | 1.871 | 4.36 | 0.819 | 1.61 | 61.089 | 4.52 | 0.542 | 4.69 | 2790.970 | 9.38 | 4192.09 | 9.04 |
| UG012199_rut_8 | 1.177 | 4.35 | 0.828 | 1.32 | 97.866 | 4.46 | 0.858 | 4.28 | 3992.954 | 8.56 | 4664.44 | 8.92 |
| UG012200_rut_1 | 5.328 | 3.53 | 0.823 | 1.36 | 21.234 | 3.73 | 0.187 | 3.66 | 1106.733 | 7.32 | 3149.31 | 7.46 |
| UG012200_rut_10 | 16.507 | 4.62 | 0.824 | 4.01 | 7.225 | 4.64 | 0.060 | 5.31 | 377.933 | 10.62 | 2139.55 | 9.27 |
| UG012200_rut_11 | 1.701 | 4.29 | 0.815 | 1.86 | 64.994 | 3.89 | 0.585 | 3.93 | 2971.058 | 7.85 | 4254.01 | 7.79 |
| UG012200_rut_12 | 2.464 | 4.73 | 0.817 | 1.70 | 45.859 | 4.79 | 0.408 | 4.78 | 2207.204 | 9.55 | 3906.32 | 9.58 |
| UG012200_rut_13 | 61.473 | 4.57 | 0.762 | 5.54 | 1.751 | 4.56 | 0.017 | 4.57 | 105.671 | 9.13 | 1027.65 | 9.12 |
| UG012200_rut_14 | 1.426 | 4.10 | 0.826 | 1.57 | 81.217 | 3.95 | 0.708 | 3.88 | 3450.202 | 7.76 | 4477.19 | 7.89 |
| UG012200_rut_15 | 6.251 | 3.76 | 0.779 | 2.53 | 17.726 | 4.23 | 0.162 | 4.11 | 965.823 | 8.21 | 2974.99 | 8.45 |
| UG012200_rut_16 | 2.634 | 5.12 | 0.826 | 2.05 | 47.463 | 4.27 | 0.388 | 4.85 | 2115.571 | 9.69 | 3940.50 | 8.54 |
| UG012200_rut_17 | 2.157 | 5.67 | 0.858 | 2.68 | 56.558 | 5.78 | 0.465 | 5.65 | 2460.663 | 11.29 | 4115.14 | 11.56 |
| UG012200_rut_18 | 4.532 | 4.52 | 0.800 | 4.04 | 25.488 | 4.41 | 0.221 | 4.80 | 1288.901 | 9.60 | 3327.09 | 8.81 |
| UG012200_rut_19 | 3.563 | 3.48 | 0.849 | 1.57 | 33.351 | 3.42 | 0.283 | 3.59 | 1608.594 | 7.17 | 3591.04 | 6.84 |
| UG012200_rut_2 | 1.529 | 2.95 | 0.830 | 2.30 | 78.278 | 2.99 | 0.660 | 2.85 | 3285.606 | 5.70 | 4440.23 | 5.98 |
| UG012200_rut_20 | 4.675 | 7.70 | 0.826 | 2.79 | 24.648 | 9.50 | 0.213 | 9.57 | 1246.375 | 19.14 | 3294.36 | 19.01 |
| UG012200_rut_21 | 2.628 | 4.55 | 0.827 | 3.77 | 44.924 | 4.87 | 0.380 | 4.52 | 2077.289 | 9.04 | 3885.85 | 9.75 |
| UG012200_rut_22 | 27.457 | 6.11 | 0.805 | 6.85 | 4.171 | 7.28 | 0.037 | 8.10 | 236.627 | 16.20 | 1688.36 | 14.56 |
| UG012200_rut_23 | 7.415 | 6.42 | 0.824 | 5.51 | 16.016 | 7.35 | 0.137 | 7.38 | 827.500 | 14.77 | 2877.73 | 14.70 |
| UG012200_rut_24 | 4.563 | 2.90 | 0.813 | 1.48 | 24.777 | 3.15 | 0.218 | 3.09 | 1272.282 | 6.18 | 3299.47 | 6.31 |
| UG012200_rut_25 | 13.415 | 3.59 | 0.815 | 1.62 | 8.422 | 3.95 | 0.074 | 3.99 | 462.616 | 7.97 | 2277.55 | 7.90 |
| UG012200_rut_26 | 4.154 | 2.91 | 0.846 | 1.42 | 28.425 | 3.17 | 0.242 | 3.08 | 1395.443 | 6.16 | 3433.87 | 6.35 |
| UG012200_rut_27 | 4.458 | 4.79 | 0.807 | 3.02 | 25.465 | 5.85 | 0.229 | 6.26 | 1327.280 | 12.53 | 3326.20 | 11.70 |
| UG012200_rut_28 | 0.450 | 7.45 | 0.840 | 1.30 | 265.018 | 6.82 | 2.247 | 6.79 | 7592.527 | 13.57 | 5669.46 | 13.65 |
| UG012200_rut_29 | 0.622 | 4.74 | 0.852 | 1.09 | 195.177 | 5.26 | 1.624 | 5.08 | 6219.083 | 10.16 | 5360.23 | 10.51 |
| UG012200_rut_3 | 7.537 | 3.37 | 0.829 | 3.24 | 15.587 | 3.69 | 0.133 | 3.52 | 806.273 | 7.04 | 2851.82 | 7.39 |
| UG012200_rut_30 | 4.681 | 7.81 | 0.780 | 3.78 | 23.788 | 8.45 | 0.214 | 7.68 | 1251.817 | 15.36 | 3259.73 | 16.90 |
| UG012200_rut_4 | 35.999 | 8.32 | 0.795 | 5.64 | 3.205 | 13.41 | 0.027 | 10.72 | 169.750 | 21.43 | 1458.37 | 26.83 |
| UG012200_rut_5 | 0.552 | 3.11 | 0.836 | 1.829 | 213.871 | 3.22 | 0.181 | 3.06 | 6704.357 | 6.12 | 5452.65 | 6.43 |
| UG012200_rut_6 | 0.819 | 4.08 | 0.842 | 0.85 | 144.465 | 4.52 | 1.235 | 4.55 | 5184.826 | 9.10 | 5056.54 | 9.03 |
| UG012200_rut_7 | 5.551 | 2.77 | 0.853 | 2.09 | 21.104 | 2.77 | 0.181 | 2.84 | 1073.725 | 5.69 | 3143.36 | 5.54 |
| UG012200_rut_8 | 13.050 | 3.77 | 0.832 | 1.38 | 8.861 | 4.00 | 0.077 | 3.94 | 476.780 | 7.87 | 2323.80 | 8.00 |
| UG012200_rut_9 | 1.392 | 8.94 | 0.815 | 2.62 | 87.367 | 9.13 | 0.742 | 10.10 | 3576.344 | 20.21 | 4550.44 | 18.27 |
| UG012201_rut_1 | 63.362 | 4.26 | 0.729 | 3.70 | 1.593 | 4.66 | 0.016 | 4.69 | 101.260 | 9.38 | 967.61 | 9.32 |
| UG012201_rut_10 | 57.391 | 13.63 | 0.808 | 4.14 | 1.937 | 7.39 | 0.017 | 6.95 | 110.976 | 13.89 | 1094.04 | 14.78 |

Appendix B: Eastern Sunda arc geochronology data - rutile

| Analysis ID | 238U/206Pb ratio | 1s% | 207Pb/206Pb ratio | 1s% | 207Pb/235U (calc) ratio | 1s% | 206Pb/238U ratio | 1s% | 206Pb/238U Age (Ma) | 2s% | 207Pb/235U (calc) Age (Ma) | 2s% |
|----------------|------------------|-------|-------------------|-------|-------------------------|-------|------------------|-------|---------------------|-------|----------------------------|-------|
| UG012201_rut_2 | 391.428 | 8.79 | 0.299 | 15.84 | 0.105 | 13.70 | 0.003 | 8.96 | 16.317 | 17.91 | 101.22 | 27.41 |
| UG012201_rut_3 | 305.935 | 9.94 | 0.370 | 20.16 | 0.168 | 14.91 | 0.003 | 9.98 | 21.173 | 19.95 | 157.74 | 29.83 |
| UG012201_rut_4 | 248.816 | 6.56 | 0.561 | 8.93 | 0.313 | 7.36 | 0.004 | 7.50 | 25.995 | 15.00 | 276.42 | 14.72 |
| UG012201_rut_5 | 142.598 | 7.45 | 0.723 | 11.15 | 0.708 | 11.14 | 0.007 | 7.45 | 45.675 | 14.89 | 543.66 | 22.29 |
| UG012201_rut_6 | 59.429 | 5.07 | 0.791 | 6.90 | 1.851 | 5.94 | 0.017 | 5.76 | 108.374 | 11.53 | 1063.65 | 11.88 |
| UG012201_rut_7 | 221.520 | 41.02 | 0.955 | 49.98 | 0.339 | 16.65 | 0.004 | 25.26 | 27.038 | 50.51 | 296.48 | 33.30 |
| UG012201_rut_8 | 454.279 | 10.15 | 0.360 | 14.99 | 0.110 | 12.66 | 0.002 | 9.04 | 14.133 | 18.08 | 105.54 | 25.31 |
| UG012201_rut_9 | 19.068 | 5.12 | 0.634 | 6.64 | 6.155 | 6.00 | 0.062 | 5.99 | 329.556 | 11.98 | 1988.07 | 12.00 |
| UG012202_rut_1 | 7.055 | 6.62 | 0.760 | 3.38 | 14.932 | 7.87 | 0.141 | 15.43 | 852.595 | 15.43 | 2810.89 | 15.75 |
| UG012202_rut_2 | 3.867 | 5.77 | 0.635 | 2.04 | 29.819 | 6.23 | 0.258 | 5.61 | 1481.717 | 11.23 | 3480.86 | 12.45 |
| UG012202_rut_3 | 3.638 | 4.85 | 0.773 | 2.42 | 29.795 | 4.27 | 0.280 | 5.72 | 1593.199 | 11.43 | 3480.07 | 8.55 |
| UG012202_rut_4 | 289.229 | 9.12 | 0.753 | 12.56 | 0.381 | 3.78 | 0.003 | 9.04 | 968.527 | 7.38 | 2990.75 | 7.57 |
| BHF-02 rut1 | 38.200 | 6.96 | 0.857 | 7.88 | 3.240 | 9.18 | 0.027 | 8.36 | 172.348 | 16.72 | 327.58 | 18.37 |
| BHF-02 rut2 | 413.829 | 11.27 | 0.758 | 15.74 | 0.265 | 11.26 | 0.003 | 11.22 | 16.207 | 22.43 | 238.78 | 22.52 |
| BHF-02 rut4 | 133.289 | 6.74 | 0.798 | 9.17 | 0.865 | 6.68 | 0.008 | 6.68 | 50.274 | 13.35 | 632.95 | 13.36 |
| BHF-03 rut1 | 0.168 | 2.27 | 0.636 | 0.62 | 746.010 | 2.62 | 6.066 | 2.11 | 12604.661 | 4.23 | 6717.86 | 5.24 |
| BHF-03 rut3 | 44.176 | 16.09 | 0.680 | 11.75 | 5.867 | 6.97 | 0.053 | 5.47 | 330.765 | 10.93 | 1966.44 | 13.93 |
| BHF-03 rut11 | 0.491 | 3.42 | 0.962 | 2.27 | 253.670 | 3.79 | 2.120 | 3.45 | 7335.782 | 6.90 | 5625.19 | 7.58 |
| BHF-03 rut12 | 19.548 | 5.03 | 0.805 | 4.60 | 0.272 | 2.154 | 0.022 | 19.55 | 143.159 | 39.10 | 1166.40 | 37.05 |
| BHF-03 rut14 | 0.363 | 8.19 | 0.640 | 2.25 | 332.272 | 7.40 | 2.852 | 7.50 | 8693.966 | 15.00 | 5898.32 | 14.80 |
| BHF-03 rut2 | 393.907 | 11.39 | 0.862 | 16.37 | 0.247 | 12.16 | 0.003 | 11.70 | 16.698 | 23.39 | 223.82 | 24.31 |
| BHF-03 rut5 | 54.593 | 7.86 | 0.769 | 8.29 | 40.563 | 8.15 | 0.349 | 12.91 | 117.229 | 19.28 | 1113.72 | 31.14 |
| BHF-03 rut6 | 2.933 | 12.66 | 0.822 | 3.22 | 517.726 | 2.85 | 4.391 | 2.30 | 10860.266 | 4.61 | 6347.54 | 5.70 |
| BHF-03 rut7 | 0.079 | 2.32 | 0.638 | 0.68 | 1523.006 | 2.61 | 13.061 | 2.12 | 17040.446 | 4.25 | 7441.84 | 5.23 |
| BHF-03 rut8 | 303.175 | 7.43 | 0.622 | 10.92 | 0.292 | 8.29 | 0.003 | 7.45 | 21.742 | 14.90 | 8075.90 | 15.43 |
| BHF-03 rut9 | 86.333 | 8.83 | 0.837 | 1.22 | 1.362 | 8.15 | 0.012 | 8.14 | 76.408 | 16.29 | 872.78 | 16.30 |
| GBF-01 rut1 | 28.490 | 7.38 | 0.815 | 4.84 | 3.862 | 8.22 | 0.035 | 7.09 | 224.347 | 14.17 | 1610.00 | 16.44 |
| GBF-01 rut10 | 21.865 | 7.27 | 0.764 | 3.53 | 5.145 | 7.87 | 0.047 | 8.13 | 295.628 | 16.25 | 1843.51 | 15.73 |
| GBF-01 rut12 | 19.555 | 5.09 | 0.784 | 4.93 | 5.101 | 4.73 | 0.062 | 5.33 | 327.240 | 10.65 | 1836.31 | 9.47 |
| GBF-01 rut13 | 132.388 | 9.38 | 0.669 | 15.64 | 0.652 | 12.27 | 0.007 | 10.75 | 48.053 | 21.51 | 509.98 | 24.54 |
| GBF-01 rut14 | 1031.517 | 29.10 | 0.297 | 30.83 | 0.044 | 26.20 | 0.001 | 16.54 | 6.511 | 33.07 | 43.74 | 52.40 |
| GBF-01 rut15 | 31.737 | 7.31 | 0.805 | 2.88 | 3.713 | 7.01 | 0.032 | 6.73 | 202.792 | 13.46 | 1574.21 | 14.02 |
| GBF-01 rut16 | 30.859 | 3.91 | 0.801 | 2.24 | 3.806 | 3.52 | 0.033 | 3.38 | 206.880 | 6.76 | 1593.96 | 7.04 |
| GBF-01 rut17 | 74.528 | 3.79 | 0.778 | 3.28 | 1.523 | 4.37 | 0.013 | 3.82 | 86.355 | 7.64 | 939.64 | 8.74 |
| GBF-01 rut18 | 31.822 | 4.49 | 0.794 | 3.51 | 3.438 | 5.61 | 0.031 | 4.59 | 199.216 | 9.19 | 1513.14 | 11.22 |
| GBF-01 rut19 | 25.692 | 15.57 | 0.829 | 6.32 | 4.542 | 8.01 | 0.039 | 8.33 | 248.448 | 16.66 | 1738.72 | 16.03 |
| GBF-01 rut20 | 14.212 | 4.76 | 0.819 | 2.27 | 8.324 | 4.89 | 0.071 | 4.54 | 442.225 | 9.09 | 2266.97 | 9.79 |
| GBF-01 rut21 | 27.988 | 7.66 | 0.805 | 2.02 | 4.183 | 5.34 | 0.036 | 5.42 | 230.744 | 10.84 | 1670.72 | 10.68 |
| GBF-01 rut22 | 43.423 | 5.91 | 0.806 | 4.59 | 2.820 | 7.66 | 0.024 | 7.54 | 151.231 | 15.08 | 1361.00 | 15.31 |
| GBF-01 rut23 | 38.295 | 4.00 | 0.805 | 4.77 | 3.063 | 4.09 | 0.027 | 3.92 | 168.811 | 7.83 | 1423.42 | 8.17 |
| GBF-01 rut24 | 60.275 | 3.28 | 0.791 | 3.66 | 1.933 | 3.46 | 0.017 | 3.50 | 107.628 | 7.00 | 1092.69 | 6.92 |
| GBF-01 rut25 | 28.573 | 4.68 | 0.802 | 1.50 | 3.866 | 3.87 | 0.035 | 3.51 | 221.383 | 7.01 | 1606.67 | 7.73 |
| GBF-01 rut26 | 83.580 | 3.85 | 0.759 | 4.72 | 1.285 | 4.48 | 0.012 | 4.31 | 77.362 | 8.62 | 839.05 | 8.96 |
| GBF-01 rut27 | 106.460 | 5.87 | 0.771 | 6.97 | 0.958 | 8.97 | 0.009 | 7.77 | 193.311 | 12.18 | 1495.32 | 13.43 |
| GBF-01 rut28 | 28.364 | 3.63 | 0.812 | 2.37 | 3.941 | 3.89 | 0.035 | 3.94 | 59.904 | 15.53 | 682.03 | 17.94 |
| GBF-01 rut29 | 46.422 | 5.02 | 0.799 | 4.90 | 2.520 | 5.81 | 0.022 | 5.80 | 223.616 | 7.89 | 1622.12 | 7.78 |
| | | | | | | | | | 138.684 | 11.60 | 1277.91 | 11.62 |

Appendix B: Eastern Sunda arc geochronology data - rutile

| Analysis ID | 238U/206Pb ratio | 1s% | 207Pb/206Pb ratio | 1s% | 207Pb/235U (calc) ratio | 1s% | 206Pb/238U ratio | 1s% | 206Pb/238U Age (Ma) | 2s% | 207Pb/235U (calc) Age (Ma) | 2s% |
|-------------|------------------|-------|-------------------|-------|-------------------------|-------|------------------|-------|---------------------|-------|----------------------------|-------|
| GBF-01 nu30 | 942.016 | 12.14 | 0.446 | 19.48 | 0.085 | 15.59 | 0.001 | 12.01 | 7.045 | 24.02 | 63.81 | 31.19 |
| GBF-01 nu33 | 16.056 | 5.88 | 0.788 | 3.30 | 7.215 | 6.13 | 0.064 | 5.58 | 400.550 | 11.17 | 2138.33 | 12.26 |
| GBF-01 nu31 | 305.996 | 10.11 | 0.470 | 13.61 | 0.235 | 13.42 | 0.003 | 13.87 | 20.729 | 27.75 | 214.46 | 26.83 |
| GBF-01 nu4 | 76.122 | 5.68 | 0.730 | 5.63 | 1.395 | 5.87 | 0.013 | 5.87 | 85.149 | 12.57 | 866.62 | 11.75 |
| GBF-01 nu5 | 40.558 | 4.29 | 0.798 | 3.48 | 2.876 | 4.50 | 0.025 | 4.65 | 159.622 | 9.31 | 1375.74 | 9.00 |
| GBF-01 nu6 | 98.189 | 4.80 | 0.769 | 5.38 | 1.056 | 7.31 | 0.010 | 5.90 | 66.304 | 11.79 | 732.04 | 14.62 |
| GBF-01 nu7 | 33.693 | 5.41 | 0.805 | 4.61 | 3.525 | 6.78 | 0.030 | 5.92 | 190.607 | 11.84 | 1532.85 | 13.56 |
| GBF-01 nu8 | 20.593 | 4.86 | 0.785 | 2.15 | 5.577 | 4.06 | 0.049 | 4.00 | 308.434 | 7.99 | 1912.61 | 8.12 |
| GBF-01 nu9 | 30.126 | 5.23 | 0.773 | 5.57 | 3.887 | 6.22 | 0.033 | 5.34 | 308.434 | 10.68 | 1610.96 | 12.44 |
| GBF-03 nu1 | 12.415 | 8.22 | 0.799 | 2.16 | 9.694 | 11.76 | 0.084 | 13.30 | 518.514 | 26.61 | 2406.17 | 23.51 |
| GBF-03 nu10 | 4.532 | 3.00 | 0.828 | 1.99 | 27.407 | 3.45 | 0.225 | 3.00 | 1309.692 | 6.01 | 3398.11 | 6.90 |
| GBF-03 nu11 | 3.225 | 8.10 | 0.798 | 3.63 | 38.287 | 6.77 | 0.324 | 8.08 | 1807.626 | 16.17 | 3727.36 | 13.54 |
| GBF-03 nu12 | 1.322 | 5.85 | 0.835 | 1.00 | 91.943 | 7.52 | 0.750 | 7.02 | 3609.329 | 14.05 | 4601.70 | 15.04 |
| GBF-03 nu13 | 3.655 | 4.82 | 0.829 | 0.82 | 33.340 | 5.04 | 0.276 | 5.02 | 1572.352 | 10.03 | 3590.72 | 10.07 |
| GBF-03 nu14 | 4.407 | 4.41 | 0.829 | 2.43 | 28.384 | 4.37 | 0.232 | 4.79 | 1343.596 | 9.59 | 3432.44 | 8.75 |
| GBF-03 nu15 | 1.431 | 4.10 | 0.838 | 1.06 | 91.092 | 5.74 | 0.732 | 5.72 | 3541.569 | 11.43 | 4592.36 | 11.49 |
| GBF-03 nu16 | 10.488 | 5.06 | 0.805 | 1.54 | 11.135 | 5.78 | 0.096 | 5.92 | 591.482 | 11.84 | 2534.45 | 11.56 |
| GBF-03 nu17 | 51.023 | 10.71 | 0.770 | 2.48 | 2.196 | 12.29 | 0.020 | 11.91 | 127.211 | 23.82 | 1179.77 | 24.57 |
| GBF-03 nu19 | 0.142 | 2.63 | 0.829 | 0.54 | 889.209 | 2.81 | 7.202 | 2.78 | 13565.556 | 5.55 | 6872.86 | 5.63 |
| GBF-03 nu2 | 2.161 | 4.42 | 0.824 | 1.42 | 57.089 | 5.55 | 0.472 | 4.86 | 2490.745 | 9.73 | 4124.47 | 11.11 |
| GBF-03 nu20 | 0.152 | 13.38 | 0.829 | 0.66 | 801.152 | 10.49 | 6.688 | 10.22 | 13148.510 | 20.44 | 6790.17 | 20.98 |
| GBF-03 nu21 | 15.036 | 6.50 | 0.799 | 2.44 | 7.851 | 7.83 | 0.066 | 8.09 | 411.570 | 16.19 | 2214.05 | 15.65 |
| GBF-03 nu23 | 2.279 | 3.56 | 0.806 | 1.21 | 52.074 | 4.33 | 0.446 | 3.86 | 2378.428 | 7.72 | 4032.79 | 8.66 |
| GBF-03 nu3 | 15.172 | 4.36 | 0.814 | 3.15 | 7.987 | 4.67 | 0.067 | 4.74 | 416.190 | 9.48 | 2229.55 | 9.34 |
| GBF-03 nu4 | 0.011 | 8.23 | 0.817 | 1.71 | 10831.245 | 8.68 | 91.137 | 8.49 | 29158.797 | 16.98 | 9433.20 | 17.35 |
| GBF-03 nu6 | 0.844 | 3.57 | 0.828 | 1.03 | 147.413 | 4.10 | 1.202 | 3.63 | 5089.478 | 7.26 | 5076.92 | 8.20 |
| GBF-03 nu7 | 1.283 | 3.98 | 0.835 | 0.83 | 96.894 | 4.14 | 0.787 | 4.04 | 3741.303 | 8.09 | 4654.29 | 8.27 |
| GBF-03 nu9 | 0.417 | 3.76 | 0.827 | 0.60 | 295.549 | 3.79 | 2.433 | 3.54 | 7950.447 | 7.08 | 5779.78 | 7.58 |
| JEM-01 nu1 | 142.963 | 10.94 | 0.740 | 10.79 | 0.789 | 11.66 | 0.007 | 13.24 | 46.105 | 26.47 | 590.76 | 23.32 |
| JEM-01 nu10 | 51.624 | 5.02 | 0.768 | 3.23 | 2.191 | 5.59 | 0.020 | 4.87 | 124.737 | 9.74 | 1178.14 | 11.17 |
| JEM-01 nu11 | 547.919 | 20.58 | 0.230 | 42.09 | 0.060 | 36.86 | 0.002 | 21.59 | 12.067 | 43.19 | 59.24 | 73.72 |
| JEM-01 nu12 | 100.442 | 11.34 | 0.643 | 8.33 | 0.906 | 8.98 | 0.010 | 9.95 | 66.831 | 19.89 | 654.77 | 17.96 |
| JEM-01 nu13 | 78.252 | 4.30 | 0.728 | 6.38 | 1.350 | 4.74 | 0.013 | 5.06 | 82.253 | 10.13 | 867.75 | 9.48 |
| JEM-01 nu14 | 17.120 | 4.75 | 0.805 | 4.00 | 7.005 | 5.09 | 0.059 | 5.25 | 371.538 | 10.49 | 2112.01 | 10.18 |
| JEM-01 nu15 | 82.311 | 12.93 | 0.735 | 5.53 | 1.324 | 10.41 | 0.012 | 9.66 | 78.057 | 19.32 | 856.45 | 20.81 |
| JEM-01 nu16 | 45.938 | 4.75 | 0.770 | 4.02 | 2.542 | 5.74 | 0.022 | 6.86 | 142.607 | 13.72 | 1284.21 | 11.47 |
| JEM-01 nu18 | 74.882 | 8.48 | 0.719 | 6.89 | 1.454 | 9.17 | 0.014 | 11.51 | 88.309 | 23.02 | 911.47 | 18.34 |
| JEM-01 nu19 | 69.738 | 18.67 | 0.789 | 6.22 | 1.525 | 9.65 | 0.014 | 9.10 | 91.340 | 18.20 | 940.44 | 19.29 |
| JEM-01 nu2 | 33.882 | 9.14 | 0.756 | 4.08 | 3.313 | 10.52 | 0.029 | 9.84 | 185.008 | 19.69 | 1484.13 | 21.04 |
| JEM-01 nu20 | 156.459 | 7.69 | 0.704 | 6.46 | 0.635 | 11.34 | 0.007 | 6.99 | 42.477 | 13.98 | 499.37 | 22.68 |
| JEM-01 nu21 | 153.668 | 8.86 | 0.635 | 9.13 | 0.607 | 8.87 | 0.006 | 9.37 | 41.351 | 18.74 | 481.43 | 17.75 |
| JEM-01 nu22 | 37.752 | 5.23 | 0.729 | 3.53 | 2.864 | 5.70 | 0.027 | 4.78 | 171.483 | 9.56 | 1372.48 | 11.39 |
| JEM-01 nu23 | 7.803 | 7.55 | 0.825 | 1.64 | 15.757 | 8.62 | 0.131 | 8.85 | 791.290 | 17.71 | 2862.18 | 17.24 |
| JEM-01 nu24 | 34.372 | 4.13 | 0.793 | 3.35 | 3.366 | 5.26 | 0.029 | 5.32 | 185.171 | 10.64 | 1496.41 | 10.51 |
| JEM-01 nu25 | 165.004 | 5.06 | 0.685 | 7.52 | 0.620 | 7.10 | 0.006 | 6.38 | 39.408 | 12.76 | 489.78 | 14.21 |
| JEM-01 nu26 | 85.359 | 5.95 | 0.865 | 5.62 | 1.185 | 6.84 | 0.012 | 6.18 | 75.561 | 12.35 | 793.69 | 13.68 |
| JEM-01 nu27 | 74.090 | 6.74 | 0.779 | 3.04 | 1.512 | 8.36 | 0.013 | 7.59 | 86.391 | 15.18 | 935.06 | 16.72 |
| JEM-01 nu28 | 207.765 | 9.16 | 0.595 | 9.31 | 0.424 | 11.82 | 0.005 | 10.42 | 30.635 | 20.83 | 359.17 | 23.64 |
| JEM-01 nu3 | 19.431 | 3.22 | 0.818 | 3.01 | 6.378 | 4.40 | 0.053 | 3.44 | 330.985 | 6.89 | 2029.24 | 8.80 |
| JEM-01 nu30 | 39.865 | 5.83 | 0.779 | 3.39 | 2.910 | 6.06 | 0.025 | 5.70 | 161.278 | 11.40 | 1384.42 | 12.11 |

Appendix B: Eastern Sunda arc geochronology data - rutile

| Analysis ID | 238U/206Pb ratio | 1 σ % | 207Pb/206Pb ratio | 1 σ % | 207Pb/235U (calc) ratio | 1 σ % | 206Pb/238U ratio | 1 σ % | 206Pb/238U Age (Ma) | 2 σ % | 207Pb/235U (calc) Age (Ma) | 2 σ % |
|--------------|------------------|--------------|-------------------|--------------|-------------------------|--------------|------------------|--------------|---------------------|--------------|----------------------------|--------------|
| JEM-01 rut4 | 114.094 | 10.78 | 0.687 | 11.54 | 0.859 | 8.54 | 0.009 | 8.94 | 58.611 | 17.88 | 629.85 | 17.07 |
| JEM-01 rut5 | 7.938 | 3.89 | 0.796 | 4.79 | 4.796 | 4.08 | 0.128 | 4.04 | 779.239 | 8.09 | 2748.42 | 8.15 |
| JEM-01 rut6 | 58.186 | 8.75 | 0.789 | 3.75 | 2.005 | 8.48 | 0.018 | 8.26 | 113.890 | 16.52 | 1117.04 | 16.96 |
| JEM-01 rut7 | 38.598 | 5.57 | 0.812 | 2.73 | 3.106 | 5.45 | 0.026 | 5.45 | 165.323 | 11.10 | 1434.08 | 10.91 |
| JEM-01 rut8 | 173.331 | 6.52 | 0.674 | 4.91 | 0.574 | 6.55 | 0.006 | 5.45 | 37.655 | 10.90 | 460.85 | 13.10 |
| JEM-01 rut9 | 46.242 | 3.81 | 0.737 | 3.55 | 2.376 | 4.12 | 0.022 | 4.51 | 137.417 | 9.03 | 1235.36 | 8.24 |
| JER-01 rut1 | 0.064 | 2.31 | 0.843 | 0.35 | 1940.805 | 2.50 | 15.861 | 2.08 | 1821.086 | 4.17 | 7687.87 | 5.00 |
| JER-01 rut10 | 0.044 | 2.96 | 0.850 | 0.48 | 2700.381 | 3.00 | 23.220 | 2.55 | 20545.853 | 5.09 | 8023.07 | 6.00 |
| JER-01 rut11 | 0.262 | 6.68 | 0.849 | 2.12 | 478.236 | 5.29 | 3.815 | 5.02 | 10131.705 | 10.03 | 6267.14 | 10.58 |
| JER-01 rut12 | 0.504 | 3.66 | 0.819 | 2.04 | 240.203 | 3.90 | 2.008 | 3.60 | 7098.606 | 7.20 | 5570.03 | 7.81 |
| JER-01 rut13 | 0.097 | 2.24 | 0.842 | 0.30 | 1194.986 | 2.75 | 10.252 | 2.09 | 15603.735 | 4.18 | 7195.74 | 5.51 |
| JER-01 rut14 | 0.134 | 1.98 | 0.844 | 0.47 | 875.879 | 2.37 | 7.604 | 1.73 | 13874.053 | 3.47 | 6880.61 | 4.74 |
| JER-01 rut15 | 0.198 | 2.78 | 0.848 | 0.85 | 627.132 | 2.84 | 5.074 | 2.49 | 11629.864 | 4.98 | 6541.86 | 5.68 |
| JER-01 rut16 | 0.766 | 4.46 | 0.843 | 2.32 | 153.684 | 5.51 | 1.330 | 4.71 | 5452.908 | 9.42 | 5118.93 | 11.03 |
| JER-01 rut18 | 0.023 | 5.00 | 0.840 | 0.80 | 5096.807 | 4.36 | 44.594 | 4.06 | 24623.730 | 8.12 | 8667.89 | 8.72 |
| JER-01 rut19 | 0.090 | 3.40 | 0.838 | 0.88 | 1311.908 | 3.28 | 11.465 | 2.90 | 16263.757 | 5.81 | 7290.45 | 6.56 |
| JER-01 rut2 | 0.047 | 2.36 | 0.839 | 0.39 | 2628.715 | 2.56 | 21.476 | 2.16 | 20064.021 | 4.33 | 7995.77 | 5.13 |
| JER-01 rut20 | 0.141 | 6.53 | 0.844 | 2.54 | 839.295 | 6.21 | 7.171 | 6.08 | 13541.213 | 12.16 | 6837.34 | 12.42 |
| JER-01 rut3 | 0.049 | 3.17 | 0.837 | 0.63 | 2534.628 | 3.06 | 20.617 | 2.69 | 19812.746 | 5.38 | 7956.77 | 6.13 |
| JER-01 rut4 | 1.208 | 31.36 | 0.849 | 17.72 | 116.243 | 27.54 | 0.965 | 16.28 | 4355.895 | 32.56 | 4837.53 | 55.08 |
| JER-01 rut5 | 0.106 | 5.46 | 0.858 | 0.60 | 1215.780 | 5.08 | 9.619 | 4.95 | 15230.556 | 9.90 | 7213.25 | 10.16 |
| JER-01 rut6 | 0.065 | 4.75 | 0.836 | 0.54 | 1929.027 | 4.81 | 15.689 | 4.56 | 18144.889 | 9.12 | 7881.67 | 9.62 |
| JER-01 rut7 | 0.065 | 5.04 | 0.847 | 0.64 | 1912.150 | 5.31 | 15.448 | 4.91 | 18051.237 | 9.82 | 7672.75 | 10.61 |
| JER-01 rut8 | 0.064 | 2.61 | 0.831 | 0.56 | 1912.115 | 2.84 | 15.718 | 2.43 | 18156.195 | 4.86 | 7672.73 | 5.69 |
| JER-01 rut9 | 22.755 | 14.30 | 0.792 | 17.56 | 4.721 | 15.38 | 0.043 | 13.08 | 273.816 | 26.15 | 1770.90 | 30.76 |
| LB002 rut1 | 0.342 | 5.35 | 0.829 | 1.01 | 346.662 | 4.99 | 2.928 | 4.65 | 8819.739 | 9.30 | 5941.24 | 9.98 |
| LB002 rut10 | 279.412 | 9.23 | 0.857 | 13.79 | 0.298 | 10.72 | 0.004 | 9.19 | 23.223 | 18.38 | 264.56 | 21.44 |
| LB002 rut11 | 92.523 | 9.39 | 0.696 | 14.39 | 1.031 | 7.46 | 0.011 | 7.22 | 69.310 | 14.44 | 719.58 | 14.93 |
| LB002 rut12 | 825.214 | 7.89 | 0.109 | 22.01 | 0.018 | 20.65 | 0.001 | 7.94 | 7.906 | 15.88 | 18.38 | 41.30 |
| LB002 rut13 | 8.106 | 4.07 | 0.811 | 2.56 | 14.819 | 4.43 | 0.124 | 3.69 | 754.548 | 7.38 | 2803.67 | 8.87 |
| LB002 rut14 | 0.772 | 2.75 | 0.849 | 1.64 | 160.814 | 2.99 | 1.308 | 2.64 | 5391.299 | 5.28 | 5164.69 | 5.97 |
| LB002 rut15 | 67.619 | 2.69 | 0.768 | 2.62 | 1.599 | 3.28 | 0.015 | 2.79 | 95.385 | 5.58 | 969.99 | 6.56 |
| LB002 rut16 | 908.427 | 7.28 | 0.130 | 18.33 | 0.021 | 17.09 | 0.001 | 7.28 | 7.117 | 14.55 | 21.22 | 34.17 |
| LB002 rut17 | 965.564 | 4.91 | 0.061 | 16.67 | 0.009 | 16.21 | 0.001 | 4.90 | 6.713 | 9.79 | 9.26 | 32.41 |
| LB002 rut18 | 0.107 | 2.36 | 0.839 | 0.52 | 1141.972 | 2.62 | 9.397 | 2.17 | 15094.612 | 4.34 | 7149.71 | 5.24 |
| LB002 rut19 | 0.031 | 3.42 | 0.838 | 0.29 | 3817.442 | 3.10 | 32.291 | 2.94 | 22596.548 | 5.88 | 8374.47 | 6.20 |
| LB002 rut2 | 0.208 | 4.13 | 0.848 | 0.64 | 564.244 | 4.67 | 4.806 | 4.14 | 11338.837 | 8.28 | 6434.75 | 9.34 |
| LB002 rut20 | 0.038 | 3.88 | 0.840 | 0.34 | 3242.007 | 3.62 | 28.571 | 3.42 | 21381.151 | 6.83 | 8208.62 | 7.24 |
| LB002 rut3 | 804.349 | 6.75 | 0.034 | 31.16 | 0.006 | 30.58 | 0.001 | 7.21 | 7.993 | 14.42 | 6.27 | 61.15 |
| LB002 rut4 | 0.129 | 3.31 | 0.832 | 0.56 | 963.575 | 3.18 | 7.749 | 2.71 | 13981.484 | 5.43 | 6945.31 | 6.36 |
| LB002 rut5 | 733.823 | 12.57 | 0.086 | 32.02 | 0.018 | 30.43 | 0.001 | 16.07 | 8.973 | 32.13 | 17.75 | 60.85 |
| LB002 rut6 | 555.533 | 18.90 | 0.530 | 28.93 | 0.146 | 22.29 | 0.002 | 19.16 | 12.155 | 38.33 | 138.73 | 44.57 |
| LB002 rut7 | 20.072 | 3.25 | 0.804 | 2.33 | 5.892 | 2.98 | 0.050 | 3.12 | 315.350 | 6.25 | 1960.05 | 5.97 |
| LB002 rut9 | 0.041 | 2.31 | 0.845 | 0.39 | 3043.808 | 2.60 | 24.599 | 2.14 | 20902.900 | 4.29 | 8144.58 | 5.21 |
| LB018 rut1 | 0.098 | 4.64 | 0.846 | 1.26 | 1212.479 | 4.70 | 10.523 | 3.68 | 15757.089 | 7.36 | 7210.49 | 9.40 |
| LB018 rut10 | 0.181 | 4.16 | 0.814 | 1.78 | 630.121 | 4.80 | 5.713 | 4.42 | 12274.354 | 8.83 | 6546.68 | 9.59 |
| LB018 rut2 | 1.174 | 3.49 | 0.830 | 3.15 | 98.005 | 3.73 | 3.44 | 3.44 | 4061.382 | 6.87 | 4676.06 | 7.45 |
| LB018 rut3 | 0.037 | 5.07 | 0.846 | 0.96 | 3182.788 | 4.34 | 27.608 | 3.54 | 21619.123 | 7.08 | 8189.91 | 8.68 |
| LB018 rut4 | 0.063 | 4.20 | 0.834 | 0.85 | 1859.207 | 4.07 | 16.414 | 3.39 | 18419.041 | 6.79 | 7644.25 | 8.13 |
| LB018 rut6 | 0.050 | 3.24 | 0.849 | 1.31 | 2385.832 | 3.69 | 20.489 | 2.75 | 19774.668 | 5.50 | 7897.37 | 7.38 |

Appendix B: Eastern Sunda arc geochronology data - rutile

| Analysis ID | 238U/206Pb ratio | 1s% | 207Pb/206Pb ratio | 1s% | 207Pb/235U (calc) ratio | 1s% | 206Pb/238U ratio | 1s% | 206Pb/238U Age (Ma) | 2s% | 207Pb/235U (calc) Age (Ma) | 2s% |
|-------------|------------------|-------|-------------------|-------|-------------------------|-------|------------------|-------|---------------------|-------|----------------------------|--------|
| LB018 rut7 | 0.034 | 2.41 | 0.839 | 0.52 | 3447.949 | 2.77 | 30.304 | 2.28 | 22199.789 | 4.57 | 8271.13 | 5.55 |
| LB018 rut8 | 0.020 | 8.16 | 0.839 | 1.59 | 5900.902 | 7.76 | 51.596 | 7.59 | 25544.680 | 15.18 | 8816.60 | 15.51 |
| LB018 rut9 | 0.025 | 2.88 | 0.835 | 0.47 | 4618.700 | 2.87 | 40.572 | 2.32 | 24028.445 | 4.64 | 8587.89 | 5.74 |
| LB022 rut1 | 8.573 | 3.02 | 0.815 | 3.74 | 13.208 | 3.42 | 0.119 | 3.32 | 724.787 | 6.65 | 2694.61 | 6.83 |
| LB022 rut10 | 7.784 | 12.76 | 0.821 | 3.42 | 15.601 | 8.49 | 0.131 | 8.13 | 794.167 | 16.26 | 2652.66 | 16.98 |
| LB022 rut2 | 234.673 | 6.48 | 0.800 | 13.93 | 0.378 | 11.62 | 0.004 | 7.25 | 27.743 | 14.50 | 325.78 | 23.24 |
| LB022 rut3 | 104.313 | 5.06 | 0.740 | 5.55 | 1.062 | 6.00 | 0.010 | 5.41 | 62.667 | 10.81 | 734.68 | 11.99 |
| LB022 rut6 | 476.807 | 22.20 | 0.493 | 35.13 | 0.145 | 27.35 | 0.002 | 22.20 | 13.957 | 44.39 | 137.73 | 54.71 |
| LB022 rut7 | 680.457 | 11.90 | 0.040 | 74.63 | < DL | 73.70 | 0.002 | 11.76 | 9.728 | 23.51 | < DL | 147.41 |
| LB022 rut8 | 44.444 | 7.64 | 0.775 | 8.84 | 2.417 | 8.29 | 0.023 | 7.68 | 144.095 | 15.36 | 1247.72 | 16.58 |
| LB022 rut9 | 75.530 | 6.96 | 0.688 | 8.28 | 1.288 | 9.77 | 0.014 | 8.32 | 88.677 | 16.65 | 840.55 | 19.54 |
| LB028 rut1 | 0.424 | 4.00 | 0.840 | 0.88 | 293.712 | 4.38 | 2.390 | 4.09 | 7870.334 | 8.17 | 5773.47 | 8.76 |
| LB028 rut10 | 0.007 | 2.49 | 0.833 | 0.38 | 15661.699 | 2.87 | 137.706 | 2.38 | 31795.938 | 4.77 | 9807.62 | 5.75 |
| LB028 rut2 | 0.160 | 2.43 | 0.842 | 0.42 | 762.884 | 2.83 | 6.297 | 2.40 | 12811.616 | 4.81 | 6740.50 | 5.67 |
| LB028 rut3 | 0.014 | 2.09 | 0.834 | 0.32 | 8064.683 | 2.51 | 70.999 | 1.92 | 27568.969 | 3.84 | 9133.75 | 5.03 |
| LB028 rut4 | 0.199 | 2.07 | 0.835 | 0.60 | 582.526 | 2.61 | 5.130 | 2.13 | 11688.352 | 4.27 | 6467.07 | 5.22 |
| LB028 rut5 | 0.034 | 8.20 | 0.838 | 0.35 | 3408.808 | 4.40 | 29.621 | 4.12 | 22057.456 | 8.23 | 8259.54 | 8.80 |
| LB028 rut6 | 0.055 | 4.11 | 0.852 | 0.94 | 2160.320 | 3.77 | 18.455 | 3.41 | 19133.485 | 6.83 | 7796.59 | 7.55 |
| LB028 rut8 | 0.064 | 7.90 | 0.863 | 1.87 | 1934.901 | 7.66 | 16.292 | 7.26 | 18373.660 | 14.51 | 7684.75 | 15.31 |
| LB028 rut9 | 0.018 | 2.89 | 0.845 | 0.55 | 6631.304 | 3.67 | 56.643 | 3.10 | 26135.421 | 6.20 | 8919.65 | 7.34 |
| LB029 rut1 | 0.182 | 5.58 | 0.831 | 0.48 | 642.310 | 4.82 | 5.632 | 4.73 | 12196.368 | 9.45 | 6566.10 | 9.65 |
| LB029 rut10 | 0.062 | 2.69 | 0.828 | 0.61 | 1920.352 | 3.07 | 16.771 | 2.47 | 18549.773 | 4.95 | 7677.09 | 6.13 |
| LB029 rut2 | 0.446 | 2.22 | 0.833 | 0.86 | 264.466 | 2.65 | 2.311 | 2.13 | 7718.314 | 4.25 | 5667.35 | 5.30 |
| LB029 rut3 | 0.580 | 2.08 | 0.831 | 0.36 | 199.440 | 2.58 | 1.753 | 2.06 | 6527.112 | 4.12 | 5382.05 | 5.16 |
| LB029 rut5 | 0.465 | 4.25 | 0.836 | 0.41 | 255.645 | 4.56 | 2.227 | 4.20 | 7553.035 | 8.40 | 5633.03 | 9.12 |
| LB029 rut6 | 0.065 | 1.74 | 0.833 | 0.40 | 1808.353 | 2.34 | 15.811 | 1.67 | 18192.114 | 3.35 | 7616.11 | 4.69 |
| LB029 rut7 | 0.011 | 8.62 | 0.840 | 1.05 | 10896.025 | 12.38 | 94.795 | 10.42 | 29409.782 | 20.84 | 9448.53 | 24.76 |
| LB036 rut8 | 0.241 | 3.80 | 0.839 | 0.40 | 491.863 | 4.24 | 4.274 | 3.84 | 10719.085 | 7.68 | 6295.61 | 8.48 |
| LB036 rut9 | 0.212 | 1.63 | 0.832 | 0.47 | 557.469 | 2.22 | 4.859 | 1.57 | 11387.262 | 3.14 | 6422.50 | 4.44 |
| LB036 rut10 | 15.112 | 9.37 | 0.835 | 2.67 | 8.217 | 7.03 | 0.067 | 6.14 | 420.794 | 12.29 | 2255.22 | 14.06 |
| LB036 rut11 | 32.121 | 3.72 | 0.769 | 4.96 | 3.419 | 5.55 | 0.032 | 5.45 | 204.059 | 10.90 | 1508.83 | 11.10 |
| LB036 rut12 | 57.521 | 6.56 | 0.809 | 5.99 | 2.048 | 9.03 | 0.017 | 8.86 | 110.841 | 17.73 | 1131.64 | 18.06 |
| LB036 rut13 | 41.344 | 7.87 | 0.794 | 6.61 | 2.860 | 8.15 | 0.025 | 7.37 | 157.839 | 14.75 | 1371.49 | 16.31 |
| LB036 rut14 | 52.527 | 9.64 | 0.735 | 10.05 | 2.001 | 7.16 | 0.020 | 8.64 | 125.596 | 17.28 | 1115.98 | 14.32 |
| LB036 rut15 | 43.619 | 3.73 | 0.782 | 4.44 | 2.551 | 3.77 | 0.024 | 3.84 | 151.040 | 7.68 | 1286.65 | 7.54 |
| LB036 rut16 | 4.428 | 3.41 | 0.831 | 2.34 | 26.657 | 4.10 | 0.230 | 4.41 | 1335.255 | 8.82 | 3370.93 | 8.20 |
| LB036 rut17 | 19.046 | 5.66 | 0.777 | 4.40 | 5.702 | 6.82 | 0.053 | 6.89 | 334.272 | 13.79 | 1931.64 | 13.63 |
| LB036 rut18 | 8.077 | 3.08 | 0.823 | 1.86 | 14.551 | 3.94 | 0.127 | 3.45 | 772.359 | 6.89 | 2786.34 | 7.87 |
| LB036 rut3 | 13.039 | 5.27 | 0.785 | 5.80 | 8.558 | 4.10 | 0.079 | 5.79 | 490.026 | 11.59 | 2282.15 | 8.19 |
| LB036 rut4 | 7.130 | 4.65 | 0.825 | 2.05 | 17.236 | 5.13 | 0.141 | 5.05 | 852.416 | 10.11 | 2948.08 | 10.25 |
| LB036 rut5 | 446.987 | 7.55 | 0.925 | 9.68 | 0.174 | 7.78 | 0.002 | 7.21 | 14.847 | 14.42 | 163.11 | 15.56 |
| LB036 rut6 | 56.263 | 5.42 | 0.748 | 6.31 | 1.880 | 6.93 | 0.018 | 6.14 | 116.599 | 12.28 | 1074.10 | 13.87 |
| LB036 rut7 | 17.149 | 5.72 | 0.802 | 5.26 | 6.672 | 5.65 | 0.061 | 5.37 | 379.494 | 10.74 | 2088.89 | 11.31 |
| LB036 rut8 | 434.766 | 12.49 | 0.309 | 23.38 | 0.100 | 19.77 | 0.002 | 12.67 | 15.200 | 25.34 | 97.01 | 39.54 |
| LB036 rut9 | 19.533 | 4.09 | 0.816 | 4.84 | 6.302 | 4.16 | 0.052 | 4.01 | 326.708 | 8.02 | 2018.79 | 8.32 |

Appendix B: Eastern Sunda arc geochronology data - titanite

| Analysis ID | ²³⁸ U/ ²⁰⁶ Pb ratio | 1s% | ²⁰⁷ Pb/ ²⁰⁶ Pb ratio | 1s% | ²⁰⁷ Pb/ ²³⁵ U (calc) ratio | 1s% | ²⁰⁸ Pb/ ²³² Th ratio | 1s% | ²⁰⁸ Pb/ ²³⁸ U ratio | 1s% | ²⁰⁶ Pb/ ²³⁸ U Age (Ma) | 2s% | ²⁰⁷ Pb/ ²³⁵ U (calc) Age (Ma) | 2s% | ²⁰⁸ Pb/ ²³² Th Age (Ma) | 2s% |
|---------------|---|------|--|-------|--|----------|--|--------|---|---------|--|-------|---|-------|---|-------|
| LB014_322_H11 | 157.87 | 4.60 | 0.6574 | 7.04 | 0.5685 | 4.63 | 0.0035 | 6.70 | 40.89 | 9.26 | 457.68 | 11.49 | 71.04 | 13.40 | | |
| LB014_322_H10 | 135.83 | 3.60 | 0.6710 | 6.80 | 0.6814 | 3.77 | 0.0024 | 6.43 | 47.41 | 7.55 | 527.64 | 11.52 | 48.90 | 12.86 | | |
| LB014_322_H11 | 375.54 | 3.64 | 0.4584 | 6.05 | 0.1682 | 3.63 | 0.0011 | 5.58 | 17.17 | 7.26 | 157.83 | 10.60 | 22.89 | 11.15 | | |
| LB014_322_H12 | 171.03 | 6.40 | 0.6216 | 10.08 | 0.4987 | 6.39 | 0.0019 | 9.57 | 37.89 | 12.77 | 410.82 | 16.26 | 37.60 | 19.14 | | |
| LB014_322_H13 | 153.68 | 3.63 | 0.5752 | 5.63 | 0.5141 | 4.81 | 0.0024 | 5.97 | 42.03 | 7.29 | 421.22 | 11.93 | 48.41 | 11.93 | | |
| LB014_322_H14 | 162.63 | 5.30 | 0.6661 | 7.62 | 0.5800 | 5.68 | 0.0021 | 11.55 | 39.29 | 11.37 | 464.47 | 15.72 | 41.75 | 23.09 | | |
| LB014_322_H15 | 428.05 | 8.60 | 0.4257 | 15.59 | 0.1342 | 8.84 | 0.0019 | 14.60 | 15.17 | 17.68 | 127.86 | 27.17 | 37.51 | 29.20 | | |
| LB014_322_H16 | 0.02 | 2.62 | 0.8393 | 0.31 | 7485.7422 | 2.87 | 64.7022 | 4.48 | 28979.02 | 4.92 | 9058.12 | 5.73 | 106879.94 | 8.95 | | |
| LB014_322_H17 | 115.79 | 7.45 | 0.5779 | 12.05 | 0.6804 | 7.44 | 0.0027 | 10.64 | 55.65 | 14.89 | 526.99 | 21.43 | 54.02 | 21.27 | | |
| LB014_322_H18 | 191.22 | 8.20 | 0.6330 | 11.09 | 0.4589 | 7.46 | 0.0028 | 8.46 | 33.74 | 14.91 | 383.49 | 18.26 | 56.70 | 16.93 | | |
| LB014_322_H19 | 34.22 | 4.73 | 0.8185 | 5.54 | 3.4444 | 4.73 | 0.0295 | 6.91 | 187.56 | 10.90 | 1514.60 | 9.46 | 291.01 | 13.81 | | |
| LB014_322_H20 | 120.20 | 5.64 | 0.6730 | 8.62 | 0.7842 | 6.90 | 0.0083 | 7.71 | 53.31 | 11.17 | 587.85 | 13.80 | 71.23 | 15.41 | | |
| LB014_322_H21 | 182.69 | 5.77 | 0.6111 | 8.81 | 0.4788 | 8.18 | 0.0016 | 7.71 | 35.31 | 11.44 | 397.26 | 16.36 | 32.23 | 15.43 | | |
| LB014_322_H22 | 50.22 | 7.03 | 0.6990 | 17.08 | 1.9078 | 7.54 | 0.0221 | 8.79 | 126.57 | 15.07 | 1083.82 | 14.31 | 442.18 | 17.58 | | |
| LB014_322_H23 | 218.36 | 3.77 | 0.5890 | 5.76 | 0.3794 | 4.88 | 0.0046 | 5.74 | 29.50 | 7.50 | 326.61 | 9.75 | 51.59 | 11.49 | | |
| LB014_322_H24 | 20.01 | 4.32 | 0.8015 | 6.37 | 5.5085 | 5.24 | 0.0500 | 6.09 | 314.47 | 8.93 | 1901.92 | 10.49 | 673.92 | 12.18 | | |
| LB014_322_H25 | 286.14 | 3.52 | 0.5924 | 5.36 | 0.3074 | 4.91 | 0.0038 | 3.51 | 24.18 | 7.03 | 272.17 | 9.82 | 51.96 | 11.92 | | |
| LB014_322_H26 | 164.97 | 3.91 | 0.6377 | 5.89 | 0.5314 | 4.93 | 0.0039 | 5.96 | 39.08 | 8.24 | 432.77 | 9.85 | 79.27 | 11.96 | | |
| LB014_322_H27 | 339.34 | 7.88 | 0.3209 | 15.35 | 0.1336 | 7.70 | 0.0008 | 14.22 | 18.96 | 15.39 | 127.33 | 27.16 | 16.01 | 28.45 | | |
| LB014_322_H28 | 0.40 | 2.20 | 0.8343 | 0.70 | 2.20 | 50.1986 | 6.62 | 0.7704 | 7.45 | 0.5916 | 2441.65 | 14.90 | 9292.66 | 16.32 | | |
| LB014_322_H29 | 0.20 | 2.20 | 0.8343 | 0.70 | 2.20 | 291.5910 | 2.40 | 2.5168 | 2.11 | 83.9346 | 8106.69 | 4.21 | 5766.13 | 4.79 | 90036.34 | 11.71 |
| LB025_323_H1 | 0.31 | 2.24 | 0.8376 | 1.07 | 369.5806 | 2.38 | 3.2528 | 2.06 | 11.0639 | 5.81 | 6006.06 | 4.75 | 50509.87 | 11.61 | | |
| LB025_323_H10 | 0.20 | 3.30 | 0.8325 | 0.85 | 562.7099 | 3.21 | 4.8913 | 3.17 | 10.1642 | 4.12 | 11432.50 | 6.34 | 6431.99 | 6.41 | 48905.38 | 8.23 |
| LB025_323_H11 | 0.69 | 3.62 | 0.8321 | 1.29 | 168.4975 | 3.66 | 1.4668 | 3.57 | 3.3414 | 3.92 | 5820.56 | 7.14 | 29760.23 | 7.83 | | |
| LB025_323_H12 | 1.36 | 4.52 | 0.8798 | 3.89 | 89.6596 | 4.71 | 0.7356 | 4.53 | 3554.11 | 9.07 | 4576.45 | 9.42 | 25481.87 | 12.86 | | |
| LB025_323_H2 | 0.24 | 2.14 | 0.8425 | 0.62 | 477.9737 | 2.26 | 4.1207 | 1.92 | 6.4858 | 4.25 | 10528.87 | 3.84 | 6286.59 | 4.53 | 40803.38 | 8.50 |
| LB025_323_H3 | 0.10 | 2.32 | 0.8383 | 0.79 | 1157.1193 | 2.50 | 9.9974 | 2.20 | 3.8823 | 3.91 | 15466.28 | 4.40 | 31292.21 | 7.82 | | |
| LB025_323_H4 | 0.43 | 1.89 | 0.8165 | 1.11 | 271.5961 | 2.24 | 2.3486 | 1.87 | 3.1241 | 3.93 | 7790.69 | 3.74 | 5694.26 | 4.48 | 28719.13 | 7.86 |
| LB025_323_H5 | 0.22 | 1.48 | 0.8378 | 0.50 | 521.5425 | 1.88 | 4.5207 | 1.45 | 5.2697 | 3.71 | 11013.68 | 2.91 | 6354.99 | 3.75 | 37209.81 | 7.42 |
| LB025_323_H6 | 0.08 | 5.24 | 0.8330 | 1.49 | 1415.3818 | 5.50 | 12.2839 | 4.88 | 128.1325 | 13.12 | 16673.92 | 9.75 | 7367.48 | 11.00 | 98528.55 | 26.24 |
| LB025_323_H7 | 0.16 | 6.31 | 0.8813 | 2.84 | 764.1244 | 6.28 | 6.2785 | 6.22 | 6.2785 | 6.22 | 6742.18 | 12.56 | 94776.38 | 44.32 | | |
| LB025_323_H8 | 0.16 | 3.60 | 0.8356 | 1.09 | 724.2472 | 3.62 | 6.2666 | 3.48 | 2.8142 | 3.63 | 12785.10 | 6.95 | 27135.82 | 7.26 | | |
| LB025_323_H9 | 3.10 | 3.38 | 0.8345 | 2.64 | 36.9439 | 3.57 | 0.3197 | 3.40 | 2.8200 | 6.55 | 1788.03 | 6.80 | 3682.04 | 7.14 | 27166.95 | 13.11 |
| LB037_329_H1 | 147.96 | 3.06 | 0.6673 | 4.19 | 0.6321 | 3.48 | 0.0067 | 3.48 | 0.0804 | 5.45 | 43.22 | 6.95 | 497.43 | 8.09 | 1567.90 | 10.89 |
| LB037_329_H10 | 257.24 | 4.61 | 0.6737 | 6.96 | 0.3647 | 5.66 | 0.0039 | 4.61 | 0.0011 | 6.72 | 25.01 | 9.22 | 315.75 | 11.31 | 22.23 | 13.44 |
| LB037_329_H11 | 17.73 | 2.64 | 0.7788 | 3.36 | 6.0735 | 3.19 | 0.0567 | 2.71 | 0.0310 | 4.91 | 355.61 | 5.42 | 1986.46 | 6.38 | 619.22 | 9.83 |
| LB037_329_H12 | 307.22 | 6.74 | 0.4537 | 11.81 | 0.2084 | 9.95 | 0.0033 | 6.73 | 0.0039 | 9.96 | 20.96 | 13.47 | 192.17 | 19.89 | 79.42 | 19.92 |
| LB037_329_H13 | 297.57 | 3.32 | 0.4533 | 5.46 | 0.2119 | 4.85 | 0.0009 | 3.31 | 0.0009 | 5.10 | 21.54 | 6.62 | 195.16 | 9.69 | 18.18 | 10.20 |
| LB037_329_H14 | 192.46 | 3.85 | 0.6575 | 5.73 | 0.4744 | 5.61 | 0.0052 | 4.14 | 0.0036 | 6.11 | 33.53 | 8.29 | 394.25 | 11.22 | 72.87 | 12.22 |
| LB037_329_H15 | 357.82 | 3.66 | 0.5393 | 6.04 | 0.2092 | 5.15 | 0.0028 | 3.90 | 0.0181 | 6.18 | 18.02 | 10.29 | 192.89 | 10.29 | 363.34 | 12.37 |
| LB037_329_H16 | 62.63 | 4.64 | 0.6849 | 6.91 | 1.5442 | 4.63 | 0.0160 | 4.63 | 0.0064 | 7.00 | 102.10 | 9.25 | 948.18 | 11.26 | 129.79 | 13.99 |
| LB037_329_H17 | 107.55 | 3.78 | 0.7490 | 5.87 | 0.9664 | 4.71 | 0.0093 | 4.13 | 0.0145 | 5.54 | 59.42 | 8.26 | 686.59 | 9.42 | 291.24 | 11.07 |
| LB037_329_H18 | 150.17 | 4.17 | 0.6948 | 6.12 | 0.6478 | 5.02 | 0.0067 | 4.13 | 0.0060 | 6.05 | 42.82 | 8.27 | 507.13 | 10.03 | 121.24 | 12.09 |
| LB037_329_H19 | 208.35 | 4.08 | 0.7034 | 6.00 | 0.4696 | 4.91 | 0.0048 | 4.07 | 0.0029 | 6.15 | 30.84 | 8.14 | 390.95 | 9.83 | 58.73 | 12.29 |
| LB037_329_H2 | 344.54 | 3.82 | 0.6509 | 5.68 | 0.2634 | 4.75 | 0.0029 | 3.79 | 0.0041 | 6.45 | 18.70 | 7.59 | 237.38 | 9.50 | 81.96 | 12.89 |
| LB037_329_H20 | 62.33 | 4.22 | 0.8311 | 2.97 | 1.8491 | 4.94 | 0.0159 | 4.26 | 0.0072 | 5.61 | 101.96 | 8.52 | 1063.10 | 9.88 | 145.70 | 11.21 |
| LB037_329_H21 | 46.96 | 3.74 | 0.7411 | 5.34 | 2.1933 | 4.75 | 0.0213 | 3.77 | 0.0061 | 6.52 | 135.78 | 7.54 | 1178.91 | 9.50 | 123.15 | 13.05 |
| LB037_329_H22 | 155.32 | 3.56 | 0.7060 | 5.23 | 0.6355 | 5.35 | 0.0065 | 4.47 | 0.0248 | 5.71 | 41.62 | 8.94 | 499.52 | 10.71 | 497.14 | 11.42 |
| LB037_329_H23 | 124.58 | 3.74 | 0.8663 | 5.50 | 0.7651 | 4.58 | 0.0080 | 4.17 | 0.0028 | 5.96 | 51.51 | 8.35 | 576.97 | 9.17 | 56.71 | 11.91 |

Appendix B: Eastern Sunda arc geochronology data - titanite

| Analysis ID | ²³⁸ U/ ²⁰⁶ Pb ratio | 1s% | ²⁰⁷ Pb/ ²⁰⁶ Pb ratio | 1s% | ²⁰⁷ Pb/ ²³⁵ U (calc) ratio | 1s% | ²⁰⁸ Pb/ ²³⁸ U ratio | 1s% | ²⁰⁸ Pb/ ²³² Th ratio | 1s% | ²⁰⁸ Pb/ ²³⁸ U Age (Ma) | 2s% | ²⁰⁷ Pb/ ²³⁵ U (calc) Age (Ma) | 2s% | ²⁰⁸ Pb/ ²³² Th Age (Ma) | 2s% |
|----------------|---|-------|--|-------|--|-------|---|-------|--|-------|--|-------|---|-------|---|-------|
| LB037_329_iH24 | 62.54 | 4.68 | 0.8035 | 6.08 | 1.8092 | 4.80 | 0.0160 | 4.72 | 0.0081 | 6.21 | 102.59 | 9.43 | 1048.79 | 9.59 | 163.49 | 12.42 |
| LB037_329_iH25 | 42.00 | 3.00 | 0.7934 | 6.70 | 2.0287 | 3.53 | 0.0238 | 2.98 | 0.0098 | 4.78 | 151.47 | 5.97 | 1308.71 | 7.07 | 197.61 | 9.55 |
| LB037_329_iH26 | 463.03 | 3.98 | 0.4599 | 6.70 | 0.1397 | 5.82 | 0.0022 | 4.32 | 0.0011 | 6.24 | 13.94 | 8.65 | 132.73 | 11.63 | 22.50 | 12.48 |
| LB037_329_iH27 | 121.47 | 7.22 | 0.6747 | 10.95 | 0.7737 | 8.66 | 0.0082 | 7.12 | 0.0043 | 9.69 | 52.87 | 14.24 | 581.90 | 17.31 | 86.46 | 19.39 |
| LB037_329_iH28 | 237.11 | 4.55 | 0.5384 | 7.36 | 0.3155 | 6.18 | 0.0042 | 4.56 | 0.0025 | 7.17 | 27.19 | 9.13 | 278.46 | 12.37 | 151.53 | 14.33 |
| LB037_329_iH29 | 180.13 | 3.91 | 0.6613 | 5.82 | 0.5147 | 4.84 | 0.0055 | 3.90 | 0.0020 | 5.81 | 35.66 | 7.80 | 421.58 | 9.69 | 39.75 | 11.62 |
| LB037_329_iH3 | 179.99 | 3.42 | 0.6594 | 4.98 | 0.5071 | 4.63 | 0.0056 | 4.17 | 0.0045 | 5.56 | 35.68 | 8.34 | 416.49 | 9.25 | 91.52 | 11.12 |
| LB037_329_iH30 | 48.57 | 3.91 | 0.8403 | 5.40 | 2.4022 | 4.79 | 0.0205 | 3.91 | 0.0272 | 5.73 | 130.93 | 7.81 | 1243.25 | 9.58 | 543.78 | 11.46 |
| LB037_329_iH31 | 147.04 | 5.63 | 0.7009 | 9.02 | 0.6619 | 8.28 | 0.0069 | 5.97 | 0.0157 | 8.42 | 44.30 | 11.93 | 515.76 | 16.56 | 315.48 | 16.84 |
| LB037_329_iH32 | 40.13 | 6.14 | 0.7350 | 8.87 | 2.0282 | 8.59 | 0.0251 | 6.00 | 0.0313 | 8.44 | 159.93 | 12.00 | 1308.00 | 17.18 | 623.57 | 16.88 |
| LB037_329_iH33 | 109.60 | 5.38 | 0.6969 | 8.98 | 0.9042 | 7.16 | 0.0091 | 5.69 | 0.0036 | 8.25 | 58.35 | 11.38 | 653.98 | 14.31 | 73.17 | 16.49 |
| LB037_329_iH34 | 168.10 | 4.32 | 0.6421 | 5.55 | 0.5302 | 6.34 | 0.0059 | 4.57 | 0.0034 | 6.23 | 38.12 | 9.14 | 431.97 | 12.68 | 68.71 | 12.46 |
| LB037_329_iH35 | 183.82 | 6.00 | 0.6402 | 9.33 | 0.4943 | 7.50 | 0.0055 | 6.14 | 0.0013 | 10.28 | 35.12 | 12.29 | 407.81 | 14.99 | 25.59 | 20.56 |
| LB037_329_iH36 | 200.36 | 4.26 | 0.6666 | 6.09 | 0.4632 | 5.97 | 0.0050 | 4.58 | 0.0016 | 5.72 | 32.18 | 9.16 | 386.51 | 11.94 | 32.07 | 11.44 |
| LB037_329_iH37 | 200.65 | 3.68 | 0.8470 | 3.84 | 5.0651 | 4.23 | 0.0484 | 3.91 | 0.0324 | 5.61 | 304.40 | 7.81 | 1926.07 | 8.46 | 646.47 | 11.23 |
| LB037_329_iH38 | 599.87 | 3.84 | 0.3210 | 7.36 | 0.0743 | 6.63 | 0.0017 | 4.03 | 0.0045 | 7.35 | 10.75 | 8.06 | 72.80 | 13.27 | 90.35 | 14.70 |
| LB037_329_iH39 | 55.14 | 3.64 | 0.6588 | 5.35 | 1.6634 | 4.85 | 0.0182 | 3.63 | 0.0081 | 5.51 | 116.00 | 7.26 | 984.67 | 9.69 | 162.86 | 11.02 |
| LB037_329_iH4 | 191.15 | 7.15 | 0.5848 | 11.42 | 0.4284 | 9.24 | 0.0052 | 7.07 | 0.0023 | 8.59 | 33.65 | 14.14 | 362.73 | 18.48 | 47.05 | 17.19 |
| LB037_329_iH40 | 491.26 | 3.26 | 0.3873 | 5.65 | 0.1081 | 5.09 | 0.0020 | 3.25 | 0.0027 | 6.20 | 13.14 | 6.49 | 104.25 | 10.19 | 54.37 | 12.41 |
| LB037_329_iH41 | 225.47 | 4.16 | 0.6816 | 6.19 | 0.4210 | 5.42 | 0.0044 | 4.15 | 0.0025 | 6.27 | 28.59 | 8.30 | 356.79 | 10.84 | 50.61 | 12.54 |
| LB037_329_iH5 | 111.50 | 5.11 | 0.6780 | 7.74 | 0.6530 | 6.24 | 0.0090 | 5.37 | 0.0076 | 6.89 | 57.61 | 10.75 | 622.31 | 12.48 | 153.73 | 13.77 |
| LB037_329_iH6 | 242.60 | 5.15 | 0.6456 | 7.56 | 0.3736 | 6.15 | 0.0042 | 4.92 | 0.0062 | 7.10 | 26.75 | 9.84 | 322.34 | 12.30 | 125.71 | 14.20 |
| LB037_329_iH7 | 4.72 | 9.11 | 0.9081 | 9.53 | 26.9466 | 7.84 | 0.2115 | 7.47 | 0.0767 | 9.16 | 1236.65 | 14.94 | 3381.53 | 15.67 | 1498.87 | 18.31 |
| LB037_329_iH8 | 83.31 | 3.40 | 0.7558 | 4.84 | 1.2590 | 4.73 | 0.0120 | 3.69 | 0.0029 | 6.47 | 76.58 | 7.38 | 827.44 | 9.46 | 58.00 | 12.95 |
| LB037_329_iH9 | 0.39 | 2.29 | 0.8234 | 1.04 | 296.1350 | 2.46 | 2.5848 | 2.32 | 10.7824 | 5.14 | 8230.09 | 4.64 | 5781.78 | 4.92 | 49897.79 | 10.28 |
| LB042_331_iH1 | 0.63 | 2.98 | 0.8288 | 1.03 | 183.0262 | 3.08 | 1.5979 | 3.00 | 2.0632 | 3.54 | 6154.50 | 6.00 | 5295.30 | 6.16 | 22691.35 | 7.08 |
| LB042_331_iH2 | 8.86 | 4.06 | 0.8440 | 2.81 | 13.1940 | 4.23 | 0.1129 | 4.01 | 0.1784 | 4.94 | 689.36 | 8.02 | 2693.63 | 8.45 | 3326.77 | 9.87 |
| ELF-03_333_iH1 | 0.10 | 3.30 | 0.8310 | 1.10 | 1139.6412 | 3.46 | 9.8217 | 3.08 | 63.1455 | 9.08 | 15382.45 | 6.16 | 7147.63 | 6.93 | 84346.03 | 18.17 |
| ELF-03_333_iH2 | 0.90 | 6.25 | 0.7709 | 6.32 | 118.6362 | 6.80 | 1.1116 | 7.61 | 5.2409 | 12.43 | 4818.32 | 15.21 | 4858.06 | 13.61 | 37116.76 | 24.85 |
| ELF-03_333_iH3 | 0.05 | 2.33 | 0.8304 | 0.63 | 2284.6143 | 2.78 | 19.2887 | 2.26 | 16.4162 | 5.31 | 19404.07 | 4.51 | 7853.37 | 5.55 | 57919.17 | 10.62 |
| ELF-03_333_iH4 | 0.03 | 7.41 | 0.8198 | 1.36 | 3441.7709 | 8.61 | 30.3789 | 8.20 | 86.7807 | 33.44 | 22215.14 | 16.40 | 8289.31 | 17.22 | 90704.45 | 66.89 |
| ELF-03_333_iH5 | 0.09 | 6.29 | 0.8268 | 0.98 | 1331.1812 | 6.48 | 11.6341 | 6.68 | 42.6649 | 8.34 | 16350.62 | 13.35 | 7305.25 | 12.97 | 76550.05 | 16.68 |
| ELF-03_333_iH6 | 1.83 | 2.49 | 0.8078 | 1.89 | 62.4656 | 2.71 | 0.5462 | 2.33 | 0.6690 | 4.19 | 2809.53 | 4.66 | 4214.35 | 5.41 | 10382.64 | 8.39 |
| ELF-03_333_iH7 | 0.15 | 5.37 | 0.8301 | 2.27 | 792.3530 | 5.44 | 6.9047 | 5.37 | 11.4724 | 7.04 | 13327.68 | 10.74 | 6778.97 | 10.89 | 51151.30 | 14.07 |
| ELF-03_333_iH8 | 0.53 | 3.76 | 0.8227 | 1.68 | 214.9551 | 3.66 | 1.8907 | 3.57 | 2.8522 | 4.52 | 6842.89 | 7.15 | 5457.76 | 7.33 | 27337.06 | 9.04 |
| SPF-05_336_iH1 | 2.89 | 2.73 | 0.7954 | 1.91 | 38.6936 | 3.18 | 0.3458 | 2.77 | 0.1272 | 5.21 | 1914.58 | 5.55 | 3737.82 | 6.36 | 2428.25 | 10.42 |
| 05_336_iH10 | 77.92 | 3.88 | 0.7595 | 4.16 | 1.3538 | 4.29 | 0.0129 | 4.29 | 0.0455 | 5.49 | 82.50 | 8.59 | 869.19 | 8.59 | 902.83 | 10.99 |
| SPF-05_336_iH2 | 0.37 | 14.04 | 0.7728 | 10.66 | 280.5194 | 19.57 | 2.6216 | 19.06 | 9.4603 | 24.51 | 8293.91 | 38.11 | 5726.97 | 39.15 | 47985.28 | 49.03 |
| SPF-05_336_iH3 | 9.52 | 4.25 | 0.8648 | 4.97 | 12.6521 | 4.92 | 0.1059 | 4.60 | 0.1067 | 5.94 | 648.96 | 9.20 | 2654.11 | 9.84 | 2055.59 | 11.89 |
| SPF-05_336_iH4 | 6.99 | 4.49 | 0.7529 | 5.03 | 14.9004 | 5.96 | 0.1429 | 4.51 | 0.0286 | 11.29 | 860.80 | 9.01 | 2808.90 | 11.92 | 531.40 | 22.58 |
| SPF-05_336_iH5 | 3.17 | 2.88 | 0.8265 | 1.00 | 36.2094 | 3.04 | 0.3171 | 2.88 | 0.7233 | 3.59 | 1775.73 | 5.77 | 3672.19 | 6.08 | 11032.23 | 7.18 |
| SPF-05_336_iH6 | 3.17 | 5.73 | 0.7971 | 6.44 | 34.6966 | 7.05 | 0.3143 | 5.92 | 0.0534 | 7.49 | 1761.79 | 11.83 | 3630.05 | 14.10 | 1055.38 | 14.98 |
| SPF-05_336_iH7 | 0.62 | 3.07 | 0.8252 | 1.19 | 184.1563 | 3.14 | 1.6140 | 3.07 | 4.5200 | 3.92 | 6194.23 | 6.14 | 5301.52 | 6.29 | 34628.55 | 7.83 |
| SPF-05_336_iH8 | 11.32 | 3.46 | 0.8254 | 2.65 | 10.1018 | 3.68 | 0.0883 | 3.53 | 0.4442 | 6.44 | 545.28 | 7.07 | 2444.13 | 7.36 | 7450.23 | 12.87 |
| SPF-05_336_iH9 | 59.54 | 13.26 | 0.7615 | 17.20 | 1.8643 | 13.35 | 0.0175 | 11.80 | 0.0553 | 27.43 | 111.72 | 23.59 | 1088.50 | 26.70 | 1090.84 | 54.85 |
| NEF-02_337_iH1 | 0.02 | 8.18 | 0.8416 | 0.55 | 4883.3344 | 6.55 | 42.0463 | 6.53 | 15.3256 | 5.18 | 24253.12 | 13.06 | 8624.45 | 13.11 | 96608.34 | 10.36 |
| NEF-02_337_iH2 | 0.03 | 8.24 | 0.8395 | 0.47 | 3782.0069 | 6.67 | 32.4770 | 6.66 | 27.2743 | 5.89 | 22632.37 | 13.32 | 6395.01 | 13.35 | 67740.96 | 11.79 |
| NEF-02_337_iH3 | 0.40 | 3.65 | 0.8311 | 1.34 | 291.8561 | 4.17 | 2.5308 | 3.79 | 13.6191 | 6.11 | 8132.24 | 7.58 | 5767.05 | 8.35 | 54370.43 | 12.21 |
| NEF-02_337_iH4 | 0.73 | 3.23 | 0.8318 | 1.55 | 158.2151 | 3.40 | 1.3765 | 3.25 | 1.1142 | 4.07 | 5880.19 | 6.50 | 5148.25 | 6.80 | 15175.65 | 8.14 |
| NEF-02_337_iH5 | 5.93 | 4.21 | 0.7831 | 3.69 | 18.4605 | 5.14 | 0.1710 | 4.42 | 2.4665 | 7.81 | 1017.67 | 8.84 | 3014.05 | 10.29 | 25198.10 | 15.62 |

Appendix B: Eastern Sunda arc geochronology data - titanite

| Analysis ID | 238U/206Pb ratio | 1s% | 207Pb/206Pb ratio | 1s% | 207Pb/235U (calc) ratio | 1s% | 206Pb/238U ratio | 1s% | 208Pb/232Th ratio | 1s% | 206Pb/238U Age (Ma) | 2s% | 207Pb/235U (calc) Age (Ma) | 2s% | 208Pb/232Th Age (Ma) | 2s% |
|-------------|------------------|-------|-------------------|-------|-------------------------|-------|------------------|-------|-------------------|-------|---------------------|-------|----------------------------|-------|----------------------|--------|
| ELF-01_1t1 | 25.61 | 4.19 | 0.7445 | 5.95 | 4.0356 | 4.81 | 0.0392 | 4.18 | 0.1063 | 9.62 | 247.99 | 8.36 | 1641.41 | 9.61 | 2047.55 | 19.24 |
| ELF-01_1t10 | 1.53 | 3.27 | 0.8462 | 1.50 | 76.6516 | 3.72 | 0.6551 | 3.76 | 3.4207 | 8.24 | 3247.98 | 7.53 | 4419.18 | 7.45 | 30127.00 | 16.47 |
| ELF-01_1t11 | 13.64 | 5.31 | 0.7308 | 7.48 | 7.4722 | 6.02 | 0.7400 | 5.20 | 0.3576 | 11.04 | 460.09 | 10.41 | 2169.66 | 12.04 | 6197.62 | 22.08 |
| ELF-01_1t12 | 8.77 | 5.29 | 0.8003 | 3.85 | 12.4137 | 5.64 | 0.1125 | 6.10 | 1.2498 | 10.61 | 687.50 | 12.21 | 2636.21 | 11.29 | 16435.83 | 21.23 |
| ELF-01_1t13 | 4.68 | 2.29 | 0.6096 | 2.61 | 23.9276 | 2.52 | 0.2145 | 2.29 | 0.9309 | 8.26 | 1252.62 | 4.57 | 3285.45 | 5.03 | 13337.51 | 16.52 |
| ELF-01_1t14 | 1.56 | 3.95 | 0.7922 | 4.20 | 70.7763 | 4.84 | 0.6375 | 4.13 | 5.3245 | 10.31 | 3179.17 | 8.26 | 4339.30 | 9.67 | 37386.29 | 20.62 |
| ELF-01_1t15 | 5.30 | 3.34 | 0.7643 | 3.52 | 20.0657 | 3.73 | 0.1908 | 3.78 | 3.7924 | 11.55 | 1125.75 | 7.55 | 3094.53 | 7.47 | 31763.61 | 23.10 |
| ELF-01_1t16 | 14.18 | 3.22 | 0.7979 | 4.45 | 7.7736 | 3.56 | 0.0705 | 3.32 | 0.1015 | 8.90 | 438.90 | 6.64 | 2205.16 | 7.11 | 1959.95 | 17.80 |
| ELF-01_1t2 | 8.64 | 6.67 | 0.6168 | 9.11 | 13.0648 | 8.32 | 0.1154 | 6.69 | 0.0425 | 10.92 | 704.32 | 13.38 | 2684.34 | 16.65 | 843.54 | 21.84 |
| ELF-01_1t3 | 3.55 | 3.80 | 0.7734 | 3.99 | 30.1241 | 4.30 | 0.2844 | 4.29 | 1.0455 | 9.04 | 1613.44 | 8.58 | 3490.87 | 8.60 | 14505.55 | 18.07 |
| ELF-01_1t4 | 9.37 | 3.18 | 0.7803 | 4.36 | 11.5689 | 4.00 | 0.1071 | 3.37 | 0.1607 | 8.54 | 655.96 | 6.74 | 2569.36 | 8.00 | 3020.65 | 17.08 |
| ELF-01_1t5 | 2.54 | 2.87 | 0.8888 | 3.13 | 48.6826 | 3.04 | 0.3962 | 2.89 | 2.8098 | 9.54 | 2151.36 | 5.97 | 3965.33 | 6.07 | 25449.89 | 19.07 |
| ELF-01_1t6 | 80.16 | 11.23 | 0.7070 | 16.65 | 1.2577 | 12.89 | 0.0129 | 10.84 | 0.0642 | 15.49 | 82.51 | 21.68 | 826.86 | 25.78 | 1261.87 | 30.99 |
| ELF-01_1t7 | 3.44 | 2.00 | 0.8205 | 1.94 | 32.9598 | 2.31 | 0.2909 | 2.07 | 1.3384 | 8.15 | 1646.12 | 4.14 | 3579.40 | 4.63 | 17218.30 | 16.30 |
| ELF-01_1t8 | 2.09 | 2.41 | 0.7817 | 2.43 | 52.3126 | 3.01 | 0.4634 | 2.62 | 1.0869 | 8.51 | 2542.03 | 5.23 | 4037.34 | 6.02 | 14912.52 | 17.02 |
| ELF-01_1t9 | 1.46 | 2.78 | 0.8171 | 1.79 | 77.4128 | 2.84 | 0.6859 | 2.56 | 2.1455 | 8.56 | 3387.06 | 5.13 | 4429.09 | 5.69 | 23228.41 | 17.12 |
| LB026_1t1 | 2.15 | 2.23 | 0.6396 | 1.97 | 54.0729 | 2.43 | 0.4658 | 2.28 | 1.5168 | 8.27 | 2464.90 | 4.56 | 4070.32 | 4.86 | 18708.85 | 16.54 |
| LB026_1t2 | 2.05 | 4.80 | 0.7956 | 4.15 | 53.9041 | 4.74 | 0.4915 | 5.08 | 2.4421 | 9.81 | 2577.28 | 10.17 | 4067.21 | 9.48 | 25055.14 | 19.62 |
| LB026_1t3 | 310.73 | 4.61 | 0.4790 | 7.76 | 0.2131 | 6.55 | 0.0032 | 4.70 | 0.0040 | 9.92 | 20.70 | 9.40 | 196.15 | 13.09 | 80.92 | 19.84 |
| LB026_1t4 | 24.16 | 3.21 | 0.7400 | 4.07 | 4.2461 | 3.54 | 0.0415 | 3.31 | 0.1447 | 8.69 | 262.16 | 6.61 | 1682.99 | 7.09 | 2736.99 | 17.38 |
| LB026_1t5 | 288.29 | 5.40 | 0.6218 | 2.08 | 86.6331 | 3.43 | 0.7566 | 3.58 | 0.8964 | 8.14 | 3631.95 | 7.15 | 4530.32 | 6.87 | 12972.04 | 16.28 |
| LB026_1t7 | 12.30 | 3.49 | 0.7708 | 4.19 | 8.6905 | 3.99 | 0.0814 | 3.54 | 0.1332 | 8.71 | 504.64 | 7.07 | 2306.08 | 7.98 | 2534.57 | 17.42 |
| NAF-01_1t1 | 101.22 | 15.45 | 0.7159 | 23.63 | 41.4763 | 5.26 | 0.0100 | 15.39 | 0.0096 | 20.34 | 64.13 | 30.78 | 697.25 | 36.37 | 193.40 | 40.67 |
| NAF-01_1t10 | 2.71 | 4.78 | 0.6073 | 5.30 | 743.2698 | 2.81 | 0.8338 | 4.96 | 7.5896 | 13.79 | 2038.95 | 9.92 | 3806.62 | 10.51 | 43591.31 | 27.58 |
| NAF-01_1t11 | 0.15 | 2.94 | 0.8338 | 1.02 | 29.2568 | 6.41 | 0.2335 | 2.89 | 61.9714 | 5.76 | 12974.64 | 5.77 | 6714.12 | 5.62 | 83971.57 | 11.53 |
| NAF-01_1t12 | 4.27 | 5.75 | 0.9028 | 7.35 | 5.0663 | 2.51 | 0.0450 | 2.30 | 13.3388 | 20.06 | 1352.86 | 11.66 | 3462.17 | 12.82 | 53978.06 | 40.11 |
| NAF-01_1t13 | 22.42 | 2.13 | 0.8197 | 2.11 | 0.0427 | 15.10 | 0.0012 | 7.80 | 0.4151 | 8.17 | 283.56 | 4.60 | 1830.48 | 5.03 | 7037.65 | 16.34 |
| NAF-01_1t14 | 841.18 | 7.79 | 0.2598 | 16.87 | 2.6139 | 10.94 | 0.0240 | 8.71 | 0.3209 | 13.45 | 153.18 | 17.42 | 1304.55 | 21.88 | 18.55 | 36.88 |
| NAF-01_1t15 | 41.95 | 9.22 | 0.7869 | 18.27 | 4.4129 | 5.42 | 0.0396 | 5.40 | 1.0584 | 9.97 | 250.63 | 10.80 | 1714.77 | 10.83 | 5641.35 | 26.90 |
| NAF-01_1t16 | 25.30 | 7.57 | 0.8053 | 3.60 | 448.9349 | 11.60 | 3.7339 | 1.96 | 3.5661 | 13.22 | 10022.57 | 23.93 | 6203.08 | 23.20 | 30782.92 | 26.45 |
| NAF-01_1t18 | 0.27 | 9.24 | 0.6487 | 5.88 | 2949.0132 | 19.52 | 27.2584 | 19.48 | 9.0747 | 14.25 | 21539.91 | 36.96 | 8112.47 | 39.04 | 46823.99 | 28.50 |
| NAF-01_1t19 | 1.11 | 1.30 | 0.8358 | 0.58 | 103.1143 | 1.31 | 0.8960 | 1.29 | 27.1899 | 3.23 | 4130.85 | 2.57 | 4716.95 | 2.62 | 67680.36 | 6.47 |
| NAF-01_1t20 | 53.81 | 9.17 | 0.7628 | 7.31 | 1.9886 | 9.76 | 0.0189 | 9.36 | 0.0810 | 13.35 | 121.01 | 18.71 | 1111.64 | 19.52 | 1576.54 | 26.70 |
| NAF-01_1t21 | 5.19 | 15.94 | 0.9264 | 10.38 | 25.4681 | 8.18 | 0.1950 | 7.92 | 2.4255 | 15.18 | 1148.27 | 15.84 | 3326.33 | 16.37 | 24957.40 | 30.36 |
| NAF-01_1t22 | 0.34 | 2.30 | 0.8270 | 1.01 | 332.7116 | 2.46 | 2.9084 | 2.29 | 16.4130 | 8.55 | 8787.33 | 4.59 | 5899.66 | 4.92 | 57915.40 | 17.09 |
| NAF-01_1t23 | 79.88 | 7.29 | 0.7591 | 8.63 | 1.3113 | 8.74 | 0.0124 | 7.23 | 0.1810 | 13.41 | 79.72 | 14.46 | 850.68 | 17.47 | 3371.50 | 26.82 |
| NAF-01_1t24 | 0.87 | 2.84 | 0.8420 | 1.62 | 133.9000 | 2.95 | 1.1510 | 2.76 | 6.6246 | 9.61 | 4937.36 | 5.52 | 4979.98 | 5.90 | 41175.77 | 19.22 |
| NAF-01_1t25 | 0.13 | 2.63 | 0.8413 | 0.77 | 895.7759 | 2.50 | 7.6897 | 2.40 | 24.1192 | 9.25 | 13945.44 | 4.80 | 6903.39 | 5.00 | 65342.62 | 18.50 |
| NAF-01_1t26 | 17.16 | 4.16 | 0.8201 | 4.51 | 6.6879 | 4.11 | 0.0591 | 4.12 | 0.6423 | 11.12 | 370.40 | 8.24 | 2071.02 | 8.22 | 10055.87 | 22.25 |
| NAF-01_1t27 | 54.09 | 5.87 | 0.7450 | 6.32 | 1.9161 | 8.53 | 0.0186 | 9.13 | 1.8961 | 56.41 | 118.90 | 18.26 | 1086.72 | 17.05 | 21554.46 | 112.82 |
| NAF-01_1t28 | 0.58 | 2.32 | 0.8533 | 1.57 | 204.9719 | 2.57 | 1.7385 | 2.32 | 3.0562 | 8.14 | 6494.13 | 4.64 | 5409.70 | 5.14 | 28382.85 | 16.29 |
| NAF-01_1t29 | 116.90 | 4.60 | 0.7183 | 5.07 | 0.8236 | 4.53 | 0.0087 | 4.77 | 0.0471 | 6.00 | 55.55 | 9.53 | 610.08 | 9.07 | 933.16 | 12.00 |
| NAF-01_1t3 | 434.75 | 2.36 | 0.5301 | 3.88 | 0.1688 | 3.56 | 0.0023 | 2.39 | 0.1455 | 4.95 | 14.86 | 4.77 | 158.35 | 7.13 | 2753.86 | 9.89 |
| NAF-01_1t30 | 0.26 | 9.02 | 0.8348 | 1.53 | 440.1527 | 10.97 | 3.8238 | 10.89 | 25.5019 | 15.03 | 10143.75 | 21.79 | 6183.07 | 21.93 | 66428.77 | 30.06 |
| NAF-01_1t31 | 4.49 | 2.52 | 0.8018 | 3.19 | 23.9193 | 3.79 | 0.2240 | 2.50 | 2.0701 | 4.67 | 1303.21 | 5.00 | 3265.11 | 7.57 | 22736.67 | 9.35 |
| NAF-01_1t32 | 1.17 | 3.23 | 0.6206 | 3.37 | 98.3871 | 3.34 | 0.8561 | 3.20 | 0.8734 | 4.76 | 3987.03 | 6.40 | 4669.77 | 6.69 | 12725.02 | 9.53 |
| NAF-01_1t33 | 2.09 | 4.24 | 0.8227 | 5.18 | 54.8330 | 5.51 | 0.4823 | 4.22 | 34.8333 | 22.26 | 2537.34 | 8.45 | 4084.24 | 11.01 | 72543.36 | 44.51 |

Appendix B: Eastern Sunda arc geochronology data - titanite

| Analysis ID | 238U/206Pb ratio | 1s% | 207Pb/206Pb ratio | 1s% | 207Pb/235U (calc) ratio | 1s% | 206Pb/238U ratio | 1s% | 208Pb/232Th ratio | 1s% | 206Pb/238U Age (Ma) | 2s% | 207Pb/235U (calc) Age (Ma) | 2s% | 208Pb/232Th Age (Ma) | 2s% |
|--------------|------------------|-------|-------------------|-------|-------------------------|-------|------------------|-------|-------------------|-------|---------------------|-------|----------------------------|-------|----------------------|-------|
| NAF-01_it14 | 630.55 | 12.53 | 0.2659 | 27.17 | 0.0605 | 24.19 | 0.0016 | 12.53 | 0.0010 | 18.75 | 10.61 | 48.38 | 59.60 | 48.38 | 19.40 | 37.50 |
| NAF-01_it5 | 0.13 | 6.59 | 0.8389 | 0.98 | 921.3635 | 5.58 | 7.9257 | 5.57 | 7.3645 | 8.54 | 14110.76 | 11.14 | 6931.96 | 11.17 | 43053.01 | 17.08 |
| NAF-01_it6 | 43.46 | 2.78 | 0.8222 | 2.74 | 2.6885 | 2.80 | 0.0232 | 2.95 | 0.0703 | 4.11 | 147.64 | 5.60 | 1319.79 | 5.60 | 1377.42 | 8.22 |
| NAF-01_it7 | 2.69 | 3.84 | 0.7962 | 3.74 | 40.4863 | 4.31 | 0.3893 | 4.26 | 4.1874 | 10.81 | 2026.08 | 8.62 | 3782.67 | 8.62 | 33368.76 | 21.63 |
| NAF-01_it8 | 0.60 | 14.45 | 0.8735 | 12.07 | 200.6522 | 14.41 | 1.6630 | 14.41 | 0.3468 | 14.91 | 6313.88 | 28.82 | 5388.18 | 29.56 | 6035.47 | 29.83 |
| NAF-01_it9 | 716.83 | 9.02 | 0.3706 | 17.35 | 0.0715 | 14.89 | 0.0014 | 9.13 | 0.0012 | 15.67 | 8.99 | 24.89 | 70.14 | 24.89 | 24.89 | 31.33 |
| SLG-02_it1 | 2.21 | 4.52 | 0.8203 | 5.38 | 51.8756 | 5.38 | 0.4570 | 4.52 | 0.4054 | 9.59 | 2426.28 | 10.75 | 4028.98 | 10.75 | 6896.36 | 19.17 |
| SLG-02_it10 | 0.23 | 3.40 | 0.8670 | 2.13 | 521.0664 | 3.34 | 4.3496 | 3.24 | 2.5347 | 6.49 | 10810.77 | 6.68 | 6354.06 | 6.68 | 25593.57 | 16.80 |
| SLG-02_it11 | 0.32 | 5.40 | 0.8483 | 2.62 | 364.2582 | 5.22 | 3.1057 | 5.22 | 3.1561 | 8.85 | 9104.69 | 10.43 | 5981.37 | 10.43 | 28875.96 | 17.70 |
| SLG-02_it12 | 7.33 | 4.29 | 0.7654 | 5.99 | 14.8309 | 4.79 | 0.1371 | 5.36 | 0.0845 | 6.28 | 828.18 | 9.57 | 2804.45 | 9.57 | 1645.06 | 12.56 |
| SLG-02_it13 | 1.71 | 3.26 | 0.8854 | 3.06 | 72.6004 | 4.78 | 0.5921 | 3.76 | 0.6656 | 8.46 | 2998.04 | 7.52 | 4364.78 | 7.52 | 10341.94 | 16.93 |
| SLG-02_it14 | | | | | | | | | | | | | | | | |
| SLG-02_it15 | | | | | | | | | | | | | | | | |
| SLG-02_it16 | 35.11 | 8.68 | 0.7446 | 12.96 | 2.9576 | 10.03 | 0.0287 | 10.35 | 0.0920 | 13.83 | 182.57 | 20.06 | 1396.81 | 20.06 | 1783.08 | 27.65 |
| SLG-02_it17 | 1.54 | 9.40 | 0.5910 | 11.07 | 54.2025 | 14.16 | 0.6990 | 9.41 | 0.2931 | 12.67 | 3301.86 | 18.81 | 4072.71 | 18.81 | 5210.01 | 25.34 |
| SLG-02_it18 | 37.49 | 2.21 | 0.7760 | 2.55 | 2.8623 | 2.57 | 0.0267 | 2.45 | 0.1153 | 8.18 | 169.74 | 4.91 | 1372.05 | 5.13 | 2212.34 | 16.35 |
| SLG-02_it2 | 12.01 | 10.77 | 0.6985 | 19.65 | 8.4378 | 14.67 | 0.0871 | 10.54 | 0.0308 | 14.71 | 538.64 | 21.07 | 2279.25 | 29.35 | 613.98 | 29.42 |
| SLG-02_it3 | 14.98 | 4.15 | 0.7472 | 7.67 | 7.0209 | 5.04 | 0.0662 | 4.17 | 0.0212 | 5.88 | 413.16 | 8.34 | 2114.08 | 10.07 | 425.17 | 11.76 |
| SLG-02_it4 | 53.99 | 8.24 | 0.8484 | 11.85 | 2.1821 | 8.91 | 0.0185 | 8.29 | 0.0095 | 13.10 | 117.93 | 16.58 | 1175.36 | 17.83 | 191.61 | 26.19 |
| SLG-02_it5 | 275.73 | 14.48 | 0.4030 | 18.20 | 0.2039 | 15.44 | 0.0037 | 9.85 | 0.0028 | 15.10 | 23.62 | 19.69 | 188.44 | 30.88 | 55.72 | 30.20 |
| SLG-02_it6 | 8.54 | 6.93 | 0.7655 | 12.17 | 12.4637 | 13.10 | 0.1178 | 8.47 | 0.0810 | 11.88 | 717.84 | 16.93 | 2640.00 | 26.20 | 1579.36 | 23.76 |
| SLG-02_it7 | 367.19 | 10.24 | 0.2602 | 22.29 | 0.0999 | 19.91 | 0.0028 | 10.24 | 0.0008 | 15.47 | 17.86 | 20.48 | 96.66 | 39.82 | 16.64 | 30.94 |
| SLG-02_it8 | 117.65 | 14.89 | 0.2703 | 32.15 | <DL | 28.60 | 0.0086 | 15.01 | 0.0034 | 18.59 | 54.94 | 30.01 | <DL | 57.20 | 68.53 | 37.18 |
| SLG-02_it9 | 121.00 | 14.64 | 0.5860 | 11.85 | 0.6716 | 9.55 | 0.0083 | 7.32 | 0.0041 | 11.78 | 83.54 | 14.65 | 521.70 | 19.10 | 83.85 | 23.56 |
| SEF-01_it_1 | 86.73 | 6.52 | 0.6725 | 9.65 | 1.0779 | 7.77 | 0.0116 | 6.50 | 0.0744 | 9.89 | 74.12 | 13.00 | 742.60 | 15.54 | 1455.56 | 19.77 |
| SEF-01_it_10 | 163.60 | 7.90 | 0.5504 | 12.68 | 0.4691 | 11.47 | 0.0062 | 7.87 | 0.0021 | 11.01 | 39.66 | 15.73 | 390.60 | 22.94 | 41.72 | 22.03 |
| SEF-01_it_3 | 2.41 | 3.17 | 0.8094 | 3.16 | 46.5002 | 3.72 | 0.4147 | 3.12 | 1.2068 | 5.16 | 2236.27 | 6.23 | 3920.13 | 7.44 | 16044.13 | 10.31 |
| SEF-01_it_4 | 264.87 | 8.21 | 0.3465 | 15.36 | 0.1812 | 13.39 | 0.0038 | 8.09 | 0.0031 | 14.46 | 24.34 | 16.17 | 169.05 | 26.79 | 63.18 | 28.92 |
| SEF-01_it_5 | 17.47 | 6.15 | 0.6567 | 8.20 | 6.7929 | 6.54 | 0.0573 | 6.13 | 0.0778 | 8.08 | 359.02 | 12.27 | 2084.80 | 13.08 | 1518.97 | 16.16 |
| SEF-01_it_6 | 352.68 | 4.69 | 0.2059 | 10.02 | 0.0812 | 9.36 | 0.0029 | 4.83 | 0.0023 | 9.25 | 18.40 | 9.67 | 79.27 | 18.72 | 45.61 | 18.49 |
| SEF-02_it_1 | 1.33 | 13.46 | 0.7210 | 14.78 | 75.8862 | 14.65 | 0.7654 | 13.38 | 0.4065 | 13.94 | 3664.11 | 26.77 | 4409.13 | 29.29 | 6915.83 | 27.88 |
| SEF-02_it_10 | 3.06 | 10.81 | 0.7642 | 10.27 | 34.6470 | 12.07 | 0.3288 | 6.63 | 0.1190 | 7.66 | 1832.70 | 13.25 | 3628.64 | 24.15 | 2279.57 | 15.32 |
| SEF-02_it_11 | 76.40 | 13.63 | 0.6564 | 14.90 | 1.5408 | 11.19 | 0.0131 | 10.50 | 0.0094 | 12.71 | 83.85 | 20.99 | 946.82 | 22.37 | 189.73 | 25.42 |
| SEF-02_it_12 | 0.77 | 4.83 | 0.9409 | 3.96 | 150.2564 | 5.17 | 1.2953 | 4.87 | 0.6765 | 7.29 | 5355.99 | 9.75 | 5096.18 | 10.34 | 10473.76 | 14.58 |
| SEF-02_it_13 | 46.71 | 4.85 | 0.6644 | 6.45 | 1.9787 | 5.46 | 0.0216 | 4.60 | 0.0185 | 6.45 | 137.84 | 9.21 | 1108.29 | 10.91 | 370.74 | 12.89 |
| SEF-02_it_2 | 0.22 | 9.21 | 0.8851 | 5.04 | 561.0299 | 9.27 | 4.5810 | 9.17 | 2.7747 | 8.36 | 11083.73 | 18.35 | 6428.95 | 18.55 | 26925.12 | 16.71 |
| SEF-02_it_3 | 0.80 | 7.28 | 0.7860 | 4.95 | 134.5774 | 7.20 | 1.2354 | 6.30 | 2.9308 | 10.84 | 5185.67 | 14.39 | 4985.07 | 14.39 | 27746.04 | 21.69 |
| SEF-02_it_4 | 1.25 | 9.20 | 0.8393 | 9.36 | 93.3339 | 9.59 | 0.8063 | 9.19 | 0.1874 | 8.26 | 3811.74 | 18.38 | 4616.79 | 19.18 | 3481.30 | 16.52 |
| SEF-02_it_5 | | | | | | | | | | | | | | | | |
| SEF-02_it_6 | 3.81 | 8.54 | 0.8221 | 8.85 | 29.4489 | 7.62 | 0.1854 | 7.74 | 0.1854 | 9.40 | 1486.73 | 15.48 | 3468.60 | 15.24 | 3446.98 | 17.79 |
| SEF-02_it_7 | 98.17 | 5.48 | 0.6875 | 6.97 | 0.9713 | 7.06 | 0.0102 | 4.93 | 0.0104 | 6.71 | 65.60 | 9.86 | 689.14 | 14.13 | 210.57 | 13.43 |
| SEF-02_it_8 | 4.77 | 7.68 | 0.6942 | 12.46 | 20.7043 | 10.14 | 0.2153 | 7.48 | 0.0436 | 10.04 | 1257.24 | 14.97 | 3124.85 | 20.28 | 864.62 | 20.08 |
| SEF-02_it_9 | 21.59 | 6.86 | 0.8555 | 7.98 | 5.4884 | 6.35 | 0.2586 | 5.95 | 0.2586 | 8.04 | 292.96 | 11.89 | 1898.78 | 12.70 | 4662.51 | 16.08 |
| SEF-04_it_1 | 1.39 | 3.72 | 0.8425 | 1.44 | 84.0828 | 3.91 | 0.7237 | 3.87 | 1.4243 | 4.56 | 3510.03 | 7.74 | 4511.98 | 7.83 | 17950.18 | 9.12 |
| SEF-04_it_2 | 0.34 | 3.20 | 0.8454 | 1.16 | 344.9284 | 3.03 | 2.9545 | 3.14 | 16.9618 | 5.69 | 8862.77 | 6.28 | 5936.17 | 6.07 | 58544.39 | 11.38 |
| SEF-04_it_3 | 0.10 | 9.89 | 0.8362 | 4.62 | 1164.5639 | 9.95 | 10.1157 | 9.87 | 1.8772 | 9.20 | 15525.25 | 19.74 | 7169.58 | 19.90 | 21421.76 | 18.40 |
| SEF-04_it_4 | 0.10 | 9.52 | 0.8133 | 3.59 | 1113.5351 | 10.77 | 9.9538 | 10.70 | 3.8504 | 7.11 | 15430.66 | 21.39 | 7124.12 | 21.54 | 32007.21 | 14.21 |
| SEF-04_it_5 | 1.40 | 4.02 | 0.8295 | 3.77 | 81.9650 | 4.17 | 0.7155 | 4.05 | 0.1806 | 5.16 | 3479.32 | 8.10 | 4486.39 | 8.35 | 3364.59 | 10.33 |
| SEF-04_it_6 | 0.02 | 15.14 | 0.8944 | 3.18 | 5180.1293 | 15.12 | 42.4288 | 14.93 | 21.2971 | 11.51 | 24310.14 | 29.86 | 8684.35 | 30.23 | 62826.95 | 23.02 |
| SEF-04_it_7 | 4.67 | 5.30 | 0.7650 | 6.24 | 22.1054 | 7.18 | 0.2106 | 6.56 | 0.1233 | 8.79 | 1231.80 | 14.37 | 3188.37 | 14.37 | 2396.03 | 17.58 |

Appendix B: Eastern Sunda arc geochronology data - titanite

| Analysis ID | 238U/206Pb ratio | 1s% | 207Pb/206Pb ratio | 1s% | 207Pb/235U (calc) ratio | 1s% | 206Pb/238U ratio | 1s% | 208Pb/232Th ratio | 1s% | 206Pb/238U Age (Ma) | 2s% | 207Pb/235U (calc) Age (Ma) | 2s% | 208Pb/232Th Age (Ma) | 2s% |
|---------------|------------------|-------|-------------------|-------|-------------------------|-------|------------------|-------|-------------------|-------|---------------------|-------|----------------------------|-------|----------------------|-------|
| SINA-01_Itl_1 | 222.42 | 7.21 | 0.5092 | 11.81 | 0.3168 | 10.65 | 0.0045 | 7.91 | 0.0046 | 11.96 | 28.99 | 15.82 | 279.48 | 21.29 | 92.26 | 23.92 |
| SINA-01_Itl_2 | 19.32 | 11.82 | 0.8372 | 15.00 | 6.0322 | 10.39 | 0.0526 | 11.02 | 0.0542 | 9.37 | 330.42 | 22.03 | 1980.51 | 20.77 | 1070.35 | 19.02 |
| SING-01_Itl_1 | 5.74 | 3.38 | 0.8503 | 2.06 | 2.05851 | 3.16 | 0.1746 | 3.22 | 0.2824 | 4.51 | 1037.17 | 6.44 | 3119.26 | 6.33 | 5041.57 | 8.74 |
| SING-01_Itl_2 | 20.20 | 6.27 | 0.7437 | 8.80 | 5.1816 | 10.47 | 0.0501 | 6.27 | 0.2199 | 8.41 | 314.97 | 12.55 | 1849.61 | 20.93 | 4028.86 | 16.82 |
| SING-01_Itl_3 | 41.94 | 8.19 | 0.7099 | 7.60 | 2.3749 | 6.22 | 0.0242 | 8.35 | 0.0144 | 6.86 | 154.34 | 16.69 | 1235.07 | 12.43 | 289.17 | 13.71 |
| SING-01_Itl_4 | 3.99 | 10.63 | 0.8777 | 11.51 | 30.8348 | 21.80 | 0.2553 | 10.92 | 0.0549 | 18.22 | 1465.98 | 21.83 | 3513.79 | 43.60 | 8763.84 | 36.43 |
| SING-02_Itl_1 | 1.66 | 3.74 | 0.8056 | 3.12 | 67.6877 | 4.19 | 0.6065 | 3.85 | 0.2928 | 4.78 | 3066.10 | 7.69 | 4294.63 | 8.39 | 5206.11 | 9.55 |
| SING-02_Itl_2 | 0.92 | 2.59 | 0.8311 | 1.29 | 126.3916 | 2.70 | 1.0979 | 2.53 | 3.5525 | 4.17 | 4776.40 | 5.07 | 4921.83 | 5.39 | 30722.36 | 8.34 |
| SING-02_Itl_3 | 2.07 | 3.66 | 0.8327 | 3.58 | 58.9651 | 4.17 | 0.4856 | 3.62 | 0.5003 | 4.92 | 2551.72 | 7.24 | 4104.63 | 8.33 | 8223.45 | 9.85 |
| SING-02_Itl_4 | 1.47 | 2.97 | 0.8384 | 1.78 | 78.6629 | 2.84 | 0.6793 | 2.96 | 0.8243 | 5.11 | 3341.71 | 5.93 | 4445.15 | 5.68 | 12186.48 | 10.22 |
| SING-02_Itl_5 | 0.81 | 3.66 | 0.8413 | 1.88 | 143.9731 | 3.69 | 1.2372 | 3.37 | 1.4653 | 4.81 | 5190.68 | 6.74 | 5053.10 | 7.37 | 18289.87 | 9.61 |
| SING-02_Itl_6 | 1.08 | 3.51 | 0.8207 | 1.75 | 105.1367 | 3.25 | 0.9262 | 3.18 | 0.8934 | 4.05 | 4226.05 | 6.36 | 4736.49 | 6.50 | 9443.45 | 8.11 |
| SING-02_Itl_7 | 2.05 | 3.58 | 0.8234 | 2.96 | 6.8234 | 4.15 | 0.6234 | 3.69 | 0.3018 | 4.42 | 2551.07 | 7.38 | 4091.95 | 8.30 | 5346.34 | 8.84 |
| SING-02_Itl_8 | 3.02 | 2.80 | 0.7951 | 2.17 | 36.5169 | 2.86 | 0.3320 | 2.82 | 0.3845 | 4.82 | 1848.21 | 5.63 | 3660.55 | 5.72 | 6594.70 | 9.65 |
| SING-02_Itl_9 | 0.86 | 2.91 | 0.8395 | 1.28 | 175.7065 | 2.86 | 1.5142 | 2.84 | 3.5093 | 4.53 | 5943.25 | 5.68 | 5254.09 | 5.72 | 30529.08 | 9.06 |
| SLG-03_Itl_1 | 141.78 | 6.72 | 0.5708 | 10.52 | 0.5578 | 8.66 | 0.4855 | 6.76 | 0.0038 | 9.37 | 45.22 | 13.52 | 450.12 | 17.32 | 76.00 | 18.75 |
| SLG-03_Itl_10 | 14.02 | 6.24 | 0.7926 | 3.66 | 7.8522 | 5.37 | 0.0718 | 4.63 | 0.0997 | 5.92 | 446.78 | 9.26 | 2214.21 | 10.74 | 1827.08 | 11.84 |
| SLG-03_Itl_11 | 0.48 | 2.98 | 0.8415 | 1.42 | 242.6977 | 3.00 | 2.0777 | 2.78 | 2.0173 | 3.97 | 7247.02 | 5.55 | 5960.47 | 5.99 | 22365.36 | 7.94 |
| SLG-03_Itl_12 | 6.06 | 3.89 | 0.7836 | 3.82 | 18.0319 | 5.17 | 0.1663 | 3.91 | 0.1951 | 4.74 | 991.89 | 7.83 | 2991.44 | 10.33 | 3612.56 | 9.49 |
| SLG-03_Itl_2 | 2.70 | 2.86 | 0.8126 | 2.40 | 41.7890 | 2.94 | 0.3710 | 2.80 | 1.1965 | 4.50 | 2034.06 | 5.59 | 3814.07 | 5.88 | 15949.81 | 9.00 |
| SLG-03_Itl_3 | 59.01 | 7.89 | 0.5097 | 14.49 | 1.7816 | 5.71 | 0.0172 | 8.66 | 0.0163 | 6.66 | 109.78 | 17.32 | 1038.76 | 11.42 | 326.84 | 13.33 |
| SLG-03_Itl_4 | 206.27 | 8.73 | 0.5087 | 14.49 | 0.3434 | 11.98 | 0.0049 | 8.72 | 0.0052 | 11.84 | 31.31 | 17.43 | 299.76 | 23.96 | 104.18 | 23.68 |
| SLG-03_Itl_5 | 295.88 | 4.13 | 0.2983 | 7.46 | 0.1397 | 6.93 | 0.0034 | 4.13 | 0.0060 | 8.06 | 21.75 | 8.27 | 132.79 | 13.87 | 120.38 | 16.11 |
| SLG-03_Itl_6 | 3.62 | 4.62 | 0.7492 | 5.21 | 28.9340 | 5.15 | 0.2785 | 5.58 | 0.4357 | 6.67 | 1583.83 | 11.15 | 3451.28 | 10.30 | 14406.91 | 13.34 |
| SLG-03_Itl_7 | 6.47 | 4.73 | 0.8773 | 5.63 | 18.8262 | 5.43 | 0.1556 | 4.76 | 0.1617 | 10.53 | 932.25 | 9.52 | 3032.96 | 10.85 | 7061.20 | 21.07 |
| SLG-03_Itl_8 | 0.67 | 2.64 | 0.8396 | 1.28 | 173.1268 | 2.60 | 1.4998 | 2.55 | 4.0016 | 4.24 | 5998.46 | 5.11 | 5239.16 | 5.21 | 32829.56 | 8.48 |
| SLG-03_Itl_9 | 2.13 | 7.49 | 0.8437 | 6.12 | 54.9436 | 7.70 | 0.4696 | 8.01 | 0.4791 | 7.84 | 2481.88 | 16.03 | 4086.25 | 15.39 | 7934.38 | 15.67 |
| TR-02_Itl_1 | 0.09 | 4.99 | 0.8430 | 1.52 | 1298.5946 | 4.32 | 11.1590 | 4.26 | 12.1185 | 5.25 | 16103.54 | 8.52 | 7280.10 | 8.63 | 52175.04 | 10.50 |
| TR-02_Itl_2 | 0.06 | 6.07 | 0.8481 | 1.36 | 2037.3962 | 5.27 | 17.3894 | 5.22 | 15.4465 | 5.91 | 18770.45 | 10.45 | 7737.14 | 10.55 | 56757.92 | 11.81 |
| TR-02_Itl_3 | 0.46 | 3.61 | 0.8073 | 1.81 | 342.8551 | 3.80 | 2.1764 | 4.21 | 6.7764 | 5.40 | 7450.45 | 8.42 | 5581.13 | 7.61 | 41575.41 | 10.79 |
| TR-02_Itl_4 | 0.30 | 3.83 | 0.8284 | 1.75 | 382.5244 | 3.52 | 3.3619 | 3.47 | 3.1841 | 6.16 | 9494.97 | 6.93 | 6040.92 | 7.04 | 29012.03 | 12.32 |
| TR-02_Itl_5 | 0.12 | 3.15 | 0.8385 | 0.95 | 979.2092 | 3.00 | 8.4778 | 2.98 | 49.2648 | 7.19 | 14497.62 | 5.96 | 6993.72 | 6.00 | 79403.24 | 14.39 |
| TR-02_Itl_6 | 0.05 | 5.06 | 0.8205 | 1.45 | 2123.3189 | 5.99 | 18.7475 | 5.18 | 84.5702 | 13.80 | 19229.77 | 10.35 | 7779.06 | 11.98 | 90187.47 | 27.60 |
| TR-04_Itl_1 | 0.22 | 8.78 | 0.8749 | 7.15 | 547.5608 | 17.55 | 4.5490 | 8.71 | 2.5738 | 10.32 | 11046.69 | 17.41 | 6404.32 | 35.10 | 25816.51 | 20.63 |
| TR-04_Itl_2 | 15.77 | 11.96 | 0.7550 | 17.57 | 6.6492 | 11.39 | 0.0209 | 8.45 | 0.0209 | 10.99 | 397.32 | 16.90 | 2065.90 | 22.78 | 418.51 | 21.98 |
| TR-04_Itl_3 | 1.45 | 2.32 | 0.8274 | 1.27 | 79.0681 | 2.35 | 0.6911 | 2.27 | 1.8224 | 3.72 | 3386.71 | 4.54 | 4450.30 | 4.71 | 21031.54 | 7.44 |
| BHF-02_Itl1 | 1.08 | 1.95 | 0.6058 | 1.74 | 104.9666 | 2.11 | 0.9252 | 1.91 | 2.3445 | 3.68 | 4222.65 | 3.82 | 4734.86 | 4.22 | 24472.15 | 7.35 |
| BHF-02_Itl10 | 0.96 | 8.07 | 0.8270 | 7.44 | 120.0464 | 8.38 | 1.0534 | 8.01 | 0.4202 | 11.57 | 4638.15 | 16.02 | 4869.95 | 16.76 | 7109.97 | 23.14 |
| BHF-02_Itl11 | 1.38 | 5.70 | 0.7671 | 5.35 | 77.1861 | 6.29 | 0.7287 | 5.70 | 2.4851 | 8.31 | 3528.63 | 11.39 | 4426.15 | 12.59 | 25306.69 | 16.82 |
| BHF-02_Itl12 | 1.35 | 8.71 | 0.8604 | 9.52 | 90.0829 | 9.34 | 0.7548 | 8.98 | 0.8165 | 11.83 | 3625.26 | 17.96 | 4581.18 | 18.68 | 12099.44 | 23.66 |
| BHF-02_Itl13 | 0.21 | 1.77 | 0.8352 | 0.91 | 555.8452 | 1.85 | 4.8091 | 1.77 | 2.8969 | 2.92 | 11341.94 | 3.54 | 6419.54 | 3.70 | 27570.93 | 5.83 |
| BHF-02_Itl14 | 10.20 | 5.20 | 0.8153 | 7.15 | 11.1815 | 7.62 | 0.0975 | 6.13 | 0.3290 | 7.07 | 600.00 | 12.26 | 2538.38 | 15.23 | 5764.76 | 14.14 |
| BHF-02_Itl15 | 0.34 | 5.77 | 0.8535 | 1.31 | 346.8902 | 5.01 | 2.9408 | 4.90 | 5.9845 | 5.64 | 8840.44 | 9.79 | 5941.91 | 10.02 | 39398.28 | 11.27 |
| BHF-02_Itl16 | 2.17 | 4.27 | 0.8208 | 4.51 | 53.4063 | 4.59 | 0.4855 | 4.41 | 8.8540 | 10.89 | 2463.91 | 8.83 | 4057.96 | 9.18 | 45895.38 | 21.78 |
| BHF-02_Itl2 | 1.18 | 5.53 | 0.6594 | 7.66 | 102.8706 | 7.23 | 0.8504 | 6.76 | 1.4585 | 8.18 | 3987.20 | 13.53 | 4714.57 | 14.46 | 18233.95 | 16.36 |
| BHF-02_Itl3 | 1.14 | 8.59 | 0.7642 | 8.44 | 92.3537 | 9.14 | 0.8732 | 8.97 | 0.9481 | 10.04 | 4046.16 | 17.94 | 4606.18 | 18.29 | 13516.89 | 20.08 |
| BHF-02_Itl4 | 0.10 | 5.88 | 0.8150 | 2.17 | 1086.6028 | 6.69 | 9.6619 | 6.12 | 7.6480 | 19.00 | 15256.52 | 12.24 | 7101.15 | 13.38 | 43728.84 | 38.00 |
| BHF-02_Itl5 | 3.19 | 5.62 | 0.7366 | 6.26 | 31.8592 | 6.16 | 0.3122 | 5.62 | 0.4017 | 6.77 | 1751.63 | 11.24 | 3545.34 | 12.33 | 6845.34 | 13.54 |
| BHF-02_Itl6 | 0.27 | 6.98 | 0.8191 | 4.00 | 418.4303 | 7.15 | 3.6963 | 7.66 | 3.2510 | 11.32 | 8971.13 | 15.33 | 6131.80 | 14.31 | 29333.70 | 22.64 |
| BHF-02_Itl7 | 1.51 | 5.01 | 0.7982 | 4.17 | 73.3595 | 5.13 | 0.6647 | 4.94 | 15.8687 | 13.47 | 3285.31 | 9.87 | 4375.20 | 10.26 | 57259.62 | 26.95 |

Appendix B: Eastern Sunda arc geochronology data - titanite

| Analysis ID | 238U/206Pb ratio | 1s% | 207Pb/206Pb ratio | 1s% | 207Pb/235U (calc) ratio | 1s% | 206Pb/238U ratio | 1s% | 208Pb/232Th ratio | 1s% | 206Pb/238U Age (Ma) | 2s% | 207Pb/235U (calc) Age (Ma) | 2s% | 208Pb/232Th Age (Ma) | 2s% |
|--------------|------------------|------|-------------------|-------|-------------------------|-------|------------------|------|-------------------|-------|---------------------|-------|----------------------------|-------|----------------------|-------|
| BHF-02_III8 | 2.53 | 8.40 | 0.7846 | 4.84 | 43.4262 | 7.57 | 0.3953 | 7.17 | 1.0806 | 7.34 | 2147.22 | 14.34 | 3852.19 | 15.14 | 14851.09 | 14.68 |
| BHF-02_III9 | 4.02 | 9.92 | 0.7771 | 16.65 | 26.8994 | 14.41 | 0.2506 | 9.91 | 1.3446 | 13.71 | 1441.55 | 19.82 | 3379.81 | 28.82 | 17272.36 | 27.42 |
| JER-01_III1 | 1.61 | 1.63 | 0.8301 | 1.02 | 71.8947 | 1.62 | 0.6220 | 1.63 | 2.7025 | 3.14 | 3117.68 | 3.26 | 4354.99 | 3.23 | 26533.41 | 6.27 |
| JER-01_III10 | 0.49 | 1.23 | 0.8396 | 0.74 | 235.6574 | 1.30 | 2.0268 | 1.19 | 0.7796 | 2.50 | 7139.34 | 2.39 | 5550.71 | 2.61 | 11683.11 | 5.00 |
| JER-01_III11 | 0.66 | 1.88 | 0.8606 | 1.42 | 183.2285 | 1.88 | 1.5179 | 1.77 | 7.3858 | 3.85 | 5952.68 | 3.54 | 5296.42 | 3.75 | 43104.63 | 7.70 |
| JER-01_III12 | 0.48 | 1.45 | 0.8205 | 0.98 | 236.0398 | 1.55 | 2.0765 | 1.44 | 7.2051 | 3.14 | 7244.42 | 2.89 | 5552.35 | 3.10 | 42663.05 | 6.28 |
| JER-01_III13 | 0.63 | 1.72 | 0.8347 | 1.34 | 186.0973 | 1.81 | 1.5897 | 1.70 | 6.7301 | 3.72 | 6133.90 | 3.40 | 5312.11 | 3.62 | 41458.46 | 7.44 |
| JER-01_III14 | 0.63 | 2.00 | 0.8331 | 1.60 | 185.1650 | 2.09 | 1.5857 | 1.98 | 5.6095 | 4.19 | 6124.03 | 3.96 | 5307.04 | 4.18 | 38279.76 | 8.39 |
| JER-01_III15 | 1.02 | 1.38 | 0.8396 | 1.15 | 115.7173 | 1.49 | 0.9631 | 1.45 | 1.1759 | 2.68 | 4413.63 | 2.88 | 4832.97 | 2.98 | 15758.61 | 5.36 |
| JER-01_III16 | 0.90 | 2.04 | 0.8137 | 1.86 | 123.8320 | 2.15 | 1.1166 | 2.20 | 4.0225 | 3.90 | 4833.60 | 4.39 | 4901.22 | 4.31 | 32714.19 | 7.80 |
| JER-01_III17 | 0.58 | 1.39 | 0.8411 | 0.97 | 199.9149 | 1.49 | 1.7201 | 1.38 | 14.0016 | 3.68 | 6450.59 | 2.77 | 5384.46 | 2.98 | 54894.04 | 7.37 |
| JER-01_III18 | 1.13 | 2.20 | 0.8236 | 2.02 | 102.3428 | 2.20 | 0.8848 | 2.11 | 2.0550 | 3.54 | 4085.86 | 4.23 | 4709.40 | 4.39 | 22636.79 | 7.08 |
| JER-01_III2 | 0.63 | 1.44 | 0.8410 | 0.97 | 183.6025 | 1.66 | 1.5775 | 1.35 | 3.1981 | 3.36 | 6103.68 | 2.70 | 5298.48 | 3.31 | 29079.77 | 6.72 |
| JER-01_III3 | 0.53 | 1.66 | 0.8344 | 1.01 | 218.5520 | 1.68 | 1.8660 | 1.46 | 5.2363 | 3.16 | 6832.30 | 2.93 | 5474.53 | 3.36 | 37101.72 | 6.33 |
| JER-01_III4 | 0.82 | 1.89 | 0.8235 | 1.57 | 126.2659 | 1.89 | 1.0922 | 1.76 | 5.2627 | 3.75 | 4758.85 | 3.53 | 4920.83 | 3.78 | 37187.20 | 7.49 |
| JER-01_III6 | 0.40 | 1.89 | 0.8334 | 1.29 | 294.4246 | 1.97 | 2.5201 | 1.87 | 4.1757 | 3.21 | 8112.79 | 3.74 | 5775.92 | 3.94 | 33323.11 | 6.43 |
| JER-01_III7 | 0.73 | 1.68 | 0.8231 | 1.18 | 155.4041 | 1.65 | 1.3648 | 1.59 | 9.9681 | 3.81 | 5548.24 | 3.18 | 5130.17 | 3.30 | 48546.19 | 7.61 |
| JER-01_III8 | 0.39 | 3.64 | 0.8212 | 1.69 | 292.2834 | 3.74 | 2.5830 | 3.63 | 11.4755 | 5.77 | 8226.85 | 7.25 | 5768.53 | 7.49 | 51156.36 | 11.54 |
| JER-01_III9 | 0.56 | 4.05 | 0.8499 | 2.44 | 208.1281 | 4.17 | 1.7693 | 4.05 | 9.9300 | 10.60 | 6586.24 | 8.11 | 5425.14 | 8.34 | 47840.81 | 21.20 |
| LB018_III1 | 5.99 | 4.01 | 0.7611 | 3.17 | 17.5794 | 4.35 | 0.1674 | 4.10 | 0.0566 | 12.33 | 997.75 | 8.20 | 2967.00 | 8.69 | 1116.38 | 24.65 |
| LB018_III2 | 0.11 | 6.20 | 0.8527 | 2.30 | 1112.5637 | 6.25 | 9.4651 | 6.17 | 11.9080 | 18.68 | 15136.44 | 12.34 | 7123.24 | 12.51 | 51847.26 | 37.36 |
| LB018_III3 | 0.11 | 7.09 | 0.8514 | 1.07 | 1098.6986 | 5.43 | 9.3596 | 5.22 | 11.0210 | 4.96 | 15071.14 | 10.43 | 7110.52 | 10.86 | 50404.24 | 9.92 |
| LB018_III4 | 0.09 | 4.58 | 0.8358 | 2.32 | 337.6157 | 5.01 | 2.9231 | 4.35 | 2.0394 | 6.55 | 8811.54 | 8.69 | 5914.47 | 10.02 | 22533.14 | 13.10 |
| LB018_III5 | 0.09 | 4.36 | 0.8489 | 0.65 | 1303.6831 | 4.45 | 11.1140 | 4.27 | 4.9508 | 5.40 | 16079.63 | 8.53 | 7284.07 | 8.90 | 36151.76 | 10.80 |
| LB022_III1 | 1.88 | 3.08 | 0.7400 | 1.21 | 54.6988 | 3.26 | 0.5354 | 3.11 | 0.5879 | 4.56 | 2783.98 | 6.21 | 4081.90 | 6.51 | 9373.20 | 9.12 |
| LB022_III2 | 2.28 | 3.58 | 0.6718 | 2.31 | 40.8445 | 3.99 | 0.4402 | 3.60 | 0.3200 | 4.68 | 2351.45 | 7.21 | 3791.40 | 7.99 | 5627.85 | 9.36 |
| LB029_III1 | 0.43 | 4.11 | 0.8313 | 0.82 | 268.8975 | 3.80 | 2.3457 | 3.64 | 0.7471 | 4.18 | 7785.16 | 7.28 | 5684.16 | 7.61 | 11309.89 | 8.35 |
| LB029_III2 | 9.80 | 4.36 | 0.8241 | 5.35 | 11.8338 | 5.31 | 0.1036 | 4.86 | 1.2904 | 6.49 | 635.39 | 9.71 | 2591.34 | 10.61 | 16798.31 | 12.98 |
| LB036_III1 | 30.51 | 4.25 | 0.8298 | 2.71 | 3.7498 | 4.16 | 0.0327 | 4.23 | 0.0339 | 4.98 | 207.63 | 8.45 | 1562.07 | 8.33 | 674.89 | 9.96 |
| LB036_III2 | 176.97 | 6.99 | 0.6238 | 10.29 | 0.4869 | 8.60 | 0.0057 | 7.00 | 0.0024 | 8.08 | 36.33 | 14.00 | 402.79 | 17.20 | 49.46 | 16.16 |

Appendix C: Eastern Sunda arc zircon trace element chemistry

| Analysis ID | Ce | Dy | Er | Eu | Gd | Hf | Ho | La | Lu | Nb | Nd | P | Pb | Pr | Sm | Ta | Tb | Th | Tm | U | Y | Yb | Zr | Fe | Ti |
|----------------|-------|--------|--------|------|-------|----------|-------|-------|--------|------|------|--------|-------|------|-------|------|-------|--------|-------|-------|---------|--------|-----------|--------|-------|
| LB014_322_zr1 | 10.88 | 131.13 | 221.91 | 3.88 | 39.49 | 10495.13 | 45.66 | 0.439 | 117.58 | 0.69 | 6.14 | 473.65 | 0.044 | 0.58 | 8.18 | 0.19 | 11.60 | 51.35 | 48.57 | 71.30 | 1476.19 | 524.76 | 486269.64 | 32.96 | 5.12 |
| LB014_322_zr10 | 6.51 | 76.20 | 162.96 | 1.25 | 18.25 | 9742.51 | 30.31 | 0.006 | 91.09 | 0.70 | 1.58 | 225.27 | 0.011 | 0.08 | 2.97 | 0.18 | 5.75 | 25.32 | 37.32 | 35.99 | 998.71 | 401.49 | 488155.84 | <2.695 | 5.98 |
| LB014_322_zr11 | 5.60 | 85.86 | 166.89 | 1.64 | 21.94 | 9341.37 | 32.42 | 0.006 | 85.42 | 0.49 | 2.09 | 191.38 | 0.009 | 0.10 | 4.28 | 0.14 | 6.67 | 23.99 | 37.13 | 29.51 | 1036.86 | 386.24 | 488491.14 | <2.738 | 6.47 |
| LB014_322_zr12 | 2.35 | 18.00 | 42.72 | 0.35 | 4.02 | 9918.62 | 7.39 | 0.001 | 27.48 | 0.28 | 0.57 | 96.94 | 0.003 | 0.21 | 0.73 | 0.07 | 1.32 | 5.39 | 10.80 | 10.70 | 261.63 | 120.21 | 489518.44 | <2.932 | 4.52 |
| LB014_322_zr13 | 5.61 | 49.56 | 123.85 | 0.48 | 9.54 | 9886.48 | 21.00 | 0.052 | 78.33 | 0.82 | 0.52 | 271.83 | 0.014 | 0.02 | 1.29 | 0.26 | 3.31 | 16.57 | 29.65 | 33.57 | 706.70 | 333.78 | 488394.70 | <4.086 | 5.70 |
| LB014_322_zr14 | 7.12 | 61.21 | 152.07 | 0.83 | 11.56 | 9174.25 | 28.80 | 0.001 | 90.16 | 0.90 | 0.58 | 246.36 | 0.009 | 0.02 | 1.74 | 0.20 | 4.06 | 22.64 | 35.39 | 36.91 | 891.79 | 392.26 | 488689.80 | <2.733 | 7.85 |
| LB014_322_zr15 | 6.18 | 73.56 | 139.53 | 2.00 | 18.95 | 8910.30 | 27.35 | 0.232 | 75.66 | 0.54 | 2.79 | 239.32 | 0.202 | 0.26 | 3.86 | 0.16 | 5.89 | 27.03 | 31.78 | 34.56 | 909.30 | 339.48 | 488902.04 | 19.71 | 6.58 |
| LB014_322_zr16 | 18.82 | 238.22 | 438.43 | 6.40 | 64.88 | 8278.53 | 87.69 | 0.046 | 211.11 | 1.49 | 5.35 | 467.03 | 0.066 | 0.34 | 11.67 | 0.27 | 19.51 | 112.19 | 95.51 | 89.44 | 2947.62 | 973.83 | 485676.51 | <2.831 | 9.40 |
| LB014_322_zr17 | 8.45 | 87.28 | 182.49 | 2.13 | 22.20 | 8260.62 | 34.61 | 0.148 | 96.89 | 0.74 | 2.10 | 265.05 | 0.079 | 0.17 | 3.77 | 0.21 | 7.01 | 39.83 | 40.02 | 43.25 | 1135.13 | 439.66 | 488985.62 | 54.02 | 8.43 |
| LB014_322_zr18 | 4.97 | 48.24 | 124.34 | 0.74 | 9.61 | 9098.73 | 21.45 | 0.006 | 78.34 | 0.59 | 0.70 | 244.49 | 0.017 | 0.03 | 1.43 | 0.19 | 3.43 | 13.31 | 29.63 | 26.30 | 724.54 | 331.92 | 489033.74 | <2.915 | 7.45 |
| LB014_322_zr19 | 4.22 | 39.70 | 99.44 | 0.60 | 8.53 | 9134.19 | 17.44 | 0.001 | 61.93 | 0.56 | 0.36 | 275.33 | 0.013 | 0.02 | 1.19 | 0.13 | 2.86 | 12.01 | 23.64 | 21.39 | 576.07 | 282.17 | 489205.62 | <3.142 | 5.37 |
| LB014_322_zr20 | 6.57 | 57.94 | 150.28 | 0.81 | 10.75 | 9133.36 | 25.76 | 0.003 | 94.46 | 0.88 | 0.59 | 246.22 | 0.007 | 0.03 | 1.78 | 0.23 | 3.96 | 18.97 | 36.11 | 35.18 | 878.17 | 407.12 | 488728.88 | <2.749 | 8.08 |
| LB014_322_zr21 | 10.85 | 107.92 | 219.17 | 1.91 | 26.08 | 9700.59 | 42.25 | 0.013 | 115.49 | 0.96 | 1.87 | 340.75 | 0.025 | 0.14 | 5.01 | 0.29 | 8.47 | 61.31 | 49.65 | 68.75 | 1405.04 | 517.17 | 487291.53 | <2.992 | 5.91 |
| LB014_322_zr22 | 8.89 | 98.62 | 192.89 | 1.99 | 25.79 | 9617.13 | 37.72 | 0.008 | 103.10 | 0.68 | 2.89 | 314.37 | 0.014 | 0.12 | 4.43 | 0.17 | 8.32 | 49.34 | 43.54 | 52.03 | 1238.17 | 453.28 | 487689.70 | <3.117 | 6.40 |
| LB014_322_zr23 | 18.08 | 154.94 | 355.84 | 1.85 | 29.95 | 8892.25 | 66.15 | 0.004 | 186.96 | 2.03 | 1.33 | 444.13 | 0.038 | 0.06 | 3.26 | 0.42 | 11.09 | 91.06 | 79.85 | 93.56 | 2242.58 | 842.89 | 486229.56 | <2.740 | 11.87 |
| LB014_322_zr24 | 4.57 | 49.72 | 119.40 | 0.60 | 9.34 | 9040.19 | 21.47 | 0.004 | 74.41 | 0.55 | 0.41 | 346.57 | 0.006 | 0.02 | 1.39 | 0.16 | 3.49 | 14.68 | 28.65 | 26.20 | 718.89 | 318.11 | 488900.96 | <2.752 | 5.95 |
| LB014_322_zr25 | 4.73 | 47.44 | 106.36 | 0.76 | 9.94 | 9414.30 | 19.22 | 0.022 | 63.43 | 0.56 | 0.65 | 187.60 | 0.121 | 0.04 | 1.56 | 0.12 | 3.57 | 17.52 | 24.73 | 26.84 | 651.36 | 272.78 | 489036.80 | 15.23 | 6.21 |
| LB014_322_zr26 | 8.05 | 69.28 | 166.59 | 0.93 | 13.69 | 9068.13 | 29.85 | 0.004 | 97.41 | 1.04 | 0.55 | 277.68 | 0.014 | 0.03 | 1.86 | 0.22 | 4.98 | 34.15 | 38.87 | 49.90 | 1012.37 | 430.64 | 488508.19 | <2.794 | 7.67 |
| LB014_322_zr27 | 12.46 | 158.38 | 297.61 | 4.06 | 42.81 | 8476.52 | 59.32 | 0.045 | 145.22 | 0.98 | 3.99 | 301.28 | 0.056 | 0.26 | 7.70 | 0.20 | 13.15 | 72.14 | 65.20 | 59.79 | 1966.93 | 688.16 | 487420.32 | 9.53 | 7.88 |
| LB014_322_zr28 | 9.50 | 89.65 | 214.07 | 1.23 | 17.47 | 8887.05 | 38.73 | 0.002 | 119.31 | 1.10 | 1.08 | 282.59 | 0.014 | 0.06 | 2.31 | 0.25 | 6.54 | 39.68 | 49.22 | 53.45 | 1310.31 | 527.35 | 488160.84 | <2.610 | 8.92 |
| LB014_322_zr29 | 5.13 | 43.46 | 102.69 | 0.76 | 9.38 | 9324.19 | 18.70 | 0.014 | 61.77 | 0.56 | 0.88 | 175.27 | 0.005 | 0.04 | 1.57 | 0.18 | 3.21 | 19.22 | 24.12 | 28.36 | 630.49 | 266.83 | 489181.35 | 3.28 | 7.11 |
| LB014_322_zr30 | 6.20 | 59.04 | 134.78 | 1.06 | 14.37 | 9352.23 | 24.55 | 0.141 | 81.44 | 0.70 | 1.57 | 247.97 | 0.053 | 0.13 | 1.82 | 0.21 | 4.60 | 23.80 | 31.19 | 34.80 | 827.04 | 349.07 | 488665.88 | 7.41 | 7.50 |
| LB014_322_zr31 | 4.68 | 44.95 | 99.54 | 0.94 | 11.03 | 10416.64 | 18.38 | 0.015 | 59.40 | 0.49 | 0.87 | 179.80 | 0.088 | 0.03 | 1.41 | 0.17 | 3.61 | 26.91 | 23.00 | 33.15 | 602.40 | 232.43 | 488396.44 | <6.924 | 5.48 |
| LB014_322_zr32 | 5.74 | 42.01 | 93.30 | 0.60 | 9.95 | 9429.91 | 17.11 | 0.112 | 55.83 | 0.74 | 0.84 | 252.91 | 0.026 | 0.06 | 1.48 | 0.14 | 3.27 | 27.75 | 22.70 | 29.63 | 577.71 | 228.65 | 488987.96 | 51.82 | 7.23 |
| LB014_322_zr33 | 13.42 | 114.65 | 273.35 | 1.34 | 21.37 | 8903.96 | 49.01 | 0.003 | 149.67 | 1.69 | 0.98 | 346.29 | 0.015 | 0.05 | 2.61 | 0.37 | 7.89 | 55.80 | 62.97 | 69.15 | 1669.01 | 670.13 | 487403.83 | <2.738 | 10.91 |
| LB014_322_zr34 | 3.73 | 40.61 | 87.74 | 0.75 | 8.97 | 9552.58 | 16.29 | 0.003 | 51.50 | 0.42 | 0.64 | 188.04 | 0.003 | 0.04 | 1.36 | 0.14 | 3.16 | 11.56 | 20.59 | 18.14 | 547.00 | 227.26 | 489132.87 | 5.36 | 5.51 |
| LB014_322_zr35 | 3.64 | 22.53 | 52.81 | 0.39 | 4.64 | 9316.38 | 9.45 | 0.009 | 30.91 | 0.52 | 0.22 | 182.21 | 0.008 | 0.01 | 0.66 | 0.13 | 1.66 | 14.31 | 12.51 | 20.81 | 315.12 | 137.59 | 489966.37 | 3.63 | 6.89 |
| LB014_322_zr36 | 13.87 | 146.92 | 318.30 | 2.40 | 31.80 | 8318.90 | 60.43 | 0.005 | 158.79 | 1.34 | 2.19 | 409.29 | 0.025 | 0.11 | 4.09 | 0.33 | 10.97 | 78.22 | 70.53 | 79.95 | 2040.27 | 723.77 | 487194.91 | <2.718 | 11.23 |
| LB014_322_zr37 | 7.77 | 86.60 | 181.33 | 1.48 | 21.04 | 9555.73 | 34.66 | 0.014 | 96.96 | 0.71 | 1.65 | 249.98 | 0.032 | 0.08 | 3.28 | 0.19 | 6.77 | 40.02 | 42.63 | 47.97 | 1140.80 | 441.82 | 488009.88 | 3.33 | 7.10 |
| LB014_322_zr38 | 6.24 | 65.92 | 147.99 | 1.00 | 14.10 | 9583.79 | 28.67 | 0.026 | 84.90 | 0.70 | 1.11 | 261.97 | 0.009 | 0.07 | 2.43 | 0.20 | 5.10 | 31.18 | 33.75 | 39.41 | 911.51 | 367.56 | 488345.40 | <2.750 | 6.15 |
| LB025_323_zr1 | 4.40 | 45.06 | 112.76 | 0.57 | 8.91 | 9322.35 | 19.79 | 0.003 | 68.63 | 0.65 | 0.46 | 213.55 | 0.008 | 0.02 | 1.04 | 0.18 | 3.38 | 15.81 | 26.47 | 31.16 | 667.76 | 293.05 | 489031.81 | <2.977 | 7.87 |
| LB025_323_zr2 | 4.48 | 43.93 | 100.64 | 0.56 | 8.68 | 9774.65 | 18.49 | 0.001 | 57.29 | 0.60 | 0.45 | 169.79 | 0.008 | 0.02 | 1.29 | 0.15 | 3.25 | 14.76 | 23.68 | 29.07 | 625.05 | 252.59 | 488878.04 | <2.920 | 6.15 |
| LB025_323_zr3 | 5.12 | 55.45 | 134.79 | 0.67 | 10.77 | 9273.63 | 23.47 | 0.092 | 75.33 | 0.57 | 0.59 | 253.67 | 0.037 | 0.04 | 1.45 | 0.15 | 3.84 | 18.03 | 30.67 | 35.14 | 798.67 | 341.11 | 488779.25 | <3.484 | 5.95 |
| LB025_323_zr4 | 5.77 | 76.13 | 149.56 | 1.38 | 18.84 | 10006.10 | 28.89 | 0.062 | 74.80 | 0.61 | 1.84 | 168.92 | 0.041 | 0.11 | 2.45 | 0.14 | 6.16 | 27.52 | 32.65 | 40.21 | 975.64 | 338.18 | 488199.67 | 15.19 | 8.22 |
| LB025_323_zr5 | 4.62 | 40.22 | 84.79 | 0.68 | 9.09 | 10435.59 | 15.71 | 0.027 | 48.13 | 0.46 | 0.69 | 124.95 | 0.013 | 0.02 | 1.61 | 0.13 | 2.92 | 17.70 | 19.86 | 27.25 | 532.67 | 213.61 | 488617.78 | <4.276 | 5.75 |
| LB025_323_zr6 | 4.11 | 43.44 | 104.05 | 0.52 | 8.52 | 9353.61 | 18.91 | 0.002 | 62.23 | 0.59 | 0.57 | 266.39 | 0.009 | 0.02 | 1.30 | 0.16 | 3.27 | 15.51 | 24.72 | 30.43 | 639.38 | 272.38 | 488953.18 | 10.56 | 5.97 |
| LB025_323_zr7 | 4.96 | 50.30 | 122.38 | 0.46 | 9.35 | 10007.99 | 20.98 | 0.001 | 72.34 | 0.64 | 0.57 | 273.71 | 0.009 | 0.02 | 1.06 | 0.22 | 3.48 | 18.10 | 28.25 | 39.37 | 731.91 | 310.27 | 488289.56 | 3.88 | 6.49 |
| LB025_323_zr8 | 4.44 | 62.82 | 124.65 | 1.05 | 15.92 | 10282.66 | 24.09 | 0.002 | 60.91 | 0.37 | 1.13 | 162.56 | 0.011 | 0.05 | 3.03 | 0.10 | 5.32 | 19.69 | 26.86 | 29.10 | 786.09 | 280.28 | 488271.31 | <2.816 | 4.72 |
| LB025_323_zr9 | 21.07 | 109.42 | 224.23 | 0.89 | 23.69 | 9874.41 | 43.60 | 0.040 | 103.80 | 1.30 | 1.08 | 363.80 | 0.209 | 0.07 | 3.31 | 0.56 | 8.35 | 93.19 | 47.46 | 80.18 | 1425.62 | 480.68 | 487040.05 | 14.12 | 9.74 |
| LB025_323_zr10 | 4.62 | 68.72 | 130.50 | 1.21 | 17.65 | 9998.38 | 25.73 | 0.004 | 63.89 | 0.40 | 1.61 | 175.16 | 0.013 | 0.06 | 3.42 | 0.11 | 5.47 | 20.81 | 28.45 | 30.28 | 837.68 | 292.94 | 488379.71 | <2.831 | 5.56 |
| LB025_323_zr11 | 5.36 | 60.71 | 127.01 | 0.88 | 13.66 | 10251.85 | 23.81 | 0.012 | 67.84 | 0.50 | 0.88 | 239.21 | 0.122 | 0.04 | 1.83 | 0.13 | 4.80 | 22.52 | 28.98 | 38.44 | 805.26 | 311.55 | 488043.16 | 31.61 | 6.11 |
| LB025_323_zr12 | 6.47 | 69.32 | 171.06 | 0.73 | 12.37 | 8953.02 | 30.32 | 0.002 | 88.73 | 0.96 | 0.53 | 296.36 | 0.011 | 0.04 | 1.59 | 0.27 | 4.69 | 26.88 | 40.15 | 52.67 | 1048.82 | 433.90 | 488517.97 | <2.723 | 8.35 |
| LB025_323_zr13 | 4.18 | 55.14 | 116.79 | 0.75 | 11.86 | 9771.32 | 22.29 | 0.003 | 63.26 | 0.44 | 0.90 | 302.69 | 0.008 | 0.04 | 1.70 | 0.14 | 4.22 | 16.80 | 26.29 | 29.81 | 737.95 | 287.12 | 488437.18 | 3.47 | 8.39 |
| LB025_323_zr14 | 7.09 | 72.75 | 160.87 | 0.72 | 13.04 | 9116.46 | 32.53 | 0.001 | 101.39 | 0.90 | 0.59 | 298.51 | 0.013 | 0.02 | 1.69 | 0.21 | 4.88 | 30.37 | 41.86 | 50.62 | 1101.42 | 450.57 | 488296.16 | 6.29 | 8.71 |
| LB025_ | | | | | | | | | | | | | | | | | | | | | | | | | |

Appendix C: Eastern Sunda arc zircon trace element chemistry

| Analysis ID | Ce | Dy | Er | Eu | Gd | Hf | Ho | La | Lu | Nb | Nd | P | Pb | Pr | Sm | Ta | Tb | Th | Tm | U | Y | Yb | Zr | Fe | Ti |
|----------------|--------|---------|---------|-------|--------|----------|--------|-------|--------|-------|-------|---------|-------|------|-------|------|--------|---------|--------|---------|----------|-----------|-----------|---------|-------|
| LB025_323_zr3 | 8.44 | 99.85 | 221.24 | 1.35 | 20.32 | 848.31 | 41.26 | 0.012 | 115.72 | 0.94 | 1.31 | 323.74 | 0.618 | 0.07 | 3.20 | 0.22 | 7.52 | 43.99 | 49.58 | 60.02 | 1389.28 | 524.30 | 488005.05 | <3.102 | 10.02 |
| LB025_323_zr30 | 6.35 | 61.63 | 159.55 | 0.64 | 11.19 | 9780.31 | 27.42 | 0.005 | 95.67 | 0.93 | 0.59 | 284.14 | 0.010 | 0.03 | 1.53 | 0.25 | 4.10 | 22.86 | 37.18 | 52.04 | 960.17 | 412.97 | 488046.55 | 3.83 | 7.51 |
| LB025_323_zr31 | 7.57 | 71.79 | 160.47 | 0.75 | 14.78 | 9338.52 | 29.85 | 0.009 | 84.63 | 0.93 | 0.63 | 264.11 | 0.023 | 0.03 | 1.36 | 0.24 | 5.12 | 36.54 | 37.10 | 54.96 | 1014.61 | 390.89 | 488360.06 | 5.31 | 8.12 |
| LB025_323_zr32 | 4.55 | 44.10 | 103.97 | 0.59 | 9.33 | 9439.70 | 18.52 | 0.001 | 61.69 | 0.57 | 0.62 | 211.93 | 0.008 | 0.03 | 1.46 | 0.17 | 3.33 | 18.27 | 23.95 | 35.34 | 633.59 | 265.71 | 488014.69 | <2.735 | 6.24 |
| LB025_323_zr33 | 4.38 | 37.98 | 94.46 | 0.44 | 7.11 | 9924.05 | 16.51 | 0.047 | 57.06 | 0.51 | 0.47 | 183.98 | 0.075 | 0.04 | 1.13 | 0.14 | 2.65 | 13.27 | 21.77 | 28.69 | 241.12 | 488077.05 | 23.68 | 7.37 | |
| LB025_323_zr34 | 6.59 | 67.94 | 150.89 | 0.80 | 14.20 | 10072.61 | 28.39 | 0.001 | 80.90 | 0.72 | 0.84 | 219.64 | 0.012 | 0.05 | 2.02 | 0.20 | 4.97 | 29.26 | 34.23 | 46.25 | 952.36 | 366.79 | 488012.92 | <2.715 | 6.87 |
| LB025_323_zr35 | 10.84 | 120.46 | 278.11 | 1.22 | 22.96 | 9930.07 | 50.35 | 0.010 | 145.06 | 1.28 | 0.94 | 384.71 | 0.035 | 0.05 | 2.20 | 0.33 | 8.72 | 59.81 | 62.25 | 80.76 | 1722.99 | 486917.52 | <2.752 | 9.25 | |
| LB025_323_zr36 | 10.18 | 121.52 | 232.57 | 2.15 | 31.86 | 9921.70 | 45.90 | 0.061 | 112.85 | 0.70 | 3.03 | 335.26 | 0.038 | 0.17 | 5.52 | 0.22 | 9.97 | 62.63 | 51.06 | 67.14 | 1520.91 | 487507.53 | 4.35 | 10.38 | |
| LB025_323_zr37 | 4.60 | 54.86 | 115.71 | 0.76 | 12.61 | 9925.01 | 21.90 | 0.008 | 62.95 | 0.48 | 1.06 | 192.65 | 0.053 | 0.05 | 2.03 | 0.14 | 4.24 | 18.18 | 26.18 | 30.99 | 733.63 | 279.56 | 488545.64 | 2.79 | 7.27 |
| LB025_323_zr38 | 6.60 | 75.69 | 155.45 | 1.15 | 17.35 | 9773.43 | 29.99 | 0.005 | 82.87 | 0.69 | 1.16 | 266.78 | 0.030 | 0.05 | 2.41 | 0.19 | 5.80 | 31.58 | 35.41 | 46.24 | 1005.94 | 375.12 | 488054.30 | 9.34 | 6.49 |
| LB025_323_zr39 | 6.64 | 85.02 | 168.46 | 1.39 | 20.68 | 9648.18 | 32.92 | 0.024 | 85.24 | 0.63 | 1.47 | 253.42 | 0.016 | 0.10 | 3.43 | 0.17 | 6.70 | 31.08 | 37.65 | 45.22 | 1081.78 | 394.99 | 488061.64 | 4.68 | 5.88 |
| LB025_323_zr40 | 6.89 | 58.88 | 147.46 | 0.65 | 11.65 | 10446.84 | 25.93 | 0.003 | 87.20 | 0.91 | 0.63 | 233.21 | 0.014 | 0.02 | 1.59 | 0.30 | 4.37 | 26.28 | 34.80 | 57.34 | 886.12 | 379.52 | 487765.99 | <2.941 | 5.93 |
| LB025_323_zr41 | 3.87 | 37.61 | 96.28 | 0.47 | 7.15 | 9802.08 | 16.52 | 0.001 | 62.08 | 0.54 | 0.32 | 205.43 | 0.008 | 0.02 | 1.17 | 0.17 | 2.60 | 12.08 | 23.39 | 30.91 | 581.56 | 260.72 | 488827.18 | 5.49 | 6.07 |
| LB025_323_zr42 | 2.60 | 24.50 | 55.64 | 0.38 | 5.44 | 9650.27 | 9.91 | 0.003 | 32.53 | 0.29 | 0.36 | 130.37 | 0.005 | 0.02 | 0.79 | 0.10 | 1.80 | 7.50 | 12.82 | 14.32 | 341.20 | 142.72 | 488527.70 | <2.794 | 5.25 |
| LB025_323_zr43 | 4.34 | 49.63 | 106.20 | 0.67 | 11.33 | 9922.26 | 19.79 | 0.001 | 58.58 | 0.43 | 0.56 | 272.32 | 0.008 | 0.04 | 1.95 | 0.15 | 3.82 | 16.49 | 24.28 | 29.75 | 658.77 | 259.07 | 488509.99 | <2.739 | 5.50 |
| LB025_323_zr44 | 210.19 | 1193.44 | 1795.56 | 10.89 | 347.05 | 7728.90 | 404.54 | 0.123 | 558.78 | 6.06 | 24.86 | 2200.19 | 0.301 | 1.46 | 61.57 | 1.53 | 105.15 | 669.52 | 331.87 | 385.63 | 12601.33 | 2787.05 | 467910.23 | <10.211 | 10.68 |
| LB025_323_zr45 | 4.23 | 41.92 | 98.65 | 0.51 | 7.82 | 9427.92 | 17.65 | 0.004 | 55.82 | 0.52 | 0.31 | 198.30 | 0.008 | 0.01 | 1.02 | 0.16 | 2.95 | 15.28 | 22.63 | 28.10 | 596.49 | 243.26 | 489116.78 | 6.83 | 6.89 |
| LB025_323_zr46 | 23.71 | 264.93 | 465.83 | 5.96 | 79.37 | 9927.83 | 94.64 | 0.055 | 215.22 | 1.14 | 9.52 | 759.40 | 0.140 | 0.57 | 16.06 | 0.41 | 22.44 | 179.67 | 100.89 | 140.14 | 3095.69 | 911.74 | 483589.55 | <13.082 | 9.96 |
| LB025_323_zr47 | 8.35 | 86.33 | 212.21 | 0.84 | 14.58 | 9463.71 | 35.03 | 0.009 | 124.73 | 1.09 | 0.88 | 345.99 | 0.107 | 0.03 | 2.12 | 0.34 | 5.90 | 36.69 | 50.19 | 66.69 | 1311.18 | 546.47 | 487581.54 | <2.939 | 9.54 |
| LB025_323_zr48 | 24.05 | 237.83 | 413.86 | 3.93 | 66.06 | 10101.23 | 85.99 | 0.025 | 167.80 | 1.36 | 6.27 | 443.25 | 0.064 | 0.35 | 13.00 | 0.35 | 20.50 | 139.42 | 84.74 | 115.66 | 2838.82 | 840.33 | 484578.63 | 2.99 | 7.16 |
| LB032_326_zr1 | 8.38 | 110.25 | 260.17 | 1.18 | 20.83 | 8833.08 | 47.16 | 0.034 | 142.58 | 1.32 | 1.14 | 361.29 | 0.031 | 0.06 | 1.94 | 0.30 | 8.12 | 39.48 | 61.04 | 50.94 | 1561.64 | 592.86 | 487637.80 | 9.58 | 12.30 |
| LB032_326_zr2 | 5.58 | 73.07 | 173.79 | 0.80 | 14.34 | 8923.53 | 31.22 | 0.001 | 92.29 | 0.87 | 0.67 | 252.83 | 0.009 | 0.04 | 1.59 | 0.27 | 5.25 | 24.90 | 39.88 | 39.54 | 1035.18 | 415.47 | 488664.19 | <2.606 | 7.35 |
| LB032_326_zr3 | 4.75 | 119.73 | 283.93 | 0.65 | 19.92 | 9421.38 | 52.01 | 0.037 | 150.19 | 1.16 | 0.71 | 357.63 | 0.020 | 0.04 | 2.53 | 0.32 | 7.98 | 17.81 | 67.13 | 50.69 | 1721.10 | 693.98 | 486889.57 | 7.63 | 6.84 |
| LB032_326_zr4 | 78.77 | 843.66 | 1656.18 | 1.55 | 174.14 | 12233.69 | 336.71 | 0.030 | 628.02 | 11.02 | 6.89 | 2825.68 | 0.533 | 0.30 | 20.67 | 3.29 | 64.82 | 539.78 | 350.49 | 572.16 | 10936.38 | 3046.13 | 465894.39 | 82.49 | 11.13 |
| LB032_326_zr5 | 8.23 | 93.92 | 225.75 | 1.03 | 16.53 | 8832.63 | 39.90 | 0.060 | 119.54 | 1.19 | 1.08 | 299.67 | 0.121 | 0.06 | 2.23 | 0.30 | 6.34 | 43.05 | 52.03 | 61.14 | 1341.52 | 538.91 | 488067.69 | 29.90 | 8.33 |
| LB032_326_zr6 | 8.70 | 96.65 | 243.27 | 0.84 | 16.87 | 8970.79 | 43.04 | 0.005 | 141.83 | 1.65 | 0.98 | 317.25 | 0.029 | 0.02 | 2.51 | 0.55 | 6.53 | 41.40 | 58.36 | 72.31 | 1471.69 | 576.26 | 487761.14 | <7.311 | 6.99 |
| LB032_326_zr7 | 5.47 | 75.10 | 178.07 | 0.88 | 14.61 | 8940.70 | 31.73 | 0.017 | 101.26 | 0.77 | 0.92 | 286.39 | 0.019 | 0.04 | 1.77 | 0.25 | 5.55 | 24.13 | 42.25 | 37.85 | 1074.22 | 411.10 | 488526.50 | 7.41 | 6.99 |
| LB032_326_zr8 | 15.58 | 232.48 | 485.74 | 0.59 | 44.84 | 11725.82 | 96.26 | 0.426 | 202.54 | 1.97 | 2.19 | 996.90 | 0.128 | 0.23 | 5.60 | 0.60 | 17.71 | 132.09 | 104.88 | 172.60 | 3033.01 | 950.65 | 481824.76 | 46.18 | 4.97 |
| LB032_326_zr9 | 12.84 | 134.19 | 306.19 | 1.37 | 24.24 | 8318.45 | 55.42 | 0.001 | 165.25 | 1.62 | 0.97 | 349.90 | 0.043 | 0.07 | 2.87 | 0.43 | 9.17 | 70.63 | 73.35 | 83.07 | 1938.34 | 696.79 | 487463.54 | <7.301 | 10.31 |
| LB032_326_zr10 | 9.31 | 105.14 | 229.97 | 1.44 | 23.17 | 9292.87 | 43.99 | 0.267 | 123.99 | 0.93 | 1.85 | 445.96 | 0.031 | 0.21 | 2.88 | 0.24 | 7.67 | 50.56 | 54.22 | 65.20 | 1458.84 | 520.06 | 487331.77 | <8.842 | 6.67 |
| LB032_326_zr11 | 13.51 | 211.10 | 389.27 | 3.45 | 52.00 | 8921.87 | 78.00 | 0.060 | 176.44 | 1.01 | 4.91 | 364.45 | 0.063 | 0.27 | 8.77 | 0.28 | 17.23 | 111.91 | 88.01 | 103.19 | 2473.49 | 804.28 | 486094.56 | 14.11 | 10.54 |
| LB032_326_zr12 | 5.03 | 94.90 | 193.84 | 1.61 | 22.58 | 8767.88 | 37.69 | 0.004 | 88.33 | 0.42 | 1.82 | 184.03 | 0.012 | 0.09 | 3.86 | 0.15 | 7.48 | 26.86 | 41.66 | 31.31 | 1182.32 | 420.26 | 488723.87 | <2.674 | 6.54 |
| LB032_326_zr13 | 9.46 | 117.35 | 265.95 | 1.15 | 21.51 | 8664.62 | 49.62 | 0.013 | 129.09 | 1.36 | 0.93 | 393.72 | 0.030 | 0.05 | 2.53 | 0.40 | 8.27 | 57.22 | 59.03 | 77.25 | 1655.73 | 601.34 | 487563.48 | 14.83 | 9.46 |
| LB032_326_zr14 | 6.58 | 81.87 | 195.91 | 0.77 | 15.04 | 8570.83 | 35.23 | 0.003 | 104.49 | 0.98 | 0.72 | 354.89 | 0.022 | 0.03 | 1.76 | 0.28 | 5.68 | 42.61 | 44.94 | 66.16 | 1175.41 | 468.76 | 488472.82 | <2.661 | 7.28 |
| LB032_326_zr15 | 8.58 | 109.76 | 251.60 | 1.24 | 21.34 | 8942.92 | 46.17 | 0.002 | 130.05 | 1.18 | 1.41 | 298.30 | 0.029 | 0.08 | 2.93 | 0.40 | 7.88 | 48.93 | 57.67 | 71.03 | 1548.37 | 601.34 | 487703.10 | <2.641 | 8.14 |
| LB032_326_zr16 | 6.12 | 90.28 | 211.24 | 0.33 | 15.55 | 12044.89 | 38.68 | 0.002 | 95.43 | 0.89 | 0.39 | 397.27 | 0.077 | 0.03 | 1.85 | 0.31 | 5.91 | 28.59 | 46.38 | 63.92 | 1252.63 | 478.82 | 485654.83 | 19.24 | 6.14 |
| LB032_326_zr17 | 25.19 | 589.22 | 1092.65 | 0.61 | 129.40 | 12665.60 | 224.20 | 0.033 | 373.09 | 5.68 | 7.50 | 649.63 | 1.927 | 0.35 | 19.79 | 2.67 | 46.45 | 2477.40 | 231.26 | 1673.67 | 7583.35 | 1944.30 | 472617.06 | <6.472 | 11.92 |
| LB032_326_zr18 | 2.98 | 54.15 | 118.03 | 0.19 | 9.83 | 11381.70 | 22.72 | 0.014 | 50.25 | 0.53 | 0.34 | 227.56 | 0.012 | 0.02 | 1.29 | 0.12 | 3.62 | 9.31 | 25.71 | 24.03 | 717.62 | 248.84 | 487446.20 | <2.592 | 6.99 |
| LB032_326_zr19 | 29.16 | 381.88 | 747.29 | 1.38 | 76.36 | 11249.80 | 149.76 | 0.058 | 273.30 | 4.03 | 3.57 | 1037.53 | 0.251 | 0.18 | 9.56 | 1.79 | 29.94 | 242.36 | 157.40 | 395.57 | 4838.98 | 1330.39 | 479259.29 | 30.13 | 9.98 |
| LB032_326_zr20 | 35.97 | 290.72 | 613.16 | 0.31 | 53.09 | 11726.99 | 118.02 | 0.013 | 229.79 | 1.86 | 2.81 | 847.09 | 0.387 | 0.18 | 7.96 | 1.43 | 21.06 | 390.24 | 134.78 | 254.65 | 4084.17 | 1161.01 | 480472.42 | 10.38 | 4.98 |
| LB032_326_zr21 | 91.19 | 941.96 | 1813.06 | 3.21 | 197.73 | 7006.25 | 358.99 | 0.361 | 688.67 | 3.05 | 12.00 | 6714.09 | 1.137 | 0.65 | 29.52 | 1.53 | 73.95 | 789.72 | 381.78 | 688.04 | 12073.01 | 3317.51 | 467396.55 | 166.72 | 27.59 |
| LB032_326_zr22 | 18.48 | 137.06 | 326.15 | 0.10 | 21.19 | 14030.16 | 59.37 | 0.002 | 177.36 | 1.60 | 0.86 | 473.21 | 0.267 | 0.04 | 1.99 | 0.06 | 9.01 | 168.72 | 79.61 | 327.98 | 2123.83 | 770.88 | 481960.19 | 11.58 | 5.34 |
| LB032_326_zr23 | 31.59 | 674.82 | 1174.31 | 4.41 | 157.33 | 8622.47 | 256.42 | 0.068 | 418.09 | 2.90 | 7.85 | 1238.25 | 0.654 | 0.38 | 22.83 | 0.71 | 55.54 | 286.83 | 249.27 | 261.99 | 7970.67 | 2044.92 | 476144.51 | 118.55 | 13.46 |
| LB032_326_zr24 | 11.56 | 187.41 | 402.74 | 0.52 | 35.49 | 11756.73 | 79.93 | 0.023 | 178.76 | 1.26 | 1.98 | 780.31 | 0.159 | 0.06 | 4.11 | | | | | | | | | | |

Appendix C: Eastern Sunda arc zircon trace element chemistry

| Analysis ID | Co | Dy | Er | Eu | Gd | Hf | Ho | La | Lu | Nb | Nd | P | Pb | Pr | Sm | Ta | Tb | Th | Tm | U | Y | Yb | Zr | Fe | Ti |
|----------------|-------|--------|--------|-------|--------|----------|--------|-------|--------|------|-------|--------|--------|------|-------|------|-------|--------|--------|--------|---------|---------|-----------|---------|-------|
| LB004_328_zr15 | 6.00 | 54.78 | 142.53 | 0.70 | 10.10 | 8927.04 | 24.55 | 0.003 | 89.78 | 0.91 | 0.53 | 243.56 | 0.007 | 0.02 | 1.45 | 0.22 | 3.76 | 17.46 | 35.05 | 33.83 | 837.75 | 384.83 | 488965.39 | -2.505 | 7.82 |
| LB004_328_zr16 | 5.77 | 49.10 | 127.95 | 0.62 | 9.27 | 9269.74 | 21.70 | 0.001 | 82.42 | 0.74 | 0.45 | 255.26 | 0.009 | 0.02 | 1.35 | 0.23 | 3.55 | 19.11 | 31.47 | 33.34 | 753.15 | 347.10 | 488826.13 | -2.556 | 7.02 |
| LB004_328_zr17 | 9.36 | 83.09 | 203.67 | 0.97 | 14.86 | 9341.83 | 35.97 | 0.003 | 121.54 | 1.28 | 0.79 | 349.84 | 0.013 | 0.04 | 1.83 | 0.33 | 5.60 | 35.36 | 48.23 | 55.18 | 1217.54 | 523.08 | 487803.84 | -2.523 | 7.59 |
| LB004_328_zr18 | 3.92 | 37.58 | 88.24 | 0.69 | 8.82 | 9682.21 | 15.63 | 0.001 | 54.75 | 0.42 | 0.36 | 160.51 | 0.005 | 0.03 | 1.43 | 0.12 | 2.94 | 12.98 | 20.63 | 22.14 | 533.30 | 230.48 | 489105.09 | -2.512 | 5.03 |
| LB004_328_zr19 | 5.92 | 64.19 | 134.04 | 1.35 | 16.43 | 9592.70 | 21.99 | 0.007 | 74.74 | 0.51 | 1.36 | 220.32 | 0.024 | 0.08 | 2.89 | 0.12 | 5.38 | 30.09 | 30.51 | 35.56 | 842.31 | 330.25 | 486545.95 | -2.684 | 4.96 |
| LB004_328_zr2 | 7.52 | 77.36 | 173.07 | 1.22 | 18.13 | 9813.88 | 31.99 | 0.004 | 101.97 | 0.74 | 1.47 | 306.67 | 0.014 | 0.08 | 2.57 | 0.18 | 6.04 | 36.64 | 40.57 | 48.48 | 1055.81 | 431.88 | 487822.84 | -2.609 | 5.49 |
| LB004_328_zr20 | 6.79 | 55.04 | 138.43 | 0.64 | 9.79 | 9688.13 | 24.04 | 0.002 | 86.36 | 1.01 | 0.65 | 230.49 | 0.011 | 0.03 | 1.40 | 0.27 | 3.81 | 27.78 | 32.65 | 46.42 | 821.00 | 371.11 | 488436.78 | -2.502 | 7.10 |
| LB004_328_zr21 | 11.66 | 107.00 | 259.37 | 1.15 | 18.24 | 9207.35 | 46.59 | 0.001 | 148.76 | 1.25 | 1.00 | 383.50 | 0.016 | 0.05 | 2.30 | 0.42 | 7.23 | 48.74 | 60.75 | 69.90 | 1570.59 | 649.02 | 487255.77 | -2.544 | 9.34 |
| LB004_328_zr22 | 12.30 | 110.00 | 259.87 | 1.39 | 20.90 | 9269.36 | 46.70 | 0.001 | 141.74 | 1.45 | 1.20 | 352.65 | 0.018 | 0.06 | 2.83 | 0.31 | 8.04 | 56.34 | 59.85 | 69.99 | 1555.17 | 637.44 | 487289.05 | -2.492 | 9.10 |
| LB004_328_zr23 | 6.73 | 67.35 | 155.71 | 0.94 | 14.13 | 9258.53 | 28.70 | 0.005 | 93.06 | 0.83 | 0.93 | 283.63 | 0.024 | 0.06 | 2.00 | 0.21 | 4.89 | 28.23 | 36.69 | 40.78 | 943.14 | 396.26 | 488471.23 | 4.12 | 7.17 |
| LB004_328_zr24 | 19.08 | 211.20 | 389.52 | 4.75 | 59.52 | 9078.43 | 78.68 | 0.025 | 187.41 | 1.12 | 5.86 | 391.78 | 0.046 | 0.33 | 11.05 | 0.28 | 18.04 | 112.00 | 87.01 | 90.68 | 2627.27 | 884.08 | 485654.20 | 45.82 | 7.37 |
| LB004_328_zr25 | 10.02 | 93.77 | 218.77 | 1.32 | 18.72 | 9200.74 | 39.69 | 0.003 | 122.91 | 1.08 | 1.07 | 296.33 | 0.025 | 0.06 | 2.78 | 0.28 | 6.80 | 39.93 | 50.56 | 53.45 | 1329.54 | 540.92 | 487654.19 | -2.504 | 8.51 |
| LB004_328_zr26 | 9.62 | 88.51 | 219.70 | 0.97 | 15.32 | 8910.40 | 38.77 | 0.003 | 126.96 | 1.26 | 0.79 | 325.97 | 0.034 | 0.03 | 1.91 | 0.35 | 6.09 | 33.92 | 52.08 | 53.88 | 1307.09 | 553.81 | 486033.96 | -2.439 | 9.78 |
| LB004_328_zr27 | 4.84 | 40.02 | 99.87 | 0.50 | 7.62 | 9225.24 | 17.31 | 0.005 | 65.38 | 0.69 | 0.47 | 187.83 | 0.016 | 0.03 | 1.18 | 0.19 | 2.76 | 14.48 | 24.08 | 28.57 | 599.28 | 277.69 | 488262.45 | -2.474 | 6.78 |
| LB004_328_zr28 | 4.70 | 36.44 | 92.37 | 0.44 | 6.53 | 9465.39 | 16.42 | 0.001 | 57.80 | 0.62 | 0.42 | 203.29 | 0.007 | 0.01 | 0.97 | 0.17 | 2.60 | 16.56 | 22.26 | 27.57 | 548.15 | 248.75 | 488141.46 | -2.533 | 6.97 |
| LB004_328_zr29 | 4.97 | 54.28 | 120.76 | 0.91 | 12.99 | 9851.72 | 22.23 | 0.002 | 70.76 | 0.50 | 1.01 | 201.76 | 0.012 | 0.06 | 2.12 | 0.19 | 4.26 | 18.24 | 28.14 | 29.85 | 733.89 | 306.82 | 486556.95 | -2.673 | 5.49 |
| LB004_328_zr30 | 7.99 | 76.18 | 191.20 | 1.02 | 14.23 | 8762.50 | 33.63 | 0.007 | 114.84 | 1.10 | 0.88 | 306.02 | 0.011 | 0.04 | 1.82 | 0.30 | 5.26 | 27.19 | 44.68 | 44.66 | 1133.20 | 482.43 | 488465.42 | -2.583 | 6.74 |
| LB004_328_zr31 | 3.76 | 28.45 | 68.97 | 0.36 | 5.66 | 9164.13 | 12.28 | 0.002 | 42.73 | 0.50 | 0.17 | 175.70 | 0.008 | 0.02 | 0.65 | 0.14 | 2.09 | 11.40 | 16.37 | 19.55 | 402.20 | 180.90 | 489678.39 | -2.553 | 9.57 |
| LB004_328_zr34 | 7.17 | 71.48 | 172.29 | 0.99 | 14.98 | 8877.49 | 30.92 | 0.003 | 100.63 | 0.81 | 1.03 | 301.60 | 0.009 | 0.05 | 1.85 | 0.27 | 5.21 | 26.19 | 40.22 | 40.67 | 1020.65 | 433.00 | 488595.07 | -2.532 | 7.84 |
| LB004_328_zr5 | 5.10 | 44.62 | 115.60 | 0.65 | 8.70 | 9562.96 | 19.56 | 0.021 | 78.16 | 0.63 | 0.57 | 222.24 | 0.100 | 0.04 | 1.27 | 0.25 | 3.25 | 17.77 | 28.62 | 33.56 | 687.06 | 322.97 | 488766.40 | 8.32 | 7.17 |
| LB004_328_zr6 | 8.19 | 86.29 | 199.71 | 1.23 | 17.40 | 9034.55 | 36.43 | 0.005 | 116.62 | 1.03 | 1.31 | 299.31 | 0.012 | 0.06 | 2.96 | 0.28 | 6.22 | 34.78 | 46.65 | 50.66 | 1209.63 | 503.60 | 488162.24 | -2.535 | 8.90 |
| LB004_328_zr7 | 6.54 | 47.64 | 121.36 | 0.86 | 10.84 | 9205.64 | 20.67 | 0.076 | 74.14 | 0.62 | 0.89 | 562.25 | 0.012 | 0.07 | 1.22 | 0.20 | 3.28 | 26.49 | 27.71 | 36.41 | 718.02 | 305.10 | 488339.94 | -5.186 | 9.06 |
| LB004_328_zr9 | 6.60 | 62.95 | 155.83 | 0.70 | 11.49 | 9142.47 | 27.40 | 0.001 | 93.95 | 0.94 | 0.55 | 260.45 | 0.005 | 0.03 | 1.56 | 0.24 | 4.35 | 23.43 | 36.85 | 38.44 | 920.01 | 400.72 | 488640.02 | -2.592 | 8.52 |
| LB004_328_zr10 | 11.79 | 90.40 | 199.50 | 1.18 | 19.62 | 9633.10 | 36.98 | 0.038 | 110.72 | 1.45 | 0.92 | 276.11 | 0.027 | 0.06 | 2.41 | 0.34 | 6.65 | 51.53 | 44.73 | 62.92 | 1226.54 | 485.49 | 487731.99 | -2.938 | 7.50 |
| LB004_330_zr10 | 41.24 | 292.52 | 544.84 | 6.57 | 81.91 | 10055.75 | 109.15 | 0.066 | 279.54 | 2.84 | 7.55 | 488.28 | 0.285 | 0.38 | 16.44 | 0.56 | 25.26 | 241.22 | 117.22 | 119.53 | 3589.62 | 1173.22 | 482942.80 | 106.23 | 9.05 |
| LB004_330_zr11 | 57.85 | 398.68 | 696.67 | 10.31 | 117.39 | 9312.37 | 142.15 | 0.051 | 350.02 | 3.12 | 13.02 | 783.36 | 0.116 | 0.63 | 22.04 | 0.67 | 35.89 | 344.26 | 156.59 | 240.47 | 4844.77 | 1475.36 | 481077.58 | -6.523 | 7.53 |
| LB004_330_zr12 | 32.20 | 222.61 | 441.40 | 4.41 | 55.99 | 9377.67 | 84.55 | 0.020 | 245.44 | 1.87 | 4.32 | 586.94 | 0.089 | 0.22 | 9.82 | 0.49 | 18.61 | 188.07 | 101.37 | 172.36 | 2811.22 | 994.73 | 484609.03 | -6.724 | 6.02 |
| LB004_330_zr13 | 34.41 | 222.66 | 428.30 | 3.11 | 51.80 | 9878.19 | 86.39 | 0.002 | 220.60 | 2.58 | 1.87 | 404.34 | 0.062 | 0.22 | 9.82 | 0.59 | 17.82 | 173.50 | 97.30 | 155.34 | 2847.84 | 935.72 | 484654.22 | -6.406 | 10.14 |
| LB004_330_zr14 | 3.85 | 36.39 | 81.10 | 0.59 | 7.36 | 10177.06 | 14.76 | 0.001 | 54.91 | 0.42 | 0.39 | 181.45 | 0.005 | 0.01 | 1.02 | 0.10 | 2.61 | 11.34 | 20.02 | 25.89 | 503.84 | 227.35 | 488733.54 | -2.428 | 3.06 |
| LB004_330_zr15 | 5.77 | 53.92 | 115.18 | 0.99 | 12.92 | 9670.46 | 21.52 | 0.015 | 65.66 | 0.45 | 1.02 | 203.57 | 0.005 | 0.05 | 2.14 | 0.14 | 4.20 | 22.69 | 27.18 | 33.49 | 709.85 | 295.48 | 488727.85 | -3.139 | 4.69 |
| LB004_330_zr16 | 17.25 | 127.26 | 269.01 | 1.88 | 26.44 | 9189.62 | 51.85 | 0.061 | 137.71 | 1.82 | 1.27 | 315.50 | 0.053 | 0.08 | 3.12 | 0.44 | 9.56 | 77.28 | 60.90 | 93.26 | 1738.22 | 630.18 | 485790.11 | 1044.13 | 17.44 |
| LB004_330_zr17 | 4.84 | 23.86 | 54.14 | 0.29 | 4.82 | 10370.36 | 9.85 | 0.002 | 33.28 | 0.45 | 0.21 | 135.13 | 0.007 | 0.01 | 0.56 | 0.14 | 1.71 | 17.98 | 13.09 | 31.72 | 335.81 | 143.56 | 488961.85 | -2.464 | 4.20 |
| LB004_330_zr19 | 3.06 | 14.87 | 36.01 | 0.18 | 3.03 | 9866.32 | 6.38 | 0.001 | 23.33 | 0.40 | 0.14 | 112.54 | -0.002 | 0.01 | 0.45 | 0.12 | 1.11 | 8.77 | 8.65 | 17.29 | 216.77 | 99.61 | 488593.98 | -2.498 | 5.33 |
| LB004_330_zr2 | 22.80 | 181.37 | 368.13 | 3.08 | 42.14 | 9224.16 | 71.40 | 0.001 | 189.36 | 1.63 | 2.59 | 359.20 | 0.178 | 0.12 | 5.78 | 0.43 | 14.65 | 125.57 | 83.27 | 105.51 | 2373.17 | 798.42 | 486033.75 | -6.700 | 11.37 |
| LB004_330_zr20 | 4.45 | 31.85 | 77.05 | 0.53 | 6.33 | 9887.63 | 13.55 | 0.016 | 50.36 | 0.57 | 0.30 | 128.03 | 0.008 | 0.02 | 0.98 | 0.17 | 2.19 | 13.87 | 18.71 | 29.46 | 471.26 | 212.11 | 488101.54 | 5.94 | 4.24 |
| LB004_330_zr22 | 5.37 | 48.33 | 108.72 | 0.70 | 10.08 | 9294.53 | 19.70 | 0.006 | 66.65 | 0.50 | 0.42 | 225.96 | 0.005 | 0.02 | 1.75 | 0.17 | 3.73 | 17.42 | 26.16 | 30.91 | 672.03 | 287.73 | 488033.27 | -2.511 | 3.55 |
| LB004_330_zr23 | 7.59 | 56.87 | 150.80 | 0.84 | 10.03 | 8855.94 | 25.77 | 0.001 | 93.47 | 1.08 | 0.62 | 204.12 | 0.009 | 0.03 | 1.55 | 0.28 | 3.73 | 22.55 | 36.31 | 45.15 | 882.74 | 394.33 | 488019.62 | -2.534 | 6.91 |
| LB004_330_zr24 | 11.79 | 88.18 | 189.27 | 1.08 | 17.65 | 9290.03 | 35.60 | 0.002 | 104.37 | 1.28 | 0.82 | 216.53 | 0.014 | 0.03 | 2.07 | 0.35 | 6.40 | 43.68 | 43.09 | 59.38 | 1194.45 | 457.76 | 488189.13 | -2.570 | 8.23 |
| LB004_330_zr25 | 67.08 | 450.94 | 756.80 | 12.32 | 145.94 | 9269.88 | 158.18 | 0.096 | 358.51 | 3.32 | 18.93 | 797.63 | 0.104 | 1.11 | 47.87 | 0.60 | 41.38 | 379.24 | 165.59 | 239.97 | 5313.32 | 1562.72 | 480338.24 | -7.084 | 9.45 |
| LB004_330_zr26 | 15.98 | 131.17 | 250.11 | 2.52 | 33.11 | 8972.38 | 49.52 | 0.008 | 128.62 | 1.39 | 1.41 | 254.39 | 0.021 | 0.06 | 4.62 | 0.28 | 10.60 | 86.73 | 57.03 | 80.18 | 1645.62 | 542.07 | 487645.10 | -6.455 | 7.87 |
| LB004_330_zr27 | 65.31 | 340.95 | 681.97 | 5.74 | 80.99 | 9010.40 | 137.00 | 0.024 | 323.13 | 4.45 | 5.80 | 769.63 | 0.188 | 0.29 | 12.47 | 0.59 | 27.41 | 599.36 | 149.48 | 314.93 | 4710.69 | 1393.02 | 481435.61 | -6.488 | 10.97 |
| LB004_330_zr28 | 9.83 | 75.45 | 177.22 | 1.01 | 15.03 | 9505.18 | 31.97 | 0.002 | 103.31 | 0.98 | 0.66 | 225.93 | 0.016 | 0.04 | 1.96 | 0.25 | 5.67 | 38.24 | 41.11 | 51.21 | 1066.42 | 446.58 | 488186.73 | -2.579 | 7.18 |
| LB004_330_zr29 | 5.90 | 50.94 | 116.44 | 0.66 | 10.94 | 9921.08 | 21.59 | 0.001 | 70.19 | 0.70 | 0.85 | 203.80 | 0.008 | 0.04 | 1.68 | 0.20 | 3.81 | 25.12 | 27.61 | 36.17 | 709.68 | 306.90 | 488524.84 | -2.586 | 5.63 |
| LB004_330_zr30 | 10.68 | 91.74 | 146.73 | 2.69 | 27.05 | 8988.28 | 31.34 | 0.011 | 78.76 | 0.79 | 1.05 | 189.57 | 0.023 | 0.14 | 4.59 | 0.22 | 8.37 | 46.63 | 33.57 | 46.79 | 1062.54 | 325.74 | 488755.42 | | |

Appendix C: Eastern Sunda arc zircon trace element chemistry

| Analysis ID | Ce | Dy | Er | Eu | Gd | Hf | Ho | La | Lu | Nb | Nd | P | Pb | Pr | Sm | Ta | Tb | Th | Tm | U | Y | Yb | Zr | Fe | Ti |
|----------------|-------|--------|---------|------|--------|----------|--------|-------|--------|------|------|---------|--------|------|-------|------|-------|--------|--------|--------|---------|---------|-----------|--------|-------|
| LB041_330_zr14 | 23.69 | 203.13 | 380.15 | 4.08 | 54.18 | 10456.07 | 75.95 | 0.016 | 184.26 | 1.31 | 5.30 | 308.38 | 0.050 | 0.28 | 10.12 | 0.35 | 16.62 | 127.40 | 83.87 | 119.74 | 2588.14 | 863.78 | 484911.46 | <2.573 | 4.92 |
| LB041_330_zr5 | 6.55 | 55.44 | 133.84 | 0.80 | 11.96 | 9306.24 | 23.51 | 0.002 | 82.31 | 0.56 | 0.55 | 279.39 | 0.007 | 0.02 | 1.40 | 0.13 | 4.21 | 25.16 | 31.46 | 41.15 | 800.36 | 348.91 | 488683.22 | <2.500 | 3.39 |
| LB041_330_zr6 | 8.90 | 56.86 | 129.47 | 0.91 | 12.36 | 9917.57 | 23.48 | 0.001 | 82.11 | 1.08 | 0.76 | 207.34 | 0.009 | 0.03 | 1.34 | 0.22 | 4.14 | 37.68 | 31.73 | 51.74 | 808.45 | 318.36 | 488358.49 | <6.787 | 6.32 |
| LB041_330_zr7 | 22.51 | 137.97 | 314.55 | 1.60 | 24.52 | 9829.16 | 56.50 | 0.001 | 180.05 | 2.72 | 1.25 | 332.56 | 0.035 | 0.08 | 2.81 | 0.57 | 9.86 | 87.31 | 73.77 | 113.86 | 1937.51 | 734.13 | 486268.96 | <6.577 | 7.91 |
| LB041_330_zr8 | 7.15 | 75.86 | 150.08 | 1.40 | 19.72 | 10199.22 | 28.79 | 0.001 | 80.04 | 0.56 | 1.65 | 182.10 | 0.015 | 0.09 | 3.35 | 0.14 | 6.10 | 32.57 | 33.56 | 39.39 | 937.03 | 359.33 | 488011.39 | <2.500 | 4.57 |
| LB041_330_zr9 | 8.00 | 64.35 | 135.44 | 0.91 | 14.54 | 9551.98 | 25.82 | 0.032 | 76.39 | 0.80 | 1.00 | 205.01 | 0.012 | 0.05 | 1.91 | 0.26 | 4.67 | 28.86 | 31.56 | 40.66 | 835.34 | 342.21 | 488589.44 | 8.07 | 4.67 |
| LB042_331_zr1 | 6.74 | 43.01 | 107.20 | 0.45 | 8.58 | 9886.09 | 18.46 | 0.008 | 64.58 | 0.74 | 0.39 | 189.15 | 0.026 | 0.03 | 1.08 | 0.21 | 3.15 | 23.62 | 25.23 | 33.67 | 641.19 | 278.71 | 488695.42 | <2.875 | 7.51 |
| LB042_331_zr10 | 7.96 | 61.20 | 149.82 | 0.76 | 12.03 | 9164.87 | 26.79 | 0.003 | 88.96 | 0.90 | 0.87 | 241.47 | 0.021 | 0.04 | 1.53 | 0.24 | 4.33 | 32.31 | 34.98 | 43.43 | 907.85 | 380.20 | 488685.70 | 2.98 | 8.11 |
| LB042_331_zr11 | 6.45 | 63.88 | 138.69 | 0.96 | 14.84 | 9502.35 | 26.40 | 0.003 | 75.78 | 0.64 | 1.10 | 194.74 | 0.023 | 0.06 | 2.33 | 0.20 | 5.04 | 25.88 | 31.46 | 33.66 | 856.72 | 340.53 | 488634.36 | 3.55 | 7.29 |
| LB042_331_zr12 | 7.96 | 59.45 | 153.63 | 0.72 | 10.31 | 9392.53 | 25.85 | 0.001 | 101.85 | 0.97 | 0.68 | 264.54 | 0.013 | 0.04 | 1.35 | 0.26 | 4.37 | 26.01 | 37.76 | 44.00 | 926.01 | 394.84 | 488434.02 | <6.224 | 9.01 |
| LB042_331_zr13 | 7.02 | 63.17 | 142.06 | 0.87 | 14.56 | 9379.88 | 26.09 | 0.139 | 82.77 | 0.64 | 1.00 | 276.37 | 0.082 | 0.11 | 2.30 | 0.23 | 5.05 | 27.90 | 33.28 | 35.75 | 864.14 | 335.12 | 488452.75 | 74.02 | 10.46 |
| LB042_331_zr14 | 15.64 | 113.11 | 261.98 | 1.22 | 23.29 | 9179.25 | 48.76 | 0.004 | 148.93 | 1.68 | 1.21 | 417.54 | 0.030 | 0.08 | 3.25 | 0.41 | 8.38 | 79.88 | 62.52 | 79.64 | 1199.50 | 604.71 | 487089.01 | 30.01 | 9.48 |
| LB042_331_zr15 | 8.61 | 85.42 | 194.05 | 1.10 | 16.52 | 9286.57 | 34.50 | 0.008 | 124.48 | 0.98 | 1.07 | 452.56 | 0.029 | 0.07 | 2.51 | 0.24 | 6.25 | 46.01 | 47.14 | 60.56 | 781.12 | 330.18 | 487647.54 | 27.05 | 7.77 |
| LB042_331_zr16 | 6.41 | 50.04 | 125.65 | 0.69 | 9.68 | 9055.58 | 22.00 | 0.044 | 76.06 | 0.72 | 0.81 | 244.07 | 0.010 | 0.05 | 1.50 | 0.20 | 3.65 | 21.06 | 30.04 | 32.26 | 866.11 | 361.01 | 488989.90 | 13.95 | 7.77 |
| LB042_331_zr17 | 6.92 | 64.58 | 148.25 | 0.95 | 12.79 | 9517.47 | 27.30 | 0.001 | 93.48 | 0.71 | 0.77 | 242.38 | 0.023 | 0.04 | 2.24 | 0.18 | 4.92 | 29.97 | 35.95 | 40.49 | 928.77 | 369.42 | 488376.57 | 22.85 | 7.45 |
| LB042_331_zr18 | 8.81 | 72.37 | 185.89 | 0.85 | 13.08 | 8889.99 | 32.59 | 0.003 | 112.81 | 1.20 | 0.76 | 298.50 | 0.015 | 0.05 | 1.75 | 0.35 | 4.93 | 37.78 | 44.32 | 55.97 | 1130.97 | 488.09 | 488310.92 | 6.68 | 10.26 |
| LB042_331_zr19 | 6.65 | 56.93 | 137.61 | 0.83 | 12.20 | 9218.49 | 24.42 | 0.049 | 82.99 | 0.75 | 1.01 | 306.82 | 0.013 | 0.07 | 1.99 | 0.28 | 4.33 | 25.28 | 33.08 | 37.65 | 856.11 | 361.01 | 487418.23 | 909.08 | 8.24 |
| LB042_331_zr20 | 6.30 | 49.43 | 130.52 | 0.62 | 8.98 | 9172.75 | 21.98 | 0.008 | 88.23 | 0.91 | 0.51 | 225.91 | 0.026 | 0.03 | 1.26 | 0.26 | 3.27 | 20.38 | 32.25 | 38.99 | 776.39 | 369.18 | 488892.23 | 7.07 | 9.02 |
| LB042_331_zr21 | 7.83 | 97.92 | 199.25 | 1.43 | 23.85 | 9570.02 | 38.93 | 0.010 | 94.16 | 0.58 | 2.10 | 271.14 | 0.019 | 0.10 | 3.50 | 0.20 | 7.84 | 34.22 | 43.74 | 38.14 | 1238.27 | 447.38 | 487831.82 | 7.15 | 7.16 |
| LB042_331_zr22 | 7.89 | 65.76 | 159.64 | 0.95 | 13.57 | 9076.32 | 28.29 | 0.024 | 93.65 | 0.87 | 0.97 | 225.29 | 0.014 | 0.06 | 2.04 | 0.27 | 4.78 | 32.43 | 37.82 | 43.43 | 958.27 | 406.53 | 488612.72 | 62.80 | 8.96 |
| LB042_331_zr23 | 8.86 | 55.60 | 132.02 | 0.78 | 11.18 | 9367.15 | 23.55 | 0.002 | 81.00 | 0.79 | 0.78 | 200.05 | 0.007 | 0.04 | 2.15 | 0.21 | 4.12 | 24.81 | 31.55 | 37.45 | 815.07 | 351.38 | 488775.95 | <2.641 | 7.37 |
| LB042_331_zr24 | 8.86 | 37.37 | 185.62 | 1.27 | 21.43 | 9433.17 | 35.27 | 0.031 | 95.65 | 0.79 | 1.86 | 227.40 | 0.031 | 0.11 | 3.53 | 0.18 | 7.09 | 42.11 | 41.24 | 46.02 | 1161.09 | 435.18 | 488129.68 | <2.727 | 8.45 |
| LB042_331_zr25 | 9.56 | 100.64 | 206.19 | 1.92 | 27.25 | 8823.76 | 39.46 | 0.023 | 117.52 | 0.69 | 2.13 | 350.37 | 0.020 | 0.14 | 4.13 | 0.21 | 8.35 | 53.21 | 47.87 | 53.10 | 1317.53 | 488.61 | 488023.90 | 41.45 | 6.67 |
| LB042_331_zr26 | 8.96 | 68.79 | 181.95 | 0.74 | 12.85 | 8947.52 | 31.64 | 0.011 | 121.30 | 1.33 | 0.88 | 324.48 | 0.082 | 0.03 | 1.68 | 0.33 | 4.55 | 31.95 | 45.95 | 54.12 | 1090.10 | 473.92 | 488324.54 | 19.47 | 12.36 |
| LB042_331_zr27 | 9.53 | 97.42 | 194.08 | 2.30 | 24.13 | 8467.07 | 36.46 | 0.033 | 113.51 | 0.71 | 2.55 | 468.27 | 0.045 | 0.11 | 4.70 | 0.11 | 8.07 | 50.38 | 46.28 | 49.54 | 1240.29 | 446.11 | 488201.65 | 37.17 | 6.01 |
| LB042_331_zr28 | 9.75 | 99.14 | 198.23 | 1.34 | 23.91 | 9739.30 | 38.44 | 0.095 | 100.70 | 0.82 | 1.93 | 275.15 | 0.044 | 0.12 | 4.43 | 0.24 | 8.13 | 52.39 | 44.19 | 59.16 | 1263.57 | 465.58 | 487624.64 | 5.36 | 6.64 |
| LB042_331_zr29 | 4.85 | 51.55 | 113.65 | 0.85 | 11.87 | 9613.50 | 21.81 | 0.001 | 63.26 | 0.45 | 0.52 | 225.37 | 0.011 | 0.04 | 1.93 | 0.13 | 3.95 | 19.39 | 26.10 | 27.66 | 700.09 | 281.65 | 488760.85 | <4.521 | 5.80 |
| LB042_331_zr30 | 5.82 | 44.49 | 109.94 | 0.56 | 8.83 | 9220.33 | 19.16 | 0.004 | 75.72 | 0.76 | 0.56 | 224.50 | 0.042 | 0.01 | 1.30 | 0.25 | 3.25 | 15.78 | 27.64 | 30.40 | 660.79 | 298.39 | 489068.46 | 12.46 | 8.66 |
| LB042_331_zr31 | 6.14 | 51.92 | 120.38 | 0.92 | 12.17 | 9828.76 | 21.56 | 0.024 | 76.36 | 0.46 | 0.82 | 229.41 | <0.010 | 0.06 | 1.81 | 0.16 | 4.37 | 20.25 | 30.00 | 29.98 | 738.32 | 306.78 | 488492.57 | 11.89 | 7.15 |
| LB042_331_zr32 | 7.50 | 70.03 | 160.18 | 0.87 | 14.59 | 9213.16 | 29.21 | 0.067 | 94.42 | 0.87 | 1.13 | 251.41 | 0.016 | 0.07 | 1.86 | 0.22 | 4.97 | 36.51 | 37.95 | 44.45 | 970.67 | 417.49 | 488498.86 | 10.51 | 8.83 |
| LB042_331_zr33 | 5.84 | 63.08 | 130.22 | 1.35 | 15.71 | 9893.91 | 24.23 | 0.004 | 76.30 | 0.51 | 1.38 | 295.33 | 0.033 | 0.06 | 2.66 | 0.13 | 5.36 | 31.16 | 30.55 | 32.70 | 808.70 | 316.96 | 488193.98 | 18.16 | 6.27 |
| LB042_331_zr34 | 6.88 | 79.41 | 164.79 | 1.27 | 20.16 | 8936.11 | 31.35 | 0.001 | 90.03 | 0.53 | 1.86 | 249.06 | 0.022 | 0.09 | 3.67 | 0.16 | 6.47 | 32.87 | 37.56 | 38.84 | 1051.41 | 379.62 | 487882.87 | 22.57 | 5.35 |
| LB042_331_zr35 | 6.09 | 33.35 | 79.99 | 0.41 | 7.70 | 9949.81 | 14.30 | 0.061 | 51.28 | 0.60 | 0.88 | 260.48 | 0.034 | 0.04 | 1.13 | 0.17 | 2.51 | 21.96 | 19.98 | 29.78 | 492.70 | 201.97 | 488636.61 | 95.23 | 10.59 |
| LB042_331_zr36 | 6.67 | 62.02 | 152.55 | 0.71 | 11.77 | 9765.73 | 27.64 | 0.032 | 94.02 | 1.02 | 0.82 | 229.73 | 0.082 | 0.05 | 1.45 | 0.23 | 4.28 | 32.33 | 36.54 | 45.42 | 944.62 | 397.87 | 488106.16 | 33.29 | 41.34 |
| LB042_331_zr37 | 6.49 | 58.56 | 134.98 | 0.77 | 13.29 | 10031.73 | 24.23 | 0.005 | 79.88 | 0.62 | 1.08 | 240.96 | 0.012 | 0.05 | 2.11 | 0.23 | 4.35 | 26.82 | 31.72 | 41.91 | 814.04 | 351.31 | 488185.46 | <2.630 | 6.55 |
| LB042_331_zr38 | 4.98 | 29.33 | 73.02 | 0.36 | 6.07 | 10027.92 | 58.12 | 0.027 | 171.13 | 1.88 | 1.07 | 613.42 | 0.028 | 0.07 | 2.65 | 0.45 | 9.19 | 86.18 | 72.22 | 93.37 | 1947.72 | 753.55 | 486094.34 | 6.25 | 9.17 |
| LB042_331_zr39 | 6.05 | 46.53 | 120.75 | 0.55 | 9.05 | 9115.01 | 22.34 | 0.004 | 75.48 | 0.93 | 0.78 | 205.62 | 0.056 | 0.04 | 1.96 | 0.27 | 3.97 | 47.12 | 29.23 | 48.32 | 744.68 | 324.01 | 488008.35 | 21.94 | 9.01 |
| LB045_332_zr1 | 9.37 | 175.95 | 368.90 | 1.71 | 41.00 | 9927.08 | 70.19 | 0.013 | 179.24 | 0.63 | 2.95 | 413.06 | 0.209 | 0.15 | 6.10 | 0.20 | 13.39 | 102.03 | 83.52 | 103.36 | 2328.27 | 786.62 | 485462.30 | 27.32 | 9.66 |
| LB045_332_zr10 | 4.12 | 94.67 | 221.07 | 0.74 | 18.38 | 9422.75 | 40.16 | 0.016 | 114.01 | 0.48 | 0.85 | 335.28 | 0.031 | 0.04 | 2.28 | 0.17 | 6.81 | 31.63 | 51.01 | 60.70 | 1346.32 | 534.90 | 487613.66 | 62.15 | 18.16 |
| LB045_332_zr11 | 7.03 | 163.57 | 398.18 | 0.72 | 27.49 | 10235.15 | 71.63 | 0.001 | 204.53 | 0.82 | 1.00 | 868.75 | 0.110 | 0.03 | 3.11 | 0.32 | 11.90 | 73.81 | 92.48 | 138.40 | 2397.62 | 881.83 | 484189.59 | 7.06 | 7.41 |
| LB045_332_zr12 | 13.05 | 197.76 | 444.14 | 1.11 | 38.30 | 9695.31 | 83.67 | 0.001 | 221.99 | 1.48 | 1.20 | 581.13 | 0.194 | 0.05 | 4.65 | 0.40 | 13.99 | 163.72 | 103.40 | 184.82 | 2771.75 | 994.53 | 484490.86 | <7.038 | 7.02 |
| LB045_332_zr14 | 7.85 | 155.16 | 340.79 | 1.39 | 30.25 | 9619.56 | 64.21 | 0.014 | 166.24 | 0.93 | 1.69 | 370.57 | 0.258 | 0.10 | 4.56 | 0.26 | 11.14 | 88.87 | 76.81 | 116.58 | 2196.58 | 779.58 | 486023.09 | <3.071 | 10.00 |
| LB045_332_zr15 | 2.12 | 49.90 | 116.49 | 0.29 | 8.15 | 9839.98 | 20.88 | 0.008 | 61.96 | 0.49 | 0.27 | 259.90 | 0.026 | 0.00 | 0.71 | 0.08 | 3.30 | 6.85 | 27.56 | 18.82 | 699.87 | 264.09 | 488529.77 | 15.20 | 10.67 |
| LB045_332_zr16 | 38.43 | 748.67 | 1500.11 | 2.00 | 149.18 | 10439.92 | 299.09 | 0.542 | 562.51 | 3.56 | 7.03 | 2347.77 | 0.811 | 0.46 | 19.78 | 0.81 | 57.36 | 597.60 | 313.76 | 642.81 | 9941.95 | 2736.02 | 463758.89 | 4136. | |

Appendix C: Eastern Sunda arc zircon trace element chemistry

| LB045_zr20 | Ce | Dy | Er | Eu | Gd | Hf | Ho | La | Lu | Nb | Nd | P | Pb | Pr | Sm | Ta | Tb | Th | Tm | U | Y | Yb | Zr | Fe | Ti |
|-------------|--------|--------|---------|------|--------|----------|--------|-------|--------|------|-------|---------|--------|------|-------|------|-------|---------|--------|---------|---------|---------|-----------|---------|-------|
| 12.41 | 250.95 | 548.05 | 548.05 | 1.95 | 57.22 | 9660.91 | 102.68 | 0.008 | 267.40 | 0.92 | 2.89 | 539.98 | 0.17 | 0.56 | 7.56 | 0.28 | 18.79 | 128.55 | 123.82 | 167.52 | 3459.34 | 1189.17 | 483340.48 | 20.17 | 8.14 |
| LB045_zr21 | 5.75 | 122.56 | 272.74 | 1.16 | 24.48 | 9302.52 | 50.36 | 0.169 | 149.99 | 0.49 | 2.00 | 31.74 | 0.181 | 0.16 | 3.60 | 0.13 | 9.03 | 60.01 | 62.59 | 85.74 | 1669.12 | 629.78 | 486761.35 | <10.041 | 6.09 |
| LB045_zr22 | 32.76 | 563.76 | 1087.73 | 4.31 | 132.46 | 9501.34 | 216.66 | 0.027 | 495.96 | 2.08 | 6.66 | 1040.87 | 0.418 | 0.36 | 18.59 | 0.63 | 43.76 | 458.73 | 244.99 | 421.01 | 7288.47 | 2278.83 | 476468.93 | <10.465 | 16.00 |
| LB045_zr3 | 3.47 | 81.69 | 212.69 | 0.55 | 13.95 | 9079.89 | 36.43 | 0.003 | 115.30 | 0.67 | 0.47 | 282.26 | 0.04 | 0.02 | 1.59 | 0.18 | 5.34 | 14.28 | 50.01 | 40.63 | 1228.55 | 521.55 | 488153.64 | <2.662 | 7.86 |
| LB045_zr4 | 5.83 | 132.31 | 341.55 | 0.75 | 22.44 | 9032.59 | 60.35 | 0.001 | 163.28 | 0.92 | 0.62 | 418.50 | 0.022 | 0.04 | 2.10 | 0.25 | 8.71 | 22.60 | 76.31 | 60.31 | 2035.60 | 776.35 | 486650.77 | <5.07 | 10.01 |
| LB045_zr6 | 21.51 | 302.44 | 612.73 | 2.70 | 69.37 | 9445.69 | 122.62 | 0.114 | 278.47 | 1.65 | 3.85 | 569.81 | 0.464 | 0.19 | 9.09 | 0.53 | 23.42 | 402.06 | 138.32 | 272.27 | 3839.51 | 1271.17 | 481703.11 | 760.65 | 28.14 |
| LB045_zr7 | 14.91 | 233.14 | 507.84 | 1.28 | 42.67 | 9736.30 | 95.57 | 0.012 | 237.17 | 1.76 | 1.47 | 691.26 | 0.206 | 0.09 | 4.88 | 0.38 | 17.11 | 198.73 | 113.33 | 203.90 | 3152.85 | 1058.23 | 483651.23 | 61.01 | 7.01 |
| LB045_zr8 | 182.41 | 627.22 | 633.97 | 1.87 | 264.96 | 10205.71 | 176.98 | 0.425 | 158.52 | 4.55 | 48.71 | 744.14 | 0.722 | 3.56 | 69.30 | 1.36 | 66.00 | 217.06 | 119.87 | 286.94 | 5703.40 | 927.06 | 479420.31 | 60.98 | 22.55 |
| LB045_zr9 | 17.70 | 369.48 | 739.16 | 1.94 | 80.67 | 9781.30 | 147.50 | 0.185 | 307.43 | 1.33 | 4.91 | 905.23 | 0.242 | 0.33 | 12.59 | 0.38 | 30.33 | 625.35 | 158.76 | 265.07 | 4917.29 | 1429.35 | 480384.38 | 193.86 | 9.86 |
| ELF-03_zr1 | 1.73 | 18.47 | 48.24 | 0.20 | 3.58 | 11424.03 | 8.14 | 0.001 | 36.72 | 0.35 | 0.16 | 123.96 | 0.016 | 0.01 | 0.61 | 0.06 | 1.26 | 10.02 | 12.85 | 37.56 | 291.77 | 154.37 | 488239.52 | <3.051 | 3.59 |
| ELF-03_zr10 | 5.02 | 64.06 | 153.80 | 0.61 | 12.40 | 11442.58 | 27.89 | 0.002 | 91.75 | 0.82 | 0.57 | 239.49 | 0.040 | 0.03 | 1.47 | 0.20 | 4.70 | 41.07 | 37.02 | 124.95 | 953.79 | 400.65 | 486946.96 | <2.662 | 5.18 |
| ELF-03_zr11 | 7.16 | 94.56 | 216.70 | 1.04 | 17.07 | 8925.43 | 39.47 | 0.003 | 121.94 | 0.92 | 0.81 | 313.69 | 0.013 | 0.04 | 1.92 | 0.21 | 6.57 | 59.53 | 50.68 | 127.80 | 1356.12 | 538.91 | 487940.16 | <2.613 | 11.05 |
| ELF-03_zr12 | 4.24 | 57.83 | 151.09 | 0.65 | 10.04 | 9320.69 | 26.24 | 0.001 | 96.19 | 0.67 | 0.36 | 287.48 | 0.173 | 0.03 | 1.52 | 0.17 | 3.93 | 21.36 | 36.84 | 75.28 | 909.32 | 414.88 | 488438.82 | <2.635 | 8.36 |
| ELF-03_zr13 | 8.80 | 141.61 | 333.40 | 1.32 | 22.58 | 8936.03 | 60.67 | 0.004 | 174.71 | 1.20 | 0.80 | 452.33 | 0.042 | 0.04 | 2.47 | 0.21 | 9.47 | 74.36 | 75.65 | 148.06 | 2120.64 | 800.46 | 486430.90 | 13.10 | 11.23 |
| ELF-03_zr16 | 10.01 | 140.00 | 353.40 | 1.04 | 21.44 | 9260.07 | 62.65 | 0.001 | 195.29 | 1.47 | 0.81 | 518.02 | 0.005 | 0.05 | 2.19 | 0.31 | 9.21 | 73.70 | 81.55 | 172.92 | 2184.68 | 866.67 | 485904.96 | <2.669 | 11.84 |
| ELF-03_zr17 | 2.26 | 18.12 | 43.94 | 0.23 | 3.27 | 11304.80 | 7.88 | 0.001 | 31.27 | 0.32 | 0.11 | 172.63 | 0.005 | 0.00 | 0.32 | 0.11 | 1.27 | 14.35 | 11.63 | 48.55 | 272.07 | 131.07 | 488264.58 | 3.12 | 4.00 |
| ELF-03_zr18 | 7.62 | 103.85 | 249.20 | 0.96 | 20.62 | 9004.89 | 45.60 | 0.124 | 146.28 | 1.06 | 0.83 | 524.62 | 0.468 | 0.07 | 2.19 | 0.22 | 7.50 | 61.19 | 58.28 | 142.30 | 1531.40 | 584.74 | 485612.49 | 1172.38 | 21.40 |
| ELF-03_zr19 | 2.09 | 26.24 | 63.04 | 0.28 | 4.89 | 10295.89 | 10.74 | 0.001 | 42.86 | 0.35 | 0.28 | 144.26 | 0.299 | 0.01 | 0.71 | 0.09 | 1.86 | 9.07 | 15.73 | 30.54 | 386.71 | 180.68 | 488903.49 | <2.729 | 8.71 |
| ELF-03_zr2 | 2.68 | 34.81 | 82.72 | 0.34 | 6.52 | 10074.32 | 14.91 | 0.001 | 56.97 | 0.41 | 0.37 | 240.76 | <0.004 | 0.01 | 0.93 | 0.10 | 2.36 | 13.49 | 20.56 | 46.76 | 521.25 | 230.70 | 488653.89 | <4.145 | 5.64 |
| ELF-03_zr7 | 8.37 | 181.27 | 367.17 | 2.83 | 40.82 | 9265.18 | 70.83 | 0.011 | 183.98 | 0.80 | 2.56 | 603.69 | 0.039 | 0.15 | 5.45 | 0.16 | 14.84 | 73.56 | 82.25 | 155.55 | 2287.24 | 775.38 | 485615.38 | 29.96 | 5.27 |
| ELF-03_zr8 | 4.83 | 100.24 | 204.65 | 1.81 | 24.82 | 9241.07 | 39.21 | 0.016 | 107.44 | 0.50 | 2.15 | 246.13 | 0.006 | 0.10 | 4.55 | 0.10 | 7.89 | 37.39 | 45.93 | 81.92 | 1264.81 | 487.75 | 488033.15 | <2.636 | 5.83 |
| ELF-03_zr9 | 4.43 | 58.26 | 154.98 | 0.65 | 10.37 | 9442.97 | 26.01 | 0.002 | 98.73 | 0.67 | 0.51 | 285.56 | 0.006 | 0.02 | 1.30 | 0.23 | 4.08 | 25.83 | 37.15 | 88.81 | 925.87 | 422.67 | 488310.08 | <2.660 | 7.97 |
| GBF-04_zr2 | 128.12 | 711.12 | 1252.08 | 0.50 | 164.35 | 11389.51 | 266.92 | 0.122 | 434.38 | 4.96 | 11.73 | 2148.54 | 8.808 | 0.52 | 22.07 | 3.82 | 57.95 | 1210.94 | 270.58 | 1460.08 | 9887.11 | 2298.65 | 487874.20 | 533.30 | 22.96 |
| GBF-04_zr3 | 13.86 | 284.52 | 584.36 | 2.68 | 56.36 | 10356.92 | 114.89 | 0.070 | 258.13 | 0.59 | 3.61 | 515.38 | 1.332 | 0.22 | 7.77 | 0.21 | 20.79 | 41.25 | 134.25 | 146.61 | 3846.59 | 1233.29 | 482901.50 | <6.942 | 6.94 |
| GBF-04_zr4 | 26.98 | 375.83 | 839.27 | 1.67 | 72.67 | 12672.20 | 155.91 | 0.001 | 362.27 | 2.41 | 2.63 | 963.76 | 76.333 | 0.11 | 8.82 | 1.14 | 28.42 | 583.81 | 194.09 | 525.53 | 5754.87 | 1735.87 | 476506.38 | 28.81 | 10.72 |
| GBF-04_zr5 | 91.33 | 409.35 | 763.82 | 1.25 | 89.24 | 13250.58 | 186.54 | 0.118 | 274.91 | 6.23 | 7.55 | 1084.62 | 8.212 | 0.43 | 13.51 | 2.97 | 32.33 | 831.74 | 168.53 | 1173.56 | 5884.70 | 1515.72 | 475401.77 | 144.75 | 24.16 |
| GBF-04_zr6 | 8.80 | 129.78 | 325.55 | 0.97 | 20.21 | 12084.45 | 56.03 | 0.069 | 144.73 | 0.47 | 0.93 | 728.31 | 19.751 | 0.11 | 2.27 | 0.17 | 8.81 | 76.71 | 75.50 | 313.08 | 1949.12 | 694.68 | 482014.93 | 1266.70 | 10.27 |
| GBF-04_zr7 | 37.60 | 214.24 | 415.91 | 0.57 | 43.76 | 11062.81 | 78.32 | 0.031 | 175.67 | 3.44 | 3.05 | 742.53 | 86.848 | 0.10 | 4.37 | 2.81 | 16.34 | 409.72 | 93.97 | 485.28 | 3088.61 | 854.35 | 482299.87 | 95.18 | 31.66 |
| GBF-04_zr8 | 26.19 | 361.19 | 807.96 | 1.46 | 66.67 | 11549.98 | 147.43 | 0.014 | 331.82 | 1.36 | 2.98 | 1178.94 | 1.487 | 0.13 | 7.13 | 0.38 | 27.41 | 97.84 | 180.09 | 581.52 | 5001.71 | 1688.00 | 478187.77 | 57.48 | 12.84 |
| SPF-05_zr1 | 2.08 | 28.27 | 70.69 | 0.27 | 5.29 | 9514.02 | 12.39 | 0.001 | 43.30 | 0.50 | 0.18 | 131.63 | <0.003 | 0.01 | 0.56 | 0.08 | 1.83 | 6.68 | 17.13 | 25.84 | 423.86 | 193.16 | 489469.79 | <3.192 | 6.18 |
| SPF-05_zr2 | 9.25 | 133.24 | 316.96 | 1.05 | 21.86 | 9090.45 | 56.69 | 0.006 | 167.10 | 1.31 | 0.93 | 409.36 | 0.018 | 0.04 | 2.62 | 0.26 | 9.05 | 61.40 | 73.29 | 137.88 | 1990.43 | 764.78 | 486618.21 | <2.702 | 13.83 |
| SPF-05_zr3 | 8.63 | 139.95 | 310.25 | 1.44 | 27.69 | 9292.07 | 58.24 | 0.035 | 163.85 | 1.20 | 1.66 | 466.50 | 0.084 | 0.10 | 4.10 | 0.23 | 10.31 | 64.88 | 73.00 | 137.53 | 1958.72 | 696.55 | 486433.85 | <7.055 | 10.74 |
| SPF-05_zr4 | 7.03 | 125.39 | 255.51 | 1.84 | 31.23 | 9192.03 | 48.44 | 0.006 | 136.26 | 0.64 | 2.01 | 305.88 | 0.007 | 0.14 | 4.75 | 0.13 | 10.39 | 59.61 | 58.34 | 207.39 | 3047.23 | 1036.02 | 483702.15 | 888.46 | 13.55 |
| SPF-05_zr5 | 3.89 | 56.86 | 138.97 | 0.78 | 12.17 | 9159.69 | 24.16 | 0.006 | 83.87 | 0.45 | 0.86 | 187.56 | 0.047 | 0.05 | 1.99 | 0.12 | 4.25 | 19.94 | 33.39 | 55.28 | 840.75 | 366.80 | 488898.03 | <2.858 | 9.28 |
| SPF-05_zr6 | 3.38 | 46.42 | 124.39 | 0.47 | 8.33 | 9181.77 | 21.20 | 0.003 | 82.28 | 0.59 | 0.31 | 201.27 | <0.003 | 0.02 | 1.19 | 0.12 | 3.34 | 14.73 | 31.49 | 51.38 | 754.05 | 353.33 | 488991.72 | <2.756 | 8.58 |
| SPF-05_zr7 | 3.80 | 73.99 | 164.27 | 0.94 | 15.87 | 9197.98 | 30.12 | 0.006 | 89.73 | 0.53 | 1.07 | 249.06 | 0.120 | 0.06 | 2.28 | 0.09 | 5.44 | 22.92 | 38.56 | 57.61 | 1010.85 | 406.22 | 488466.76 | <2.801 | 13.04 |
| SPF-05_zr8 | 8.33 | 123.56 | 289.49 | 1.07 | 21.45 | 8900.93 | 51.70 | 0.007 | 147.18 | 0.97 | 1.11 | 353.18 | 0.015 | 0.05 | 2.52 | 0.28 | 8.36 | 55.50 | 67.16 | 119.81 | 1784.59 | 707.50 | 487132.44 | 49.61 | 12.17 |
| SPF-05_zr9 | 3.25 | 72.19 | 153.27 | 1.18 | 17.38 | 9526.82 | 28.41 | 0.001 | 79.59 | 0.32 | 1.24 | 168.93 | 0.005 | 0.07 | 2.98 | 0.08 | 5.66 | 21.72 | 35.13 | 50.75 | 959.86 | 369.37 | 488512.87 | <2.741 | 5.92 |

*All elements are in ppm.

Appendix C: Eastern Sunda arc zircon trace element chemistry

| Analysis ID | Ce | Dy | Er | Eu | Gd | Hf | Ho | La | Lu | Nb | Nd | P | Pb | Pr | Sm | Ta | Tb | Th | Tm | U | Y | Yb | Zr | Fe | Ti |
|---------------|-------|--------|--------|------|-------|----------|-------|-------|--------|------|------|--------|--------|------|------|------|-------|--------|--------|--------|---------|-----------|-----------|--------|-------|
| SFF-05_zr9 | 2.90 | 44.11 | 95.14 | 0.53 | 9.62 | 10547.93 | 17.60 | 0.002 | 50.93 | 0.32 | 0.50 | 182.77 | 0.007 | 0.02 | 1.61 | 0.09 | 3.38 | 12.57 | 22.05 | 35.33 | 601.03 | 231.33 | 488318.35 | <2.754 | 6.03 |
| NEF-02_zr1 | 9.14 | 32.31 | 74.69 | 0.38 | 6.31 | 13202.04 | 13.63 | 0.003 | 45.67 | 0.78 | 0.25 | 186.92 | 0.037 | 0.01 | 0.75 | 0.34 | 2.36 | 99.86 | 17.69 | 190.85 | 460.65 | 193.88 | 486341.71 | 5.49 | 2.47 |
| NEF-02_zr10 | 9.49 | 94.05 | 227.76 | 1.04 | 15.88 | 8855.55 | 41.05 | 0.004 | 124.47 | 1.28 | 0.84 | 351.80 | 0.032 | 0.06 | 2.08 | 0.28 | 6.27 | 65.53 | 51.66 | 98.58 | 1408.20 | 548.34 | 487860.47 | <2.842 | 10.95 |
| NEF-02_zr11 | 10.84 | 102.16 | 232.60 | 1.56 | 20.98 | 9614.93 | 42.86 | 0.008 | 140.46 | 1.45 | 0.99 | 473.80 | 0.066 | 0.04 | 2.19 | 0.43 | 7.67 | 92.11 | 54.67 | 125.45 | 1481.04 | 563.28 | 486893.12 | <7.001 | 9.46 |
| NEF-02_zr12 | 5.98 | 56.87 | 146.73 | 0.78 | 10.03 | 8847.70 | 26.71 | 0.001 | 92.70 | 0.90 | 0.60 | 319.13 | 0.123 | 0.02 | 1.51 | 0.22 | 3.98 | 25.75 | 35.86 | 50.26 | 881.66 | 365.48 | 488816.61 | <6.945 | 9.46 |
| NEF-02_zr13 | 1.94 | 14.37 | 35.11 | 0.18 | 2.86 | 10669.42 | 6.24 | 0.002 | 24.27 | 0.41 | 0.14 | 168.31 | 0.026 | 0.00 | 0.45 | 0.07 | 1.12 | 5.85 | 8.31 | 16.14 | 210.50 | 93.12 | 488895.05 | <6.989 | 4.46 |
| NEF-02_zr14 | 2.93 | 28.83 | 66.97 | 0.64 | 6.57 | 9507.39 | 12.14 | 0.003 | 44.73 | 0.39 | 0.54 | 159.37 | 0.070 | 0.03 | 1.37 | 0.17 | 2.31 | 14.29 | 16.57 | 29.47 | 186.15 | 489277.76 | 108.63 | 4.77 | |
| NEF-02_zr15 | 3.28 | 29.02 | 75.69 | 0.49 | 6.32 | 8940.89 | 12.68 | 0.001 | 51.39 | 0.60 | 0.31 | 192.33 | 0.030 | 0.01 | 0.89 | 0.15 | 2.07 | 11.31 | 18.63 | 29.65 | 447.48 | 209.95 | 489721.03 | 3.20 | 5.89 |
| NEF-02_zr16 | 9.48 | 95.49 | 232.87 | 1.02 | 16.72 | 8860.90 | 42.15 | 0.003 | 128.17 | 1.53 | 1.03 | 382.69 | 0.049 | 0.04 | 1.81 | 0.33 | 6.41 | 53.03 | 54.25 | 87.81 | 1441.05 | 569.60 | 487560.95 | <2.775 | 10.54 |
| NEF-02_zr17 | 4.13 | 43.15 | 105.40 | 0.71 | 8.45 | 9166.62 | 18.46 | 0.002 | 67.26 | 0.62 | 0.61 | 220.71 | 0.057 | 0.04 | 1.22 | 0.18 | 2.92 | 16.58 | 25.68 | 39.25 | 640.07 | 284.62 | 489175.16 | <2.793 | 6.98 |
| NEF-02_zr18 | 8.30 | 84.03 | 202.64 | 0.87 | 15.25 | 8681.78 | 36.52 | 0.003 | 110.15 | 1.11 | 0.77 | 328.27 | 0.046 | 0.04 | 2.06 | 0.26 | 6.14 | 47.76 | 45.92 | 73.91 | 1245.40 | 483.92 | 486331.52 | <2.757 | 9.66 |
| NEF-02_zr19 | 2.89 | 23.00 | 58.78 | 0.34 | 4.43 | 10012.48 | 10.11 | 0.001 | 43.48 | 0.48 | 0.26 | 144.76 | 0.116 | 0.02 | 0.72 | 0.14 | 1.64 | 11.43 | 15.00 | 30.80 | 360.80 | 175.92 | 489156.70 | <2.889 | 4.58 |
| NEF-02_zr2 | 11.82 | 110.99 | 254.52 | 1.24 | 20.42 | 8646.48 | 47.22 | 0.004 | 133.45 | 1.39 | 0.89 | 361.50 | 0.067 | 0.05 | 2.38 | 0.33 | 7.80 | 76.51 | 57.16 | 100.73 | 1557.49 | 597.49 | 487736.84 | 5.87 | 10.67 |
| NEF-02_zr20 | 4.05 | 30.09 | 69.13 | 0.30 | 5.84 | 10642.19 | 13.00 | 0.003 | 46.70 | 0.49 | 0.28 | 198.04 | 0.083 | 0.01 | 0.78 | 0.14 | 2.34 | 21.52 | 17.21 | 53.30 | 438.23 | 184.05 | 489447.17 | <7.458 | 4.09 |
| NEF-02_zr21 | 2.32 | 14.62 | 33.17 | 0.17 | 3.05 | 9986.25 | 5.81 | 0.002 | 21.71 | 0.38 | 0.13 | 152.47 | 0.026 | 0.00 | 0.34 | 0.10 | 1.03 | 12.16 | 7.99 | 25.15 | 204.91 | 89.63 | 489442.82 | <3.741 | 4.56 |
| NEF-02_zr22 | 5.08 | 61.40 | 130.66 | 1.18 | 14.72 | 9074.07 | 24.16 | 0.008 | 70.00 | 0.62 | 1.28 | 214.99 | 0.021 | 0.06 | 2.38 | 0.15 | 4.63 | 31.52 | 29.54 | 47.89 | 819.40 | 305.72 | 488984.74 | 4.07 | 6.94 |
| NEF-02_zr24 | 4.14 | 36.65 | 91.94 | 0.55 | 7.65 | 9456.70 | 16.59 | 0.001 | 57.26 | 0.57 | 0.39 | 241.19 | 0.026 | 0.02 | 1.14 | 0.17 | 2.58 | 22.05 | 22.09 | 42.10 | 559.04 | 243.55 | 489053.64 | <3.396 | 5.92 |
| NEF-02_zr26 | 13.38 | 133.16 | 283.92 | 1.61 | 26.87 | 8765.25 | 53.65 | 0.002 | 136.59 | 1.55 | 1.14 | 386.25 | 0.066 | 0.06 | 2.95 | 0.35 | 10.05 | 112.31 | 61.93 | 114.13 | 1802.07 | 630.99 | 487236.84 | <3.089 | 11.61 |
| NEF-02_zr27 | 10.13 | 124.58 | 259.60 | 1.47 | 24.26 | 9883.44 | 50.48 | 0.050 | 118.65 | 1.30 | 1.68 | 510.98 | 0.141 | 0.11 | 3.06 | 0.32 | 9.00 | 51.91 | 55.54 | 85.73 | 1575.28 | 556.70 | 486535.58 | 10.69 | 8.30 |
| NEF-02_zr28 | 6.65 | 75.83 | 151.45 | 1.41 | 18.39 | 9920.46 | 29.31 | 0.006 | 78.09 | 0.74 | 1.36 | 247.98 | 0.029 | 0.07 | 3.15 | 0.20 | 5.80 | 41.64 | 33.11 | 69.73 | 956.37 | 346.11 | 489051.47 | <2.812 | 4.74 |
| NEF-02_zr29 | 5.19 | 52.03 | 137.63 | 0.84 | 9.78 | 9497.90 | 23.90 | 0.003 | 85.23 | 0.82 | 0.65 | 292.92 | 0.059 | 0.02 | 1.51 | 0.27 | 3.69 | 22.77 | 32.93 | 52.58 | 807.27 | 358.52 | 489484.40 | <2.865 | 7.33 |
| NEF-02_zr3 | 7.44 | 75.01 | 181.47 | 0.81 | 13.48 | 8578.14 | 32.34 | 0.003 | 102.05 | 1.05 | 0.73 | 309.68 | 0.027 | 0.04 | 1.92 | 0.22 | 5.16 | 41.10 | 42.07 | 67.89 | 1112.14 | 449.31 | 488655.75 | <2.731 | 9.52 |
| NEF-02_zr30 | 3.97 | 49.38 | 106.02 | 1.00 | 12.80 | 9082.48 | 19.81 | 0.005 | 61.83 | 0.43 | 0.96 | 256.62 | 0.039 | 0.06 | 2.13 | 0.10 | 4.11 | 22.33 | 24.37 | 36.20 | 682.61 | 267.78 | 489152.42 | <2.855 | 4.82 |
| NEF-02_zr31 | 4.35 | 53.00 | 111.88 | 1.09 | 12.94 | 8886.14 | 21.24 | 0.001 | 64.57 | 0.50 | 1.26 | 286.21 | 0.035 | 0.07 | 2.29 | 0.14 | 4.31 | 27.21 | 25.67 | 41.66 | 692.01 | 278.94 | 489715.12 | <2.893 | 5.65 |
| NEF-02_zr32 | 4.18 | 44.45 | 110.78 | 0.74 | 9.05 | 8852.50 | 19.02 | 0.001 | 70.64 | 0.68 | 0.50 | 254.06 | 0.019 | 0.03 | 1.48 | 0.21 | 3.21 | 20.25 | 26.69 | 44.44 | 688.95 | 296.16 | 489290.69 | <2.824 | 7.96 |
| NEF-02_zr33 | 4.17 | 52.24 | 109.17 | 1.00 | 12.58 | 9490.24 | 20.87 | 0.005 | 62.46 | 0.46 | 1.18 | 234.88 | 0.024 | 0.06 | 2.52 | 0.12 | 4.14 | 21.34 | 24.88 | 35.23 | 681.27 | 272.30 | 488558.24 | <2.877 | 5.97 |
| NEF-02_zr34 | 2.33 | 18.68 | 46.17 | 0.26 | 3.77 | 10011.49 | 8.05 | 0.001 | 29.91 | 0.39 | 0.26 | 135.04 | 0.032 | 0.01 | 0.61 | 0.09 | 1.36 | 6.75 | 11.13 | 17.91 | 273.42 | 124.88 | 489344.99 | <2.772 | 5.14 |
| NEF-02_zr35 | 6.24 | 91.57 | 179.22 | 1.67 | 23.05 | 9031.95 | 34.80 | 0.012 | 89.81 | 0.63 | 2.41 | 241.46 | 0.036 | 0.15 | 3.98 | 0.19 | 7.40 | 42.96 | 39.03 | 55.76 | 1126.48 | 405.38 | 488466.43 | <2.969 | 5.97 |
| NEF-02_zr36 | 2.86 | 23.08 | 54.66 | 0.33 | 4.57 | 9289.06 | 9.84 | 0.002 | 32.58 | 0.46 | 0.30 | 137.09 | 0.023 | 0.01 | 0.43 | 0.13 | 1.65 | 12.06 | 13.00 | 23.63 | 329.60 | 140.50 | 489791.27 | <3.036 | 6.98 |
| NEF-02_zr37 | 7.76 | 76.33 | 203.19 | 0.84 | 12.13 | 8758.11 | 35.26 | 0.001 | 122.47 | 1.24 | 0.77 | 340.36 | 0.108 | 0.03 | 1.68 | 0.31 | 5.05 | 42.56 | 47.86 | 85.69 | 1218.07 | 521.90 | 488244.63 | <3.162 | 9.04 |
| NEF-02_zr38 | 5.73 | 56.28 | 140.61 | 0.69 | 10.58 | 8692.98 | 24.38 | 0.004 | 83.24 | 0.86 | 0.56 | 277.80 | 0.026 | 0.02 | 1.68 | 0.24 | 3.85 | 26.10 | 33.17 | 50.91 | 843.55 | 356.21 | 489077.89 | <2.770 | 8.66 |
| NEF-02_zr4 | 3.01 | 34.29 | 72.27 | 0.69 | 8.04 | 9686.99 | 13.46 | 0.002 | 42.30 | 0.38 | 0.78 | 167.64 | 0.020 | 0.04 | 1.49 | 0.10 | 2.68 | 13.66 | 16.72 | 26.41 | 457.33 | 184.76 | 489226.29 | <2.788 | 4.98 |
| NEF-02_zr40 | 5.10 | 57.00 | 130.29 | 0.79 | 11.21 | 8844.68 | 24.06 | 0.006 | 72.61 | 0.71 | 0.70 | 265.67 | 0.062 | 0.04 | 1.87 | 0.21 | 4.11 | 22.94 | 30.61 | 41.02 | 801.11 | 321.41 | 489079.06 | 3.87 | 7.81 |
| NEF-02_zr41 | 2.74 | 28.88 | 58.23 | 0.50 | 6.64 | 9741.90 | 10.90 | 0.001 | 36.40 | 0.45 | 0.30 | 172.63 | 0.035 | 0.02 | 0.97 | 0.10 | 2.18 | 11.69 | 13.80 | 26.52 | 380.24 | 150.59 | 489303.34 | 4.45 | 3.34 |
| NEF-02_zr42 | 3.01 | 25.70 | 57.73 | 0.45 | 5.38 | 9731.47 | 10.72 | 0.004 | 36.62 | 0.45 | 0.30 | 165.79 | 0.164 | 0.02 | 1.03 | 0.12 | 1.96 | 11.86 | 13.74 | 25.93 | 365.14 | 153.86 | 489339.73 | 3.86 | 5.04 |
| NEF-02_zr43 | 6.76 | 62.20 | 159.83 | 0.93 | 11.58 | 9136.34 | 27.15 | 0.002 | 96.92 | 0.88 | 0.70 | 279.27 | 0.037 | 0.03 | 1.42 | 0.26 | 4.25 | 38.41 | 38.02 | 71.01 | 963.31 | 417.07 | 488513.07 | <2.801 | 7.96 |
| NEF-02_zr44 | 8.70 | 90.90 | 226.40 | 0.90 | 15.04 | 8762.34 | 40.56 | 0.001 | 125.60 | 1.35 | 0.84 | 359.69 | 0.110 | 0.04 | 1.65 | 0.34 | 5.98 | 47.12 | 52.91 | 82.88 | 1370.46 | 550.34 | 487976.08 | 3.73 | 9.91 |
| NEF-02_zr45 | 6.08 | 64.29 | 161.11 | 0.90 | 11.63 | 9041.47 | 28.77 | 0.003 | 97.46 | 0.97 | 0.93 | 284.86 | 0.015 | 0.06 | 1.94 | 0.24 | 4.43 | 31.02 | 38.64 | 63.16 | 976.06 | 424.79 | 488560.56 | <2.758 | 7.80 |
| NEF-02_zr6 | 2.60 | 12.66 | 29.41 | 0.19 | 2.09 | 10743.74 | 5.30 | 0.001 | 18.91 | 0.38 | 0.08 | 139.41 | 0.036 | 0.00 | 0.32 | 0.10 | 0.89 | 14.00 | 6.96 | 31.04 | 179.33 | 77.46 | 488937.52 | <2.791 | 3.11 |
| NEF-02_zr7 | 7.55 | 97.77 | 193.84 | 1.95 | 24.23 | 9346.09 | 36.80 | 0.003 | 98.86 | 0.70 | 2.04 | 333.81 | 0.128 | 0.11 | 4.48 | 0.18 | 7.64 | 56.69 | 43.14 | 67.52 | 1205.17 | 445.07 | 487869.63 | <2.813 | 5.37 |
| NEF-02_zr8 | 2.94 | 25.29 | 61.95 | 0.38 | 5.22 | 9609.99 | 10.93 | 0.001 | 40.47 | 0.43 | 0.25 | 162.12 | 0.029 | 0.01 | 0.90 | 0.13 | 1.69 | 12.02 | 14.84 | 30.04 | 379.41 | 169.25 | 489408.47 | <2.816 | 5.09 |
| ELF-01_zirc1 | 8.37 | 81.46 | 214.86 | 0.92 | 13.27 | 9011.06 | 37.32 | 0.002 | 121.48 | 1.17 | 0.89 | 316.40 | 0.038 | 0.05 | 1.65 | 0.27 | 5.32 | 45.28 | 49.98 | 85.43 | 1313.42 | 540.64 | 487972.13 | <2.832 | 8.62 |
| ELF-01_zirc10 | 1.71 | 17.26 | 47.45 | 0.15 | 2.62 | 10478.31 | 7.40 | 0.017 | 33.14 | 0.38 | 0.15 | 111.61 | 0.013 | 0.02 | 0.50 | 0.07 | 1.02 | 16.41 | 12.30 | 40.28 | 272.23 | 135.88 | 488967.52 | 30.19 | 6.33 |
| ELF-01_zirc11 | 18.16 | 189.56 | 434.59 | 1.46 | 35.86 | 8927.23 | 78.23 | 0.004 | 260.86 | 2.24 | 1.51 | 659.44 | 0.033 | 0.10 | 3.85 | 0.65 | 13.43 | 275.14 | 107.63 | 221.60 | 2669.06 | 1131.60 | 488480.05 | <2.458 | 7.01 |
| ELF-01_zirc12 | 2.44 | 25.38 | 61.66 | 0.20 | 4.77 | 10254.68 | 10.76 | 0.004 | 43.77 | 0.47 | 0.27 | 129.03 | <0.008 | 0.01 | 0.87 | | | | | | | | | | |

Appendix C: Eastern Sunda arc zircon trace element chemistry

| Analysis ID | Ce | Dy | Er | Eu | Gd | Hf | Ho | La | Lu | Nb | Nd | P | Pb | Pr | Sm | Ta | Tb | Th | Tm | U | Y | Yb | Zr | Fe | Ti |
|-------------|--------|---------|---------|------|--------|----------|--------|-------|--------|-------|-------|---------|--------|------|-------|--------|-------|---------|--------|---------|----------|---------|-----------|---------|--------|
| ELF-01-z15 | 2.03 | 36.89 | 88.22 | 0.45 | 7.27 | 9796.26 | 15.80 | 0.004 | 61.50 | 0.46 | 0.37 | 577.35 | <0.008 | 0.01 | 0.74 | 0.08 | 2.59 | 10.41 | 22.98 | 39.74 | 540.60 | 248.54 | 488754.69 | <2.479 | 4.72 |
| ELF-01-z16 | 33.11 | 268.71 | 596.90 | 1.80 | 48.28 | 9792.61 | 110.58 | 0.004 | 294.56 | 3.55 | 1.86 | 577.17 | 0.042 | 0.10 | 5.35 | 0.75 | 18.91 | 277.44 | 133.83 | 260.47 | 3726.29 | 1336.83 | 482776.28 | -2.467 | 11.54 |
| ELF-01-z17 | 112.79 | 572.69 | 1073.44 | 2.22 | 127.57 | 10464.18 | 214.14 | 0.021 | 449.91 | 26.06 | 6.97 | 1375.60 | 0.502 | 0.31 | 19.33 | 7.70 | 44.20 | 2135.53 | 237.28 | 1016.80 | 7312.00 | 2242.97 | 473407.08 | 44.93 | 12.27 |
| ELF-01-z18 | 2.27 | 18.18 | 46.89 | 0.14 | 3.28 | 10879.49 | 8.09 | 0.004 | 33.18 | 0.44 | 0.41 | 142.82 | <0.008 | 0.01 | 0.46 | 0.08 | 1.26 | 11.90 | 11.90 | 52.75 | 286.28 | 131.55 | 488625.68 | <2.408 | 4.29 |
| ELF-01-z19 | 57.77 | 261.77 | 545.98 | 1.48 | 55.56 | 14794.16 | 103.69 | 0.087 | 311.17 | 12.03 | 3.21 | 717.07 | 0.602 | 0.14 | 7.41 | 5.43 | 19.14 | 4710.44 | 133.29 | 2208.73 | 3456.22 | 1400.73 | 474468.54 | 14.93 | 21.75 |
| ELF-01-z2 | 71.96 | 373.50 | 832.00 | 6.44 | 84.73 | 11006.28 | 151.10 | 1.072 | 577.90 | 7.26 | 17.92 | 1550.70 | 0.862 | 2.23 | 17.76 | 2.24 | 28.34 | 1325.11 | 211.64 | 1104.30 | 4988.39 | 2413.73 | 475697.68 | 130.67 | 5.23 |
| ELF-01-z20 | 16.92 | 132.56 | 306.27 | 1.06 | 25.00 | 9676.99 | 58.50 | 0.026 | 184.37 | 2.06 | 1.00 | 646.84 | 0.051 | 0.05 | 3.59 | 0.76 | 9.47 | 239.28 | 75.37 | 190.65 | 1935.08 | 774.89 | 485652.88 | -5.732 | 12.63 |
| ELF-01-z21 | 51.18 | 217.97 | 495.62 | 1.78 | 44.30 | 11376.38 | 91.57 | 0.025 | 285.26 | 8.02 | 2.03 | 758.44 | 0.428 | 0.14 | 6.40 | 3.59 | 16.72 | 2891.42 | 121.63 | 1840.90 | 3163.43 | 1264.68 | 479687.52 | 17.29 | 8.33 |
| ELF-01-z22 | 75.34 | 282.03 | 557.45 | 2.72 | 63.49 | 9610.17 | 108.21 | 0.004 | 289.69 | 10.10 | 2.66 | 596.82 | 0.365 | 0.14 | 7.84 | 2.40 | 21.46 | 3144.90 | 130.27 | 790.94 | 3660.21 | 1302.34 | 480562.58 | -2.345 | 14.19 |
| ELF-01-z23 | 11.33 | 92.44 | 292.17 | 0.33 | 14.53 | 15147.99 | 45.34 | 0.422 | 227.75 | 4.46 | 2.70 | 595.53 | 0.579 | 0.23 | 2.89 | 3.56 | 5.29 | 632.68 | 80.14 | 1217.58 | 1710.06 | 916.78 | 480562.46 | 100.16 | 9.30 |
| ELF-01-z24 | 34.16 | 215.74 | 464.33 | 1.05 | 37.91 | 11536.05 | 87.67 | 0.039 | 247.21 | 5.63 | 1.57 | 540.73 | 0.429 | 0.09 | 5.35 | 1.67 | 14.57 | 1465.58 | 109.81 | 1019.23 | 2936.90 | 1122.36 | 481287.22 | 57.18 | 9.11 |
| ELF-01-z25 | 20.06 | 138.98 | 417.03 | 0.28 | 18.41 | 14869.47 | 69.29 | 1.196 | 258.65 | 5.17 | 1.29 | 846.75 | 25.226 | 0.20 | 2.34 | 3.47 | 8.03 | 721.28 | 103.83 | 2628.43 | 2701.92 | 1059.07 | 472117.64 | 4662.94 | 5.89 |
| ELF-01-z26 | 16.55 | 101.01 | 240.69 | 0.63 | 17.37 | 13164.65 | 43.66 | 0.008 | 148.02 | 2.65 | 1.12 | 330.23 | 0.261 | 0.06 | 2.29 | 1.74 | 7.02 | 808.46 | 61.22 | 717.17 | 1470.45 | 629.28 | 483527.27 | 6.28 | 5.63 |
| ELF-01-z27 | 16.91 | 144.89 | 341.47 | 1.21 | 25.22 | 14893.48 | 59.68 | 0.049 | 216.44 | 2.30 | 1.21 | 604.42 | 0.460 | 0.07 | 3.31 | 1.56 | 9.47 | 1145.51 | 87.12 | 1343.94 | 2049.71 | 924.76 | 479847.50 | 40.18 | 5.97 |
| ELF-01-z28 | 2.81 | 25.54 | 57.32 | 0.31 | 5.57 | 10276.40 | 10.33 | 0.045 | 38.30 | 0.50 | 0.40 | 183.02 | 0.038 | 0.04 | 1.05 | 0.12 | 1.88 | 22.69 | 14.75 | 60.63 | 369.86 | 158.33 | 488812.51 | 29.13 | 10.37 |
| ELF-01-z29 | 4.34 | 51.13 | 128.90 | 0.64 | 9.01 | 9051.22 | 22.14 | 0.054 | 87.87 | 0.69 | 0.50 | 227.58 | 0.012 | 0.05 | 1.40 | 0.18 | 3.43 | 18.07 | 32.64 | 65.62 | 792.79 | 353.53 | 488966.72 | 2.87 | 8.50 |
| ELF-01-z3 | 31.94 | 165.53 | 399.39 | 1.37 | 27.62 | 10156.85 | 69.10 | 0.004 | 282.36 | 3.55 | 1.45 | 405.60 | 0.068 | 0.07 | 3.03 | 0.71 | 10.94 | 394.87 | 98.92 | 304.74 | 2452.58 | 1093.86 | 484539.82 | <2.430 | 11.28 |
| ELF-01-z4 | 70.45 | 411.47 | 869.88 | 1.82 | 82.82 | 11126.10 | 165.25 | 0.032 | 435.10 | 8.06 | 3.76 | 1521.70 | 0.633 | 0.17 | 10.83 | 2.27 | 30.10 | 1592.38 | 200.57 | 770.89 | 5419.41 | 2012.45 | 475664.98 | 98.05 | 11.16 |
| ELF-01-z5 | 25.34 | 177.16 | 406.69 | 0.81 | 30.92 | 14608.88 | 73.50 | 0.115 | 243.19 | 3.21 | 2.24 | 625.84 | 1.008 | 0.16 | 4.55 | 2.18 | 11.99 | 1935.75 | 101.84 | 1973.88 | 2494.97 | 1055.29 | 475340.78 | 114.75 | 11.22 |
| ELF-01-z6 | 16.20 | 103.28 | 247.17 | 0.88 | 18.35 | 9523.34 | 45.00 | 0.017 | 156.08 | 1.89 | 0.87 | 370.26 | 0.179 | 0.04 | 2.34 | 0.55 | 7.30 | 162.68 | 62.08 | 161.98 | 1513.57 | 655.78 | 486928.19 | 21.24 | 8.92 |
| ELF-01-z7 | 30.70 | 269.32 | 663.26 | 0.93 | 50.79 | 13115.49 | 114.48 | 0.754 | 418.60 | 8.84 | 1.40 | 1551.48 | 5.658 | 0.65 | 8.80 | 7.10 | 18.59 | 2474.67 | 162.08 | 2306.59 | 3985.53 | 1742.20 | 473316.67 | 997.27 | 7.85 |
| ELF-01-z8 | 24.76 | 100.37 | 238.84 | 0.46 | 18.64 | 14320.23 | 43.00 | 0.092 | 144.49 | 3.47 | 1.47 | 389.87 | 1.012 | 0.14 | 2.72 | 4.28 | 6.96 | 1145.95 | 59.74 | 2005.95 | 1483.46 | 630.72 | 481108.28 | 218.43 | 4.48 |
| ELF-01-z9 | 8.52 | 67.66 | 159.32 | 0.76 | 15.02 | 11967.96 | 29.05 | 0.008 | 102.06 | 1.02 | 0.76 | 207.91 | 0.051 | 0.05 | 1.92 | 1.16 | 4.92 | 151.06 | 40.17 | 243.73 | 974.09 | 426.96 | 486287.63 | -5.568 | 5.66 |
| ELF-02-z1 | 100.19 | 427.52 | 767.53 | 2.47 | 102.58 | 11704.93 | 160.88 | 0.201 | 297.38 | 4.14 | 8.90 | 1138.59 | 0.334 | 0.60 | 17.27 | 2.25 | 32.86 | 2052.94 | 167.51 | 1411.05 | 5335.42 | 1537.23 | 475771.08 | 137.52 | 8.76 |
| ELF-02-z10 | 95.99 | 1071.63 | 2031.46 | 1.14 | 223.35 | 14854.52 | 400.21 | 1.267 | 933.42 | 93.81 | 30.34 | 4655.23 | 3.869 | 2.47 | 41.11 | 277.97 | 81.02 | 2897.01 | 482.97 | 3853.67 | 14987.92 | 4676.40 | 448526.95 | 657.75 | 7.80 |
| ELF-02-z11 | 3.89 | 64.67 | 172.46 | 0.62 | 10.36 | 9295.68 | 29.18 | 0.004 | 114.93 | 0.74 | 0.46 | 337.36 | <0.008 | 0.02 | 1.44 | 0.15 | 4.15 | 19.82 | 43.71 | 75.44 | 1030.47 | 475.91 | 488145.04 | 2.48 | 7.57 |
| ELF-02-z12 | 7.08 | 115.87 | 281.67 | 1.00 | 18.07 | 8942.14 | 50.05 | 0.004 | 165.62 | 1.26 | 0.71 | 428.59 | <0.008 | 0.03 | 2.05 | 0.28 | 7.39 | 49.67 | 67.68 | 138.00 | 1719.38 | 694.60 | 487087.53 | 2.81 | 10.53 |
| ELF-02-z13 | 5.61 | 213.04 | 484.93 | 0.36 | 48.46 | 13923.10 | 84.93 | 0.217 | 187.51 | 5.34 | 3.09 | 1149.93 | 0.241 | 0.22 | 6.81 | 1.62 | 16.72 | 580.15 | 91.10 | 713.61 | 2731.16 | 4849.71 | 479670.08 | 33.79 | 6.19 |
| ELF-02-z14 | 2.05 | 27.32 | 64.21 | 0.35 | 4.65 | 10991.24 | 12.16 | 0.066 | 46.12 | 0.38 | 0.63 | 209.75 | 0.111 | 0.06 | 0.65 | 0.15 | 1.80 | 24.89 | 17.17 | 55.01 | 401.18 | 186.77 | 488178.79 | 16.17 | 5.73 |
| ELF-02-z15 | 8.72 | 125.96 | 268.65 | 1.41 | 23.34 | 9665.15 | 50.86 | 0.006 | 144.46 | 1.10 | 1.05 | 342.02 | 0.010 | 0.05 | 2.73 | 0.24 | 9.17 | 87.27 | 63.45 | 136.48 | 1751.29 | 633.21 | 486713.77 | 3.30 | 11.37 |
| ELF-02-z16 | 7.32 | 631.35 | 1209.94 | 1.42 | 115.68 | 12174.17 | 250.47 | 0.031 | 416.54 | 0.89 | 3.52 | 932.41 | 0.178 | 0.16 | 11.97 | 0.33 | 45.40 | 55.50 | 246.62 | 117.52 | 7661.24 | 2130.93 | 474832.76 | 6.51 | 4.43 |
| ELF-02-z17 | 77.88 | 862.82 | 1628.88 | 2.40 | 156.87 | 13898.74 | 326.34 | 0.112 | 639.38 | 11.72 | 7.49 | 3346.19 | 2.000 | 0.38 | 20.27 | 8.64 | 61.48 | 1255.99 | 356.09 | 481.63 | 1146.24 | 3238.59 | 461948.95 | 308.13 | 3.78 |
| ELF-02-z18 | 66.73 | 459.83 | 917.39 | 0.32 | 82.65 | 14769.91 | 175.15 | 0.218 | 453.77 | 78.40 | 6.00 | 2224.89 | 6.126 | 0.44 | 12.94 | 167.43 | 33.32 | 949.60 | 225.01 | 1023.14 | 6584.99 | 2227.68 | 468788.13 | 1125.47 | 5.41 |
| ELF-02-z19 | 3.59 | 91.38 | 197.94 | 0.97 | 18.05 | 9182.36 | 36.28 | 0.012 | 110.89 | 0.49 | 0.77 | 380.49 | <0.008 | 0.04 | 2.28 | 0.09 | 6.45 | 22.38 | 47.05 | 60.15 | 1196.64 | 474.88 | 487932.72 | 4.12 | 5.94 |
| ELF-02-z2 | 3.52 | 38.02 | 90.08 | 0.27 | 6.48 | 12209.96 | 15.99 | 0.004 | 54.85 | 0.59 | 0.17 | 221.42 | 0.099 | 0.01 | 0.70 | 0.79 | 2.42 | 74.68 | 22.44 | 50.09 | 550.87 | 232.56 | 486995.45 | <2.375 | 5.16 |
| ELF-02-z20 | 74.34 | 351.67 | 705.58 | 2.51 | 72.17 | 10861.59 | 137.15 | 0.262 | 350.84 | 6.04 | 4.03 | 1147.48 | 1.426 | 0.24 | 9.65 | 4.12 | 26.07 | 1207.86 | 167.21 | 322.67 | 4486.70 | 1630.98 | 478509.57 | 237.86 | 16.73 |
| ELF-02-z21 | 4.85 | 62.10 | 167.42 | 0.70 | 10.45 | 10116.50 | 28.92 | 0.018 | 101.51 | 0.84 | 0.38 | 343.52 | 0.037 | 0.03 | 1.25 | 0.35 | 4.10 | 40.50 | 41.87 | 86.67 | 1013.48 | 433.89 | 487560.41 | -5.313 | 7.68 |
| ELF-02-z22 | 12.13 | 130.01 | 292.73 | 0.91 | 26.60 | 11531.17 | 54.42 | 0.043 | 160.32 | 2.07 | 1.04 | 504.66 | 1.855 | 0.06 | 2.30 | 0.96 | 8.99 | 162.03 | 70.40 | 355.82 | 1838.21 | 698.65 | 484585.14 | 12.14 | 7.79 |
| ELF-02-z23 | 5.59 | 109.49 | 225.64 | 1.44 | 23.56 | 9678.27 | 43.45 | 0.429 | 120.80 | 1.07 | 1.83 | 259.64 | 0.428 | 0.17 | 3.84 | 0.18 | 7.67 | 39.75 | 52.74 | 82.93 | 1412.76 | 536.17 | 480430.72 | 5020.04 | 278.75 |
| ELF-02-z24 | 2.97 | 62.52 | 137.28 | 0.80 | 12.02 | 9842.39 | 25.59 | 0.008 | 83.27 | 0.38 | 0.77 | 304.84 | <0.008 | 0.03 | 1.77 | 0.08 | 4.46 | 20.46 | 33.53 | 52.94 | 856.00 | 354.35 | 488139.10 | 8.81 | 5.19 |
| ELF-02-z25 | 78.73 | 840.29 | 1444.79 | 6.00 | 184.63 | 10010.08 | 313.58 | 0.058 | 539.80 | 5.22 | 9.88 | 1542.82 | 0.238 | 0.54 | 25.33 | 1.12 | 64.55 | 773.85 | 303.68 | 706.46 | 9799.31 | 2709.37 | 470183.17 | 664.28 | 10.28 |
| ELF-02-z26 | 6.94 | 91.27 | 205.86 | 1.41 | 17.62 | 8689.85 | 37.52 | 0.004 | 128.72 | 0.75 | 1.14 | 410.03 | 0.029 | 0.04 | 2.17 | 0.15 | 6.44 | 72.84 | 50.82 | 152.72 | 1289.78 | 534.27 | 488042.09 | 2.78 | 9.39 |
| ELF-02-z27 | 7.90 | 114.10 | 276.38 | 1.13 | 19.99 | 9128.01 | 51.24 | 0.008 | 158.53 | 1.01 | 0.85 | 398.14 | <0.021 | 0.04 | 2.90 | 0.27 | 7.88 | 66.96 | 67.00 | 160.31 | 1723.15 | 683.28 | 486994.63 | <5.551 | 11.25 |
| ELF-02-z28 | 9.16 | 137.67 | 357.61 | 0.98 | 20.37 | 9229.47 | 64.59 | 0.008 | 203.18 | 1.50 | 0.40 | 805.32 | | | | | | | | | | | | | |

Appendix C: Eastern Sunda arc zircon trace element chemistry

| Analysis ID | Ce | Dy | Er | Eu | Gd | Hf | Ho | La | Lu | Nb | Nd | P | Pb | Pr | Sm | Ta | Tb | Th | Tm | U | Y | Yb | Zr | Fe | Ti |
|---------------|--------|---------|---------|------|--------|----------|--------|-------|--------|-------|-------|---------|--------|------|-------|--------|--------|----------|--------|---------|----------|-----------|-----------|---------|--------|
| ELF-02_zirc34 | 3.90 | 59.11 | 156.13 | 0.50 | 10.50 | 10038.59 | 26.87 | 0.025 | 102.66 | 0.71 | 0.41 | 282.19 | <0.008 | 0.02 | 1.13 | 0.18 | 4.06 | 25.57 | 38.92 | 74.15 | 930.79 | 423.15 | 487860.70 | 5.30 | 7.18 |
| ELF-02_zirc4 | 55.68 | 631.71 | 1443.63 | 0.96 | 95.34 | 13931.20 | 254.87 | 0.850 | 774.80 | 72.06 | 6.51 | 2770.66 | 3.801 | 0.58 | 12.91 | 240.65 | 41.81 | 2154.73 | 362.44 | 2706.84 | 9626.04 | 4704.91 | 481458.38 | 887.38 | 6.44 |
| ELF-02_zirc5 | 23.67 | 219.23 | 793.26 | 0.40 | 26.32 | 12995.89 | 122.39 | 0.120 | 378.78 | 5.38 | 2.58 | 1554.23 | 1.419 | 0.17 | 3.81 | 1.92 | 11.77 | 569.38 | 201.04 | 618.83 | 4580.10 | 1907.98 | 476313.63 | 115.34 | 5.85 |
| ELF-02_zirc6 | 4.93 | 106.85 | 210.17 | 1.92 | 25.17 | 9257.57 | 41.05 | 0.009 | 115.76 | 0.54 | 2.18 | 255.31 | <0.008 | 0.14 | 4.45 | 0.16 | 8.38 | 44.06 | 49.47 | 93.79 | 1382.46 | 483.45 | 487842.25 | <2.386 | 7.99 |
| ELF-02_zirc7 | 104.10 | 700.00 | 1249.22 | 2.86 | 139.46 | 12097.76 | 257.46 | 0.023 | 485.90 | 10.92 | 4.95 | 1966.48 | 0.326 | 0.23 | 17.82 | 8.08 | 51.94 | 2237.08 | 270.08 | 604.33 | 8104.43 | 2455.38 | 470001.76 | 4.79 | 10.29 |
| ELF-02_zirc8 | 3.77 | 73.74 | 193.31 | 0.63 | 12.15 | 9747.13 | 33.83 | 0.004 | 122.31 | 0.93 | 0.40 | 353.66 | 0.011 | 0.02 | 0.96 | 0.21 | 4.92 | 15.75 | 47.80 | 69.43 | 1136.50 | 501.11 | 487620.91 | <2.361 | 6.04 |
| ELF-02_zirc9 | 3.14 | 41.39 | 107.27 | 0.46 | 7.09 | 10556.73 | 18.28 | 0.004 | 75.93 | 0.59 | 0.50 | 208.73 | <0.008 | 0.02 | 1.11 | 0.15 | 2.91 | 16.45 | 27.28 | 63.40 | 651.69 | 306.62 | 488101.89 | <2.404 | 5.38 |
| LB005_zirc1 | 447.74 | 704.63 | 1262.55 | 0.54 | 181.12 | 11461.78 | 252.09 | 0.133 | 416.79 | 20.73 | 21.46 | 1805.45 | 2.395 | 1.32 | 38.23 | 10.75 | 58.39 | 6272.11 | 252.28 | 1529.44 | 9230.56 | 2243.82 | 466389.95 | <6.561 | 15.30 |
| LB005_zirc10 | 85.58 | 189.31 | 411.30 | 0.35 | 43.05 | 9429.32 | 75.60 | 0.590 | 173.49 | 3.34 | 4.34 | 547.04 | 1.864 | 0.34 | 6.61 | 2.30 | 14.73 | 1619.88 | 90.91 | 305.17 | 2790.93 | 857.05 | 483588.91 | 139.17 | 7.82 |
| LB005_zirc11 | 384.93 | 904.81 | 1618.87 | 1.16 | 226.58 | 12154.41 | 319.15 | 0.183 | 568.18 | 16.72 | 23.51 | 1684.66 | 2.478 | 1.63 | 39.16 | 6.03 | 72.26 | 6907.27 | 328.98 | 2207.25 | 11754.70 | 2934.14 | 460743.16 | 276.70 | 33.61 |
| LB005_zirc12 | 126.68 | 508.95 | 883.63 | 2.14 | 128.19 | 9196.09 | 183.28 | 3.118 | 305.32 | 4.58 | 12.04 | 1146.82 | 0.911 | 1.23 | 22.13 | 2.43 | 41.66 | 925.71 | 179.96 | 388.64 | 6102.47 | 1561.81 | 437151.08 | ##### | 142.07 |
| LB005_zirc13 | 279.72 | 1339.39 | 2171.64 | 5.35 | 354.82 | 9143.39 | 463.02 | 0.114 | 596.91 | 15.61 | 19.90 | 2281.68 | 0.674 | 1.01 | 55.96 | 3.12 | 114.12 | 1666.58 | 387.63 | 821.91 | 14510.28 | 3254.09 | 462792.03 | <6.528 | 19.17 |
| LB005_zirc14 | 221.61 | 1006.28 | 1640.96 | 2.40 | 246.06 | 9669.70 | 360.10 | 1.106 | 470.15 | 10.60 | 18.01 | 1804.66 | 7.405 | 1.06 | 40.94 | 2.98 | 82.20 | 1310.57 | 315.48 | 748.70 | 11045.55 | 2721.33 | 466481.97 | 1629.74 | 14.38 |
| LB005_zirc15 | 263.38 | 908.88 | 1641.59 | 1.17 | 215.57 | 9477.22 | 326.21 | 0.133 | 559.94 | 7.97 | 18.01 | 1746.72 | 1.002 | 1.21 | 36.49 | 3.71 | 72.49 | 2629.12 | 332.19 | 1233.36 | 11822.67 | 2978.58 | 466696.30 | <6.526 | 8.03 |
| LB005_zirc16 | 109.52 | 460.15 | 871.03 | 1.54 | 110.15 | 11385.15 | 169.67 | 1.053 | 314.77 | 4.81 | 9.46 | 987.97 | 4.867 | 0.75 | 17.17 | 3.59 | 35.89 | 1420.54 | 174.93 | 492.44 | 5726.64 | 1585.79 | 476304.92 | 510.68 | 10.81 |
| LB005_zirc17 | 106.39 | 942.89 | 1535.06 | 3.72 | 234.30 | 9889.43 | 325.52 | 0.047 | 439.42 | 4.10 | 13.69 | 1527.85 | 0.236 | 0.63 | 38.40 | 1.09 | 77.34 | 559.37 | 283.58 | 386.68 | 10252.42 | 2345.04 | 471239.31 | <6.686 | 8.00 |
| LB005_zirc18 | 555.32 | 978.39 | 1617.79 | 1.54 | 269.37 | 13301.63 | 339.64 | 0.146 | 494.95 | 21.63 | 29.83 | 1702.25 | 4.166 | 1.87 | 53.81 | 10.70 | 81.60 | 12337.31 | 317.91 | 1928.49 | 12167.36 | 2840.85 | 465791.02 | 114.78 | 21.17 |
| LB005_zirc2 | 234.51 | 974.44 | 1686.15 | 2.88 | 241.23 | 11629.83 | 342.17 | 1.705 | 533.79 | 10.76 | 21.83 | 2201.93 | 7.523 | 1.60 | 43.91 | 4.73 | 79.15 | 2946.97 | 322.75 | 1185.32 | 11426.26 | 2803.19 | 463250.55 | 878.01 | 18.50 |
| LB005_zirc3 | 336.36 | 994.19 | 1692.60 | 0.96 | 247.87 | 9872.39 | 355.38 | 1.372 | 491.72 | 20.79 | 19.29 | 2131.49 | 9.206 | 1.18 | 41.03 | 6.85 | 80.87 | 3042.35 | 325.60 | 1591.07 | 11790.76 | 2807.75 | 463853.05 | 909.99 | 18.69 |
| LB005_zirc4 | 104.23 | 843.14 | 1326.92 | 2.77 | 209.36 | 9278.81 | 294.65 | 0.045 | 370.44 | 4.13 | 11.84 | 1248.40 | 0.195 | 0.61 | 32.92 | 1.04 | 67.17 | 503.15 | 254.99 | 346.09 | 9193.25 | 2197.35 | 473862.39 | <3.698 | 7.75 |
| LB005_zirc5 | 152.45 | 997.20 | 1655.85 | 4.24 | 249.26 | 9217.57 | 346.55 | 0.070 | 484.58 | 7.84 | 15.36 | 1674.63 | 0.999 | 0.76 | 37.27 | 1.84 | 81.32 | 816.62 | 304.70 | 491.37 | 10937.64 | 2547.79 | 469966.70 | 56.85 | 13.11 |
| LB005_zirc6 | 170.08 | 1153.74 | 1838.28 | 4.03 | 293.91 | 9716.57 | 400.22 | 0.066 | 513.56 | 6.24 | 17.32 | 1924.42 | 0.328 | 0.93 | 45.29 | 1.74 | 95.84 | 872.66 | 335.27 | 507.09 | 12553.57 | 2803.13 | 466906.00 | <6.480 | 10.01 |
| LB005_zirc7 | 182.24 | 825.80 | 1393.74 | 3.62 | 210.89 | 9537.35 | 289.29 | 0.115 | 418.15 | 11.73 | 13.18 | 1642.38 | 2.902 | 0.57 | 32.91 | 3.57 | 68.37 | 1206.20 | 261.34 | 617.08 | 9092.60 | 2227.41 | 471982.88 | 98.65 | 22.04 |
| LB005_zirc8 | 328.47 | 918.31 | 1417.81 | 1.19 | 203.51 | 9873.89 | 290.96 | 0.265 | 458.39 | 19.19 | 17.01 | 1522.07 | 1.663 | 0.99 | 37.65 | 7.50 | 85.70 | 4152.39 | 290.69 | 1664.52 | 9691.50 | 2611.95 | 468180.90 | 40.61 | 16.69 |
| LB015_zirc1 | 9.33 | 85.32 | 186.77 | 1.46 | 19.68 | 9615.15 | 34.31 | 0.123 | 109.97 | 0.96 | 1.67 | 437.12 | 0.032 | 0.14 | 3.45 | 0.22 | 6.88 | 43.07 | 42.24 | 50.44 | 1153.19 | 458.81 | 487548.12 | 7.06 | 6.59 |
| LB015_zirc2 | 8.05 | 77.14 | 180.02 | 1.13 | 17.33 | 9818.68 | 32.32 | 0.007 | 107.53 | 0.98 | 1.39 | 346.89 | 0.026 | 0.06 | 2.79 | 0.18 | 6.06 | 34.56 | 41.32 | 48.04 | 1102.12 | 437.57 | 487680.68 | <6.202 | 4.93 |
| LB015_zirc3 | 12.13 | 108.82 | 252.83 | 1.30 | 21.40 | 9472.13 | 45.27 | 0.286 | 147.14 | 1.59 | 2.07 | 463.90 | 1.079 | 0.20 | 3.02 | 0.39 | 7.65 | 64.73 | 57.31 | 68.03 | 1529.51 | 603.73 | 486553.08 | 180.36 | 169.97 |
| LB015_zirc4 | 7.89 | 91.48 | 191.46 | 2.23 | 24.52 | 10241.33 | 35.65 | 0.206 | 108.06 | 1.02 | 3.50 | 343.46 | 0.307 | 0.43 | 4.15 | 0.28 | 7.30 | 50.53 | 43.46 | 62.63 | 1221.23 | 459.00 | 487112.39 | 46.57 | 5.35 |
| LB015_zirc5 | 14.89 | 138.43 | 287.08 | 3.99 | 38.54 | 8998.86 | 53.91 | 0.904 | 156.11 | 1.71 | 9.46 | 507.94 | 0.172 | 0.90 | 6.96 | 0.49 | 11.38 | 69.06 | 62.85 | 73.74 | 1888.02 | 646.28 | 488677.83 | 54.59 | 12.68 |
| LB015_zirc6 | 6.84 | 71.34 | 161.28 | 0.94 | 18.02 | 10612.41 | 29.40 | 0.007 | 98.54 | 0.62 | 1.29 | 346.42 | <0.025 | 0.06 | 2.24 | 0.17 | 5.88 | 30.86 | 36.97 | 44.56 | 1007.20 | 400.36 | 487244.21 | <6.957 | 5.77 |
| LB015_zirc7 | 8.77 | 85.47 | 186.32 | 1.62 | 20.75 | 9630.08 | 33.09 | 0.009 | 97.31 | 0.87 | 1.64 | 270.26 | 0.022 | 0.10 | 3.70 | 0.22 | 6.80 | 47.64 | 39.97 | 52.47 | 1092.55 | 425.21 | 487970.69 | <2.778 | 6.60 |
| LB026_zirc1 | 4.55 | 41.05 | 101.88 | 0.49 | 8.24 | 10458.70 | 18.06 | 0.003 | 67.39 | 0.76 | 0.39 | 211.63 | <0.009 | 0.01 | 0.97 | 0.22 | 2.95 | 13.93 | 25.17 | 33.47 | 624.58 | 277.83 | 488252.90 | <2.755 | 5.21 |
| LB026_zirc10 | 4.18 | 40.61 | 100.31 | 0.49 | 7.77 | 8899.14 | 18.03 | 0.006 | 61.32 | 0.65 | 0.36 | 226.82 | 0.009 | 0.03 | 1.28 | 0.19 | 2.93 | 11.11 | 23.76 | 25.43 | 604.94 | 258.50 | 488444.46 | <2.792 | 8.62 |
| LB026_zirc11 | 5.66 | 49.72 | 112.01 | 0.41 | 9.94 | 10630.71 | 20.53 | 0.007 | 66.18 | 0.95 | 0.38 | 201.38 | <0.023 | 0.02 | 1.17 | 0.19 | 3.48 | 24.01 | 25.88 | 41.18 | 710.24 | 273.45 | 488026.82 | <6.548 | 6.38 |
| LB026_zirc12 | 8.55 | 101.01 | 212.36 | 1.25 | 23.16 | 10031.62 | 39.60 | 0.010 | 103.17 | 0.83 | 1.43 | 267.58 | <0.023 | 0.09 | 2.87 | 0.26 | 7.66 | 50.45 | 44.83 | 56.97 | 1335.28 | 444.52 | 487359.44 | <6.463 | 7.39 |
| LB026_zirc13 | 3.98 | 45.26 | 101.40 | 0.71 | 11.44 | 9877.17 | 18.53 | 0.106 | 56.62 | 0.43 | 0.81 | 187.49 | 0.100 | 0.07 | 1.93 | 0.10 | 3.34 | 14.30 | 22.51 | 23.70 | 633.50 | 242.49 | 488690.07 | <6.548 | 6.39 |
| LB026_zirc14 | 4.93 | 54.15 | 130.05 | 0.58 | 10.21 | 9800.23 | 22.17 | 0.007 | 81.43 | 0.90 | 0.48 | 241.21 | <0.023 | 0.02 | 1.67 | 0.26 | 3.76 | 19.41 | 29.92 | 38.04 | 787.86 | 322.44 | 488429.88 | <6.573 | 6.59 |
| LB026_zirc15 | 11.23 | 114.95 | 246.87 | 1.25 | 22.37 | 9668.57 | 47.02 | 0.029 | 129.42 | 1.32 | 1.45 | 359.27 | 0.023 | 0.07 | 3.19 | 0.31 | 8.21 | 56.51 | 55.85 | 78.69 | 1552.60 | 579.76 | 487033.84 | <2.765 | 8.18 |
| LB026_zirc16 | 5.48 | 71.90 | 151.13 | 1.07 | 15.77 | 9686.39 | 28.88 | 0.072 | 81.26 | 0.74 | 1.35 | 234.01 | 0.129 | 0.11 | 2.58 | 0.19 | 5.45 | 26.83 | 33.89 | 39.38 | 949.28 | 354.97 | 488200.24 | 66.63 | 7.49 |
| LB026_zirc17 | 6.44 | 71.13 | 163.35 | 0.65 | 12.48 | 9636.14 | 28.97 | 0.007 | 90.52 | 1.00 | 0.71 | 264.95 | <0.023 | 0.05 | 1.54 | 0.20 | 5.15 | 29.09 | 33.54 | 46.25 | 1007.14 | 373.54 | 488170.69 | <6.494 | 8.45 |
| LB026_zirc18 | 53.73 | 453.65 | 752.06 | 5.64 | 123.75 | 9474.21 | 159.81 | 0.014 | 271.29 | 3.33 | 4.89 | 878.14 | 0.140 | 0.20 | 16.80 | 0.65 | 38.15 | 437.40 | 144.65 | 238.76 | 5065.48 | 1311.97 | 480572.19 | <6.342 | 17.35 |
| LB026_zirc19 | 7.26 | 64.85 | 159.31 | 0.68 | 11.77 | 10290.30 | 27.75 | 0.010 | 94.47 | 0.88 | 0.62 | 252.32 | <0.023 | 0.04 | 1.42 | 0.35 | 4.51 | 37.50 | 36.18 | 59.22 | 989.82 | 382.07 | 487726.90 | <6.532 | 6.90 |
| LB026_zirc20 | 9.52 | 104.41 | 229.48 | 1.25 | 19.34 | 9186.64 | 43.31 | 0.073 | 124.12 | 1.13 | 1.39 | 370.97 | 0.095 | 0.09 | 2.74 | 0.32 | 7.45 | 51.40 | 53.34 | 68.35 | 1437.10 | 487506.18 | 30.69 | 11.66 | |
| LB026_zirc21 | 5.26 | 66.29 | 133.54 | 0.92 | | | | | | | | | | | | | | | | | | | | | |

Appendix C: Eastern Sunda arc zircon trace element chemistry

| Analysis ID | Ce | Dy | Er | Eu | Gd | Hf | Ho | La | Lu | Nb | Nd | P | Pb | Pr | Sm | Ta | Tb | Th | Tm | U | Y | Yb | Zr | Fe | Ti |
|---------------|-------|--------|--------|------|-------|----------|--------|-------|--------|-------|------|---------|--------|------|-------|-------|-------|---------|--------|---------|---------|---------|-----------|---------|--------|
| LB026_zirc3 | 4.20 | 35.62 | 79.92 | 0.32 | 6.41 | 10017.25 | 14.82 | 0.059 | 48.10 | 0.95 | 0.41 | 206.36 | 0.014 | 0.02 | 0.89 | 0.20 | 2.57 | 16.86 | 19.10 | 33.05 | 498.23 | 207.71 | 485899.20 | 1419.72 | 727.05 |
| LB026_zirc4 | 3.04 | 28.25 | 68.09 | 0.38 | 5.15 | 10634.57 | 12.05 | 0.008 | 42.04 | 0.63 | 0.31 | 176.48 | -0.009 | 0.01 | 0.68 | 0.13 | 1.88 | 8.74 | 16.57 | 21.14 | 415.60 | 184.25 | 488566.85 | -2.784 | 5.11 |
| LB026_zirc5 | 4.53 | 50.63 | 119.68 | 0.64 | 10.38 | 9620.39 | 21.61 | 0.054 | 73.21 | 0.61 | 0.74 | 253.32 | 0.022 | 0.06 | 1.50 | 0.17 | 3.53 | 15.35 | 28.80 | 32.21 | 734.54 | 311.49 | 488639.22 | 43.22 | 12.72 |
| LB026_zirc6 | 8.26 | 83.23 | 203.02 | 0.86 | 15.35 | 9424.16 | 35.43 | 0.007 | 113.04 | 1.17 | 0.45 | 349.42 | -0.023 | 0.04 | 2.13 | 0.22 | 5.90 | 35.42 | 44.81 | 56.27 | 1234.03 | 465.97 | 487777.80 | -6.430 | 8.31 |
| LB026_zirc7 | 6.06 | 64.29 | 164.35 | 0.71 | 11.53 | 9332.40 | 28.42 | 0.003 | 98.04 | 0.87 | 0.56 | 275.64 | 0.012 | 0.03 | 1.90 | 0.28 | 4.30 | 20.40 | 38.87 | 43.97 | 969.77 | 421.95 | 488386.63 | -2.744 | 7.76 |
| LB026_zirc8 | 8.22 | 92.23 | 208.05 | 1.19 | 19.59 | 9623.98 | 37.66 | 0.038 | 110.35 | 1.07 | 1.12 | 392.68 | 0.049 | 0.06 | 2.15 | 0.22 | 6.83 | 47.41 | 45.09 | 53.56 | 1294.14 | 467.30 | 487441.89 | 10.97 | 9.12 |
| LB026_zirc9 | 4.79 | 50.96 | 123.29 | 0.54 | 9.32 | 9826.38 | 21.98 | 0.003 | 74.20 | 0.71 | 0.40 | 248.26 | 0.011 | 0.02 | 1.35 | 0.21 | 3.44 | 16.70 | 29.20 | 35.86 | 747.95 | 311.02 | 488465.10 | -2.766 | 6.04 |
| NAF-01_zirc1 | 6.90 | 98.47 | 292.76 | 0.57 | 14.62 | 13026.32 | 45.25 | 0.594 | 218.63 | 1.05 | 1.50 | 3027.93 | 0.820 | 0.22 | 2.39 | 0.94 | 6.26 | 393.57 | 78.19 | 415.41 | 1401.64 | 924.40 | 478473.38 | 55.44 | 10.84 |
| NAF-01_zirc10 | 9.71 | 143.47 | 266.66 | 1.57 | 35.97 | 9846.66 | 55.05 | 0.018 | 100.04 | 0.88 | 3.06 | 247.92 | 0.022 | 0.16 | 6.55 | 0.29 | 11.27 | 62.14 | 54.42 | 76.47 | 1680.31 | 505.06 | 487006.96 | -2.840 | 9.43 |
| NAF-01_zirc11 | 38.67 | 204.06 | 489.54 | 2.55 | 42.54 | 10941.40 | 86.11 | 0.014 | 280.66 | 4.83 | 3.40 | 652.51 | 0.329 | 0.19 | 6.54 | 3.91 | 15.11 | 1120.45 | 114.33 | 1067.16 | 3027.66 | 1242.58 | 481568.44 | -2.795 | 7.63 |
| NAF-01_zirc12 | 77.19 | 287.57 | 607.30 | 0.51 | 59.39 | 16407.61 | 112.99 | 0.456 | 276.00 | 10.53 | 3.00 | 1170.36 | 3.740 | 0.27 | 8.14 | 10.83 | 21.39 | 1290.14 | 130.11 | 1289.30 | 3794.11 | 1299.49 | 474693.13 | 275.42 | 20.01 |
| NAF-01_zirc13 | 30.99 | 276.02 | 482.55 | 2.51 | 70.51 | 9869.17 | 98.91 | 0.014 | 174.39 | 1.78 | 4.95 | 607.21 | 0.153 | 0.21 | 10.73 | 0.46 | 23.21 | 304.91 | 92.73 | 221.97 | 3198.29 | 846.62 | 483762.82 | -1.470 | 7.73 |
| NAF-01_zirc14 | 13.53 | 87.35 | 179.90 | 0.90 | 19.91 | 10986.00 | 34.89 | 0.607 | 85.78 | 1.13 | 2.15 | 390.97 | 0.068 | 0.26 | 2.84 | 0.77 | 6.54 | 116.75 | 40.36 | 295.83 | 1120.86 | 405.19 | 488486.05 | -2.872 | 6.08 |
| NAF-01_zirc15 | 30.01 | 182.20 | 400.92 | 0.83 | 38.12 | 15748.05 | 73.37 | 0.099 | 205.95 | 8.39 | 2.31 | 767.35 | 0.348 | 0.16 | 6.14 | 14.25 | 12.93 | 641.88 | 89.41 | 879.45 | 2422.99 | 928.73 | 479206.54 | -6.451 | 4.19 |
| NAF-01_zirc16 | 6.35 | 61.30 | 118.63 | 0.58 | 14.13 | 9837.63 | 23.72 | 0.003 | 49.44 | 0.64 | 0.70 | 220.56 | 0.048 | 0.04 | 2.16 | 0.18 | 4.76 | 27.04 | 25.21 | 38.77 | 739.00 | 245.82 | 48862.37 | -2.884 | 11.28 |
| NAF-01_zirc17 | 65.02 | 304.33 | 622.78 | 0.48 | 57.96 | 14448.14 | 119.81 | 0.015 | 270.20 | 6.33 | 1.94 | 1737.89 | 0.293 | 0.12 | 7.24 | 2.83 | 21.99 | 912.46 | 136.00 | 910.58 | 3889.34 | 1328.10 | 475737.44 | -3.560 | 5.17 |
| NAF-01_zirc18 | 14.06 | 141.11 | 282.50 | 1.21 | 31.68 | 9354.26 | 55.64 | 0.156 | 118.89 | 1.51 | 1.71 | 438.03 | 0.256 | 0.14 | 3.92 | 0.35 | 10.82 | 100.75 | 57.86 | 110.58 | 1770.15 | 559.47 | 484866.06 | 1329.35 | 130.23 |
| NAF-01_zirc19 | 60.90 | 273.30 | 577.54 | 0.52 | 55.80 | 15231.21 | 108.70 | 0.095 | 267.59 | 7.87 | 2.85 | 1289.51 | 0.667 | 0.16 | 7.00 | 7.89 | 19.91 | 933.94 | 125.42 | 1015.51 | 3667.54 | 1241.86 | 476363.05 | 38.08 | 6.45 |
| NAF-01_zirc20 | 6.95 | 94.67 | 186.69 | 1.13 | 21.47 | 9852.90 | 36.45 | 0.023 | 76.93 | 0.62 | 1.48 | 247.92 | 0.334 | 0.08 | 3.52 | 0.17 | 7.13 | 52.97 | 38.68 | 64.75 | 1138.67 | 377.07 | 487727.26 | 20.25 | 8.48 |
| NAF-01_zirc21 | 19.79 | 348.46 | 655.07 | 3.65 | 83.24 | 12654.66 | 133.46 | 0.437 | 298.25 | 10.13 | 5.54 | 1035.42 | 1.965 | 0.40 | 10.92 | 9.67 | 28.18 | 303.27 | 142.25 | 1730.73 | 4397.57 | 1366.30 | 474751.78 | 815.10 | 6.29 |
| NAF-01_zirc22 | 20.52 | 96.71 | 247.49 | 0.50 | 20.07 | 15215.08 | 43.93 | 0.028 | 142.06 | 3.17 | 0.79 | 337.50 | 0.093 | 0.04 | 2.71 | 5.09 | 6.93 | 214.21 | 58.26 | 524.08 | 1491.50 | 618.47 | 482504.86 | -1.080 | 5.79 |
| NAF-01_zirc23 | 12.07 | 139.09 | 261.99 | 1.26 | 34.58 | 10382.64 | 53.22 | 0.026 | 98.98 | 0.99 | 2.51 | 291.04 | 0.265 | 0.15 | 5.04 | 0.37 | 11.28 | 81.32 | 51.10 | 95.32 | 1675.64 | 474.02 | 486531.64 | -6.479 | 9.46 |
| NAF-01_zirc24 | 4.26 | 27.85 | 60.53 | 0.29 | 5.89 | 10259.49 | 11.19 | 0.003 | 31.44 | 0.64 | 0.23 | 127.96 | -0.009 | 0.01 | 0.73 | 0.12 | 2.01 | 16.35 | 13.83 | 29.65 | 368.82 | 143.91 | 489015.05 | -2.831 | 7.14 |
| NAF-01_zirc25 | 4.57 | 33.87 | 80.39 | 0.39 | 6.52 | 10059.13 | 14.40 | 0.003 | 48.12 | 0.51 | 0.38 | 142.20 | -0.009 | 0.02 | 0.93 | 0.14 | 2.45 | 19.78 | 19.47 | 36.54 | 486.22 | 210.78 | 488923.22 | -2.863 | 7.53 |
| NAF-01_zirc26 | 9.76 | 154.12 | 279.84 | 1.69 | 37.42 | 9420.29 | 58.01 | 0.007 | 105.06 | 0.79 | 2.17 | 295.79 | 0.034 | 0.13 | 5.65 | 0.22 | 12.16 | 74.63 | 55.84 | 72.56 | 1796.22 | 501.61 | 487088.76 | -6.247 | 8.36 |
| NAF-01_zirc27 | 6.37 | 59.44 | 125.80 | 1.12 | 16.15 | 11008.16 | 23.58 | 0.011 | 70.55 | 0.54 | 1.42 | 112.82 | 0.017 | 0.10 | 2.89 | 0.12 | 4.64 | 60.47 | 29.86 | 79.12 | 785.40 | 316.91 | 487721.10 | -2.827 | 5.90 |
| NAF-01_zirc28 | 19.79 | 141.88 | 283.71 | 0.96 | 29.96 | 10473.70 | 55.19 | 0.459 | 120.60 | 2.04 | 1.85 | 526.15 | 0.184 | 0.17 | 2.86 | 1.10 | 10.08 | 190.05 | 58.65 | 420.16 | 1792.35 | 556.03 | 488472.63 | -1.628 | 8.91 |
| NAF-01_zirc29 | 11.19 | 46.11 | 117.02 | 0.36 | 9.62 | 11891.95 | 20.32 | 0.018 | 74.68 | 1.19 | 0.86 | 293.51 | 0.099 | 0.03 | 1.73 | 1.03 | 3.33 | 162.81 | 28.38 | 373.40 | 696.25 | 309.25 | 486541.17 | -6.328 | 3.72 |
| NAF-01_zirc30 | 20.80 | 240.13 | 416.80 | 1.97 | 57.76 | 10226.02 | 84.79 | 0.042 | 152.59 | 1.17 | 5.14 | 463.77 | 0.098 | 0.26 | 8.16 | 0.42 | 18.56 | 215.13 | 81.62 | 177.08 | 2754.01 | 744.70 | 484537.21 | -9.537 | 8.70 |
| NAF-01_zirc31 | 20.35 | 199.05 | 358.58 | 1.57 | 48.30 | 11059.44 | 73.78 | 0.019 | 138.14 | 1.84 | 3.34 | 528.26 | 0.173 | 0.17 | 7.98 | 1.33 | 15.66 | 198.16 | 74.71 | 272.87 | 2321.57 | 700.38 | 484311.80 | -2.839 | 7.51 |
| NAF-01_zirc32 | 7.00 | 52.52 | 98.23 | 0.39 | 12.33 | 10803.78 | 19.77 | 0.370 | 39.52 | 0.64 | 0.54 | 197.87 | 0.028 | 0.06 | 1.29 | 0.17 | 3.75 | 24.36 | 20.59 | 34.60 | 629.18 | 192.83 | 488077.41 | -3.444 | 8.34 |
| NAF-01_zirc33 | 30.85 | 225.75 | 482.38 | 1.20 | 43.31 | 17897.07 | 89.03 | 0.086 | 234.93 | 15.11 | 2.35 | 791.62 | 0.795 | 0.13 | 6.17 | 31.12 | 16.25 | 532.99 | 117.11 | 1216.51 | 2956.49 | 1144.30 | 476491.63 | -2.859 | 5.54 |
| NAF-01_zirc34 | 19.52 | 156.24 | 290.40 | 2.12 | 41.65 | 9879.75 | 58.64 | 0.016 | 132.19 | 1.36 | 3.50 | 381.82 | 0.049 | 0.20 | 7.03 | 0.54 | 12.80 | 179.67 | 64.26 | 240.75 | 1917.72 | 640.62 | 486028.10 | -3.241 | 6.10 |
| NAF-01_zirc35 | 24.32 | 220.25 | 408.11 | 3.70 | 56.81 | 10019.24 | 82.40 | 0.175 | 187.20 | 1.41 | 6.71 | 455.93 | 0.108 | 0.37 | 10.12 | 0.30 | 17.64 | 319.75 | 88.49 | 234.39 | 2690.24 | 892.41 | 484530.10 | 4.84 | 7.36 |
| NAF-01_zirc36 | 23.69 | 187.86 | 352.25 | 2.45 | 50.88 | 10942.47 | 69.54 | 0.128 | 159.29 | 1.57 | 4.59 | 286.30 | 0.102 | 0.29 | 9.28 | 0.39 | 15.48 | 276.17 | 74.41 | 251.85 | 2233.48 | 746.44 | 484889.39 | -2.838 | 6.49 |
| NAF-01_zirc37 | 88.46 | 328.50 | 655.15 | 0.89 | 70.35 | 14890.83 | 124.54 | 0.176 | 281.11 | 6.18 | 4.26 | 1121.80 | 3.489 | 0.24 | 9.51 | 5.99 | 24.20 | 1257.95 | 137.34 | 1116.83 | 4049.25 | 1316.51 | 475682.42 | 296.40 | 5.66 |
| NAF-01_zirc38 | 10.20 | 89.31 | 186.97 | 0.86 | 18.48 | 10438.75 | 35.85 | 0.005 | 86.21 | 1.12 | 1.10 | 282.59 | 0.070 | 0.05 | 2.88 | 0.38 | 6.56 | 66.97 | 40.87 | 99.98 | 1149.97 | 408.98 | 487245.47 | -2.787 | 8.45 |
| NAF-02_zirc1 | 5.58 | 45.95 | 98.72 | 0.50 | 9.89 | 10241.97 | 18.26 | 0.024 | 52.31 | 0.79 | 0.42 | 181.19 | 0.019 | 0.03 | 1.55 | 0.18 | 3.22 | 22.16 | 22.38 | 37.36 | 609.73 | 239.53 | 488493.32 | 17.67 | 8.60 |
| NAF-02_zirc10 | 11.86 | 118.14 | 234.58 | 1.75 | 29.36 | 10121.53 | 44.71 | 0.007 | 112.06 | 0.82 | 2.72 | 265.27 | 0.030 | 0.15 | 5.31 | 0.22 | 9.39 | 103.87 | 50.39 | 97.49 | 1495.04 | 504.36 | 486942.99 | 14.96 | 6.54 |
| NAF-02_zirc11 | 5.29 | 51.68 | 105.60 | 0.58 | 11.82 | 10059.64 | 20.23 | 0.034 | 52.65 | 0.79 | 0.82 | 246.95 | 0.204 | 0.06 | 1.48 | 0.18 | 3.81 | 23.16 | 23.02 | 33.49 | 655.17 | 231.03 | 488443.41 | 22.26 | 8.18 |
| NAF-02_zirc12 | 7.59 | 61.67 | 133.50 | 0.65 | 14.22 | 10204.67 | 25.58 | 0.129 | 63.72 | 0.87 | 0.82 | 231.47 | 0.742 | 0.04 | 2.23 | 0.21 | 4.72 | 39.42 | 30.08 | 47.65 | 814.70 | 297.97 | 487584.72 | 384.73 | 18.42 |
| NAF-02_zirc13 | 6.30 | 71.26 | 144.36 | 0.88 | 17.36 | 10458.21 | 28.34 | 0.008 | 63.58 | 0.63 | 1.23 | 197.43 | 0.014 | 0.05 | 2.96 | 0.16 | 5.55 | 31.19 | 31.14 | 42.77 | 884.06 | 307.72 | 487889.71 | 3.88 | 7.43 |
| NAF-02_zirc14 | 9.11 | 86.91 | 183.95 | 0.94 | 18.85 | 10177.28 | 34.74 | 0.008 | 83.68 | 1.07 | 1.00 | 279.05 | 0.014 | 0.04 | 2.75 | 0.42 | 6.29 | 47.86 | 40.12 | 79.41 | 1112.96 | 397.25 | 487525.91 | 3.75 | 9.49 |
| NAF-02_zirc15 | 5.92 | 42.30 | 88.32 | 0.43 | 8.49 | 10858.46 | 17.31 | 0.018 | 42.69 | 0.70 | 0.66 | 221.86 | 0.408 | 0.05 | 1.36 | 0.19 | 3.29 | 23.23 | 19.85 | 41.27 | 541.51 | 201.40 | 486062.86 | 1536.27 | 7.95 |

Appendix C: Eastern Sunda arc zircon trace element chemistry

| Analysis ID | Ce | Dy | Er | Eu | Gd | Hf | Ho | La | Lu | Nb | Nd | P | Pb | Pr | Sm | Ta | Tb | Th | Tm | U | Y | Yb | Zr | Fe | Ti |
|---------------|-------|--------|--------|------|-------|----------|-------|--------|--------|------|-------|---------|--------|------|-------|------|-------|--------|-------|--------|---------|-----------|-----------|---------|---------|
| NAF-02_zirc19 | 27.84 | 207.75 | 368.91 | 2.83 | 54.85 | 9342.44 | 76.71 | <0.010 | 142.14 | 1.77 | 2.95 | 530.83 | 0.073 | 0.12 | 7.40 | 0.34 | 17.95 | 190.68 | 74.18 | 130.49 | 2428.74 | 687.59 | 485539.18 | 24.62 | 10.43 |
| NAF-02_zirc20 | 7.22 | 78.62 | 157.86 | 1.11 | 19.35 | 10362.80 | 30.60 | 0.007 | 78.15 | 0.56 | 1.97 | 212.55 | <0.021 | 0.08 | 3.52 | 0.19 | 6.35 | 43.95 | 34.05 | 53.41 | 1006.71 | 345.81 | 487720.40 | 9.44 | 6.84 |
| NAF-02_zirc21 | 6.86 | 77.68 | 161.98 | 0.79 | 18.52 | 9899.75 | 30.38 | 0.007 | 72.18 | 0.71 | 1.30 | 288.76 | 0.021 | 0.06 | 3.41 | 0.22 | 6.26 | 31.83 | 33.93 | 44.23 | 992.74 | 326.48 | 487954.80 | 17.16 | 8.10 |
| NAF-02_zirc22 | 7.11 | 58.40 | 129.58 | 0.60 | 13.26 | 10104.98 | 23.29 | 0.007 | 69.89 | 0.73 | 0.89 | 214.43 | 0.029 | 0.05 | 2.03 | 0.19 | 4.23 | 34.90 | 29.50 | 55.17 | 784.83 | 316.42 | 488236.76 | <2.856 | 7.54 |
| NAF-02_zirc23 | 10.77 | 90.23 | 209.96 | 0.89 | 17.17 | 9853.38 | 38.82 | 0.007 | 99.01 | 1.37 | 0.95 | 324.42 | 0.019 | 0.04 | 2.07 | 0.34 | 6.17 | 47.98 | 46.55 | 75.90 | 1253.56 | 466.57 | 487449.38 | <2.900 | 10.64 |
| NAF-02_zirc24 | 6.45 | 54.85 | 110.24 | 1.00 | 13.96 | 10583.98 | 20.86 | 0.062 | 61.49 | 0.47 | 1.58 | 129.02 | 0.013 | 0.08 | 2.76 | 0.12 | 4.43 | 41.19 | 25.64 | 51.97 | 711.81 | 274.28 | 488171.91 | 4.18 | 6.40 |
| NAF-02_zirc25 | 8.33 | 67.68 | 151.81 | 0.59 | 14.04 | 9924.51 | 28.02 | 0.079 | 77.50 | 1.16 | 1.31 | 241.91 | 0.029 | 0.07 | 2.25 | 0.27 | 5.01 | 38.38 | 34.81 | 59.56 | 920.62 | 362.61 | 483345.52 | 2487.52 | 1020.86 |
| NAF-02_zirc26 | 4.31 | 98.31 | 194.92 | 1.17 | 22.26 | 9846.31 | 38.51 | 0.004 | 80.34 | 0.76 | 1.57 | 266.64 | 0.010 | 0.06 | 3.45 | 0.21 | 7.62 | 35.25 | 40.65 | 50.35 | 1203.59 | 397.50 | 487720.53 | <2.816 | 9.21 |
| NAF-02_zirc27 | 4.47 | 36.84 | 76.79 | 0.32 | 7.43 | 10587.29 | 14.49 | 0.004 | 38.15 | 0.53 | 0.35 | 162.33 | <0.008 | 0.02 | 1.20 | 0.14 | 2.73 | 13.90 | 17.47 | 17.47 | 178.66 | 178.66 | 488534.66 | 2.94 | 7.23 |
| NAF-02_zirc28 | 9.43 | 95.18 | 214.98 | 0.89 | 18.49 | 9531.21 | 39.66 | 0.006 | 98.18 | 1.21 | 0.95 | 334.57 | 0.024 | 0.06 | 3.08 | 0.36 | 6.83 | 36.63 | 47.71 | 66.73 | 1285.87 | 476.22 | 487627.67 | 5.82 | 11.01 |
| NAF-02_zirc29 | 9.09 | 85.49 | 180.50 | 0.94 | 17.88 | 9764.94 | 34.56 | 0.089 | 82.36 | 0.94 | 1.15 | 287.34 | 0.018 | 0.08 | 2.48 | 0.24 | 6.45 | 46.54 | 39.93 | 60.47 | 1114.71 | 390.52 | 487799.58 | 33.22 | 13.32 |
| NAF-02_zirc30 | 4.63 | 16.89 | 42.18 | 0.25 | 3.40 | 11127.26 | 7.39 | 0.004 | 28.66 | 0.55 | 0.16 | 139.64 | 0.015 | 0.01 | 0.49 | 0.15 | 1.25 | 21.76 | 10.40 | 42.46 | 121.39 | 488474.34 | 6.31 | 6.13 | |
| NAF-02_zirc31 | 7.93 | 104.93 | 195.94 | 1.25 | 24.79 | 10056.11 | 39.64 | 0.015 | 79.66 | 0.82 | 1.79 | 238.52 | 0.041 | 0.08 | 3.87 | 0.19 | 8.40 | 42.43 | 40.95 | 53.35 | 1232.37 | 395.24 | 487573.57 | <2.861 | 9.49 |
| NAF-02_zirc32 | 7.67 | 59.99 | 139.96 | 0.92 | 13.34 | 10115.54 | 24.54 | 0.013 | 85.01 | 0.80 | 1.54 | 199.45 | 0.052 | 0.08 | 2.53 | 0.21 | 4.56 | 46.25 | 33.60 | 67.97 | 860.13 | 374.01 | 488086.81 | 6.61 | 7.49 |
| NAF-02_zirc33 | 6.27 | 50.77 | 112.63 | 0.46 | 10.84 | 10081.35 | 20.04 | 0.004 | 58.31 | 0.78 | 0.56 | 199.53 | 0.044 | 0.02 | 1.43 | 0.19 | 3.53 | 25.17 | 25.65 | 44.53 | 680.59 | 262.95 | 488468.96 | 8.67 | 8.56 |
| NAF-02_zirc34 | 10.44 | 113.03 | 221.81 | 1.43 | 26.20 | 9570.70 | 43.03 | 0.004 | 98.90 | 0.82 | 2.25 | 273.33 | 0.027 | 0.09 | 4.29 | 0.21 | 8.68 | 75.39 | 47.77 | 81.00 | 1390.17 | 468.14 | 487558.71 | 3.25 | 7.53 |
| NAF-02_zirc35 | 51.15 | 75.47 | 155.66 | 1.35 | 18.82 | 9814.16 | 29.65 | 17.870 | 76.37 | 0.78 | 25.27 | 4148.81 | 0.064 | 5.68 | 6.84 | 0.19 | 6.14 | 43.87 | 34.23 | 63.37 | 957.86 | 347.65 | 480262.96 | 52.75 | 8.04 |
| NAF-02_zirc36 | 6.57 | 51.19 | 108.73 | 0.50 | 11.43 | 10076.36 | 20.12 | 0.011 | 52.56 | 0.76 | 0.30 | 219.85 | 0.078 | 0.04 | 1.91 | 0.16 | 3.88 | 23.02 | 23.47 | 34.05 | 683.27 | 235.06 | 488453.72 | 20.05 | 8.06 |
| NAF-02_zirc37 | 10.42 | 91.16 | 194.50 | 1.25 | 21.02 | 10020.30 | 36.01 | 0.055 | 99.22 | 0.89 | 1.66 | 280.62 | 0.036 | 0.12 | 3.59 | 0.25 | 6.86 | 68.12 | 43.63 | 84.58 | 1205.41 | 449.04 | 487466.78 | 26.10 | 11.04 |
| NAF-02_zirc38 | 5.56 | 33.61 | 84.03 | 0.47 | 6.94 | 10285.56 | 14.32 | 0.033 | 52.76 | 0.61 | 0.42 | 212.74 | 0.161 | 0.03 | 1.06 | 0.15 | 2.60 | 20.97 | 19.64 | 38.31 | 514.10 | 215.14 | 488544.40 | 17.08 | 8.02 |
| NAF-02_zirc39 | 7.91 | 75.92 | 171.32 | 0.80 | 13.89 | 9417.98 | 31.76 | 0.004 | 82.31 | 0.94 | 0.70 | 271.79 | 0.013 | 0.04 | 1.93 | 0.25 | 5.32 | 35.33 | 38.15 | 56.72 | 1023.90 | 382.08 | 488267.71 | 4.53 | 10.00 |
| NAF-02_zirc40 | 8.79 | 98.11 | 194.28 | 1.07 | 22.08 | 10188.29 | 37.87 | 0.014 | 89.59 | 0.85 | 1.46 | 285.88 | 0.013 | 0.09 | 3.65 | 0.16 | 7.69 | 51.72 | 42.52 | 65.40 | 1215.31 | 420.91 | 487396.50 | 5.53 | 9.82 |
| NAF-02_zirc41 | 12.74 | 101.08 | 197.17 | 1.32 | 25.69 | 10342.57 | 38.52 | 0.013 | 86.35 | 0.93 | 2.23 | 259.89 | 0.297 | 0.10 | 4.60 | 0.24 | 8.13 | 122.92 | 42.35 | 98.25 | 1240.69 | 413.96 | 487173.16 | 10.54 | 15.58 |
| NAF-02_zirc42 | 6.64 | 64.99 | 125.83 | 0.76 | 14.80 | 10343.28 | 25.87 | 0.055 | 54.44 | 0.72 | 0.76 | 237.94 | 0.827 | 0.06 | 2.03 | 0.20 | 5.25 | 29.52 | 27.19 | 41.26 | 789.23 | 265.75 | 488025.23 | 20.43 | 16.05 |
| NAF-02_zirc43 | 23.40 | 195.95 | 414.92 | 2.00 | 41.89 | 9010.92 | 78.58 | 0.007 | 204.93 | 2.25 | 1.26 | 539.24 | 0.877 | 0.08 | 4.18 | 0.46 | 14.93 | 215.27 | 91.43 | 203.35 | 2624.00 | 899.00 | 485294.89 | 8.87 | 12.71 |
| NAF-02_zirc44 | 4.83 | 19.17 | 50.61 | 0.22 | 4.20 | 10621.60 | 8.60 | 0.004 | 62.02 | 0.83 | 0.54 | 247.13 | <0.008 | 0.03 | 1.36 | 0.23 | 4.37 | 19.66 | 28.59 | 38.62 | 764.15 | 289.78 | 488406.27 | <2.778 | 8.94 |
| NAF-02_zirc45 | 4.81 | 39.78 | 82.74 | 0.34 | 8.26 | 10328.09 | 15.39 | 0.004 | 42.28 | 0.47 | 0.44 | 212.96 | <0.008 | 0.01 | 1.18 | 0.15 | 2.93 | 16.50 | 18.98 | 30.51 | 508.91 | 196.45 | 488567.46 | <2.771 | 6.96 |
| NAF-02_zirc46 | 5.08 | 54.05 | 115.21 | 0.52 | 10.87 | 10036.95 | 22.47 | 0.009 | 55.91 | 0.61 | 0.49 | 251.84 | 0.575 | 0.02 | 1.54 | 0.20 | 3.85 | 18.60 | 26.03 | 33.87 | 700.90 | 258.70 | 488346.85 | 40.75 | 8.35 |
| NAF-02_zirc47 | 7.10 | 63.34 | 153.49 | 0.72 | 14.27 | 9824.13 | 27.49 | 0.004 | 81.54 | 0.95 | 1.09 | 238.99 | 0.010 | 0.04 | 2.14 | 0.25 | 4.89 | 32.04 | 35.31 | 57.48 | 898.28 | 372.37 | 488201.01 | <2.757 | 8.29 |
| NAF-02_zirc48 | 8.55 | 79.09 | 182.85 | 0.85 | 15.47 | 9609.79 | 32.81 | 0.004 | 94.09 | 1.14 | 1.02 | 287.59 | 0.035 | 0.04 | 2.13 | 0.30 | 5.88 | 37.66 | 41.32 | 66.10 | 1088.83 | 426.70 | 487962.85 | <2.731 | 10.47 |
| NAF-02_zirc49 | 6.00 | 69.29 | 133.23 | 0.82 | 15.71 | 10223.94 | 26.48 | 0.044 | 55.50 | 0.63 | 0.94 | 209.10 | 0.059 | 0.05 | 2.25 | 0.17 | 5.21 | 24.04 | 27.71 | 34.27 | 811.31 | 268.44 | 488121.04 | 45.27 | 11.03 |
| NAF-02_zirc50 | 9.35 | 75.74 | 166.67 | 0.80 | 16.73 | 9824.33 | 30.78 | 0.129 | 77.50 | 0.96 | 1.10 | 349.56 | 0.041 | 0.10 | 2.31 | 0.22 | 5.44 | 50.40 | 34.86 | 63.32 | 1018.78 | 348.49 | 487741.66 | 67.96 | 12.88 |
| NAF-02_zirc51 | 11.12 | 121.33 | 247.02 | 1.13 | 27.21 | 9587.55 | 46.85 | 0.018 | 105.30 | 1.03 | 1.47 | 410.68 | 0.042 | 0.08 | 3.27 | 0.27 | 9.13 | 59.17 | 50.77 | 73.25 | 1534.50 | 489.16 | 487073.44 | 15.17 | 9.81 |
| NAF-02_zirc52 | 26.15 | 226.60 | 435.54 | 4.00 | 59.39 | 9412.86 | 83.30 | 0.036 | 215.06 | 1.56 | 5.44 | 616.66 | 0.661 | 0.31 | 11.21 | 0.42 | 18.84 | 264.07 | 95.36 | 224.84 | 2825.11 | 964.56 | 484349.15 | 89.75 | 9.88 |
| NAF-02_zirc53 | 9.79 | 53.12 | 124.10 | 0.52 | 12.30 | 9836.55 | 21.99 | 0.076 | 63.96 | 0.86 | 0.94 | 326.51 | <0.021 | 0.12 | 1.83 | 0.22 | 4.11 | 52.15 | 27.90 | 72.25 | 760.45 | 278.05 | 488241.13 | 12.66 | 9.89 |
| NAF-02_zirc54 | 17.96 | 173.27 | 379.03 | 1.48 | 32.22 | 10629.31 | 71.88 | 0.074 | 170.94 | 1.72 | 2.03 | 822.16 | 0.117 | 0.17 | 4.66 | 0.52 | 12.21 | 135.79 | 82.48 | 154.65 | 2289.73 | 822.40 | 483443.17 | 508.09 | 9.57 |
| NAF-02_zirc55 | 5.88 | 38.21 | 90.32 | 0.40 | 8.87 | 10676.41 | 17.10 | 0.007 | 45.77 | 0.69 | 0.34 | 224.72 | 0.028 | 0.02 | 0.75 | 0.22 | 2.77 | 20.99 | 20.34 | 31.61 | 582.30 | 203.67 | 488199.53 | 12.71 | 7.65 |
| NAF-02_zirc56 | 8.77 | 65.11 | 139.70 | 0.77 | 14.54 | 10402.74 | 26.08 | 0.121 | 72.77 | 0.85 | 1.70 | 219.15 | 0.642 | 0.07 | 2.55 | 0.22 | 4.75 | 46.76 | 32.04 | 63.18 | 865.64 | 334.78 | 487771.78 | 72.28 | 8.64 |
| NAF-02_zirc57 | 12.85 | 106.23 | 240.41 | 1.12 | 22.48 | 10054.48 | 44.34 | 0.004 | 126.81 | 1.19 | 1.34 | 363.06 | 0.030 | 0.07 | 3.41 | 0.35 | 7.86 | 97.94 | 54.42 | 123.81 | 1466.41 | 572.66 | 486783.38 | <2.906 | 8.39 |
| NAF-02_zirc58 | 18.94 | 188.94 | 349.87 | 2.34 | 44.66 | 10372.74 | 70.44 | 0.057 | 140.22 | 1.37 | 3.28 | 375.15 | 0.064 | 0.21 | 7.35 | 0.37 | 14.56 | 140.40 | 73.36 | 134.18 | 2221.33 | 696.96 | 485036.80 | 257.68 | 20.22 |
| NAF-02_zirc59 | 27.38 | 194.32 | 390.89 | 3.19 | 49.59 | 9788.48 | 74.68 | 0.510 | 193.38 | 1.53 | 5.60 | 654.52 | 0.116 | 0.49 | 9.97 | 0.42 | 15.74 | 286.15 | 83.07 | 240.26 | 2559.44 | 853.46 | 484572.86 | 10.51 | 9.13 |
| NAF-02_zirc60 | 8.53 | 59.60 | 143.66 | 0.58 | 11.67 | 9813.98 | 24.77 | 0.014 | 90.30 | 0.98 | 0.89 | 344.93 | <0.021 | 0.03 | 1.75 | 0.29 | 4.11 | 51.24 | 34.00 | 74.93 | 889.81 | 368.78 | 487973.57 | 16.65 | 7.25 |
| NAF-02_zirc61 | 5.02 | 63.86 | 123.94 | 0.94 | 15.31 | 10030.86 | 24.66 | 0.005 | 53.47 | 0.88 | 0.88 | 230.96 | <0.009 | 0.02 | 2.72 | 0.11 | 5.12 | 30.92 | 26.40 | 31.15 | 777.26 | 362.34 | 488346.46 | <2.905 | 7.27 |
| NAF-02_zirc62 | 6.90 | 98.66 | 184.17 | 1.12 | 22.72 | 10014.80 | 37.39 | 0.037 | 70.58 | 0.63 | 1.45 | 243.71 | 0.083 | 0.08 | 3.52 | 0.17 | 7.37 | 34.62 | 37.10 | 44.72 | 1143.36 | 262.59 | 487728.05 | 18.20 | 8.39 |
| NAF-02_zirc63 | 9.44 | 60.55 | 133.54 | 0.69 | 13.89 | 10032.38 | 24.64 | | | | | | | | | | | | | | | | | | |

Appendix C: Eastern Sunda arc zircon trace element chemistry

| Analysis ID | Ce | Dy | Er | Eu | Gd | Hf | Ho | La | Lu | Nb | Nd | P | Pb | Pr | Sm | Ta | Tb | Th | Tm | U | Y | Yb | Zr | Fe | Ti |
|---------------|-------|--------|--------|------|-------|----------|-------|--------|--------|------|-------|---------|--------|------|------|------|-------|--------|--------|--------|---------|-----------|-----------|---------|-------|
| NAF-03_zirc22 | 5.78 | 51.11 | 112.38 | 0.46 | 9.50 | 10410.21 | 20.77 | 0.003 | 60.18 | 0.68 | 0.38 | 253.10 | <0.009 | 0.03 | 1.41 | 0.23 | 3.79 | 24.82 | 26.00 | 55.50 | 687.87 | 272.20 | 488105.68 | <2.896 | 7.24 |
| NAF-03_zirc23 | 18.22 | 148.26 | 334.35 | 1.08 | 29.70 | 9303.74 | 61.87 | 0.005 | 136.29 | 1.92 | 1.20 | 499.62 | 0.034 | 0.06 | 3.08 | 0.47 | 10.76 | 97.59 | 67.38 | 116.46 | 1941.53 | 654.62 | 486389.30 | <2.903 | 10.57 |
| NAF-03_zirc24 | 7.83 | 53.87 | 131.95 | 0.72 | 11.11 | 10072.17 | 22.93 | 0.003 | 86.25 | 0.84 | 0.88 | 248.37 | 0.013 | 0.05 | 1.66 | 0.20 | 3.80 | 44.18 | 32.49 | 73.59 | 818.27 | 363.64 | 488094.15 | <2.863 | 7.50 |
| NAF-03_zirc25 | 15.66 | 118.03 | 244.76 | 1.13 | 26.62 | 12928.79 | 46.78 | 0.016 | 120.41 | 0.98 | 2.09 | 281.67 | 0.119 | 0.11 | 4.01 | 0.54 | 8.50 | 274.47 | 56.81 | 287.01 | 1533.62 | 585.77 | 484436.07 | 7.10 | 6.66 |
| NAF-03_zirc26 | 16.64 | 170.69 | 349.62 | 1.74 | 37.20 | 8861.35 | 64.27 | 0.024 | 152.70 | 1.56 | 1.35 | 751.23 | 0.046 | 0.07 | 4.83 | 0.48 | 13.08 | 120.43 | 71.01 | 151.53 | 2098.93 | 702.93 | 485935.68 | <8.332 | 9.69 |
| NAF-03_zirc27 | 34.23 | 90.87 | 194.89 | 1.31 | 21.71 | 9736.28 | 37.16 | 10.287 | 95.91 | 1.07 | 15.10 | 2551.03 | 0.039 | 3.09 | 6.08 | 0.31 | 6.93 | 55.35 | 42.91 | 73.42 | 1194.39 | 440.39 | 483121.91 | 44.49 | 10.02 |
| NAF-03_zirc28 | 6.55 | 55.91 | 123.18 | 0.55 | 11.78 | 10271.95 | 22.21 | 0.007 | 62.34 | 0.71 | 0.62 | 253.50 | <0.009 | 0.03 | 1.83 | 0.22 | 3.88 | 26.89 | 27.84 | 44.40 | 750.65 | 283.88 | 488122.28 | <2.881 | 7.78 |
| NAF-03_zirc29 | 7.96 | 80.38 | 178.40 | 0.81 | 16.89 | 9637.89 | 33.81 | 0.004 | 85.25 | 0.96 | 0.88 | 338.41 | 0.015 | 0.05 | 2.37 | 0.34 | 5.91 | 29.87 | 38.66 | 53.60 | 1084.15 | 401.20 | 487887.63 | <2.906 | 11.26 |
| NAF-03_zirc3 | 6.53 | 72.57 | 142.05 | 1.40 | 17.46 | 10335.70 | 27.15 | 0.005 | 74.62 | 0.96 | 2.15 | 150.56 | 0.009 | 0.10 | 3.92 | 0.13 | 5.76 | 44.49 | 32.17 | 904.24 | 339.35 | 488006.40 | <2.782 | 5.88 | |
| NAF-03_zirc30 | 5.28 | 40.56 | 105.93 | 0.56 | 8.72 | 9189.26 | 17.86 | 0.004 | 70.68 | 0.77 | 0.64 | 192.68 | 0.014 | 0.02 | 1.45 | 0.19 | 2.95 | 27.37 | 26.01 | 54.23 | 626.95 | 288.99 | 489201.92 | <2.919 | 8.00 |
| NAF-03_zirc31 | 8.95 | 70.12 | 161.97 | 0.92 | 15.01 | 10113.56 | 28.88 | 0.007 | 93.64 | 0.92 | 1.64 | 235.24 | 0.009 | 0.07 | 2.31 | 0.24 | 5.25 | 59.79 | 37.88 | 86.91 | 973.15 | 422.24 | 487810.34 | <2.854 | 7.52 |
| NAF-03_zirc32 | 8.32 | 96.26 | 185.18 | 0.98 | 23.70 | 10658.38 | 36.12 | 0.007 | 75.93 | 0.66 | 1.53 | 205.50 | <0.021 | 0.07 | 3.00 | 0.16 | 7.51 | 36.47 | 37.79 | 43.63 | 1167.53 | 360.87 | 487304.46 | 7.73 | 8.20 |
| NAF-03_zirc33 | 6.18 | 54.66 | 118.65 | 0.64 | 12.11 | 10231.61 | 21.96 | 0.003 | 59.58 | 0.69 | 0.88 | 192.22 | 0.018 | 0.04 | 1.89 | 0.18 | 4.18 | 29.05 | 26.51 | 44.31 | 723.75 | 270.49 | 488318.16 | <2.855 | 7.48 |
| NAF-03_zirc34 | 7.19 | 44.16 | 116.23 | 0.80 | 8.79 | 9975.31 | 19.45 | 0.172 | 83.81 | 0.84 | 1.16 | 227.21 | 0.052 | 0.09 | 1.35 | 0.24 | 3.36 | 52.29 | 28.59 | 89.05 | 692.47 | 346.41 | 488351.50 | 6.87 | 8.57 |
| NAF-03_zirc35 | 8.32 | 63.89 | 141.71 | 0.77 | 13.77 | 10104.38 | 26.72 | 0.055 | 73.64 | 0.88 | 0.93 | 259.56 | 0.699 | 0.06 | 1.87 | 0.23 | 4.69 | 33.15 | 31.97 | 57.24 | 876.74 | 327.30 | 487575.83 | 334.77 | 11.21 |
| NAF-03_zirc36 | 5.92 | 49.65 | 107.53 | 1.09 | 12.65 | 10728.43 | 19.60 | 0.017 | 64.01 | 0.55 | 1.22 | 147.81 | 0.157 | 0.07 | 2.53 | 0.15 | 3.85 | 55.71 | 25.32 | 75.81 | 667.32 | 275.95 | 487903.01 | 115.48 | 6.89 |
| NAF-03_zirc37 | 6.64 | 59.24 | 122.73 | 0.85 | 16.04 | 10185.23 | 23.91 | 0.009 | 69.23 | 0.81 | 1.95 | 241.98 | 0.147 | 0.07 | 3.75 | 0.20 | 4.91 | 30.80 | 27.68 | 51.47 | 775.83 | 278.97 | 488161.19 | 8.17 | 7.93 |
| NAF-03_zirc38 | 25.96 | 327.72 | 555.24 | 4.06 | 90.21 | 9218.65 | 37.88 | 0.019 | 133.14 | 1.12 | 0.66 | 382.40 | 0.323 | 0.03 | 1.74 | 0.22 | 5.90 | 43.60 | 51.76 | 78.86 | 1298.04 | 555.93 | 488061.20 | <6.823 | 7.09 |
| NAF-03_zirc39 | 20.58 | 177.34 | 416.98 | 2.13 | 31.99 | 9560.87 | 74.54 | 0.128 | 223.55 | 3.82 | 1.42 | 564.79 | 0.156 | 0.12 | 3.59 | 0.77 | 12.22 | 128.22 | 96.16 | 190.30 | 2511.09 | 995.77 | 484986.02 | <2.604 | 8.39 |
| NAF-03_zirc40 | 22.00 | 183.53 | 455.42 | 1.85 | 28.79 | 9234.15 | 78.81 | 0.007 | 255.13 | 4.86 | 1.30 | 456.40 | 0.134 | 0.06 | 4.00 | 1.00 | 12.14 | 122.19 | 102.78 | 211.53 | 2719.86 | 1083.67 | 485069.95 | <6.158 | 9.36 |
| NAF-03_zirc41 | 23.86 | 195.16 | 457.20 | 2.24 | 34.41 | 9618.20 | 80.91 | 0.020 | 244.72 | 4.61 | 1.25 | 463.14 | 0.088 | 0.06 | 4.11 | 0.95 | 13.74 | 156.29 | 106.22 | 233.97 | 2867.15 | 1120.89 | 484528.46 | <2.579 | 10.71 |
| NAF-03_zirc42 | 6.26 | 87.76 | 214.65 | 1.12 | 16.01 | 7982.48 | 38.00 | 0.004 | 123.05 | 0.87 | 0.74 | 362.38 | 0.066 | 0.03 | 2.01 | 0.22 | 6.19 | 36.85 | 50.82 | 61.07 | 1251.27 | 554.64 | 488728.71 | <2.655 | 5.26 |
| NAF-03_zirc43 | 21.19 | 177.59 | 430.19 | 2.07 | 29.37 | 9156.94 | 77.32 | 0.006 | 234.33 | 4.43 | 1.23 | 407.55 | 0.100 | 0.05 | 3.52 | 0.83 | 12.10 | 124.64 | 96.60 | 196.78 | 2601.98 | 1016.61 | 485451.93 | <6.019 | 8.66 |
| NAF-03_zirc44 | 14.37 | 142.72 | 330.98 | 1.89 | 24.22 | 9037.55 | 60.01 | 0.011 | 188.13 | 2.41 | 1.33 | 398.21 | 0.061 | 0.07 | 3.06 | 0.52 | 10.09 | 93.01 | 77.55 | 139.65 | 2033.11 | 805.20 | 486544.70 | <6.147 | 5.86 |
| NAF-03_zirc45 | 21.18 | 180.45 | 445.59 | 1.99 | 32.05 | 9239.12 | 77.59 | 0.034 | 243.40 | 4.18 | 1.43 | 506.11 | 0.082 | 0.06 | 4.03 | 0.88 | 12.76 | 134.61 | 100.98 | 203.90 | 2640.01 | 1059.98 | 485081.92 | <6.109 | 10.64 |
| NAF-03_zirc46 | 28.98 | 240.81 | 509.97 | 5.57 | 52.21 | 9619.60 | 94.79 | 0.096 | 257.60 | 4.76 | 8.66 | 600.53 | 0.143 | 0.88 | 9.97 | 0.82 | 18.62 | 159.52 | 116.09 | 226.00 | 3310.02 | 1175.52 | 483634.10 | <3.271 | 9.88 |
| NAF-03_zirc47 | 13.54 | 133.39 | 324.15 | 1.63 | 24.08 | 8900.42 | 56.09 | 0.090 | 186.95 | 2.38 | 1.24 | 505.72 | 0.076 | 0.09 | 2.94 | 0.57 | 9.49 | 89.67 | 75.04 | 138.61 | 1954.20 | 782.75 | 486554.24 | <6.142 | 6.79 |
| NAF-03_zirc48 | 8.70 | 106.99 | 264.59 | 1.39 | 20.43 | 8895.33 | 45.40 | 0.010 | 161.23 | 1.14 | 0.81 | 450.45 | 0.209 | 0.04 | 2.78 | 0.28 | 7.37 | 67.05 | 61.58 | 109.04 | 1579.92 | 665.43 | 487262.32 | <6.370 | 3.46 |
| NAF-03_zirc49 | 21.49 | 174.36 | 424.93 | 1.90 | 28.67 | 9722.13 | 76.34 | 0.056 | 242.57 | 4.75 | 1.08 | 469.33 | 0.077 | 0.07 | 3.35 | 1.02 | 11.67 | 127.20 | 98.96 | 220.27 | 2566.18 | 1037.08 | 484904.98 | <6.159 | 9.15 |
| NAF-03_zirc50 | 18.65 | 152.65 | 357.49 | 1.89 | 26.18 | 9414.01 | 64.22 | 0.014 | 194.28 | 3.73 | 1.13 | 387.12 | 0.154 | 0.06 | 3.18 | 0.91 | 10.84 | 142.87 | 83.67 | 206.57 | 2184.30 | 887.33 | 485891.94 | 30.44 | 9.50 |
| NAF-03_zirc51 | 14.86 | 151.71 | 366.59 | 1.65 | 26.26 | 9279.68 | 66.89 | 0.008 | 196.07 | 3.18 | 1.26 | 419.34 | 0.057 | 0.05 | 3.34 | 0.69 | 10.39 | 96.44 | 85.44 | 171.49 | 2200.65 | 901.66 | 485988.83 | 3.41 | 7.53 |
| NAF-03_zirc52 | 21.98 | 169.96 | 426.68 | 1.85 | 28.97 | 9357.43 | 75.30 | 0.007 | 237.23 | 4.52 | 1.33 | 413.49 | 0.084 | 0.04 | 3.74 | 1.02 | 11.25 | 113.33 | 98.10 | 190.25 | 2542.10 | 1006.25 | 485375.23 | <6.157 | 9.73 |
| NAF-03_zirc53 | 25.25 | 213.06 | 485.76 | 2.20 | 36.90 | 9562.68 | 88.16 | 0.013 | 255.63 | 5.16 | 1.25 | 506.38 | 0.114 | 0.07 | 4.32 | 1.03 | 14.94 | 176.12 | 113.02 | 286.04 | 3048.96 | 1176.13 | 484165.22 | 8.71 | 9.53 |
| NAF-03_zirc54 | 20.21 | 193.18 | 439.66 | 2.63 | 37.46 | 9061.22 | 80.95 | 0.042 | 223.37 | 3.72 | 1.48 | 448.45 | 0.333 | 0.08 | 4.60 | 0.71 | 13.73 | 136.33 | 100.71 | 176.65 | 2727.89 | 1034.25 | 485209.23 | 54.31 | 10.12 |
| NAF-03_zirc55 | 20.94 | 176.96 | 404.30 | 1.89 | 31.08 | 9675.76 | 74.24 | 0.016 | 223.13 | 3.74 | 1.50 | 386.55 | 0.071 | 0.10 | 3.62 | 0.78 | 12.07 | 126.59 | 98.09 | 211.21 | 2579.42 | 1049.89 | 485119.82 | <4.865 | 7.27 |
| NAF-03_zirc56 | 13.31 | 132.56 | 322.92 | 1.63 | 22.68 | 8960.77 | 65.20 | 0.007 | 184.44 | 2.72 | 0.84 | 407.48 | 0.109 | 0.05 | 2.96 | 0.44 | 9.24 | 83.81 | 75.93 | 133.66 | 1931.41 | 785.71 | 486737.20 | <6.301 | 6.31 |
| NAF-03_zirc57 | 15.47 | 145.32 | 345.52 | 1.93 | 25.15 | 9262.96 | 62.83 | 0.060 | 196.52 | 2.92 | 1.55 | 429.12 | 0.289 | 0.08 | 3.50 | 0.61 | 9.88 | 113.46 | 82.95 | 153.97 | 2098.74 | 1139.01 | 484512.58 | <2.507 | 10.71 |
| NAF-03_zirc58 | 18.74 | 169.44 | 401.54 | 1.77 | 28.41 | 9344.92 | 71.30 | 0.037 | 217.25 | 3.97 | 1.28 | 432.90 | 0.736 | 0.08 | 3.71 | 0.80 | 11.36 | 91.46 | 94.22 | 191.58 | 2451.42 | 1006.37 | 485306.79 | 132.39 | 9.55 |
| NAF-03_zirc59 | 14.37 | 140.74 | 344.29 | 1.68 | 24.14 | 8825.98 | 60.36 | 0.079 | 180.94 | 2.67 | 0.96 | 335.77 | 0.159 | 0.06 | 2.73 | 0.62 | 9.69 | 77.07 | 78.72 | 126.42 | 1994.52 | 824.07 | 482443.89 | 3347.96 | 13.82 |
| NAF-03_zirc60 | 10.39 | 115.08 | 268.38 | 1.34 | 23.08 | 9078.83 | 48.32 | 0.258 | 152.14 | 1.53 | 2.07 | 462.60 | 0.224 | 0.22 | 3.42 | 0.39 | 8.06 | 74.86 | 63.94 | 120.77 | 1615.42 | 676.19 | 487039.62 | 11.54 | 6.51 |
| NAF-03_zirc61 | 26.91 | 221.92 | 511.00 | 2.31 | 37.65 | 9385.51 | 90.58 | 0.011 | 270.69 | 4.78 | 1.38 | 476.68 | 0.109 | 0.06 | 4.40 | 1.00 | 14.65 | 169.11 | 115.41 | 239.91 | 3127.23 | 1181.92 | 484257.40 | <6.077 | 10.18 |

*All elements are in ppm.

Appendix C: Eastern Sunda arc zircon trace element chemistry

| Analysis ID | Ce | Dy | Er | Gd | Hf | Ho | La | Lu | Nb | Nd | P | Pb | Pr | Sm | Ta | Tb | Th | Tm | U | Y | Yb | Zr | Fe | Ti | |
|---------------|--------|--------|---------|-------|---------|----------|--------|--------|--------|--------|--------|---------|--------|-------|-------|--------|---------|---------|---------|---------|-----------|-----------|-----------|---------|-------|
| SLG-01_zirc6 | 12.61 | 158.16 | 7.31 | 49.48 | 58.95 | 0.409 | 155.20 | 1.69 | 11.70 | 539.40 | 0.066 | 0.98 | 14.87 | 0.39 | 13.99 | 61.42 | 68.53 | 111.06 | 1922.84 | 712.34 | 486694.30 | 5.24 | 7.01 | | |
| SLG-01_zirc5 | 18.88 | 174.02 | 1.94 | 29.19 | 9475.96 | 73.24 | 0.015 | 224.97 | 4.17 | 1.20 | 442.16 | 0.072 | 0.06 | 3.53 | 0.85 | 114.93 | 95.81 | 191.94 | 2509.40 | 2509.40 | 485280.99 | -2.628 | 9.15 | | |
| SLG-01_zirc7 | 26.90 | 226.61 | 2.49 | 40.43 | 9524.75 | 94.75 | 0.005 | 263.80 | 5.17 | 1.77 | 487.60 | 0.116 | 0.06 | 4.20 | 1.11 | 15.64 | 176.27 | 118.27 | 251.90 | 3232.42 | 1217.97 | 483975.10 | -2.616 | 9.70 | |
| SLG-01_zirc8 | 14.41 | 145.07 | 3.47 | 26.33 | 8901.52 | 62.67 | 0.019 | 190.11 | 2.55 | 1.15 | 391.12 | 0.046 | 0.11 | 3.16 | 0.53 | 10.24 | 83.65 | 81.19 | 134.88 | 2072.03 | 855.79 | 486568.78 | -2.611 | 7.03 | |
| SLG-01_zirc9 | 18.79 | 170.72 | 3.37 | 33.14 | 9332.78 | 71.76 | 0.076 | 216.90 | 3.00 | 1.94 | 563.13 | 0.215 | 0.11 | 4.26 | 0.64 | 12.39 | 188.90 | 92.08 | 219.26 | 2438.16 | 978.95 | 485147.07 | 35.59 | 10.22 | |
| SLG-02_zirc1 | 39.80 | 418.60 | 708.57 | 2.32 | 108.28 | 7965.02 | 147.32 | 0.404 | 241.37 | 8.06 | 610.98 | 0.923 | 0.48 | 17.73 | 0.34 | 32.90 | 453.49 | 141.20 | 239.40 | 4717.24 | 1227.46 | 482661.32 | 63.97 | 31.00 | |
| SLG-02_zirc10 | 30.96 | 242.54 | 396.66 | 3.11 | 65.05 | 8823.24 | 85.30 | 0.743 | 131.78 | 3.03 | 7.27 | 360.56 | 0.510 | 1.48 | 0.86 | 20.23 | 415.04 | 77.57 | 199.58 | 2624.35 | 683.52 | 485599.87 | 135.04 | 39.68 | |
| SLG-02_zirc11 | 10.30 | 122.45 | 249.22 | 1.57 | 26.38 | 8053.78 | 48.52 | 0.007 | 115.40 | 1.00 | 1.49 | 366.12 | 0.057 | 0.12 | 3.96 | 0.27 | 8.70 | 105.93 | 88.91 | 1580.21 | 508.80 | 488220.83 | -6.290 | 10.03 | |
| SLG-02_zirc2 | 10.74 | 118.14 | 285.00 | 1.44 | 26.21 | 7721.64 | 48.77 | 0.078 | 136.92 | 1.02 | 1.95 | 247.94 | 0.165 | 0.15 | 3.72 | 0.26 | 8.64 | 195.97 | 88.35 | 1667.53 | 596.56 | 484408.84 | -8.149 | 15.33 | |
| SLG-02_zirc3 | 23.36 | 154.38 | 264.64 | 1.83 | 40.39 | 10409.57 | 55.53 | 0.057 | 89.89 | 2.17 | 3.62 | 363.11 | 1.819 | 0.22 | 6.75 | 0.66 | 12.56 | 52.68 | 130.39 | 1644.38 | 466.13 | 486312.31 | -3.196 | 9.80 | |
| SLG-02_zirc4 | 3.44 | 28.32 | 72.55 | 0.55 | 4.93 | 7181.60 | 11.72 | 0.014 | 54.86 | 0.64 | 0.61 | 130.96 | 0.076 | 0.03 | 1.05 | 0.16 | 2.01 | 63.86 | 78.82 | 423.91 | 208.76 | 491083.07 | 30.45 | 10.33 | |
| SLG-02_zirc5 | 408.60 | 396.29 | 548.42 | 32.90 | 177.64 | 11867.70 | 121.68 | 5.213 | 159.81 | 28.38 | 117.11 | 422.40 | 39.926 | 14.48 | 77.32 | 1.84 | 40.64 | 796.77 | 102.46 | 1099.87 | 4014.85 | 871.82 | 478803.73 | 721.82 | 86.54 |
| SLG-02_zirc6 | 10.06 | 145.50 | 274.33 | 2.47 | 34.90 | 8061.26 | 55.28 | 0.007 | 112.98 | 0.69 | 2.74 | 242.85 | 0.172 | 0.16 | 4.15 | 0.18 | 11.57 | 191.60 | 57.45 | 127.58 | 1778.38 | 532.86 | 488092.16 | -6.590 | 14.69 |
| SLG-02_zirc7 | 38.62 | 338.51 | 639.79 | 3.68 | 78.65 | 8201.31 | 129.09 | 0.489 | 253.75 | 2.35 | 4.45 | 758.48 | 0.396 | 0.26 | 11.67 | 0.50 | 26.60 | 562.93 | 303.91 | 4140.31 | 1207.28 | 482941.82 | -8.893 | 18.71 | |
| SLG-02_zirc8 | 25.83 | 219.86 | 455.99 | 2.22 | 42.55 | 7903.68 | 88.40 | 0.007 | 180.82 | 1.91 | 1.78 | 502.09 | 0.260 | 0.10 | 4.78 | 0.43 | 16.06 | 401.41 | 83.74 | 236.83 | 2865.82 | 485775.49 | -6.178 | 21.71 | |
| SLG-02_zirc9 | 15.40 | 218.72 | 306.96 | 3.53 | 72.17 | 8654.29 | 70.69 | 0.110 | 90.96 | 1.71 | 9.57 | 340.46 | 4.133 | 0.67 | 15.26 | 0.58 | 19.94 | 144.92 | 2081.81 | 2081.81 | 487079.87 | -2.809 | 21.04 | | |
| SPF-03_zirc1 | 108.87 | 374.79 | 693.88 | 0.67 | 96.36 | 10420.18 | 136.62 | 0.571 | 295.75 | 2.94 | 10.22 | 12.318 | 0.76 | 16.16 | 1.39 | 29.76 | 1523.12 | 144.68 | 1232.00 | 5249.17 | 1356.69 | 476066.85 | 1621.44 | 10.78 | |
| SPF-03_zirc10 | 121.50 | 272.94 | 495.80 | 0.61 | 72.95 | 11194.85 | 98.61 | 0.133 | 217.82 | 2.31 | 7.85 | 570.19 | 0.701 | 0.54 | 13.04 | 0.90 | 22.22 | 656.07 | 106.69 | 3628.37 | 1014.78 | 481222.99 | 336.39 | 12.78 | |
| SPF-03_zirc11 | 153.93 | 474.15 | 852.47 | 0.81 | 123.18 | 10510.70 | 173.21 | 0.207 | 329.36 | 3.67 | 11.65 | 855.61 | 3.527 | 0.79 | 21.16 | 1.86 | 39.23 | 1680.64 | 175.52 | 601.61 | 6214.54 | 476821.02 | 918.48 | 8.71 | |
| SPF-03_zirc12 | 295.81 | 615.98 | 1050.99 | 1.14 | 179.40 | 10768.84 | 216.58 | 0.660 | 456.00 | 5.91 | 24.25 | 1207.89 | 2.959 | 1.80 | 34.60 | 1.56 | 52.31 | 2030.37 | 221.03 | 757.55 | 8559.79 | 2158.51 | 471936.51 | 356.67 | 14.53 |
| SPF-03_zirc13 | 228.21 | 435.16 | 774.97 | 0.81 | 115.86 | 10816.21 | 156.78 | 0.213 | 336.82 | 4.87 | 12.96 | 902.88 | 0.873 | 0.85 | 21.66 | 1.93 | 36.06 | 1903.79 | 168.54 | 489.59 | 6367.03 | 1669.95 | 476115.71 | 303.95 | 13.00 |
| SPF-03_zirc14 | 170.97 | 409.14 | 750.04 | 0.68 | 103.57 | 10004.24 | 151.17 | 0.514 | 328.68 | 4.87 | 10.19 | 900.00 | 7.468 | 0.86 | 17.83 | 1.70 | 33.05 | 1836.53 | 162.25 | 653.06 | 5754.32 | 1629.75 | 477014.81 | 616.13 | 14.43 |
| SPF-03_zirc15 | 35.74 | 455.80 | 795.91 | 2.26 | 112.23 | 10389.11 | 165.14 | 0.644 | 280.53 | 2.92 | 5.42 | 938.82 | 0.423 | 0.36 | 14.63 | 0.96 | 37.17 | 808.54 | 155.25 | 990.63 | 5239.25 | 478543.83 | 663.95 | 13.59 | |
| SPF-03_zirc16 | 56.18 | 149.22 | 302.53 | 0.31 | 36.67 | 11407.22 | 58.47 | 0.154 | 146.20 | 1.45 | 4.37 | 410.62 | 0.422 | 0.30 | 6.05 | 0.67 | 11.96 | 1062.46 | 68.78 | 2163.84 | 712.82 | 483591.21 | 105.60 | 7.17 | |
| SPF-03_zirc17 | 110.76 | 311.81 | 579.50 | 0.53 | 78.18 | 11043.51 | 115.06 | 0.096 | 254.33 | 3.19 | 6.92 | 677.20 | 0.338 | 0.40 | 13.45 | 1.52 | 25.01 | 890.78 | 124.30 | 406.20 | 4383.56 | 1207.49 | 480317.72 | 96.44 | 10.47 |
| SPF-03_zirc18 | 124.62 | 381.20 | 756.55 | 0.83 | 95.46 | 12856.98 | 143.25 | 0.954 | 319.05 | 4.66 | 10.17 | 1257.58 | 15.809 | 0.93 | 15.63 | 1.68 | 29.70 | 3600.81 | 161.35 | 1873.86 | 5460.75 | 1505.36 | 471484.15 | 1407.35 | 23.85 |
| SPF-03_zirc19 | 126.30 | 348.81 | 637.41 | 0.72 | 91.93 | 13647.31 | 126.91 | 0.188 | 260.69 | 2.71 | 9.27 | 821.10 | 3.170 | 1.48 | 14.68 | 1.09 | 28.62 | 1282.49 | 130.83 | 1112.78 | 4838.83 | 1220.78 | 476549.20 | 216.53 | 11.08 |
| SPF-03_zirc20 | 63.67 | 152.86 | 431.72 | 0.46 | 30.51 | 13207.67 | 69.14 | 6.136 | 224.98 | 2.45 | 13.93 | 944.89 | 5.464 | 2.57 | 7.30 | 1.89 | 10.23 | 2395.09 | 97.59 | 6093.24 | 2336.77 | 1004.96 | 474983.07 | 658.73 | 36.80 |
| SPF-03_zirc3 | 86.15 | 233.95 | 450.29 | 0.32 | 52.33 | 11725.32 | 86.35 | 0.287 | 203.54 | 2.86 | 3.78 | 626.14 | 4.131 | 0.28 | 8.15 | 1.60 | 17.97 | 1141.98 | 96.67 | 531.15 | 3339.89 | 950.64 | 480577.40 | 557.77 | 11.31 |
| SPF-03_zirc4 | 78.09 | 241.72 | 455.50 | 0.30 | 60.27 | 12207.15 | 88.55 | 0.025 | 189.40 | 1.84 | 4.25 | 548.77 | 0.152 | 0.28 | 8.86 | 0.76 | 18.83 | 729.02 | 94.91 | 638.50 | 3304.83 | 907.73 | 481391.69 | -6.433 | 9.55 |
| SPF-03_zirc5 | 156.98 | 416.73 | 751.11 | 0.53 | 108.18 | 11338.58 | 151.64 | 0.138 | 297.71 | 5.48 | 8.57 | 845.18 | 9.187 | 0.50 | 16.90 | 2.25 | 34.09 | 1169.74 | 155.62 | 746.92 | 5462.12 | 1453.20 | 478543.83 | 663.95 | 13.59 |
| SPF-03_zirc6 | 109.47 | 346.23 | 657.05 | 0.61 | 70.83 | 13357.27 | 126.07 | 0.534 | 244.71 | 3.76 | 5.27 | 904.88 | 6.778 | 0.41 | 10.87 | 2.26 | 24.64 | 3572.07 | 134.02 | 3256.79 | 4109.08 | 1241.24 | 473824.57 | 448.79 | 15.50 |
| SPF-03_zirc7 | 136.41 | 370.97 | 645.28 | 0.81 | 99.84 | 10924.46 | 131.46 | 0.164 | 271.82 | 2.77 | 11.80 | 744.92 | 0.398 | 0.78 | 18.89 | 0.83 | 30.94 | 851.43 | 135.42 | 599.65 | 5070.68 | 1295.35 | 479154.25 | 148.81 | 10.85 |
| SPF-03_zirc8 | 135.53 | 341.46 | 631.43 | 0.65 | 89.56 | 10906.11 | 125.21 | 0.080 | 300.47 | 2.96 | 9.63 | 690.04 | 0.454 | 0.64 | 15.59 | 1.02 | 28.48 | 947.22 | 137.52 | 371.72 | 4846.55 | 1377.66 | 479726.93 | 22.86 | 10.36 |
| SPF-03_zirc9 | 119.16 | 309.24 | 575.76 | 0.55 | 80.39 | 9733.33 | 112.29 | 0.086 | 249.80 | 2.53 | 8.31 | 644.34 | 0.589 | 0.58 | 15.25 | 1.15 | 25.28 | 804.85 | 121.64 | 242.39 | 4313.47 | 1191.78 | 481741.09 | 12.56 | 9.85 |
| SPF-06_zirc1 | 99.92 | 577.39 | 1062.59 | 3.27 | 136.05 | 10415.74 | 215.96 | 0.101 | 397.09 | 6.65 | 5.75 | 1396.30 | 1.905 | 0.32 | 18.92 | 1.53 | 45.83 | 796.08 | 210.77 | 713.81 | 6938.92 | 1935.41 | 475023.78 | 214.09 | 16.36 |
| SPF-06_zirc10 | 11.82 | 347.00 | 676.04 | 1.88 | 66.47 | 9712.65 | 136.03 | 0.011 | 253.93 | 1.23 | 2.07 | 710.28 | 0.016 | 0.13 | 6.95 | 0.30 | 25.19 | 81.35 | 139.90 | 112.64 | 4201.77 | 1283.30 | 482235.32 | 5.13 | 10.15 |
| SPF-06_zirc11 | 21.52 | 299.80 | 540.34 | 1.92 | 64.35 | 10255.91 | 110.51 | 0.445 | 195.96 | 1.54 | 2.91 | 701.75 | 3.037 | 0.25 | 9.28 | 0.33 | 22.31 | 126.17 | 104.29 | 169.32 | 3392.10 | 963.51 | 482172.43 | 679.46 | 12.41 |
| SPF-06_zirc12 | 46.04 | 566.19 | 1014.28 | 3.72 | 128.24 | 9528.44 | 210.57 | 0.102 | 353.17 | 2.95 | 6.80 | 1638.67 | 0.523 | 0.37 | 18.18 | 0.86 | 43.70 | 304.60 | 200.45 | 382.56 | 6662.70 | 1816.90 | 476484.18 | 83.77 | 13.71 |
| SPF-06_zirc13 | 30.79 | 384.24 | 657.38 | 2.48 | 77.74 | 10099.53 | 135.11 | 0.025 | 245.25 | 2.12 | 3.81 | 826.52 | 0.416 | 0.16 | 10.04 | 0.66 | 27.05 | 202.61 | 135.27 | 300.33 | 4304.07 | 1282.82 | 481076.85 | 249.22 | 9.91 |
| SPF-06_zirc14 | 76.56 | 580.95 | 1018.14 | 3.57 | 141.79 | 11138.58 | 212.15 | 1.861 | 358.23 | 3.56 | 10.71 | 1254.85 | 15.196 | 0.81 | 22.81 | 1.12 | 46.55 | 761.39 | 206.31 | 689.55 | 6768.67 | 1906.68 | 472401.44 | 2207.97 | 13.55 |
| SPF-06_zirc16 | 78.32 | 510.26 | 874.18 | 2.70 | 124.41 | 11287.52 | 187.85 | 1.250 | 304.88 | 4.04 | 9.95 | 1248.47 | 12.060 | 0.75 | 19.91 | 1.45 | 40.96 | 1131.56 | 174.15 | 1068.33 | 5868.09 | 1585.43 | 474891.85 | 994.45 | 13.33 |
| SPF-06_zirc17 | 45.50 | 397.14 | 785.54 | 2.03 | 77.41 | 9862.29 | 153.74 | 0.014 | 286.54 | 4.14 | 3.03 | 1010.01 | 0.077 | 0.11 | 8.84 | 0.81 | 29.54 | 214.90 | 153.92 | 271.46 | 4883.50 | 1402.46 | 480321.80 | 9.79 | 14.45 |
| SPF-06_zirc18 | 41.09 | 250.48 | 521.35 | 0.94 | 47.62 | 16899.42 | 98.01 | 0.106 | 233.51 | 3.01 | 2.11 | 846.50 | 1.645 | 0.14 | 5.83 | 2.45 | 17.97 | 1016.92 | | | | | | | |

Appendix C: Eastern Sunda arc zircon trace element chemistry

| Analysis ID | Ce | Er | Gd | Hf | Ho | La | Lu | Nb | Nd | P | Pb | Pr | Sm | Ta | Tb | Th | Tm | U | Y | Yb | Zr | Fe | Ti | | |
|--------------|-------|--------|---------|------|--------|----------|--------|-------|--------|-------|-------|--------|--------|-------|-------|-------|-------|-------|-------|--------|--------|----------|----------|--------|------|
| SFP-06-z6 | 75.87 | 145.61 | 1273.97 | 6.19 | 186.16 | 9366.75 | 288.74 | 0.047 | 440.42 | 4.33 | 10.06 | 1394.7 | 0.188 | 0.52 | 26.41 | 0.90 | 60.16 | 484.7 | 246.5 | 474.6 | 8683.0 | 2196.6 | 474159.3 | 22.1 | 9.2 |
| SFP-06-z7 | 26.57 | 183.29 | 365.15 | 0.86 | 34.76 | 13061.55 | 70.57 | 0.226 | 150.94 | 2.61 | 1.44 | 606.6 | 1.321 | 0.12 | 4.70 | 1.17 | 13.70 | 272.7 | 77.2 | 630.3 | 2283.1 | 710.9 | 482036.1 | 262.0 | 10.0 |
| SFP-06-z8 | 15.19 | 319.58 | 601.59 | 1.94 | 68.43 | 9323.38 | 121.90 | 0.014 | 216.65 | 1.12 | 2.64 | 576.4 | 0.128 | 0.16 | 8.96 | 0.36 | 24.23 | 110.2 | 119.0 | 151.5 | 3765.8 | 1057.2 | 483474.5 | 13.7 | 8.5 |
| SFP-06-z9 | 89.65 | 717.32 | 1235.65 | 4.37 | 174.26 | 10084.96 | 285.15 | 0.216 | 414.10 | 4.28 | 9.48 | 1334.5 | 1.918 | 0.51 | 26.96 | 1.02 | 57.15 | 721.6 | 244.0 | 566.8 | 8240.0 | 2228.2 | 473740.4 | 139.7 | 17.1 |
| UG012184-z1 | 21.68 | 180.73 | 333.03 | 2.44 | 37.12 | 8750.36 | 68.95 | 0.005 | 146.76 | 1.87 | 1.83 | 244.1 | 0.053 | 0.07 | 4.31 | 0.26 | 13.49 | 90.4 | 71.8 | 114.4 | 2249.5 | 671.2 | 486937.6 | <2.495 | 11.7 |
| UG012184-z10 | 16.67 | 219.29 | 346.94 | 4.88 | 63.13 | 8665.06 | 75.56 | 0.027 | 140.93 | 1.16 | 4.83 | 229.8 | 0.144 | 0.26 | 11.20 | 0.22 | 18.72 | 102.7 | 73.3 | 108.5 | 2361.3 | 675.8 | 486808.4 | <2.541 | 15.4 |
| UG012184-z11 | 9.31 | 70.56 | 143.76 | 1.24 | 16.53 | 9846.12 | 28.27 | 0.091 | 74.89 | 1.15 | 3.09 | 117.8 | 0.159 | 0.18 | 2.79 | 0.17 | 5.57 | 33.2 | 33.2 | 91.8 | 330.6 | 486386.4 | 12.2 | 124.7 | |
| UG012184-z12 | 3.19 | 107.13 | 250.85 | 0.47 | 16.47 | 10510.83 | 45.65 | 0.067 | 137.02 | 0.87 | 0.55 | 611.8 | 0.042 | 0.05 | 1.94 | 0.18 | 7.44 | 30.6 | 59.5 | 64.6 | 1505.8 | 601.2 | 488743.5 | 74.4 | 6.0 |
| UG012184-z13 | 8.51 | 83.45 | 156.76 | 1.46 | 20.91 | 8855.46 | 32.26 | 0.004 | 75.28 | 0.62 | 1.02 | 214.2 | 0.033 | 0.06 | 3.17 | 0.13 | 6.57 | 28.7 | 35.4 | 50.8 | 1027.8 | 351.0 | 488849.4 | <2.563 | 6.4 |
| UG012184-z14 | 7.30 | 42.96 | 93.98 | 0.68 | 8.39 | 9883.30 | 17.92 | 0.004 | 50.42 | 0.81 | 0.48 | 124.3 | 0.024 | 0.02 | 1.21 | 0.13 | 3.08 | 21.6 | 22.4 | 45.3 | 593.1 | 225.2 | 489161.6 | <2.531 | 5.0 |
| UG012184-z15 | 23.77 | 166.41 | 332.85 | 2.07 | 32.62 | 8627.91 | 66.37 | 0.009 | 152.70 | 2.23 | 1.21 | 228.3 | 0.052 | 0.06 | 3.85 | 0.38 | 13.38 | 91.4 | 74.0 | 124.0 | 2185.0 | 699.5 | 487104.8 | 3.1 | 11.3 |
| UG012184-z16 | 9.34 | 113.63 | 191.83 | 2.57 | 32.12 | 9336.93 | 84.41 | 0.004 | 178.71 | 2.94 | 1.53 | 240.9 | 0.036 | 0.07 | 4.90 | 0.37 | 16.01 | 137.7 | 89.5 | 163.3 | 2773.9 | 842.4 | 485723.0 | <2.500 | 11.0 |
| UG012184-z17 | 36.16 | 215.22 | 418.57 | 2.57 | 71.03 | 8831.72 | 50.21 | 0.010 | 122.21 | 1.77 | 1.37 | 261.3 | 0.139 | 0.07 | 3.16 | 0.32 | 9.30 | 71.1 | 58.4 | 105.2 | 1698.8 | 556.0 | 487660.6 | <2.534 | 15.6 |
| UG012184-z18 | 4.08 | 42.91 | 81.71 | 0.69 | 9.87 | 9518.43 | 16.11 | 0.004 | 43.12 | 0.39 | 0.62 | 134.2 | <0.009 | 0.04 | 1.65 | 0.09 | 3.37 | 12.3 | 19.1 | 25.8 | 541.5 | 189.2 | 488312.0 | <2.489 | 4.3 |
| UG012184-z19 | 15.45 | 126.37 | 236.97 | 2.03 | 29.88 | 8666.52 | 47.91 | 0.005 | 112.64 | 1.15 | 1.64 | 246.3 | 0.012 | 0.06 | 3.94 | 0.17 | 9.81 | 61.2 | 53.4 | 82.8 | 1564.2 | 514.9 | 488046.4 | <2.484 | 6.7 |
| UG012184-z20 | 9.34 | 113.63 | 191.83 | 2.57 | 32.12 | 9336.93 | 40.33 | 0.055 | 85.12 | 0.71 | 2.59 | 133.8 | 0.094 | 0.16 | 5.65 | 0.14 | 9.39 | 51.5 | 41.7 | 67.0 | 1307.0 | 395.6 | 488208.7 | 6.6 | 5.5 |
| UG012184-z21 | 7.40 | 76.07 | 155.20 | 1.38 | 18.02 | 8957.36 | 30.01 | 0.004 | 78.02 | 0.86 | 1.36 | 134.0 | 0.009 | 0.06 | 2.77 | 0.15 | 5.92 | 23.4 | 35.2 | 44.9 | 1002.6 | 345.3 | 488975.0 | 3.9 | 5.9 |
| UG012184-z22 | 10.39 | 91.90 | 175.71 | 1.72 | 21.97 | 8375.79 | 35.53 | 0.079 | 88.92 | 0.86 | 1.23 | 280.1 | 0.097 | 0.08 | 3.20 | 0.15 | 7.09 | 43.2 | 40.1 | 67.5 | 1164.1 | 395.8 | 488833.0 | 9.7 | 6.5 |
| UG012184-z23 | 5.02 | 42.52 | 90.96 | 0.72 | 9.54 | 9157.48 | 17.09 | 0.004 | 50.27 | 0.70 | 0.53 | 114.7 | 0.275 | 0.03 | 1.18 | 0.15 | 3.25 | 12.8 | 21.3 | 29.8 | 568.7 | 218.7 | 489547.6 | 4.8 | 4.6 |
| UG012184-z24 | 6.85 | 49.53 | 105.04 | 0.78 | 10.53 | 9216.66 | 20.26 | 0.004 | 56.86 | 0.73 | 0.68 | 139.2 | <0.009 | 0.02 | 1.45 | 0.14 | 3.66 | 17.2 | 24.7 | 36.8 | 680.8 | 249.8 | 489281.0 | 3.0 | 5.7 |
| UG012184-z25 | 17.91 | 117.10 | 253.06 | 1.57 | 22.24 | 9404.90 | 48.51 | 0.004 | 126.84 | 2.18 | 1.03 | 175.7 | 0.167 | 0.05 | 2.70 | 0.41 | 8.36 | 64.2 | 113.6 | 1649.0 | 576.3 | 487455.2 | <2.559 | 8.3 | |
| UG012184-z26 | 4.41 | 32.70 | 70.69 | 0.60 | 7.76 | 9263.88 | 13.15 | 0.004 | 41.23 | 0.58 | 0.41 | 81.4 | <0.009 | 0.01 | 1.07 | 0.14 | 2.60 | 10.5 | 16.6 | 26.4 | 447.3 | 175.4 | 489738.6 | <2.576 | 5.1 |
| UG012184-z27 | 13.72 | 234.84 | 458.95 | 1.39 | 46.56 | 11033.65 | 92.11 | 0.004 | 205.12 | 1.97 | 1.15 | 647.8 | 0.370 | 0.05 | 4.90 | 0.66 | 17.12 | 290.7 | 100.5 | 286.6 | 2951.4 | 959.5 | 483011.4 | <2.582 | 4.5 |
| UG012184-z28 | 7.04 | 72.86 | 137.26 | 1.42 | 17.90 | 9210.32 | 27.62 | 0.004 | 66.90 | 0.67 | 1.22 | 143.7 | 0.039 | 0.06 | 2.80 | 0.13 | 5.95 | 24.7 | 31.2 | 42.9 | 892.9 | 307.8 | 488942.2 | <2.527 | 5.0 |
| UG012184-z29 | 97.05 | 86.74 | 180.49 | 3.43 | 26.92 | 8668.65 | 35.11 | 0.024 | 33.794 | 92.41 | 62.60 | 147.6 | 0.251 | 0.057 | 12.34 | 14.76 | 153.3 | 29.9 | 41.2 | 63.2 | 1173.8 | 405.5 | 458371.1 | 126.9 | 7.5 |
| UG012184-z30 | 10.67 | 109.88 | 220.22 | 1.35 | 20.47 | 8822.93 | 43.81 | 0.005 | 99.98 | 1.44 | 1.01 | 176.4 | 0.010 | 0.04 | 2.10 | 0.24 | 8.15 | 53.3 | 49.2 | 76.9 | 1452.9 | 466.0 | 488277.9 | <2.503 | 9.6 |
| UG012184-z31 | 10.67 | 88.85 | 168.34 | 1.86 | 22.65 | 9683.33 | 35.01 | 0.011 | 78.00 | 0.88 | 0.97 | 163.6 | <0.036 | 0.04 | 3.79 | 0.12 | 7.33 | 47.0 | 37.6 | 55.6 | 1092.1 | 363.8 | 488209.9 | <2.514 | 6.7 |
| UG012184-z32 | 5.39 | 51.33 | 103.36 | 0.81 | 10.90 | 9120.61 | 19.88 | 0.026 | 55.04 | 0.57 | 0.88 | 178.2 | 0.028 | 0.04 | 1.89 | 0.10 | 3.74 | 15.4 | 24.2 | 31.8 | 664.6 | 241.1 | 489307.2 | 3.0 | 5.1 |
| UG012184-z33 | 6.84 | 71.05 | 135.80 | 1.22 | 17.56 | 8843.32 | 26.87 | 0.017 | 68.05 | 0.79 | 1.30 | 172.5 | 0.051 | 0.08 | 2.59 | 0.15 | 5.67 | 29.5 | 30.9 | 44.0 | 886.5 | 307.7 | 489137.3 | 19.5 | 8.2 |
| UG012184-z34 | 6.20 | 48.49 | 102.12 | 0.70 | 10.41 | 9541.70 | 19.11 | 0.024 | 57.09 | 0.76 | 0.45 | 136.8 | 0.021 | 0.03 | 1.45 | 0.19 | 3.74 | 17.3 | 23.8 | 35.1 | 660.3 | 245.9 | 489076.2 | <2.511 | 4.5 |
| UG012184-z35 | 7.74 | 47.04 | 110.33 | 0.75 | 10.35 | 10003.78 | 19.95 | 0.004 | 67.09 | 0.92 | 0.46 | 115.0 | <0.009 | 0.02 | 1.47 | 0.25 | 3.51 | 18.2 | 28.0 | 50.5 | 686.1 | 284.2 | 488666.6 | <2.516 | 4.1 |
| UG012184-z36 | 3.11 | 19.09 | 39.39 | 0.31 | 4.16 | 9147.01 | 7.49 | 0.004 | 21.86 | 0.40 | 0.79 | 76.8 | <0.009 | 0.01 | 0.40 | 0.07 | 1.40 | 5.4 | 9.4 | 14.0 | 250.6 | 95.3 | 489716.2 | 5.6 | 3.4 |
| UG012184-z37 | 9.54 | 63.23 | 130.85 | 0.89 | 12.76 | 9234.48 | 25.22 | 0.011 | 65.49 | 0.94 | 0.81 | 173.4 | 0.151 | 0.03 | 2.16 | 0.18 | 4.52 | 29.9 | 30.3 | 60.9 | 858.0 | 294.3 | 488898.8 | 4.2 | 11.3 |
| UG012184-z38 | 4.99 | 61.61 | 112.22 | 1.26 | 16.84 | 9187.15 | 22.41 | 0.004 | 54.20 | 0.52 | 1.25 | 112.7 | 0.091 | 0.05 | 2.85 | 0.10 | 5.01 | 19.6 | 25.0 | 33.2 | 743.8 | 244.5 | 489279.3 | <2.495 | 5.7 |
| UG012184-z39 | 12.41 | 71.89 | 140.33 | 1.18 | 16.34 | 8938.26 | 27.90 | 0.047 | 67.88 | 1.13 | 1.39 | 205.4 | 0.202 | 0.16 | 2.33 | 0.23 | 5.52 | 54.5 | 31.3 | 72.9 | 911.8 | 309.5 | 488918.5 | 25.6 | 8.2 |
| UG012184-z40 | 5.23 | 40.87 | 90.48 | 0.66 | 8.77 | 8968.94 | 16.67 | 0.004 | 51.73 | 0.59 | 0.44 | 121.4 | <0.009 | 0.02 | 1.33 | 0.13 | 3.20 | 12.0 | 21.6 | 32.5 | 570.2 | 225.7 | 489674.4 | <2.495 | 5.8 |
| UG012184-z41 | 11.62 | 146.68 | 237.14 | 3.10 | 40.91 | 8974.29 | 50.94 | 0.008 | 101.44 | 0.83 | 2.68 | 204.0 | 0.367 | 0.15 | 6.77 | 0.15 | 12.50 | 65.5 | 51.7 | 71.1 | 1615.1 | 462.5 | 487586.1 | 2.5 | 5.0 |
| UG012184-z42 | 20.24 | 137.73 | 227.84 | 2.84 | 40.80 | 9170.21 | 48.99 | 0.007 | 60.91 | 0.61 | 1.14 | 116.8 | <0.009 | 0.06 | 2.86 | 0.14 | 5.14 | 19.4 | 27.3 | 37.1 | 781.6 | 265.8 | 488974.7 | <2.526 | 4.1 |
| UG012184-z43 | 11.09 | 91.61 | 198.89 | 1.14 | 16.93 | 8666.75 | 37.56 | 0.004 | 106.42 | 1.54 | 0.73 | 169.2 | 2.556 | 0.04 | 2.35 | 0.30 | 6.21 | 34.3 | 46.7 | 72.4 | 1279.5 | 461.3 | 488614.5 | 7.4 | 10.0 |
| UG012184-z44 | 6.03 | 39.03 | 82.38 | 0.58 | 8.49 | 9743.03 | 15.84 | 0.046 | 46.16 | 0.80 | 0.62 | 133.2 | 0.646 | 0.03 | 1.22 | 0.17 | 3.06 | 19.6 | 19.3 | 37.8 | 518.1 | 199.7 | 489138.8 | 3.8 | 5.9 |
| UG012184-z45 | 6.14 | 55.99 | 126.38 | 0.81 | 11.09 | 8803.04 | 23.02 | 0.004 | 70.32 | 0.80 | 0.64 | 190.3 | 0.039 | 0.03 | 1.74 | 0.14 | 4.11 | 17.5 | 30.0 | 42.8 | 793.5 | 300.2 | 489296.8 | <2.845 | 8.0 |
| UG012184-z46 | 12.81 | 131.55 | 216.96 | 3.14 | 37.66 | 9168.55 | 46.36 | 0.004 | 95.91 | 0.95 | 2.89 | 170.6 | <0.011 | 0.14 | 6.80 | 0.18 | 11.25 | 63.3 | 47.0 | 74.3 | 1477.7 | 441.6 | 488034.8 | <2.859 | 5.5 |
| UG012186-z1 | 6.16 | 36.36 | 71.36 | 0.76 | 8.54 | 10582.81 | 13.97 | 0.025 | 37.45 | 0.90 | 0.67 | 118.3 | 1.088 | 0.04 | 1.47 | 0.10 | 3.01 | 19.8 | 16.6 | 40.7 | 467.2 | 163.5 | 488586.6 | 38.3 | 4.5 |
| UG012186-z10 | 8.58 | 31.49 | 67.11 | 0.49 | 6.85 | 11282.18 | 12.38 | 0.004 | 38.36 | 0.57 | 0.32 | 93.2 | 0.053 | 0.02 | 1.11 | 0.15 | 2.47 | 23.7 | 15.9 | 58.4 | 437.3 | 162.4 | 488188.0 | <2.462 | 3.4 |
| UG012186-z11 | 19.93 | 117.25 | 207.15 | 2.39 | 31.83 | 10541.99 | 43.24 | 0.005 | 99.43 | 1.33 | 2.26 | 129.3 | 0.023 | 0.11 | 5.55 | 0.19 | 9.84 | 75.5 | 46.6 | 103.9 | 1409.1 | 451.5 | 487068.4 | <2.468 | 5.4 |
| UG012186-z12 | 10.25 | 57.17 | 108.32 | 0.80 | 12.95 | 11209.05 | 21.09 | 0.061 | 57.94 | 0.93 | 0.66 | 115.3 | 2 | | | | | | | | | | | | |

Appendix C: Eastern Sunda arc zircon trace element chemistry

| Analysis ID | Ce | Dy | Er | Eu | Gd | Hf | Ho | La | Lu | Nb | Nd | P | Pb | Pr | Sm | Ta | Tb | Th | Tm | U | Y | Yb | Zr | Fe | Ti |
|--------------|-------|--------|--------|-------|-------|----------|-------|-------|--------|------|-------|--------|---------|-------|-------|-------|-------|--------|-------|--------|---------|-----------|-----------|--------|-------|
| UG012186 z13 | 4.48 | 29.65 | 58.23 | 0.54 | 8.02 | 10355.06 | 11.51 | 0.173 | 29.86 | 0.61 | 0.82 | 156.80 | 448.197 | 0.07 | 1.13 | 0.31 | 2.39 | 9.56 | 13.35 | 22.39 | 377.51 | 135.99 | 487876.64 | 285.06 | 43.15 |
| UG012186 z14 | 5.85 | 39.91 | 80.10 | 0.66 | 8.92 | 10267.08 | 15.69 | 0.004 | 46.89 | 0.64 | 0.41 | 171.41 | 17.41 | 0.016 | 1.30 | 0.10 | 3.01 | 13.63 | 19.70 | 34.56 | 538.41 | 201.04 | 488662.06 | <2.510 | 3.60 |
| UG012186 z15 | 15.16 | 71.47 | 148.45 | 1.05 | 17.01 | 10295.72 | 38.25 | 0.029 | 80.99 | 1.41 | 1.18 | 174.51 | 14.150 | 0.05 | 2.49 | 0.29 | 5.54 | 76.43 | 34.87 | 105.22 | 974.90 | 358.25 | 487769.43 | 32.73 | 6.11 |
| UG012186 z16 | 14.29 | 87.26 | 175.47 | 1.24 | 17.87 | 10123.88 | 34.39 | 0.011 | 89.15 | 1.16 | 0.88 | 269.12 | 15.713 | 0.02 | 2.69 | 0.12 | 6.10 | 50.24 | 40.31 | 87.25 | 1135.42 | 393.27 | 487488.11 | 38.08 | 11.62 |
| UG012186 z17 | 7.73 | 75.71 | 138.30 | 1.37 | 19.89 | 10481.58 | 28.24 | 0.007 | 65.41 | 0.79 | 1.35 | 204.38 | 1.028 | 0.08 | 2.99 | 0.14 | 6.18 | 27.73 | 31.26 | 49.04 | 927.17 | 301.80 | 487806.96 | 10.23 | 4.67 |
| UG012186 z18 | 17.67 | 45.82 | 96.38 | 0.92 | 10.45 | 10206.28 | 17.97 | 3.629 | 51.65 | 0.75 | 7.10 | 172.85 | 0.032 | 1.42 | 2.90 | 0.18 | 3.55 | 24.77 | 22.05 | 60.78 | 617.80 | 485441.41 | 28.12 | 5.06 | |
| UG012186 z19 | 6.55 | 37.54 | 80.49 | 0.54 | 7.61 | 10176.80 | 14.38 | 0.004 | 43.98 | 0.67 | 0.40 | 144.21 | 0.365 | 0.02 | 0.97 | 0.15 | 2.85 | 14.78 | 19.04 | 42.96 | 510.03 | 195.32 | 488681.15 | 2.90 | 5.01 |
| UG012186 z20 | 3.89 | 12.17 | 32.24 | 0.17 | 2.92 | 12433.42 | 5.36 | 0.004 | 38.10 | 0.37 | 0.14 | 77.39 | 0.037 | 0.07 | 0.25 | 0.04 | 0.90 | 17.49 | 8.68 | 54.08 | 214.90 | 117.92 | 487681.78 | <2.581 | 2.28 |
| UG012186 z21 | 9.33 | 52.58 | 105.28 | 0.82 | 10.92 | 10074.01 | 20.09 | 0.009 | 55.59 | 0.83 | 0.86 | 166.08 | <0.008 | 0.05 | 1.56 | 0.17 | 3.91 | 32.25 | 24.47 | 65.91 | 691.15 | 243.97 | 488540.71 | 3.93 | 4.29 |
| UG012186 z22 | 18.38 | 176.93 | 171.65 | 38.65 | 88.25 | 11339.64 | 46.11 | 1.210 | 71.64 | 1.04 | 45.16 | 603.60 | 13.156 | 3.92 | 43.29 | 18.51 | 48.58 | 34.29 | 85.48 | 86.48 | 1905.71 | 310.83 | 485410.01 | 18.80 | 5.20 |
| UG012186 z23 | 10.22 | 96.70 | 175.88 | 2.15 | 27.92 | 9307.03 | 35.69 | 0.006 | 82.29 | 0.78 | 1.92 | 215.06 | <0.008 | 0.10 | 3.89 | 0.16 | 8.22 | 40.32 | 38.00 | 63.71 | 1178.29 | 373.93 | 488276.01 | <2.410 | 4.59 |
| UG012186 z24 | 6.60 | 46.23 | 90.87 | 0.76 | 11.81 | 10344.28 | 17.23 | 0.004 | 48.95 | 0.64 | 0.65 | 156.74 | 0.207 | 0.03 | 1.68 | 0.12 | 3.43 | 20.62 | 21.26 | 39.78 | 594.90 | 213.28 | 488521.69 | 9.76 | 4.93 |
| UG012186 z25 | 27.54 | 180.59 | 337.29 | 2.39 | 40.72 | 8623.81 | 67.99 | 0.004 | 149.56 | 1.98 | 1.62 | 315.38 | 0.042 | 0.06 | 4.45 | 0.27 | 14.15 | 123.61 | 73.49 | 162.59 | 2227.53 | 696.62 | 486883.72 | <2.423 | 9.51 |
| UG012186 z26 | 5.28 | 41.94 | 89.73 | 0.77 | 9.30 | 9087.46 | 16.62 | 0.012 | 53.93 | 0.58 | 0.70 | 227.01 | 1.093 | 0.04 | 1.20 | 0.12 | 3.36 | 29.08 | 21.60 | 36.59 | 563.23 | 227.31 | 489355.03 | 7.25 | 4.81 |
| UG012186 z27 | 9.60 | 47.38 | 98.59 | 0.72 | 10.06 | 10623.23 | 18.39 | 0.004 | 57.76 | 0.85 | 0.68 | 115.75 | 0.016 | 0.02 | 1.55 | 0.14 | 3.60 | 40.74 | 23.52 | 66.96 | 641.50 | 245.72 | 488265.08 | <2.446 | 3.53 |
| UG012186 z28 | 37.84 | 206.90 | 359.44 | 3.20 | 51.59 | 9912.62 | 75.14 | 0.007 | 158.79 | 2.69 | 2.95 | 204.37 | 7.592 | 0.15 | 7.67 | 0.37 | 16.57 | 123.85 | 79.20 | 148.07 | 2482.97 | 742.23 | 485697.63 | 4.34 | 8.72 |
| UG012190 z1 | 5.96 | 62.11 | 118.39 | 1.33 | 15.17 | 9120.78 | 23.57 | 0.013 | 59.34 | 0.61 | 1.04 | 146.82 | 0.150 | 0.06 | 2.70 | 0.12 | 5.14 | 20.94 | 26.69 | 37.25 | 779.72 | 257.78 | 489188.75 | 9.45 | 5.43 |
| UG012190 z10 | 7.24 | 73.55 | 146.41 | 1.35 | 17.45 | 9055.16 | 28.59 | 0.029 | 76.41 | 1.00 | 1.08 | 209.77 | 1.805 | 0.06 | 2.43 | 0.16 | 5.79 | 43.80 | 33.71 | 48.74 | 943.95 | 335.30 | 488496.14 | 223.59 | 24.18 |
| UG012190 z11 | 7.07 | 61.96 | 127.50 | 0.90 | 12.81 | 8602.10 | 24.13 | 0.004 | 66.44 | 0.85 | 0.59 | 175.58 | <0.009 | 0.03 | 1.87 | 0.12 | 4.44 | 22.43 | 22.43 | 47.26 | 807.84 | 293.87 | 489453.35 | <2.533 | 5.72 |
| UG012190 z12 | 7.07 | 46.58 | 101.44 | 0.67 | 10.03 | 9994.25 | 18.89 | 0.007 | 60.49 | 0.79 | 0.43 | 94.76 | 0.340 | 0.02 | 1.32 | 0.20 | 3.30 | 27.60 | 25.31 | 41.97 | 641.50 | 285.59 | 488718.43 | 67.16 | 5.20 |
| UG012190 z13 | 4.84 | 36.80 | 75.69 | 0.58 | 7.81 | 9597.94 | 14.49 | 0.004 | 43.14 | 0.53 | 0.39 | 116.78 | 0.016 | 0.02 | 1.40 | 0.13 | 2.80 | 13.89 | 18.38 | 32.20 | 490.80 | 187.06 | 489345.96 | <2.520 | 4.85 |
| UG012190 z14 | 6.83 | 77.65 | 134.13 | 1.50 | 21.31 | 9890.94 | 28.24 | 0.018 | 63.40 | 0.52 | 1.69 | 162.09 | 0.047 | 0.09 | 3.32 | 0.11 | 6.49 | 30.46 | 30.37 | 41.58 | 907.54 | 293.41 | 488346.24 | 5.46 | 4.55 |
| UG012190 z15 | 4.04 | 32.81 | 71.35 | 0.59 | 7.34 | 8891.13 | 13.01 | 0.004 | 41.71 | 0.58 | 0.21 | 227.01 | <0.009 | 0.01 | 0.96 | 0.12 | 2.49 | 8.73 | 17.09 | 22.41 | 450.87 | 176.99 | 489668.46 | <2.538 | 4.59 |
| UG012190 z16 | 8.70 | 75.97 | 162.08 | 1.03 | 13.97 | 8741.27 | 30.98 | 0.004 | 85.53 | 1.18 | 24.01 | 180.05 | <0.009 | 0.03 | 2.13 | 0.23 | 5.57 | 24.01 | 33.78 | 56.00 | 1040.88 | 237.05 | 489180.03 | 22.73 | 16.98 |
| UG012190 z17 | 6.79 | 69.18 | 131.91 | 1.19 | 16.05 | 9275.83 | 26.34 | 0.004 | 63.11 | 0.71 | 1.25 | 146.46 | 0.011 | 0.05 | 2.80 | 0.13 | 5.36 | 25.81 | 29.62 | 44.64 | 872.45 | 289.41 | 488933.94 | <2.511 | 5.17 |
| UG012190 z18 | 8.00 | 66.45 | 143.88 | 0.92 | 13.49 | 8979.94 | 27.00 | 0.004 | 76.56 | 0.88 | 0.56 | 197.42 | <0.009 | 0.03 | 1.87 | 0.18 | 4.98 | 23.53 | 32.80 | 48.57 | 899.93 | 332.10 | 488977.75 | <2.518 | 5.34 |
| UG012190 z19 | 4.20 | 48.58 | 83.87 | 1.10 | 12.75 | 9397.47 | 17.35 | 0.004 | 39.72 | 0.38 | 1.07 | 77.81 | <0.009 | 0.03 | 2.25 | 0.06 | 4.06 | 13.05 | 18.77 | 22.66 | 566.96 | 183.20 | 489465.70 | <2.497 | 4.58 |
| UG012190 z20 | 5.13 | 45.16 | 98.02 | 0.54 | 8.98 | 9260.34 | 17.66 | 0.043 | 56.27 | 0.85 | 0.43 | 191.01 | 3.724 | 0.03 | 1.57 | 0.13 | 3.22 | 32.04 | 23.18 | 33.78 | 616.66 | 237.05 | 489180.03 | 22.73 | 16.98 |
| UG012190 z21 | 3.77 | 32.26 | 69.64 | 0.52 | 6.16 | 9319.49 | 12.87 | 0.004 | 40.27 | 0.44 | 0.34 | 175.74 | <0.009 | 0.00 | 0.83 | 0.09 | 2.34 | 8.86 | 16.23 | 19.97 | 434.15 | 173.48 | 489535.99 | <2.509 | 4.69 |
| UG012190 z22 | 9.15 | 64.52 | 143.45 | 1.06 | 12.63 | 9057.28 | 26.88 | 0.009 | 77.89 | 1.05 | 0.85 | 153.38 | 0.009 | 0.04 | 1.79 | 0.21 | 4.78 | 24.16 | 33.98 | 56.74 | 916.44 | 342.37 | 488973.37 | <2.557 | 6.10 |
| UG012190 z23 | 18.97 | 133.44 | 262.01 | 1.71 | 26.15 | 8653.73 | 51.53 | 0.004 | 119.94 | 2.00 | 0.90 | 229.70 | 0.562 | 0.06 | 3.43 | 0.33 | 9.84 | 82.02 | 58.03 | 109.30 | 1714.26 | 566.44 | 487864.74 | 7.21 | 9.35 |
| UG012190 z24 | 10.83 | 92.60 | 174.53 | 1.71 | 23.15 | 9623.35 | 34.88 | 0.004 | 85.90 | 1.09 | 1.83 | 152.87 | <0.009 | 0.08 | 3.66 | 0.23 | 7.30 | 42.59 | 40.51 | 67.88 | 1151.53 | 391.10 | 488174.72 | <2.537 | 5.39 |
| UG012190 z25 | 5.06 | 64.02 | 132.41 | 0.91 | 12.73 | 9151.66 | 25.41 | 0.004 | 71.08 | 0.97 | 0.59 | 171.21 | <0.009 | 0.03 | 2.08 | 0.22 | 4.63 | 25.51 | 31.19 | 56.69 | 865.12 | 309.67 | 488960.73 | <2.562 | 6.71 |
| UG012190 z26 | 8.66 | 43.47 | 94.79 | 0.66 | 8.47 | 9012.60 | 17.69 | 0.029 | 51.95 | 0.54 | 0.35 | 199.58 | 0.019 | 0.02 | 1.02 | 0.10 | 3.24 | 13.25 | 22.12 | 30.35 | 602.53 | 225.69 | 489449.78 | <2.523 | 5.15 |
| UG012190 z27 | 11.22 | 96.30 | 198.96 | 1.17 | 19.05 | 8648.93 | 38.32 | 0.004 | 100.98 | 1.49 | 0.94 | 196.18 | <0.009 | 0.04 | 2.59 | 0.25 | 6.71 | 37.28 | 45.73 | 74.64 | 1300.72 | 453.43 | 488585.37 | <2.487 | 8.34 |
| UG012190 z28 | 7.40 | 70.46 | 157.64 | 1.09 | 14.77 | 8331.10 | 29.69 | 0.004 | 85.37 | 1.06 | 0.68 | 213.18 | <0.009 | 0.03 | 2.24 | 0.18 | 4.96 | 24.30 | 36.89 | 56.33 | 983.62 | 375.24 | 489277.42 | <2.490 | 6.90 |
| UG012190 z29 | 7.92 | 58.82 | 131.88 | 0.82 | 12.24 | 9166.45 | 24.29 | 0.004 | 70.29 | 0.92 | 0.58 | 146.23 | 0.037 | 0.03 | 1.66 | 0.21 | 4.28 | 24.68 | 31.09 | 48.00 | 831.92 | 314.09 | 489043.11 | <2.536 | 6.54 |
| UG012190 z30 | 12.18 | 137.30 | 236.79 | 2.88 | 38.02 | 8984.99 | 49.50 | 0.013 | 104.25 | 0.83 | 2.58 | 193.52 | 0.014 | 0.13 | 6.04 | 0.15 | 11.35 | 57.18 | 51.25 | 74.50 | 1566.97 | 489.59 | 487930.19 | <2.597 | 4.94 |
| UG012190 z31 | 9.80 | 75.20 | 155.11 | 1.09 | 14.58 | 8999.52 | 30.06 | 0.004 | 79.40 | 1.18 | 0.68 | 147.71 | <0.009 | 0.02 | 1.91 | 0.17 | 5.40 | 28.67 | 35.34 | 56.15 | 1004.91 | 354.66 | 488901.12 | <2.479 | 6.59 |
| UG012190 z32 | 9.01 | 53.04 | 134.29 | 0.93 | 10.61 | 9407.72 | 23.54 | 0.004 | 85.62 | 1.10 | 0.62 | 122.44 | 0.013 | 0.03 | 1.62 | 0.22 | 3.65 | 25.14 | 33.17 | 67.55 | 816.50 | 353.74 | 488871.71 | <2.508 | 5.50 |
| UG012190 z33 | 4.79 | 38.89 | 85.92 | 0.39 | 7.52 | 10426.30 | 15.73 | 0.007 | 46.04 | 2.44 | 0.24 | 176.09 | 0.063 | 0.01 | 1.07 | 1.11 | 2.85 | 258.36 | 19.95 | 35.59 | 557.36 | 208.98 | 488326.35 | 3.84 | 4.95 |
| UG012190 z34 | 8.60 | 62.43 | 137.80 | 0.87 | 12.05 | 9360.37 | 25.76 | 0.004 | 74.79 | 1.22 | 0.57 | 208.55 | 0.123 | 0.03 | 1.91 | 0.21 | 4.47 | 28.00 | 32.88 | 54.95 | 879.26 | 328.55 | 488672.97 | 15.13 | 6.56 |
| UG012190 z35 | 5.62 | 45.53 | 96.70 | 0.66 | 9.13 | 9215.77 | 17.98 | 0.004 | 55.62 | 0.66 | 0.31 | 149.41 | <0.009 | 0.01 | 1.28 | 0.15 | 3.38 | 14.19 | 23.18 | 30.77 | 620.18 | 237.34 | 489359.19 | <2.541 | 5.47 |
| UG012190 z36 | 5.84 | 41.73 | 96.21 | 0.59 | 8.25 | 9425.62 | 17.27 | 0.004 | 56.60 | 0.75 | 0.42 | 119.07 | <0.009 | 0.02 | 1.25 | 0.19 | 2.98 | 14.05 | 23.17 | 35.76 | 607.62 | 242.29 | 489270.76 | <2.511 | 5.14 |
| UG012190 z37 | 14.17 | 77.32 | 174.67 | 0.97 | 15.59 | 96 | | | | | | | | | | | | | | | | | | | |

Appendix C: Eastern Sunda arc zircon trace element chemistry

| Analysis ID | Ce | Dy | Er | Eu | Gd | Hf | Ho | La | Lu | Nb | Nd | P | Pb | Pr | Sm | Ta | Tb | Tm | U | Y | Yb | Zr | Fe | Ti | |
|--------------|-------|--------|--------|------|-------|----------|-------|-------|--------|------|------|---------|--------|------|------|------|-------|--------|-------|--------|---------|--------|-----------|--------|-------|
| UG012193.z10 | 11.09 | 37.48 | 81.49 | 1.79 | 8.92 | 9923.74 | 15.42 | 3.329 | 47.03 | 0.65 | 7.87 | 1121.78 | 14.401 | 1.29 | 3.29 | 0.11 | 2.89 | 12.07 | 19.65 | 26.31 | 514.60 | 198.21 | 488712.19 | 247.47 | 4.60 |
| UG012193.z11 | 6.33 | 30.96 | 71.82 | 0.42 | 6.54 | 10536.04 | 13.50 | 0.015 | 38.66 | 0.54 | 0.36 | 91.36 | <0.026 | 0.01 | 0.94 | 0.18 | 2.50 | 15.77 | 17.08 | 45.99 | 444.13 | 167.87 | 488755.10 | <5.955 | 3.42 |
| UG012193.z12 | 6.52 | 75.57 | 136.10 | 1.70 | 19.60 | 9561.48 | 28.04 | 0.009 | 62.20 | 0.54 | 1.47 | 120.60 | 0.951 | 0.07 | 3.31 | 0.09 | 6.20 | 25.13 | 29.70 | 36.50 | 898.40 | 276.89 | 488599.88 | 108.82 | 5.79 |
| UG012193.z13 | 8.50 | 76.97 | 129.83 | 2.26 | 24.03 | 9193.43 | 27.16 | 0.027 | 59.25 | 0.81 | 2.10 | 159.12 | 6.584 | 0.14 | 4.23 | 0.11 | 6.90 | 37.24 | 28.28 | 51.54 | 880.71 | 263.28 | 488659.03 | 219.94 | 4.71 |
| UG012193.z14 | 7.68 | 85.30 | 150.18 | 1.72 | 21.21 | 9738.89 | 30.94 | 0.054 | 66.02 | 0.72 | 1.29 | 271.42 | 6.434 | 0.11 | 3.06 | 0.07 | 6.55 | 26.49 | 32.50 | 47.71 | 985.41 | 303.37 | 487744.30 | 280.69 | 96.60 |
| UG012193.z15 | 5.07 | 36.28 | 77.22 | 0.49 | 7.32 | 9825.67 | 14.55 | 0.004 | 43.08 | 0.58 | 0.21 | 161.00 | <0.008 | 0.01 | 0.90 | 0.11 | 2.62 | 13.09 | 18.33 | 33.05 | 485.12 | 185.45 | 488991.78 | 3.31 | 3.32 |
| UG012193.z16 | 9.59 | 83.35 | 159.93 | 0.97 | 15.34 | 8743.60 | 32.69 | 0.034 | 77.74 | 1.51 | 0.99 | 183.13 | 0.620 | 0.02 | 2.73 | 0.25 | 6.12 | 33.66 | 38.30 | 59.41 | 1049.61 | 366.50 | 488626.35 | 243.73 | 7.44 |
| UG012193.z17 | 5.79 | 39.94 | 87.82 | 0.48 | 8.57 | 10110.07 | 16.56 | 0.008 | 50.22 | 0.71 | 0.09 | 123.92 | <0.025 | 0.01 | 1.41 | 0.13 | 2.95 | 13.60 | 21.35 | 34.30 | 541.98 | 413.42 | 488851.19 | <5.449 | 4.06 |
| UG012193.z18 | 12.38 | 85.97 | 186.02 | 1.21 | 16.31 | 9240.58 | 35.55 | 0.009 | 91.93 | 1.37 | 0.96 | 212.98 | 0.310 | 0.03 | 2.02 | 0.16 | 6.38 | 45.24 | 42.25 | 71.38 | 1193.55 | 402.40 | 488255.29 | 16.92 | 10.97 |
| UG012193.z19 | 4.38 | 27.02 | 57.56 | 0.39 | 6.42 | 9805.69 | 11.52 | 0.008 | 31.22 | 0.55 | 0.21 | 135.40 | 0.028 | 0.01 | 0.85 | 0.10 | 2.02 | 10.45 | 14.13 | 26.12 | 354.36 | 135.19 | 488359.17 | 12.69 | 4.84 |
| UG012193.z20 | 4.27 | 37.85 | 70.56 | 0.72 | 9.14 | 9438.39 | 14.25 | 0.004 | 37.71 | 0.52 | 0.51 | 118.09 | <0.008 | 0.03 | 1.56 | 0.10 | 2.92 | 12.93 | 16.64 | 25.81 | 485.93 | 166.12 | 488917.00 | <2.416 | 5.43 |
| UG012193.z21 | 8.00 | 67.33 | 138.43 | 0.91 | 14.33 | 9294.75 | 27.02 | 0.054 | 67.02 | 0.72 | 1.08 | 246.95 | 0.337 | 0.06 | 1.93 | 0.18 | 5.14 | 29.47 | 30.95 | 48.18 | 874.48 | 299.63 | 488639.84 | 43.32 | 6.78 |
| UG012193.z22 | 3.93 | 31.24 | 64.61 | 0.49 | 6.52 | 9595.58 | 12.24 | 0.004 | 37.57 | 0.50 | 0.31 | 116.91 | <0.008 | 0.02 | 1.02 | 0.10 | 2.39 | 9.66 | 15.44 | 23.48 | 414.50 | 156.61 | 489481.03 | <2.388 | 4.65 |
| UG012193.z23 | 10.62 | 89.53 | 187.75 | 1.23 | 17.11 | 8688.08 | 35.64 | 0.008 | 93.37 | 1.20 | 0.82 | 205.37 | 0.330 | 0.04 | 2.18 | 0.18 | 6.49 | 33.67 | 42.24 | 66.47 | 1199.56 | 412.85 | 488677.14 | 20.91 | 9.37 |
| UG012193.z24 | 7.56 | 55.51 | 117.37 | 0.84 | 11.53 | 9243.42 | 22.54 | 0.011 | 64.01 | 0.72 | 0.67 | 203.30 | <0.008 | 0.05 | 1.47 | 0.13 | 4.21 | 22.95 | 27.79 | 43.57 | 759.90 | 270.35 | 489000.55 | 9.31 | 5.66 |
| UG012193.z25 | 16.82 | 136.86 | 286.15 | 2.05 | 29.44 | 8910.02 | 52.24 | 0.005 | 122.93 | 1.63 | 1.46 | 216.97 | 0.014 | 0.07 | 3.99 | 0.25 | 10.59 | 63.10 | 58.95 | 96.82 | 1733.14 | 565.53 | 487650.69 | <2.369 | 7.56 |
| UG012193.z26 | 8.01 | 58.45 | 132.15 | 0.86 | 11.89 | 9228.71 | 24.32 | 0.004 | 74.68 | 1.02 | 0.61 | 138.93 | <0.008 | 0.02 | 1.46 | 0.17 | 4.16 | 20.34 | 32.00 | 48.78 | 836.30 | 326.71 | 488992.87 | 2.70 | 5.83 |
| UG012193.z27 | 4.64 | 38.15 | 79.55 | 0.56 | 6.56 | 9260.81 | 14.93 | 0.004 | 44.07 | 0.56 | 0.29 | 181.84 | 0.078 | 0.01 | 1.23 | 0.12 | 2.81 | 13.09 | 18.49 | 28.87 | 508.80 | 191.29 | 489413.71 | 26.22 | 4.41 |
| UG012193.z28 | 11.44 | 88.18 | 186.30 | 1.11 | 17.64 | 8958.81 | 35.49 | 0.004 | 90.72 | 1.34 | 0.79 | 184.27 | <0.008 | 0.04 | 2.49 | 0.22 | 6.40 | 35.37 | 41.84 | 66.54 | 1191.97 | 410.74 | 488552.39 | 3.95 | 6.91 |
| UG012193.z29 | 3.75 | 33.90 | 72.47 | 0.58 | 7.44 | 10089.51 | 13.30 | 0.017 | 38.93 | 0.52 | 0.37 | 128.47 | 5.613 | 0.02 | 1.22 | 0.10 | 2.55 | 9.83 | 16.48 | 23.93 | 460.97 | 164.16 | 488956.30 | 315.97 | 5.30 |
| UG012195.z10 | 4.41 | 46.10 | 85.20 | 0.93 | 11.76 | 9200.08 | 17.33 | 0.004 | 42.90 | 0.46 | 0.92 | 120.81 | 0.805 | 0.05 | 1.91 | 0.12 | 3.67 | 14.28 | 19.29 | 25.52 | 564.89 | 194.04 | 488937.04 | <2.618 | 6.39 |
| UG012195.z11 | 4.78 | 12.22 | 26.70 | 0.21 | 2.76 | 10996.08 | 4.85 | 0.004 | 16.78 | 0.48 | 0.05 | 58.39 | 0.014 | 0.00 | 0.29 | 0.10 | 0.90 | 11.73 | 6.48 | 33.28 | 171.04 | 70.13 | 488923.70 | <2.556 | 3.15 |
| UG012195.z12 | 7.23 | 59.17 | 136.26 | 0.90 | 11.80 | 9156.38 | 24.57 | 0.004 | 77.08 | 1.07 | 0.33 | 131.25 | 0.225 | 0.02 | 1.85 | 0.20 | 4.06 | 17.98 | 32.12 | 48.87 | 844.04 | 333.39 | 489048.99 | <2.361 | 6.03 |
| UG012195.z13 | 2.61 | 16.08 | 34.16 | 0.18 | 2.64 | 10441.87 | 6.36 | 0.010 | 19.40 | 0.41 | 0.23 | 46.76 | 0.107 | 0.01 | 0.47 | 0.04 | 1.31 | 4.21 | 8.28 | 12.20 | 213.40 | 81.20 | 489319.35 | <0.662 | 4.19 |
| UG012195.z14 | 6.33 | 87.72 | 154.52 | 2.00 | 24.37 | 9341.48 | 31.52 | 0.004 | 70.87 | 0.50 | 2.03 | 119.09 | <0.008 | 0.10 | 3.86 | 0.10 | 7.30 | 28.27 | 33.71 | 45.16 | 1028.32 | 322.17 | 488700.40 | <2.391 | 4.49 |
| UG012195.z15 | 23.50 | 208.95 | 355.71 | 3.64 | 53.69 | 8285.63 | 74.53 | 0.111 | 147.63 | 1.56 | 2.91 | 295.32 | 0.039 | 0.19 | 7.45 | 0.24 | 17.00 | 115.83 | 76.25 | 121.94 | 2412.07 | 699.58 | 486910.03 | <2.362 | 10.53 |
| UG012195.z16 | 5.88 | 63.48 | 103.01 | 1.58 | 18.66 | 9514.72 | 21.71 | 0.011 | 47.74 | 0.26 | 1.91 | 70.88 | 0.372 | 0.12 | 2.94 | 0.10 | 4.93 | 25.52 | 22.92 | 34.37 | 713.57 | 211.66 | 489109.25 | 49.86 | 5.82 |
| UG012195.z17 | 8.38 | 79.84 | 164.89 | 1.22 | 16.04 | 8634.79 | 31.64 | 0.004 | 84.72 | 1.01 | 0.89 | 207.75 | 0.160 | 0.04 | 2.70 | 0.19 | 5.84 | 27.11 | 37.03 | 54.80 | 1043.02 | 376.61 | 488633.62 | <2.433 | 7.01 |
| UG012195.z18 | 6.85 | 79.68 | 139.49 | 1.98 | 22.08 | 10388.23 | 28.72 | 0.005 | 66.04 | 0.46 | 1.95 | 78.05 | 0.023 | 0.09 | 4.02 | 0.11 | 6.43 | 35.13 | 30.91 | 55.52 | 934.29 | 298.90 | 488121.73 | <2.374 | 3.54 |
| UG012195.z19 | 5.20 | 67.77 | 118.58 | 1.54 | 17.02 | 9246.71 | 24.14 | 0.007 | 58.22 | 0.52 | 1.33 | 111.68 | 0.310 | 0.07 | 2.77 | 0.10 | 5.32 | 19.10 | 26.89 | 32.70 | 799.54 | 261.50 | 489107.25 | 34.68 | 4.34 |
| UG012195.z20 | 17.39 | 135.63 | 289.46 | 1.54 | 22.91 | 8544.13 | 56.05 | 0.031 | 135.44 | 2.00 | 0.98 | 299.07 | 0.555 | 0.08 | 2.88 | 0.35 | 8.77 | 70.50 | 64.41 | 110.43 | 1845.17 | 602.90 | 487507.27 | 51.10 | 12.70 |
| UG012195.z21 | 9.95 | 73.95 | 169.35 | 0.91 | 13.48 | 9120.91 | 30.10 | 0.004 | 88.96 | 1.49 | 0.71 | 142.87 | 0.014 | 0.03 | 2.04 | 0.19 | 5.00 | 29.50 | 39.32 | 64.61 | 1041.51 | 389.30 | 488727.27 | <2.359 | 8.16 |
| UG012195.z22 | 24.75 | 221.90 | 401.69 | 2.86 | 47.02 | 8709.68 | 81.89 | 0.005 | 164.65 | 1.98 | 2.00 | 264.19 | 0.175 | 0.10 | 5.35 | 0.33 | 16.94 | 130.73 | 85.26 | 142.53 | 2281.59 | 763.62 | 486221.30 | <2.384 | 13.43 |
| UG012195.z23 | 14.30 | 193.32 | 315.42 | 3.83 | 54.59 | 9310.66 | 66.45 | 0.021 | 127.71 | 1.11 | 3.66 | 199.53 | 0.242 | 0.20 | 8.42 | 0.15 | 15.88 | 94.95 | 65.36 | 98.92 | 2124.06 | 604.67 | 486766.44 | 31.07 | 5.69 |
| UG012195.z24 | 3.53 | 33.20 | 70.54 | 0.58 | 6.75 | 8994.80 | 13.23 | 0.006 | 40.37 | 0.52 | 0.43 | 138.38 | 4.657 | 0.02 | 0.88 | 0.10 | 2.60 | 8.78 | 16.75 | 23.50 | 451.96 | 173.19 | 489355.45 | 357.11 | 4.06 |
| UG012195.z25 | 4.52 | 37.73 | 77.90 | 0.67 | 8.98 | 9350.28 | 14.98 | 0.009 | 42.92 | 0.53 | 0.57 | 115.09 | <0.008 | 0.02 | 1.30 | 0.14 | 3.12 | 12.98 | 17.92 | 27.00 | 481.44 | 184.43 | 489541.25 | 5.77 | 4.65 |
| UG012195.z26 | 4.11 | 31.95 | 69.44 | 0.57 | 6.64 | 9467.28 | 12.93 | 0.004 | 41.66 | 0.54 | 0.31 | 99.98 | <0.008 | 0.01 | 1.06 | 0.12 | 2.50 | 10.02 | 17.00 | 23.64 | 442.76 | 176.65 | 488542.57 | <2.424 | 4.50 |
| UG012195.z27 | 22.01 | 81.74 | 144.56 | 1.24 | 18.88 | 15871.84 | 28.71 | 0.021 | 73.83 | 1.92 | 1.03 | 146.56 | 0.175 | 0.04 | 2.61 | 0.74 | 6.40 | 781.53 | 33.19 | 778.99 | 981.92 | 328.26 | 488692.27 | 23.24 | 4.16 |
| UG012195.z28 | 6.12 | 40.12 | 92.44 | 0.61 | 8.24 | 9844.19 | 16.59 | 0.004 | 58.83 | 0.77 | 0.39 | 82.71 | 0.052 | 0.01 | 1.08 | 0.16 | 2.95 | 13.49 | 23.30 | 38.28 | 581.21 | 250.14 | 489051.24 | <2.352 | 3.66 |
| UG012195.z29 | 9.16 | 42.80 | 86.08 | 0.62 | 8.50 | 10381.98 | 16.67 | 0.004 | 43.17 | 0.63 | 0.48 | 108.61 | <0.009 | 0.02 | 1.31 | 0.17 | 3.29 | 42.20 | 19.77 | 75.77 | 554.51 | 194.76 | 488631.14 | <2.427 | 4.15 |
| UG012195.z30 | 9.45 | 79.92 | 179.38 | 1.21 | 14.75 | 8677.70 | 33.69 | 0.004 | 93.66 | 1.04 | 0.88 | 142.32 | 0.097 | 0.04 | 2.34 | 0.21 | 5.70 | 27.89 | 41.59 | 63.20 | 1118.12 | 411.62 | 488912.32 | 27.56 | 7.92 |
| UG012195.z31 | 4.13 | 15.17 | 29.77 | 0.29 | 3.29 | 12354.29 | 5.66 | 0.004 | 18.63 | 0.41 | 0.18 | 54.57 | <0.008 | 0.01 | 0.49 | 0.08 | 1.18 | 11.26 | 7.09 | 30.18 | 198.59 | 77.79 | 487867.47 | <2.361 | 3.41 |
| UG012195.z32 | 3.99 | 27.68 | 65.62 | 0.48 | 5.00 | 9904.35 | 11.61 | 0.008 | 40.06 | 0.58 | 0.25 | 101.59 | 4.238 | 0.01 | 0.58 | 0.09 | 2.03 | 9.17 | 16.00 | 27.28 | 402.72 | 165.14 | 489185.86 | 71.53 | 2.96 |
| UG012195.z33 | 8.37 | 70.43 | 154.21 | 1.01 | 14.50 | 8635.32 | 29.95 | 0.023 | 78.13 | 0.93 | 0.61 | 198.30 | 0.032 | 0.01 | 1.65 | 0.17 | 4.85 | 27.19 | 34.90 | 54.72 | 965.44 | 340.62 | 489135.79 | <6.584 | 7.11 |
| UG012195.z34 | 3.88 | 35.94 | 69.40 | 0.69 | 8.97 | 9245.41 | 13.49 | 0.004 | 37.4 | | | | | | | | | | | | | | | | |

Appendix C: Eastern Sunda arc zircon trace element chemistry

| Analysis ID | Ce | Dy | Er | Eu | Gd | Hf | Ho | La | Lu | Nb | Nd | P | Pb | Pr | Sm | Ta | Tb | Th | Tm | U | Y | Yb | Zr | Fe | Ti |
|--------------|--------|--------|--------|------|-------|----------|-------|--------|--------|-------|-------|---------|--------|-------|-------|------|-------|--------|-------|--------|---------|-----------|-----------|---------|-------|
| UG012196-z14 | 4.30 | 36.52 | 78.74 | 0.56 | 6.93 | 10291.22 | 14.85 | 0.008 | 45.10 | 0.71 | 0.26 | 144.02 | 1.027 | 0.01 | 0.89 | 0.13 | 2.56 | 50.20 | 19.50 | 27.27 | 485.90 | 202.52 | 488709.35 | 20.41 | 4.24 |
| UG012196-z15 | 23.02 | 134.89 | 279.72 | 1.81 | 27.78 | 9295.50 | 55.49 | 0.062 | 132.13 | 2.35 | 1.16 | 165.04 | 18.020 | 0.06 | 3.29 | 0.37 | 9.97 | 84.14 | 62.42 | 116.34 | 1818.17 | 606.15 | 487192.01 | 46.18 | 19.13 |
| UG012196-z16 | 9.99 | 99.40 | 185.87 | 2.01 | 24.46 | 8602.76 | 38.41 | 0.136 | 86.93 | 0.79 | 1.72 | 258.11 | 34.401 | 0.11 | 3.98 | 0.13 | 7.66 | 57.16 | 40.71 | 62.45 | 1219.51 | 393.78 | 486782.59 | 1372.26 | 6.93 |
| UG012196-z17 | 11.34 | 93.35 | 177.83 | 1.78 | 23.17 | 9650.59 | 36.38 | 0.008 | 78.62 | 0.98 | 0.57 | 127.76 | <0.023 | 0.06 | 3.26 | 0.15 | 7.52 | 39.93 | 37.95 | 58.42 | 1151.66 | 366.32 | 488199.17 | <5.473 | 6.08 |
| UG012196-z18 | 5.98 | 48.86 | 113.27 | 0.82 | 10.56 | 9661.46 | 21.71 | 0.008 | 60.72 | 0.98 | 0.57 | 127.76 | 0.052 | 0.04 | 1.86 | 0.22 | 3.85 | 30.83 | 26.42 | 44.95 | 695.15 | 261.25 | 488923.13 | <5.459 | 4.99 |
| UG012196-z19 | 14.68 | 107.50 | 211.65 | 1.19 | 20.41 | 9728.87 | 41.90 | 0.010 | 102.81 | 1.16 | 1.13 | 166.00 | 0.120 | 0.03 | 3.21 | 0.31 | 7.52 | 46.60 | 49.44 | 77.41 | 1374.60 | 479.64 | 487679.10 | 13.34 | 8.17 |
| UG012196-z20 | 4.47 | 28.48 | 62.95 | 0.42 | 5.73 | 10390.98 | 11.48 | 0.004 | 38.52 | 0.41 | 0.18 | 87.49 | <0.008 | 0.00 | 0.60 | 0.09 | 2.00 | 9.11 | 15.09 | 396.32 | 161.21 | 487895.45 | <3.344 | 2.86 | |
| UG012196-z21 | 18.49 | 146.59 | 293.96 | 1.88 | 30.34 | 8736.92 | 60.09 | 0.004 | 128.60 | 1.32 | 1.22 | 289.30 | <0.023 | 0.05 | 3.29 | 0.26 | 11.21 | 72.07 | 64.92 | 105.23 | 1866.60 | 602.74 | 487384.04 | <5.489 | 9.96 |
| UG012196-z22 | 12.21 | 75.17 | 160.73 | 0.98 | 14.16 | 10057.56 | 30.37 | 0.004 | 82.96 | 1.01 | 0.66 | 136.10 | 0.025 | 0.03 | 2.06 | 0.24 | 5.63 | 41.17 | 37.04 | 71.57 | 1024.91 | 375.88 | 488061.22 | <2.353 | 5.33 |
| UG012196-z23 | 34.19 | 137.87 | 317.52 | 1.84 | 27.69 | 12267.04 | 57.82 | 0.049 | 183.59 | 2.77 | 1.19 | 241.52 | 0.351 | 0.06 | 3.34 | 0.44 | 10.10 | 287.64 | 76.58 | 335.76 | 1980.92 | 778.39 | 484120.04 | 63.89 | 9.73 |
| UG012196-z24 | 6.46 | 44.78 | 79.82 | 1.26 | 13.51 | 10209.12 | 16.35 | 0.008 | 39.39 | 0.44 | 0.73 | 124.31 | 0.102 | 0.04 | 2.22 | 0.09 | 3.73 | 25.65 | 17.73 | 36.27 | 523.50 | 173.56 | 488821.32 | <5.622 | 4.38 |
| UG012196-z25 | 10.95 | 98.85 | 181.10 | 2.02 | 25.24 | 8954.85 | 36.05 | 0.006 | 90.34 | 0.78 | 1.97 | 216.73 | 0.016 | 0.09 | 4.18 | 0.17 | 7.88 | 41.30 | 41.14 | 68.32 | 1207.87 | 400.49 | 488464.67 | 6.59 | 4.42 |
| UG012196-z26 | 9.63 | 89.10 | 174.04 | 1.44 | 19.11 | 9037.23 | 34.78 | 0.006 | 87.86 | 1.00 | 1.10 | 180.05 | 0.016 | 0.08 | 2.91 | 0.15 | 6.94 | 35.30 | 40.35 | 57.25 | 1146.73 | 389.66 | 488587.91 | <2.373 | 6.01 |
| UG012196-z27 | 84.65 | 189.36 | 357.32 | 1.82 | 40.90 | 12286.89 | 71.71 | 0.240 | 135.69 | 15.19 | 5.56 | 396.16 | 14.089 | 0.52 | 8.20 | 3.25 | 14.36 | 402.16 | 76.58 | 321.40 | 2327.08 | 676.89 | 488308.14 | 73.23 | 7.04 |
| UG012196-z28 | 10.94 | 95.70 | 187.07 | 1.52 | 20.77 | 8815.89 | 36.70 | 0.006 | 91.01 | 1.08 | 1.18 | 196.17 | 0.017 | 0.05 | 2.97 | 0.22 | 7.24 | 44.11 | 42.56 | 65.84 | 1125.88 | 409.94 | 488571.51 | 20.51 | 8.63 |
| UG012196-z29 | 6.01 | 57.07 | 114.04 | 0.99 | 12.81 | 9493.05 | 21.42 | 0.005 | 62.20 | 0.88 | 0.97 | 121.77 | 0.011 | 0.04 | 1.92 | 0.23 | 4.33 | 25.16 | 26.60 | 41.21 | 741.78 | 268.77 | 489004.22 | <2.336 | 5.54 |
| UG012196-z30 | 4.79 | 51.94 | 85.98 | 1.11 | 14.39 | 9494.95 | 18.06 | 0.006 | 38.52 | 0.43 | 1.05 | 63.80 | <0.012 | 0.04 | 2.10 | 0.08 | 4.07 | 13.86 | 19.06 | 25.33 | 573.26 | 182.73 | 489426.15 | <3.387 | 4.68 |
| UG012196-z31 | 6.02 | 51.19 | 96.79 | 0.97 | 12.80 | 9437.74 | 19.24 | 0.083 | 51.42 | 0.66 | 1.37 | 132.94 | 2.788 | 0.07 | 2.07 | 0.16 | 4.04 | 33.94 | 22.82 | 47.27 | 628.84 | 226.16 | 487895.68 | 143.33 | 7.36 |
| UG012197-z1 | 11.02 | 81.17 | 171.21 | 1.17 | 16.13 | 9758.18 | 33.57 | 0.011 | 87.93 | 1.34 | 0.93 | 297.63 | 0.230 | 0.03 | 2.78 | 0.30 | 5.95 | 52.68 | 40.40 | 73.23 | 1071.26 | 382.75 | 487825.96 | 40.49 | 7.55 |
| UG012197-z10 | 10.33 | 78.33 | 182.34 | 1.11 | 15.35 | 8767.91 | 33.04 | 0.005 | 96.05 | 1.39 | 0.80 | 161.85 | <0.010 | 0.04 | 2.31 | 0.26 | 5.33 | 25.95 | 42.78 | 67.21 | 1143.05 | 432.36 | 488795.73 | <2.821 | 7.50 |
| UG012197-z11 | 16.26 | 112.94 | 238.78 | 1.50 | 21.04 | 9092.76 | 44.87 | 0.006 | 116.19 | 1.93 | 0.96 | 205.58 | 0.299 | 0.05 | 2.72 | 0.33 | 8.04 | 55.25 | 54.49 | 97.85 | 1530.20 | 531.90 | 487766.82 | 52.93 | 7.78 |
| UG012197-z12 | 15.27 | 118.05 | 234.70 | 1.60 | 24.48 | 8766.08 | 46.77 | 0.005 | 111.33 | 1.71 | 1.10 | 233.87 | <0.010 | 0.06 | 3.02 | 0.25 | 8.60 | 51.87 | 53.18 | 85.78 | 1518.60 | 516.66 | 488060.43 | <2.879 | 8.59 |
| UG012197-z13 | 7.07 | 48.66 | 115.76 | 0.77 | 9.32 | 9738.25 | 21.22 | 0.008 | 66.87 | 1.10 | 0.56 | 154.26 | <0.027 | 0.03 | 1.80 | 0.21 | 3.63 | 17.91 | 28.04 | 51.56 | 700.19 | 292.88 | 488780.22 | <5.636 | 5.51 |
| UG012197-z14 | 8.49 | 85.96 | 154.41 | 1.63 | 23.03 | 8919.38 | 32.42 | 0.008 | 76.03 | 0.76 | 1.21 | 283.35 | <0.027 | 0.07 | 4.09 | 0.12 | 7.12 | 31.79 | 35.02 | 52.73 | 1034.53 | 344.29 | 488657.70 | <5.662 | 5.01 |
| UG012197-z15 | 9.59 | 75.34 | 160.16 | 1.09 | 15.01 | 8806.91 | 30.04 | 0.034 | 83.65 | 1.23 | 0.80 | 180.73 | 0.028 | 0.04 | 2.15 | 0.23 | 5.31 | 30.96 | 36.77 | 56.50 | 1021.34 | 367.65 | 488834.53 | 6.16 | 7.42 |
| UG012197-z16 | 6.02 | 41.38 | 91.06 | 0.63 | 8.78 | 9016.84 | 17.14 | 0.004 | 48.33 | 0.61 | 0.48 | 141.28 | <0.008 | 0.03 | 1.15 | 0.13 | 3.06 | 18.15 | 20.91 | 47.85 | 578.85 | 213.54 | 489592.10 | 3.69 | 5.82 |
| UG012197-z17 | 172.07 | 67.09 | 106.68 | 2.02 | 27.34 | 10980.10 | 21.90 | 64.593 | 46.34 | 2.46 | 95.40 | 79.3004 | 0.376 | 21.35 | 18.71 | 1.23 | 6.06 | 221.06 | 24.32 | 473.22 | 729.50 | 221.45 | 471025.82 | 547.88 | 8.54 |
| UG012197-z18 | 8.30 | 59.55 | 127.44 | 0.84 | 12.79 | 9108.82 | 23.98 | 0.017 | 66.35 | 0.84 | 1.00 | 259.62 | <0.012 | 0.03 | 1.68 | 0.20 | 4.55 | 29.83 | 28.92 | 49.26 | 818.82 | 286.77 | 488868.19 | 6.49 | 7.82 |
| UG012197-z19 | 4.47 | 28.26 | 60.89 | 0.38 | 6.68 | 9780.66 | 11.12 | 0.012 | 34.11 | 0.59 | 0.48 | 110.35 | <0.010 | 0.03 | 0.69 | 0.13 | 2.08 | 11.14 | 14.50 | 24.36 | 385.77 | 146.74 | 489394.03 | 3.15 | 4.90 |
| UG012197-z20 | 4.72 | 35.45 | 74.77 | 0.46 | 7.35 | 9506.16 | 14.19 | 0.009 | 44.52 | 0.69 | 0.67 | 144.93 | 0.321 | 0.01 | 1.06 | 0.13 | 2.72 | 16.89 | 19.67 | 35.72 | 464.64 | 192.37 | 489359.03 | 12.81 | 5.96 |
| UG012197-z21 | 9.07 | 54.51 | 125.27 | 0.82 | 11.59 | 9613.00 | 22.74 | 0.005 | 66.45 | 1.03 | 0.54 | 153.30 | 0.033 | 0.03 | 1.80 | 0.22 | 3.90 | 29.35 | 28.93 | 66.72 | 795.30 | 295.64 | 488629.74 | 85.35 | 5.71 |
| UG012197-z22 | 11.04 | 83.35 | 168.58 | 1.17 | 16.95 | 9004.95 | 32.36 | 0.004 | 83.06 | 1.01 | 0.70 | 240.54 | 0.011 | 0.02 | 2.26 | 0.19 | 6.28 | 40.85 | 37.77 | 63.42 | 1085.92 | 374.29 | 488671.70 | 4.13 | 6.79 |
| UG012197-z23 | 7.44 | 72.96 | 145.25 | 1.07 | 16.18 | 9191.10 | 28.45 | 0.010 | 70.38 | 0.86 | 0.98 | 281.82 | 0.075 | 0.05 | 2.23 | 0.13 | 5.30 | 25.99 | 32.59 | 39.66 | 923.03 | 312.54 | 488628.47 | 7.27 | 8.06 |
| UG012197-z24 | 14.64 | 77.18 | 161.85 | 1.17 | 15.98 | 9940.10 | 31.50 | 0.035 | 82.51 | 1.39 | 1.15 | 217.35 | 0.055 | 0.08 | 2.25 | 0.20 | 5.53 | 53.66 | 37.15 | 84.28 | 1035.94 | 360.05 | 487964.61 | <5.343 | 5.77 |
| UG012197-z25 | 4.09 | 34.37 | 73.46 | 0.52 | 8.40 | 9689.73 | 13.79 | 0.017 | 38.27 | 0.58 | 0.79 | 153.45 | 0.621 | 0.03 | 0.93 | 0.12 | 2.49 | 16.34 | 16.37 | 23.47 | 458.35 | 166.62 | 489224.45 | 31.63 | 4.80 |
| UG012197-z26 | 10.75 | 72.94 | 147.66 | 0.98 | 15.54 | 9323.68 | 28.88 | 0.006 | 77.05 | 1.02 | 0.78 | 170.33 | 0.013 | 0.04 | 2.11 | 0.23 | 5.28 | 38.08 | 34.70 | 54.50 | 963.15 | 343.39 | 488662.41 | 3.52 | 6.35 |
| UG012197-z27 | 14.17 | 157.17 | 266.26 | 2.84 | 39.39 | 9000.32 | 56.29 | 0.011 | 107.17 | 1.03 | 2.67 | 200.83 | 0.038 | 0.15 | 6.21 | 0.18 | 12.90 | 84.46 | 56.60 | 85.94 | 1804.61 | 513.98 | 487538.62 | 15.80 | 8.06 |
| UG012197-z28 | 6.30 | 50.15 | 112.07 | 0.66 | 9.56 | 9467.53 | 21.13 | 0.008 | 61.43 | 1.04 | 0.54 | 160.19 | 0.186 | 0.02 | 1.22 | 0.16 | 3.62 | 16.20 | 26.51 | 37.32 | 695.96 | 273.09 | 488999.17 | <5.711 | 13.72 |
| UG012197-z29 | 5.78 | 61.23 | 114.55 | 1.30 | 15.19 | 9430.72 | 23.29 | 0.008 | 56.61 | 0.51 | 0.96 | 143.47 | <0.027 | 0.05 | 2.21 | 0.11 | 5.09 | 24.84 | 25.81 | 40.21 | 734.40 | 247.80 | 489029.95 | <5.700 | 5.70 |
| UG012198-z1 | 13.62 | 109.62 | 232.66 | 1.57 | 21.86 | 8958.65 | 44.22 | 0.016 | 112.70 | 1.42 | 1.35 | 298.42 | 0.074 | 0.10 | 2.42 | 0.31 | 8.06 | 59.52 | 53.48 | 97.02 | 1459.71 | 504.24 | 487945.82 | 7.03 | 9.65 |
| UG012198-z10 | | | | | | | | | | | | | | | | | | | | | | | | | |

Appendix C: Eastern Sunda arc zircon trace element chemistry

| Analysis ID | Ce | Dy | Er | Eu | Gd | Hf | Ho | La | Lu | Nb | Nd | P | Pb | Pr | Sm | Ta | Tb | Th | Tm | U | Y | Yb | Zr | Fe | Ti |
|--------------|-------|--------|--------|------|--------|----------|--------|--------|--------|-------|-------|---------|--------|------|-------|-------|-------|---------|--------|--------|---------|-----------|-----------|--------|-------|
| UG012198_Z16 | 20.25 | 186.41 | 364.74 | 3.81 | 47.32 | 8394.13 | 72.02 | 0.010 | 168.53 | 1.17 | 3.59 | 338.66 | 0.045 | 0.20 | 8.11 | 0.23 | 14.97 | 188.02 | 78.46 | 95.00 | 2248.86 | 790.21 | 488816.37 | <2.517 | 6.67 |
| UG012198_Z17 | 4.76 | 35.23 | 189.70 | 0.51 | 7.12 | 9123.24 | 15.33 | 0.018 | 55.15 | 0.65 | 0.53 | 170.88 | 0.020 | 0.02 | 0.97 | 0.10 | 2.39 | 23.03 | 21.47 | 26.73 | 520.69 | 231.05 | 489505.43 | <2.960 | 8.08 |
| UG012198_Z18 | 22.45 | 148.88 | 148.88 | 1.58 | 18.25 | 9031.98 | 28.81 | 0.003 | 80.98 | 1.66 | 1.60 | 174.74 | 0.114 | 0.08 | 3.31 | 0.27 | 5.80 | 376.94 | 34.02 | 88.90 | 904.95 | 352.51 | 48652.87 | <2.519 | 6.80 |
| UG012198_Z19 | 4.88 | 44.27 | 112.01 | 0.53 | 7.72 | 8974.35 | 19.33 | 0.007 | 68.15 | 0.66 | 0.42 | 198.29 | 0.030 | 0.02 | 1.02 | 0.10 | 3.05 | 19.11 | 25.77 | 24.66 | 652.35 | 282.84 | 489358.61 | <6.281 | 4.39 |
| UG012198_Z2 | 5.01 | 31.52 | 82.80 | 0.36 | 5.38 | 10476.82 | 14.08 | 0.004 | 51.73 | 0.67 | 0.34 | 141.11 | 0.085 | 0.01 | 0.78 | 0.10 | 2.22 | 23.93 | 20.04 | 30.35 | 400.47 | 224.24 | 489558.49 | 27.84 | 4.74 |
| UG012198_Z20 | 5.84 | 31.60 | 81.04 | 0.49 | 6.17 | 8812.52 | 13.37 | 0.007 | 56.37 | 0.67 | 0.29 | 98.28 | 0.068 | 0.01 | 0.88 | 0.16 | 2.21 | 27.65 | 19.51 | 25.23 | 475.85 | 214.66 | 489951.78 | <6.580 | 5.51 |
| UG012198_Z21 | 17.47 | 123.17 | 299.15 | 1.33 | 20.53 | 8917.37 | 53.79 | 0.003 | 152.76 | 1.99 | 1.02 | 244.57 | 0.039 | 0.05 | 2.64 | 0.27 | 8.18 | 111.72 | 67.38 | 88.09 | 1756.15 | 696.87 | 487402.02 | <2.529 | 9.52 |
| UG012198_Z22 | 8.24 | 59.30 | 149.49 | 0.71 | 9.52 | 9333.74 | 25.63 | 0.012 | 88.89 | 0.92 | 0.52 | 174.10 | 0.285 | 0.14 | 1.41 | 0.21 | 3.94 | 36.64 | 36.74 | 42.64 | 869.04 | 387.44 | 486633.73 | 73.45 | 7.53 |
| UG012198_Z23 | 62.39 | 415.66 | 768.77 | 9.48 | 113.26 | 8265.35 | 154.61 | 0.062 | 349.04 | 2.54 | 11.53 | 659.85 | 0.198 | 0.69 | 21.62 | 0.43 | 34.89 | 686.74 | 166.09 | 257.67 | 4923.10 | 1640.20 | 481574.72 | <2.475 | 8.45 |
| UG012198_Z24 | 12.70 | 76.51 | 197.73 | 0.77 | 13.54 | 9420.21 | 34.56 | 0.006 | 112.58 | 1.26 | 0.62 | 212.40 | 0.017 | 0.02 | 1.62 | 0.25 | 5.13 | 60.15 | 46.74 | 55.17 | 1154.73 | 495.91 | 488102.59 | <2.525 | 6.72 |
| UG012198_Z25 | 10.49 | 74.02 | 182.86 | 0.81 | 12.23 | 8945.86 | 32.56 | 0.003 | 101.34 | 0.88 | 0.57 | 185.15 | 0.021 | 0.02 | 1.62 | 0.18 | 5.14 | 60.97 | 42.81 | 51.62 | 1098.09 | 451.15 | 488712.57 | <2.520 | 7.02 |
| UG012198_Z26 | 32.13 | 174.41 | 369.64 | 2.51 | 35.88 | 9087.49 | 70.46 | 0.045 | 174.80 | 1.99 | 1.88 | 304.58 | 0.121 | 0.09 | 4.38 | 0.37 | 12.88 | 283.39 | 81.54 | 130.33 | 2316.58 | 808.69 | 486187.78 | <2.534 | 9.67 |
| UG012198_Z27 | 26.17 | 223.95 | 424.24 | 5.50 | 61.10 | 8631.20 | 84.42 | 0.068 | 198.70 | 1.26 | 6.13 | 368.74 | 0.080 | 0.37 | 11.35 | 0.21 | 18.86 | 118.83 | 92.68 | 118.83 | 2738.96 | 927.53 | 485717.00 | 26.59 | 7.96 |
| UG012198_Z28 | 13.72 | 88.57 | 226.67 | 0.96 | 14.57 | 8944.75 | 38.87 | 0.003 | 129.50 | 1.48 | 0.86 | 231.33 | 0.022 | 0.05 | 2.12 | 0.29 | 5.81 | 77.35 | 63.28 | 68.43 | 1312.71 | 569.11 | 488204.04 | <2.543 | 8.13 |
| UG012198_Z29 | 15.44 | 131.70 | 279.33 | 2.76 | 32.15 | 8487.85 | 52.35 | 0.013 | 146.73 | 1.01 | 3.16 | 331.96 | 0.039 | 0.16 | 5.95 | 0.19 | 10.18 | 148.26 | 63.60 | 86.13 | 1695.85 | 666.08 | 487624.32 | <2.526 | 5.29 |
| UG012198_Z3 | 9.84 | 80.08 | 179.40 | 1.15 | 15.74 | 8459.35 | 32.97 | 0.004 | 99.85 | 0.83 | 0.85 | 258.46 | 0.020 | 0.04 | 2.08 | 0.18 | 5.50 | 65.55 | 41.25 | 50.15 | 1078.43 | 439.81 | 488882.55 | <2.527 | 6.78 |
| UG012198_Z30 | 3.60 | 18.41 | 42.87 | 0.31 | 4.27 | 9746.24 | 7.55 | 0.006 | 26.97 | 0.40 | 0.31 | 79.19 | 0.010 | 0.01 | 0.38 | 0.04 | 1.35 | 10.26 | 13.30 | 257.34 | 116.05 | 489683.41 | <2.539 | 4.57 | |
| UG012198_Z31 | 9.54 | 83.33 | 163.54 | 1.78 | 20.26 | 9319.49 | 31.92 | 0.010 | 78.38 | 0.65 | 1.92 | 141.18 | 0.025 | 0.11 | 3.83 | 0.13 | 6.42 | 88.01 | 36.15 | 43.56 | 1022.77 | 366.46 | 489594.90 | <2.565 | 4.05 |
| UG012198_Z32 | 7.86 | 58.08 | 133.26 | 0.94 | 12.29 | 9298.01 | 24.38 | 0.011 | 75.44 | 0.74 | 0.91 | 192.60 | 0.016 | 0.06 | 2.11 | 0.13 | 4.04 | 54.20 | 31.12 | 48.73 | 816.61 | 328.66 | 488817.00 | 11.63 | 5.83 |
| UG012198_Z33 | 24.11 | 160.69 | 372.13 | 1.59 | 26.11 | 9002.23 | 68.60 | 0.003 | 184.00 | 2.26 | 1.11 | 276.87 | 0.034 | 0.04 | 2.99 | 0.36 | 10.84 | 136.74 | 83.18 | 106.20 | 2255.83 | 852.67 | 486475.15 | <2.492 | 8.82 |
| UG012198_Z34 | 7.23 | 44.98 | 119.91 | 0.60 | 8.26 | 9685.91 | 20.57 | 0.003 | 76.24 | 0.82 | 0.47 | 164.85 | <0.008 | 0.02 | 1.29 | 0.12 | 3.11 | 35.26 | 29.60 | 41.87 | 708.18 | 324.10 | 488831.80 | <2.528 | 4.88 |
| UG012198_Z35 | 8.19 | 67.28 | 145.03 | 1.18 | 15.34 | 9872.29 | 26.68 | 0.003 | 76.55 | 0.62 | 1.15 | 170.29 | 0.020 | 0.06 | 2.74 | 0.12 | 5.11 | 59.46 | 33.38 | 44.46 | 889.26 | 342.30 | 488337.09 | <2.543 | 3.07 |
| UG012198_Z36 | 13.05 | 124.84 | 257.52 | 2.32 | 29.69 | 8599.98 | 49.57 | 0.003 | 121.62 | 0.84 | 2.11 | 259.08 | 0.041 | 0.10 | 4.93 | 0.19 | 9.72 | 104.31 | 56.73 | 60.44 | 1579.85 | 585.31 | 487981.58 | <2.490 | 5.46 |
| UG012198_Z37 | 12.37 | 83.33 | 199.45 | 0.90 | 14.67 | 8794.77 | 35.29 | 0.003 | 110.64 | 1.14 | 0.62 | 232.22 | 0.028 | 0.03 | 1.83 | 0.24 | 5.58 | 99.94 | 46.98 | 73.19 | 1198.96 | 488.44 | 488448.30 | <2.527 | 7.13 |
| UG012198_Z38 | 6.57 | 39.58 | 100.38 | 0.55 | 7.62 | 8817.20 | 17.34 | 0.017 | 57.28 | 1.01 | 0.50 | 147.40 | 0.010 | 0.03 | 0.88 | 0.12 | 2.71 | 37.53 | 24.01 | 36.45 | 568.59 | 254.16 | 489657.42 | 4.83 | 5.81 |
| UG012198_Z39 | 9.40 | 73.73 | 144.30 | 2.33 | 20.64 | 8327.48 | 28.00 | 0.024 | 85.51 | 0.57 | 3.20 | 142.73 | 0.033 | 0.19 | 3.88 | 0.10 | 3.22 | 120.17 | 33.34 | 68.48 | 925.83 | 364.03 | 489418.04 | <2.550 | 6.47 |
| UG012198_Z4 | 13.98 | 112.77 | 248.71 | 1.57 | 21.62 | 8310.62 | 46.57 | 0.003 | 129.96 | 1.20 | 1.09 | 289.66 | 0.023 | 0.07 | 2.99 | 0.23 | 8.04 | 98.76 | 56.71 | 66.65 | 1490.44 | 578.60 | 488239.73 | <2.516 | 7.42 |
| UG012198_Z40 | 10.32 | 81.01 | 170.24 | 1.42 | 18.63 | 8448.28 | 32.18 | 0.005 | 91.93 | 0.69 | 1.72 | 189.06 | 0.023 | 0.11 | 3.27 | 0.15 | 5.91 | 76.35 | 38.60 | 46.20 | 1062.55 | 405.32 | 489076.81 | <2.528 | 5.58 |
| UG012198_Z41 | 13.96 | 88.81 | 211.71 | 1.23 | 15.05 | 8351.29 | 38.29 | 0.007 | 118.38 | 1.34 | 0.96 | 221.23 | 0.024 | 0.06 | 2.01 | 0.23 | 6.02 | 87.81 | 49.28 | 64.98 | 1275.28 | 533.51 | 488679.99 | <2.800 | 7.46 |
| UG012198_Z42 | 8.54 | 49.47 | 123.09 | 0.86 | 9.84 | 9378.34 | 21.26 | 0.004 | 75.54 | 0.60 | 0.51 | 244.94 | 0.047 | 0.03 | 1.23 | 0.12 | 3.65 | 54.07 | 29.92 | 44.86 | 734.22 | 327.16 | 488777.61 | <2.581 | 4.73 |
| UG012198_Z5 | 7.07 | 46.73 | 113.32 | 0.63 | 8.71 | 9498.21 | 19.75 | 0.010 | 67.83 | 0.66 | 0.49 | 193.02 | 0.181 | 0.01 | 1.47 | 0.13 | 3.22 | 37.68 | 27.65 | 35.48 | 662.31 | 299.99 | 488867.13 | 40.09 | 7.02 |
| UG012198_Z6 | 36.17 | 217.52 | 446.46 | 3.17 | 46.08 | 9104.65 | 85.56 | 0.010 | 205.30 | 2.04 | 1.41 | 315.54 | 0.082 | 0.09 | 5.86 | 0.37 | 16.30 | 315.53 | 97.62 | 149.01 | 2837.37 | 963.49 | 488314.40 | <2.514 | 11.24 |
| UG012198_Z8 | 14.69 | 105.87 | 219.85 | 2.11 | 25.69 | 10461.22 | 41.41 | 0.005 | 107.14 | 0.85 | 3.23 | 138.15 | 0.053 | 0.16 | 5.51 | 0.14 | 8.45 | 145.39 | 48.63 | 74.71 | 1327.92 | 497.73 | 487156.18 | <2.540 | 3.93 |
| UG012198_Z9 | 14.44 | 113.18 | 247.23 | 1.66 | 22.92 | 8359.34 | 45.28 | 0.019 | 125.94 | 1.04 | 1.21 | 273.53 | 0.049 | 0.07 | 3.25 | 0.18 | 8.04 | 124.59 | 55.64 | 73.77 | 1466.76 | 575.04 | 489224.77 | 12.77 | 7.22 |
| BHF-01_Z1 | 52.16 | 316.41 | 657.55 | 1.08 | 68.53 | 16890.85 | 122.94 | 0.268 | 313.87 | 15.95 | 5.32 | 1305.96 | 1.714 | 0.40 | 10.07 | 20.30 | 24.17 | 3316.07 | 149.78 | 808.85 | 4094.02 | 1474.85 | 472697.18 | 80.83 | 16.40 |
| BHF-01_Z2 | 5.17 | 40.24 | 102.95 | 0.64 | 8.46 | 10746.27 | 17.63 | 0.020 | 67.28 | 0.72 | 0.52 | 214.67 | 0.017 | 0.04 | 1.59 | 0.13 | 2.83 | 24.59 | 26.01 | 43.12 | 612.35 | 280.77 | 486021.97 | <3.286 | 5.78 |
| BHF-01_Z3 | 4.23 | 51.09 | 111.60 | 0.80 | 12.60 | 9874.22 | 20.30 | <0.001 | 68.57 | 0.64 | 1.17 | 276.24 | <0.008 | 0.05 | 2.37 | 0.13 | 4.00 | 15.10 | 27.18 | 28.50 | 696.86 | 286.50 | 488683.80 | <2.991 | 4.98 |
| BHF-01_Z4 | 7.30 | 87.06 | 168.36 | 1.83 | 22.58 | 9661.61 | 32.47 | 0.012 | 88.71 | 0.57 | 2.04 | 237.95 | <0.007 | 0.13 | 4.13 | 0.12 | 6.73 | 38.43 | 38.74 | 46.46 | 1065.60 | 395.21 | 489092.12 | <2.942 | 6.17 |
| BHF-01_Z5 | 2.23 | 17.77 | 46.61 | 0.24 | 3.19 | 10378.22 | 7.89 | <0.001 | 33.06 | 0.43 | 0.22 | 148.57 | <0.007 | 0.01 | 0.38 | 0.07 | 1.26 | 7.31 | 12.32 | 20.63 | 273.99 | 133.64 | 489032.35 | <2.920 | 3.66 |
| BHF-01_Z6 | 4.84 | 35.24 | 76.11 | 0.47 | 7.74 | 12343.39 | 14.79 | 0.003 | 45.62 | 0.51 | 0.23 | 136.00 | 0.086 | 0.01 | 0.93 | 0.11 | 2.83 | 16.43 | 18.15 | 31.09 | 483.13 | 197.92 | 487237.19 | <3.244 | 3.24 |
| BHF-01_Z7 | 10.24 | 119.11 | 267.41 | 1.61 | 24.86 | 8493.60 | 50.41 | 0.010 | 140.36 | 1.03 | 1.51 | 476.12 | <0.008 | 0.09 | 3.48 | 0.22 | 9.10 | 37.89 | 61.08 | 56.12 | 1626.14 | 625.66 | 487573.67 | <3.220 | 7.24 |
| BHF-01_Z8 | 3.77 | 25.10 | 63.60 | 0.43 | 5.79 | 9364.71 | 10.56 | <0.001 | 42.93 | 0.62 | 0.34 | 202.31 | <0.007 | 0.01 | 0.97 | 0.13 | 1.86 | 7.54 | 15.97 | 17.54 | 378.74 | 176.12 | 489514.31 | <2.886 | 6.34 |
| BHF-01_Z9 | 4.83 | 42.13 | 84.95 | 0.82 | 10.06 | 11521.65 | 15.88 | 0.002 | 51.47 | 0.54 | 0.62 | 138.06 | 0.096 | 0.04 | 1.43 | 0.07 | 3.25 | 15.68 | 20.57 | 28.30 | 542.05 | 212.87 | 487156.00 | 3.23 | 4.35 |
| BHF-04_Z1 | 2.80 | 29.38 | 71.64 | 0.32 | 5.30 | 10759.84 | 12.97 | 0.011 | 49.01 | 0.45 | 0.34 | 243.49 | 0.016 | 0.02 | 1.02 | 0.12 | 2.12 | 8.85 | 17.76 | 23.14 | 432.22 | 195.22 | 488293.69 | <3.811 | 4.23 |
| BHF-04_Z10 | 8.18 | 84.21 | | | | | | | | | | | | | | | | | | | | | | | |

Appendix C: Eastern Sunda arc zircon trace element chemistry

| Analysis ID | Ce | Dy | Er | Eu | Gd | Hf | Ho | La | Lu | Nb | Nd | P | Pb | Pr | Sm | Ta | Tb | Th | Tm | U | Y | Yb | Zr | Fe | Ti |
|-------------|-------|--------|--------|------|----------|----------|--------|--------|--------|------|------|---------|--------|------|------|------|-------|--------|--------|--------|---------|----------|-----------|--------|-------|
| BHF-04-z16 | 7.57 | 52.04 | 135.82 | 0.85 | 10.40 | 10091.20 | 22.93 | 0.002 | 94.46 | 1.05 | 0.78 | 216.72 | 0.011 | 0.05 | 1.67 | 0.25 | 3.56 | 42.97 | 33.74 | 72.30 | 827.48 | 378.77 | 488112.33 | 3.10 | 6.76 |
| BHF-04-z15 | 5.63 | 102.62 | 230.48 | 1.21 | 19.24 | 8643.65 | 42.93 | <0.001 | 117.39 | 1.03 | 0.66 | 424.63 | <0.006 | 0.05 | 2.24 | 0.15 | 7.21 | 21.64 | 51.37 | 41.14 | 1382.46 | 517.51 | 487986.99 | <2.791 | 7.31 |
| BHF-04-z17 | 2.96 | 29.67 | 73.51 | 0.41 | 10236.26 | 12.71 | <0.001 | <0.001 | 49.46 | 0.44 | 0.34 | 207.95 | <0.006 | 0.01 | 0.77 | 0.08 | 2.22 | 7.85 | 17.80 | 20.73 | 189.28 | 48744.84 | 48744.84 | <2.797 | 4.10 |
| BHF-04-z18 | 4.75 | 42.02 | 106.14 | 0.58 | 7.51 | 10425.67 | 18.28 | <0.001 | 68.22 | 0.80 | 0.31 | 218.23 | <0.006 | 0.01 | 1.25 | 0.22 | 2.88 | 17.45 | 25.30 | 35.91 | 626.34 | 274.53 | 488252.11 | 3.05 | 5.59 |
| BHF-04-z19 | 7.91 | 73.61 | 186.47 | 0.69 | 12.79 | 10323.00 | 32.42 | <0.001 | 114.29 | 1.37 | 0.74 | 295.69 | 0.008 | 0.03 | 1.45 | 0.29 | 5.01 | 33.63 | 43.45 | 81.94 | 1121.38 | 464.88 | 48728.52 | 3.39 | 6.45 |
| BHF-04-z22 | 2.50 | 27.41 | 64.45 | 0.33 | 5.48 | 11006.20 | 11.96 | 0.002 | 46.21 | 0.64 | 0.27 | 196.11 | <0.007 | 0.01 | 0.81 | 0.36 | 1.98 | 20.98 | 16.94 | 27.78 | 402.07 | 190.19 | 488233.94 | <2.848 | 4.16 |
| BHF-04-z20 | 4.52 | 46.47 | 114.93 | 0.54 | 8.74 | 9652.68 | 19.91 | <0.001 | 72.26 | 0.81 | 0.68 | 240.08 | <0.006 | 0.03 | 1.27 | 0.17 | 3.35 | 13.48 | 27.20 | 34.74 | 685.00 | 296.46 | 488554.75 | <2.834 | 5.84 |
| BHF-04-z21 | 3.69 | 41.93 | 103.21 | 0.55 | 8.67 | 10129.58 | 17.79 | <0.001 | 66.47 | 0.62 | 0.26 | 184.02 | <0.006 | 0.02 | 0.85 | 0.20 | 2.93 | 14.60 | 24.85 | 38.39 | 613.94 | 273.62 | 488308.79 | <2.813 | 4.21 |
| BHF-04-z22 | 5.58 | 40.77 | 93.21 | 0.42 | 7.61 | 11514.90 | 17.21 | <0.001 | 64.95 | 0.96 | 0.26 | 184.02 | <0.006 | 0.02 | 0.85 | 0.20 | 2.93 | 20.19 | 23.73 | 41.94 | 590.58 | 256.64 | 487560.20 | <2.803 | 3.88 |
| BHF-04-z23 | 4.00 | 24.61 | 59.61 | 0.27 | 4.92 | 11894.02 | 10.41 | 0.003 | 42.73 | 0.61 | 0.25 | 137.59 | 0.008 | 0.01 | 0.56 | 0.13 | 1.78 | 16.43 | 14.92 | 34.64 | 369.08 | 169.17 | 487741.27 | <2.776 | 3.27 |
| BHF-04-z24 | 3.48 | 31.88 | 77.94 | 0.48 | 6.27 | 10050.27 | 13.49 | <0.001 | 51.40 | 0.75 | 0.23 | 197.59 | <0.006 | 0.02 | 0.69 | 0.13 | 2.16 | 8.83 | 19.01 | 24.97 | 474.09 | 209.95 | 488953.12 | <2.803 | 4.47 |
| BHF-04-z25 | 4.60 | 44.49 | 115.97 | 0.58 | 8.32 | 9941.74 | 19.71 | <0.001 | 75.12 | 0.94 | 0.43 | 234.31 | <0.006 | 0.02 | 1.07 | 0.18 | 2.93 | 10.97 | 18.17 | 32.05 | 674.97 | 305.95 | 488495.62 | <2.791 | 4.83 |
| BHF-04-z26 | 5.95 | 60.76 | 155.01 | 0.67 | 11.07 | 9896.84 | 26.48 | <0.001 | 98.23 | 1.11 | 0.60 | 297.53 | <0.006 | 0.03 | 1.45 | 0.28 | 4.12 | 18.18 | 36.98 | 52.55 | 935.99 | 403.74 | 487977.21 | <2.783 | 6.03 |
| BHF-04-z27 | 4.45 | 36.20 | 89.77 | 0.34 | 6.53 | 10927.57 | 14.95 | 0.028 | 58.11 | 1.31 | 0.36 | 204.53 | 0.012 | 0.04 | 0.99 | 0.44 | 2.51 | 33.47 | 22.29 | 33.33 | 515.43 | 241.87 | 488065.40 | <2.787 | 4.04 |
| BHF-04-z28 | 5.89 | 38.50 | 104.27 | 0.59 | 7.45 | 10182.99 | 17.08 | <0.001 | 114.65 | 0.94 | 0.50 | 183.91 | 0.014 | 0.02 | 1.30 | 0.21 | 2.82 | 17.29 | 25.68 | 39.43 | 601.02 | 298.31 | 488510.25 | <2.793 | 6.27 |
| BHF-04-z29 | 3.29 | 29.41 | 73.15 | 0.33 | 6.14 | 10171.25 | 12.36 | 0.005 | 44.79 | 0.69 | 0.34 | 157.00 | 0.011 | 0.01 | 1.00 | 0.12 | 2.04 | 9.63 | 17.74 | 25.51 | 432.33 | 185.29 | 488914.62 | <3.510 | 4.66 |
| BHF-04-z3 | 2.55 | 20.08 | 48.57 | 0.25 | 4.38 | 10624.55 | 8.39 | <0.001 | 31.51 | 0.59 | 0.24 | 151.74 | <0.007 | 0.01 | 0.47 | 0.11 | 1.43 | 6.69 | 12.05 | 17.73 | 292.97 | 128.43 | 488822.90 | <2.860 | 4.01 |
| BHF-04-z30 | 5.25 | 50.10 | 105.19 | 0.83 | 13.70 | 9945.15 | 19.31 | 0.002 | 60.76 | 0.72 | 1.03 | 170.52 | <0.006 | 0.06 | 2.38 | 0.14 | 3.98 | 16.45 | 24.17 | 27.70 | 657.88 | 259.39 | 488690.04 | <2.841 | 6.48 |
| BHF-04-z31 | 2.89 | 23.02 | 55.76 | 0.25 | 4.69 | 10559.90 | 9.66 | 0.002 | 35.92 | 0.65 | 0.20 | 168.55 | <0.006 | 0.01 | 0.55 | 0.09 | 1.69 | 11.12 | 13.15 | 26.46 | 341.11 | 144.09 | 488754.91 | <2.776 | 3.96 |
| BHF-04-z32 | 4.28 | 38.45 | 96.70 | 0.36 | 7.96 | 10214.78 | 16.54 | <0.001 | 62.23 | 0.85 | 0.41 | 196.29 | <0.006 | 0.01 | 1.28 | 0.13 | 2.85 | 12.19 | 23.42 | 32.00 | 581.35 | 250.31 | 488547.83 | <2.744 | 4.91 |
| BHF-04-z33 | 2.81 | 22.01 | 52.16 | 0.29 | 3.90 | 10821.58 | 9.16 | 0.015 | 35.71 | 0.60 | 0.31 | 143.79 | <0.006 | 0.02 | 0.51 | 0.11 | 1.54 | 7.19 | 12.93 | 19.60 | 316.86 | 142.95 | 488644.32 | <2.740 | 4.01 |
| BHF-04-z34 | 27.20 | 224.09 | 475.88 | 1.08 | 43.19 | 12536.40 | 89.39 | 0.006 | 232.75 | 5.42 | 1.80 | 1076.60 | 0.106 | 0.06 | 5.53 | 2.59 | 16.28 | 502.24 | 108.38 | 77.30 | 2900.85 | 1126.02 | 488090.38 | 8.51 | 9.49 |
| BHF-04-z35 | 3.59 | 28.20 | 73.31 | 0.38 | 5.57 | 10299.26 | 12.59 | 0.004 | 48.15 | 0.71 | 0.27 | 210.36 | 0.007 | 0.01 | 0.97 | 0.17 | 1.99 | 14.64 | 17.84 | 31.55 | 442.59 | 196.62 | 488678.76 | 3.46 | 5.21 |
| BHF-04-z36 | 8.98 | 101.89 | 245.52 | 0.48 | 17.27 | 11473.98 | 43.27 | 0.001 | 142.95 | 1.03 | 0.59 | 550.84 | 0.027 | 0.02 | 1.97 | 1.06 | 6.72 | 127.51 | 60.61 | 90.13 | 1438.15 | 664.94 | 485320.52 | 3.35 | 5.46 |
| BHF-04-z37 | 4.65 | 43.14 | 106.70 | 0.47 | 7.53 | 10197.53 | 18.41 | 0.003 | 68.99 | 0.85 | 0.29 | 206.39 | <0.006 | 0.01 | 0.83 | 0.18 | 2.86 | 13.55 | 26.01 | 36.86 | 644.51 | 283.07 | 488427.46 | <2.749 | 5.13 |
| BHF-04-z38 | 2.93 | 24.99 | 62.06 | 0.29 | 4.61 | 10490.16 | 10.81 | 0.008 | 41.19 | 0.61 | 0.21 | 144.50 | 0.023 | 0.01 | 0.59 | 0.13 | 1.86 | 9.13 | 15.16 | 22.91 | 373.96 | 164.51 | 488785.10 | 7.12 | 5.71 |
| BHF-04-z39 | 5.45 | 36.08 | 82.27 | 0.45 | 8.15 | 10135.07 | 14.97 | <0.001 | 47.59 | 0.70 | 0.41 | 219.22 | <0.006 | 0.01 | 0.75 | 0.16 | 2.71 | 24.54 | 19.04 | 42.29 | 509.88 | 201.86 | 488884.34 | <2.724 | 4.73 |
| BHF-04-z4 | 4.33 | 37.06 | 89.34 | 0.48 | 7.27 | 10534.75 | 15.76 | <0.001 | 55.79 | 0.67 | 0.44 | 144.95 | <0.007 | 0.02 | 0.95 | 0.14 | 2.61 | 12.98 | 21.21 | 29.68 | 536.39 | 228.15 | 488466.26 | <2.893 | 4.80 |
| BHF-04-z40 | 7.23 | 62.35 | 158.53 | 0.65 | 10.65 | 10928.54 | 27.60 | <0.001 | 102.99 | 1.35 | 0.44 | 266.32 | 0.009 | 0.02 | 1.33 | 0.30 | 4.34 | 23.47 | 38.98 | 65.94 | 952.15 | 424.28 | 487207.27 | <2.705 | 4.27 |
| BHF-04-z41 | 11.27 | 99.99 | 238.41 | 0.78 | 17.34 | 10585.51 | 43.07 | 0.001 | 135.32 | 1.67 | 0.79 | 377.19 | 0.011 | 0.03 | 2.07 | 0.28 | 6.93 | 53.68 | 55.17 | 105.79 | 1449.28 | 575.83 | 486425.27 | <2.859 | 5.54 |
| BHF-04-z42 | 6.87 | 75.78 | 180.73 | 0.77 | 14.54 | 9750.77 | 32.69 | 0.003 | 109.20 | 1.09 | 0.52 | 399.37 | 0.010 | 0.03 | 1.89 | 0.21 | 5.30 | 27.05 | 42.72 | 60.96 | 1104.31 | 452.24 | 487613.16 | <2.765 | 5.69 |
| BHF-04-z5 | 3.57 | 38.44 | 89.86 | 0.54 | 8.29 | 9830.40 | 16.10 | 0.003 | 58.26 | 0.64 | 0.43 | 157.52 | <0.008 | 0.03 | 1.27 | 0.11 | 2.62 | 9.36 | 21.49 | 23.71 | 553.79 | 242.67 | 488967.15 | <3.524 | 4.34 |
| BHF-04-z6 | 4.59 | 48.76 | 127.35 | 0.57 | 7.93 | 9527.50 | 21.79 | 0.001 | 60.50 | 0.89 | 0.43 | 227.63 | 0.008 | 0.03 | 1.21 | 0.17 | 3.35 | 12.16 | 30.74 | 33.04 | 742.53 | 330.05 | 488720.76 | <3.057 | 6.54 |
| BHF-04-z7 | 4.16 | 44.44 | 111.62 | 0.49 | 8.58 | 9805.93 | 19.41 | <0.001 | 69.59 | 0.75 | 0.47 | 251.77 | <0.007 | 0.02 | 1.36 | 0.16 | 3.08 | 12.41 | 26.74 | 32.63 | 668.01 | 292.22 | 488598.81 | <2.806 | 4.79 |
| BHF-04-z8 | 5.76 | 66.36 | 155.88 | 1.01 | 15.07 | 9829.19 | 27.76 | <0.001 | 93.07 | 0.81 | 0.74 | 351.60 | <0.007 | 0.05 | 2.25 | 0.16 | 5.05 | 26.50 | 36.70 | 51.61 | 947.82 | 387.94 | 487911.10 | <2.868 | 4.20 |
| BHF-04-z9 | 13.48 | 131.10 | 304.21 | 1.22 | 22.16 | 9975.92 | 54.85 | <0.001 | 171.43 | 2.25 | 0.99 | 453.59 | 0.015 | 0.05 | 2.42 | 0.46 | 9.14 | 64.89 | 70.69 | 121.09 | 1872.75 | 724.87 | 486036.80 | <3.009 | 8.08 |
| JEM-02-z1 | 20.01 | 131.20 | 300.12 | 1.21 | 23.06 | 9227.24 | 53.96 | 0.005 | 157.61 | 2.70 | 1.12 | 371.15 | 0.242 | 0.05 | 2.82 | 0.65 | 8.72 | 427.27 | 67.06 | 386.54 | 1834.43 | 689.96 | 486400.57 | <2.774 | 10.04 |
| JEM-02-z10 | 12.10 | 89.32 | 219.46 | 0.85 | 16.16 | 9209.51 | 39.83 | 0.006 | 124.75 | 1.85 | 0.94 | 311.71 | 0.060 | 0.04 | 1.92 | 0.54 | 6.04 | 152.88 | 51.71 | 204.27 | 1331.54 | 535.89 | 487637.87 | <2.727 | 8.01 |
| JEM-02-z11 | 12.51 | 69.05 | 170.73 | 0.70 | 12.64 | 10193.29 | 30.57 | 0.002 | 97.27 | 1.81 | 0.79 | 267.90 | 0.087 | 0.04 | 1.76 | 0.52 | 5.15 | 251.37 | 39.77 | 293.79 | 1047.88 | 421.43 | 487323.27 | <2.751 | 6.05 |
| JEM-02-z12 | 11.87 | 131.10 | 264.45 | 2.42 | 31.88 | 8777.34 | 50.80 | 0.012 | 136.21 | 1.37 | 2.60 | 334.89 | 0.080 | 0.16 | 5.92 | 0.31 | 10.07 | 170.85 | 59.80 | 168.94 | 1671.20 | 601.90 | 487419.39 | 4.32 | 7.48 |
| JEM-02-z13 | 17.47 | 90.76 | 200.71 | 0.93 | 17.85 | 9933.48 | 37.76 | 0.052 | 107.91 | 2.16 | 1.14 | 450.19 | 0.141 | 0.08 | 3.13 | 0.64 | 6.75 | 435.84 | 44.13 | 362.12 | 1272.27 | 468.13 | 486646.70 | 3.61 | 6.06 |
| JEM-02-z14 | 13.50 | 91.61 | 230.17 | 0.96 | 15.42 | 9073.95 | 39.98 | <0.001 | 136.36 | 2.24 | 0.91 | 300.83 | 0.065 | 0.04 | 1.84 | 0.57 | 6.11 | 205.67 | 54.70 | 285.63 | 1400.09 | 580.47 | 487555.55 | <2.703 | 8.69 |
| JEM-02-z15 | 17.21 | 173.43 | 348.98 | 2.65 | 40.92 | 8803.41 | 68.38 | 0.030 | 180.03 | 2.07 | 3.53 | 417.40 | 0.226 | 0.23 | 6.70 | 0.59 | 13.61 | 297.60 | 78.27 | 281.64 | 2196.99 | 801.36 | 486162.13 | 37.70 | 9.42 |
| JEM-02-z16 | 9.28 | 81.90 | 203.68 | 0.88 | 15.26 | 8875.85 | 35.96 | 0.002 | 118.73 | 1.81 | 0.80 | 336.50 | 0.036 | 0.08 | 2.06 | 0.47 | 5.55 | 89.48 | 48.18 | 146.30 | 1228.56 | 505.25 | 488084.64 | <2.623 | 7.88 |
| JEM-02-z2 | 6.01 | 70.27 | 154.73 | 0.82 | 15.03 | 9547.52 | 28.21 | 0.004 | 84.53 | 0.95 | | | | | | | | | | | | | | | |

Appendix C: Eastern Sunda arc zircon trace element chemistry

| Analysis ID | Ce | Dy | Er | Eu | Gd | Hf | Ho | La | Lu | Nb | Nd | P | Pb | Pr | Sm | Ta | Tb | Th | Tm | U | Y | Yb | Zr | Fe | Ti |
|-------------|-------|--------|---------|-------|--------|----------|--------|--------|--------|------|-------|---------|--------|------|-------|------|-------|--------|--------|--------|---------|-----------|------------|--------|-------|
| JEM-02 z8 | 8.11 | 66.53 | 166.62 | 0.61 | 11.72 | 9180.70 | 29.44 | 0.002 | 103.97 | 1.93 | 0.60 | 262.78 | 0.019 | 0.04 | 1.87 | 0.43 | 4.43 | 72.95 | 41.10 | 128.95 | 1011.24 | 434.29 | 4883066.72 | 2.885 | 7.41 |
| JEM-02 z9 | 23.22 | 148.50 | 345.76 | 1.35 | 27.88 | 9469.65 | 63.64 | 0.011 | 185.24 | 3.98 | 1.27 | 406.17 | 0.137 | 0.07 | 3.42 | 0.90 | 10.44 | 455.26 | 77.70 | 452.71 | 2163.49 | 804.78 | 485578.11 | <2.801 | 9.21 |
| PCT-01 z1 | 18.41 | 172.52 | 384.47 | 0.49 | 30.87 | 10162.62 | 71.65 | 0.007 | 178.58 | 2.60 | 1.10 | 659.05 | 0.300 | 0.04 | 3.62 | 0.90 | 12.18 | 206.29 | 85.52 | 245.58 | 2392.26 | 853.70 | 484546.99 | <3.838 | 3.90 |
| PCT-01 z10 | 22.79 | 204.46 | 472.07 | 0.63 | 36.52 | 10467.52 | 86.90 | 0.057 | 227.99 | 3.28 | 1.34 | 774.53 | 0.400 | 0.08 | 4.19 | 1.04 | 14.21 | 227.36 | 104.42 | 256.51 | 2854.91 | 1045.39 | 483295.94 | <2.751 | 4.93 |
| PCT-01 z11 | 11.70 | 101.38 | 246.48 | 0.22 | 17.06 | 10438.78 | 44.72 | 0.012 | 104.38 | 1.60 | 0.74 | 467.37 | 0.373 | 0.03 | 1.89 | 0.61 | 6.80 | 79.64 | 57.04 | 131.37 | 1473.27 | 486295.33 | <2.776 | 3.80 | |
| PCT-01 z12 | 27.54 | 257.13 | 551.27 | 0.72 | 45.95 | 10903.21 | 105.68 | 0.032 | 247.00 | 4.14 | 1.92 | 839.56 | 0.500 | 0.09 | 5.78 | 1.20 | 17.68 | 278.13 | 122.75 | 311.26 | 3438.71 | 1183.83 | 481087.83 | 3.22 | 4.98 |
| PCT-01 z13 | 15.14 | 122.95 | 279.99 | 0.56 | 21.66 | 10553.34 | 51.98 | 0.037 | 132.44 | 1.68 | 2.41 | 642.38 | 0.6951 | 0.30 | 2.66 | 0.63 | 8.38 | 117.66 | 62.44 | 172.22 | 1685.51 | 629.01 | 485463.95 | 8.92 | 4.40 |
| PCT-01 z14 | 13.59 | 140.49 | 337.07 | 0.52 | 23.18 | 9769.67 | 60.45 | 0.120 | 164.64 | 1.89 | 1.44 | 532.52 | 0.157 | 0.09 | 2.96 | 0.60 | 9.28 | 72.21 | 74.72 | 116.40 | 1976.97 | 783.06 | 485639.55 | 8.10 | 6.53 |
| PCT-01 z15 | 14.26 | 127.38 | 305.21 | 0.37 | 22.47 | 11059.31 | 54.78 | 0.029 | 140.96 | 1.76 | 0.92 | 596.22 | 0.203 | 0.04 | 2.13 | 0.66 | 8.87 | 86.25 | 66.24 | 136.36 | 1779.93 | 653.96 | 485089.80 | 4.54 | 3.33 |
| PCT-01 z16 | 14.23 | 128.04 | 303.04 | 0.39 | 20.87 | 10791.74 | 55.60 | <0.001 | 145.47 | 1.90 | 0.69 | 569.64 | 0.284 | 0.03 | 2.04 | 0.74 | 8.74 | 101.01 | 68.33 | 151.84 | 1804.91 | 682.60 | 483210.83 | 2.92 | 3.88 |
| PCT-01 z17 | 23.23 | 216.17 | 474.65 | 0.48 | 38.27 | 10518.50 | 88.23 | 0.016 | 214.61 | 2.99 | 1.30 | 829.67 | 0.319 | 0.06 | 5.10 | 0.97 | 15.07 | 205.59 | 103.09 | 287.69 | 2894.95 | 1020.14 | 483105.83 | <3.515 | 3.18 |
| PCT-01 z18 | 13.65 | 114.66 | 267.93 | 0.36 | 20.46 | 10656.85 | 48.84 | 0.111 | 129.22 | 1.65 | 0.81 | 550.11 | 0.278 | 0.06 | 2.43 | 0.55 | 7.80 | 114.06 | 60.05 | 152.28 | 1613.08 | 597.67 | 485727.15 | 3.22 | 3.67 |
| PCT-01 z19 | 10.19 | 148.24 | 334.01 | 0.59 | 25.72 | 10371.86 | 61.54 | 0.005 | 159.54 | 1.28 | 1.23 | 767.49 | 0.271 | 0.07 | 3.08 | 0.80 | 10.19 | 78.57 | 75.16 | 126.65 | 2019.53 | 741.90 | 484907.25 | 3.46 | 3.78 |
| PCT-01 z20 | 17.33 | 155.51 | 352.52 | 0.72 | 28.64 | 10066.93 | 65.85 | 0.006 | 165.66 | 2.08 | 1.11 | 604.53 | 0.324 | 0.04 | 3.30 | 0.80 | 10.66 | 177.82 | 77.80 | 212.75 | 2135.44 | 771.63 | 485148.80 | 3.09 | 5.33 |
| PCT-01 z21 | 14.19 | 138.23 | 331.57 | 0.52 | 22.87 | 10441.51 | 59.19 | 0.024 | 166.38 | 2.12 | 0.74 | 575.81 | 0.227 | 0.03 | 2.69 | 0.77 | 9.15 | 121.23 | 75.22 | 174.29 | 1964.06 | 755.08 | 485220.86 | 4.78 | 4.98 |
| PCT-01 z22 | 13.39 | 121.17 | 284.99 | 0.37 | 21.16 | 10890.91 | 51.67 | <0.001 | 134.64 | 1.55 | 0.79 | 552.49 | 0.194 | 0.03 | 2.27 | 0.63 | 8.26 | 106.99 | 63.18 | 158.19 | 1695.14 | 625.87 | 485414.40 | 3.50 | 3.66 |
| PCT-01 z23 | 25.20 | 258.11 | 567.57 | 0.72 | 48.13 | 10288.33 | 107.54 | 0.005 | 246.90 | 3.79 | 1.92 | 910.48 | 0.598 | 0.08 | 6.27 | 1.15 | 18.54 | 366.63 | 121.33 | 310.39 | 3454.81 | 1183.77 | 482117.83 | <2.825 | 3.78 |
| PCT-01 z24 | 27.83 | 213.54 | 444.85 | 1.50 | 43.81 | 9949.23 | 85.42 | 0.005 | 196.04 | 3.31 | 1.74 | 700.51 | 0.884 | 0.07 | 6.18 | 0.91 | 16.26 | 515.55 | 96.14 | 346.90 | 2799.06 | 927.46 | 483733.64 | <3.241 | 5.07 |
| PCT-01 z25 | 13.04 | 136.83 | 352.61 | 0.58 | 22.15 | 9830.44 | 63.78 | 0.012 | 187.56 | 2.24 | 0.71 | 522.11 | 0.160 | 0.04 | 2.56 | 0.57 | 9.25 | 64.84 | 81.70 | 133.87 | 2084.81 | 847.44 | 485629.86 | <4.242 | 5.10 |
| PCT-01 z26 | 11.63 | 108.34 | 254.57 | 0.35 | 18.87 | 10231.77 | 46.05 | 0.003 | 124.77 | 1.26 | 0.79 | 467.05 | 0.164 | 0.03 | 2.58 | 0.49 | 7.63 | 82.64 | 58.26 | 125.96 | 1522.00 | 563.65 | 486400.40 | <3.779 | 3.74 |
| PCT-01 z27 | 24.51 | 265.32 | 549.08 | 0.97 | 53.39 | 9846.58 | 105.80 | 0.170 | 225.61 | 2.50 | 2.48 | 895.26 | 0.464 | 0.15 | 7.28 | 0.74 | 19.80 | 211.30 | 113.81 | 228.36 | 3393.11 | 1069.30 | 482784.29 | 30.80 | 9.56 |
| PCT-01 z28 | 22.75 | 206.70 | 453.43 | 0.60 | 35.98 | 11432.75 | 85.60 | 0.002 | 166.62 | 3.55 | 1.13 | 746.80 | 0.460 | 0.05 | 4.61 | 1.25 | 14.04 | 287.93 | 98.01 | 348.83 | 2797.72 | 946.08 | 482661.95 | <3.137 | 2.86 |
| PCT-01 z29 | 10.38 | 97.49 | 238.61 | 0.26 | 17.02 | 10489.57 | 42.66 | 0.364 | 122.03 | 1.55 | 0.84 | 464.76 | 0.442 | 0.11 | 1.58 | 0.52 | 6.68 | 69.17 | 54.03 | 115.48 | 1420.40 | 542.21 | 486137.74 | 169.20 | 19.55 |
| PCT-01 z30 | 14.43 | 144.06 | 340.74 | 0.45 | 26.32 | 10771.37 | 61.75 | 0.071 | 164.47 | 1.97 | 1.63 | 575.47 | 0.205 | 0.03 | 3.43 | 0.67 | 10.00 | 96.46 | 76.69 | 150.70 | 2043.06 | 767.75 | 484904.95 | <3.571 | 4.86 |
| PCT-01 z31 | 13.77 | 137.66 | 361.05 | 0.51 | 22.12 | 10464.01 | 61.51 | 0.020 | 187.19 | 2.49 | 0.90 | 553.38 | 0.180 | 0.05 | 2.32 | 0.93 | 9.05 | 67.73 | 83.23 | 139.59 | 2037.94 | 873.40 | 488004.92 | <5.081 | 4.30 |
| PCT-01 z32 | 13.57 | 141.66 | 335.18 | 0.59 | 24.57 | 10021.92 | 61.26 | 0.022 | 161.77 | 1.68 | 0.88 | 720.16 | 0.263 | 0.06 | 2.86 | 0.62 | 9.65 | 170.29 | 74.97 | 191.36 | 2017.97 | 746.33 | 485159.60 | <2.937 | 4.16 |
| PCT-01 z33 | 15.26 | 141.37 | 309.32 | 0.58 | 25.71 | 9897.47 | 58.34 | 1.852 | 126.34 | 2.17 | 4.90 | 935.46 | 0.254 | 0.81 | 3.61 | 0.79 | 9.88 | 76.23 | 64.67 | 126.89 | 1804.77 | 619.27 | 485125.18 | 116.81 | 17.92 |
| PCT-01 z34 | 16.58 | 154.81 | 372.18 | 0.44 | 26.98 | 10285.70 | 67.46 | 0.011 | 187.76 | 2.32 | 0.73 | 669.35 | 0.577 | 0.05 | 2.66 | 0.84 | 10.91 | 158.75 | 83.22 | 196.79 | 2217.68 | 844.93 | 484724.87 | <4.125 | 5.59 |
| PCT-01 z35 | 6.04 | 119.20 | 270.63 | 0.69 | 20.91 | 9145.15 | 50.30 | 0.492 | 115.12 | 1.05 | 1.92 | 585.94 | 0.095 | 0.28 | 3.40 | 0.28 | 8.04 | 29.56 | 56.54 | 52.64 | 1579.17 | 554.22 | 487004.90 | <3.184 | 5.58 |
| PCT-01 z36 | 19.21 | 165.20 | 377.39 | 0.59 | 29.87 | 10645.17 | 70.60 | 0.003 | 172.63 | 2.61 | 0.91 | 646.50 | 0.467 | 0.04 | 3.08 | 0.84 | 11.97 | 228.24 | 84.16 | 252.18 | 2255.01 | 814.00 | 484373.80 | <2.832 | 4.95 |
| PCT-01 z37 | 14.44 | 202.88 | 464.41 | 0.55 | 32.49 | 10415.59 | 85.44 | 0.050 | 223.01 | 1.89 | 1.37 | 979.32 | 0.614 | 0.11 | 4.57 | 0.56 | 13.40 | 99.15 | 103.16 | 157.38 | 2731.62 | 1058.42 | 483205.76 | <6.215 | 5.27 |
| PCT-01 z38 | 16.28 | 150.63 | 356.70 | 0.46 | 25.66 | 10768.18 | 65.00 | <0.001 | 168.62 | 2.29 | 0.93 | 638.73 | 0.269 | 0.03 | 2.95 | 0.80 | 10.74 | 119.94 | 79.25 | 168.44 | 1726.01 | 778.42 | 484634.96 | <3.387 | 4.19 |
| PCT-01 z4 | 10.28 | 98.79 | 250.55 | 0.37 | 15.84 | 10333.09 | 44.27 | 0.007 | 132.22 | 1.63 | 0.63 | 443.33 | 0.134 | 0.02 | 1.61 | 0.53 | 6.63 | 54.81 | 57.68 | 106.18 | 1461.33 | 595.30 | 486451.11 | <2.753 | 4.46 |
| PCT-01 z5 | 12.86 | 172.05 | 377.34 | 0.54 | 31.20 | 10523.38 | 70.75 | 0.077 | 184.85 | 1.81 | 0.99 | 773.48 | 0.298 | 0.07 | 3.61 | 0.53 | 11.72 | 94.63 | 86.36 | 149.63 | 2320.02 | 867.45 | 484248.83 | 8.64 | 5.53 |
| PCT-01 z6 | 21.81 | 196.29 | 443.13 | 0.66 | 35.35 | 10163.90 | 82.93 | 0.065 | 207.43 | 2.89 | 1.20 | 727.46 | 0.381 | 0.08 | 4.05 | 0.93 | 13.58 | 244.15 | 99.98 | 271.96 | 2700.20 | 987.34 | 483837.55 | <2.973 | 4.77 |
| PCT-01 z7 | 11.52 | 182.59 | 406.04 | 0.69 | 33.80 | 10521.21 | 74.88 | 0.004 | 189.84 | 1.33 | 1.62 | 851.38 | 0.317 | 0.06 | 4.14 | 0.54 | 12.60 | 88.68 | 91.01 | 144.66 | 2502.59 | 893.15 | 483865.19 | <3.596 | 3.55 |
| PCT-01 z9 | 38.50 | 281.69 | 602.97 | 1.09 | 58.49 | 10586.43 | 115.99 | 2.636 | 267.03 | 3.92 | 7.39 | 1372.89 | 0.708 | 1.09 | 6.41 | 1.45 | 18.83 | 360.48 | 136.21 | 411.21 | 3668.71 | 1250.57 | 480543.83 | <6.332 | 5.93 |
| PCT-02 z1 | 48.73 | 710.01 | 1233.35 | 3.92 | 166.11 | 8115.42 | 268.00 | 0.083 | 369.49 | 9.31 | 7.02 | 1295.36 | 0.481 | 0.34 | 20.38 | 1.68 | 56.84 | 344.40 | 230.96 | 241.77 | 7695.63 | 1956.36 | 478831.97 | 7.77 | 7.59 |
| PNG-01 z1 | 4.87 | 93.17 | 224.68 | 0.65 | 15.80 | 9449.42 | 41.07 | 0.042 | 105.96 | 1.15 | 0.43 | 343.64 | 0.769 | 0.04 | 1.90 | 0.27 | 6.84 | 30.61 | 49.81 | 64.48 | 1297.51 | 491.57 | 487647.36 | 5.02 | 7.04 |
| PNG-01 z2 | 6.08 | 178.72 | 389.18 | 1.47 | 35.79 | 9956.34 | 73.43 | 0.027 | 164.70 | 1.05 | 1.60 | 394.08 | 0.222 | 0.09 | 5.02 | 0.29 | 13.15 | 47.41 | 81.80 | 79.43 | 2284.18 | 774.21 | 485630.13 | <4.102 | 4.94 |
| PNG-01 z3 | 6.64 | 129.43 | 278.19 | 0.99 | 23.96 | 9256.34 | 52.80 | 0.173 | 115.47 | 1.36 | 1.41 | 395.23 | 0.121 | 0.12 | 2.88 | 0.43 | 8.78 | 59.64 | 59.37 | 75.73 | 1638.61 | 562.10 | 487477.93 | <3.296 | 8.24 |
| PNG-01 z4 | 5.11 | 125.84 | 285.54 | 0.89 | 24.33 | 8817.46 | 53.21 | 0.085 | 128.29 | 0.97 | 1.00 | 398.42 | 0.098 | 0.08 | 3.00 | 0.28 | 8.94 | 32.81 | 61.06 | 60.47 | 1651.01 | 589.30 | 484774.70 | <3.296 | 8.24 |
| SINA-01 z1 | 7.61 | 128.10 | 307.46 | 0.26 | 21.96 | 11194.86 | 56.28 | 0.255 | 131.73 | 2.17 | 1.40 | 582.20 | 0.075 | 0.14 | 2.30 | 0.77 | 8.71 | 49.81 | 65.84 | 107.85 | 173.62 | 614.38 | 485163.74 | <4.023 | 2.54 |
| SINA-01 z11 | 32.27 | 798.68 | 1460.17 | 14.92 | 214.93 | 7838.94 | 291.38 | 0.139 | 604.31 | 3.81 | 26.43 | 1196.31 | 0.535 | 1.65 | 43.93 | 0.65 | 66.31 | 458.90 | 310.40 | 313.61 | 9572.79 | 29 | | | |

Appendix C: Eastern Sunda arc zircon trace element chemistry

| Analysis ID | Ce | Dy | Er | Eu | Gd | Hf | Ho | La | Lu | Nb | Nd | P | Pr | Sm | Ta | Tb | Th | Tm | U | Y | Yb | Zr | Fe | Ti | |
|-------------|-------|--------|--------|-------|--------|----------|--------|--------|--------|------|-------|---------|-------|-------|--------|-------|--------|--------|--------|---------|---------|-----------|-----------|-------|------|
| SINA-01 216 | 8.24 | 293.56 | 632.67 | 1.96 | 55.62 | 8502.39 | 118.33 | 0.008 | 181.38 | 1.49 | 2.91 | 729.56 | 0.11 | 7.45 | 0.38 | 20.14 | 89.55 | 139.05 | 155.26 | 3816.16 | 1335.15 | 483524.70 | 5.22 | 4.06 | |
| SINA-01 219 | 6.61 | 143.66 | 322.79 | 0.46 | 24.95 | 10539.06 | 60.83 | 0.003 | 136.90 | 2.29 | 0.70 | 468.80 | 0.079 | 2.58 | 0.71 | 9.93 | 47.95 | 69.44 | 100.09 | 1883.50 | 660.88 | 485658.72 | <2.598 | 3.18 | |
| SINA-01 22 | 7.59 | 179.72 | 409.19 | 0.58 | 30.18 | 10025.24 | 77.11 | 0.209 | 177.08 | 2.57 | 0.93 | 696.12 | 0.058 | 3.79 | 0.60 | 12.54 | 49.34 | 88.30 | 112.14 | 2450.65 | 868.33 | 484689.39 | <4.520 | 3.42 | |
| SINA-01 220 | 7.10 | 119.89 | 280.28 | 0.33 | 20.90 | 11382.27 | 52.79 | 0.006 | 123.19 | 1.91 | 0.62 | 434.36 | 0.088 | 1.88 | 0.78 | 8.15 | 52.72 | 61.75 | 115.42 | 1626.60 | 586.14 | 485464.64 | 4.42 | 2.27 | |
| SINA-01 221 | 3.86 | 85.72 | 211.78 | 0.23 | 14.03 | 10801.38 | 38.29 | 0.010 | 95.13 | 1.51 | 0.34 | 324.46 | 0.027 | 1.50 | 0.45 | 5.81 | 18.78 | 46.44 | 53.92 | 1186.38 | 449.96 | 486876.34 | <2.589 | 2.88 | |
| SINA-01 222 | 6.37 | 137.94 | 323.56 | 0.46 | 24.07 | 10139.37 | 60.73 | 0.021 | 140.03 | 2.26 | 0.72 | 422.14 | 0.068 | 2.13 | 0.63 | 9.56 | 40.96 | 71.43 | 91.65 | 1855.03 | 676.49 | 486069.10 | 6.45 | 3.40 | |
| SINA-01 223 | 10.31 | 194.81 | 405.09 | 3.64 | 48.59 | 11180.38 | 78.58 | 0.067 | 162.78 | 3.57 | 7.66 | 669.71 | 0.163 | 16.33 | 0.88 | 15.70 | 80.52 | 83.69 | 141.70 | 2399.67 | 796.71 | 483819.75 | 60.00 | 4.30 | |
| SINA-01 224 | 3.64 | 116.35 | 263.08 | 0.37 | 19.49 | 10778.82 | 49.88 | 0.019 | 108.62 | 1.43 | 0.43 | 398.45 | 0.034 | 2.38 | 0.43 | 8.27 | 21.84 | 55.94 | 58.17 | 1520.46 | 528.35 | 486248.53 | <3.341 | 2.78 | |
| SINA-01 225 | 4.39 | 143.46 | 312.99 | 0.56 | 25.14 | 10424.42 | 56.01 | 0.010 | 130.39 | 1.38 | 0.93 | 407.51 | 0.107 | 2.94 | 0.40 | 9.82 | 27.63 | 68.55 | 68.18 | 1824.84 | 673.32 | 485988.13 | 4.05 | 2.49 | |
| SINA-01 227 | 5.62 | 131.27 | 303.69 | 0.56 | 21.50 | 11480.71 | 66.22 | 0.002 | 139.82 | 1.24 | 0.66 | 551.50 | 0.314 | 2.62 | 0.40 | 8.97 | 44.80 | 67.35 | 90.12 | 1753.82 | 656.73 | 484959.00 | <2.848 | 1.86 | |
| SINA-01 229 | 6.26 | 143.19 | 332.94 | 0.36 | 22.98 | 10656.98 | 61.61 | <0.001 | 149.59 | 2.43 | 0.61 | 471.52 | 0.071 | 2.45 | 0.78 | 9.62 | 42.96 | 73.76 | 102.59 | 1910.77 | 718.77 | 485471.10 | <2.617 | 3.08 | |
| SINA-01 230 | 6.89 | 143.18 | 321.53 | 0.46 | 25.92 | 10289.11 | 61.65 | <0.001 | 129.54 | 2.26 | 0.68 | 425.39 | 0.060 | 2.54 | 0.70 | 10.28 | 48.51 | 68.24 | 98.29 | 1843.27 | 628.54 | 486002.56 | <2.674 | 3.10 | |
| SINA-01 231 | 14.05 | 107.04 | 248.68 | 0.47 | 19.32 | 10408.08 | 45.84 | 3.021 | 113.90 | 2.01 | 9.56 | 1307.92 | 0.030 | 1.57 | 0.90 | 7.38 | 21.61 | 55.49 | 63.13 | 1405.49 | 539.93 | 484812.49 | 12.26 | 3.10 | |
| SINA-01 232 | 6.69 | 121.09 | 287.28 | 0.32 | 18.69 | 11133.13 | 52.58 | 0.142 | 129.07 | 2.34 | 0.81 | 453.25 | 0.066 | 2.14 | 0.73 | 7.96 | 43.55 | 63.68 | 99.01 | 1648.58 | 619.17 | 485481.50 | 70.23 | 6.76 | |
| SINA-01 233 | 19.60 | 481.29 | 464.47 | 59.00 | 321.41 | 10417.62 | 118.88 | 0.942 | 137.68 | 1.99 | 98.59 | 1344.91 | 0.547 | 7.50 | 134.82 | 0.57 | 62.89 | 47.69 | 83.95 | 3864.10 | 721.59 | 480995.24 | 6.16 | 3.47 | |
| SINA-01 234 | 4.08 | 109.39 | 238.83 | 0.35 | 20.23 | 10337.17 | 46.01 | 0.027 | 95.39 | 1.77 | 0.62 | 418.04 | 0.049 | 1.90 | 0.46 | 7.94 | 28.86 | 51.16 | 67.37 | 1399.94 | 476.73 | 488731.70 | <2.751 | 2.84 | |
| SINA-01 24 | 4.63 | 102.65 | 229.28 | 0.27 | 17.57 | 10642.37 | 43.65 | 0.019 | 98.78 | 1.75 | 0.63 | 362.06 | 0.040 | 1.74 | 0.43 | 6.83 | 29.48 | 49.54 | 67.76 | 1321.47 | 479.57 | 486688.80 | 11.74 | 3.10 | |
| SINA-01 25 | 30.65 | 338.41 | 658.99 | 1.05 | 71.50 | 9925.69 | 133.59 | 5.695 | 229.22 | 6.60 | 21.16 | 2344.59 | 0.191 | 3.20 | 12.76 | 1.13 | 25.86 | 166.34 | 131.74 | 189.87 | 4028.34 | 1165.91 | 478976.99 | 26.13 | 3.79 |
| SINA-01 26 | 14.67 | 232.51 | 486.06 | 0.75 | 44.44 | 10851.52 | 93.28 | 0.003 | 183.90 | 4.30 | 1.43 | 640.91 | 0.278 | 4.49 | 1.19 | 16.79 | 230.75 | 100.04 | 251.61 | 2869.30 | 962.01 | 483304.57 | <4.938 | 3.95 | |
| SINA-01 27 | 7.97 | 158.93 | 341.89 | 0.40 | 26.77 | 10112.72 | 63.15 | 0.005 | 138.67 | 2.64 | 0.67 | 459.11 | 0.055 | 2.79 | 0.89 | 10.68 | 56.73 | 73.88 | 115.05 | 1989.10 | 696.34 | 485808.50 | <5.114 | 2.90 | |
| SINA-01 28 | 5.25 | 113.72 | 275.65 | 0.31 | 18.72 | 10907.30 | 49.55 | 0.005 | 123.27 | 2.13 | 0.45 | 417.21 | 0.042 | 1.58 | 0.64 | 7.64 | 31.18 | 59.48 | 79.53 | 1539.75 | 579.03 | 486006.07 | 3.92 | 3.25 | |
| SINA-01 29 | 5.05 | 201.97 | 420.24 | 0.66 | 38.12 | 10511.83 | 81.93 | <0.001 | 163.24 | 1.39 | 1.44 | 583.54 | 0.067 | 4.47 | 0.36 | 14.41 | 42.49 | 88.30 | 89.82 | 2486.99 | 813.44 | 484547.05 | <2.846 | 2.31 | |
| SINA-02 1 | 5.07 | 114.97 | 284.40 | 0.29 | 17.94 | 10667.67 | 50.56 | <0.001 | 134.81 | 2.16 | 0.44 | 423.29 | 0.067 | 1.93 | 0.71 | 7.70 | 26.46 | 64.03 | 77.72 | 1603.00 | 629.09 | 486046.75 | <3.159 | 3.22 | |
| SINA-02 10 | 4.09 | 107.01 | 240.07 | 0.30 | 18.09 | 10301.73 | 45.07 | 0.015 | 93.73 | 1.60 | 0.77 | 427.14 | 0.042 | 2.01 | 0.39 | 7.43 | 26.38 | 49.66 | 61.73 | 1383.37 | 454.93 | 486770.73 | 4.37 | 2.20 | |
| SINA-02 11 | 5.69 | 139.17 | 319.60 | 1.00 | 24.91 | 10797.23 | 52.73 | 0.033 | 142.87 | 2.07 | 1.32 | 397.86 | 0.320 | 2.09 | 0.63 | 9.77 | 34.78 | 50.41 | 88.64 | 1825.00 | 673.17 | 485663.14 | 4.53 | 2.14 | |
| SINA-02 12 | 5.05 | 125.39 | 278.91 | 0.48 | 21.50 | 10492.14 | 59.74 | 0.004 | 116.94 | 2.07 | 0.69 | 424.02 | 0.050 | 2.26 | 0.59 | 8.56 | 35.84 | 59.01 | 80.55 | 1603.27 | 563.79 | 486243.38 | <2.832 | 2.17 | |
| SINA-02 14 | 6.18 | 158.90 | 358.83 | 0.34 | 23.73 | 10842.40 | 64.13 | 0.002 | 154.63 | 2.35 | 0.62 | 702.62 | 0.069 | 2.43 | 0.63 | 10.28 | 45.49 | 79.98 | 105.14 | 2002.87 | 763.94 | 484700.00 | <3.581 | 3.06 | |
| SINA-02 15 | 4.33 | 157.37 | 330.10 | 0.59 | 29.68 | 10097.82 | 63.26 | 0.085 | 128.75 | 1.32 | 1.15 | 469.92 | 0.051 | 3.49 | 0.36 | 11.52 | 38.93 | 67.52 | 68.35 | 1946.41 | 643.32 | 485930.33 | 13.76 | 4.08 | |
| SINA-02 20 | 5.42 | 123.79 | 294.35 | 0.21 | 19.27 | 11229.08 | 53.43 | 0.002 | 136.96 | 2.26 | 0.53 | 511.29 | 0.051 | 1.79 | 0.70 | 7.89 | 31.14 | 65.13 | 85.74 | 1676.49 | 585.91 | 486038.80 | <2.835 | 2.82 | |
| SINA-02 21 | 5.81 | 192.33 | 389.47 | 0.79 | 37.76 | 10522.36 | 77.16 | 0.070 | 147.05 | 1.12 | 1.07 | 363.81 | 0.063 | 2.28 | 0.64 | 9.13 | 64.56 | 64.53 | 123.97 | 1725.72 | 617.75 | 485818.03 | <2.959 | 2.76 | |
| SINA-02 19 | 9.09 | 178.15 | 400.29 | 0.49 | 28.91 | 10894.24 | 76.61 | 0.011 | 161.93 | 2.63 | 0.80 | 606.25 | 0.106 | 3.26 | 0.84 | 12.24 | 83.16 | 86.25 | 152.31 | 2341.18 | 819.36 | 484330.26 | <2.967 | 3.46 | |
| SINA-02 22 | 4.93 | 161.02 | 345.95 | 0.64 | 28.18 | 10558.36 | 66.60 | 0.089 | 137.55 | 1.39 | 1.46 | 478.18 | 0.044 | 3.64 | 0.43 | 11.62 | 29.72 | 71.79 | 69.82 | 2007.55 | 664.45 | 485485.90 | <2.480 | 2.55 | |
| SINA-02 223 | 3.92 | 145.93 | 312.79 | 0.59 | 27.70 | 10454.05 | 59.41 | 0.003 | 127.83 | 1.32 | 0.82 | 402.04 | 0.037 | 2.88 | 0.40 | 10.08 | 25.82 | 65.78 | 62.23 | 1800.09 | 619.01 | 486028.17 | <2.661 | 2.11 | |
| SINA-02 224 | 4.82 | 125.20 | 278.35 | 0.31 | 23.61 | 10361.06 | 52.84 | 0.022 | 120.99 | 1.95 | 0.54 | 511.29 | 0.051 | 1.79 | 0.70 | 7.89 | 31.14 | 65.13 | 85.74 | 1676.49 | 585.91 | 486038.80 | <2.835 | 2.82 | |
| SINA-02 225 | 7.12 | 137.36 | 313.45 | 0.39 | 23.87 | 10935.30 | 59.39 | <0.001 | 129.99 | 2.34 | 0.65 | 394.59 | 0.059 | 2.27 | 0.51 | 9.10 | 39.57 | 57.79 | 74.92 | 1590.75 | 539.39 | 486427.70 | 7.20 | 2.90 | |
| SINA-02 226 | 11.10 | 225.78 | 485.67 | 0.68 | 38.18 | 10554.47 | 94.02 | 0.039 | 194.38 | 4.01 | 1.36 | 709.66 | 0.167 | 4.87 | 1.09 | 15.52 | 120.91 | 101.82 | 189.83 | 2908.15 | 937.96 | 483488.91 | 5.03 | 3.64 | |
| SINA-02 227 | 6.86 | 137.08 | 313.64 | 0.48 | 23.92 | 10456.41 | 58.87 | 0.003 | 128.15 | 2.34 | 0.63 | 473.54 | 0.076 | 2.62 | 0.66 | 9.79 | 62.79 | 66.71 | 114.24 | 1803.70 | 629.69 | 485816.07 | <2.554 | 2.71 | |
| SINA-02 229 | 5.29 | 180.81 | 405.82 | 0.48 | 29.21 | 10293.39 | 76.67 | <0.001 | 167.14 | 1.84 | 1.08 | 854.44 | 0.055 | 3.11 | 0.57 | 12.26 | 47.85 | 85.93 | 110.54 | 2341.99 | 827.86 | 484330.01 | 3.39 | 2.41 | |
| SINA-02 23 | 7.70 | 151.83 | 333.22 | 0.41 | 26.71 | 10847.71 | 64.22 | 0.070 | 133.38 | 2.79 | 1.00 | 546.88 | 0.090 | 3.30 | 0.79 | 10.56 | 68.28 | 69.10 | 121.39 | 1918.90 | 644.94 | 485189.99 | 4.88 | 3.25 | |
| SINA-02 230 | 6.30 | 121.94 | 288.29 | 0.35 | 20.23 | 10915.27 | 53.56 | 0.002 | 129.64 | 2.06 | 0.51 | 460.44 | 0.063 | 1.96 | 0.71 | 8.26 | 35.32 | 63.86 | 90.29 | 1621.83 | 620.54 | 485764.97 | <2.552 | 2.60 | |
| SINA-02 231 | 6.03 | 124.96 | 282.50 | 0.41 | 19.58 | 10437.64 | 52.60 | <0.001 | 123.87 | 2.21 | 0.55 | 429.37 | 0.048 | 2.19 | 0.68 | 8.06 | 35.02 | 62.36 | 85.25 | 1612.93 | 594.99 | 486227.79 | <2.683 | 2.95 | |
| SINA-02 233 | 8.62 | 171.19 | 371.68 | 0.50 | 29.20 | 10655.67 | 70.75 | <0.001 | 148.45 | 2.92 | 0.74 | 547.14 | 0.084 | 2.76 | 0.90 | 11.66 | 56.13 | 80.01 | 123.58 | 2175.51 | 747.83 | 484932.72 | 3.55 | 2.63 | |
| SINA-02 234 | 7.75 | 143.95 | 321.78 | 0.37 | 23.15 | 10881.55 | 61.20 | <0.001 | 135.97 | 2.60 | 0.79 | 516.70 | 0.075 | 2.59 | 0.76 | 9.86 | 52.59 | 70.24 | 114.71 | 1889.56 | 662.18 | 485282.44 | <2.454 | 2.65 | |
| SINA-02 235 | 4.74 | 184.19 | 345.56 | 0.55 | 29.70 | 10606.01 | 67.87 | 0.029 | 138.53 | 1.89 | 0.91 | 508.82 | 0.053 | 3.49 | 0.41 | 11.70 | 36.71 | 73.28 | 76.77 | 2086.74 | 677.99 | 485304.95 | <2.689 | 2.82 | |
| SINA-02 24 | 6.40 | 163.79 | 365.06 | 0.94 | 37.79 | 10614.03 | 71.94 | 0.043 | 132.69 | 1.88 | 1.70 | 501.84 | 0.264 | 4.62 | 0.48 | 13.93 | 63.53 | 73.49 | 96.69 | 2157.10 | 667.00 | 485155.44 | 4.82 | 2.88 | |
| SINA-02 26 | 4.49 | 112.35 | 252.07 | 0.39 | 19.12 | 10535.69 | 47.14 | 0.024 | 104.74 | 1.67 | | | | | | | | | | | | | | | |

Appendix C: Eastern Sunda arc zircon trace element chemistry

| Analysis ID | Ce | Dy | Er | Eu | Gd | Hf | Ho | La | Lu | Nb | Nd | P | Pb | Pr | Sm | Ta | Tb | Th | Tm | U | Y | Yb | Zr | Fe | Ti |
|-------------|--------|---------|---------|-------|--------|----------|--------|--------|--------|-------|--------|---------|--------|-------|--------|--------|--------|---------|--------|---------|----------|-----------|-----------|----------|-------|
| SINA-02_28 | 4.92 | 156.06 | 340.21 | 0.59 | 28.78 | 10415.94 | 65.36 | 0.004 | 140.78 | 1.58 | 0.84 | 427.49 | 0.065 | 0.04 | 3.59 | 0.45 | 11.14 | 34.15 | 71.86 | 76.68 | 1978.77 | 686.31 | 485701.53 | 3.25 | 2.76 |
| SINA-02_29 | 5.65 | 152.28 | 358.14 | 0.36 | 25.51 | 10693.51 | 65.35 | 0.003 | 157.07 | 2.15 | 0.56 | 691.69 | 0.050 | 0.02 | 2.97 | 0.64 | 10.39 | 35.46 | 76.39 | 95.31 | 2045.95 | 752.89 | 484817.68 | -2.781 | 2.54 |
| LB010_Z_3 | 22.45 | 546.40 | 1027.87 | 2.09 | 115.23 | 9858.62 | 209.52 | 0.108 | 328.26 | 2.21 | 5.41 | 945.79 | 0.229 | 0.22 | 15.35 | 0.58 | 42.83 | 107.07 | 197.54 | 159.37 | 6452.02 | 1729.77 | 471771.34 | 885.76 | 10.90 |
| LB011_Z_1 | 10.19 | 102.22 | 213.95 | 0.76 | 20.20 | 9880.58 | 41.00 | <0.003 | 87.81 | 0.94 | 1.12 | 387.55 | 0.011 | 0.04 | 3.03 | 0.30 | 7.51 | 30.09 | 45.15 | 50.40 | 1319.96 | 439.51 | 487280.27 | -2.638 | 9.97 |
| LB011_Z_3 | 6.03 | 78.57 | 203.07 | 0.36 | 12.17 | 10402.10 | 35.36 | 0.003 | 118.67 | 0.84 | 0.44 | 467.40 | 0.060 | 0.02 | 1.58 | 0.34 | 5.43 | 49.20 | 98.71 | 1205.37 | 524.89 | 486756.87 | 2.91 | 4.08 | |
| LB043_Z_1 | 7.49 | 74.49 | 155.30 | 1.15 | 17.82 | 9985.01 | 28.84 | 0.169 | 84.01 | 0.57 | 1.86 | 338.88 | 0.033 | 0.13 | 2.80 | 0.20 | 5.74 | 47.73 | 36.06 | 54.84 | 982.50 | 374.36 | 487721.70 | 34.98 | 8.05 |
| LB043_Z_10 | 9.42 | 66.84 | 176.80 | 0.76 | 12.74 | 9505.33 | 31.06 | 0.011 | 104.72 | 1.28 | 0.50 | 281.90 | <0.014 | 0.04 | 1.74 | 0.32 | 4.88 | 50.62 | 42.23 | 71.65 | 1036.15 | 437.80 | 488076.06 | 16.24 | 8.30 |
| LB043_Z_2 | 7.57 | 61.70 | 140.54 | 0.76 | 12.69 | 9706.32 | 25.37 | 0.070 | 81.45 | 0.74 | 1.08 | 260.78 | 0.024 | 0.05 | 1.85 | 0.25 | 4.65 | 39.28 | 42.23 | 53.56 | 867.77 | 343.27 | 488318.08 | -2.628 | 5.40 |
| LB043_Z_3 | 11.59 | 97.35 | 223.41 | 1.44 | 21.15 | 9479.26 | 39.93 | <0.003 | 124.82 | 1.15 | 1.84 | 302.54 | 0.033 | 0.09 | 3.56 | 0.31 | 7.22 | 79.25 | 44.31 | 92.75 | 1353.10 | 543.44 | 487366.92 | -2.631 | 8.97 |
| LB043_Z_4 | 10.29 | 69.95 | 184.43 | 0.80 | 13.82 | 9576.56 | 31.96 | 0.018 | 110.57 | 1.25 | 0.57 | 276.05 | 0.123 | 0.19 | 3.19 | 0.36 | 5.35 | 58.80 | 41.47 | 79.16 | 1103.85 | 472.18 | 487931.64 | -5.812 | 8.66 |
| LB043_Z_5 | 15.34 | 105.23 | 269.62 | 1.28 | 22.29 | 10209.51 | 46.96 | 0.028 | 147.94 | 1.96 | 1.33 | 303.24 | 0.051 | 0.06 | 3.49 | 0.38 | 8.26 | 104.44 | 62.71 | 132.83 | 1614.76 | 656.09 | 486512.35 | -7.975 | 7.16 |
| LB043_Z_6 | 4.90 | 29.03 | 69.61 | 0.31 | 5.92 | 9744.01 | 12.28 | 0.014 | 44.04 | 0.62 | 0.53 | 187.36 | 0.036 | 0.02 | 0.81 | 0.17 | 2.11 | 20.92 | 16.75 | 35.06 | 420.72 | 183.33 | 489171.36 | 3.50 | 6.67 |
| LB043_Z_7 | 3.83 | 28.56 | 70.69 | 0.42 | 5.79 | 10098.88 | 12.29 | <0.003 | 44.94 | 0.43 | 0.28 | 153.24 | 0.011 | 0.01 | 0.67 | 0.15 | 2.17 | 13.00 | 16.81 | 24.24 | 421.02 | 183.03 | 488991.22 | -2.574 | 5.09 |
| LB043_Z_8 | 6.57 | 56.52 | 133.56 | 0.83 | 12.14 | 9777.93 | 23.22 | <0.003 | 78.70 | 0.55 | 0.81 | 254.58 | 0.024 | 0.05 | 1.79 | 0.25 | 4.45 | 32.68 | 30.80 | 49.22 | 802.33 | 330.35 | 488376.50 | -2.568 | 5.52 |
| LB043_Z_9 | 14.35 | 125.23 | 288.63 | 1.67 | 32.97 | 10219.49 | 51.02 | 0.054 | 139.04 | 1.10 | 3.39 | 550.33 | 0.094 | 0.31 | 5.50 | 0.36 | 10.03 | 118.77 | 60.39 | 122.60 | 1670.05 | 603.44 | 485976.81 | -6.251 | 6.34 |
| LB044_Z_1 | 227.80 | 805.59 | 554.72 | 10.14 | 513.90 | 10719.33 | 182.47 | 3.459 | 70.76 | 5.56 | 313.10 | 1119.09 | 1.455 | 26.62 | 243.85 | 1.23 | 108.53 | 1470.15 | 83.43 | 1764.68 | 4712.52 | 543.82 | 477398.43 | -5.688 | 21.65 |
| LB044_Z_2 | 59.63 | 530.96 | 792.55 | 1.07 | 148.96 | 10299.58 | 185.91 | 0.059 | 182.68 | 4.84 | 8.34 | 1112.05 | 2.212 | 0.46 | 23.25 | 2.47 | 47.23 | 2225.88 | 140.16 | 1878.47 | 5815.33 | 1090.16 | 476415.40 | -5.560 | 25.28 |
| LB044_Z_3 | 1.93 | 50.11 | 123.75 | 0.41 | 8.59 | 9301.93 | 21.47 | <0.003 | 72.10 | 0.44 | 0.20 | 206.11 | 0.016 | 0.01 | 1.09 | 0.12 | 3.49 | 7.11 | 28.72 | 21.42 | 733.97 | 312.47 | 488974.14 | -2.588 | 10.22 |
| LB044_Z_4 | 53.42 | 218.16 | 164.46 | 2.81 | 141.21 | 10871.26 | 50.33 | 0.374 | 25.83 | 1.02 | 46.15 | 399.11 | 0.438 | 3.06 | 56.03 | 0.66 | 29.12 | 260.91 | 26.66 | 404.84 | 1414.41 | 189.64 | 485669.21 | 69.17 | 14.08 |
| LB044_Z_5 | 16.13 | 287.70 | 603.77 | 3.10 | 69.02 | 9075.88 | 119.11 | 0.632 | 225.71 | 1.10 | 5.65 | 689.89 | 0.311 | 0.43 | 9.58 | 0.35 | 22.80 | 196.71 | 131.67 | 189.58 | 3720.22 | 1235.85 | 482200.03 | 788.64 | 28.05 |
| LB010_Z_1 | 19.01 | 316.61 | 650.96 | 1.13 | 66.22 | 9735.44 | 129.86 | 0.008 | 225.77 | 2.07 | 1.92 | 782.87 | 0.121 | 0.14 | 7.56 | 0.60 | 23.60 | 135.95 | 128.77 | 155.41 | 3999.01 | 1176.71 | 482380.11 | -6.380 | 10.14 |
| LB010_Z_2 | 25.20 | 409.42 | 807.10 | 1.40 | 82.83 | 9641.34 | 165.99 | 0.013 | 275.47 | 2.56 | 3.72 | 1064.08 | 0.185 | 0.13 | 10.16 | 0.80 | 30.72 | 195.56 | 162.83 | 182.55 | 5082.97 | 1400.54 | 480250.78 | -5.908 | 11.55 |
| LB010_Z_5 | 25.05 | 471.18 | 981.23 | 1.43 | 99.00 | 12631.19 | 191.49 | 0.028 | 386.48 | 2.00 | 4.27 | 1088.19 | 0.226 | 0.18 | 11.66 | 0.79 | 35.04 | 213.81 | 207.38 | 334.78 | 6239.59 | 1900.82 | 475925.33 | 17.11 | 4.35 |
| LB010_Z_6 | 99.19 | 655.22 | 1187.71 | 4.90 | 163.78 | 9242.14 | 248.04 | 2.710 | 401.49 | 4.08 | 13.36 | 1427.19 | 11.871 | 1.13 | 27.23 | 1.90 | 54.33 | 1145.08 | 237.29 | 910.27 | 7727.07 | 2124.18 | 472983.29 | 1176.43 | 12.63 |
| LB010_Z_6 | 389.55 | 382.00 | 461.13 | 18.85 | 162.65 | 10761.33 | 111.87 | 67.856 | 135.54 | 8.63 | 210.07 | 669.60 | 38.176 | 47.46 | 80.05 | 6.14 | 41.93 | 1482.84 | 88.68 | 1807.81 | 3518.05 | 767.99 | 474914.25 | 3633.60 | 81.30 |
| LB011_Z_2 | 7.72 | 143.00 | 289.82 | 1.37 | 33.37 | 9320.52 | 57.85 | <0.006 | 112.89 | 0.76 | 2.13 | 441.63 | 0.015 | 0.10 | 3.98 | 0.24 | 10.83 | 39.01 | 60.06 | 39.01 | 1825.42 | 541.08 | 486717.67 | -5.992 | 9.18 |
| LB011_Z_4 | 17.00 | 300.38 | 542.25 | 3.16 | 75.81 | 9079.55 | 114.89 | 0.018 | 192.41 | 1.15 | 4.95 | 552.09 | 0.041 | 0.24 | 12.04 | 0.36 | 24.79 | 79.61 | 110.79 | 77.20 | 3465.41 | 989.56 | 484059.33 | -6.078 | 10.80 |
| LB011_Z_5 | 18.53 | 299.79 | 584.92 | 2.83 | 73.76 | 9310.01 | 117.25 | 0.037 | 190.14 | 1.59 | 4.50 | 585.40 | 0.129 | 0.25 | 9.36 | 0.47 | 24.08 | 89.85 | 112.64 | 80.93 | 3529.43 | 992.29 | 483834.03 | 54.09 | 13.47 |
| LB011_Z_6 | 9.84 | 122.32 | 309.68 | 0.59 | 21.72 | 11619.80 | 55.92 | 0.222 | 161.38 | 2.41 | 1.17 | 660.55 | 0.145 | 0.21 | 4.23 | 0.67 | 8.66 | 150.39 | 69.06 | 258.28 | 1790.13 | 716.13 | 484101.71 | 178.61 | 6.41 |
| LB011_Z_7 | 5.87 | 87.48 | 185.58 | 0.89 | 19.45 | 9079.55 | 35.51 | 0.304 | 77.07 | 0.84 | 1.41 | 563.24 | 0.177 | 0.33 | 2.30 | 0.23 | 7.09 | 17.51 | 41.55 | 28.15 | 1170.90 | 383.19 | 487771.69 | 26.12 | 11.33 |
| NEF-01_Z_1 | 8.70 | 47.20 | 115.44 | 0.38 | 7.16 | 10062.23 | 20.09 | 0.010 | 45.98 | 1.15 | 0.30 | 227.86 | 0.068 | 0.03 | 1.07 | 0.87 | 3.31 | 202.70 | 26.63 | 372.83 | 718.79 | 252.14 | 488074.62 | -7.305 | 2.92 |
| NEF-01_Z_2 | 66.31 | 360.06 | 807.70 | 2.11 | 72.34 | 11143.40 | 148.90 | 0.226 | 327.84 | 6.00 | 3.43 | 584.40 | 5.722 | 0.16 | 9.50 | 2.77 | 27.01 | 1276.05 | 179.83 | 889.56 | 5104.44 | 1689.14 | 477592.81 | 951.37 | 8.65 |
| NEF-01_Z_3 | 318.82 | 1004.49 | 1747.61 | 5.24 | 279.12 | 10307.12 | 370.58 | 0.977 | 530.93 | 16.78 | 23.99 | 1821.84 | 9.887 | 1.50 | 46.94 | 4.23 | 86.99 | 4139.75 | 354.11 | 1066.64 | 12141.54 | 3075.11 | 462001.54 | 1696.43 | 22.98 |
| NEF-03_Z_1 | 40.15 | 452.66 | 952.51 | 0.49 | 95.42 | 12919.54 | 186.88 | 0.320 | 382.34 | 15.25 | 5.74 | 1874.31 | 2.052 | 0.39 | 11.45 | 12.96 | 33.89 | 494.66 | 198.97 | 626.86 | 5847.87 | 1861.56 | 472950.53 | 944.24 | 20.95 |
| NEF-03_Z_2 | 15.23 | 305.87 | 822.42 | 1.01 | 67.10 | 10026.22 | 140.37 | 0.230 | 429.01 | 11.74 | 6.31 | 1625.43 | 1.111 | 0.44 | 10.60 | 6.58 | 22.75 | 370.49 | 192.87 | 768.55 | 4569.10 | 1907.43 | 475878.88 | 1873.42 | 56.19 |
| NEF-03_Z_3 | 12.59 | 131.95 | 174.28 | 0.18 | 18.18 | 10300.29 | 72.21 | 0.195 | 305.82 | 8.00 | 0.97 | 983.54 | 4.723 | 0.10 | 1.98 | 4.49 | 7.55 | 299.12 | 121.15 | 731.86 | 2308.31 | 1296.05 | 468245.97 | 11150.52 | 35.32 |
| NEF-03_Z_4 | 42.93 | 742.11 | 1328.64 | 2.09 | 194.00 | 9784.56 | 279.06 | 0.183 | 495.75 | 13.83 | 8.42 | 2780.63 | 0.592 | 0.39 | 23.69 | 4.61 | 61.42 | 879.66 | 259.76 | 938.67 | 8739.26 | 2370.80 | 469456.60 | 236.21 | 10.51 |
| NEF-03_Z_5 | 63.96 | 542.66 | 1164.17 | 1.45 | 114.20 | 9138.92 | 223.69 | 0.959 | 482.08 | 13.88 | 10.88 | 1427.18 | 0.725 | 0.86 | 18.81 | 5.22 | 41.09 | 433.87 | 255.94 | 748.60 | 6966.64 | 2378.26 | 475735.93 | 167.73 | 7.67 |
| NEF-03_Z_6 | 18.40 | 261.30 | 582.32 | 1.72 | 62.60 | 11083.88 | 108.24 | 0.423 | 277.65 | 10.55 | 4.79 | 1243.68 | 1.628 | 0.38 | 10.24 | 11.74 | 21.32 | 275.76 | 111.74 | 515.77 | 3440.39 | 1319.01 | 467578.57 | 9836.91 | 54.79 |
| SEF-01_Z_1 | 6.75 | 72.99 | 155.59 | 0.56 | 13.29 | 9668.57 | 30.16 | 0.010 | 66.69 | 0.88 | 0.96 | 270.86 | 0.215 | 0.07 | 1.82 | 0.21 | 5.33 | 52.84 | 34.35 | 54.31 | 979.43 | 319.70 | 487256.47 | 678.97 | 43.56 |
| SEF-01_Z_10 | 23.89 | 251.72 | 454.72 | 3.40 | 66.27 | 8278.74 | 95.75 | 0.022 | 151.98 | 1.46 | 4.59 | 453.81 | 0.294 | 0.24 | 10.45 | 0.41 | 21.18 | 371.15 | 92.71 | 227.35 | 3078.31 | 789.67 | 485434.92 | -5.610 | 19.27 |
| SEF-01_Z_11 | 14.45 | 136.01 | 249.71 | 2.25 | 40.06 | 8370.53 | 52.03 | 0.028 | 99.91 | 0.81 | 4.86 | 268.01 | 0.143 | 0.28 | 6.91 | 0.16 | 11.35 | 229.64 | 52.15 | 120.21 | 1624.84 | 490.41 | 488012.76 | -5.747 | 14.88 |
| SEF-01_Z_12 | 6.42 | 54.68 | 148.95 | 0.69 | 11.29 | 7977.40 | 25.86 | 0.066 | 92.54 | 1.03 | 0.78 | 233.00 | 0.054 | 0.05 | 1.50 | 0.25 | 4.22 | 41.14 | 35.58 | 880.12 | 385.70 | 489333.80 | 173.37 | 40.40 | |
| SEF-01_Z_13 | 25.47 | 375.56 | 624.10 | 4.95 | 93.83 | 7418.89 | 132.59 | 0.022 | 191.34 | 1.64 | 4.78 | 601.84 | 0.336 | 0.26 | 13.62 | 0.46</ | | | | | | | | | |

Appendix C: Eastern Sunda arc zircon trace element chemistry

| Analysis ID | Ce | Dy | Er | Eu | Gd | Hf | Ho | La | Lu | Nb | Nd | P | Pb | Pr | Sm | Ta | Tb | Th | Tm | U | Y | Yb | Zr | Fe | Ti |
|--------------|-------|--------|--------|------|-------|----------|--------|--------|--------|------|-------|---------|-------|------|-------|------|-------|--------|--------|--------|---------|---------|-----------|--------|-------|
| SEF-01_Z_17 | 24.70 | 325.74 | 575.67 | 8.01 | 96.20 | 7691.41 | 122.18 | 0.045 | 224.22 | 1.53 | 7.38 | 509.85 | 0.417 | 0.37 | 16.89 | 0.27 | 28.84 | 626.29 | 120.48 | 289.40 | 3861.32 | 1122.78 | 484216.43 | <5.768 | 15.11 |
| SEF-01_Z_18 | 23.85 | 256.94 | 455.84 | 4.59 | 76.34 | 7309.39 | 95.83 | 0.048 | 167.76 | 1.13 | 7.75 | 418.61 | 0.305 | 0.38 | 14.40 | 0.36 | 22.22 | 424.32 | 93.06 | 230.66 | 3027.69 | 860.47 | 486162.95 | <6.412 | 18.18 |
| SEF-01_Z_2 | 14.91 | 149.00 | 337.47 | 2.18 | 33.35 | 7933.31 | 62.90 | 0.020 | 159.27 | 0.85 | 3.31 | 350.14 | 0.236 | 0.17 | 5.33 | 0.36 | 11.09 | 302.54 | 73.40 | 199.04 | 2066.03 | 725.04 | 487229.41 | 51.13 | 18.89 |
| SEF-01_Z_3 | 5.17 | 61.28 | 134.73 | 1.08 | 12.90 | 8725.94 | 24.54 | 0.004 | 77.05 | 0.51 | 1.12 | 202.12 | 0.039 | 0.05 | 2.24 | 0.16 | 4.88 | 43.48 | 31.45 | 56.70 | 825.85 | 331.42 | 489231.45 | <2.624 | 5.23 |
| SEF-01_Z_4 | 16.50 | 243.94 | 464.43 | 2.76 | 61.56 | 8929.85 | 94.57 | 0.020 | 179.41 | 1.22 | 4.42 | 487.23 | 0.162 | 0.27 | 10.03 | 0.31 | 20.01 | 148.82 | 98.72 | 148.82 | 2978.41 | 901.25 | 485084.00 | 5.70 | 12.33 |
| SEF-01_Z_5 | 8.13 | 96.48 | 191.93 | 2.30 | 23.37 | 7690.53 | 36.61 | 0.013 | 94.38 | 0.47 | 2.79 | 204.51 | 0.126 | 0.18 | 4.88 | 0.17 | 7.67 | 193.53 | 42.56 | 143.78 | 1322.60 | 437.34 | 489216.18 | <2.637 | 14.65 |
| SEF-01_Z_6 | 18.56 | 291.18 | 490.46 | 3.45 | 75.62 | 7297.16 | 105.53 | 0.026 | 160.04 | 0.90 | 6.79 | 424.38 | 0.233 | 0.34 | 13.29 | 0.29 | 24.84 | 244.92 | 95.29 | 220.01 | 3368.28 | 829.28 | 485844.96 | <2.609 | 18.45 |
| SEF-01_Z_7 | 15.42 | 213.65 | 417.57 | 1.99 | 55.64 | 9139.83 | 85.11 | 0.044 | 148.19 | 0.89 | 4.18 | 394.08 | 0.266 | 0.20 | 8.99 | 0.25 | 17.56 | 266.00 | 86.25 | 163.48 | 2665.39 | 755.97 | 485508.90 | 26.76 | 16.93 |
| SEF-01_Z_8 | 7.00 | 84.58 | 184.17 | 0.90 | 17.41 | 8723.12 | 34.02 | 0.034 | 81.27 | 0.72 | 1.18 | 278.94 | 0.066 | 0.08 | 2.35 | 0.25 | 6.51 | 73.31 | 39.98 | 132.11 | 1192.11 | 383.11 | 488685.14 | 16.11 | 13.42 |
| SEF-01_Z_9 | 11.23 | 156.49 | 303.45 | 2.56 | 39.62 | 8530.63 | 60.13 | 0.149 | 119.62 | 0.59 | 3.68 | 313.90 | 0.142 | 0.31 | 6.81 | 0.26 | 13.25 | 186.76 | 63.15 | 134.74 | 1951.82 | 583.31 | 487321.37 | 6.60 | 13.63 |
| SEF-02_Z_1 | 5.97 | 53.16 | 134.59 | 0.64 | 9.67 | 8340.83 | 23.20 | <0.002 | 84.16 | 0.87 | 0.44 | 185.67 | 0.049 | 0.03 | 1.28 | 0.27 | 3.72 | 40.13 | 32.83 | 61.42 | 795.54 | 356.15 | 489568.08 | <2.570 | 6.86 |
| SEF-02_Z_2 | 7.56 | 61.37 | 165.81 | 0.91 | 11.37 | 8605.84 | 28.13 | <0.006 | 104.84 | 0.83 | 0.58 | 216.29 | 0.057 | 0.03 | 1.57 | 0.31 | 4.19 | 56.89 | 39.69 | 82.80 | 977.39 | 432.10 | 488990.59 | <5.902 | 6.51 |
| SEF-02_Z_3 | 5.76 | 75.04 | 158.20 | 1.54 | 16.94 | 8559.37 | 29.80 | <0.002 | 83.49 | 0.49 | 1.77 | 163.69 | 0.066 | 0.09 | 2.94 | 0.15 | 5.80 | 49.84 | 36.07 | 59.20 | 968.61 | 374.87 | 489197.66 | 3.55 | 4.94 |
| SINA-04_Z_1 | 12.14 | 178.76 | 390.35 | 0.60 | 34.40 | 10309.91 | 76.58 | 1.003 | 149.52 | 3.02 | 3.88 | 933.95 | 0.168 | 0.56 | 4.46 | 0.65 | 13.03 | 124.85 | 80.54 | 150.50 | 2277.21 | 740.60 | 484211.60 | 13.35 | 3.11 |
| SINA-04_Z_10 | 5.98 | 121.13 | 282.52 | 0.42 | 20.57 | 10435.95 | 53.80 | <0.006 | 117.04 | 1.72 | 0.76 | 463.88 | 0.107 | 0.02 | 2.07 | 0.55 | 7.91 | 44.22 | 60.54 | 93.97 | 1589.88 | 575.23 | 486173.36 | 7.75 | 3.73 |
| SINA-04_Z_12 | 7.88 | 159.86 | 343.77 | 0.54 | 28.11 | 10162.64 | 67.18 | 0.235 | 133.94 | 2.30 | 1.37 | 535.40 | 0.345 | 0.15 | 3.00 | 0.59 | 11.43 | 62.44 | 72.34 | 109.10 | 1988.13 | 670.64 | 48510.87 | 16.59 | 3.35 |
| SINA-04_Z_13 | 6.45 | 207.60 | 443.05 | 0.67 | 37.75 | 10523.57 | 85.47 | 0.004 | 171.98 | 1.90 | 1.06 | 657.67 | 0.495 | 0.05 | 4.56 | 0.53 | 14.90 | 66.74 | 93.43 | 115.26 | 2594.37 | 857.92 | 484176.59 | <2.621 | 2.86 |
| SINA-04_Z_14 | 8.12 | 248.70 | 530.15 | 0.57 | 44.52 | 10351.50 | 100.60 | 0.080 | 207.52 | 2.33 | 1.58 | 886.26 | 0.158 | 0.10 | 5.01 | 0.66 | 17.55 | 68.96 | 111.25 | 144.62 | 3106.33 | 1041.39 | 483010.91 | <3.120 | 2.52 |
| SINA-04_Z_15 | 4.09 | 123.28 | 267.19 | 0.54 | 21.86 | 10430.01 | 51.30 | 0.058 | 112.72 | 1.01 | 0.84 | 463.60 | 0.059 | 0.04 | 2.30 | 0.35 | 8.76 | 31.82 | 57.85 | 62.52 | 1557.93 | 552.18 | 486255.23 | 32.01 | 3.51 |
| SINA-04_Z_16 | 7.40 | 156.26 | 336.73 | 0.49 | 28.77 | 10181.21 | 63.24 | 0.525 | 136.79 | 1.52 | 2.51 | 577.81 | 0.198 | 0.31 | 4.08 | 0.40 | 11.52 | 43.12 | 73.70 | 88.47 | 1973.90 | 685.16 | 485564.97 | 7.74 | 3.79 |
| SINA-04_Z_17 | 3.76 | 124.99 | 272.66 | 0.39 | 21.81 | 9984.69 | 52.41 | 0.032 | 111.63 | 1.32 | 0.60 | 546.53 | 0.244 | 0.04 | 2.46 | 0.38 | 8.69 | 26.05 | 57.84 | 63.85 | 1589.22 | 551.89 | 486433.76 | <2.562 | 2.88 |
| SINA-04_Z_18 | 10.81 | 200.89 | 462.80 | 0.64 | 30.44 | 10672.98 | 85.32 | 0.022 | 206.22 | 3.44 | 1.02 | 556.26 | 0.566 | 0.05 | 3.60 | 0.96 | 13.77 | 73.02 | 103.08 | 151.84 | 2710.61 | 1003.33 | 483948.17 | 11.12 | 3.99 |
| SINA-04_Z_19 | 8.60 | 216.38 | 447.98 | 1.18 | 41.86 | 9526.23 | 84.98 | 0.005 | 175.96 | 2.38 | 1.55 | 432.23 | 1.561 | 0.06 | 5.25 | 0.55 | 16.33 | 81.93 | 93.76 | 123.23 | 2665.88 | 884.12 | 485230.63 | 4.71 | 4.06 |
| SINA-04_Z_2 | 8.37 | 158.30 | 359.17 | 0.46 | 27.86 | 10587.33 | 66.20 | 0.605 | 152.83 | 2.05 | 2.38 | 686.58 | 0.427 | 0.36 | 3.74 | 0.60 | 11.27 | 56.11 | 78.76 | 111.52 | 2057.59 | 755.42 | 484820.63 | 23.81 | 5.09 |
| SINA-04_Z_20 | 6.36 | 129.23 | 314.90 | 0.46 | 20.93 | 10923.43 | 58.96 | 0.050 | 138.14 | 2.32 | 0.94 | 536.83 | 0.241 | 0.02 | 2.48 | 0.57 | 8.83 | 38.33 | 70.58 | 89.10 | 1813.90 | 681.04 | 485161.31 | 117.96 | 4.80 |
| SINA-04_Z_21 | 6.93 | 236.30 | 498.76 | 1.88 | 47.37 | 8175.76 | 95.98 | 0.023 | 222.59 | 1.46 | 1.92 | 480.65 | 0.767 | 0.11 | 1.98 | 0.39 | 17.58 | 72.68 | 112.89 | 117.27 | 3020.67 | 1065.94 | 485512.35 | 34.46 | 5.91 |
| SINA-04_Z_22 | 3.03 | 103.99 | 251.76 | 0.30 | 14.84 | 11096.87 | 44.98 | <0.002 | 116.06 | 0.96 | 0.36 | 737.82 | 0.047 | 0.01 | 3.30 | 0.38 | 6.73 | 18.49 | 55.61 | 66.81 | 1428.45 | 555.12 | 485425.94 | 2.96 | 2.46 |
| SINA-04_Z_23 | 15.40 | 234.09 | 468.06 | 1.21 | 46.76 | 9728.58 | 92.63 | 3.292 | 175.45 | 1.84 | 12.77 | 1437.60 | 3.530 | 1.93 | 8.05 | 0.46 | 17.60 | 55.63 | 95.65 | 105.03 | 2792.50 | 882.38 | 482913.41 | 21.66 | 2.56 |
| SINA-04_Z_24 | 5.04 | 173.96 | 359.25 | 0.67 | 31.69 | 10362.71 | 69.03 | <0.003 | 142.02 | 1.26 | 1.12 | 387.34 | 0.289 | 0.05 | 3.92 | 0.39 | 12.49 | 36.97 | 75.67 | 82.20 | 2104.29 | 701.25 | 485641.85 | <2.962 | 2.62 |
| SINA-04_Z_25 | 10.60 | 196.81 | 418.29 | 0.75 | 33.75 | 10618.97 | 81.14 | 0.051 | 166.57 | 3.00 | 1.27 | 626.97 | 6.298 | 0.07 | 4.15 | 0.86 | 14.26 | 97.83 | 91.80 | 167.73 | 2553.42 | 849.51 | 484174.09 | 4.17 | 4.75 |
| SINA-04_Z_26 | 15.94 | 259.96 | 574.17 | 0.47 | 43.66 | 11479.66 | 108.19 | 0.033 | 241.24 | 4.83 | 1.32 | 779.61 | 0.268 | 0.06 | 4.43 | 1.46 | 18.21 | 120.76 | 125.51 | 266.64 | 3432.79 | 1190.89 | 481707.80 | 3.48 | 2.92 |
| SINA-04_Z_27 | 5.17 | 148.53 | 322.57 | 0.54 | 26.05 | 10508.56 | 61.41 | 0.006 | 128.61 | 1.50 | 0.96 | 489.19 | 0.118 | 0.04 | 3.08 | 0.47 | 10.65 | 40.81 | 67.77 | 85.67 | 1888.30 | 635.27 | 485668.50 | 17.51 | 2.89 |
| SINA-04_Z_28 | 4.93 | 137.12 | 293.15 | 0.48 | 24.13 | 10510.99 | 57.37 | 0.012 | 119.58 | 1.38 | 0.74 | 375.15 | 0.182 | 0.04 | 2.80 | 0.37 | 9.97 | 35.53 | 63.15 | 78.28 | 1718.57 | 583.97 | 486156.91 | 4.73 | 2.46 |
| SINA-04_Z_29 | 34.68 | 191.44 | 412.18 | 0.83 | 39.78 | 10818.24 | 76.62 | 8.345 | 166.31 | 3.13 | 27.57 | 2186.76 | 0.189 | 4.48 | 10.63 | 0.83 | 14.28 | 76.98 | 87.61 | 139.31 | 2441.60 | 832.75 | 481032.75 | 27.06 | 3.17 |
| SINA-04_Z_3 | 4.92 | 197.33 | 410.16 | 0.78 | 35.48 | 10081.26 | 79.17 | 0.031 | 158.30 | 1.25 | 1.30 | 559.67 | 0.092 | 0.05 | 4.43 | 0.33 | 14.04 | 41.71 | 85.01 | 88.52 | 2423.73 | 794.90 | 485021.46 | <2.765 | 2.55 |
| SINA-04_Z_31 | 5.38 | 121.59 | 294.88 | 0.44 | 18.21 | 10436.14 | 52.51 | 0.126 | 135.74 | 2.10 | 0.79 | 399.11 | 0.220 | 0.05 | 2.56 | 0.63 | 8.24 | 26.62 | 66.11 | 77.32 | 1639.88 | 655.89 | 486205.48 | <2.835 | 4.70 |
| SINA-04_Z_33 | 7.03 | 194.02 | 430.69 | 0.58 | 31.43 | 10290.20 | 80.55 | 0.019 | 174.52 | 2.49 | 0.72 | 857.36 | 1.874 | 0.04 | 3.47 | 0.64 | 13.30 | 64.90 | 91.07 | 130.68 | 2527.47 | 869.40 | 484026.08 | 5.66 | 2.91 |
| SINA-04_Z_34 | 6.33 | 133.80 | 304.12 | 0.43 | 21.89 | 10381.09 | 56.49 | 0.037 | 130.92 | 2.04 | 0.88 | 444.85 | 0.176 | 0.04 | 1.98 | 0.68 | 9.00 | 42.51 | 65.28 | 94.98 | 1743.15 | 636.38 | 486026.48 | <2.586 | 3.21 |
| SINA-04_Z_35 | 23.94 | 167.24 | 345.06 | 1.08 | 33.92 | 10251.91 | 68.12 | 5.945 | 133.62 | 1.82 | 19.79 | 2043.34 | 0.180 | 3.26 | 8.58 | 0.54 | 12.54 | 47.37 | 73.06 | 91.48 | 2032.98 | 669.31 | 482474.99 | 29.23 | 3.42 |
| SINA-04_Z_36 | 6.40 | 188.81 | 386.84 | 0.62 | 35.34 | 10250.90 | 76.12 | 0.140 | 146.64 | 1.69 | 1.91 | 506.95 | 0.144 | 0.10 | 4.34 | 0.45 | 13.87 | 49.68 | 80.10 | 90.09 | 2301.52 | 748.00 | 485188.38 | <2.521 | 2.49 |
| SINA-04_Z_37 | 6.69 | 140.09 | 324.46 | 0.26 | 22.84 | 10768.04 | 60.39 | <0.002 | 144.82 | 2.47 | 0.50 | 475.74 | 0.469 | 0.03 | 2.21 | 0.78 | 9.35 | 36.93 | 71.96 | 99.55 | 1858.05 | 694.46 | 485470.40 | <2.542 | 3.53 |
| SINA-04_Z_4 | 5.00 | 144.88 | 332.06 | 0.48 | 23.74 | 10024.91 | 61.80 | 0.234 | 138.23 | 2.25 | 1.38 | 508.56 | 0.036 | 0.13 | 2.74 | 0.55 | 10.21 | 26.39 | 71.01 | 72.77 | 1885.33 | 677.42 | 485973.55 | <2.590 | 3.38 |
| SINA-04_Z_5 | 8.59 | 218.90 | 455.24 | 0.79 | 38.79 | 10380.23 | 88.87 | 0.005 | 173.45 | 2.57 | 1.40 | 545.14 | 0.232 | 0.06 | 4.64 | 0.71 | 15.68 | 66.97 | 94.30 | 128.38 | 2070.58 | 760.57 | 484320.12 | 12.46 | 2.67 |
| SINA-04_Z_6 | 8.15 | 155.02 | 352.16 | 0.45 | 24.44 | 10654.44 | 66.20 | 0.032 | 152.42 | 2.81 | 0.45 | 473.68 | 0.196 | 0.06 | 2.40 | 0.86 | 10.39 | 57.61 | 79.06 | 127.36 | 2716.85 | 872.41 | | | |

Appendix C: Eastern Sunda arc zircon trace element chemistry

| Analysis ID | Ce | Dy | Er | Eu | Gd | Hf | Ho | La | Lu | Nb | Nd | P | Pb | Pr | Sm | Ta | Tb | Th | Tm | U | Y | Yb | Zr | Fe | Ti |
|--------------|--------|--------|--------|------|-------|----------|--------|--------|--------|------|--------|----------|-------|-------|-------|------|-------|--------|--------|--------|---------|---------|-----------|--------|-------|
| SINA-05_z_12 | 113.89 | 161.09 | 316.60 | 2.24 | 61.17 | 9594.08 | 63.86 | 37.722 | 128.98 | 2.19 | 115.42 | 12904.55 | 0.080 | 19.56 | 35.50 | 0.54 | 14.10 | 42.26 | 65.95 | 90.88 | 1840.65 | 622.77 | 461371.13 | 148.67 | 4.49 |
| SINA-05_z_13 | 6.70 | 160.93 | 344.30 | 0.50 | 28.03 | 11206.56 | 66.12 | 0.037 | 142.26 | 1.61 | 0.73 | 485.21 | 0.060 | 0.05 | 3.52 | 0.52 | 11.60 | 47.35 | 74.91 | 104.75 | 2031.32 | 697.00 | 484892.99 | <2.587 | 2.72 |
| SINA-05_z_15 | 5.20 | 113.18 | 251.97 | 0.34 | 19.03 | 10528.55 | 47.77 | 0.042 | 109.09 | 1.64 | 0.73 | 383.57 | 0.044 | 0.04 | 2.16 | 0.49 | 7.75 | 35.51 | 54.52 | 80.19 | 1459.02 | 530.25 | 486513.50 | <2.598 | 3.03 |
| SINA-05_z_16 | 5.73 | 152.14 | 325.58 | 0.50 | 25.47 | 10300.64 | 63.15 | 0.013 | 128.29 | 2.24 | 0.84 | 416.40 | 0.057 | 0.02 | 2.72 | 0.58 | 10.31 | 42.51 | 70.30 | 91.99 | 1896.08 | 610.54 | 485945.80 | <2.570 | 3.08 |
| SINA-05_z_17 | 5.12 | 131.64 | 301.67 | 0.46 | 23.41 | 9872.43 | 57.59 | 0.112 | 125.80 | 1.62 | 1.31 | 448.47 | 0.075 | 0.08 | 2.59 | 0.48 | 9.52 | 39.79 | 66.31 | 78.90 | 1731.71 | 611.48 | 486452.12 | <5.783 | 2.91 |
| SINA-05_z_18 | 11.44 | 235.29 | 448.13 | 0.77 | 46.10 | 10151.07 | 91.35 | 0.489 | 163.68 | 3.70 | 3.03 | 722.44 | 0.182 | 0.23 | 5.56 | 0.75 | 17.91 | 117.59 | 90.26 | 130.42 | 2732.70 | 830.66 | 483849.29 | 193.29 | 17.44 |
| SINA-05_z_19 | 26.79 | 227.98 | 471.36 | 0.81 | 44.19 | 10948.79 | 92.15 | 4.391 | 183.50 | 4.03 | 14.01 | 1905.20 | 1.674 | 2.33 | 7.87 | 1.05 | 15.96 | 168.61 | 98.47 | 228.59 | 2855.39 | 916.60 | 480789.22 | 19.50 | 4.00 |
| SINA-05_z_20 | 5.90 | 140.99 | 303.79 | 0.41 | 24.88 | 10359.14 | 57.48 | 0.150 | 125.86 | 1.97 | 0.96 | 466.72 | 0.043 | 0.12 | 2.77 | 0.57 | 9.92 | 39.92 | 64.87 | 75.32 | 1760.71 | 607.43 | 486011.73 | <2.630 | 2.74 |
| SINA-05_z_21 | 6.14 | 218.38 | 440.57 | 1.16 | 41.58 | 10327.79 | 87.51 | 0.063 | 167.11 | 1.70 | 3.00 | 572.90 | 0.074 | 0.17 | 6.57 | 0.45 | 16.06 | 47.57 | 92.30 | 96.01 | 2651.68 | 840.95 | 484463.83 | <2.568 | 2.59 |
| SINA-05_z_22 | 6.14 | 219.04 | 431.15 | 1.20 | 43.29 | 10234.01 | 84.10 | 0.042 | 157.21 | 1.23 | 2.35 | 394.64 | 0.088 | 0.13 | 6.19 | 0.36 | 16.40 | 46.77 | 87.63 | 85.90 | 2667.87 | 804.64 | 485007.31 | 14.99 | 2.87 |
| SINA-05_z_23 | 3.45 | 117.21 | 255.59 | 0.44 | 21.00 | 10531.22 | 49.51 | <0.002 | 103.93 | 1.13 | 0.44 | 289.36 | 0.026 | 0.01 | 2.21 | 0.38 | 8.56 | 18.89 | 53.49 | 48.92 | 1464.79 | 513.15 | 486736.44 | <2.625 | 2.57 |
| SINA-05_z_24 | 6.57 | 129.50 | 301.91 | 0.37 | 20.65 | 11073.73 | 55.84 | 0.020 | 132.67 | 2.15 | 0.61 | 459.54 | 0.099 | 0.03 | 2.51 | 0.72 | 8.98 | 40.37 | 65.65 | 99.81 | 1705.66 | 639.52 | 485513.44 | <2.630 | 3.07 |
| SINA-05_z_25 | 4.46 | 116.84 | 287.12 | 0.25 | 17.49 | 11076.11 | 51.51 | <0.003 | 136.33 | 1.58 | 0.46 | 533.86 | 0.052 | 0.02 | 1.75 | 0.54 | 7.72 | 23.85 | 64.12 | 77.46 | 1616.71 | 640.27 | 485512.13 | <2.656 | 2.38 |
| SINA-05_z_26 | 5.97 | 153.93 | 359.48 | 0.51 | 24.89 | 10378.44 | 66.03 | 0.028 | 158.28 | 2.38 | 1.04 | 413.95 | 0.049 | 0.05 | 2.72 | 0.50 | 10.62 | 32.75 | 78.85 | 87.85 | 2039.09 | 759.44 | 485606.47 | <2.676 | 3.17 |
| SINA-05_z_27 | 6.43 | 127.54 | 316.29 | 0.34 | 21.51 | 10602.90 | 56.55 | <0.006 | 139.01 | 2.51 | 0.73 | 487.41 | 0.072 | 0.03 | 2.12 | 0.63 | 9.12 | 42.58 | 68.99 | 100.49 | 1778.21 | 667.12 | 485698.01 | <5.803 | 3.56 |
| SINA-05_z_28 | 5.13 | 114.06 | 251.35 | 0.38 | 19.95 | 10294.92 | 48.03 | <0.006 | 102.17 | 1.71 | 0.61 | 393.06 | 0.093 | 0.01 | 2.13 | 0.48 | 7.60 | 37.91 | 54.67 | 82.14 | 1442.90 | 509.17 | 486704.70 | <5.680 | 2.93 |
| SINA-05_z_29 | 6.60 | 170.03 | 352.20 | 0.57 | 30.85 | 10409.11 | 68.75 | 0.004 | 141.71 | 2.23 | 0.86 | 402.76 | 0.073 | 0.03 | 3.03 | 0.62 | 12.25 | 55.81 | 75.27 | 97.31 | 2072.19 | 711.52 | 485586.04 | <2.584 | 2.89 |
| SINA-05_z_30 | 9.47 | 408.25 | 825.40 | 1.75 | 80.43 | 9617.70 | 160.39 | 0.042 | 311.42 | 2.40 | 3.83 | 972.41 | 0.165 | 0.18 | 11.13 | 0.51 | 30.94 | 132.68 | 170.36 | 194.57 | 4082.61 | 1550.01 | 480428.13 | 19.67 | 5.11 |
| SINA-05_z_31 | 7.80 | 211.28 | 414.92 | 0.74 | 41.37 | 10154.14 | 83.33 | 0.445 | 149.34 | 2.02 | 2.49 | 601.79 | 0.136 | 0.28 | 5.47 | 0.52 | 15.73 | 65.73 | 83.66 | 103.49 | 2520.01 | 749.27 | 484740.88 | 21.29 | 4.50 |
| SINA-05_z_32 | 5.22 | 183.99 | 384.60 | 0.64 | 35.29 | 10759.56 | 74.76 | 0.045 | 149.45 | 1.01 | 1.05 | 398.69 | 0.050 | 0.04 | 3.72 | 0.36 | 13.94 | 38.68 | 79.58 | 81.57 | 2279.16 | 748.36 | 485062.60 | <2.587 | 2.43 |
| SINA-05_z_33 | 7.14 | 188.64 | 497.85 | 0.47 | 32.93 | 10256.63 | 86.31 | 0.503 | 278.06 | 8.99 | 4.09 | 761.31 | 0.380 | 0.36 | 5.19 | 8.11 | 13.10 | 288.28 | 125.20 | 406.99 | 2834.35 | 1283.30 | 482907.50 | 136.46 | 13.93 |
| SINA-05_z_34 | 6.73 | 162.03 | 382.10 | 0.32 | 28.21 | 10571.54 | 70.73 | 0.050 | 160.60 | 1.98 | 1.31 | 698.42 | 0.053 | 0.07 | 3.37 | 0.55 | 11.42 | 45.78 | 83.69 | 105.49 | 2145.08 | 792.18 | 484706.96 | <5.826 | 3.61 |
| SINA-05_z_35 | 4.47 | 95.49 | 225.94 | 0.31 | 16.79 | 10390.07 | 42.06 | 0.008 | 97.00 | 1.37 | 0.53 | 408.46 | 0.045 | 0.02 | 1.75 | 0.48 | 6.81 | 25.77 | 49.27 | 64.08 | 1304.37 | 467.97 | 486847.25 | <5.724 | 2.39 |
| SINA-05_z_36 | 11.37 | 196.17 | 456.72 | 0.49 | 35.02 | 10653.02 | 88.33 | <0.006 | 182.60 | 3.78 | 1.27 | 712.74 | 0.129 | 0.03 | 3.30 | 0.91 | 13.92 | 92.39 | 95.15 | 162.35 | 2584.01 | 883.21 | 483895.06 | <5.776 | 3.14 |
| SINA-05_z_37 | 5.46 | 120.60 | 308.88 | 0.38 | 19.44 | 10646.12 | 54.60 | <0.006 | 135.12 | 2.11 | 0.55 | 463.84 | 0.069 | 0.04 | 1.91 | 0.65 | 8.17 | 33.30 | 67.13 | 86.07 | 1887.72 | 641.89 | 485862.88 | <5.685 | 2.84 |
| SINA-05_z_38 | 7.04 | 138.82 | 332.87 | 0.41 | 21.18 | 10639.57 | 60.93 | 0.145 | 149.90 | 2.44 | 0.98 | 606.89 | 0.417 | 0.12 | 2.03 | 0.70 | 9.45 | 31.09 | 72.71 | 87.67 | 1900.70 | 724.00 | 485246.72 | <3.795 | 3.15 |
| SINA-05_z_39 | 4.46 | 154.62 | 320.80 | 0.79 | 28.37 | 10428.03 | 62.36 | <0.003 | 121.45 | 0.99 | 0.81 | 319.34 | 0.046 | 0.02 | 3.56 | 0.26 | 11.29 | 26.78 | 65.65 | 61.57 | 1864.09 | 613.25 | 486137.48 | <2.987 | 2.58 |
| SINA-05_z_40 | 5.36 | 120.34 | 283.54 | 0.29 | 18.17 | 11049.79 | 51.15 | 0.006 | 126.41 | 2.04 | 0.51 | 375.65 | 0.050 | 0.02 | 1.89 | 0.57 | 7.96 | 30.92 | 61.98 | 82.83 | 1615.16 | 598.95 | 485875.32 | <2.648 | 3.24 |
| SINA-05_z_41 | 5.94 | 143.93 | 351.05 | 0.35 | 22.43 | 10471.03 | 63.03 | 0.002 | 158.56 | 2.76 | 0.46 | 432.77 | 0.040 | 0.01 | 2.19 | 0.80 | 9.74 | 31.23 | 77.18 | 92.96 | 1955.70 | 758.20 | 485603.09 | <2.553 | 3.27 |
| SINA-05_z_42 | 15.30 | 325.85 | 627.24 | 1.42 | 61.55 | 9355.89 | 126.22 | 0.004 | 229.37 | 5.07 | 1.69 | 915.21 | 0.306 | 0.07 | 7.65 | 1.07 | 24.00 | 281.43 | 129.36 | 270.89 | 3849.01 | 1185.91 | 482389.06 | <2.534 | 5.00 |
| SINA-05_z_43 | 5.60 | 163.81 | 351.41 | 0.53 | 28.42 | 11090.67 | 66.82 | 0.003 | 142.84 | 1.06 | 0.76 | 468.30 | 0.049 | 0.02 | 3.02 | 0.39 | 11.89 | 37.79 | 73.54 | 84.96 | 2039.83 | 704.89 | 485013.46 | <2.590 | 2.72 |
| SINA-05_z_44 | 4.29 | 127.09 | 282.60 | 0.42 | 21.62 | 10709.45 | 53.75 | <0.003 | 111.00 | 1.37 | 0.55 | 397.66 | 0.096 | 0.03 | 2.37 | 0.47 | 8.72 | 27.93 | 59.10 | 70.63 | 1606.99 | 562.35 | 486141.50 | <3.128 | 2.49 |
| SINA-05_z_45 | 7.76 | 232.63 | 472.89 | 0.89 | 42.55 | 9409.96 | 92.88 | 0.074 | 175.71 | 3.10 | 1.94 | 764.19 | 0.127 | 0.07 | 4.54 | 0.74 | 16.99 | 107.09 | 96.95 | 153.16 | 2841.43 | 896.49 | 484409.48 | <2.569 | 3.02 |
| SINA-05_z_46 | 47.32 | 172.11 | 354.18 | 1.41 | 42.43 | 10854.45 | 67.90 | 0.074 | 139.92 | 1.33 | 42.34 | 4687.49 | 0.079 | 7.27 | 15.71 | 0.43 | 13.66 | 48.30 | 74.59 | 96.34 | 2056.23 | 712.55 | 476517.22 | 133.00 | 4.10 |
| SINA-05_z_47 | 15.83 | 404.58 | 795.73 | 1.60 | 78.32 | 10550.89 | 158.55 | 0.151 | 291.65 | 2.63 | 5.49 | 1157.67 | 0.306 | 0.43 | 11.53 | 0.67 | 29.80 | 217.99 | 164.44 | 234.32 | 4834.54 | 1494.11 | 479532.55 | <2.563 | 4.12 |
| SING-01_z_1 | 12.92 | 196.01 | 483.05 | 0.72 | 33.18 | 10238.10 | 87.26 | 0.025 | 239.50 | 1.86 | 0.96 | 1081.72 | 0.236 | 0.07 | 3.45 | 0.55 | 13.75 | 192.23 | 109.43 | 329.41 | 2850.12 | 1082.26 | 482622.81 | 118.81 | 3.62 |
| SING-01_z_2 | 6.99 | 75.63 | 180.72 | 0.30 | 12.34 | 10617.34 | 32.56 | 0.060 | 96.55 | 1.19 | 0.45 | 320.92 | 0.168 | 0.04 | 1.46 | 0.38 | 5.16 | 71.51 | 42.34 | 133.52 | 1063.28 | 438.10 | 486027.95 | 806.04 | 8.62 |
| SING-01_z_3 | 3.92 | 207.04 | 443.59 | 1.01 | 33.41 | 10441.21 | 86.00 | 0.004 | 181.27 | 0.68 | 1.25 | 775.55 | 0.027 | 0.02 | 3.47 | 0.14 | 14.71 | 22.75 | 92.59 | 54.53 | 2630.78 | 897.71 | 484238.96 | 54.82 | 5.17 |
| SING-01_z_4 | 14.16 | 159.16 | 400.74 | 0.94 | 26.86 | 10155.89 | 72.17 | <0.007 | 182.51 | 2.04 | 1.06 | 579.49 | 0.237 | 0.04 | 3.37 | 0.52 | 10.79 | 151.20 | 88.37 | 219.97 | 2312.66 | 877.09 | 484818.55 | <5.912 | 5.82 |
| SING-02_z_1 | 5.01 | 59.00 | 136.65 | 1.02 | 12.86 | 9690.69 | 24.92 | 0.004 | 80.24 | 0.68 | 1.23 | 261.25 | 0.019 | 0.06 | 1.93 | 0.18 | 4.40 | 27.13 | 31.61 | 42.92 | 859.27 | 336.23 | 488366.18 | <2.660 | 6.73 |
| SING-02_z_2 | 4.57 | 50.75 | 118.78 | 0.84 | 9.62 | 9957.23 | 21.24 | 0.028 | 72.78 | 0.61 | 0.61 | 273.66 | 0.010 | 0.06 | 1.42 | 0.16 | 3.66 | 19.19 | 28.26 | 34.35 | 734.59 | 304.42 | 488332.98 | 5.56 | 5.44 |
| SING-02_z_3 | 8.98 | 104.08 | 246.15 | 1.31 | 18.75 | 9501.21 | 44.25 | <0.003 | 139.66 | 1.24 | 0.93 | 411.70 | 0.032 | 0.06 | 2.32 | 0.35 | 7.46 | 50.43 | 55.72 | 77.23 | 1510.77 | 591.86 | 487098.60 | 3.94 | 8.82 |
| SING-02_z_4 | 2.58 | 28.10 | 65.54 | 0.41 | 5.18 | 10537.63 | 11.68 | 0.021 | 42.37 | 0.40 | 0.34 | 202.21 | 0.197 | 0.02 | 0.78 | 0.11 | 1.99 | 13.65 | 15.59 | 17.70 | 396.76 | 177.21 | 488489.27 | 88.40 | 4.87 |
| SING-02_z_5 | 2.60 | 21.04 | 49.20 | 0.58 | 4.60 | 10062.33 | 8.75 | 0.045 | 31.29 | 0.36 | 1.02 | 229.04 | 0.041 | 0.12 | 1.50 | 0.10 | 1.77 | 12.05 | 11.88 | 22.33 | | | | | |

Appendix C: Eastern Sunda arc zircon trace element chemistry

| Analysis ID | Ce | Dy | Er | Eu | Gd | Hf | Ho | La | Lu | Nb | Nd | P | Pb | Pr | Sm | Ta | Tb | Th | Tm | U | Y | Yb | Zr | Fe | Ti | |
|--------------|-------|--------|--------|------|-------|----------|-------|--------|--------|------|------|--------|--------|------|------|------|------|-------|-------|--------|---------|--------|-----------|-----------|-------|------|
| SING-02_z_18 | 7.50 | 76.39 | 181.66 | 0.96 | 13.46 | 9846.01 | 32.61 | 0.003 | 104.55 | 0.97 | 0.80 | 315.30 | 0.033 | 0.03 | 1.72 | 0.37 | 5.47 | 45.80 | 41.66 | 68.63 | 1118.41 | 442.93 | 487607.54 | <2.662 | 7.13 | |
| SING-02_z_19 | 8.26 | 80.68 | 191.36 | 0.94 | 13.81 | 10264.30 | 34.23 | <0.003 | 117.35 | 1.15 | 0.66 | 347.44 | 0.031 | 0.05 | 1.73 | 0.36 | 5.47 | 44.07 | 44.90 | 81.39 | 1187.36 | 486.66 | 487166.74 | <2.644 | 7.80 | |
| SING-02_z_2 | 6.67 | 80.55 | 181.18 | 1.37 | 17.72 | 9434.73 | 33.12 | 0.064 | 102.36 | 0.76 | 1.29 | 335.84 | 0.064 | 0.10 | 2.93 | 0.19 | 6.12 | 39.47 | 41.56 | 54.96 | 1133.39 | 438.42 | 487697.43 | 185.41 | 11.78 | |
| SING-02_z_20 | 3.72 | 38.05 | 90.48 | 0.58 | 7.24 | 10049.68 | 15.78 | 0.003 | 59.01 | 0.51 | 0.62 | 233.44 | 0.014 | 0.04 | 1.21 | 0.13 | 2.78 | 17.17 | 21.90 | 30.49 | 552.91 | 239.59 | 488642.31 | <2.653 | 5.78 | |
| SING-02_z_21 | 4.58 | 55.90 | 132.47 | 0.84 | 10.39 | 9308.20 | 23.35 | <0.003 | 84.08 | 0.63 | 0.53 | 296.99 | 0.021 | 0.02 | 1.67 | 0.15 | 4.09 | 24.52 | 31.78 | 42.57 | 820.43 | 349.00 | 488623.85 | <2.607 | 6.12 | |
| SING-02_z_22 | 3.41 | 34.94 | 80.16 | 0.48 | 6.75 | 10112.81 | 14.63 | <0.003 | 48.50 | 0.48 | 0.80 | 200.74 | 0.011 | 0.02 | 0.65 | 0.13 | 2.58 | 15.82 | 18.86 | 25.19 | 492.99 | 204.77 | 488774.91 | <2.650 | 5.47 | |
| SING-02_z_23 | 9.01 | 88.73 | 221.41 | 0.97 | 16.61 | 9831.51 | 38.39 | 0.010 | 136.33 | 1.21 | 0.80 | 365.40 | 0.041 | 0.05 | 2.17 | 0.45 | 6.16 | 49.02 | 52.27 | 84.54 | 1363.49 | 569.54 | 487073.46 | 2.91 | 8.49 | |
| SING-02_z_24 | 2.43 | 27.29 | 56.15 | 0.45 | 6.29 | 10151.82 | 10.68 | <0.003 | 34.70 | 0.33 | 0.44 | 123.62 | 0.119 | 0.02 | 1.05 | 0.10 | 2.06 | 8.39 | 13.42 | 16.09 | 359.27 | 144.85 | 489113.38 | 15.76 | 5.39 | |
| SING-02_z_25 | 3.29 | 33.66 | 72.19 | 0.59 | 7.31 | 10560.02 | 13.59 | <0.003 | 49.73 | 0.40 | 0.51 | 189.27 | 0.015 | 0.01 | 1.25 | 0.14 | 2.50 | 13.36 | 18.03 | 27.34 | 477.85 | 205.39 | 488492.38 | 6.23 | 3.88 | |
| SING-02_z_26 | 12.01 | 136.15 | 326.01 | 1.46 | 22.67 | 9104.86 | 60.40 | <0.003 | 177.73 | 1.54 | 0.89 | 484.13 | 0.056 | 0.05 | 2.38 | 0.39 | 9.64 | 75.69 | 73.22 | 101.95 | 2034.22 | 776.86 | 486394.54 | 6.35 | 9.82 | |
| SING-02_z_27 | 4.79 | 52.24 | 129.72 | 0.63 | 9.01 | 9690.70 | 21.94 | 0.003 | 84.83 | 0.73 | 0.58 | 284.93 | 0.015 | 0.02 | 1.47 | 0.22 | 3.58 | 20.75 | 30.87 | 42.90 | 793.01 | 342.06 | 488388.81 | 4.42 | 6.71 | |
| SING-02_z_28 | 3.08 | 27.69 | 70.39 | 0.38 | 6.16 | 10236.09 | 12.12 | <0.003 | 48.20 | 0.40 | 0.24 | 167.01 | 0.111 | 0.01 | 0.72 | 0.10 | 2.00 | 10.92 | 17.16 | 24.66 | 428.39 | 195.56 | 488838.23 | 3.44 | 5.49 | |
| SING-02_z_29 | 2.04 | 22.74 | 55.16 | 0.37 | 4.65 | 10711.04 | 9.66 | <0.003 | 39.15 | 0.28 | 0.14 | 163.16 | <0.006 | 0.01 | 0.59 | 0.09 | 1.74 | 5.55 | 13.65 | 14.41 | 341.98 | 153.59 | 488649.07 | 4.34 | 3.75 | |
| SING-02_z_3 | 8.09 | 89.56 | 201.65 | 1.11 | 17.02 | 9365.74 | 36.69 | 0.026 | 117.15 | 1.09 | 0.84 | 411.75 | 0.031 | 0.06 | 2.15 | 0.31 | 6.39 | 45.44 | 46.56 | 64.64 | 1262.50 | 493.05 | 487619.73 | 5.11 | 7.22 | |
| SING-02_z_30 | 8.10 | 107.19 | 217.61 | 2.26 | 26.02 | 9758.75 | 41.55 | 0.040 | 113.70 | 0.86 | 2.12 | 300.67 | 0.047 | 0.13 | 5.27 | 0.24 | 8.77 | 54.22 | 49.13 | 63.69 | 1370.87 | 509.68 | 487305.75 | 58.03 | 6.20 | |
| SING-02_z_31 | 5.77 | 63.90 | 157.90 | 0.72 | 10.20 | 9771.70 | 27.01 | 0.058 | 96.93 | 0.80 | 0.53 | 279.07 | 0.802 | 0.05 | 1.53 | 0.27 | 4.54 | 26.31 | 36.51 | 48.23 | 959.19 | 409.46 | 487982.94 | 67.25 | 7.31 | |
| SING-02_z_4 | 11.93 | 127.50 | 289.24 | 1.54 | 24.61 | 9264.53 | 53.35 | 0.003 | 156.12 | 1.50 | 1.45 | 473.65 | 0.056 | 0.06 | 2.89 | 0.39 | 9.30 | 76.75 | 65.84 | 98.37 | 1820.60 | 681.90 | 486642.49 | 4.97 | 13.33 | |
| SING-02_z_5 | 2.85 | 26.30 | 62.91 | 0.50 | 5.22 | 10370.38 | 10.66 | 0.020 | 43.54 | 0.48 | 0.37 | 185.98 | 0.019 | 0.02 | 0.81 | 0.12 | 1.93 | 12.11 | 15.25 | 23.89 | 379.39 | 173.54 | 488774.84 | 7.40 | 4.80 | |
| SING-02_z_6 | 3.38 | 45.68 | 97.48 | 0.76 | 10.06 | 9771.99 | 17.82 | 0.035 | 60.28 | 0.42 | 0.93 | 240.48 | 0.011 | 0.06 | 1.52 | 0.13 | 3.43 | 15.46 | 22.94 | 27.05 | 611.26 | 249.01 | 488742.56 | 10.94 | 6.08 | |
| SING-02_z_7 | 3.67 | 38.51 | 108.44 | 0.66 | 7.85 | 9531.31 | 18.20 | <0.003 | 67.49 | 0.51 | 0.32 | 295.95 | 0.033 | 0.02 | 1.15 | 0.10 | 2.90 | 14.07 | 25.58 | 29.19 | 627.44 | 280.67 | 488780.57 | <5.854 | 5.64 | |
| SING-02_z_8 | 5.09 | 64.33 | 140.03 | 1.25 | 15.04 | 9686.37 | 25.82 | <0.003 | 83.47 | 0.53 | 1.45 | 258.51 | 0.021 | 0.07 | 2.83 | 0.14 | 5.16 | 26.90 | 32.67 | 43.84 | 887.20 | 353.13 | 488395.01 | <2.636 | 6.35 | |
| SING-02_z_9 | 3.31 | 31.29 | 81.95 | 0.49 | 5.89 | 10661.33 | 13.84 | 0.036 | 58.61 | 0.62 | 0.42 | 184.86 | 0.356 | 0.02 | 0.77 | 0.18 | 2.32 | 11.27 | 20.44 | 29.38 | 497.44 | 234.73 | 488335.95 | 18.56 | 4.26 | |
| TR-02_z_1 | 6.51 | 82.62 | 175.81 | 1.53 | 19.23 | 9559.84 | 32.67 | 0.002 | 96.89 | 0.62 | 1.88 | 267.63 | 0.033 | 0.12 | 3.72 | 0.18 | 6.57 | 39.52 | 39.91 | 56.09 | 1103.37 | 420.35 | 488039.47 | <2.584 | 6.32 | |
| TR-02_z_10 | 3.71 | 31.95 | 75.35 | 0.38 | 5.65 | 10562.57 | 13.64 | <0.003 | 43.28 | 0.74 | 0.52 | 318.07 | 0.083 | 0.10 | 1.39 | 0.32 | 3.90 | 33.20 | 33.20 | 31.96 | 60.37 | 816.50 | 350.45 | 487503.37 | 3.09 | 5.95 |
| TR-02_z_12 | 5.13 | 42.22 | 112.61 | 0.67 | 7.75 | 9895.09 | 18.96 | 0.268 | 75.69 | 0.61 | 0.89 | 243.27 | 0.555 | 0.10 | 1.33 | 0.25 | 2.97 | 26.97 | 27.61 | 44.30 | 673.26 | 301.94 | 488425.27 | 49.94 | 19.08 | |
| TR-02_z_13 | 8.09 | 98.02 | 212.67 | 1.77 | 22.62 | 9811.76 | 39.99 | 0.014 | 110.18 | 0.83 | 2.60 | 288.69 | 0.072 | 0.10 | 3.84 | 0.21 | 7.73 | 48.73 | 47.71 | 66.32 | 1302.08 | 496.63 | 487681.25 | <3.477 | 7.61 | |
| TR-02_z_14 | 6.08 | 54.29 | 134.22 | 0.60 | 9.21 | 10712.92 | 23.88 | 0.004 | 83.28 | 0.74 | 0.52 | 318.07 | 0.083 | 0.10 | 1.39 | 0.32 | 3.90 | 33.20 | 33.20 | 31.96 | 60.37 | 816.50 | 350.45 | 487503.37 | 3.09 | 5.95 |
| TR-02_z_18 | 3.38 | 43.00 | 86.80 | 0.86 | 9.91 | 10474.63 | 16.48 | <0.003 | 53.04 | 0.42 | 0.86 | 185.85 | 0.233 | 0.03 | 1.90 | 0.11 | 3.35 | 14.86 | 20.68 | 26.68 | 554.99 | 225.45 | 488430.88 | <2.584 | 4.63 | |
| TR-02_z_19 | 4.82 | 35.99 | 92.79 | 0.41 | 7.18 | 11827.30 | 15.98 | <0.003 | 63.90 | 0.56 | 0.27 | 201.72 | 0.046 | 0.02 | 0.96 | 0.25 | 2.54 | 19.30 | 22.82 | 47.29 | 556.41 | 260.58 | 487285.08 | 33.49 | 3.74 | |
| TR-02_z_2 | 5.48 | 54.15 | 133.37 | 0.65 | 9.53 | 9741.88 | 23.76 | 0.045 | 86.82 | 0.63 | 0.40 | 375.21 | 0.037 | 0.04 | 1.40 | 0.19 | 3.72 | 21.99 | 32.99 | 44.37 | 824.47 | 356.32 | 488126.02 | 3.00 | 6.70 | |
| TR-02_z_20 | 3.43 | 46.93 | 98.24 | 1.02 | 10.96 | 10446.27 | 18.14 | 0.008 | 96.68 | 0.37 | 0.94 | 195.25 | 0.048 | 0.04 | 1.79 | 0.11 | 3.69 | 16.77 | 22.49 | 26.92 | 608.15 | 239.43 | 488346.23 | <2.967 | 5.08 | |
| TR-02_z_21 | 6.19 | 68.40 | 177.35 | 0.80 | 11.45 | 9366.42 | 30.79 | 0.006 | 110.73 | 0.92 | 0.60 | 307.61 | 0.115 | 0.03 | 1.67 | 0.28 | 4.57 | 29.37 | 42.31 | 54.95 | 1066.48 | 457.80 | 488130.48 | <2.556 | 7.95 | |
| TR-02_z_22 | 3.13 | 28.41 | 67.53 | 0.42 | 5.16 | 9887.62 | 11.87 | 0.007 | 43.37 | 0.49 | 0.34 | 209.62 | 0.027 | 0.01 | 0.67 | 0.15 | 2.20 | 15.96 | 16.18 | 27.93 | 407.69 | 179.60 | 488054.89 | <2.580 | 5.90 | |
| TR-02_z_23 | 2.38 | 19.21 | 46.05 | 0.34 | 4.27 | 10526.41 | 7.74 | <0.003 | 30.89 | 0.42 | 0.13 | 180.71 | 0.110 | 0.01 | 0.55 | 0.13 | 1.39 | 12.07 | 11.11 | 22.82 | 280.59 | 126.85 | 488844.58 | 4.06 | 4.54 | |
| TR-02_z_24 | 4.63 | 46.87 | 117.07 | 0.59 | 8.41 | 10053.51 | 19.75 | <0.003 | 75.33 | 0.74 | 0.50 | 249.17 | 0.038 | 0.01 | 1.10 | 0.21 | 3.27 | 20.70 | 28.11 | 40.82 | 700.78 | 306.60 | 488347.68 | <2.583 | 5.97 | |
| TR-02_z_25 | 6.82 | 72.46 | 177.46 | 0.87 | 12.07 | 10135.30 | 30.93 | <0.003 | 107.05 | 0.98 | 0.73 | 307.11 | 0.033 | 0.04 | 1.43 | 0.27 | 4.86 | 32.82 | 41.42 | 58.84 | 1163.40 | 447.02 | 487555.78 | <3.165 | 6.82 | |
| TR-02_z_26 | 7.65 | 73.81 | 191.50 | 0.94 | 12.42 | 10153.63 | 33.00 | <0.002 | 125.74 | 1.22 | 0.63 | 335.68 | 0.036 | 0.04 | 1.89 | 0.34 | 5.22 | 41.72 | 46.47 | 81.69 | 1163.40 | 518.41 | 487275.95 | <2.553 | 7.30 | |
| TR-02_z_27 | 3.25 | 34.32 | 87.54 | 0.59 | 6.42 | 9814.26 | 15.12 | 0.008 | 61.96 | 0.51 | 0.39 | 202.57 | 0.018 | 0.02 | 1.04 | 0.22 | 2.47 | 10.90 | 21.71 | 26.60 | 523.04 | 249.51 | 488659.50 | 43.44 | 5.13 | |
| TR-02_z_28 | 5.14 | 61.05 | 146.70 | 0.96 | 12.05 | 9534.61 | 26.08 | <0.002 | 89.75 | 0.69 | 0.75 | 293.92 | 0.032 | 0.05 | 1.83 | 0.15 | 4.47 | 25.24 | 34.56 | 46.33 | 893.38 | 373.26 | 488336.25 | <2.519 | 6.97 | |
| TR-02_z_29 | 8.09 | 93.35 | 200.51 | 1.60 | 20.57 | 9929.72 | 37.77 | 0.008 | 106.81 | 0.90 | 1.73 | 333.62 | 0.131 | 0.08 | 3.57 | 0.25 | 7.14 | 58.29 | 45.73 | 65.39 | 1284.83 | 473.81 | 487223.42 | 87.75 | 6.54 | |
| TR-02_z_3 | 5.89 | 66.57 | 157.19 | 0.87 | 12.69 | 9804.18 | 27.93 | 0.018 | 91.51 | 0.79 | 1.24 | 327.17 | 0.081 | 0.06 | 1.82 | 0.24 | 4.71 | 29.18 | 36.26 | 45.57 | 966.14 | 390.73 | 487960.51 | <2.565 | 6.29 | |
| TR-02_z_30 | 2.31 | 25.27 | 60.53 | 0.33 | 5.14 | 10425.66 | 10.80 | 0.004 | 40.89 | 0.41 | 0.25 | 186.13 | 0.161 | 0.01 | 0.73 | 0.10 | 1.76 | 6.55 | 14.83 | 16.31 | 366.47 | 163.28 | 488768.95 | 3.28 | 4.40 | |
| TR-02_z_31 | 2.32 | 15.54 | 36.88 | 0.22 | 2.93 | 10719.56 | 6.35 | <0.002 | 24.38 | 0.31 | 0.10 | 149.72 | 0.033 | 0.01 | 0.23 | 0.13 | 1.10 | 12.14 | 9.14 | 25.45 | 224.93 | 100.10 | 488860.63 | <2.549 | 3.96 | |
| TR-02_z_32 | 4.26 | 48.38 | 108.59 | 0.77 | 10.65 | 9624.28 | 19.76 | 0.030 | 67.15 | 0.52 | 0.82 | 240.06 | 0.056 | 0.05 | 1.71 | 0.16 | 3.59 | 21.41 | 25.76 | 33.10 | 674.74 | 280.94 | 488450.19 | 223.64 | 10.26 | |
| TR-02_z_33 | 3.60 | 37.98 | 96.40 | 0.55 | 7.27 | 10697.26 | 16.62 | <0.002 | 67.70 | 0.47 | 0.51 | 248.49 | 0.016 | 0.01 | 1.08 | 0 | | | | | | | | | | |

Appendix C: Eastern Sunda arc zircon trace element chemistry

| Analysis ID | Ce | Dy | Er | Eu | Gd | Hf | Ho | La | Lu | Nb | Nd | P | Pb | Pr | Sm | Ta | Tb | Th | Tm | U | Y | Yb | Zr | Fe | Ti |
|--------------|--------|--------|---------|------|--------|----------|--------|--------|--------|-------|--------|----------|--------|-------|-------|------|-------|--------|--------|--------|---------|---------|-----------|--------|-------|
| TR-02_Z_5 | 2.52 | 19.04 | 44.83 | 0.26 | 3.86 | 9975.61 | 7.79 | 0.011 | 28.61 | 0.49 | 0.13 | 138.31 | 0.316 | 0.01 | 0.47 | 0.10 | 1.40 | 10.24 | 10.72 | 20.74 | 273.77 | 118.55 | 489366.04 | <2.565 | 6.05 |
| TR-02_Z_6 | 4.50 | 46.26 | 117.78 | 0.59 | 7.86 | 10009.09 | 20.02 | <0.002 | 75.02 | 0.69 | 0.36 | 242.25 | 0.044 | 0.02 | 1.11 | 0.20 | 3.23 | 18.04 | 28.17 | 37.91 | 714.26 | 309.41 | 486383.57 | <2.561 | 5.98 |
| TR-02_Z_7 | 7.11 | 80.06 | 190.32 | 0.98 | 14.73 | 9465.39 | 34.19 | 0.003 | 110.78 | 1.03 | 0.92 | 323.40 | 0.043 | 0.04 | 2.10 | 0.27 | 3.65 | 35.85 | 44.53 | 57.81 | 1168.86 | 470.02 | 487876.64 | <2.536 | 7.76 |
| TR-02_Z_8 | 3.99 | 39.44 | 105.85 | 0.66 | 7.75 | 9765.54 | 17.41 | <0.002 | 73.90 | 0.65 | 0.55 | 226.25 | 0.018 | 0.03 | 1.20 | 0.19 | 2.71 | 15.00 | 26.02 | 37.83 | 627.38 | 298.06 | 488717.34 | <2.530 | 6.09 |
| TR-02_Z_9 | 5.07 | 50.24 | 129.81 | 0.73 | 8.80 | 9576.22 | 22.39 | 0.022 | 83.26 | 0.81 | 0.57 | 271.12 | 0.071 | 0.03 | 1.46 | 0.25 | 3.51 | 24.69 | 30.88 | 43.39 | 779.48 | 343.52 | 488518.90 | 5.41 | 7.13 |
| TR-03_Z_1 | 5.06 | 61.79 | 125.88 | 1.36 | 15.44 | 10242.10 | 23.60 | 0.023 | 69.06 | 0.51 | 1.24 | 230.17 | 0.034 | 0.08 | 2.87 | 0.15 | 5.03 | 31.35 | 28.32 | 39.03 | 791.72 | 299.72 | 487913.05 | 186.27 | 7.89 |
| TR-03_Z_2 | 4.49 | 44.81 | 105.56 | 0.71 | 8.34 | 10084.66 | 19.26 | 0.098 | 67.17 | 0.73 | 0.71 | 298.36 | 0.390 | 0.09 | 1.61 | 0.17 | 3.27 | 19.22 | 25.72 | 37.66 | 652.79 | 275.11 | 488059.05 | 266.27 | 6.55 |
| TR-04_Z_10 | 11.46 | 242.86 | 500.60 | 1.14 | 46.17 | 9954.94 | 97.51 | <0.002 | 199.09 | 2.66 | 1.22 | 635.02 | 0.172 | 0.06 | 5.11 | 0.65 | 17.75 | 161.73 | 106.98 | 150.70 | 3111.28 | 992.24 | 483796.45 | <2.522 | 8.36 |
| TR-04_Z_11 | 14.40 | 282.84 | 575.19 | 1.28 | 50.71 | 9394.64 | 112.82 | 0.077 | 213.34 | 1.91 | 1.90 | 811.93 | 0.106 | 0.10 | 5.88 | 0.49 | 20.68 | 84.80 | 116.83 | 103.33 | 3519.15 | 1091.58 | 483281.23 | 44.92 | 10.89 |
| TR-04_Z_12 | 5.25 | 86.34 | 216.95 | 0.32 | 13.03 | 12180.82 | 38.52 | <0.002 | 108.92 | 1.01 | 0.47 | 349.42 | 0.038 | 0.02 | 1.66 | 0.40 | 5.89 | 25.36 | 49.95 | 65.88 | 1268.78 | 509.83 | 485616.68 | <2.497 | 3.67 |
| TR-04_Z_13 | 21.62 | 385.45 | 789.07 | 1.64 | 79.81 | 10251.96 | 157.04 | 0.146 | 289.31 | 2.81 | 3.10 | 1055.95 | 0.194 | 0.19 | 9.34 | 0.94 | 29.34 | 138.32 | 161.57 | 166.70 | 4830.11 | 1438.42 | 480909.71 | 26.45 | 8.46 |
| TR-04_Z_14 | 9.65 | 187.36 | 399.22 | 3.45 | 46.22 | 8107.64 | 73.91 | 0.018 | 200.26 | 0.74 | 3.89 | 385.75 | 0.062 | 0.21 | 6.76 | 0.20 | 14.80 | 135.77 | 89.26 | 144.87 | 2410.45 | 902.63 | 486645.79 | <5.775 | 5.39 |
| TR-04_Z_15 | 4.27 | 148.92 | 320.94 | 0.59 | 29.69 | 10513.09 | 64.51 | 0.043 | 126.61 | 0.95 | 1.16 | 414.17 | 0.048 | 0.04 | 3.00 | 0.28 | 11.04 | 20.92 | 67.01 | 39.50 | 1892.68 | 619.56 | 485965.07 | <5.976 | 5.14 |
| TR-04_Z_16 | 5.28 | 186.77 | 405.10 | 0.87 | 37.07 | 9899.54 | 76.30 | <0.006 | 167.18 | 0.95 | 1.87 | 409.58 | 0.048 | 0.06 | 4.95 | 0.28 | 13.55 | 31.77 | 87.62 | 56.15 | 2438.69 | 619.14 | 485374.90 | <5.789 | 5.77 |
| TR-04_Z_17 | 10.51 | 239.40 | 525.11 | 0.97 | 42.02 | 10610.53 | 99.64 | 0.088 | 216.06 | 1.76 | 1.62 | 620.90 | 0.090 | 0.09 | 4.92 | 0.58 | 17.18 | 63.28 | 111.48 | 111.48 | 3235.46 | 1066.96 | 483199.60 | 15.73 | 6.11 |
| TR-04_Z_18 | 9.08 | 188.80 | 382.63 | 0.71 | 28.79 | 10315.14 | 71.04 | 0.002 | 156.24 | 1.64 | 0.77 | 488.24 | 0.060 | 0.03 | 3.32 | 0.60 | 12.19 | 50.05 | 80.43 | 84.87 | 2287.69 | 777.06 | 485187.92 | <2.534 | 6.38 |
| TR-04_Z_19 | 4.62 | 152.64 | 331.73 | 1.01 | 29.34 | 10061.21 | 63.51 | <0.006 | 140.87 | 0.73 | 1.22 | 437.19 | 0.061 | 0.07 | 3.98 | 0.26 | 11.29 | 26.87 | 69.92 | 59.95 | 1980.52 | 694.80 | 485927.88 | 32.24 | 5.55 |
| TR-04_Z_20 | 5.72 | 130.97 | 286.58 | 0.48 | 21.78 | 10403.17 | 54.69 | <0.002 | 117.27 | 1.39 | 0.64 | 453.64 | 0.037 | 0.02 | 2.44 | 0.45 | 8.98 | 28.38 | 61.33 | 53.83 | 1692.69 | 577.71 | 486154.73 | <2.606 | 6.00 |
| TR-04_Z_21 | 29.39 | 602.15 | 1138.72 | 1.72 | 124.06 | 9887.88 | 241.68 | 0.301 | 374.98 | 8.89 | 5.15 | 1417.17 | 0.365 | 0.38 | 15.86 | 1.93 | 46.14 | 328.49 | 227.75 | 347.14 | 7052.96 | 1948.29 | 475139.43 | 686.57 | 80.88 |
| TR-04_Z_22 | 17.22 | 261.77 | 585.41 | 0.95 | 48.04 | 10197.99 | 107.56 | 0.068 | 232.66 | 3.09 | 1.55 | 744.15 | 0.260 | 0.02 | 5.05 | 0.95 | 19.04 | 175.29 | 119.16 | 119.16 | 3402.79 | 1109.32 | 482710.39 | 85.49 | 35.10 |
| TR-04_Z_23 | 2.76 | 103.12 | 247.94 | 0.45 | 18.23 | 9197.51 | 45.84 | <0.006 | 107.05 | 1.17 | 0.50 | 312.64 | 0.037 | 0.01 | 1.51 | 0.27 | 7.21 | 15.36 | 53.03 | 39.50 | 1404.25 | 504.70 | 487793.69 | <5.837 | 3.76 |
| TR-04_Z_24 | 7.32 | 208.04 | 418.38 | 1.48 | 45.57 | 10324.16 | 83.92 | 0.063 | 159.23 | 0.70 | 2.23 | 419.72 | 0.110 | 0.11 | 6.41 | 0.22 | 15.95 | 39.80 | 86.08 | 59.71 | 2550.84 | 788.81 | 484686.95 | 58.06 | 5.95 |
| TR-04_Z_25 | 47.12 | 248.22 | 506.81 | 1.61 | 54.35 | 10110.96 | 99.38 | 10.575 | 195.30 | 1.95 | 29.24 | 2780.98 | 0.190 | 0.52 | 13.19 | 0.64 | 20.11 | 126.38 | 106.76 | 126.38 | 3202.48 | 976.44 | 479159.27 | 75.62 | 44.91 |
| TR-04_Z_26 | 2.96 | 125.26 | 282.81 | 0.52 | 24.80 | 9327.31 | 53.16 | 0.002 | 119.95 | 1.08 | 0.59 | 287.80 | 0.026 | 0.02 | 2.89 | 0.52 | 8.52 | 13.01 | 60.07 | 37.81 | 1613.65 | 573.51 | 487413.36 | <2.579 | 4.73 |
| TR-04_Z_27 | 4.90 | 140.60 | 314.30 | 0.47 | 24.80 | 10280.51 | 58.55 | 0.019 | 128.46 | 1.20 | 0.57 | 469.10 | 0.029 | 0.03 | 2.81 | 0.38 | 10.03 | 18.02 | 65.90 | 41.58 | 1846.80 | 635.38 | 485938.86 | <2.552 | 5.12 |
| TR-04_Z_28 | 5.19 | 161.61 | 334.57 | 0.58 | 29.30 | 10683.68 | 65.44 | 0.199 | 127.82 | 1.39 | 1.33 | 478.77 | 0.049 | 0.10 | 3.39 | 0.45 | 11.78 | 32.57 | 69.38 | 70.96 | 1958.29 | 636.02 | 485451.27 | 16.48 | 5.51 |
| TR-04_Z_29 | 205.13 | 875.73 | 1461.36 | 4.47 | 234.04 | 9384.51 | 313.93 | 52.056 | 412.82 | 11.42 | 168.99 | 16083.22 | 0.552 | 28.26 | 67.35 | 1.78 | 72.81 | 457.63 | 270.46 | 399.07 | 9365.46 | 2313.57 | 443189.34 | 351.68 | 9.74 |
| TR-04_Z_30 | 11.87 | 266.29 | 546.18 | 0.77 | 47.98 | 10707.09 | 107.58 | 0.018 | 194.00 | 4.28 | 1.16 | 762.47 | 0.143 | 0.05 | 4.75 | 0.95 | 19.26 | 108.58 | 110.86 | 168.63 | 3256.55 | 1006.97 | 482569.41 | 135.84 | 30.27 |
| TR-04_Z_31 | 5.23 | 172.33 | 366.81 | 0.54 | 30.09 | 10485.43 | 70.16 | 0.017 | 145.59 | 1.34 | 1.11 | 533.47 | 0.038 | 0.04 | 3.53 | 0.37 | 12.08 | 28.48 | 76.75 | 59.18 | 2170.96 | 712.40 | 485195.50 | <2.559 | 5.30 |
| TR-04_Z_32 | 12.11 | 226.94 | 495.09 | 0.84 | 39.38 | 10006.27 | 95.35 | <0.006 | 183.98 | 2.40 | 1.34 | 687.13 | 0.118 | 0.06 | 4.04 | 0.60 | 16.46 | 98.83 | 101.99 | 120.10 | 2970.98 | 927.12 | 483956.54 | <5.748 | 6.68 |
| TR-04_Z_33 | 8.87 | 210.13 | 442.29 | 0.64 | 37.89 | 10044.51 | 85.39 | 0.008 | 164.45 | 2.07 | 1.15 | 569.73 | 0.073 | 0.05 | 3.98 | 0.54 | 14.95 | 44.14 | 90.00 | 72.05 | 2657.83 | 842.92 | 484704.83 | <2.556 | 6.72 |
| TR-04_Z_34 | 6.25 | 220.54 | 460.88 | 1.22 | 48.26 | 9615.12 | 91.44 | <0.006 | 173.81 | 0.71 | 2.01 | 512.21 | 0.094 | 0.07 | 5.94 | 0.19 | 17.41 | 36.03 | 94.86 | 54.60 | 2750.40 | 861.61 | 484933.89 | 55.28 | 5.67 |
| TR-04_Z_35 | 6.08 | 89.68 | 236.79 | 0.31 | 15.24 | 12042.47 | 41.69 | 0.033 | 120.01 | 1.07 | 0.59 | 400.83 | 0.070 | 0.01 | 1.63 | 0.45 | 6.28 | 30.16 | 54.98 | 68.05 | 1371.70 | 555.75 | 488416.81 | 23.36 | 4.30 |
| TR-04_Z_36 | 4.52 | 91.12 | 210.73 | 0.46 | 14.56 | 10428.04 | 39.13 | 0.020 | 99.10 | 0.90 | 0.40 | 304.71 | 0.061 | 0.02 | 1.80 | 0.38 | 6.14 | 33.55 | 45.77 | 91.79 | 1228.14 | 464.17 | 486943.71 | 110.37 | 10.05 |
| TR-04_Z_37 | 6.80 | 164.67 | 365.34 | 0.89 | 31.83 | 9844.78 | 72.18 | 0.143 | 147.45 | 1.28 | 1.78 | 495.81 | 0.127 | 0.13 | 3.64 | 0.33 | 12.23 | 37.97 | 78.41 | 65.67 | 2150.01 | 728.49 | 485699.98 | 33.39 | 9.47 |
| TR-04_Z_38 | 5.74 | 203.76 | 442.76 | 1.06 | 35.44 | 8932.42 | 86.09 | <0.006 | 168.80 | 1.47 | 0.82 | 447.39 | 0.064 | 0.02 | 3.44 | 0.44 | 14.54 | 39.07 | 92.02 | 69.98 | 2561.83 | 853.59 | 485841.64 | <5.697 | 5.40 |
| TR-04_Z_39 | 10.24 | 235.72 | 505.37 | 1.05 | 41.69 | 9954.75 | 97.94 | <0.002 | 201.85 | 1.91 | 1.28 | 596.29 | 0.067 | 0.05 | 4.95 | 0.55 | 16.49 | 52.01 | 107.19 | 86.67 | 3050.17 | 1014.49 | 484050.05 | <2.570 | 6.13 |
| TR-04_Z_40 | 32.62 | 629.65 | 1202.32 | 3.14 | 137.28 | 10076.81 | 247.26 | 0.046 | 425.69 | 3.23 | 7.41 | 1008.15 | 0.418 | 0.28 | 17.39 | 0.86 | 49.03 | 196.70 | 248.80 | 218.41 | 7565.03 | 2191.77 | 476101.01 | <5.671 | 6.96 |
| TR-04_Z_41 | 5.61 | 70.03 | 200.08 | 0.92 | 12.90 | 8610.98 | 33.54 | 0.042 | 124.76 | 0.79 | 0.69 | 316.87 | 0.052 | 0.03 | 1.81 | 0.22 | 4.88 | 32.89 | 48.16 | 57.34 | 1139.90 | 518.11 | 485211.09 | <5.777 | 7.51 |
| TR-04_Z_42 | 6.14 | 218.73 | 477.03 | 0.67 | 41.28 | 10189.64 | 92.31 | 0.044 | 175.52 | 1.90 | 1.20 | 716.87 | 0.078 | 0.03 | 5.35 | 0.53 | 16.18 | 45.38 | 96.42 | 85.25 | 2745.52 | 856.39 | 484105.99 | 28.06 | 5.17 |
| TR-04_Z_43 | 5.19 | 81.24 | 221.95 | 0.32 | 14.58 | 9975.74 | 38.03 | 0.454 | 116.48 | 0.95 | 1.85 | 920.45 | <0.025 | 0.16 | 2.04 | 0.23 | 6.12 | 12.00 | 48.42 | 35.97 | 1230.84 | 484.61 | 486201.10 | 26.35 | 6.81 |
| UG012183_Z_1 | 6.53 | 55.24 | 111.97 | 1.13 | 14.69 | 9083.54 | 21.42 | <0.007 | 53.27 | 0.60 | 1.47 | 234.37 | 0.016 | 0.05 | 2.38 | 0.12 | 4.79 | 22.09 | 24.44 | 36.63 | 711.80 | 242.48 | 489154.70 | <5.925 | 5.69 |
| UG012183_Z_2 | 7.92 | 58.02 | 125.06 | 0.91 | 12.41 | 9592.22 | 23.15 | 0.011 | 60.72 | 0.70 | 1.08 | 252.63 | 0.023 | 0.08 | 2.28 | 0.21 | 4.82 | 27.78 | 26.56 | 45.59 | 758.71 | 270.88 | 488618.82 | 10.99 | 7.21 |
| UG012183_Z_3 | 7.31 | 91.61 | 179.06 | 1.82 | 24.75 | 8863.78 | 35.56 | <0.007 | 80.81 | 0.79 | 2.27 | 235.05 | 0.015 | 0.12 | 4.42 | 0.13 | 7.77 | 30.12 | 38.56 | 46.59 | | | | | |

Appendix C: Eastern Sunda arc zircon trace element chemistry

| Analysis ID | Ce | Dy | Er | Eu | Gd | Hf | Ho | La | Lu | Nb | Nd | P | Pb | Pr | Sm | Ta | Tb | Th | Tm | U | Y | Yb | Zr | Fe | Ti |
|---------------|-------|--------|--------|------|-------|----------|-------|--------|--------|------|------|--------|--------|------|------|------|-------|--------|-------|--------|---------|--------|-----------|--------|-------|
| UG012185_Z_12 | 21.44 | 158.80 | 303.15 | 2.97 | 41.29 | 8805.11 | 59.88 | 0.004 | 137.72 | 1.44 | 2.41 | 288.33 | 0.016 | 0.13 | 6.66 | 0.25 | 13.54 | 92.83 | 64.46 | 119.72 | 1993.59 | 635.99 | 487125.21 | 4.17 | 7.19 |
| UG012185_Z_14 | 4.99 | 46.44 | 90.32 | 0.92 | 10.96 | 9517.88 | 17.83 | 0.005 | 47.92 | 0.47 | 0.71 | 115.93 | 0.019 | 0.04 | 1.87 | 0.11 | 3.96 | 13.83 | 20.74 | 29.20 | 596.75 | 212.70 | 489252.71 | <2.697 | 4.41 |
| UG012185_Z_15 | 6.26 | 57.20 | 117.64 | 1.93 | 12.77 | 9311.13 | 21.31 | 0.054 | 64.50 | 0.71 | 1.23 | 189.51 | 0.204 | 0.04 | 1.99 | 0.12 | 4.44 | 29.50 | 27.03 | 51.64 | 751.89 | 280.97 | 486894.24 | 180.90 | 33.00 |
| UG012185_Z_16 | 10.30 | 89.84 | 183.29 | 4.48 | 20.39 | 9000.66 | 34.52 | 0.010 | 85.73 | 1.23 | 1.63 | 224.43 | 0.190 | 0.06 | 3.36 | 0.21 | 7.14 | 41.99 | 39.82 | 65.33 | 1178.27 | 397.47 | 488396.32 | 13.36 | 45.68 |
| UG012185_Z_17 | 20.84 | 186.78 | 333.92 | 4.14 | 52.29 | 8707.15 | 68.20 | 0.006 | 143.20 | 1.30 | 3.85 | 295.89 | 0.021 | 0.17 | 8.96 | 0.25 | 16.05 | 96.97 | 70.73 | 110.68 | 2205.97 | 670.44 | 486879.39 | 3.93 | 15.30 |
| UG012185_Z_18 | 17.57 | 122.26 | 252.42 | 1.58 | 24.59 | 9060.48 | 47.91 | 0.003 | 114.13 | 1.78 | 1.08 | 226.00 | 0.017 | 0.06 | 3.00 | 0.29 | 9.21 | 59.81 | 53.49 | 91.80 | 1587.47 | 526.23 | 487696.03 | 3.39 | 30.73 |
| UG012185_Z_19 | 9.58 | 60.07 | 126.56 | 0.92 | 14.13 | 9832.49 | 23.45 | <0.003 | 64.49 | 0.97 | 0.94 | 112.19 | 0.008 | 0.02 | 1.97 | 0.17 | 4.57 | 35.46 | 28.61 | 69.72 | 799.69 | 292.78 | 488643.35 | <2.613 | 4.70 |
| UG012185_Z_20 | 4.27 | 41.61 | 84.04 | 0.70 | 9.38 | 9328.87 | 15.64 | <0.003 | 45.47 | 0.64 | 0.66 | 112.17 | <0.006 | 0.02 | 1.46 | 0.10 | 3.30 | 12.28 | 18.85 | 28.28 | 531.59 | 202.01 | 489493.41 | <2.754 | 5.41 |
| UG012185_Z_21 | 6.69 | 55.21 | 116.91 | 1.01 | 13.28 | 9071.53 | 21.90 | <0.003 | 61.27 | 0.64 | 0.85 | 139.26 | <0.006 | 0.04 | 2.06 | 0.16 | 4.54 | 18.80 | 26.37 | 38.83 | 736.60 | 272.29 | 489295.06 | <2.669 | 6.22 |
| UG012185_Z_22 | 10.40 | 86.57 | 183.09 | 1.34 | 18.98 | 8607.99 | 34.70 | 0.014 | 92.10 | 0.90 | 1.31 | 276.94 | 0.041 | 0.05 | 2.57 | 0.18 | 6.71 | 40.31 | 40.98 | 66.14 | 1199.79 | 415.44 | 488612.67 | 42.93 | 5.77 |
| UG012185_Z_23 | 7.22 | 62.26 | 125.94 | 1.01 | 14.67 | 9577.78 | 23.99 | 0.006 | 60.81 | 0.74 | 0.87 | 156.26 | 0.029 | 0.04 | 2.15 | 0.12 | 4.84 | 23.43 | 27.53 | 41.44 | 798.01 | 415.84 | 488783.65 | 4.74 | 5.66 |
| UG012185_Z_24 | 5.72 | 43.64 | 93.88 | 0.79 | 9.51 | 9432.34 | 17.60 | <0.003 | 48.78 | 0.60 | 0.61 | 113.62 | 0.010 | 0.02 | 1.35 | 0.13 | 3.33 | 16.31 | 21.17 | 34.25 | 592.30 | 218.75 | 489315.93 | <2.677 | 4.90 |
| UG012185_Z_25 | 14.77 | 98.07 | 195.56 | 1.32 | 21.64 | 9414.59 | 38.52 | 0.032 | 89.20 | 1.27 | 1.17 | 193.50 | 0.016 | 0.05 | 2.79 | 0.19 | 7.93 | 60.32 | 42.25 | 76.09 | 1264.09 | 411.02 | 488023.18 | 35.28 | 9.92 |
| UG012185_Z_26 | 10.44 | 79.89 | 169.46 | 1.24 | 17.05 | 9185.85 | 31.82 | <0.003 | 81.75 | 1.05 | 0.98 | 174.59 | 0.014 | 0.04 | 2.66 | 0.19 | 6.51 | 32.47 | 36.94 | 61.21 | 1079.84 | 370.32 | 488590.47 | <2.664 | 6.29 |
| UG012185_Z_27 | 5.86 | 35.16 | 74.33 | 0.64 | 7.40 | 10411.09 | 13.97 | <0.003 | 41.65 | 0.57 | 0.39 | 85.69 | 0.006 | 0.02 | 1.19 | 0.15 | 2.72 | 18.78 | 17.26 | 42.57 | 473.59 | 181.54 | 488810.56 | <2.695 | 4.06 |
| UG012185_Z_3 | 9.85 | 73.91 | 163.70 | 1.22 | 16.31 | 9383.53 | 30.16 | <0.003 | 79.65 | 0.94 | 0.87 | 146.65 | 0.009 | 0.04 | 2.33 | 0.18 | 5.84 | 30.12 | 35.15 | 54.31 | 1011.55 | 360.64 | 488594.43 | <2.685 | 6.71 |
| UG012185_Z_4 | 31.72 | 219.86 | 416.08 | 3.33 | 51.82 | 8908.48 | 84.61 | 0.007 | 168.16 | 2.33 | 1.62 | 267.99 | 0.062 | 0.08 | 5.84 | 0.34 | 17.87 | 141.83 | 85.55 | 149.78 | 2768.14 | 819.25 | 485903.71 | 5.91 | 12.97 |
| UG012185_Z_5 | 9.95 | 80.16 | 165.96 | 1.28 | 17.18 | 9348.60 | 31.28 | 0.026 | 79.05 | 0.93 | 1.07 | 178.74 | 0.156 | 0.06 | 2.49 | 0.18 | 6.16 | 35.22 | 46.02 | 62.29 | 1041.07 | 362.34 | 488494.45 | 10.95 | 5.94 |
| UG012185_Z_6 | 13.73 | 92.64 | 208.28 | 1.20 | 18.88 | 9012.95 | 38.80 | 0.005 | 102.13 | 1.33 | 0.93 | 190.27 | 0.011 | 0.04 | 2.40 | 0.27 | 6.91 | 44.26 | 36.22 | 77.19 | 1289.06 | 464.79 | 488306.53 | 4.88 | 7.22 |
| UG012185_Z_7 | 5.86 | 35.16 | 74.33 | 0.64 | 7.40 | 10411.09 | 13.97 | <0.003 | 41.65 | 0.57 | 0.39 | 85.69 | 0.006 | 0.02 | 1.19 | 0.15 | 2.72 | 18.78 | 17.26 | 42.57 | 473.59 | 181.54 | 488810.56 | <2.695 | 4.06 |
| UG012185_Z_8 | 7.93 | 92.46 | 166.33 | 1.75 | 24.46 | 9006.69 | 33.06 | 0.006 | 77.23 | 0.65 | 1.79 | 194.90 | 0.012 | 0.10 | 3.99 | 0.12 | 7.81 | 30.87 | 35.99 | 48.24 | 1503.29 | 489.95 | 488178.25 | <2.633 | 9.70 |
| UG012185_Z_9 | 21.52 | 136.29 | 258.32 | 2.28 | 33.51 | 9273.54 | 51.64 | 0.006 | 113.08 | 1.73 | 1.78 | 226.95 | 0.079 | 0.08 | 5.19 | 0.28 | 10.93 | 109.46 | 54.78 | 100.95 | 1682.04 | 536.80 | 487404.13 | <2.670 | 8.41 |
| UG012187_Z_1 | 18.03 | 150.70 | 286.22 | 2.42 | 35.48 | 8778.04 | 56.70 | 0.010 | 122.14 | 1.64 | 2.10 | 251.44 | 0.018 | 0.07 | 4.87 | 0.26 | 11.99 | 77.84 | 60.25 | 101.65 | 1848.22 | 575.15 | 487935.21 | <2.692 | 9.10 |
| UG012187_Z_10 | 21.09 | 157.44 | 308.98 | 2.65 | 42.98 | 8211.05 | 69.57 | 0.203 | 131.95 | 1.40 | 2.87 | 274.65 | 0.031 | 0.23 | 5.89 | 0.24 | 13.39 | 93.41 | 63.32 | 114.83 | 1951.11 | 614.17 | 487538.30 | 61.68 | 54.72 |
| UG012187_Z_11 | 10.65 | 74.55 | 165.85 | 1.10 | 16.20 | 9651.50 | 31.47 | <0.007 | 76.99 | 1.03 | 0.76 | 148.74 | <0.014 | 0.03 | 1.92 | 0.10 | 5.97 | 43.17 | 35.73 | 64.96 | 1034.83 | 365.76 | 488427.90 | <5.885 | 7.62 |
| UG012187_Z_12 | 8.73 | 74.04 | 158.95 | 1.30 | 16.22 | 9271.49 | 29.77 | 0.009 | 80.41 | 0.95 | 0.91 | 155.05 | 0.007 | 0.05 | 2.73 | 0.19 | 5.76 | 27.45 | 35.87 | 58.77 | 1006.63 | 395.75 | 488665.29 | <2.686 | 6.86 |
| UG012187_Z_13 | 6.30 | 54.22 | 108.46 | 1.04 | 12.63 | 9035.11 | 20.67 | 0.011 | 53.61 | 0.57 | 0.84 | 157.23 | 0.009 | 0.03 | 2.14 | 0.09 | 4.46 | 21.91 | 24.25 | 36.93 | 675.87 | 242.42 | 489382.07 | 4.43 | 5.07 |
| UG012187_Z_14 | 10.14 | 83.15 | 170.21 | 1.49 | 19.16 | 9340.83 | 32.50 | 0.005 | 81.80 | 0.93 | 1.35 | 150.00 | 0.014 | 0.06 | 3.04 | 0.22 | 6.68 | 35.48 | 37.25 | 62.31 | 1079.87 | 375.30 | 488904.76 | 3.74 | 6.01 |
| UG012187_Z_15 | 18.39 | 120.54 | 254.57 | 1.49 | 22.41 | 9235.46 | 48.39 | 0.004 | 120.30 | 1.83 | 1.09 | 207.59 | 0.016 | 0.04 | 2.81 | 0.33 | 8.95 | 56.44 | 56.31 | 97.32 | 1639.00 | 562.36 | 487561.34 | <2.653 | 8.62 |
| UG012187_Z_16 | 5.89 | 78.01 | 137.99 | 1.69 | 21.28 | 9349.37 | 28.21 | 0.009 | 61.48 | 0.58 | 2.06 | 123.41 | 0.051 | 0.11 | 3.34 | 0.11 | 6.67 | 23.53 | 28.83 | 37.70 | 927.23 | 287.30 | 488852.73 | 4.98 | 5.33 |
| UG012187_Z_17 | 5.86 | 21.29 | 51.05 | 0.39 | 5.16 | 10574.29 | 8.88 | <0.003 | 37.79 | 0.42 | 0.28 | 57.29 | 0.064 | 0.01 | 0.80 | 0.11 | 1.79 | 18.52 | 13.00 | 46.34 | 324.66 | 144.54 | 488866.73 | 5.40 | 3.04 |
| UG012187_Z_18 | 6.87 | 79.02 | 138.09 | 1.76 | 21.17 | 9648.48 | 28.84 | 0.035 | 61.66 | 0.59 | 1.93 | 91.82 | 0.008 | 0.09 | 4.02 | 0.09 | 6.86 | 27.39 | 30.17 | 40.05 | 937.78 | 286.22 | 488877.19 | <2.693 | 4.91 |
| UG012187_Z_19 | 6.04 | 38.85 | 90.74 | 0.54 | 8.67 | 9829.81 | 16.45 | 0.013 | 48.75 | 0.76 | 0.33 | 125.75 | <0.014 | 0.01 | 1.10 | 0.17 | 2.89 | 15.68 | 21.01 | 34.32 | 552.60 | 213.80 | 489028.45 | 11.42 | 5.32 |
| UG012187_Z_2 | 5.68 | 37.51 | 84.54 | 0.59 | 8.38 | 9612.39 | 15.43 | 0.011 | 49.22 | 0.69 | 0.49 | 117.98 | 0.014 | 0.01 | 1.16 | 0.15 | 2.88 | 12.53 | 20.09 | 31.87 | 525.37 | 212.46 | 489232.69 | 23.61 | 5.08 |
| UG012187_Z_3 | 9.27 | 70.90 | 156.89 | 1.02 | 14.59 | 8903.03 | 29.39 | <0.003 | 79.68 | 1.01 | 0.65 | 164.87 | <0.006 | 0.03 | 1.87 | 0.23 | 5.38 | 24.58 | 35.74 | 55.59 | 993.12 | 360.31 | 488865.05 | <2.649 | 6.88 |
| UG012187_Z_4 | 5.96 | 42.95 | 93.66 | 0.59 | 8.63 | 9491.56 | 16.67 | <0.003 | 47.18 | 0.67 | 0.55 | 98.43 | <0.007 | 0.02 | 1.2 | 0.10 | 3.43 | 14.63 | 21.85 | 31.68 | 574.57 | 223.67 | 489319.91 | <3.177 | 5.85 |
| UG012187_Z_5 | 6.32 | 43.53 | 92.82 | 0.78 | 10.02 | 9833.25 | 16.94 | <0.003 | 49.69 | 0.66 | 0.66 | 112.38 | <0.006 | 0.02 | 1.57 | 0.17 | 3.38 | 19.85 | 21.31 | 44.11 | 583.67 | 220.57 | 489012.65 | <2.672 | 5.39 |
| UG012187_Z_6 | 4.20 | 42.12 | 86.62 | 0.61 | 10.09 | 9682.81 | 16.39 | 0.059 | 43.80 | 0.35 | 1.08 | 91.05 | <0.019 | 0.02 | 1.27 | 0.06 | 3.27 | 13.05 | 20.25 | 25.62 | 538.63 | 201.89 | 489334.44 | <7.684 | 5.75 |
| UG012187_Z_7 | 9.48 | 78.56 | 152.64 | 1.35 | 19.03 | 9069.44 | 30.21 | 0.036 | 70.62 | 0.79 | 1.22 | 182.33 | 0.015 | 0.06 | 2.41 | 0.13 | 6.50 | 32.48 | 33.04 | 52.28 | 984.04 | 336.38 | 488777.52 | 29.15 | 7.87 |
| UG012187_Z_8 | 4.68 | 55.87 | 98.34 | 1.34 | 15.51 | 9858.51 | 19.58 | 0.005 | 46.12 | 0.37 | 1.35 | 114.80 | <0.006 | 0.05 | 2.90 | 0.10 | 4.99 | 15.94 | 21.35 | 27.29 | 666.93 | 214.61 | 488915.44 | <2.702 | 4.87 |
| UG012187_Z_9 | 7.05 | 59.89 | 135.12 | 0.96 | 12.44 | 8576.87 | 25.24 | <0.003 | 73.14 | 0.78 | 0.54 | 185.56 | <0.006 | 0.04 | 1.96 | 0.16 | 4.63 | 20.36 | 31.39 | 49.57 | 863.27 | 323.62 | 489386.03 | <2.677 | 7.02 |
| UG012188_Z_1 | 4.60 | 30.87 | 68.70 | 0.49 | 6.71 | 9777.78 | 12.50 | <0.003 | 38.28 | 0.50 | 0.23 | 104.09 | 0.010 | 0.01 | 0.69 | 0.12 | 2.39 | 12.93 | 15.87 | 24.86 | 428.57 | 168.29 | 489338.76 | <2.677 | 4.21 |
| UG012188_Z_2 | 20.37 | 131.33 | 256.04 | 2.38 | 33.54 | 9091.12 | 49.92 | 0.006 | 118.49 | 1.30 | 2.17 | 277.36 | 0.030 | 0.09 | 5.18 | 0.28 | 11.15 | 85.05 | 55.62 | 126.96 | 1675.07 | 551.69 | 487444.27 | <2.675 | 5.26 |
| UG012188_Z_11 | 16.82 | 102.59 | 206.98 | 1.44 | 22.05 | 9368.20 | 41.22 | <0.003 | 100.01 | 1.61 | 1.01 | 179.31 | 0.023 | 0.05 | 3.07 | 0.31 | 7.99 | 59.59 | 45.48 | 100.03 | 1367.27 | 463.28 | 487948.59 | <2.644 | |

Appendix C: Eastern Sunda arc zircon trace element chemistry

| Analysis ID | Ce | Dy | Er | Gd | Hf | Ho | La | Lu | Nb | Nd | P | Pb | Pr | Sm | Ta | Tb | Th | Tm | U | Y | Yb | Zr | Fe | Ti | |
|---------------|-------|--------|--------|------|-------|----------|-------|--------|--------|------|------|--------|--------|------|------|------|-------|--------|--------|---------|---------|-----------|-----------|---------|-------|
| UG012188_Z_17 | 6.52 | 40.13 | 86.09 | 0.78 | 9.62 | 10979.12 | 15.81 | 0.123 | 45.88 | 0.52 | 0.91 | 91.37 | 0.199 | 0.05 | 1.60 | 0.15 | 18.85 | 19.44 | 38.65 | 535.15 | 203.44 | 488237.30 | 25.46 | 4.27 | |
| UG012188_Z_18 | 10.72 | 61.06 | 144.74 | 0.77 | 13.24 | 9722.85 | 25.96 | 0.008 | 77.99 | 1.09 | 0.89 | 162.30 | 0.027 | 0.04 | 1.94 | 0.32 | 4.51 | 58.04 | 62.63 | 894.59 | 344.44 | 488435.14 | 9.77 | 5.73 | |
| UG012188_Z_19 | 22.11 | 135.34 | 262.56 | 2.24 | 30.24 | 8895.17 | 52.51 | <0.007 | 118.66 | 1.77 | 1.16 | 232.65 | 0.042 | 0.06 | 4.12 | 0.34 | 10.43 | 88.60 | 121.94 | 1715.67 | 541.87 | 487628.93 | 8.70 | 9.84 | |
| UG012188_Z_20 | 15.81 | 110.44 | 232.97 | 1.59 | 24.77 | 10127.02 | 43.88 | 0.281 | 118.35 | 2.20 | 1.92 | 403.90 | 0.085 | 0.18 | 3.75 | 0.83 | 8.60 | 114.92 | 128.40 | 1454.42 | 544.02 | 486610.86 | 46.21 | 6.93 | |
| UG012188_Z_21 | 10.56 | 79.80 | 169.85 | 1.14 | 16.61 | 9151.23 | 32.26 | <0.003 | 84.76 | 0.91 | 0.83 | 216.01 | 0.011 | 0.03 | 2.21 | 0.21 | 5.79 | 35.90 | 69.53 | 1078.92 | 383.21 | 488356.07 | <2.663 | 5.92 | |
| UG012188_Z_22 | 13.44 | 88.98 | 180.32 | 1.43 | 20.41 | 9190.92 | 34.25 | <0.003 | 86.13 | 1.02 | 1.07 | 225.45 | 0.016 | 0.04 | 3.19 | 0.21 | 6.97 | 41.50 | 76.05 | 1148.94 | 391.29 | 488356.07 | <2.663 | 5.92 | |
| UG012188_Z_23 | 25.05 | 115.60 | 222.67 | 1.64 | 23.85 | 9834.58 | 44.04 | 0.040 | 94.88 | 1.93 | 1.44 | 201.05 | 0.022 | 0.09 | 2.95 | 0.35 | 8.99 | 193.97 | 171.52 | 1433.23 | 454.27 | 487215.55 | 54.19 | 7.76 | |
| UG012188_Z_24 | 7.35 | 65.88 | 130.11 | 1.32 | 16.71 | 9505.36 | 24.59 | <0.003 | 96.32 | 1.48 | 1.03 | 165.89 | 0.012 | 0.05 | 3.06 | 0.27 | 7.96 | 53.93 | 92.21 | 1338.22 | 441.31 | 488110.33 | 4.52 | 6.85 | |
| UG012188_Z_25 | 13.24 | 68.69 | 144.74 | 1.23 | 15.55 | 10622.52 | 26.59 | 0.005 | 73.74 | 0.83 | 0.70 | 225.79 | 0.024 | 0.03 | 2.18 | 0.40 | 5.32 | 105.44 | 32.76 | 837.05 | 283.27 | 488001.33 | 4.52 | 6.85 | |
| UG012188_Z_26 | 10.52 | 63.64 | 143.16 | 1.18 | 14.72 | 9324.30 | 26.09 | <0.003 | 74.45 | 1.05 | 1.03 | 178.78 | 0.013 | 0.05 | 2.19 | 0.22 | 5.07 | 35.92 | 64.79 | 922.00 | 338.86 | 487569.50 | <2.798 | 4.96 | |
| UG012188_Z_27 | 14.09 | 59.88 | 108.31 | 1.06 | 14.95 | 9870.75 | 21.50 | 0.023 | 48.02 | 0.64 | 0.64 | 137.92 | 0.034 | 0.04 | 2.16 | 0.20 | 4.88 | 110.54 | 110.30 | 721.52 | 225.17 | 488629.21 | 8.19 | 5.72 | |
| UG012188_Z_28 | 10.00 | 71.12 | 141.13 | 1.35 | 17.02 | 9541.98 | 27.55 | 0.020 | 70.36 | 0.68 | 1.04 | 213.39 | 0.011 | 0.06 | 3.01 | 0.13 | 5.97 | 33.38 | 61.80 | 910.54 | 316.49 | 488506.32 | <2.695 | 5.16 | |
| UG012188_Z_29 | 10.45 | 108.21 | 198.41 | 1.66 | 25.06 | 9925.44 | 40.29 | 0.059 | 88.28 | 1.37 | 1.31 | 181.66 | 0.011 | 0.07 | 3.62 | 0.23 | 8.82 | 86.07 | 96.14 | 1302.65 | 411.02 | 486984.64 | 551.67 | 6.75 | |
| UG012188_Z_30 | 3.33 | 23.22 | 48.55 | 0.44 | 5.57 | 10068.38 | 8.88 | 0.006 | 28.78 | 0.33 | 0.37 | 86.44 | 0.095 | 0.01 | 0.81 | 0.07 | 1.85 | 7.13 | 10.95 | 306.32 | 117.75 | 489412.19 | <2.720 | 4.07 | |
| UG012188_Z_31 | 41.23 | 67.03 | 150.49 | 0.62 | 8.54 | 10261.37 | 16.83 | 0.063 | 49.68 | 0.74 | 0.54 | 126.34 | 0.010 | 0.03 | 1.36 | 0.16 | 3.12 | 21.00 | 20.66 | 566.24 | 217.44 | 488696.58 | 4.04 | 4.81 | |
| UG012188_Z_32 | 10.70 | 70.24 | 132.10 | 0.97 | 13.59 | 9686.90 | 27.61 | <0.003 | 74.18 | 1.15 | 0.96 | 153.99 | 0.021 | 0.02 | 1.79 | 0.21 | 5.03 | 35.00 | 32.84 | 920.16 | 336.21 | 488420.75 | <2.688 | 57.79 | |
| UG012188_Z_33 | 15.15 | 98.48 | 197.91 | 1.54 | 22.78 | 9418.58 | 38.33 | 0.010 | 93.19 | 1.27 | 1.26 | 211.94 | 0.073 | 0.05 | 3.03 | 0.22 | 7.54 | 63.46 | 43.33 | 1284.97 | 430.23 | 487984.64 | 18.20 | 7.36 | |
| UG012188_Z_34 | 5.15 | 40.68 | 88.53 | 0.81 | 11.47 | 9724.71 | 17.30 | <0.007 | 49.70 | 0.54 | 0.89 | 101.60 | <0.014 | 0.03 | 1.25 | 0.09 | 3.52 | 13.27 | 21.56 | 31.71 | 560.52 | 214.82 | 489149.68 | 10.64 | 3.59 |
| UG012188_Z_35 | 7.38 | 54.46 | 118.30 | 0.77 | 11.54 | 9279.24 | 21.76 | <0.003 | 59.87 | 0.91 | 0.76 | 173.73 | <0.005 | 0.02 | 1.55 | 0.20 | 4.25 | 22.59 | 26.60 | 43.93 | 755.02 | 274.78 | 489035.66 | 6.06 | 6.85 |
| UG012188_Z_36 | 4.35 | 40.32 | 86.91 | 0.66 | 8.98 | 8996.71 | 16.22 | <0.003 | 46.81 | 0.53 | 0.31 | 200.23 | 0.033 | 0.01 | 1.34 | 0.09 | 3.15 | 11.09 | 19.80 | 28.19 | 548.32 | 206.70 | 489549.56 | <2.662 | 4.24 |
| UG012188_Z_37 | 4.61 | 49.60 | 90.52 | 0.87 | 11.04 | 9567.21 | 17.45 | 0.021 | 42.52 | 0.44 | 0.76 | 172.12 | 0.049 | 0.03 | 1.60 | 0.09 | 3.90 | 19.73 | 24.89 | 587.08 | 201.89 | 488981.13 | 93.82 | 7.51 | |
| UG012188_Z_38 | 10.31 | 78.97 | 179.53 | 1.15 | 15.55 | 8963.46 | 33.32 | <0.003 | 91.30 | 1.41 | 0.76 | 183.49 | <0.006 | 0.04 | 1.98 | 0.24 | 5.65 | 30.39 | 40.46 | 64.87 | 1127.41 | 412.01 | 488642.06 | <2.643 | 7.35 |
| UG012188_Z_39 | 5.34 | 31.20 | 68.05 | 0.43 | 6.14 | 9326.60 | 12.58 | <0.003 | 35.13 | 0.51 | 0.30 | 112.79 | <0.005 | 0.01 | 0.98 | 0.13 | 2.39 | 13.88 | 15.18 | 29.77 | 426.85 | 158.50 | 489661.74 | 3.42 | 6.68 |
| UG012188_Z_40 | 6.75 | 32.92 | 70.91 | 0.63 | 7.36 | 10132.77 | 13.36 | <0.003 | 35.55 | 0.54 | 0.37 | 110.08 | 0.007 | 0.01 | 0.90 | 0.10 | 2.44 | 23.73 | 15.84 | 51.96 | 442.61 | 159.79 | 489001.41 | <2.672 | 17.38 |
| UG012188_Z_41 | 3.57 | 30.87 | 65.90 | 0.45 | 6.15 | 9367.65 | 12.04 | <0.003 | 36.24 | 0.52 | 0.33 | 144.86 | 0.062 | 0.01 | 0.88 | 0.07 | 2.41 | 15.01 | 15.10 | 404.21 | 156.16 | 489597.73 | 7.84 | 4.54 | |
| UG012188_Z_42 | 6.50 | 70.24 | 132.10 | 0.97 | 13.59 | 9900.50 | 25.95 | <0.003 | 62.91 | 0.60 | 1.55 | 135.97 | 0.016 | 0.07 | 3.61 | 0.14 | 5.75 | 29.28 | 28.63 | 850.20 | 284.40 | 488506.41 | <2.666 | 3.82 | |
| UG012188_Z_43 | 26.44 | 200.82 | 366.24 | 3.20 | 47.02 | 8656.21 | 74.10 | 0.027 | 148.65 | 2.16 | 2.12 | 298.96 | 0.045 | 0.09 | 5.92 | 0.31 | 16.37 | 124.13 | 135.96 | 2410.89 | 717.61 | 486516.81 | 89.03 | 13.95 | |
| UG012188_Z_44 | 8.76 | 69.23 | 145.07 | 1.05 | 15.36 | 9650.95 | 27.19 | 0.008 | 72.70 | 0.83 | 1.05 | 169.54 | 0.009 | 0.04 | 2.26 | 0.20 | 5.37 | 33.88 | 32.29 | 60.32 | 329.89 | 488498.28 | <2.676 | 5.97 | |
| UG012188_Z_45 | 15.37 | 117.89 | 240.94 | 1.49 | 20.93 | 9136.17 | 47.49 | 0.104 | 111.80 | 1.90 | 0.98 | 249.66 | 1.217 | 0.11 | 3.19 | 0.37 | 8.54 | 66.63 | 52.54 | 90.90 | 1545.84 | 542.58 | 487495.26 | 144.52 | 7.73 |
| UG012188_Z_46 | 8.17 | 79.30 | 162.68 | 1.45 | 18.58 | 9131.85 | 31.35 | 0.093 | 78.48 | 0.93 | 1.50 | 207.66 | 3.612 | 0.12 | 2.89 | 0.15 | 6.27 | 41.06 | 35.59 | 53.24 | 1019.21 | 357.98 | 488466.54 | 128.84 | 9.51 |
| UG012191_Z_1 | 9.88 | 96.74 | 189.31 | 2.02 | 25.37 | 8912.56 | 37.21 | 0.006 | 91.21 | 0.53 | 2.63 | 139.60 | 0.026 | 0.16 | 4.50 | 0.14 | 7.97 | 88.52 | 41.89 | 1192.79 | 415.88 | 488634.73 | <2.563 | 5.07 | |
| UG012191_Z_2 | 31.23 | 194.90 | 401.73 | 2.82 | 43.21 | 8422.57 | 76.91 | 0.005 | 185.10 | 1.68 | 1.66 | 321.76 | 0.151 | 0.07 | 4.62 | 0.26 | 15.07 | 338.39 | 85.41 | 149.63 | 2561.78 | 851.78 | 486255.84 | <2.569 | 12.08 |
| UG012191_Z_3 | 20.26 | 115.07 | 256.14 | 1.80 | 24.10 | 8766.45 | 47.98 | 0.011 | 125.49 | 1.18 | 1.37 | 262.93 | 0.056 | 0.06 | 3.34 | 0.25 | 8.74 | 175.93 | 65.50 | 78.54 | 1556.95 | 575.51 | 487775.22 | 24.07 | 7.38 |
| UG012191_Z_4 | 25.74 | 197.55 | 399.94 | 3.00 | 43.59 | 8515.63 | 76.96 | 0.043 | 175.15 | 1.68 | 1.92 | 484.77 | 0.419 | 0.10 | 5.48 | 0.27 | 15.16 | 215.31 | 86.29 | 105.28 | 2524.04 | 850.04 | 485969.36 | 41.50 | 12.90 |
| UG012191_Z_5 | 14.68 | 93.51 | 206.50 | 1.28 | 19.63 | 8707.23 | 38.76 | 0.010 | 103.54 | 1.09 | 1.04 | 284.48 | 0.094 | 0.05 | 2.39 | 0.19 | 7.04 | 135.56 | 45.70 | 71.21 | 1261.86 | 463.22 | 488319.60 | 4.26 | 7.22 |
| UG012191_Z_6 | 30.60 | 188.41 | 406.51 | 2.44 | 37.77 | 9030.60 | 76.55 | 0.009 | 193.12 | 2.00 | 1.67 | 372.94 | 0.184 | 0.10 | 4.06 | 0.35 | 14.22 | 273.45 | 88.42 | 136.20 | 2541.14 | 880.47 | 485728.39 | 8.06 | 13.36 |
| UG012191_Z_7 | 17.89 | 97.07 | 237.58 | 1.34 | 18.76 | 8509.38 | 42.03 | 0.006 | 126.66 | 1.30 | 1.21 | 235.17 | 0.117 | 0.27 | 8.96 | 0.23 | 16.38 | 282.75 | 84.00 | 122.97 | 2462.71 | 833.52 | 485812.10 | <2.536 | 5.87 |
| UG012191_Z_8 | 8.23 | 73.96 | 238.98 | 0.35 | 10.22 | 10212.67 | 37.94 | 0.815 | 141.04 | 4.29 | 1.99 | 474.73 | 0.801 | 0.30 | 1.57 | 3.14 | 4.49 | 87.71 | 58.96 | 147.48 | 1381.16 | 643.63 | 484834.47 | 1325.91 | 9.99 |
| UG012191_Z_9 | 19.08 | 180.04 | 375.71 | 3.90 | 49.04 | 8428.92 | 75.05 | 0.022 | 169.47 | 1.23 | 3.91 | 339.05 | 0.063 | 0.22 | 8.17 | 0.20 | 16.35 | 158.57 | 81.67 | 85.28 | 2315.76 | 800.68 | 486628.18 | 3.99 | 6.22 |
| UG012191_Z_10 | 24.92 | 169.78 | 370.25 | 2.04 | 32.03 | 8230.05 | 69.93 | 0.008 | 176.62 | 1.74 | 1.29 | 343.46 | 0.063 | 0.06 | 3.67 | 0.27 | 12.39 | 185.85 | 81.93 | 109.10 | 820.38 | 486837.13 | 4.86 | 10.91 | |
| UG012191_Z_11 | 16.72 | 112.87 | 250.18 | 1.62 | 22.18 | 8616.23 | 46.41 | 0.010 | 122.85 | 1.05 | 1.29 | 266.01 | 0.051 | 0.06 | 2.92 | 0.22 | 8.50 | 123.78 | 55.75 | 1531.87 | 559.25 | 487935.70 | 52.12 | 8.24 | |
| UG012191_Z_12 | 24.28 | 164.58 | 353.44 | 1.95 | 28.99 | 8531.50 | 67.99 | 0.010 | 156.76 | 1.81 | 1.44 | 296.39 | 0.083 | 0.06 | 3.04 | 0.30 | 12.07 | 173.77 | 78.10 | 97.14 | 2225.56 | 765.00 | 486842.11 | 40.58 | 12.98 |
| UG012191_Z_13 | 12.82 | 92.92 | 224.79 | 1.22 | 17.99 | 8750.37 | 40.77 | 0.003 | 127.30 | 0.90 | 0.78 | 389.16 | 0.076 | 0.04 | 2.33 | 0.22 | 6.71 | 104.90 | 52.90 | 1363.07 | 560.63 | 487659.18 | 4.21 | 25.57 | |
| UG012191_Z_14 | 11.96 | 76.95 | 180.82 | 1.01 | 14.13 | 8953.85 | 31.93 | 0.012 | 96.18 | 0.95 | 0.70 | 203.76 | 0.190 | 0.04 | 2.17 | 0.18 | 5.50 | 73.10 | 41.23 | 56.04 | 1065.72 | 423.86 | 488583.30 | 41.85 | 6.21 |
| UG012191_Z_15 | 8.33 | 66.11 | 149.35 | 0.92 | 13.40 | 8640.17 | 27.03 | 0.008 | 80.28 | 0.71 | 0.85 | 180.30 | 0.030 | 0.05 | 2.18 | 0.15 | 4.72 | 52.09 | 34.32 | 44.31 | 904.55 | | | | |

Appendix C: Eastern Sunda arc zircon trace element chemistry

| Analysis ID | Ce | Dy | Er | Gd | Hf | Ho | La | Lu | Nb | Nd | P | Pb | Pr | Sm | Ta | Tb | Th | Tm | U | Y | Yb | Zr | Fe | Ti |
|---------------|-------|--------|--------|------|-------|----------|--------|--------|-------|------|--------|--------|------|-------|------|-------|---------|--------|--------|---------|---------|-----------|--------|--------|
| UGO12191_z_27 | 45.69 | 233.81 | 482.90 | 3.43 | 51.64 | 8778.84 | 0.006 | 218.60 | 2.29 | 2.00 | 319.29 | 0.119 | 0.10 | 5.82 | 0.43 | 18.37 | 382.47 | 103.26 | 168.05 | 3082.50 | 1022.61 | 485124.26 | -2.594 | 10.57 |
| UGO12191_z_28 | 16.29 | 112.53 | 261.03 | 1.75 | 22.83 | 8044.81 | -0.002 | 138.99 | 1.04 | 1.45 | 360.17 | 0.063 | 0.06 | 3.66 | 0.22 | 8.55 | 118.66 | 59.77 | 81.62 | 1575.82 | 624.15 | 488122.00 | -2.592 | 13.30 |
| UGO12191_z_29 | 9.75 | 35.19 | 84.23 | 0.60 | 7.04 | 8739.01 | -0.002 | 50.74 | 0.50 | 0.45 | 133.28 | 0.025 | 0.03 | 1.11 | 0.13 | 2.52 | 50.55 | 20.39 | 41.37 | 510.21 | 219.54 | 489861.81 | -2.614 | 9.65 |
| UGO12191_z_3 | 6.17 | 48.46 | 121.02 | 0.71 | 9.04 | 8499.56 | -0.002 | 71.98 | 0.56 | 0.40 | 221.73 | 0.085 | 0.02 | 1.34 | 0.12 | 3.47 | 28.76 | 28.70 | 31.83 | 718.51 | 309.41 | 489549.54 | -2.545 | 5.88 |
| UGO12191_z_30 | 5.12 | 50.26 | 115.37 | 0.80 | 10.74 | 9683.93 | -0.005 | 66.20 | 0.56 | 0.63 | 207.00 | 0.016 | 0.03 | 1.54 | 0.15 | 3.84 | 31.11 | 27.04 | 35.75 | 694.90 | 288.89 | 488670.98 | 52.75 | 7.57 |
| UGO12191_z_31 | 18.42 | 134.74 | 317.26 | 1.46 | 22.99 | 8658.87 | 0.004 | 164.41 | 1.74 | 1.62 | 369.39 | 0.105 | 0.13 | 2.68 | 0.34 | 9.22 | 138.86 | 71.68 | 101.37 | 1849.72 | 740.09 | 487145.92 | 4.77 | 10.22 |
| UGO12191_z_32 | 11.95 | 89.29 | 179.98 | 1.76 | 20.67 | 9613.54 | 0.009 | 91.41 | 0.64 | 1.79 | 189.30 | 0.040 | 0.13 | 3.67 | 0.13 | 7.01 | 95.66 | 40.63 | 54.34 | 1107.65 | 416.78 | 488105.80 | -2.574 | 3.87 |
| UGO12191_z_33 | 7.62 | 67.15 | 165.61 | 0.93 | 13.41 | 9328.54 | 0.005 | 89.71 | 0.94 | 0.77 | 177.02 | 0.055 | 0.04 | 2.01 | 0.17 | 4.85 | 35.23 | 38.39 | 38.47 | 968.26 | 401.77 | 488575.69 | 17.02 | 4.97 |
| UGO12191_z_6 | 23.79 | 130.08 | 294.88 | 1.92 | 25.40 | 7990.79 | 0.005 | 149.53 | 1.57 | 1.74 | 307.51 | 0.203 | 0.11 | 3.34 | 0.31 | 9.41 | 202.31 | 66.17 | 104.20 | 1868.79 | 634.73 | 487867.15 | -2.556 | 9.81 |
| UGO12191_z_7 | 2.84 | 68.23 | 162.76 | 0.24 | 10.79 | 11554.17 | 0.011 | 80.80 | 0.44 | 0.35 | 251.08 | 0.036 | 0.02 | 0.96 | 0.14 | 4.50 | 22.52 | 36.73 | 45.37 | 954.12 | 374.75 | 486831.85 | -2.578 | 3.62 |
| UGO12191_z_8 | 6.90 | 121.37 | 272.07 | 0.53 | 21.08 | 11243.01 | 0.002 | 123.30 | 0.71 | 0.51 | 382.58 | 0.214 | 0.03 | 2.52 | 0.25 | 8.62 | 138.16 | 59.58 | 156.79 | 1645.93 | 583.39 | 485577.45 | -2.562 | 4.86 |
| UGO12191_z_9 | 13.73 | 63.21 | 158.21 | 0.89 | 11.37 | 9643.11 | 0.024 | 92.02 | 1.09 | 0.51 | 223.75 | 0.392 | 0.04 | 1.70 | 0.23 | 4.68 | 103.11 | 37.77 | 75.09 | 936.35 | 403.13 | 488192.31 | 30.56 | 4.81 |
| UGO12192_z_1 | 13.64 | 105.03 | 242.87 | 1.47 | 19.77 | 8357.52 | 0.013 | 126.80 | 0.97 | 1.20 | 319.91 | 0.952 | 0.06 | 2.74 | 0.20 | 7.68 | 110.18 | 54.37 | 74.18 | 1471.46 | 571.98 | 488172.07 | -2.559 | 7.69 |
| UGO12192_z_10 | 13.70 | 108.57 | 251.64 | 1.43 | 21.56 | 8347.41 | 0.013 | 127.39 | 1.06 | 1.02 | 348.27 | 0.268 | 0.06 | 2.64 | 0.23 | 7.82 | 101.37 | 56.41 | 74.86 | 1503.78 | 576.73 | 488075.37 | 2.78 | 7.85 |
| UGO12192_z_11 | 8.68 | 312.86 | 603.38 | 1.03 | 56.87 | 9961.04 | 0.009 | 213.47 | 1.77 | 1.41 | 667.19 | 0.456 | 0.05 | 5.29 | 0.43 | 22.76 | 52.24 | 122.56 | 86.40 | 3719.84 | 1100.91 | 482970.68 | -2.921 | 5.49 |
| UGO12192_z_2 | 11.04 | 83.87 | 181.37 | 1.84 | 22.27 | 8857.04 | 0.025 | 92.48 | 0.84 | 3.13 | 161.81 | 11.990 | 0.23 | 4.33 | 0.13 | 6.70 | 133.29 | 40.84 | 63.83 | 1118.21 | 424.92 | 488648.80 | 4.90 | 11.45 |
| UGO12192_z_3 | 13.30 | 93.37 | 199.71 | 1.65 | 20.19 | 8642.07 | 0.013 | 56.97 | 0.87 | 1.66 | 153.74 | 17.350 | 0.12 | 3.73 | 0.15 | 7.11 | 97.13 | 45.58 | 65.60 | 1244.66 | 468.96 | 488580.64 | -2.803 | 6.79 |
| UGO12192_z_4 | 5.61 | 55.07 | 110.02 | 1.15 | 14.63 | 9313.60 | 0.009 | 111.30 | 0.87 | 1.63 | 281.38 | 0.230 | 0.09 | 3.77 | 0.18 | 7.98 | 74.97 | 49.92 | 55.74 | 1353.83 | 510.00 | 488099.03 | 2.62 | 4.94 |
| UGO12192_z_5 | 10.93 | 104.02 | 223.24 | 1.72 | 22.95 | 8868.51 | 0.013 | 120.91 | 1.08 | 0.96 | 308.13 | 0.144 | 0.04 | 2.17 | 0.18 | 7.51 | 96.62 | 51.69 | 64.93 | 1406.47 | 540.99 | 488523.10 | 3.58 | 7.52 |
| UGO12192_z_6 | 8.62 | 73.75 | 160.74 | 1.31 | 16.36 | 8363.77 | 0.014 | 86.93 | 0.82 | 1.55 | 241.46 | 0.123 | 0.07 | 2.78 | 0.10 | 5.79 | 64.61 | 36.08 | 41.01 | 985.43 | 375.91 | 489175.69 | -2.539 | 5.30 |
| UGO12192_z_7 | 16.57 | 129.40 | 293.88 | 2.12 | 26.68 | 8016.30 | 0.009 | 155.18 | 1.07 | 1.72 | 391.58 | 0.457 | 0.10 | 3.82 | 0.26 | 9.77 | 147.80 | 66.91 | 95.21 | 1756.42 | 696.40 | 487757.77 | -2.543 | 6.24 |
| UGO12192_z_8 | 13.58 | 99.86 | 232.81 | 1.36 | 19.55 | 8082.55 | 0.013 | 120.91 | 1.08 | 0.96 | 308.13 | 0.144 | 0.04 | 2.17 | 0.18 | 7.51 | 96.62 | 51.69 | 64.93 | 1406.47 | 540.99 | 488523.10 | 3.58 | 7.52 |
| UGO12192_z_9 | 10.31 | 69.94 | 170.32 | 0.63 | 12.84 | 10319.44 | -0.003 | 97.66 | 0.80 | 0.40 | 326.28 | 0.253 | 0.02 | 1.40 | 0.20 | 4.50 | 76.67 | 40.16 | 69.39 | 1007.39 | 439.34 | 487424.95 | -3.198 | 4.51 |
| UGO12194_z_1 | 9.86 | 65.48 | 137.97 | 1.28 | 15.88 | 8694.89 | 0.010 | 73.10 | 0.56 | 1.57 | 204.17 | 0.023 | 0.09 | 2.31 | 0.13 | 5.20 | 81.85 | 31.82 | 42.85 | 863.13 | 322.15 | 489192.37 | -2.608 | 5.17 |
| UGO12194_z_10 | 15.62 | 112.59 | 245.21 | 1.75 | 24.18 | 8666.19 | 0.004 | 125.47 | 1.13 | 1.78 | 257.89 | 0.097 | 0.08 | 3.58 | 0.21 | 8.60 | 126.60 | 54.98 | 74.52 | 1522.45 | 565.12 | 487933.91 | 5.96 | 40.03 |
| UGO12194_z_11 | 2.89 | 42.79 | 114.38 | 0.29 | 7.72 | 11530.60 | 0.082 | 74.01 | 0.36 | 0.41 | 171.48 | 0.057 | 0.05 | 0.83 | 0.11 | 3.02 | 62.34 | 27.99 | 152.16 | 667.75 | 304.34 | 486539.20 | 586.40 | 14.94 |
| UGO12194_z_12 | 12.91 | 82.05 | 170.90 | 1.72 | 20.38 | 9311.72 | 0.005 | 85.94 | 0.88 | 2.25 | 231.95 | 0.125 | 0.13 | 3.64 | 0.19 | 6.52 | 157.03 | 39.28 | 75.24 | 1074.84 | 400.73 | 486985.18 | 959.05 | 8.69 |
| UGO12194_z_2 | 16.71 | 102.38 | 239.98 | 1.23 | 18.79 | 8978.44 | 0.037 | 129.44 | 1.47 | 0.94 | 288.37 | 0.914 | 0.06 | 2.43 | 0.25 | 7.58 | 137.97 | 54.49 | 82.60 | 1492.13 | 556.97 | 487651.88 | 53.70 | 13.43 |
| UGO12194_z_3 | 8.67 | 67.32 | 175.31 | 0.71 | 9.94 | 8774.91 | 0.142 | 102.85 | 0.95 | 0.73 | 312.51 | 4.487 | 0.07 | 1.65 | 0.09 | 4.71 | 50.88 | 39.68 | 48.48 | 1021.32 | 419.39 | 488274.52 | 268.51 | 13.32 |
| UGO12194_z_4 | 16.88 | 134.79 | 279.73 | 2.22 | 29.49 | 8414.24 | 0.012 | 131.19 | 1.11 | 1.40 | 270.34 | 0.067 | 0.09 | 4.17 | 0.24 | 10.20 | 140.71 | 62.43 | 78.87 | 1686.38 | 615.42 | 487856.02 | 8.54 | 10.20 |
| UGO12194_z_5 | 17.37 | 125.00 | 278.45 | 2.31 | 29.23 | 8111.70 | 0.005 | 138.67 | 0.81 | 2.17 | 337.02 | 1.425 | 0.15 | 5.12 | 0.16 | 10.09 | 132.24 | 62.83 | 78.41 | 1689.06 | 626.73 | 487906.18 | 41.79 | 8.01 |
| UGO12194_z_6 | 11.64 | 46.80 | 109.57 | 0.74 | 10.12 | 8782.70 | 0.005 | 61.21 | 0.63 | 0.87 | 178.40 | 0.022 | 0.05 | 1.55 | 0.11 | 3.46 | 67.87 | 25.24 | 39.38 | 653.61 | 267.02 | 489501.46 | 3.36 | 4.46 |
| UGO12194_z_7 | 10.82 | 70.56 | 153.04 | 1.62 | 15.94 | 8055.45 | 0.024 | 75.25 | 0.63 | 0.66 | 117.41 | 0.041 | 0.06 | 2.16 | 0.16 | 5.58 | 135.92 | 33.90 | 105.68 | 933.11 | 343.70 | 489561.89 | 68.85 | 7.25 |
| UGO12194_z_8 | 9.39 | 78.76 | 181.51 | 1.31 | 15.66 | 9362.35 | 0.010 | 100.05 | 0.74 | 1.15 | 265.27 | 0.076 | 0.06 | 2.19 | 0.15 | 5.91 | 62.01 | 41.81 | 54.47 | 1100.06 | 440.34 | 488160.68 | 5.27 | 4.28 |
| UGO12194_z_9 | 5.06 | 37.68 | 87.86 | 0.55 | 6.32 | 8788.95 | 0.023 | 55.71 | 0.59 | 0.41 | 188.89 | 0.065 | 0.02 | 0.77 | 0.12 | 2.67 | 20.71 | 21.42 | 23.39 | 537.90 | 230.89 | 489694.26 | 11.29 | 5.78 |
| UGO12199_z_1 | 3.10 | 32.01 | 78.35 | 0.50 | 5.95 | 9497.91 | 0.060 | 47.18 | 0.53 | 0.42 | 166.94 | 4.572 | 0.03 | 0.94 | 0.13 | 2.32 | 18.24 | 18.11 | 35.80 | 472.40 | 197.83 | 488852.55 | 356.23 | 6.02 |
| UGO12199_z_2 | 4.54 | 62.47 | 156.83 | 1.80 | 19.77 | 9625.87 | 0.039 | 73.16 | 0.54 | 2.14 | 198.84 | 0.494 | 0.10 | 3.39 | 0.17 | 6.51 | 49.74 | 32.86 | 55.22 | 968.44 | 333.85 | 488031.84 | 252.03 | 6.64 |
| UGO12199_z_3 | 5.95 | 62.47 | 137.96 | 1.05 | 14.62 | 10521.74 | 0.044 | 75.64 | 0.63 | 1.08 | 315.10 | 0.379 | 0.08 | 2.52 | 0.18 | 5.03 | 74.22 | 31.22 | 68.82 | 835.44 | 327.86 | 487587.18 | 17.98 | 5.09 |
| UGO12199_z_4 | 3.21 | 28.24 | 62.42 | 0.66 | 6.06 | 9927.94 | -0.002 | 47.42 | 0.52 | 0.39 | 179.32 | 0.055 | 0.02 | 1.02 | 0.15 | 2.05 | 19.18 | 17.32 | 37.87 | 436.20 | 194.55 | 489026.95 | -2.580 | 5.38 |
| UGO12199_z_5 | 12.92 | 156.83 | 324.18 | 1.91 | 30.31 | 9445.01 | 0.029 | 148.82 | 1.72 | 1.50 | 479.65 | 0.394 | 0.09 | 3.96 | 0.43 | 11.69 | 144.00 | 70.14 | 137.92 | 2062.64 | 691.51 | 486021.22 | 69.38 | 11.73 |
| UGO12199_z_6 | 33.62 | 156.18 | 317.43 | 3.18 | 38.56 | 12888.29 | 0.033 | 135.62 | 4.43 | 2.73 | 288.50 | 0.672 | 0.16 | 6.04 | 1.19 | 12.53 | 1199.17 | 68.71 | 184.37 | 2085.12 | 881.58 | 488309.28 | 181.37 | 5.57 |
| UGO12199_z_7 | 67.29 | 237.38 | 431.30 | 2.11 | 60.81 | 11766.20 | 0.154 | 185.82 | 6.91 | 5.94 | 460.97 | 1.466 | 0.35 | 10.71 | 3.18 | 19.58 | 2240.55 | 94.12 | 489.98 | 2978.57 | 888.27 | 480834.66 | 68.12 | 17.523 |
| UGO12200_z_1 | 73.52 | 217.11 | 434.46 | 1.80 | 53.92 | 11649.97 | 0.035 | 182.95 | 9.89 | 4.03 | 572.46 | 0.714 | 0.21 | 8.77 | 4.38 | 17.62 | 1666.35 | 96.43 | 446.19 | 2855.63 | 912.58 | 481734.01 | 57.27 | 8.12 |
| UGO12200_z_2 | 6.97 | 91.32 | 204.40 | 1.85 | 23.00 | 9067.70 | 0.010 | 106.71 | 0.69 | 1.73 | 393.02 | 1.268 | 0.09 | 3.90 | 0.30 | 8.08 | 72.34 | 44.41 | 80.37 | 1246.32 | 457.39 | 487890.60 | 7.49 | 6.62 |
| UGO12200_z_3 | 62.91 | 200.18 | 388.54 | 3.12 | 53.16 | 11411.13 | 0.035 | 178.58 | 7.99 | 5.16 | 490.83 | 1.364 | 0.23 | 11.47 | 3.45 | 16.76 | 2159.88 | 85.03 | 263.24 | 2593.72 | 853.61 | 482432.23 | 13.03 | 12.71 |
| UGO12200_z_4 | 49.70 | 214.98 | 431.98 | 1.96 | 50.80 | 12306.86 | 0.197 | 199.69 | 13.51 | 4.51 | 899.84 | 2.232 | 0.27 | 9.00 | 7.36 | 16.93 | | | | | | | | |

Appendix C: Eastern Sunda arc zircon trace element chemistry

| Analysis ID | Ce | Dy | Er | Eu | Gd | Hf | Ho | La | Lu | Nb | Nd | P | Pb | Pr | Sm | Ta | Tb | Th | Tm | U | Y | Yb | Zr | Fe | Ti |
|--------------|--------|--------|--------|------|--------|----------|--------|--------|--------|-------|-------|--------|--------|------|-------|-------|-------|---------|--------|--------|---------|---------|-----------|---------|-------|
| UG012200_z_6 | 5.09 | 64.01 | 143.77 | 1.00 | 13.08 | 9826.64 | 26.22 | <0.003 | 81.77 | 0.65 | 0.91 | 288.83 | 0.016 | 0.04 | 2.26 | 0.19 | 4.88 | 34.51 | 33.29 | 54.22 | 888.04 | 351.16 | 488181.57 | <2.614 | 6.74 |
| UG012200_z_7 | 132.79 | 438.81 | 819.00 | 7.32 | 129.94 | 10878.59 | 166.23 | 0.105 | 335.04 | 11.93 | 17.39 | 668.49 | 2.925 | 0.92 | 26.85 | 5.20 | 38.50 | 7126.12 | 177.08 | 615.98 | 5410.27 | 1711.84 | 474138.35 | 10.62 | 7.20 |
| UG012200_z_8 | 48.75 | 106.52 | 264.32 | 1.32 | 22.78 | 12560.95 | 46.24 | 1.352 | 104.01 | 8.02 | 8.08 | 354.25 | 4.991 | 1.00 | 5.28 | 11.70 | 8.41 | 6046.62 | 59.99 | 637.71 | 1644.12 | 588.97 | 476561.00 | 2713.09 | 8.33 |
| BHF-02_zr1 | 15.37 | 112.76 | 253.86 | 0.81 | 20.93 | 13215.90 | 48.17 | 0.013 | 146.81 | 2.30 | 1.36 | 550.47 | 0.078 | 0.05 | 3.13 | 1.00 | 8.07 | 451.96 | 67.73 | 338.79 | 1528.02 | 672.67 | 483440.84 | 8.65 | 4.66 |
| BHF-02_zr10 | 3.29 | 23.72 | 58.90 | 0.23 | 4.38 | 12002.59 | 10.12 | 0.006 | 43.96 | 0.66 | 0.17 | 133.66 | 0.032 | 0.01 | 0.58 | 0.16 | 1.56 | 17.06 | 15.14 | 39.68 | 352.29 | 173.08 | 487670.83 | 8.74 | 3.43 |
| BHF-02_zr11 | 7.37 | 86.49 | 206.80 | 1.15 | 16.17 | 8787.71 | 37.20 | <0.001 | 118.63 | 1.21 | 0.98 | 374.14 | 0.007 | 0.04 | 2.02 | 0.21 | 6.07 | 26.41 | 49.35 | 51.98 | 1248.58 | 512.67 | 488153.80 | <2.760 | 7.61 |
| BHF-02_zr12 | 3.71 | 25.70 | 61.74 | 0.27 | 5.05 | 10486.44 | 10.93 | 0.005 | 44.23 | 0.54 | 0.29 | 132.34 | 0.005 | 0.01 | 0.71 | 0.14 | 1.86 | 7.94 | 16.13 | 19.04 | 377.50 | 180.80 | 488805.53 | <2.740 | 4.89 |
| BHF-02_zr13 | 20.50 | 260.41 | 490.89 | 3.64 | 56.20 | 8524.86 | 98.68 | 0.017 | 214.45 | 1.91 | 2.87 | 548.99 | 0.017 | 0.15 | 6.73 | 0.28 | 20.56 | 120.45 | 105.62 | 115.40 | 3201.91 | 1009.55 | 484946.33 | <2.731 | 15.12 |
| BHF-02_zr14 | 5.02 | 38.02 | 94.06 | 0.45 | 7.33 | 10665.70 | 16.63 | <0.001 | 56.62 | 0.82 | 0.51 | 180.59 | 0.004 | 0.03 | 1.32 | 0.32 | 2.79 | 17.16 | 22.91 | 53.42 | 564.74 | 248.23 | 488242.97 | <2.744 | 6.30 |
| BHF-02_zr15 | 6.56 | 60.40 | 141.73 | 0.68 | 11.36 | 9142.93 | 25.52 | 0.011 | 79.84 | 0.89 | 0.51 | 281.86 | 0.126 | 0.02 | 1.46 | 0.19 | 4.29 | 18.13 | 33.09 | 34.01 | 848.18 | 343.20 | 488746.38 | <2.821 | 10.25 |
| BHF-02_zr16 | 6.05 | 76.80 | 214.33 | 0.28 | 9.07 | 17788.47 | 34.95 | 0.005 | 151.10 | 3.79 | 0.26 | 454.82 | 0.143 | 0.01 | 0.91 | 1.83 | 4.57 | 707.80 | 60.59 | 264.86 | 1490.42 | 682.97 | 480575.12 | 14.07 | 4.48 |
| BHF-02_zr17 | 17.33 | 207.92 | 393.79 | 3.67 | 50.25 | 9854.82 | 76.90 | 0.021 | 183.54 | 1.70 | 4.74 | 451.42 | 0.029 | 0.25 | 8.56 | 0.47 | 16.37 | 105.61 | 87.34 | 111.99 | 2480.99 | 840.00 | 485192.88 | 4.82 | 6.99 |
| BHF-02_zr18 | 5.19 | 37.64 | 91.10 | 0.43 | 6.80 | 10277.50 | 15.74 | 0.075 | 56.86 | 0.79 | 0.53 | 237.19 | 0.028 | 0.06 | 1.03 | 0.29 | 2.54 | 37.74 | 22.13 | 60.88 | 540.11 | 238.25 | 488427.67 | 9.48 | 7.11 |
| BHF-02_zr19 | 15.02 | 196.21 | 368.20 | 3.73 | 48.33 | 10631.77 | 73.14 | 0.017 | 181.32 | 1.59 | 4.09 | 461.17 | 0.021 | 0.24 | 7.98 | 1.00 | 15.47 | 109.35 | 82.07 | 156.20 | 2338.31 | 814.58 | 484766.29 | <2.788 | 7.32 |
| BHF-02_zr2 | 9.14 | 102.65 | 241.98 | 1.15 | 17.66 | 8894.93 | 44.66 | <0.001 | 131.87 | 1.17 | 0.92 | 357.04 | <0.004 | 0.04 | 2.24 | 0.21 | 7.30 | 32.40 | 56.21 | 57.64 | 1454.13 | 567.29 | 487762.70 | <2.750 | 8.65 |
| BHF-02_zr20 | 5.58 | 68.00 | 161.17 | 0.79 | 12.61 | 8608.57 | 28.80 | 0.003 | 94.81 | 0.90 | 0.65 | 311.88 | 0.005 | 0.04 | 1.77 | 0.20 | 4.88 | 15.83 | 39.00 | 34.90 | 975.29 | 401.21 | 488881.61 | <2.763 | 7.10 |
| BHF-02_zr21 | 16.78 | 237.10 | 426.62 | 5.09 | 65.11 | 8138.20 | 91.50 | 0.030 | 195.31 | 1.26 | 4.99 | 662.35 | 0.480 | 0.30 | 12.12 | 0.21 | 19.22 | 82.77 | 98.77 | 93.79 | 2767.05 | 920.73 | 485626.63 | 21.80 | 9.85 |
| BHF-02_zr22 | 8.95 | 109.57 | 231.48 | 1.76 | 23.78 | 9049.77 | 43.45 | 0.014 | 122.55 | 1.09 | 1.86 | 355.41 | 0.006 | 0.09 | 3.89 | 0.19 | 7.94 | 34.60 | 52.86 | 54.41 | 1416.80 | 537.99 | 487373.37 | <2.793 | 7.40 |
| BHF-02_zr23 | 6.47 | 88.95 | 169.72 | 1.80 | 22.03 | 9071.86 | 33.84 | 0.007 | 87.28 | 0.77 | 2.52 | 279.63 | 0.024 | 0.12 | 3.75 | 0.15 | 7.00 | 25.51 | 38.77 | 34.28 | 1086.74 | 383.25 | 488450.99 | <2.840 | 5.64 |
| BHF-02_zr24 | 8.87 | 121.16 | 236.20 | 2.39 | 31.41 | 9183.12 | 46.27 | 0.020 | 118.06 | 0.92 | 2.98 | 302.10 | 0.082 | 0.17 | 5.84 | 0.20 | 9.42 | 42.00 | 52.09 | 58.45 | 1484.99 | 532.12 | 487641.86 | 6.31 | 6.34 |
| BHF-02_zr25 | 7.40 | 76.78 | 186.96 | 0.84 | 13.28 | 8855.43 | 34.13 | 0.004 | 106.95 | 1.13 | 0.74 | 278.82 | 0.005 | 0.03 | 1.92 | 0.19 | 5.09 | 21.35 | 44.86 | 43.90 | 1114.34 | 463.41 | 488512.81 | <2.754 | 9.20 |
| BHF-02_zr26 | 6.70 | 95.47 | 183.72 | 2.08 | 23.28 | 8326.54 | 37.20 | 0.014 | 94.90 | 0.68 | 1.17 | 421.95 | 0.023 | 0.13 | 4.31 | 0.15 | 7.90 | 26.78 | 44.93 | 40.93 | 1176.82 | 420.72 | 488515.46 | 51.97 | 5.15 |
| BHF-02_zr27 | 17.05 | 142.10 | 318.59 | 0.31 | 23.66 | 14564.05 | 59.76 | 0.014 | 184.21 | 7.56 | 1.17 | 574.82 | 0.558 | 0.08 | 2.88 | 4.71 | 9.31 | 809.68 | 89.13 | 559.37 | 1860.78 | 904.02 | 480900.71 | 57.35 | 5.30 |
| BHF-02_zr28 | 6.84 | 86.36 | 202.49 | 0.90 | 15.55 | 8076.73 | 37.93 | <0.002 | 111.65 | 1.16 | 0.78 | 364.83 | <0.009 | 0.03 | 2.11 | 0.15 | 5.43 | 23.95 | 50.34 | 47.87 | 1244.77 | 491.54 | 488740.76 | <6.368 | 8.70 |
| BHF-02_zr6 | 29.73 | 178.53 | 430.25 | 0.85 | 27.72 | 12810.70 | 78.79 | 0.011 | 251.30 | 7.79 | 0.81 | 786.29 | 0.330 | 0.04 | 3.99 | 3.02 | 11.13 | 1195.02 | 118.95 | 547.51 | 2413.62 | 1194.78 | 480083.96 | 68.94 | 7.10 |
| BHF-02_zr7 | 5.51 | 40.76 | 106.26 | 0.52 | 7.97 | 9862.78 | 18.49 | 0.002 | 67.48 | 0.84 | 0.62 | 201.13 | 0.004 | 0.03 | 1.24 | 0.15 | 2.95 | 13.62 | 26.60 | 27.38 | 631.15 | 285.22 | 488707.55 | <2.773 | 6.67 |
| BHF-02_zr8 | 8.53 | 122.59 | 230.66 | 2.38 | 30.74 | 8254.87 | 47.93 | 0.009 | 113.94 | 0.88 | 2.52 | 500.07 | 0.419 | 0.15 | 5.96 | 0.15 | 10.17 | 37.83 | 56.22 | 51.10 | 1509.57 | 525.62 | 487759.02 | 131.41 | 17.86 |
| BHF-02_zr9 | 4.17 | 43.84 | 107.88 | 0.57 | 7.84 | 9267.87 | 19.15 | 0.022 | 63.42 | 0.76 | 0.65 | 210.56 | <0.004 | 0.03 | 1.07 | 0.18 | 2.93 | 11.18 | 25.14 | 30.92 | 631.28 | 287.52 | 489152.02 | <2.837 | 6.44 |
| BHF-03_zr1 | 14.47 | 117.71 | 287.67 | 1.08 | 19.65 | 11012.98 | 51.50 | <0.001 | 164.02 | 2.59 | 0.92 | 415.48 | 0.013 | 0.03 | 2.10 | 0.50 | 7.78 | 68.47 | 68.11 | 149.40 | 1702.78 | 702.65 | 485535.92 | <2.833 | 5.74 |
| BHF-03_zr10 | 30.03 | 210.15 | 437.70 | 1.72 | 39.90 | 11024.70 | 83.89 | 0.024 | 212.70 | 3.77 | 1.94 | 632.93 | 0.045 | 0.08 | 5.03 | 0.72 | 15.20 | 246.27 | 98.10 | 254.10 | 2738.58 | 977.43 | 488325.27 | <2.792 | 8.40 |
| BHF-03_zr11 | 9.28 | 93.36 | 205.19 | 1.09 | 19.62 | 10932.02 | 38.41 | 0.071 | 113.42 | 1.37 | 1.52 | 486.43 | 0.006 | 0.10 | 3.25 | 0.23 | 7.03 | 49.17 | 47.83 | 89.46 | 1283.46 | 498.64 | 486244.45 | <3.937 | 5.20 |
| BHF-03_zr12 | 4.99 | 40.40 | 95.65 | 0.36 | 7.28 | 10990.75 | 17.09 | 0.036 | 59.41 | 0.72 | 0.41 | 201.32 | 0.120 | 0.02 | 1.09 | 0.20 | 3.01 | 23.18 | 23.02 | 53.58 | 567.00 | 248.27 | 487943.72 | <2.798 | 7.00 |
| BHF-03_zr13 | 12.21 | 106.07 | 255.12 | 0.98 | 16.90 | 10988.05 | 45.66 | 0.029 | 146.23 | 2.08 | 1.02 | 380.60 | 0.052 | 0.04 | 2.30 | 0.48 | 7.03 | 66.71 | 60.71 | 136.01 | 1525.12 | 626.64 | 485848.53 | 46.77 | 17.53 |
| BHF-03_zr14 | 9.86 | 81.42 | 175.66 | 0.89 | 16.59 | 10921.01 | 33.13 | 0.015 | 94.55 | 1.27 | 0.70 | 350.70 | 0.012 | 0.04 | 2.21 | 0.22 | 6.05 | 60.85 | 39.84 | 77.13 | 1093.22 | 417.79 | 486837.33 | <2.764 | 5.20 |
| BHF-03_zr15 | 9.16 | 80.39 | 194.64 | 0.81 | 14.35 | 10502.17 | 34.52 | 0.004 | 115.57 | 1.51 | 0.93 | 357.45 | 0.007 | 0.04 | 2.04 | 0.31 | 5.68 | 39.55 | 46.42 | 80.44 | 1581.77 | 489.99 | 486991.26 | 2.87 | 7.18 |
| BHF-03_zr16 | 12.26 | 108.36 | 247.01 | 1.08 | 19.35 | 10402.75 | 43.89 | 0.158 | 135.64 | 1.65 | 1.28 | 509.13 | 0.020 | 0.10 | 2.75 | 0.32 | 7.55 | 62.56 | 57.19 | 104.66 | 1503.58 | 580.78 | 486113.85 | 68.88 | 11.34 |
| BHF-03_zr17 | 7.96 | 65.39 | 153.57 | 0.74 | 13.05 | 10930.07 | 47.80 | 0.037 | 89.13 | 1.26 | 0.64 | 329.67 | 0.095 | 0.04 | 1.83 | 0.27 | 4.89 | 53.72 | 36.34 | 78.96 | 937.30 | 381.07 | 487098.96 | 4.56 | 7.40 |
| BHF-03_zr18 | 4.41 | 34.50 | 88.79 | 0.42 | 6.17 | 10040.99 | 15.18 | 0.026 | 54.84 | 0.69 | 0.37 | 197.28 | 0.007 | 0.03 | 0.72 | 0.16 | 2.48 | 13.92 | 21.54 | 29.50 | 518.63 | 226.49 | 488777.10 | <2.841 | 5.74 |
| BHF-03_zr19 | 3.81 | 35.79 | 90.04 | 0.39 | 6.63 | 10814.10 | 15.50 | 0.005 | 61.51 | 0.77 | 0.36 | 232.34 | 0.060 | 0.01 | 0.83 | 0.15 | 2.52 | 13.72 | 22.29 | 39.77 | 535.58 | 251.17 | 488066.92 | 6.42 | 4.80 |
| BHF-03_zr2 | 10.48 | 107.13 | 234.30 | 1.02 | 22.16 | 10709.78 | 43.51 | 0.008 | 126.90 | 1.48 | 1.43 | 389.06 | 0.014 | 0.06 | 3.12 | 0.29 | 7.75 | 51.33 | 54.45 | 94.11 | 1411.93 | 559.87 | 486366.66 | <2.810 | 5.56 |
| BHF-03_zr20 | 5.46 | 49.85 | 118.70 | 0.51 | 9.28 | 10784.44 | 21.41 | 0.008 | 72.52 | 1.18 | 0.17 | 429.22 | 0.014 | 0.03 | 1.18 | 0.17 | 3.54 | 36.60 | 28.57 | 67.93 | 724.98 | 299.67 | 487232.49 | <2.813 | 4.67 |
| BHF-03_zr21 | 6.86 | 56.37 | 132.41 | 0.56 | 10.80 | 10987.19 | 24.16 | 0.036 | 82.38 | 0.88 | 0.64 | 357.13 | 0.012 | 0.05 | 1.25 | 0.16 | 4.08 | 32.26 | 32.28 | 60.56 | 807.36 | 342.80 | 487239.23 | <2.791 | 4.73 |
| BHF-03_zr22 | 4.53 | 35.81 | 82.81 | 0.48 | 7.06 | 10291.83 | 15.01 | 0.008 | 50.94 | 0.73 | 0.35 | 171.54 | 0.166 | 0.01 | 1.00 | 0.15 | 2.49 | 14.28 | 19.79 | 29.90 | 510.79 | 210.70 | 488644.31 | 15.92 | 5.53 |
| BHF-03_zr23 | 12.91 | 112.63 | 254.20 | 1.04 | 20.26 | 10436.65 | 47.42 | 0.003 | 139.77 | 1.92 | 0.84 | 434.36 | 0.012 | 0.04 | 2.39 | 0.36 | 7.92 | 77.47 | 59.03 | 124.22 | 1482.98 | 601.25 | 486221.38 | <2.795 | 6.96 |
| BHF-03_zr24 | 5.29 | 51.75 | 125.66 | | | | | | | | | | | | | | | | | | | | | | |

Appendix C: Eastern Sunda arc zircon trace element chemistry

| Analysis ID | Ce | Dy | Er | Eu | Gd | Hf | Ho | La | Lu | Nb | Nd | P | Pb | Pr | Sm | Ta | Tb | Th | Tm | U | Y | Yb | Zr | Fe | Ti |
|-------------|-------|--------|---------|------|--------|----------|--------|--------|--------|------|------|---------|---------|------|-------|------|-------|---------|--------|---------|---------|-----------|-----------|---------|-------|
| BHF-03_zr29 | 5.83 | 70.56 | 155.03 | 0.83 | 14.87 | 10925.15 | 28.70 | 0.002 | 88.26 | 0.82 | 1.07 | 341.05 | 0.007 | 0.04 | 2.57 | 0.15 | 5.34 | 29.54 | 36.45 | 59.00 | 942.05 | 375.18 | 487115.76 | -2.786 | 3.89 |
| BHF-03_zr3 | 4.25 | 42.89 | 100.74 | 0.46 | 8.39 | 10635.04 | 18.11 | 0.005 | 64.46 | 0.75 | 0.66 | 233.51 | 0.005 | 0.02 | 1.30 | 0.13 | 3.07 | 18.49 | 24.82 | 46.47 | 605.03 | 275.90 | 488088.70 | -2.937 | 4.17 |
| BHF-03_zr30 | 8.16 | 81.00 | 192.82 | 0.75 | 13.52 | 10715.44 | 34.80 | <0.001 | 117.05 | 1.31 | 0.61 | 431.30 | 0.011 | 0.02 | 1.83 | 0.27 | 5.45 | 41.02 | 46.78 | 90.08 | 1165.71 | 490.34 | 486677.10 | -2.793 | 5.15 |
| BHF-03_zr31 | 9.20 | 77.57 | 195.03 | 0.83 | 12.71 | 10749.09 | 34.46 | <0.001 | 113.35 | 1.36 | 0.52 | 325.09 | 0.006 | 0.02 | 1.77 | 0.29 | 5.26 | 40.85 | 45.70 | 93.86 | 1144.45 | 488.05 | 486868.53 | -3.497 | 4.29 |
| BHF-03_zr32 | 6.81 | 68.02 | 146.39 | 1.00 | 16.00 | 11103.98 | 27.63 | 0.007 | 83.25 | 0.81 | 0.99 | 237.22 | 0.028 | 0.04 | 2.58 | 0.20 | 5.12 | 32.91 | 34.28 | 60.99 | 898.92 | 352.64 | 487255.39 | -2.778 | 4.51 |
| BHF-03_zr33 | 4.71 | 43.61 | 109.02 | 0.39 | 7.72 | 10611.35 | 18.81 | 0.009 | 73.49 | 0.81 | 0.36 | 211.26 | 0.034 | 0.01 | 1.09 | 0.18 | 2.94 | 15.73 | 27.47 | 43.68 | 653.76 | 295.08 | 488073.57 | -2.833 | 4.94 |
| BHF-03_zr34 | 8.54 | 78.25 | 183.64 | 0.79 | 14.52 | 11530.71 | 33.06 | 0.008 | 109.73 | 1.14 | 0.64 | 381.32 | 0.009 | 0.03 | 1.87 | 0.27 | 5.25 | 48.25 | 44.59 | 94.96 | 1085.36 | 473.95 | 486304.77 | -2.990 | 3.82 |
| BHF-03_zr35 | 6.50 | 60.73 | 140.20 | 0.81 | 12.69 | 10491.71 | 25.27 | 0.011 | 81.36 | 0.97 | 1.01 | 228.43 | 0.006 | 0.05 | 1.66 | 0.19 | 4.67 | 31.49 | 32.84 | 58.21 | 862.94 | 339.16 | 487800.87 | -2.748 | 6.06 |
| BHF-03_zr36 | 5.39 | 53.25 | 130.50 | 0.70 | 9.37 | 9908.61 | 23.28 | 0.002 | 81.29 | 0.89 | 0.43 | 267.69 | 0.004 | 0.03 | 1.25 | 0.21 | 3.57 | 18.12 | 31.40 | 44.93 | 765.62 | 336.10 | 488303.23 | -2.801 | 5.43 |
| BHF-03_zr4 | 7.38 | 62.51 | 150.54 | 0.55 | 11.45 | 10751.07 | 27.17 | <0.001 | 93.85 | 1.19 | 0.61 | 368.60 | 0.013 | 0.02 | 1.43 | 0.26 | 4.51 | 52.04 | 36.59 | 82.03 | 901.44 | 394.41 | 487200.03 | -2.830 | 4.44 |
| BHF-03_zr5 | 4.05 | 30.27 | 78.30 | 0.29 | 5.76 | 12180.39 | 13.31 | 0.006 | 53.68 | 0.68 | 0.23 | 200.69 | 0.007 | 0.01 | 0.84 | 0.19 | 2.06 | 15.77 | 19.58 | 47.85 | 450.03 | 216.46 | 487240.48 | -2.840 | 2.54 |
| BHF-03_zr6 | 10.00 | 93.34 | 213.14 | 0.92 | 17.52 | 10666.71 | 39.05 | 0.020 | 118.82 | 1.39 | 0.73 | 387.38 | 0.011 | 0.04 | 2.14 | 0.27 | 6.64 | 57.23 | 49.81 | 96.55 | 1263.77 | 521.65 | 486621.99 | -2.817 | 5.98 |
| BHF-03_zr7 | 5.36 | 36.00 | 90.87 | 0.41 | 6.97 | 12482.22 | 15.90 | 0.002 | 62.39 | 0.76 | 0.29 | 239.51 | 0.005 | 0.01 | 0.85 | 0.18 | 2.52 | 25.05 | 23.36 | 68.17 | 539.19 | 486766.64 | -2.848 | 3.00 | |
| BHF-03_zr8 | 3.38 | 33.10 | 82.07 | 0.48 | 6.33 | 10024.70 | 14.35 | <0.001 | 53.23 | 0.63 | 0.24 | 187.18 | <0.004 | 0.01 | 0.90 | 0.13 | 2.44 | 9.14 | 20.09 | 25.67 | 482.66 | 217.62 | 488859.54 | -2.811 | 5.01 |
| BHF-03_zr9 | 6.08 | 68.37 | 153.43 | 0.67 | 13.24 | 10407.67 | 27.58 | 0.004 | 92.26 | 0.98 | 0.72 | 339.91 | 0.011 | 0.04 | 2.08 | 0.18 | 5.00 | 30.96 | 36.30 | 62.78 | 930.31 | 382.14 | 487512.39 | -2.820 | 4.95 |
| BHF-01_zr1 | 21.69 | 344.58 | 672.47 | 2.94 | 74.31 | 9466.88 | 133.03 | 0.015 | 283.14 | 2.25 | 3.00 | 583.37 | 0.024 | 0.16 | 9.37 | 0.62 | 25.71 | 120.20 | 146.12 | 84.95 | 4323.50 | 1380.20 | 482326.17 | 8.50 | 81.69 |
| BHF-01_zr10 | 15.10 | 403.49 | 604.28 | 3.26 | 72.33 | 9470.97 | 140.97 | 0.030 | 194.35 | 1.71 | 1.89 | 1233.74 | 0.138 | 0.10 | 6.45 | 0.39 | 29.35 | 75.55 | 116.37 | 58.67 | 4677.19 | 1005.05 | 480912.71 | 228.19 | 20.18 |
| BHF-01_zr11 | 15.85 | 203.34 | 416.11 | 2.16 | 42.63 | 10304.80 | 79.78 | 0.023 | 187.76 | 1.50 | 1.92 | 447.73 | 0.055 | 0.10 | 6.31 | 0.62 | 15.34 | 80.88 | 92.11 | 62.74 | 2592.14 | 894.62 | 484630.35 | 90.78 | 10.58 |
| BHF-01_zr12 | 14.32 | 221.75 | 425.73 | 1.80 | 48.60 | 9297.06 | 90.39 | <0.003 | 189.31 | 1.27 | 2.39 | 521.70 | 0.010 | 0.11 | 6.38 | 0.43 | 16.52 | 57.54 | 100.35 | 48.82 | 2604.98 | 872.45 | 485375.67 | -6.411 | 4.78 |
| BHF-01_zr13 | 13.56 | 210.54 | 403.19 | 1.51 | 45.29 | 9113.56 | 85.49 | <0.002 | 169.57 | 1.59 | 2.02 | 685.47 | 0.067 | 0.10 | 5.44 | 0.37 | 15.59 | 59.57 | 96.91 | 49.44 | 2592.41 | 854.42 | 485242.66 | -6.299 | 11.36 |
| BHF-01_zr14 | 28.13 | 438.98 | 728.32 | 3.57 | 91.22 | 11227.30 | 161.37 | 0.026 | 284.72 | 3.25 | 3.42 | 1195.31 | 0.282 | 0.12 | 9.83 | 1.06 | 33.71 | 301.97 | 169.45 | 280.03 | 5039.52 | 1453.43 | 478508.78 | 123.84 | 11.92 |
| BHF-01_zr15 | 19.79 | 305.22 | 557.21 | 1.86 | 67.28 | 8988.18 | 119.67 | 0.020 | 201.99 | 2.05 | 2.89 | 568.42 | 0.048 | 0.10 | 9.01 | 0.51 | 23.49 | 91.94 | 127.15 | 56.98 | 3510.08 | 1067.18 | 484102.24 | 37.12 | 9.79 |
| BHF-01_zr16 | 35.40 | 295.06 | 636.57 | 1.84 | 52.98 | 9975.07 | 127.73 | 0.016 | 265.88 | 4.42 | 1.83 | 739.43 | 0.084 | 0.09 | 6.14 | 0.90 | 20.17 | 278.68 | 152.13 | 212.22 | 3669.72 | 1364.94 | 481974.11 | 17.07 | 20.57 |
| BHF-01_zr17 | 41.52 | 346.63 | 704.02 | 2.35 | 67.69 | 9135.95 | 137.47 | 0.043 | 257.92 | 4.74 | 2.13 | 786.02 | 2.844 | 0.11 | 6.36 | 1.04 | 21.19 | 345.50 | 136.51 | 160.16 | 4027.85 | 1272.65 | 481867.78 | 108.93 | 21.26 |
| BHF-01_zr18 | 11.89 | 140.44 | 333.12 | 1.02 | 21.33 | 10058.30 | 60.28 | 0.023 | 164.82 | 2.10 | 1.16 | 435.04 | 0.760 | 0.04 | 2.17 | 0.80 | 9.31 | 77.77 | 77.55 | 58.85 | 1933.46 | 777.30 | 485816.58 | 66.46 | 13.83 |
| BHF-01_zr19 | 18.55 | 252.27 | 530.82 | 1.42 | 44.55 | 10389.52 | 101.21 | 0.014 | 226.17 | 3.24 | 1.64 | 537.05 | 0.020 | 0.08 | 4.99 | 0.99 | 17.57 | 142.80 | 117.95 | 87.34 | 3277.90 | 1124.29 | 482395.06 | 11.72 | 11.21 |
| BHF-01_zr20 | 29.21 | 318.02 | 650.58 | 2.42 | 62.69 | 9215.76 | 127.56 | 0.022 | 275.53 | 2.65 | 2.25 | 625.98 | 0.057 | 0.12 | 7.61 | 0.62 | 23.17 | 127.96 | 139.76 | 77.29 | 4192.13 | 1312.65 | 482780.83 | -3.199 | 16.97 |
| BHF-01_zr21 | 19.79 | 208.64 | 442.97 | 1.51 | 40.72 | 9171.79 | 85.39 | 0.035 | 194.40 | 3.08 | 1.29 | 629.28 | 0.068 | 0.07 | 4.49 | 0.69 | 15.59 | 151.12 | 98.49 | 73.90 | 2734.13 | 935.28 | 484922.07 | 36.81 | 12.91 |
| BHF-01_zr22 | 24.82 | 200.19 | 442.55 | 1.37 | 36.10 | 10161.55 | 83.78 | 0.006 | 197.15 | 3.36 | 1.41 | 557.61 | 0.020 | 0.07 | 3.97 | 0.78 | 13.90 | 133.26 | 98.79 | 101.94 | 2764.45 | 955.85 | 484314.47 | -2.782 | 16.01 |
| BHF-01_zr23 | 42.01 | 302.01 | 621.75 | 2.00 | 57.81 | 9852.61 | 121.28 | 0.043 | 257.92 | 4.74 | 2.13 | 786.02 | 2.844 | 0.11 | 6.36 | 1.04 | 21.19 | 345.50 | 136.51 | 160.16 | 4027.85 | 1272.65 | 481867.78 | 108.93 | 21.26 |
| BHF-01_zr24 | 18.68 | 244.15 | 497.86 | 2.90 | 52.88 | 8899.72 | 94.64 | 0.010 | 214.35 | 1.94 | 2.62 | 522.22 | 0.018 | 0.13 | 7.73 | 0.50 | 18.52 | 70.19 | 108.03 | 55.31 | 3017.50 | 1037.53 | 484979.09 | 5.53 | 6.79 |
| BHF-03_zr1 | 60.81 | 470.39 | 1011.44 | 2.00 | 89.90 | 14604.96 | 192.06 | 0.006 | 387.96 | 7.11 | 3.60 | 1498.59 | 0.535 | 0.16 | 10.70 | 4.42 | 33.69 | 1506.18 | 222.53 | 1016.86 | 6905.93 | 2055.91 | 471360.37 | 40.05 | 7.40 |
| BHF-03_zr2 | 60.00 | 511.99 | 959.55 | 2.23 | 112.03 | 11373.47 | 208.36 | 0.031 | 311.60 | 3.40 | 4.03 | 1421.00 | 14.875 | 0.22 | 14.38 | 0.69 | 38.97 | 209.60 | 214.83 | 799.21 | 7067.61 | 1728.99 | 474977.42 | 138.31 | 8.83 |
| BHF-03_zr3 | 15.52 | 226.12 | 453.39 | 1.89 | 50.49 | 9487.43 | 95.59 | <0.003 | 188.62 | 0.78 | 2.56 | 678.29 | 0.145 | 0.09 | 7.43 | 0.20 | 16.12 | 134.57 | 108.68 | 184.94 | 3009.53 | 938.21 | 484254.83 | -6.364 | 10.55 |
| BHF-03_zr4 | 15.07 | 285.72 | 687.17 | 1.27 | 46.51 | 11988.07 | 131.60 | 0.004 | 285.40 | 1.10 | 0.63 | 1493.95 | 3.400 | 0.04 | 6.25 | 0.32 | 20.17 | 215.65 | 174.08 | 940.55 | 4116.23 | 1548.36 | 478212.97 | -8.351 | 5.68 |
| BHF-03_zr5 | 43.70 | 494.36 | 934.66 | 1.22 | 104.76 | 11847.31 | 182.30 | 0.048 | 354.67 | 8.15 | 3.50 | 1645.87 | 2.399 | 0.21 | 13.30 | 1.80 | 35.60 | 383.92 | 210.10 | 785.12 | 6105.71 | 1885.64 | 475107.81 | 32.45 | 17.07 |
| BHF-03_zr6 | 31.36 | 299.32 | 629.79 | 4.53 | 70.87 | 15815.94 | 122.82 | 0.486 | 292.59 | 5.20 | 9.14 | 1186.37 | 219.013 | 0.88 | 13.87 | 3.70 | 21.98 | 749.36 | 157.11 | 704.27 | 4411.22 | 1431.11 | 469996.99 | 3942.16 | 18.75 |
| JER-01_zr1 | 4.07 | 56.21 | 112.63 | 1.24 | 14.64 | 10079.94 | 21.29 | 0.005 | 61.51 | 0.57 | 1.38 | 212.95 | 0.019 | 0.06 | 2.59 | 0.11 | 4.39 | 19.89 | 25.03 | 27.48 | 714.07 | 259.58 | 488432.76 | -2.791 | 5.34 |
| JER-01_zr10 | 7.38 | 90.72 | 191.15 | 1.18 | 18.61 | 9765.33 | 35.99 | 0.003 | 102.88 | 0.92 | 0.78 | 326.48 | 0.044 | 0.03 | 2.40 | 0.21 | 6.65 | 43.73 | 44.04 | 47.50 | 1203.50 | 451.23 | 487617.90 | -2.803 | 7.35 |
| JER-01_zr11 | 2.65 | 23.97 | 59.94 | 0.28 | 4.30 | 10427.08 | 10.53 | <0.001 | 41.53 | 0.49 | 1.10 | 134.15 | 0.289 | 0.01 | 0.59 | 0.14 | 1.71 | 7.65 | 14.65 | 17.59 | 364.44 | 158.18 | 488874.30 | 9.27 | 4.59 |
| JER-01_zr12 | 4.55 | 49.49 | 109.12 | 0.97 | 10.85 | 10010.53 | 19.84 | 0.004 | 69.08 | 0.57 | 0.77 | 230.37 | 0.022 | 0.04 | 1.61 | 0.14 | 3.57 | 25.44 | 26.61 | 38.94 | 686.21 | 284.55 | 488455.06 | -2.801 | 5.21 |
| JER-01_zr13 | 4.43 | 45.17 | 109.21 | 0.67 | 8.46 | 9697.44 | 19.44 | 0.107 | 68.50 | 0.83 | 0.60 | 207.03 | 0.214 | 0.05 | 1.26 | 0.20 | 3.16 | 17.30 | 26.66 | 34.24 | 686.49 | 282.59 | 488372.25 | 301.05 | 8.65 |
| JER-01_zr14 | 2.26 | 24.50 | 58.87 | 0.33 | 5.05 | 10452.98 | 10.13 | <0.001 | 41.82 | 0.52 | 0.22 | 183.44 | 0.016 | 0.00 | 0.76 | 0.07 | 1.79 | 7.02 | 14.48 | 17.21 | 355.94 | 162.62 | 488777.60 | -2.822 | 3.45 |
| JER-01_zr15 | 3.53 | 42.51 | 106.24 | 0.68 | 8.10 | 9925.11 | 18.31 | 0.007 | 69.68 | 0.69 | 0.57 | 235.91 | 0.009 | 0.04 | 0.98 | 0.18 | 3.02 | 12.20 | 25.93 | 27.82 | 631.77 | 279.79 | 488593.83 | -2.833 | 6.29 |
| JER-01_zr16 | | | | | | | | | | | | | | | | | | | | | | | | | |

Appendix C: Eastern Sunda arc zircon trace element chemistry

| Analysis ID | Ce | Dy | Er | Eu | Gd | Hf | Ho | La | Lu | Nb | Nd | P | Pb | Pr | Sm | Ta | Tb | Th | Tm | U | Y | Yb | Zr | Fe | Ti |
|-------------|-------|--------|--------|------|-------|----------|-------|--------|--------|------|------|--------|-------|------|------|------|-------|--------|-------|---------|---------|-----------|-----------|--------|-------|
| JER-01_Z121 | 7.36 | 86.15 | 171.27 | 1.69 | 21.07 | 10286.37 | 33.32 | 0.007 | 94.02 | 0.78 | 1.79 | 252.63 | 0.037 | 0.11 | 3.49 | 0.19 | 6.85 | 45.33 | 39.41 | 58.80 | 1100.54 | 396.63 | 487538.22 | -2.767 | 5.14 |
| JER-01_Z122 | 9.24 | 121.07 | 223.09 | 3.17 | 34.33 | 9134.64 | 44.76 | 0.010 | 118.19 | 0.67 | 2.83 | 323.33 | 0.116 | 0.20 | 5.91 | 0.19 | 9.85 | 54.79 | 49.95 | 58.61 | 1433.52 | 505.90 | 487717.41 | -3.213 | 6.38 |
| JER-01_Z13 | 2.41 | 22.98 | 53.45 | 0.39 | 4.70 | 9823.69 | 9.73 | 0.009 | 36.68 | 0.48 | 1.83 | 183.62 | 0.045 | 0.03 | 0.68 | 0.08 | 1.69 | 7.04 | 13.28 | 14.31 | 337.04 | 146.90 | 489273.89 | 13.08 | 6.37 |
| JER-01_Z14 | 6.28 | 66.84 | 156.95 | 0.92 | 11.96 | 10119.17 | 28.18 | 0.021 | 92.09 | 0.77 | 0.57 | 285.19 | 0.022 | 0.04 | 1.66 | 0.25 | 4.84 | 35.63 | 36.90 | 53.87 | 963.02 | 386.83 | 487788.30 | 8.55 | 7.60 |
| JER-01_Z15 | 6.13 | 76.24 | 169.96 | 0.97 | 14.53 | 9610.71 | 30.92 | 0.006 | 101.35 | 0.97 | 0.83 | 297.21 | 0.025 | 0.05 | 2.14 | 0.24 | 5.28 | 32.01 | 40.00 | 50.86 | 1044.56 | 422.47 | 488023.42 | -2.755 | 6.79 |
| JER-01_Z16 | 2.61 | 11.07 | 27.64 | 0.15 | 1.85 | 10511.61 | 4.83 | 0.0328 | 18.95 | 0.50 | 0.49 | 128.60 | 0.325 | 0.08 | 0.20 | 0.10 | 0.91 | 5.45 | 6.76 | 13.12 | 167.57 | 73.98 | 486671.43 | 339.35 | 37.76 |
| JER-01_Z17 | 2.37 | 20.05 | 48.64 | 0.26 | 3.54 | 11172.76 | 8.39 | 0.050 | 32.92 | 0.47 | 0.30 | 144.85 | 0.054 | 0.04 | 0.47 | 0.11 | 1.37 | 6.73 | 11.83 | 15.51 | 292.15 | 130.13 | 488403.20 | 13.56 | 5.98 |
| JER-01_Z18 | 5.75 | 62.97 | 142.97 | 0.96 | 12.66 | 10036.08 | 26.31 | 0.002 | 85.52 | 0.80 | 0.66 | 276.67 | 0.016 | 0.03 | 1.69 | 0.20 | 4.70 | 24.72 | 33.92 | 38.10 | 884.51 | 353.17 | 488029.66 | -2.814 | 5.10 |
| JER-01_Z19 | 7.54 | 80.04 | 193.97 | 0.96 | 14.50 | 9730.90 | 34.70 | <0.001 | 113.75 | 1.17 | 0.69 | 341.47 | 0.038 | 0.03 | 1.37 | 0.29 | 5.35 | 40.69 | 44.99 | 62.49 | 1170.91 | 479.20 | 487613.01 | -2.806 | 12.63 |
| LB009_Z11 | 18.76 | 109.54 | 241.57 | 1.29 | 21.29 | 9863.93 | 44.61 | 0.005 | 136.44 | 2.03 | 1.03 | 302.84 | 0.022 | 0.05 | 2.68 | 0.46 | 7.88 | 77.45 | 55.78 | 95.44 | 1537.44 | 576.01 | 486911.01 | 3.79 | 7.06 |
| LB009_Z10 | 22.47 | 123.37 | 285.21 | 1.58 | 26.92 | 10540.66 | 49.54 | <0.001 | 146.60 | 2.44 | 1.18 | 347.31 | 0.041 | 0.07 | 3.44 | 0.59 | 9.35 | 107.83 | 61.63 | 114.24 | 1688.62 | 630.98 | 486112.48 | -2.828 | 6.16 |
| LB009_Z11 | 9.15 | 49.81 | 122.85 | 0.78 | 9.69 | 10471.47 | 21.49 | <0.001 | 79.18 | 1.33 | 0.58 | 221.44 | 0.019 | 0.02 | 1.29 | 0.28 | 3.63 | 54.48 | 29.93 | 63.39 | 743.76 | 324.22 | 487974.22 | -2.839 | 4.81 |
| LB009_Z12 | 11.48 | 71.98 | 165.54 | 1.11 | 17.36 | 13922.66 | 29.27 | 0.002 | 104.65 | 0.87 | 1.01 | 164.27 | 0.020 | 0.06 | 2.51 | 0.26 | 5.85 | 54.31 | 41.15 | 81.52 | 1034.15 | 444.04 | 484936.15 | 43.18 | 3.10 |
| LB009_Z13 | 6.71 | 49.40 | 118.14 | 0.76 | 9.85 | 9894.14 | 21.06 | <0.001 | 76.14 | 0.88 | 0.49 | 160.36 | 0.007 | 0.04 | 1.22 | 0.22 | 3.43 | 20.69 | 28.91 | 38.22 | 718.35 | 308.71 | 488618.44 | -3.122 | 5.34 |
| LB009_Z14 | 7.55 | 41.45 | 98.36 | 0.62 | 7.50 | 10637.86 | 17.35 | 0.007 | 62.59 | 0.81 | 0.48 | 189.45 | 0.011 | 0.02 | 0.91 | 0.21 | 2.90 | 33.63 | 23.48 | 52.99 | 594.44 | 253.27 | 488190.38 | <2.809 | 4.45 |
| LB009_Z15 | 12.18 | 111.46 | 215.21 | 2.42 | 28.31 | 9982.55 | 42.16 | 0.058 | 118.12 | 1.05 | 2.88 | 268.53 | 0.026 | 0.15 | 5.14 | 0.27 | 9.26 | 58.84 | 49.88 | 64.19 | 1386.64 | 505.50 | 487184.70 | 45.15 | 8.00 |
| LB009_Z16 | 8.15 | 59.91 | 144.41 | 0.91 | 11.79 | 10412.60 | 25.35 | <0.001 | 97.00 | 0.78 | 0.55 | 348.39 | 0.008 | 0.03 | 1.69 | 0.23 | 4.49 | 33.87 | 35.95 | 56.52 | 890.48 | 387.68 | 487544.38 | -2.773 | 3.72 |
| LB009_Z17 | 18.49 | 114.08 | 262.32 | 1.31 | 21.27 | 10205.57 | 47.32 | 0.003 | 156.68 | 1.98 | 1.03 | 430.79 | 0.024 | 0.05 | 2.54 | 0.44 | 8.01 | 85.72 | 62.40 | 107.67 | 1644.80 | 655.05 | 486246.21 | 7.90 | 6.36 |
| LB009_Z18 | 10.24 | 92.61 | 178.22 | 1.94 | 24.65 | 9338.63 | 35.10 | 0.009 | 96.32 | 0.72 | 0.96 | 294.85 | 0.020 | 0.11 | 4.37 | 0.16 | 7.29 | 47.06 | 40.72 | 54.80 | 1159.23 | 409.85 | 488056.38 | 19.20 | 4.49 |
| LB009_Z19 | 9.22 | 62.45 | 131.97 | 1.12 | 14.75 | 10582.48 | 24.94 | 0.009 | 77.25 | 1.14 | 0.96 | 224.91 | 0.026 | 0.05 | 2.41 | 0.23 | 5.03 | 50.44 | 48.87 | 83.52 | 319.43 | 487717.80 | 47.44 | 6.15 | |
| LB009_Z20 | 14.53 | 87.29 | 191.13 | 1.26 | 18.24 | 11259.64 | 35.63 | 0.003 | 112.95 | 1.29 | 0.90 | 342.12 | 0.017 | 0.03 | 2.35 | 0.35 | 6.00 | 62.93 | 45.51 | 78.98 | 1208.40 | 474.78 | 486387.45 | 4.51 | 5.43 |
| LB009_Z21 | 8.43 | 57.64 | 123.84 | 0.88 | 10.91 | 9953.12 | 23.21 | <0.001 | 70.87 | 0.97 | 0.55 | 183.46 | 0.018 | 0.02 | 1.28 | 0.24 | 4.24 | 32.45 | 29.36 | 46.30 | 1119.18 | 438.96 | 487689.15 | 113.16 | 6.22 |
| LB009_Z22 | 44.51 | 230.28 | 443.33 | 3.10 | 54.37 | 11362.00 | 88.96 | 0.010 | 205.43 | 2.87 | 2.63 | 704.68 | 0.107 | 0.11 | 8.37 | 0.69 | 18.10 | 308.97 | 95.71 | 226.39 | 2992.82 | 932.85 | 482641.41 | -2.770 | 5.03 |
| LB009_Z22 | 10.64 | 86.63 | 185.82 | 1.60 | 19.76 | 10386.54 | 34.09 | 0.004 | 110.11 | 1.06 | 1.57 | 290.07 | 0.023 | 0.08 | 3.21 | 0.23 | 6.96 | 56.19 | 43.57 | 68.13 | 1147.03 | 460.57 | 487250.76 | -2.795 | 4.33 |
| LB009_Z23 | 6.63 | 28.66 | 67.01 | 0.51 | 5.43 | 10892.58 | 12.26 | 0.064 | 43.98 | 0.67 | 0.37 | 178.26 | 0.099 | 0.02 | 0.96 | 0.23 | 2.12 | 29.52 | 16.87 | 43.84 | 418.98 | 180.06 | 488303.71 | 15.19 | 4.44 |
| LB009_Z24 | 13.44 | 86.22 | 192.69 | 1.28 | 17.76 | 9477.60 | 33.46 | 0.004 | 112.42 | 1.35 | 0.99 | 314.43 | 0.015 | 0.06 | 2.61 | 0.34 | 6.17 | 55.62 | 44.90 | 74.01 | 1184.64 | 468.58 | 487357.37 | -2.773 | 5.22 |
| LB009_Z26 | 8.54 | 75.02 | 176.12 | 1.11 | 15.98 | 9938.51 | 31.65 | 0.004 | 108.98 | 1.08 | 1.51 | 256.06 | 0.014 | 0.07 | 2.78 | 0.31 | 5.35 | 40.12 | 42.99 | 57.85 | 1088.49 | 458.62 | 487758.49 | -2.814 | 6.45 |
| LB009_Z27 | 9.26 | 62.81 | 151.52 | 0.87 | 11.22 | 10441.43 | 26.18 | <0.001 | 99.66 | 1.16 | 0.56 | 235.48 | 0.011 | 0.03 | 1.27 | 0.30 | 4.30 | 29.23 | 37.36 | 53.38 | 924.09 | 402.66 | 487691.50 | -2.847 | 5.38 |
| LB009_Z28 | 6.72 | 46.84 | 103.73 | 0.80 | 9.85 | 10484.21 | 18.99 | <0.001 | 63.56 | 0.56 | 0.39 | 208.97 | 0.012 | 0.04 | 1.43 | 0.16 | 3.62 | 28.48 | 24.81 | 39.92 | 624.79 | 260.14 | 488232.27 | -3.477 | 3.74 |
| LB009_Z29 | 39.65 | 161.75 | 273.07 | 3.73 | 45.49 | 10649.60 | 57.83 | 0.012 | 127.81 | 3.50 | 4.78 | 369.18 | 0.141 | 0.21 | 8.30 | 0.68 | 13.47 | 501.28 | 59.52 | 206.68 | 1838.98 | 586.09 | 485454.45 | -2.830 | 9.96 |
| LB018_Z10 | 10.74 | 58.46 | 135.38 | 0.54 | 10.98 | 11343.32 | 24.16 | 0.009 | 75.12 | 1.05 | 0.66 | 296.78 | 0.025 | 0.05 | 1.76 | 0.31 | 4.07 | 63.51 | 31.54 | 88.12 | 833.84 | 326.53 | 487031.50 | -2.767 | 4.99 |
| LB018_Z11 | 5.19 | 42.82 | 93.92 | 0.42 | 8.54 | 9943.69 | 17.44 | 0.019 | 47.49 | 0.71 | 0.54 | 225.25 | 0.781 | 0.03 | 1.25 | 0.17 | 3.07 | 14.67 | 21.44 | 26.36 | 578.61 | 213.73 | 488692.06 | 29.70 | 8.12 |
| LB018_Z12 | 12.75 | 72.19 | 166.32 | 0.70 | 14.19 | 11374.10 | 29.81 | 0.073 | 95.86 | 1.48 | 0.87 | 314.76 | 0.024 | 0.07 | 2.15 | 0.41 | 5.20 | 67.72 | 39.22 | 88.76 | 1016.18 | 412.44 | 486630.28 | 16.47 | 4.91 |
| LB018_Z13 | 6.12 | 80.19 | 158.36 | 0.96 | 19.04 | 10490.37 | 30.31 | 0.002 | 72.12 | 0.61 | 1.16 | 171.39 | 0.006 | 0.06 | 3.63 | 0.16 | 6.38 | 22.37 | 34.62 | 31.52 | 1011.95 | 335.09 | 487755.79 | -2.779 | 6.73 |
| LB018_Z14 | 6.51 | 76.70 | 158.36 | 0.70 | 15.98 | 10368.70 | 30.47 | <0.001 | 69.90 | 0.79 | 0.64 | 229.20 | 0.007 | 0.04 | 2.22 | 0.26 | 5.58 | 16.06 | 34.25 | 27.32 | 983.63 | 331.45 | 487779.89 | -2.730 | 8.43 |
| LB018_Z15 | 7.86 | 60.37 | 155.55 | 0.63 | 11.07 | 9359.70 | 26.36 | 0.002 | 97.05 | 1.17 | 0.59 | 242.01 | 0.012 | 0.03 | 1.54 | 0.32 | 4.01 | 35.86 | 37.08 | 61.28 | 922.14 | 400.94 | 488486.02 | -2.788 | 8.19 |
| LB018_Z16 | 4.29 | 23.55 | 58.87 | 0.28 | 4.48 | 10125.28 | 10.30 | <0.001 | 38.39 | 0.60 | 0.25 | 173.41 | 0.007 | 0.02 | 0.64 | 0.14 | 1.82 | 10.22 | 14.21 | 32.22 | 348.32 | 155.61 | 489040.68 | -2.793 | 5.14 |
| LB018_Z17 | 10.02 | 82.33 | 183.52 | 0.77 | 16.40 | 10803.17 | 33.90 | 0.102 | 100.41 | 1.14 | 1.10 | 352.94 | 0.046 | 0.08 | 2.28 | 0.33 | 5.98 | 52.11 | 43.34 | 59.37 | 1136.67 | 443.16 | 486610.30 | 186.68 | 8.99 |
| LB018_Z18 | 8.25 | 61.26 | 154.85 | 0.71 | 11.16 | 9644.68 | 27.17 | 0.002 | 99.31 | 1.19 | 0.51 | 244.25 | 0.017 | 0.03 | 1.62 | 0.32 | 4.08 | 39.39 | 38.02 | 65.30 | 924.74 | 403.85 | 488253.94 | -2.851 | 7.34 |
| LB018_Z22 | 13.29 | 77.78 | 170.68 | 0.82 | 14.42 | 10145.09 | 31.75 | 0.425 | 98.78 | 1.35 | 1.21 | 281.09 | 0.171 | 0.16 | 1.80 | 0.38 | 5.61 | 94.01 | 41.96 | 106.09 | 1061.51 | 435.20 | 488857.02 | 481.47 | 34.24 |
| LB018_Z23 | 10.24 | 74.02 | 180.33 | 0.77 | 14.46 | 10162.52 | 31.94 | 0.003 | 108.93 | 1.34 | 0.80 | 314.35 | 0.020 | 0.03 | 1.59 | 0.30 | 5.42 | 55.74 | 43.36 | 81.86 | 1103.27 | 454.14 | 487432.74 | -2.847 | 6.93 |
| LB018_Z24 | 8.61 | 88.55 | 156.36 | 0.65 | 13.02 | 11320.48 | 27.93 | 0.005 | 86.43 | 0.96 | 0.67 | 307.91 | 0.039 | 0.06 | 2.32 | 0.31 | 4.08 | 35.89 | 36.36 | 56.14 | 946.79 | 403.85 | 486874.21 | -3.203 | 4.08 |
| LB018_Z25 | 12.13 | 68.82 | 167.37 | 0.72 | 13.72 | 11253.77 | 29.71 | 0.018 | 99.16 | 1.42 | 0.80 | 352.50 | 0.026 | 0.06 | 2.18 | 0.40 | 5.92 | 58.17 | 40.07 | 1038.33 | 428.87 | 486636.96 | 2.97 | 5.22 | |
| LB018_Z26 | 9.26 | 65.02 | 165.24 | 0.67 | 12.37 | 9833.95 | 29.29 | 0.002 | 103.66 | 1.46 | 0.50 | 323.24 | 0.016 | 0.03 | 1.66 | 0.36 | 4.47 | 45.20 | 40.47 | 74.53 | 997.02 | 427.91 | 487832.76 | -2.849 | 7.38 |
| LB018_Z27 | 8.07 | 66.00 | 146.23 | 0.74 | 15.38 | 9894.91 | 27.12 | <0.001 | 84.98 | 0.92 | 1.00 | 205.58 | 0.010 | 0.08 | 2.50 | 0.28 | 4.74 | 42.41 | 35.99 | 59.86 | | | | | |

Appendix C: Eastern Sunda arc zircon trace element chemistry

| Analysis ID | Ce | Dy | Er | Eu | Gd | Hf | Ho | La | Lu | Nb | Nd | P | Pb | Pr | Sm | Ta | Tb | Th | Tm | U | Y | Yb | Zr | Fe | Ti |
|-------------|-------|--------|--------|------|-------|----------|--------|--------|--------|------|------|--------|--------|------|-------|------|-------|--------|--------|---------|---------|-----------|-----------|--------|-------|
| LB018_zr28 | 9.88 | 94.76 | 204.03 | 0.95 | 19.77 | 1120.86 | 38.15 | 0.006 | 111.75 | 1.01 | 1.52 | 341.49 | 0.021 | 0.07 | 3.13 | 0.33 | 7.13 | 47.29 | 47.80 | 68.88 | 1284.45 | 489.94 | 486431.69 | <2.794 | 4.90 |
| LB018_zr29 | 6.19 | 38.48 | 95.43 | 0.52 | 8.03 | 10063.44 | 16.46 | 0.089 | 60.83 | 0.89 | 0.93 | 213.73 | 0.070 | 0.08 | 1.25 | 0.20 | 2.92 | 26.01 | 23.17 | 46.56 | 571.70 | 246.84 | 488610.37 | 5.60 | 6.20 |
| LB018_zr30 | 12.82 | 98.91 | 212.26 | 1.10 | 21.67 | 11133.79 | 39.99 | 0.189 | 115.74 | 1.23 | 1.88 | 379.65 | 0.029 | 0.14 | 3.60 | 0.42 | 7.60 | 65.91 | 49.61 | 86.95 | 1324.14 | 513.03 | 486222.68 | <2.854 | 4.33 |
| LB018_zr30 | 9.88 | 79.23 | 183.91 | 0.70 | 15.86 | 10935.98 | 33.43 | 0.004 | 104.63 | 1.20 | 1.74 | 345.43 | 0.019 | 0.05 | 2.04 | 0.35 | 5.58 | 39.26 | 44.17 | 62.51 | 1103.56 | 454.21 | 486799.09 | <2.803 | 4.71 |
| LB018_zr31 | 9.06 | 68.98 | 172.07 | 0.75 | 12.74 | 9422.22 | 30.43 | <0.001 | 105.90 | 1.34 | 0.80 | 320.64 | 0.015 | 0.03 | 1.82 | 0.36 | 4.86 | 46.96 | 41.55 | 71.33 | 1037.48 | 444.45 | 488082.42 | <2.820 | 8.04 |
| LB018_zr32 | 10.58 | 94.48 | 206.08 | 1.11 | 21.36 | 10375.49 | 38.29 | 0.005 | 110.63 | 0.98 | 1.50 | 367.79 | 0.023 | 0.10 | 3.47 | 0.26 | 7.71 | 52.00 | 46.66 | 85.96 | 1279.79 | 482.08 | 486901.66 | <2.796 | 4.45 |
| LB018_zr33 | 11.88 | 79.42 | 192.03 | 0.69 | 15.11 | 10956.14 | 33.73 | <0.001 | 109.62 | 1.56 | 0.65 | 334.95 | 0.022 | 0.02 | 1.78 | 0.41 | 5.63 | 72.00 | 77.32 | 1162.55 | 479.88 | 486702.33 | <2.817 | 5.41 | |
| LB018_zr34 | 11.54 | 134.99 | 315.15 | 0.95 | 26.59 | 9716.87 | 58.08 | 0.003 | 147.66 | 1.97 | 1.05 | 468.62 | 0.008 | 0.05 | 3.57 | 0.47 | 9.56 | 28.49 | 70.60 | 59.14 | 1865.42 | 684.84 | 486315.78 | <2.808 | 12.17 |
| LB018_zr35 | 11.16 | 65.54 | 156.56 | 0.80 | 13.18 | 11334.85 | 29.12 | 0.004 | 89.26 | 1.36 | 0.69 | 343.35 | 0.032 | 0.03 | 1.03 | 0.17 | 3.99 | 4.89 | 73.16 | 36.70 | 958.87 | 376.41 | 486726.90 | <3.581 | 5.07 |
| LB018_zr36 | 13.34 | 80.50 | 202.25 | 0.68 | 14.30 | 10621.51 | 35.30 | 0.005 | 117.23 | 1.90 | 0.69 | 333.55 | 0.023 | 0.03 | 1.82 | 0.46 | 5.81 | 62.94 | 48.20 | 91.50 | 1216.53 | 502.53 | 486835.49 | 9.89 | 5.99 |
| LB018_zr37 | 9.81 | 59.86 | 140.91 | 0.67 | 11.11 | 10099.56 | 25.05 | 0.003 | 82.75 | 1.16 | 0.46 | 268.42 | 0.023 | 0.02 | 1.48 | 0.30 | 4.16 | 59.22 | 33.88 | 79.66 | 859.03 | 355.95 | 487972.15 | <2.808 | 6.21 |
| LB018_zr38 | 10.66 | 104.40 | 243.70 | 0.99 | 19.51 | 10065.39 | 44.08 | 0.013 | 124.99 | 1.37 | 0.76 | 374.10 | 0.019 | 0.08 | 2.68 | 0.35 | 7.44 | 31.17 | 57.00 | 50.86 | 1466.88 | 555.80 | 486868.81 | <2.843 | 7.02 |
| LB018_zr39 | 6.28 | 45.09 | 113.00 | 0.53 | 8.17 | 10287.58 | 19.64 | 0.004 | 73.09 | 0.84 | 0.49 | 224.55 | 0.010 | 0.02 | 1.30 | 0.23 | 3.23 | 28.13 | 27.72 | 49.82 | 681.71 | 302.69 | 488237.59 | <2.812 | 4.85 |
| LB018_zr4 | 7.52 | 101.60 | 225.42 | 0.73 | 19.51 | 9801.70 | 42.78 | 0.002 | 105.03 | 1.19 | 0.75 | 435.22 | 0.005 | 0.03 | 2.24 | 0.34 | 7.37 | 19.26 | 50.92 | 40.66 | 1362.22 | 485.66 | 487157.88 | <2.865 | 10.13 |
| LB018_zr40 | 11.85 | 64.88 | 148.99 | 0.70 | 13.13 | 11313.42 | 27.78 | 0.052 | 80.84 | 1.41 | 1.07 | 333.16 | 0.078 | 0.08 | 2.30 | 0.36 | 5.05 | 79.38 | 35.04 | 90.14 | 914.52 | 354.04 | 486705.85 | 98.61 | 5.03 |
| LB018_zr5 | 10.93 | 76.63 | 195.29 | 0.80 | 14.10 | 10262.64 | 33.80 | 0.003 | 121.01 | 1.64 | 0.77 | 356.51 | 0.019 | 0.03 | 2.14 | 0.48 | 5.58 | 58.27 | 47.53 | 94.83 | 1165.63 | 510.36 | 487129.05 | <2.874 | 6.49 |
| LB018_zr6 | 20.35 | 118.19 | 266.12 | 0.90 | 22.05 | 11507.57 | 49.09 | 0.015 | 148.16 | 2.56 | 0.93 | 428.27 | 0.033 | 0.05 | 3.26 | 0.65 | 8.59 | 91.24 | 61.48 | 119.09 | 1626.86 | 636.59 | 485298.47 | <3.828 | 4.63 |
| LB018_zr7 | 13.95 | 135.50 | 282.68 | 1.70 | 31.11 | 9964.74 | 53.57 | 0.004 | 148.53 | 1.21 | 2.44 | 529.74 | 0.036 | 0.13 | 5.24 | 0.32 | 10.54 | 107.53 | 65.41 | 117.08 | 1772.67 | 666.31 | 486026.86 | <2.776 | 5.40 |
| LB018_zr8 | 8.99 | 80.68 | 180.14 | 1.11 | 17.68 | 9737.08 | 33.19 | 0.027 | 102.49 | 1.00 | 1.39 | 336.75 | 0.030 | 0.09 | 2.69 | 0.32 | 6.24 | 58.86 | 42.02 | 72.81 | 1118.65 | 434.96 | 487688.93 | 16.08 | 6.15 |
| LB018_zr9 | 14.16 | 116.46 | 242.63 | 1.22 | 25.59 | 11170.39 | 46.33 | 0.060 | 125.27 | 1.32 | 1.64 | 320.69 | 0.036 | 0.10 | 4.66 | 0.36 | 8.87 | 79.79 | 56.05 | 92.14 | 1533.74 | 560.09 | 485959.13 | 21.91 | 5.73 |
| LB024_zr1 | 2.85 | 14.46 | 35.02 | 0.17 | 2.69 | 10982.53 | 5.85 | 0.002 | 24.87 | 0.50 | 0.12 | 107.27 | <0.003 | 0.00 | 0.39 | 0.09 | 1.01 | 5.00 | 9.03 | 12.79 | 210.10 | 98.31 | 488778.20 | <2.824 | 4.18 |
| LB024_zr10 | 6.21 | 46.94 | 116.01 | 0.65 | 9.57 | 9422.40 | 20.93 | <0.001 | 71.43 | 1.06 | 0.49 | 189.26 | 0.007 | 0.02 | 1.45 | 0.22 | 3.39 | 16.23 | 28.22 | 32.20 | 697.70 | 287.08 | 488955.74 | 5.02 | 5.38 |
| LB024_zr11 | 7.10 | 75.31 | 145.05 | 1.73 | 20.02 | 9775.01 | 28.01 | 0.010 | 78.24 | 0.71 | 1.95 | 170.57 | 0.007 | 0.10 | 3.66 | 0.16 | 6.26 | 28.01 | 32.54 | 35.41 | 932.93 | 332.68 | 488385.05 | <2.840 | 4.82 |
| LB024_zr12 | 3.90 | 29.64 | 71.98 | 0.36 | 5.63 | 10882.53 | 12.32 | 0.014 | 50.13 | 0.58 | 0.18 | 147.13 | 0.012 | 0.04 | 0.69 | 0.15 | 2.15 | 9.26 | 17.58 | 23.48 | 437.62 | 198.67 | 488380.13 | <2.763 | 2.99 |
| LB024_zr13 | 29.13 | 201.20 | 385.90 | 2.92 | 44.57 | 9489.36 | 76.64 | 0.018 | 189.89 | 2.58 | 2.74 | 376.53 | 0.045 | 0.14 | 5.89 | 0.53 | 16.03 | 147.36 | 85.30 | 132.86 | 2587.54 | 854.40 | 485457.40 | 12.07 | 11.75 |
| LB024_zr14 | 12.33 | 87.79 | 217.03 | 1.19 | 17.59 | 10603.27 | 39.26 | <0.001 | 128.58 | 1.65 | 0.77 | 273.73 | 0.018 | 0.05 | 2.52 | 0.51 | 6.24 | 38.97 | 50.85 | 70.46 | 1292.28 | 534.43 | 487550.83 | <2.801 | 6.32 |
| LB024_zr15 | 16.62 | 93.52 | 217.03 | 1.19 | 17.59 | 10603.27 | 39.26 | 0.005 | 130.02 | 1.99 | 0.77 | 284.77 | 0.038 | 0.05 | 2.04 | 0.52 | 6.55 | 70.95 | 52.85 | 97.64 | 1348.88 | 553.41 | 486701.12 | 22.60 | 6.30 |
| LB024_zr16 | 11.43 | 58.00 | 125.41 | 0.86 | 12.56 | 10501.20 | 23.19 | 0.145 | 70.49 | 1.05 | 0.82 | 289.04 | 0.020 | 0.07 | 1.79 | 0.32 | 4.19 | 54.54 | 28.96 | 61.81 | 781.58 | 302.98 | 487790.14 | <2.857 | 4.46 |
| LB024_zr17 | 29.04 | 185.58 | 305.82 | 4.69 | 58.89 | 9633.04 | 63.79 | 0.008 | 135.61 | 1.83 | 4.72 | 405.02 | 0.075 | 0.18 | 11.06 | 0.31 | 16.86 | 241.57 | 65.78 | 129.66 | 2080.46 | 632.15 | 486043.04 | <2.861 | 8.03 |
| LB024_zr18 | 13.42 | 88.08 | 185.87 | 1.11 | 16.99 | 9916.78 | 35.04 | 0.082 | 101.85 | 1.55 | 1.07 | 266.15 | 0.095 | 0.06 | 2.46 | 0.36 | 6.37 | 51.43 | 43.23 | 64.09 | 1153.62 | 440.98 | 487660.15 | 7.61 | 7.54 |
| LB024_zr19 | 6.35 | 56.73 | 115.13 | 1.21 | 13.61 | 9363.90 | 21.54 | 0.032 | 68.10 | 0.82 | 1.31 | 250.74 | 0.051 | 0.08 | 2.23 | 0.15 | 4.49 | 21.99 | 27.17 | 32.92 | 727.08 | 289.73 | 488839.17 | 5.91 | 5.19 |
| LB024_zr2 | 12.81 | 90.96 | 210.70 | 1.03 | 17.46 | 9414.05 | 38.11 | 0.002 | 117.77 | 1.43 | 0.65 | 229.23 | 0.020 | 0.03 | 2.05 | 0.33 | 6.52 | 48.28 | 49.27 | 66.57 | 1276.67 | 504.83 | 487907.81 | <2.798 | 7.49 |
| LB024_zr20 | 4.98 | 22.80 | 58.25 | 0.35 | 4.64 | 10986.23 | 10.04 | <0.001 | 39.53 | 0.64 | 0.15 | 171.50 | 0.006 | 0.01 | 0.63 | 0.13 | 1.89 | 16.48 | 14.40 | 31.98 | 349.63 | 157.00 | 488384.87 | <2.836 | 4.94 |
| LB024_zr21 | 31.69 | 197.69 | 412.73 | 2.51 | 40.49 | 9473.99 | 76.30 | 0.003 | 206.25 | 3.25 | 1.60 | 432.18 | 0.049 | 0.08 | 4.38 | 0.63 | 14.63 | 140.99 | 91.57 | 146.71 | 2677.45 | 909.43 | 485191.27 | <2.805 | 10.68 |
| LB024_zr22 | 3.76 | 28.10 | 68.69 | 0.43 | 5.49 | 9696.74 | 12.32 | <0.001 | 47.20 | 0.60 | 0.32 | 140.61 | 0.005 | 0.01 | 0.85 | 0.14 | 2.07 | 8.45 | 17.36 | 17.68 | 416.16 | 189.81 | 489314.70 | 7.26 | 6.42 |
| LB024_zr23 | 13.48 | 107.33 | 228.25 | 1.80 | 23.38 | 9618.62 | 42.87 | <0.001 | 119.84 | 1.37 | 1.16 | 320.27 | 0.022 | 0.06 | 2.94 | 0.27 | 8.15 | 68.10 | 52.10 | 75.42 | 1424.43 | 525.05 | 487349.42 | <2.828 | 6.57 |
| LB024_zr24 | 4.61 | 34.56 | 85.54 | 0.44 | 7.17 | 10466.40 | 14.35 | <0.001 | 60.58 | 0.70 | 4.11 | 889.32 | 0.086 | 0.18 | 9.30 | 0.96 | 21.02 | 259.54 | 169.92 | 381.40 | 4086.94 | 1843.81 | 481938.25 | <2.760 | 8.21 |
| LB024_zr25 | 40.83 | 273.40 | 681.23 | 4.65 | 58.85 | 8659.28 | 117.44 | 0.017 | 444.40 | 3.07 | 4.11 | 889.32 | 0.086 | 0.18 | 9.30 | 0.96 | 21.02 | 259.54 | 169.92 | 381.40 | 4086.94 | 1843.81 | 481938.25 | <2.760 | 8.21 |
| LB024_zr26 | 7.80 | 59.40 | 142.08 | 0.84 | 11.34 | 9674.40 | 25.65 | 0.003 | 88.42 | 0.98 | 0.59 | 201.41 | 0.064 | 0.03 | 1.42 | 0.28 | 4.56 | 24.90 | 34.07 | 43.83 | 866.13 | 367.60 | 488437.15 | 12.03 | 6.68 |
| LB024_zr27 | 4.02 | 33.83 | 81.13 | 0.48 | 7.01 | 10276.24 | 14.61 | <0.001 | 53.94 | 0.56 | 0.28 | 185.19 | 0.007 | 0.00 | 0.91 | 0.15 | 2.37 | 10.12 | 20.33 | 22.74 | 491.70 | 220.17 | 488672.86 | <2.799 | 4.64 |
| LB024_zr28 | 3.50 | 30.36 | 70.53 | 0.60 | 6.60 | 9396.93 | 12.70 | 0.003 | 45.57 | 0.52 | 0.44 | 167.87 | 0.029 | 0.03 | 0.84 | 0.12 | 2.40 | 9.33 | 17.00 | 17.96 | 426.22 | 185.79 | 489496.24 | <2.796 | 4.67 |
| LB024_zr29 | 4.37 | 34.30 | 85.36 | 0.50 | 6.76 | 9479.13 | 15.03 | 0.003 | 56.77 | 0.85 | 0.32 | 158.97 | <0.003 | 0.01 | 1.07 | 0.19 | 2.56 | 10.93 | 21.45 | 24.12 | 503.50 | 232.45 | 489294.79 | <2.851 | 5.11 |
| LB024_zr30 | 6.25 | 35.33 | 85.04 | 0.54 | 6.55 | 10481.19 | 15.05 | 0.035 | 53.02 | 0.88 | 0.80 | 147.34 | 0.133 | 0.04 | 1.39 | 0.14 | 2.84 | 15.10 | 21.83 | 26.83 | 553.10 | 238.30 | 488740.16 | 14.14 | 8.56 |
| LB024_zr31 | 3.62 | 28.54 | 70.39 | 0.31 | 5.10 | 10548.65 | 12.23 | <0.001 | 48.68 | 0.52 | 0.28 | 223.71 | 0.004 | 0.02 | 0.72 | 0.12 | 2.03 | 11.00 | 18.16 | 23.49 | 426.26 | 196.89 | 488492.14 | 4.22 | 3.79 |
| LB024_zr32 | 3.88 | 33.19 | 76.88 | 0.49 | 6.41 | 10163.85 | 13.82 | 0.0 | | | | | | | | | | | | | | | | | |

Appendix C: Eastern Sunda arc zircon trace element chemistry

| Analysis ID | Ce | Dy | Er | Gd | Hf | Ho | La | Lu | Nb | Nd | P | Pb | Pr | Sm | Ta | Tb | Th | Tm | U | Y | Yb | Zr | Fe | Ti | |
|-------------|-------|--------|--------|------|-------|----------|--------|---------|--------|------|------|---------|-------|------|-------|------|-------|--------|--------|---------|---------|-----------|-----------|----------|-------|
| LE024_Zr37 | 3.83 | 23.85 | 50.60 | 0.63 | 6.45 | 9933.41 | 9.25 | 0.134 | 34.03 | 0.61 | 1.24 | 149.13 | 0.252 | 0.14 | 1.43 | 0.11 | 1.96 | 12.77 | 18.44 | 326.55 | 135.62 | 489255.40 | 21.41 | 4.33 | |
| LE024_Zr38 | 17.97 | 121.71 | 247.04 | 2.18 | 29.83 | 10261.84 | 46.58 | 0.016 | 123.32 | 1.42 | 2.36 | 394.02 | 0.053 | 0.14 | 4.73 | 0.25 | 9.71 | 152.73 | 54.04 | 86.87 | 1579.76 | 536.11 | 486433.93 | 4.71 | 5.53 |
| LE024_Zr4 | 12.55 | 89.78 | 234.82 | 1.16 | 14.57 | 9294.12 | 41.00 | 0.002 | 136.13 | 1.72 | 0.84 | 257.92 | 0.012 | 0.04 | 2.09 | 0.14 | 5.96 | 38.16 | 54.65 | 68.98 | 1377.87 | 584.02 | 487745.73 | <2.768 | 8.21 |
| LE024_Zr5 | 10.46 | 86.66 | 184.69 | 1.55 | 20.30 | 9225.93 | 34.67 | 0.190 | 107.14 | 1.13 | 1.71 | 261.91 | 0.038 | 0.14 | 3.26 | 0.31 | 6.81 | 37.93 | 43.22 | 50.94 | 1183.62 | 445.48 | 488132.05 | 36.34 | 6.69 |
| LE024_Zr6 | 11.62 | 72.14 | 155.64 | 1.06 | 15.08 | 9805.60 | 29.21 | 0.750 | 87.56 | 1.19 | 2.28 | 538.66 | 0.017 | 0.36 | 2.51 | 0.26 | 5.31 | 41.68 | 36.38 | 49.63 | 972.93 | 368.30 | 487523.91 | 4.63 | 5.59 |
| LE024_Zr7 | 6.72 | 50.15 | 122.05 | 0.87 | 10.36 | 9874.25 | 21.53 | 0.002 | 77.15 | 0.80 | 0.68 | 180.76 | 0.010 | 0.03 | 1.65 | 0.22 | 3.59 | 29.55 | 39.27 | 740.88 | 319.18 | 488553.46 | 2.98 | 5.41 | |
| LE024_Zr8 | 6.64 | 53.60 | 126.87 | 0.75 | 10.63 | 9675.89 | 22.55 | <0.001 | 81.37 | 0.73 | 0.66 | 317.24 | 0.007 | 0.03 | 1.30 | 0.19 | 3.78 | 22.41 | 31.80 | 39.27 | 770.09 | 338.45 | 488379.71 | <2.810 | 3.96 |
| LE024_Zr9 | 36.37 | 245.59 | 520.50 | 4.45 | 58.00 | 9288.05 | 98.15 | 0.031 | 270.05 | 2.83 | 4.24 | 784.71 | 0.077 | 0.27 | 8.34 | 0.71 | 19.58 | 248.81 | 117.25 | 217.65 | 3414.21 | 1158.33 | 483335.73 | 7.70 | 7.66 |
| LE028_Zr1 | 13.07 | 80.22 | 191.95 | 0.61 | 14.38 | 11098.59 | 34.28 | 0.002 | 110.11 | 1.58 | 0.68 | 390.65 | 0.030 | 0.02 | 2.16 | 0.47 | 5.49 | 66.75 | 45.75 | 94.37 | 1161.82 | 476.70 | 486464.61 | <2.780 | 4.85 |
| LE028_Zr10 | 41.77 | 165.67 | 346.09 | 1.27 | 32.80 | 11481.28 | 66.10 | <0.001 | 163.96 | 5.34 | 1.26 | 564.64 | 0.119 | 0.06 | 4.18 | 1.19 | 12.47 | 353.92 | 77.57 | 294.95 | 2179.01 | 767.74 | 483914.24 | <2.820 | 4.66 |
| LE028_Zr11 | 8.88 | 99.83 | 206.39 | 1.10 | 21.49 | 10970.14 | 39.11 | 0.008 | 105.48 | 0.79 | 1.37 | 324.44 | 0.028 | 0.07 | 3.57 | 0.24 | 7.71 | 48.42 | 60.41 | 1281.10 | 417.96 | 486570.11 | <2.795 | 4.11 | |
| LE028_Zr12 | 10.70 | 72.88 | 182.81 | 0.63 | 13.38 | 10837.45 | 31.72 | <0.001 | 106.12 | 1.42 | 0.56 | 287.78 | 0.023 | 0.03 | 1.66 | 0.43 | 5.09 | 44.64 | 43.34 | 73.27 | 147.17 | 461.18 | 48770.50 | <2.721 | 4.56 |
| LE028_Zr13 | 12.93 | 143.23 | 302.47 | 1.09 | 27.20 | 10023.82 | 59.08 | 0.028 | 125.42 | 1.31 | 1.41 | 399.59 | 2.567 | 0.07 | 3.08 | 0.33 | 10.24 | 39.04 | 64.62 | 55.50 | 1839.74 | 606.12 | 485722.75 | 440.08 | 16.74 |
| LE028_Zr14 | 9.57 | 72.41 | 183.66 | 0.98 | 14.01 | 10941.68 | 31.83 | <0.001 | 110.83 | 1.29 | 0.62 | 428.75 | 0.015 | 0.03 | 1.81 | 0.35 | 4.88 | 38.12 | 44.49 | 70.33 | 1106.74 | 472.44 | 486619.28 | 3.22 | 4.20 |
| LE028_Zr15 | 5.74 | 81.83 | 165.50 | 0.63 | 17.53 | 10137.13 | 32.24 | 0.003 | 69.45 | 0.71 | 0.81 | 301.11 | 0.010 | 0.04 | 1.28 | 0.27 | 6.13 | 14.14 | 34.88 | 24.40 | 1004.02 | 333.88 | 487779.46 | <2.727 | 8.61 |
| LE028_Zr16 | 10.96 | 92.38 | 206.90 | 1.03 | 19.32 | 10225.16 | 38.09 | 0.002 | 119.80 | 1.06 | 1.44 | 456.64 | 0.031 | 0.06 | 2.79 | 0.31 | 6.82 | 70.73 | 48.57 | 89.77 | 1278.23 | 516.52 | 486807.76 | <2.757 | 5.05 |
| LE028_Zr17 | 14.34 | 93.43 | 227.63 | 0.80 | 16.23 | 10417.70 | 40.19 | 0.083 | 129.60 | 1.90 | 0.83 | 453.14 | 2.155 | 0.09 | 2.05 | 0.47 | 6.40 | 74.73 | 53.49 | 105.05 | 1367.52 | 565.74 | 485662.33 | 477.62 | 7.32 |
| LE028_Zr18 | 11.30 | 85.41 | 200.25 | 0.77 | 18.12 | 10983.53 | 36.15 | 0.002 | 115.38 | 1.31 | 0.73 | 477.46 | 0.025 | 0.04 | 2.26 | 0.31 | 6.10 | 58.16 | 48.28 | 82.47 | 1222.35 | 498.02 | 486292.02 | <2.828 | 3.82 |
| LE028_Zr19 | 34.79 | 342.76 | 682.38 | 3.04 | 78.92 | 11683.69 | 131.91 | 0.099 | 296.10 | 2.68 | 5.70 | 1138.89 | 0.569 | 0.34 | 12.61 | 1.26 | 26.83 | 231.81 | 147.64 | 402.64 | 4326.56 | 1426.28 | 486244.68 | 61.48 | 4.83 |
| LE028_Zr20 | 31.59 | 349.79 | 747.94 | 3.04 | 78.92 | 11683.69 | 131.91 | 0.099 | 296.10 | 2.68 | 5.70 | 1138.89 | 0.569 | 0.34 | 12.61 | 1.26 | 26.83 | 231.81 | 147.64 | 402.64 | 4326.56 | 1426.28 | 486244.68 | 61.48 | 4.83 |
| LE028_Zr21 | 9.90 | 79.79 | 173.94 | 0.91 | 18.86 | 10964.07 | 31.84 | 0.220 | 95.93 | 1.17 | 1.56 | 328.80 | 0.042 | 0.13 | 2.71 | 0.30 | 5.95 | 67.14 | 40.21 | 73.06 | 1053.33 | 417.97 | 486845.54 | 29.72 | 7.07 |
| LE028_Zr22 | 10.83 | 99.46 | 215.03 | 1.06 | 23.03 | 10983.82 | 40.56 | 0.040 | 113.00 | 1.02 | 1.89 | 416.32 | 0.197 | 0.11 | 3.52 | 0.26 | 7.65 | 59.12 | 49.09 | 78.83 | 1316.24 | 500.97 | 485562.32 | 589.29 | 4.30 |
| LE028_Zr23 | 15.32 | 99.94 | 230.15 | 0.77 | 18.12 | 11288.66 | 42.35 | 0.007 | 123.96 | 1.64 | 0.81 | 433.99 | 0.027 | 0.05 | 2.41 | 0.45 | 7.15 | 71.24 | 53.29 | 92.86 | 1397.54 | 554.79 | 485847.85 | 5.14 | 4.23 |
| LE028_Zr24 | 6.94 | 57.16 | 130.25 | 0.58 | 13.44 | 11082.43 | 24.85 | 0.178 | 71.16 | 0.62 | 1.40 | 491.42 | 0.014 | 0.13 | 1.91 | 0.21 | 4.49 | 25.73 | 31.22 | 41.09 | 813.76 | 321.95 | 486929.22 | 5.30 | 3.77 |
| LE028_Zr25 | 5.12 | 58.37 | 141.42 | 0.41 | 10.88 | 10702.22 | 24.00 | 0.042 | 84.60 | 0.70 | 0.41 | 482.53 | 0.010 | 0.01 | 1.19 | 0.19 | 4.08 | 20.59 | 34.74 | 42.99 | 845.21 | 373.43 | 487147.75 | 5.32 | 3.92 |
| LE028_Zr26 | 12.71 | 89.70 | 190.16 | 2.07 | 19.68 | 10906.64 | 34.54 | 0.769 | 108.03 | 1.46 | 4.56 | 517.51 | 5.427 | 0.54 | 4.57 | 0.46 | 6.89 | 64.32 | 45.07 | 91.88 | 1207.57 | 473.47 | 483162.61 | 2371.21 | 8.61 |
| LE028_Zr27 | 6.58 | 35.10 | 85.68 | 0.36 | 6.51 | 10671.68 | 15.29 | <0.001 | 52.22 | 0.78 | 0.43 | 224.90 | 0.087 | 0.01 | 1.20 | 0.21 | 2.66 | 29.23 | 21.41 | 52.50 | 524.85 | 225.57 | 486189.41 | 20.72 | 4.96 |
| LE028_Zr28 | 18.58 | 123.94 | 295.54 | 1.00 | 21.93 | 9843.16 | 54.09 | 0.003 | 160.38 | 2.25 | 0.82 | 469.93 | 0.054 | 0.03 | 2.35 | 0.52 | 8.85 | 115.62 | 67.85 | 135.05 | 1799.84 | 691.08 | 486172.46 | 3.95 | 9.09 |
| LE028_Zr29 | 10.74 | 67.34 | 159.75 | 0.60 | 12.93 | 10900.31 | 29.63 | 0.036 | 92.36 | 1.26 | 1.00 | 342.53 | 0.030 | 0.07 | 2.05 | 0.29 | 5.09 | 56.27 | 38.24 | 73.45 | 984.83 | 404.07 | 486916.65 | 82.46 | 6.15 |
| LE028_Zr30 | 10.99 | 91.52 | 191.37 | 1.04 | 20.97 | 11187.51 | 36.29 | 0.037 | 100.35 | 1.00 | 1.48 | 311.73 | 0.033 | 0.07 | 3.67 | 0.32 | 7.01 | 60.05 | 43.92 | 74.98 | 1203.33 | 439.44 | 486511.56 | <2.818 | 12.47 |
| LE028_Zr31 | 12.63 | 77.16 | 187.94 | 0.78 | 14.67 | 10566.91 | 32.55 | 0.056 | 106.11 | 1.41 | 0.97 | 309.01 | 0.044 | 0.06 | 2.20 | 0.42 | 5.57 | 72.30 | 43.82 | 89.74 | 1127.25 | 487.64 | 486930.37 | 109.22 | 8.44 |
| LE028_Zr32 | 18.04 | 186.71 | 408.30 | 1.65 | 39.75 | 10461.37 | 75.15 | 0.007 | 202.32 | 1.53 | 2.55 | 816.50 | 0.046 | 0.12 | 6.03 | 0.45 | 14.14 | 123.08 | 92.13 | 148.84 | 2484.13 | 926.55 | 483919.26 | <2.742 | 5.28 |
| LE028_Zr33 | 8.30 | 65.53 | 158.10 | 0.82 | 13.04 | 9867.17 | 28.89 | <0.001 | 97.94 | 0.91 | 0.85 | 269.93 | 0.011 | 0.04 | 2.21 | 0.32 | 4.72 | 43.15 | 38.50 | 68.97 | 951.37 | 405.73 | 487994.76 | <2.859 | 5.92 |
| LE028_Zr34 | 11.33 | 99.08 | 240.66 | 0.79 | 16.53 | 10227.36 | 45.10 | 0.013 | 132.11 | 1.69 | 0.86 | 480.33 | 0.049 | 0.03 | 2.22 | 0.41 | 6.70 | 43.53 | 62.18 | 79.02 | 1458.10 | 598.94 | 485235.07 | 948.21 | 5.74 |
| LE028_Zr35 | 16.88 | 104.05 | 197.04 | 3.44 | 30.62 | 10507.95 | 41.63 | 0.881 | 100.84 | 1.83 | 6.51 | 494.21 | 3.140 | 0.97 | 7.70 | 0.60 | 8.64 | 83.04 | 49.32 | 117.10 | 1331.06 | 468.85 | 47077.25 | 11884.44 | 11.13 |
| LE028_Zr36 | 8.28 | 52.23 | 134.01 | 0.59 | 9.16 | 9642.29 | 23.17 | 0.051 | 82.27 | 1.11 | 0.58 | 366.31 | 0.014 | 0.05 | 1.16 | 0.26 | 3.48 | 41.35 | 32.43 | 63.91 | 795.84 | 343.02 | 488237.24 | <2.767 | 7.15 |
| LE029_Zr10 | 17.84 | 100.27 | 223.90 | 1.31 | 20.10 | 10127.15 | 40.64 | 0.183 | 121.65 | 1.92 | 1.80 | 379.90 | 0.100 | 0.21 | 3.05 | 0.59 | 7.33 | 150.64 | 51.98 | 146.61 | 1366.57 | 535.54 | 486752.45 | 10.55 | 7.14 |
| LE029_Zr11 | 19.26 | 147.15 | 319.51 | 1.92 | 29.44 | 9633.05 | 59.50 | 0.008 | 169.29 | 2.06 | 2.10 | 372.69 | 0.054 | 0.11 | 3.87 | 0.50 | 10.45 | 142.32 | 73.46 | 145.24 | 2012.84 | 752.79 | 486177.47 | <2.724 | 9.10 |
| LE029_Zr12 | 6.63 | 40.82 | 92.79 | 0.42 | 7.82 | 9401.43 | 16.92 | <0.001 | 51.39 | 0.78 | 0.44 | 212.54 | 0.017 | 0.02 | 0.88 | 0.20 | 2.80 | 38.23 | 21.90 | 46.14 | 561.82 | 222.34 | 489148.82 | <2.736 | 6.43 |
| LE029_Zr13 | 7.21 | 50.91 | 130.47 | 0.80 | 9.23 | 9291.16 | 22.34 | 0.005 | 79.54 | 0.93 | 0.43 | 212.18 | 0.019 | 0.01 | 1.57 | 0.29 | 3.42 | 33.92 | 31.69 | 53.82 | 763.77 | 331.00 | 488863.99 | 3.99 | 6.76 |
| LE029_Zr14 | 14.55 | 127.87 | 283.07 | 2.11 | 30.16 | 9794.65 | 49.58 | 0.018 | 137.21 | 1.32 | 2.56 | 368.74 | 0.048 | 0.15 | 5.03 | 0.33 | 10.01 | 118.60 | 60.08 | 110.76 | 1648.14 | 605.04 | 486686.66 | 5.52 | 6.29 |
| LE029_Zr15 | 14.11 | 98.28 | 238.17 | 1.02 | 17.27 | 9268.73 | 42.05 | 0.023 | 136.63 | 1.98 | 0.87 | 328.30 | 0.050 | 0.05 | 2.72 | 0.40 | 6.55 | 94.28 | 56.44 | 108.74 | 1446.59 | 582.20 | 487453.90 | 18.47 | 9.33 |
| LE029_Zr16 | 8.42 | 71.39 | 159.49 | 1.04 | 14.71 | 9374.18 | 28.82 | 0.012 | 88.72 | 1.02 | 1.06 | 234.93 | 0.022 | 0.07 | 2.40 | 0.24 | 5.48 | 50.34 | 37.00 | 59.15 | 977.52 | 382.37 | 488420.32 | 4.98 | 7.36 |
| LE029_Zr17 | 4.86 | 35.78 | 90.70 | 0.43 | 6.94 | 10505.50 | 15.57 | 0.006 | 56.71 | 0.65 | 0.31 | 227.05 | 0.026 | 0.02 | 0.89 | 0.19 | 2.96 | 18.13 | 21.73 | 34.41 | 536.73 | 237.73 | 486330.64 | <2.634 | 4.90 |
| LE029_Zr18 | 12.78 | 92.98 | 229.99 | 1.12 | 15.21 | 8875.81 | 39.22 | 0.002</ | | | | | | | | | | | | | | | | | |

Appendix C: Eastern Sunda arc zircon trace element chemistry

| Analysis ID | Ce | Dy | Er | Eu | Gd | Hf | Ho | La | Lu | Nb | Nd | P | Pb | Pr | Sm | Ta | Tb | Th | Tm | U | Y | Yb | Zr | Fe | Ti |
|-------------|-------|--------|--------|------|-------|----------|-------|--------|--------|------|------|--------|-------|------|-------|------|-------|--------|--------|--------|---------|---------|-----------|--------|-------|
| LB029_zr20 | 11.59 | 86.51 | 198.65 | 1.03 | 17.11 | 8876.08 | 38.20 | 0.022 | 103.80 | 1.27 | 1.12 | 344.38 | 0.034 | 0.07 | 2.63 | 0.31 | 6.42 | 79.91 | 48.90 | 87.97 | 1236.86 | 465.85 | 48144.34 | -6.116 | 7.91 |
| LB029_zr21 | 13.13 | 81.47 | 198.48 | 0.82 | 15.22 | 8863.12 | 37.40 | 0.228 | 113.56 | 1.48 | 1.38 | 423.37 | 0.032 | 0.11 | 2.00 | 0.39 | 5.36 | 69.55 | 51.04 | 94.49 | 1207.87 | 499.54 | 487998.18 | -8.168 | 8.73 |
| LB029_zr22 | 8.54 | 57.06 | 144.45 | 0.66 | 10.33 | 9258.07 | 24.94 | 0.143 | 90.02 | 1.20 | 0.82 | 271.35 | 1.331 | 0.06 | 1.64 | 0.38 | 3.84 | 42.20 | 35.32 | 63.11 | 871.46 | 673.73 | 488247.94 | 238.38 | 23.22 |
| LB029_zr23 | 6.30 | 49.02 | 119.19 | 0.70 | 10.19 | 9338.75 | 21.02 | <0.001 | 72.81 | 0.82 | 0.66 | 257.68 | 0.014 | 0.04 | 1.52 | 0.26 | 3.71 | 27.34 | 28.88 | 44.56 | 724.66 | 306.17 | 488824.19 | 5.51 | 6.50 |
| LB029_zr24 | 14.80 | 82.52 | 190.54 | 0.89 | 17.38 | 10001.35 | 34.70 | 0.123 | 103.84 | 1.88 | 0.95 | 408.42 | 0.069 | 0.07 | 2.19 | 0.43 | 5.94 | 134.01 | 44.34 | 125.12 | 1191.16 | 456.36 | 487171.69 | -4.165 | 6.87 |
| LB029_zr25 | 7.87 | 116.84 | 261.52 | 0.83 | 22.79 | 10874.05 | 48.17 | 0.002 | 133.85 | 0.97 | 0.84 | 622.87 | 0.025 | 0.04 | 2.66 | 0.47 | 8.41 | 63.18 | 61.03 | 103.10 | 1892.36 | 610.63 | 485433.51 | 3.84 | 4.02 |
| LB029_zr26 | 10.82 | 56.40 | 137.73 | 0.71 | 10.89 | 9698.83 | 24.45 | 0.002 | 82.22 | 0.87 | 0.64 | 233.94 | 0.012 | 0.03 | 1.82 | 0.28 | 4.03 | 37.68 | 32.96 | 57.07 | 841.01 | 350.84 | 488399.53 | 3.19 | 6.31 |
| LB029_zr27 | 6.75 | 55.94 | 135.18 | 0.54 | 10.79 | 10365.82 | 23.74 | 0.112 | 83.31 | 0.83 | 0.57 | 425.96 | 0.228 | 0.05 | 1.58 | 0.23 | 3.94 | 39.77 | 32.56 | 58.44 | 871.98 | 351.03 | 487513.78 | 26.33 | 4.12 |
| LB029_zr28 | 8.77 | 52.67 | 126.91 | 0.62 | 9.92 | 9665.35 | 22.79 | <0.001 | 76.09 | 1.04 | 0.61 | 278.32 | 0.022 | 0.04 | 1.43 | 0.31 | 3.94 | 50.61 | 30.30 | 72.13 | 770.86 | 320.48 | 488433.47 | -2.668 | 6.41 |
| LB029_zr29 | 6.33 | 49.68 | 111.73 | 0.75 | 10.44 | 9513.44 | 19.88 | 0.004 | 64.11 | 0.87 | 0.97 | 203.81 | 0.020 | 0.04 | 1.71 | 0.18 | 3.61 | 29.80 | 26.51 | 41.99 | 682.96 | 284.23 | 488880.01 | -0.692 | 6.09 |
| LB029_zr30 | 6.27 | 39.84 | 96.28 | 0.61 | 8.13 | 9516.85 | 17.02 | 0.161 | 65.57 | 0.95 | 0.69 | 157.61 | 0.332 | 0.10 | 1.12 | 0.20 | 2.78 | 26.31 | 24.57 | 39.90 | 889.58 | 268.43 | 488975.76 | 97.69 | 8.45 |
| LB029_zr31 | 13.21 | 120.52 | 257.99 | 1.67 | 27.71 | 9266.37 | 48.23 | 0.012 | 132.94 | 1.48 | 2.37 | 310.05 | 0.032 | 0.14 | 4.30 | 0.34 | 9.01 | 96.06 | 58.04 | 100.21 | 1591.43 | 592.20 | 487317.11 | -2.627 | 7.72 |
| LB029_zr32 | 27.39 | 152.97 | 329.44 | 1.33 | 32.37 | 10350.17 | 61.44 | 0.003 | 164.06 | 2.92 | 1.34 | 536.78 | 0.089 | 0.08 | 4.25 | 0.65 | 11.47 | 256.44 | 73.58 | 188.26 | 2039.40 | 737.73 | 485171.31 | -2.670 | 6.49 |
| LB029_zr33 | 10.13 | 84.85 | 193.83 | 1.12 | 17.95 | 9381.25 | 33.06 | 0.006 | 106.30 | 1.16 | 1.21 | 270.92 | 0.027 | 0.08 | 2.65 | 0.31 | 6.33 | 64.38 | 45.24 | 74.28 | 1173.62 | 466.47 | 487999.07 | -2.690 | 7.85 |
| LB029_zr34 | 13.48 | 79.55 | 193.84 | 0.81 | 13.66 | 10233.32 | 33.71 | 0.007 | 111.84 | 1.99 | 0.64 | 345.95 | 0.035 | 0.04 | 1.51 | 0.45 | 5.54 | 101.25 | 45.37 | 118.39 | 1183.41 | 484.04 | 487134.11 | -3.732 | 6.33 |
| LB029_zr35 | 8.68 | 57.72 | 152.02 | 0.68 | 10.61 | 9401.76 | 25.94 | <0.001 | 96.16 | 1.31 | 0.66 | 257.51 | 0.018 | 0.04 | 1.54 | 0.36 | 4.15 | 38.09 | 37.30 | 63.47 | 894.67 | 396.51 | 488457.82 | -2.659 | 7.42 |
| LB029_zr36 | 6.17 | 52.99 | 127.04 | 0.75 | 10.87 | 9332.50 | 22.29 | 0.007 | 76.47 | 0.89 | 0.63 | 331.57 | 0.034 | 0.02 | 1.65 | 0.19 | 3.64 | 33.01 | 30.06 | 47.95 | 753.66 | 318.00 | 488560.32 | 54.07 | 6.14 |
| LB029_zr37 | 12.06 | 83.79 | 209.29 | 0.87 | 15.11 | 9517.43 | 38.85 | 0.002 | 123.99 | 1.57 | 0.88 | 298.95 | 0.053 | 0.03 | 2.00 | 0.39 | 5.61 | 67.78 | 49.66 | 93.34 | 1259.49 | 520.83 | 487670.68 | -2.624 | 8.09 |
| LB029_zr38 | 7.04 | 42.33 | 105.90 | 0.50 | 7.93 | 9790.07 | 18.49 | 0.004 | 63.99 | 0.73 | 0.62 | 237.75 | 0.013 | 0.02 | 1.23 | 0.25 | 3.13 | 34.40 | 25.17 | 57.16 | 631.62 | 271.20 | 488666.35 | -2.627 | 6.80 |
| LB029_zr39 | 10.93 | 97.42 | 206.30 | 1.47 | 21.47 | 9276.40 | 39.00 | 0.093 | 110.21 | 1.08 | 2.02 | 279.58 | 0.055 | 0.14 | 3.51 | 0.27 | 7.52 | 76.78 | 47.21 | 77.77 | 1272.02 | 482.55 | 487818.38 | 60.66 | 13.00 |
| LB029_zr40 | 16.84 | 126.61 | 288.00 | 1.36 | 22.58 | 9157.21 | 54.50 | 0.010 | 161.91 | 1.91 | 1.52 | 370.36 | 0.040 | 0.10 | 3.57 | 0.48 | 8.83 | 114.02 | 68.78 | 126.85 | 1826.53 | 707.97 | 486849.48 | -2.595 | 10.92 |
| LB029_zr41 | 12.03 | 90.99 | 218.69 | 1.07 | 17.27 | 9239.39 | 38.88 | 0.003 | 125.96 | 1.45 | 1.24 | 294.88 | 0.022 | 0.06 | 2.33 | 0.37 | 6.21 | 69.99 | 51.14 | 86.90 | 1320.34 | 534.29 | 487798.12 | -2.789 | 8.78 |
| LB029_zr42 | 9.38 | 61.44 | 156.49 | 0.87 | 12.29 | 9434.61 | 27.53 | 0.071 | 95.02 | 1.28 | 1.14 | 231.78 | 0.044 | 0.08 | 2.06 | 0.34 | 4.29 | 47.03 | 37.40 | 62.81 | 940.45 | 397.37 | 488290.01 | 96.13 | 7.67 |
| LB029_zr43 | 10.50 | 75.96 | 194.30 | 0.79 | 13.61 | 9378.68 | 33.60 | 0.004 | 117.83 | 1.55 | 0.81 | 294.07 | 0.012 | 0.05 | 2.02 | 0.41 | 5.07 | 54.80 | 46.54 | 84.13 | 1144.72 | 499.73 | 487961.27 | -2.763 | 8.68 |
| LB029_zr44 | 11.34 | 76.03 | 196.74 | 0.79 | 13.93 | 9404.94 | 34.20 | 0.041 | 118.88 | 1.51 | 0.87 | 287.93 | 0.053 | 0.04 | 1.98 | 0.38 | 5.20 | 59.03 | 47.19 | 85.15 | 1170.64 | 496.08 | 487920.52 | 29.62 | 9.83 |
| LB029_zr45 | 6.28 | 53.41 | 124.08 | 0.84 | 10.79 | 9475.45 | 22.47 | 0.004 | 73.77 | 0.89 | 0.92 | 219.22 | 0.009 | 0.05 | 1.91 | 0.18 | 4.01 | 31.26 | 29.56 | 44.10 | 755.14 | 311.86 | 488755.56 | -2.736 | 6.36 |
| LB029_zr46 | 11.90 | 82.27 | 200.93 | 0.79 | 13.86 | 9466.41 | 35.36 | 0.003 | 119.78 | 1.07 | 0.79 | 297.70 | 0.017 | 0.03 | 1.89 | 0.40 | 5.68 | 60.42 | 48.11 | 88.96 | 1221.77 | 511.88 | 487778.17 | -2.724 | 8.09 |
| LB036_zr1 | 4.96 | 37.13 | 90.20 | 0.59 | 8.46 | 10330.79 | 15.97 | 0.006 | 58.53 | 0.68 | 0.33 | 128.49 | 0.005 | 0.03 | 1.05 | 0.17 | 2.68 | 13.95 | 21.99 | 26.29 | 550.75 | 238.72 | 488647.82 | -2.573 | 3.92 |
| LB036_zr10 | 7.82 | 67.23 | 168.74 | 0.82 | 13.29 | 9384.26 | 29.48 | 0.007 | 104.21 | 1.21 | 0.64 | 268.81 | 0.007 | 0.03 | 1.53 | 0.32 | 4.63 | 30.04 | 38.89 | 50.62 | 1014.28 | 434.90 | 488284.29 | -2.621 | 7.11 |
| LB036_zr11 | 11.52 | 83.94 | 177.66 | 1.39 | 19.46 | 10287.29 | 33.50 | 0.634 | 100.05 | 0.89 | 2.69 | 518.55 | 0.021 | 0.30 | 3.55 | 0.22 | 6.44 | 46.58 | 40.62 | 53.67 | 1106.45 | 423.51 | 486971.16 | 3.57 | 5.23 |
| LB036_zr12 | 9.02 | 71.72 | 160.52 | 1.01 | 13.50 | 9468.29 | 29.53 | <0.001 | 91.43 | 1.12 | 0.57 | 186.25 | 0.023 | 0.03 | 1.57 | 0.30 | 5.22 | 44.69 | 37.29 | 62.81 | 996.78 | 383.63 | 488433.62 | -2.581 | 6.46 |
| LB036_zr13 | 5.06 | 34.08 | 78.50 | 0.45 | 6.63 | 9131.65 | 13.91 | 0.012 | 46.28 | 0.65 | 0.30 | 149.85 | 0.013 | 0.02 | 0.62 | 0.20 | 2.34 | 21.84 | 18.45 | 34.37 | 467.34 | 194.72 | 489642.16 | -2.611 | 5.38 |
| LB036_zr14 | 10.18 | 85.75 | 191.61 | 1.16 | 18.06 | 9882.20 | 35.49 | 0.003 | 113.06 | 1.17 | 0.86 | 354.58 | 0.023 | 0.04 | 2.32 | 0.26 | 6.50 | 54.14 | 45.22 | 62.51 | 1203.72 | 472.63 | 487434.67 | -2.571 | 5.94 |
| LB036_zr15 | 17.63 | 140.62 | 294.40 | 2.48 | 33.70 | 8415.72 | 56.20 | 0.014 | 165.03 | 1.26 | 1.91 | 402.48 | 0.044 | 0.11 | 5.12 | 0.32 | 10.92 | 95.73 | 67.61 | 95.04 | 1853.34 | 691.06 | 487355.70 | <3.008 | 6.91 |
| LB036_zr16 | 4.91 | 44.58 | 103.08 | 0.82 | 10.02 | 9308.00 | 18.74 | 0.002 | 62.20 | 0.73 | 0.67 | 218.50 | 0.017 | 0.03 | 1.38 | 0.17 | 3.43 | 15.47 | 24.68 | 26.29 | 632.80 | 262.58 | 489100.55 | 6.14 | 7.37 |
| LB036_zr18 | 25.58 | 155.14 | 326.16 | 2.37 | 33.78 | 9360.28 | 61.31 | 0.026 | 167.16 | 2.14 | 1.68 | 378.26 | 0.056 | 0.08 | 4.08 | 0.47 | 11.58 | 123.10 | 73.04 | 125.85 | 2032.77 | 741.84 | 486200.45 | 127.83 | 7.51 |
| LB036_zr19 | 9.81 | 91.30 | 176.66 | 1.98 | 24.32 | 9744.52 | 34.12 | 0.013 | 95.62 | 0.76 | 2.05 | 272.09 | 0.019 | 0.11 | 4.22 | 0.19 | 7.64 | 45.22 | 40.15 | 49.83 | 1127.30 | 417.76 | 487864.63 | -2.602 | 5.29 |
| LB036_zr2 | 7.58 | 85.33 | 166.12 | 1.83 | 21.82 | 8864.48 | 32.28 | 0.007 | 86.03 | 0.74 | 1.51 | 178.76 | 0.009 | 0.04 | 1.73 | 0.15 | 3.27 | 13.98 | 22.69 | 25.29 | 566.07 | 240.51 | 488855.58 | 2.76 | 3.97 |
| LB036_zr20 | 5.88 | 50.23 | 121.88 | 0.90 | 11.01 | 9455.48 | 21.39 | 0.006 | 78.68 | 0.80 | 0.96 | 232.22 | 0.017 | 0.04 | 1.53 | 0.21 | 3.83 | 19.46 | 29.68 | 33.63 | 742.29 | 323.66 | 488474.83 | 4.75 | 7.45 |
| LB036_zr21 | 34.14 | 273.45 | 494.56 | 6.75 | 79.64 | 9651.67 | 98.34 | 0.106 | 216.62 | 2.09 | 9.39 | 600.77 | 0.900 | 0.63 | 19.07 | 0.48 | 23.66 | 350.44 | 105.15 | 214.05 | 3295.19 | 1007.66 | 483519.27 | 9.11 | 72.99 |
| LB036_zr3 | 25.97 | 190.97 | 397.07 | 3.15 | 43.44 | 8351.82 | 76.15 | 0.002 | 206.88 | 1.97 | 2.17 | 504.29 | 0.055 | 0.10 | 6.04 | 0.47 | 14.92 | 154.88 | 88.51 | 142.47 | 2555.42 | 897.10 | 488046.63 | -2.567 | 9.17 |
| LB036_zr4 | 4.32 | 43.43 | 96.51 | 0.80 | 9.72 | 9853.45 | 17.29 | 0.003 | 58.02 | 0.52 | 0.71 | 178.76 | 0.009 | 0.04 | 1.73 | 0.15 | 3.74 | 13.98 | 22.69 | 25.29 | 566.07 | 240.51 | 488855.58 | 2.76 | 3.97 |
| LB036_zr5 | 6.72 | 63.83 | 150.09 | 0.82 | 12.38 | 9233.58 | 26.66 | 0.002 | 89.70 | 0.87 | 0.73 | 320.00 | 0.018 | 0.03 | 1.43 | 0.21 | 4.49 | 34.70 | 35.45 | 42.32 | 911.60 | 373.99 | 488474.83 | 4.75 | 7.45 |
| LB036_zr6 | 12.14 | 89.07 | 190.32 | 1.59 | 21.02 | 9159.81 | 35.16 | <0.001 | 101.92 | 0.85 | 1.15 | 227.51 | 0.025 | 0.05 | 2.80 | 0.46 | 6.96 | 49.54 | 44.69 | 59.29 | 1194.09 | 448.99 | 488266.75 | <3.065 | 6.27 |
| LB036_zr7 | 6.45 | 61.00 | 136.37 | 1.04 | 12.87 | 10153.82 | 24.18 | 0.002 | 80.38 | 0.67 | 0.84 | 283.65 | 0.039 | 0.03 | | | | | | | | | | | |

Appendix C: Eastern Sunda arc zircon trace element chemistry

| Analysis ID | Ce | Dy | Er | Eu | Gd | Hf | Ho | La | Lu | Nb | Nd | P | Pb | Pr | Sm | Ta | Tb | Th | Tm | U | Y | Yb | Zr | Fe | Ti |
|-------------|-------|--------|--------|------|-------|----------|-------|--------|--------|------|-------|-------|-------|------|-------|------|-------|--------|-------|--------|---------|-----------|-----------|---------|-------|
| LB002_zr12 | 5.83 | 38.25 | 98.15 | 0.55 | 7.75 | 9659.12 | 16.90 | <0.001 | 66.12 | 0.82 | 0.39 | 0.010 | 0.025 | 0.03 | 1.23 | 0.21 | 2.99 | 15.08 | 24.69 | 32.45 | 597.86 | 286.27 | 488259.33 | -2.621 | 5.23 |
| LB002_zr13 | 14.14 | 86.06 | 186.50 | 1.18 | 17.95 | 9481.25 | 34.89 | 0.006 | 102.88 | 1.52 | 0.78 | 0.025 | 0.05 | 0.03 | 2.31 | 0.35 | 6.72 | 55.40 | 44.20 | 66.81 | 1165.91 | 450.23 | 488390.02 | -2.617 | 6.74 |
| LB002_zr14 | 16.10 | 109.69 | 246.93 | 1.46 | 22.46 | 8920.21 | 44.91 | 0.002 | 138.94 | 1.87 | 1.13 | 0.018 | 0.05 | 0.02 | 2.26 | 0.41 | 8.37 | 63.15 | 58.89 | 83.06 | 1577.76 | 607.81 | 488192.06 | -2.589 | 8.72 |
| LB002_zr15 | 15.35 | 99.96 | 236.93 | 1.17 | 20.04 | 9473.63 | 41.59 | 0.004 | 133.40 | 1.83 | 0.91 | 0.017 | 0.06 | 0.02 | 2.56 | 0.46 | 7.38 | 59.84 | 56.00 | 81.47 | 1465.03 | 581.68 | 487939.73 | -2.623 | 7.87 |
| LB002_zr16 | 11.02 | 82.27 | 191.89 | 1.10 | 16.90 | 9527.08 | 34.55 | <0.001 | 109.76 | 1.31 | 0.88 | 0.008 | 0.04 | 0.02 | 2.30 | 0.37 | 6.34 | 39.50 | 46.68 | 51.45 | 1485.03 | 471.33 | 488396.76 | -2.613 | 5.83 |
| LB002_zr17 | 14.95 | 27.18 | 70.50 | 0.69 | 7.06 | 8993.78 | 11.92 | 4.140 | 47.94 | 0.67 | 7.09 | 0.018 | 0.018 | 1.43 | 1.94 | 0.15 | 2.08 | 11.24 | 18.11 | 23.25 | 420.38 | 201.48 | 483785.98 | 64.45 | 4.61 |
| LB002_zr18 | 17.80 | 122.78 | 288.80 | 1.65 | 25.70 | 9164.00 | 49.34 | <0.001 | 149.46 | 2.12 | 1.17 | 0.023 | 0.05 | 0.03 | 3.50 | 0.49 | 9.54 | 70.10 | 62.76 | 89.21 | 1690.24 | 648.30 | 487798.78 | -2.670 | 10.67 |
| LB002_zr19 | 3.99 | 34.01 | 76.82 | 0.53 | 7.21 | 9689.45 | 13.81 | <0.001 | 49.74 | 0.58 | 0.40 | 0.003 | 0.02 | 0.02 | 1.14 | 0.16 | 2.68 | 11.25 | 19.13 | 23.27 | 206.59 | 488536.32 | -2.658 | 4.24 | |
| LB002_zr20 | 34.55 | 229.52 | 412.86 | 5.41 | 67.72 | 10146.43 | 82.67 | 0.022 | 197.42 | 1.89 | 6.88 | 0.062 | 0.35 | 0.13 | 13.59 | 0.44 | 21.12 | 182.22 | 93.40 | 143.27 | 2821.72 | 900.38 | 485262.99 | -2.627 | 5.78 |
| LB002_zr21 | 6.62 | 49.98 | 119.61 | 0.76 | 10.51 | 9912.30 | 20.76 | 0.005 | 74.17 | 0.82 | 0.64 | 0.007 | 0.03 | 0.03 | 1.60 | 0.23 | 3.81 | 19.01 | 29.27 | 36.03 | 731.31 | 311.35 | 488845.40 | 4.78 | 3.95 |
| LB002_zr22 | 10.67 | 68.82 | 160.01 | 0.89 | 15.13 | 10511.09 | 28.40 | 0.003 | 97.54 | 1.20 | 0.61 | 0.016 | 0.06 | 0.02 | 1.59 | 0.32 | 5.15 | 46.86 | 39.34 | 59.26 | 987.52 | 419.22 | 487933.77 | -2.785 | 4.69 |
| LB002_zr23 | 6.80 | 51.57 | 125.05 | 0.75 | 10.98 | 9396.63 | 21.31 | <0.001 | 79.88 | 0.73 | 0.58 | 0.015 | 0.05 | 0.03 | 1.65 | 0.18 | 4.09 | 23.66 | 30.94 | 39.28 | 759.58 | 330.19 | 489169.77 | 3.88 | 7.52 |
| LB002_zr24 | 5.27 | 34.42 | 83.86 | 0.55 | 7.48 | 9496.23 | 14.39 | <0.002 | 57.04 | 0.67 | 0.49 | 0.007 | 0.02 | 0.02 | 1.15 | 0.18 | 2.82 | 13.42 | 21.27 | 27.43 | 512.72 | 232.07 | 489512.54 | -3.040 | 5.56 |
| LB002_zr25 | 4.23 | 19.71 | 51.79 | 0.31 | 3.94 | 10143.35 | 8.76 | <0.001 | 34.30 | 0.48 | 0.33 | 0.004 | 0.01 | 0.01 | 0.58 | 0.15 | 1.48 | 10.26 | 12.96 | 25.52 | 307.27 | 143.06 | 489394.89 | -2.612 | 4.04 |
| LB002_zr26 | 10.88 | 59.89 | 138.09 | 0.82 | 13.39 | 9976.28 | 23.83 | 0.004 | 81.74 | 1.17 | 0.56 | 0.020 | 0.03 | 0.03 | 1.94 | 0.29 | 4.72 | 49.69 | 33.33 | 61.72 | 862.93 | 353.18 | 488558.64 | -2.622 | 4.04 |
| LB002_zr27 | 8.47 | 81.82 | 155.13 | 1.82 | 24.45 | 9668.27 | 29.52 | 0.019 | 83.23 | 0.63 | 2.30 | 0.065 | 0.13 | 0.05 | 4.05 | 0.17 | 7.36 | 35.57 | 35.37 | 42.67 | 1018.13 | 363.67 | 488664.21 | 3.15 | 5.35 |
| LB002_zr28 | 8.32 | 51.93 | 118.07 | 0.72 | 10.96 | 9607.85 | 21.06 | 0.007 | 70.87 | 0.90 | 0.42 | 0.012 | 0.02 | 0.02 | 1.43 | 0.22 | 4.01 | 32.82 | 28.61 | 44.08 | 737.18 | 298.96 | 489043.19 | 15.82 | 4.33 |
| LB002_zr29 | 6.84 | 63.01 | 121.20 | 1.30 | 16.21 | 9822.69 | 23.61 | 0.004 | 64.47 | 0.60 | 1.14 | 0.024 | 0.06 | 0.02 | 2.74 | 0.13 | 5.30 | 35.07 | 28.17 | 33.84 | 765.70 | 289.04 | 488850.50 | 6.55 | 3.14 |
| LB002_zr30 | 9.69 | 60.32 | 139.67 | 0.79 | 13.03 | 9833.93 | 24.97 | <0.001 | 86.18 | 0.88 | 0.66 | 0.015 | 0.05 | 0.03 | 1.91 | 0.22 | 4.71 | 33.63 | 33.99 | 49.48 | 880.46 | 362.01 | 488651.86 | 3.01 | 4.57 |
| LB002_zr31 | 10.39 | 79.95 | 191.47 | 1.04 | 15.03 | 9222.78 | 33.60 | 0.004 | 115.60 | 1.19 | 0.69 | 0.012 | 0.03 | 0.02 | 2.22 | 0.31 | 5.82 | 33.08 | 46.59 | 61.29 | 1191.37 | 493.40 | 488583.22 | 8.43 | 5.61 |
| LB002_zr32 | 15.14 | 151.40 | 321.86 | 2.07 | 31.56 | 9483.92 | 59.40 | 0.002 | 173.51 | 2.14 | 1.02 | 0.038 | 0.06 | 0.02 | 3.82 | 0.45 | 11.80 | 98.34 | 75.46 | 108.61 | 2030.48 | 761.81 | 486985.17 | -2.728 | 9.29 |
| LB002_zr33 | 14.51 | 98.57 | 229.18 | 1.33 | 19.13 | 9337.47 | 40.60 | 0.006 | 135.43 | 1.70 | 1.03 | 0.028 | 0.05 | 0.02 | 2.41 | 0.46 | 7.63 | 58.19 | 54.87 | 82.55 | 1443.47 | 489247.09 | -2.691 | 6.13 | |
| LB002_zr34 | 6.97 | 43.82 | 100.75 | 0.64 | 9.16 | 10096.14 | 17.97 | 0.009 | 61.12 | 0.73 | 0.40 | 0.018 | 0.02 | 0.02 | 1.26 | 0.20 | 3.40 | 37.13 | 24.54 | 52.01 | 628.34 | 259.34 | 488865.85 | -2.740 | 5.28 |
| LB002_zr35 | 4.14 | 21.22 | 52.33 | 0.30 | 3.80 | 9945.25 | 8.82 | 0.002 | 36.41 | 0.48 | 0.17 | 0.004 | 0.01 | 0.01 | 0.51 | 0.16 | 1.62 | 13.31 | 13.71 | 25.75 | 315.12 | 149.43 | 489512.32 | -2.702 | 4.16 |
| LB002_zr36 | 4.13 | 36.83 | 88.45 | 0.59 | 8.03 | 9636.53 | 15.64 | 0.002 | 58.70 | 0.50 | 0.22 | 0.006 | 0.02 | 0.02 | 1.22 | 0.12 | 3.04 | 12.05 | 21.83 | 26.44 | 545.99 | 242.57 | 489441.43 | -2.686 | 3.19 |
| LB002_zr37 | 10.73 | 70.50 | 160.93 | 0.94 | 15.13 | 9602.35 | 28.55 | <0.001 | 94.27 | 1.20 | 0.66 | 0.018 | 0.03 | 0.02 | 2.07 | 0.30 | 5.54 | 42.09 | 39.20 | 58.81 | 1002.59 | 410.38 | 488615.89 | -2.673 | 5.91 |
| LB002_zr38 | 14.15 | 84.09 | 199.75 | 1.01 | 16.54 | 9946.25 | 36.23 | 0.180 | 120.47 | 1.80 | 1.23 | 0.123 | 0.12 | 0.12 | 2.38 | 0.43 | 6.23 | 48.98 | 48.22 | 79.42 | 1263.51 | 514.56 | 487988.79 | 8.32 | 5.34 |
| LB002_zr39 | 5.23 | 29.53 | 68.40 | 0.45 | 6.79 | 10248.36 | 12.40 | 0.136 | 42.85 | 0.65 | 0.41 | 0.111 | 0.04 | 0.02 | 0.77 | 0.12 | 2.35 | 15.95 | 16.94 | 25.70 | 422.55 | 182.42 | 486522.77 | 1197.12 | 18.28 |
| LB002_zr40 | 5.05 | 34.21 | 88.81 | 0.48 | 6.73 | 9843.14 | 15.06 | <0.001 | 63.20 | 0.63 | 0.36 | 0.003 | 0.02 | 0.02 | 1.11 | 0.17 | 2.45 | 11.54 | 23.32 | 26.19 | 528.69 | 255.12 | 488223.66 | 3.32 | 4.67 |
| LB002_zr41 | 4.11 | 18.06 | 43.00 | 0.28 | 3.76 | 10204.05 | 7.88 | 0.079 | 28.13 | 0.56 | 0.29 | 0.008 | 0.03 | 0.03 | 1.71 | 0.31 | 5.23 | 40.87 | 40.87 | 64.57 | 1061.84 | 443.64 | 488663.28 | -2.636 | 7.60 |
| LB002_zr42 | 8.69 | 76.86 | 156.71 | 1.38 | 19.29 | 9221.10 | 29.49 | <0.002 | 85.93 | 0.86 | 1.19 | 0.016 | 0.08 | 0.02 | 2.85 | 0.19 | 6.25 | 34.16 | 36.47 | 46.20 | 1017.73 | 368.37 | 488927.10 | -3.366 | 2.86 |
| LB002_zr43 | 8.22 | 80.10 | 174.39 | 1.55 | 19.58 | 9230.31 | 31.55 | 0.003 | 99.76 | 0.67 | 1.43 | 0.014 | 0.09 | 0.03 | 3.18 | 0.18 | 6.72 | 33.10 | 42.07 | 42.07 | 1087.04 | 431.40 | 488780.20 | 3.27 | 4.43 |
| LB002_zr44 | 20.54 | 120.42 | 263.53 | 1.63 | 27.56 | 9433.39 | 48.63 | 0.007 | 141.72 | 2.00 | 1.31 | 0.024 | 0.05 | 0.03 | 3.03 | 0.43 | 9.45 | 86.93 | 61.72 | 95.30 | 1649.96 | 630.57 | 487648.55 | -2.777 | 6.93 |
| LB002_zr45 | 3.87 | 27.73 | 66.54 | 0.41 | 6.43 | 9632.65 | 11.50 | <0.001 | 41.73 | 0.45 | 0.26 | 0.002 | 0.02 | 0.02 | 0.68 | 0.12 | 2.08 | 9.10 | 16.46 | 18.17 | 409.26 | 175.91 | 488997.39 | -2.568 | 4.05 |
| LB002_zr46 | 9.49 | 39.55 | 91.61 | 0.56 | 8.42 | 10729.62 | 16.31 | <0.001 | 56.82 | 0.88 | 0.33 | 0.016 | 0.06 | 0.01 | 1.10 | 0.28 | 3.05 | 51.32 | 22.66 | 67.67 | 566.80 | 237.48 | 488468.29 | -2.535 | 4.26 |
| LB002_zr47 | 31.78 | 66.55 | 149.68 | 1.27 | 15.86 | 9276.56 | 27.22 | 8.869 | 87.44 | 1.05 | 13.45 | 0.042 | 0.04 | 0.02 | 3.09 | 4.44 | 3.31 | 25.55 | 35.87 | 45.44 | 948.28 | 373.62 | 477129.81 | 43.66 | 4.65 |
| LB002_zr48 | 6.67 | 34.26 | 89.26 | 0.52 | 7.01 | 10125.51 | 15.19 | <0.001 | 60.43 | 0.77 | 0.31 | 0.007 | 0.02 | 0.02 | 0.84 | 0.22 | 2.64 | 21.09 | 23.08 | 40.24 | 551.29 | 252.38 | 488971.45 | -2.649 | 5.17 |
| LB002_zr49 | 8.66 | 63.90 | 135.01 | 0.99 | 13.38 | 9417.96 | 25.27 | 0.079 | 76.90 | 0.92 | 1.12 | 0.084 | 0.08 | 0.08 | 1.90 | 0.28 | 4.71 | 27.68 | 32.39 | 44.13 | 879.91 | 333.67 | 487615.60 | 352.68 | 6.86 |
| LB002_zr50 | 13.24 | 84.15 | 190.15 | 0.94 | 15.87 | 9385.61 | 33.92 | 0.009 | 111.65 | 1.40 | 0.86 | 0.026 | 0.04 | 0.02 | 2.09 | 0.34 | 6.25 | 49.36 | 46.15 | 67.19 | 1202.55 | 488454.58 | 4.44 | 5.26 | |
| LB002_zr51 | 8.15 | 82.97 | 162.05 | 2.00 | 23.40 | 9019.76 | 30.69 | 0.122 | 87.69 | 0.72 | 2.30 | 0.134 | 0.16 | 0.16 | 4.69 | 0.18 | 7.29 | 39.72 | 37.15 | 42.42 | 1042.37 | 387.27 | 489006.60 | 5.22 | 5.94 |

*All elements are in ppm.

Appendix C: Eastern Sunda arc apatite trace element chemistry (EMPA)

| Analysis ID | Si | Al | La | Ce | Nd | Fe | Mn | Mg | Ca | Sr | Na | K | P | S | As | Cl | F | O.stoi. | TOTAL |
|--------------|------|-------|-------|-------|-------|------|------|-------|-------|-------|------|-------|-------|------|-------|------|------|---------|-------|
| LB014_ap_001 | 0.16 | <0.01 | 0.18 | 0.33 | 0.15 | 0.10 | 0.17 | 0.02 | 37.72 | -0.04 | 0.15 | <0.03 | 17.69 | 0.10 | <0.02 | 2.22 | 1.74 | 37.27 | 98.00 |
| LB014_ap_002 | 0.13 | <0.01 | 0.08 | 0.28 | 0.16 | 0.11 | 0.13 | 0.03 | 37.87 | -0.04 | 0.09 | <0.03 | 17.52 | 0.11 | <0.02 | 2.17 | 1.54 | 37.13 | 97.37 |
| LB014_ap_003 | 0.11 | <0.01 | 0.14 | 0.30 | 0.17 | 0.08 | 0.17 | 0.02 | 37.96 | 0.04 | 0.12 | <0.03 | 17.58 | 0.09 | <0.02 | 2.09 | 1.50 | 37.25 | 97.62 |
| LB014_ap_004 | 0.15 | <0.01 | 0.10 | 0.26 | 0.09 | 0.09 | 0.21 | 0.02 | 38.09 | <0.03 | 0.08 | <0.03 | 17.57 | 0.13 | 0.03 | 2.27 | 1.64 | 37.28 | 98.00 |
| LB014_ap_005 | 0.10 | <0.01 | <0.08 | 0.20 | 0.09 | 0.07 | 0.17 | 0.02 | 38.15 | <0.03 | 0.09 | <0.03 | 17.73 | 0.09 | <0.02 | 2.14 | 1.72 | 37.35 | 97.93 |
| LB014_ap_006 | 0.13 | <0.01 | 0.12 | 0.32 | 0.15 | 0.08 | 0.19 | <0.01 | 37.95 | 0.04 | 0.11 | <0.03 | 17.58 | 0.10 | <0.02 | 2.18 | 1.60 | 37.21 | 97.75 |
| LB014_ap_007 | 0.13 | <0.01 | 0.17 | 0.29 | 0.12 | 0.09 | 0.15 | 0.02 | 37.99 | -0.04 | 0.11 | <0.03 | 17.65 | 0.07 | <0.02 | 2.13 | 1.37 | 37.38 | 97.67 |
| LB014_ap_008 | 0.08 | <0.01 | <0.08 | 0.18 | 0.11 | 0.11 | 0.19 | 0.04 | 38.35 | -0.04 | 0.04 | <0.03 | 17.76 | 0.07 | <0.02 | 1.93 | 1.76 | 37.47 | 98.09 |
| LB014_ap_009 | 0.14 | <0.01 | <0.08 | 0.32 | 0.14 | 0.14 | 0.17 | 0.02 | 38.03 | 0.06 | 0.06 | <0.03 | 17.63 | 0.10 | <0.02 | 2.13 | 1.60 | 37.35 | 97.89 |
| LB014_ap_010 | 0.15 | <0.01 | 0.19 | 0.27 | 0.15 | 0.11 | 0.20 | 0.03 | 37.83 | 0.05 | 0.09 | <0.04 | 17.69 | 0.09 | <0.02 | 2.30 | 1.60 | 37.31 | 98.06 |
| LB014_ap_011 | 0.13 | <0.01 | 0.12 | 0.30 | 0.16 | 0.12 | 0.13 | 0.02 | 38.13 | <0.04 | 0.13 | <0.03 | 17.66 | 0.13 | <0.02 | 2.03 | 1.56 | 37.51 | 98.14 |
| LB014_ap_012 | 0.14 | <0.01 | <0.08 | 0.27 | 0.14 | 0.09 | 0.13 | 0.02 | 37.88 | -0.04 | 0.13 | <0.04 | 17.59 | 0.12 | <0.02 | 2.16 | 1.67 | 37.19 | 97.53 |
| LB014_ap_013 | 0.13 | <0.01 | 0.11 | 0.30 | 0.12 | 0.12 | 0.17 | 0.02 | 38.04 | 0.06 | 0.09 | <0.03 | 17.59 | 0.11 | <0.02 | 2.12 | 1.52 | 37.32 | 97.81 |
| LB014_ap_014 | 0.19 | <0.01 | 0.21 | 0.46 | 0.19 | 0.10 | 0.16 | 0.03 | 37.96 | 0.04 | 0.07 | <0.03 | 17.48 | 0.07 | 0.02 | 2.19 | 1.79 | 37.08 | 98.04 |
| LB014_ap_015 | 0.14 | <0.01 | 0.13 | 0.35 | 0.18 | 0.11 | 0.15 | 0.01 | 38.16 | -0.04 | 0.10 | <0.03 | 17.60 | 0.12 | <0.02 | 2.15 | 1.69 | 37.34 | 98.23 |
| LB014_ap_016 | 0.13 | <0.01 | 0.14 | 0.36 | 0.16 | 0.10 | 0.18 | 0.02 | 38.07 | -0.04 | 0.09 | <0.04 | 17.65 | 0.10 | <0.02 | 2.19 | 1.63 | 37.35 | 98.16 |
| LB014_ap_017 | 0.15 | <0.01 | 0.13 | 0.22 | 0.13 | 0.09 | 0.15 | 0.02 | 37.94 | 0.06 | 0.12 | <0.03 | 17.51 | 0.12 | <0.02 | 2.15 | 1.70 | 37.13 | 97.61 |
| LB014_ap_018 | 0.16 | 0.01 | 0.18 | 0.33 | 0.17 | 0.10 | 0.19 | 0.02 | 37.87 | -0.04 | 0.11 | <0.03 | 17.55 | 0.12 | <0.02 | 2.17 | 1.68 | 37.20 | 97.86 |
| LB014_ap_019 | 0.16 | <0.01 | 0.09 | 0.15 | 0.09 | 0.12 | 0.17 | 0.02 | 38.07 | -0.04 | 0.09 | <0.03 | 17.69 | 0.13 | 0.02 | 2.12 | 1.65 | 37.43 | 98.01 |
| LB014_ap_020 | 0.13 | <0.01 | 0.12 | 0.27 | 0.17 | 0.10 | 0.19 | 0.02 | 37.99 | <0.03 | 0.09 | <0.03 | 17.60 | 0.07 | <0.02 | 2.19 | 1.56 | 37.22 | 97.71 |
| LB014_ap_021 | 0.17 | <0.01 | 0.16 | 0.23 | 0.11 | 0.11 | 0.18 | 0.02 | 38.06 | -0.04 | 0.08 | <0.04 | 17.61 | 0.10 | <0.02 | 2.28 | 1.59 | 37.30 | 98.00 |
| LB014_ap_022 | 0.13 | <0.01 | 0.12 | 0.22 | <0.06 | 0.10 | 0.18 | 0.03 | 38.17 | 0.05 | 0.09 | <0.03 | 17.61 | 0.13 | <0.02 | 2.15 | 1.52 | 37.39 | 97.87 |
| LB014_ap_023 | 0.15 | 0.01 | 0.10 | 0.30 | 0.10 | 0.11 | 0.15 | 0.02 | 37.81 | -0.04 | 0.09 | <0.04 | 17.63 | 0.09 | <0.02 | 2.19 | 1.64 | 37.21 | 97.62 |
| LB014_ap_024 | 0.13 | <0.01 | 0.10 | 0.29 | <0.07 | 0.13 | 0.17 | 0.02 | 38.10 | 0.04 | 0.13 | <0.03 | 17.60 | 0.11 | <0.02 | 2.09 | 1.48 | 37.37 | 97.76 |
| LB014_ap_025 | 0.10 | <0.01 | 0.13 | 0.27 | 0.09 | 0.11 | 0.17 | 0.03 | 38.07 | -0.04 | 0.13 | <0.03 | 17.65 | 0.12 | <0.02 | 2.23 | 1.49 | 37.41 | 98.00 |
| LB014_ap_026 | 0.15 | <0.01 | 0.10 | 0.28 | 0.11 | 0.13 | 0.19 | 0.02 | 38.09 | -0.04 | 0.09 | <0.03 | 17.60 | 0.11 | <0.02 | 2.22 | 1.63 | 37.30 | 98.01 |
| LB014_ap_027 | 0.11 | <0.01 | 0.19 | 0.25 | 0.11 | 0.10 | 0.21 | 0.04 | 38.01 | -0.04 | 0.10 | <0.03 | 17.67 | 0.10 | <0.02 | 2.21 | 1.67 | 37.30 | 98.07 |
| LB014_ap_028 | 0.15 | <0.01 | 0.17 | 0.29 | 0.17 | 0.15 | 0.20 | 0.02 | 37.98 | 0.04 | 0.10 | <0.03 | 17.65 | 0.09 | <0.02 | 2.16 | 1.40 | 37.43 | 97.99 |
| LB014_ap_030 | 0.13 | <0.01 | 0.12 | 0.26 | <0.07 | 0.11 | 0.20 | 0.03 | 38.24 | -0.04 | 0.06 | <0.03 | 17.65 | 0.08 | <0.02 | 2.15 | 1.74 | 37.31 | 98.08 |
| LB014_ap_031 | 0.14 | <0.01 | 0.17 | 0.33 | <0.07 | 0.09 | 0.15 | 0.03 | 37.92 | -0.04 | 0.11 | <0.03 | 17.54 | 0.12 | <0.02 | 2.55 | 1.56 | 37.38 | 97.59 |
| LB014_ap_032 | 0.11 | <0.01 | 0.10 | 0.19 | 0.10 | 0.11 | 0.12 | 0.02 | 38.09 | 0.06 | 0.11 | <0.03 | 17.59 | 0.13 | <0.02 | 2.02 | 1.46 | 37.38 | 97.59 |
| LB014_ap_033 | 0.17 | <0.01 | 0.15 | 0.38 | 0.12 | 0.10 | 0.21 | 0.02 | 37.72 | 0.04 | 0.16 | <0.03 | 17.51 | 0.13 | <0.02 | 2.62 | 1.57 | 37.08 | 97.99 |
| LB014_ap_034 | 0.15 | <0.01 | 0.17 | 0.23 | <0.06 | 0.14 | 0.19 | 0.02 | 38.11 | 0.07 | 0.10 | <0.03 | 17.61 | 0.12 | <0.02 | 2.15 | 1.76 | 37.31 | 98.14 |
| LB014_ap_035 | 0.17 | <0.01 | 0.11 | 0.26 | 0.13 | 0.11 | 0.13 | 0.01 | 38.14 | -0.04 | 0.09 | <0.04 | 17.63 | 0.11 | <0.02 | 2.14 | 1.82 | 37.28 | 98.14 |
| LB014_ap_036 | 0.17 | <0.01 | 0.11 | 0.42 | 0.15 | 0.07 | 0.14 | 0.02 | 37.97 | 0.06 | 0.11 | <0.03 | 17.71 | 0.10 | <0.02 | 2.13 | 1.66 | 37.42 | 98.22 |
| LB014_ap_037 | 0.14 | <0.01 | 0.15 | 0.32 | 0.17 | 0.10 | 0.17 | 0.02 | 38.06 | -0.04 | 0.11 | <0.03 | 17.63 | 0.11 | 0.02 | 2.11 | 1.61 | 37.38 | 98.08 |
| LB014_ap_038 | 0.13 | <0.01 | 0.17 | 0.24 | 0.08 | 0.11 | 0.20 | 0.02 | 38.16 | -0.04 | 0.09 | <0.03 | 17.58 | 0.14 | <0.02 | 2.07 | 1.61 | 37.37 | 97.96 |
| LB014_ap_039 | 0.13 | <0.01 | 0.10 | 0.17 | 0.08 | 0.11 | 0.19 | 0.02 | 38.06 | -0.04 | 0.11 | <0.03 | 17.59 | 0.12 | <0.02 | 2.05 | 1.81 | 37.22 | 97.75 |
| LB014_ap_040 | 0.14 | <0.01 | 0.11 | 0.32 | 0.16 | 0.11 | 0.18 | 0.02 | 37.91 | 0.04 | 0.10 | <0.03 | 17.55 | 0.08 | <0.02 | 2.11 | 1.57 | 37.19 | 97.61 |
| LB025_ap_001 | 0.08 | <0.01 | <0.08 | <0.09 | <0.07 | 0.16 | 0.15 | 0.18 | 38.62 | -0.04 | 0.06 | <0.03 | 17.81 | 0.07 | <0.02 | 0.28 | 3.19 | 37.45 | 98.05 |
| LB025_ap_002 | 0.04 | <0.01 | <0.08 | 0.09 | 0.09 | 0.33 | 0.36 | 0.25 | 38.13 | 0.06 | 0.08 | <0.03 | 17.86 | 0.06 | <0.02 | 0.70 | 2.57 | 37.60 | 98.20 |
| LB025_ap_003 | 0.07 | <0.01 | <0.08 | 0.12 | 0.10 | 0.18 | 0.10 | 0.12 | 38.69 | 0.04 | 0.05 | <0.04 | 17.92 | 0.06 | <0.02 | 0.35 | 3.09 | 37.61 | 98.48 |
| LB025_ap_004 | 0.08 | <0.01 | <0.07 | 0.10 | <0.07 | 0.22 | 0.07 | 0.10 | 38.82 | -0.04 | 0.07 | <0.03 | 17.96 | 0.09 | <0.02 | 0.35 | 3.07 | 37.72 | 98.54 |
| LB025_ap_005 | 0.09 | <0.01 | <0.08 | <0.08 | 0.15 | 0.08 | 0.21 | 0.09 | 38.51 | 0.06 | 0.04 | <0.03 | 18.00 | 0.10 | <0.02 | 0.37 | 2.93 | 37.86 | 98.61 |
| LB025_ap_006 | 0.19 | 0.06 | <0.08 | 0.15 | 0.08 | 0.15 | 0.11 | 0.18 | 38.04 | -0.04 | 0.10 | <0.03 | 17.69 | 0.09 | <0.02 | 1.64 | 1.61 | 37.69 | 97.82 |
| LB025_ap_007 | 0.08 | <0.01 | 0.15 | 0.14 | 0.11 | 0.15 | 0.10 | 0.11 | 38.41 | -0.04 | 0.04 | <0.03 | 17.87 | 0.03 | <0.02 | 0.67 | 2.71 | 37.49 | 98.05 |
| LB025_ap_008 | 0.08 | <0.01 | <0.08 | <0.09 | <0.07 | 0.20 | 0.12 | 0.12 | 38.03 | -0.04 | 0.08 | <0.04 | 17.72 | 0.08 | <0.02 | 2.10 | 1.99 | 37.19 | 97.72 |
| LB025_ap_009 | 0.01 | <0.01 | <0.08 | <0.09 | 0.07 | 0.11 | 0.04 | 0.04 | 38.45 | 0.06 | 0.05 | <0.04 | 17.88 | 0.02 | <0.02 | 0.47 | 2.91 | 37.25 | 97.56 |
| LB025_ap_010 | 0.07 | <0.01 | <0.08 | <0.06 | 0.16 | 0.13 | 0.12 | 0.12 | 38.71 | -0.04 | 0.07 | <0.03 | 17.90 | 0.07 | <0.02 | 0.55 | 2.98 | 37.58 | 98.33 |
| LB025_ap_011 | 0.07 | <0.01 | <0.08 | <0.06 | 0.14 | 0.09 | 0.07 | 0.07 | 38.58 | -0.04 | 0.09 | <0.03 | 17.88 | 0.06 | <0.02 | 0.71 | 2.98 | 37.40 | 98.06 |

*all elements in wt. % (EMPA).

Appendix C: Eastern Sunda arc apatite trace element chemistry (EMPA)

| Analysis ID | Si | Al | La | Ce | Nd | Fe | Mn | Mg | Ca | Sr | Na | K | P | S | As | Cl | F | O.stoi. | TOTAL |
|---------------|------|-------|----|----|-------|-------|------|-------|-------|-------|-------|---|-------|-------|-------|------|------|---------|-------|
| LB025_ap_012 | 0.06 | <0.01 | | | <0.07 | 0.21 | 0.13 | 0.22 | 38.38 | | 0.04 | | 17.86 | 0.23 | <0.02 | 0.23 | 3.15 | 37.49 | 97.95 |
| LB025_ap_013 | 0.07 | <0.01 | | | 0.14 | 0.22 | 0.32 | 0.14 | 38.18 | <0.04 | 0.06 | | 17.81 | 0.06 | <0.02 | 0.74 | 2.91 | 37.31 | 97.96 |
| LB025_ap_014 | 0.11 | <0.01 | | | <0.06 | 0.16 | 0.10 | 0.14 | 38.42 | <0.04 | 0.12 | | 17.82 | 0.17 | <0.02 | 0.41 | 2.94 | 37.61 | 98.01 |
| LB027_ap_001 | 1.19 | <0.01 | | | <0.06 | 0.06 | 0.06 | 0.03 | 38.96 | 0.05 | <0.02 | | 17.93 | 0.01 | <0.02 | 0.29 | 3.52 | 37.39 | 98.42 |
| LB027_ap_002 | 1.19 | 0.08 | | | <0.07 | 0.68 | 0.07 | 0.59 | 37.15 | <0.04 | 0.03 | | 16.92 | 0.01 | <0.02 | 0.45 | 3.07 | 37.34 | 97.58 |
| LB027_ap_003 | 0.13 | 0.02 | | | <0.06 | 0.27 | 0.12 | 0.07 | 38.39 | <0.03 | 0.04 | | 17.77 | 0.02 | <0.02 | 1.48 | 2.45 | 37.27 | 98.03 |
| LB027_ap_004 | 0.04 | <0.01 | | | <0.06 | 0.05 | 0.08 | <0.01 | 38.67 | <0.04 | 0.02 | | 17.82 | 0.02 | <0.02 | 0.52 | 2.73 | 37.32 | 97.27 |
| LB027_ap_005 | 0.04 | <0.01 | | | <0.06 | 0.14 | 0.05 | 0.05 | 38.82 | 0.05 | 0.05 | | 18.01 | 0.03 | <0.02 | 1.03 | 3.06 | 37.45 | 98.79 |
| LB027_ap_006 | 1.20 | 0.06 | | | <0.07 | 0.49 | 0.14 | 0.53 | 37.07 | <0.04 | 0.02 | | 17.02 | 0.01 | <0.02 | 0.36 | 2.57 | 37.59 | 97.06 |
| LB042_ap_001 | 0.11 | <0.01 | | | <0.06 | 0.06 | 0.09 | 0.04 | 38.42 | <0.03 | 0.13 | | 17.90 | 0.16 | <0.02 | 1.04 | 2.37 | 37.72 | 98.04 |
| LB042_ap_002 | 0.14 | <0.01 | | | 0.09 | 0.12 | 0.09 | 0.03 | 38.33 | <0.04 | 0.12 | | 17.70 | 0.14 | <0.02 | 0.89 | 2.52 | 37.42 | 97.59 |
| LB042_ap_003 | 0.10 | <0.01 | | | 0.14 | 0.17 | 0.07 | 0.07 | 38.41 | 0.04 | 0.10 | | 17.87 | 0.08 | <0.02 | 1.14 | 2.65 | 37.45 | 98.30 |
| LB042_ap_004 | 0.09 | <0.01 | | | 0.12 | 0.06 | 0.07 | 0.04 | 38.52 | <0.03 | 0.09 | | 17.90 | 0.14 | <0.02 | 0.81 | 2.61 | 37.64 | 98.12 |
| LB042_ap_005 | 0.11 | <0.01 | | | <0.07 | 0.15 | 0.09 | 0.08 | 38.23 | <0.03 | 0.08 | | 17.74 | 0.13 | <0.02 | 1.85 | 1.93 | 37.44 | 97.83 |
| LB042_ap_006 | 0.10 | <0.01 | | | 0.11 | 0.13 | 0.08 | 0.05 | 38.33 | <0.04 | 0.11 | | 17.72 | 0.10 | <0.02 | 1.10 | 2.59 | 37.27 | 97.71 |
| LB042_ap_007 | 0.09 | <0.01 | | | 0.10 | 0.10 | 0.08 | 0.04 | 38.72 | <0.04 | 0.10 | | 17.89 | 0.11 | <0.02 | 0.75 | 2.79 | 37.62 | 98.39 |
| LB042_ap_008 | 0.09 | <0.01 | | | 0.10 | 0.22 | 0.12 | 0.14 | 37.98 | <0.04 | 0.13 | | 17.82 | 0.08 | <0.02 | 0.90 | 2.78 | 37.29 | 97.66 |
| LB042_ap_009 | 0.10 | <0.01 | | | 0.11 | 0.10 | 0.04 | 0.04 | 38.57 | <0.04 | 0.11 | | 17.84 | 0.13 | <0.02 | 0.93 | 2.67 | 37.55 | 98.19 |
| LB042_ap_010 | 0.11 | <0.01 | | | 0.10 | 0.10 | 0.10 | 0.05 | 38.56 | <0.03 | 0.11 | | 17.79 | 0.11 | <0.02 | 1.25 | 2.45 | 37.49 | 98.22 |
| LB042_ap_011 | 0.11 | <0.01 | | | <0.07 | 0.10 | 0.10 | 0.04 | 38.42 | <0.04 | 0.07 | | 17.85 | 0.11 | 0.02 | 1.10 | 2.56 | 37.47 | 97.93 |
| LB042_ap_012 | 0.08 | <0.01 | | | 0.18 | 0.09 | 0.13 | 0.04 | 38.37 | <0.04 | 0.10 | | 17.88 | 0.11 | <0.02 | 1.24 | 2.48 | 37.50 | 98.19 |
| LB042_ap_013 | 0.12 | <0.01 | | | 0.14 | 0.09 | 0.05 | 0.03 | 38.57 | <0.03 | 0.11 | | 17.86 | 0.10 | <0.02 | 0.76 | 2.33 | 37.74 | 97.90 |
| LB042_ap_014 | 0.14 | <0.01 | | | 0.19 | 0.13 | 0.10 | 0.05 | 38.43 | <0.04 | 0.07 | | 17.92 | 0.07 | <0.02 | 0.59 | 3.04 | 37.49 | 98.22 |
| LB042_ap_015 | 0.08 | <0.01 | | | <0.07 | 0.09 | 0.10 | 0.06 | 38.47 | <0.04 | 0.13 | | 17.77 | 0.10 | <0.02 | 0.75 | 2.60 | 37.44 | 97.61 |
| LB042_ap_016 | 0.08 | <0.01 | | | 0.08 | 0.09 | 0.11 | 0.05 | 38.55 | 0.04 | 0.10 | | 17.85 | 0.09 | <0.02 | 0.89 | 2.61 | 37.51 | 98.04 |
| LB042_ap_017 | 0.12 | <0.01 | | | 0.08 | 0.11 | 0.12 | 0.05 | 38.28 | <0.04 | 0.12 | | 17.75 | 0.09 | <0.02 | 1.48 | 2.22 | 37.36 | 97.76 |
| LB042_ap_018 | 0.10 | <0.01 | | | <0.07 | 0.10 | 0.07 | 0.06 | 38.42 | 0.05 | 0.10 | | 17.92 | 0.10 | <0.02 | 0.70 | 2.80 | 37.56 | 97.98 |
| LB042_ap_019 | 0.08 | <0.01 | | | <0.07 | 0.09 | 0.09 | 0.03 | 38.29 | 0.04 | 0.12 | | 17.89 | 0.09 | <0.02 | 1.67 | 2.18 | 37.45 | 98.03 |
| LB042_ap_020 | 0.12 | <0.01 | | | 0.13 | 0.09 | 0.05 | 0.06 | 38.42 | <0.04 | 0.13 | | 17.79 | 0.11 | <0.02 | 0.71 | 2.53 | 37.53 | 97.67 |
| LB042_ap_021 | 0.08 | <0.01 | | | <0.07 | 0.11 | 0.13 | 0.05 | 38.20 | <0.04 | 0.07 | | 17.77 | 0.06 | <0.02 | 2.52 | 1.43 | 37.35 | 97.75 |
| LB042_ap_022 | 0.08 | <0.01 | | | 0.10 | 0.10 | 0.07 | 0.05 | 38.64 | <0.04 | 0.10 | | 17.84 | 0.11 | <0.02 | 0.86 | 2.63 | 37.55 | 98.14 |
| LB042_ap_023 | 0.10 | <0.01 | | | 0.07 | 0.11 | 0.10 | 0.06 | 38.47 | <0.04 | 0.12 | | 17.82 | 0.14 | <0.02 | 1.15 | 2.62 | 37.48 | 98.23 |
| LB042_ap_024 | 0.11 | 0.01 | | | 0.08 | 0.08 | 0.09 | 0.05 | 38.38 | <0.04 | 0.08 | | 17.81 | 0.09 | <0.02 | 0.97 | 2.65 | 37.39 | 97.80 |
| LB042_ap_025 | 0.10 | <0.01 | | | 0.15 | 0.14 | 0.07 | 0.05 | 38.59 | <0.04 | 0.08 | | 17.90 | 0.10 | <0.02 | 0.95 | 2.76 | 37.55 | 98.44 |
| ELF-03_ap_001 | 0.02 | <0.01 | | | <0.06 | 0.07 | 0.12 | <0.01 | 38.78 | 0.04 | 0.03 | | 17.91 | <0.01 | 0.02 | 0.96 | 2.43 | 37.48 | 97.85 |
| ELF-03_ap_002 | 0.04 | <0.01 | | | <0.06 | 0.06 | 0.09 | <0.01 | 39.10 | 0.05 | <0.02 | | 18.07 | 0.01 | 0.04 | 0.80 | 2.71 | 37.75 | 98.71 |
| ELF-03_ap_003 | 0.04 | <0.01 | | | <0.06 | 0.04 | 0.09 | <0.01 | 38.80 | <0.03 | <0.02 | | 18.01 | 0.02 | 0.03 | 0.85 | 2.39 | 37.67 | 97.83 |
| ELF-03_ap_004 | 0.03 | <0.01 | | | 0.09 | 0.09 | 0.11 | <0.01 | 38.80 | <0.04 | 0.04 | | 17.98 | 0.02 | <0.02 | 1.00 | 2.23 | 37.70 | 98.08 |
| ELF-03_ap_005 | 0.04 | <0.01 | | | <0.07 | 0.05 | 0.10 | <0.01 | 38.81 | <0.04 | 0.02 | | 18.06 | 0.01 | <0.02 | 0.94 | 2.28 | 37.76 | 98.07 |
| ELF-03_ap_006 | 0.04 | <0.01 | | | <0.07 | 0.07 | 0.09 | <0.01 | 38.85 | <0.04 | <0.02 | | 17.90 | <0.01 | <0.02 | 0.99 | 2.14 | 37.61 | 97.69 |
| ELF-03_ap_007 | 0.03 | <0.01 | | | <0.06 | <0.02 | 0.10 | <0.01 | 39.26 | <0.04 | <0.02 | | 18.04 | 0.01 | 0.02 | 0.26 | 2.63 | 37.91 | 98.26 |
| ELF-03_ap_008 | 0.03 | <0.01 | | | <0.07 | 0.14 | 0.22 | 0.02 | 38.61 | 0.04 | 0.04 | | 17.95 | 0.02 | <0.02 | 1.19 | 2.14 | 37.62 | 98.02 |
| ELF-03_ap_009 | 0.03 | <0.01 | | | <0.06 | 0.08 | 0.08 | 0.01 | 38.96 | <0.04 | 0.03 | | 18.02 | 0.02 | <0.02 | 0.91 | 2.41 | 37.74 | 98.29 |
| ELF-03_ap_010 | 0.04 | <0.01 | | | <0.06 | 0.04 | 0.12 | <0.01 | 38.90 | 0.08 | 0.04 | | 17.92 | 0.02 | <0.02 | 0.98 | 2.45 | 37.56 | 98.15 |
| ELF-03_ap_011 | 0.03 | <0.01 | | | <0.06 | 0.06 | 0.09 | <0.01 | 38.93 | <0.04 | 0.03 | | 18.05 | 0.01 | <0.02 | 1.07 | 2.18 | 37.82 | 98.26 |
| ELF-03_ap_012 | 0.04 | <0.01 | | | <0.06 | 0.05 | 0.08 | <0.01 | 39.09 | 0.06 | <0.02 | | 17.95 | <0.01 | 0.02 | 0.97 | 2.13 | 37.77 | 98.17 |
| ELF-03_ap_013 | 0.05 | <0.01 | | | <0.07 | 0.03 | 0.05 | <0.01 | 39.25 | <0.04 | <0.02 | | 18.01 | 0.02 | 0.09 | 0.48 | 3.11 | 37.64 | 98.74 |
| ELF-03_ap_014 | 0.03 | <0.01 | | | <0.06 | 0.04 | 0.10 | <0.01 | 39.17 | <0.04 | <0.02 | | 18.12 | 0.01 | <0.02 | 0.78 | 2.73 | 37.81 | 98.78 |
| ELF-03_ap_015 | 0.07 | <0.01 | | | <0.07 | 0.03 | 0.04 | <0.01 | 39.19 | <0.04 | <0.02 | | 17.96 | <0.01 | 0.03 | 0.30 | 2.85 | 37.68 | 98.14 |
| ELF-03_ap_016 | 0.05 | <0.01 | | | <0.07 | 0.11 | 0.08 | <0.01 | 38.95 | <0.03 | 0.05 | | 17.98 | 0.02 | <0.02 | 1.14 | 2.20 | 37.76 | 98.34 |

*all elements in wt. % (EMPA).

Appendix C: Eastern Sunda arc apatite trace element chemistry (EMPA)

| Analysis ID | Si | Al | La | Ce | Nd | Fe | Mn | Mg | Ca | Sr | Na | K | P | S | As | Cl | F | O.soi. | TOTAL |
|---------------|------|-------|----|----|-------|-------|-------|-------|-------|-------|-------|---|-------|-------|-------|------|------|--------|-------|
| ELF-03_ap_017 | 0.03 | <0.01 | | | <0.07 | <0.04 | 0.03 | <0.01 | 39.19 | <0.03 | 0.03 | | 18.04 | <0.01 | <0.02 | 0.32 | 2.83 | 37.74 | 98.25 |
| ELF-03_ap_018 | 0.02 | 0.01 | | | <0.06 | 0.04 | 0.07 | <0.01 | 39.20 | <0.04 | 0.02 | | 18.01 | <0.01 | 0.05 | 0.40 | 3.12 | 37.62 | 98.56 |
| ELF-03_ap_019 | 0.03 | <0.01 | | | <0.06 | 0.07 | 0.14 | <0.01 | 39.01 | 0.07 | 0.03 | | 18.05 | 0.01 | 0.03 | 1.08 | 2.06 | 37.93 | 98.51 |
| ELF-03_ap_020 | 0.17 | 0.12 | | | <0.06 | 0.04 | 0.09 | <0.01 | 38.85 | 0.04 | <0.02 | | 17.92 | 0.01 | 0.03 | 0.65 | 2.60 | 37.79 | 98.31 |
| ELF-03_ap_021 | 0.07 | <0.01 | | | <0.06 | 0.03 | 0.06 | <0.01 | 38.90 | <0.04 | <0.02 | | 17.91 | 0.03 | <0.02 | 0.60 | 2.27 | 37.73 | 97.62 |
| ELF-03_ap_022 | 0.05 | <0.01 | | | 0.07 | 0.10 | 0.11 | 0.02 | 38.78 | <0.03 | 0.03 | | 18.07 | 0.01 | <0.02 | 1.13 | 2.25 | 37.79 | 98.39 |
| ELF-03_ap_023 | 0.03 | <0.01 | | | <0.06 | 0.06 | 0.09 | <0.01 | 38.92 | <0.04 | 0.06 | | 18.03 | 0.02 | <0.02 | 0.99 | 2.32 | 37.75 | 98.27 |
| ELF-03_ap_024 | 0.02 | <0.01 | | | <0.06 | 0.07 | 0.11 | <0.01 | 38.74 | <0.04 | 0.06 | | 17.80 | 0.02 | <0.02 | 1.11 | 2.29 | 37.38 | 97.61 |
| ELF-03_ap_025 | 0.04 | <0.01 | | | 0.07 | 0.07 | 0.09 | <0.01 | 38.84 | <0.03 | <0.02 | | 18.05 | 0.02 | 0.03 | 1.02 | 2.49 | 37.67 | 98.37 |
| ELF-03_ap_026 | 0.03 | <0.01 | | | <0.06 | 0.08 | 0.11 | 0.02 | 38.78 | <0.04 | 0.03 | | 17.99 | 0.01 | <0.02 | 1.18 | 2.19 | 37.66 | 98.07 |
| ELF-03_ap_027 | 0.05 | <0.01 | | | 0.07 | 0.04 | <0.03 | <0.01 | 39.46 | <0.04 | <0.02 | | 18.03 | 0.02 | 0.07 | 0.34 | 3.14 | 37.77 | 98.98 |
| ELF-03_ap_028 | 0.04 | <0.01 | | | <0.06 | 0.07 | 0.05 | <0.01 | 39.08 | <0.04 | 0.03 | | 18.06 | 0.02 | 0.02 | 0.54 | 2.32 | 37.95 | 98.18 |
| ELF-03_ap_029 | 0.03 | <0.01 | | | <0.06 | 0.10 | 0.12 | <0.01 | 39.02 | <0.04 | 0.03 | | 17.96 | 0.01 | <0.02 | 1.12 | 2.07 | 37.80 | 98.25 |
| ELF-03_ap_030 | 0.04 | <0.01 | | | <0.06 | 0.04 | 0.04 | <0.01 | 39.08 | <0.03 | <0.02 | | 18.00 | 0.08 | 0.02 | 0.37 | 3.08 | 37.68 | 98.42 |
| ELF-03_ap_031 | 0.08 | <0.01 | | | <0.07 | 0.06 | 0.08 | <0.01 | 38.89 | 0.04 | 0.02 | | 18.09 | 0.01 | 0.04 | 0.86 | 2.39 | 37.84 | 98.39 |
| ELF-03_ap_032 | 0.02 | <0.01 | | | <0.07 | 0.06 | 0.07 | <0.01 | 39.18 | <0.03 | 0.02 | | 18.05 | 0.01 | 0.04 | 0.57 | 2.99 | 37.65 | 98.65 |
| ELF-03_ap_033 | 0.03 | <0.01 | | | <0.06 | <0.02 | 0.05 | <0.01 | 39.08 | <0.03 | <0.02 | | 18.03 | 0.01 | 0.02 | 0.59 | 2.66 | 37.74 | 98.24 |
| ELF-03_ap_034 | 0.04 | <0.01 | | | <0.06 | <0.02 | 0.05 | <0.01 | 39.08 | <0.04 | 0.03 | | 18.02 | <0.01 | <0.02 | 0.30 | 2.70 | 37.76 | 97.98 |
| ELF-03_ap_035 | 0.05 | <0.01 | | | <0.06 | 0.05 | 0.06 | 0.01 | 38.87 | 0.03 | 0.03 | | 17.87 | <0.01 | 0.04 | 0.62 | 2.80 | 37.42 | 97.87 |
| ELF-03_ap_036 | 0.03 | <0.01 | | | <0.07 | 0.07 | 0.13 | <0.01 | 38.91 | 0.04 | <0.02 | | 18.10 | 0.01 | 0.03 | 0.95 | 2.47 | 37.78 | 98.52 |
| SPF-05_ap_001 | 0.05 | <0.01 | | | <0.07 | <0.02 | 0.14 | <0.01 | 38.86 | 0.04 | 0.02 | | 17.95 | 0.04 | 0.02 | 0.36 | 3.18 | 37.45 | 98.10 |
| SPF-05_ap_002 | 0.07 | <0.01 | | | <0.07 | 0.03 | 0.05 | <0.01 | 38.94 | <0.04 | 0.03 | | 17.80 | 0.04 | <0.02 | 1.07 | 2.01 | 37.61 | 97.64 |
| SPF-05_ap_003 | 0.07 | <0.01 | | | 0.08 | <0.02 | 0.03 | <0.01 | 38.69 | <0.04 | 0.03 | | 17.90 | 0.06 | 0.03 | 0.68 | 1.96 | 37.79 | 97.32 |
| SPF-05_ap_004 | 0.06 | <0.01 | | | 0.07 | <0.02 | 0.05 | <0.01 | 38.55 | <0.03 | 0.07 | | 17.80 | 0.04 | 0.02 | 0.37 | 2.91 | 37.26 | 97.20 |
| SPF-05_ap_005 | 0.05 | <0.01 | | | 0.11 | <0.02 | 0.08 | <0.01 | 38.81 | <0.04 | 0.04 | | 17.92 | 0.05 | <0.02 | 0.89 | 1.57 | 37.98 | 97.50 |
| SPF-05_ap_006 | 0.08 | <0.01 | | | <0.07 | <0.02 | <0.03 | <0.01 | 38.78 | 0.04 | 0.04 | | 17.77 | 0.04 | 0.02 | 0.75 | 2.26 | 37.50 | 97.26 |
| SPF-05_ap_007 | 0.06 | <0.01 | | | <0.07 | <0.02 | 0.10 | <0.01 | 38.40 | 0.06 | 0.09 | | 17.83 | 0.03 | 0.02 | 1.35 | 0.69 | 37.96 | 96.61 |
| SPF-05_ap_008 | 0.07 | <0.01 | | | 0.13 | 0.03 | 0.04 | <0.01 | 38.79 | <0.04 | 0.02 | | 17.82 | 0.04 | <0.02 | 0.88 | 1.98 | 37.66 | 97.46 |
| SPF-05_ap_009 | 0.08 | <0.01 | | | <0.07 | <0.02 | <0.03 | <0.01 | 39.11 | <0.04 | 0.03 | | 17.91 | 0.08 | <0.02 | 0.44 | 2.28 | 37.90 | 97.83 |
| SPF-05_ap_010 | 0.08 | <0.01 | | | 0.11 | <0.02 | <0.03 | <0.01 | 38.84 | <0.03 | 0.06 | | 17.81 | 0.08 | 0.03 | 0.49 | 2.36 | 37.66 | 97.51 |
| SPF-05_ap_011 | 0.09 | <0.01 | | | <0.06 | 0.18 | 0.17 | 0.07 | 38.15 | <0.04 | 0.06 | | 17.66 | 0.14 | <0.02 | 2.79 | 1.22 | 37.39 | 97.92 |
| SPF-05_ap_012 | 0.09 | <0.01 | | | 0.10 | <0.02 | 0.06 | <0.01 | 38.57 | 0.04 | 0.04 | | 17.79 | 0.09 | <0.02 | 0.37 | 2.80 | 37.39 | 97.32 |
| SPF-05_ap_013 | 0.04 | 0.01 | | | <0.06 | <0.02 | 0.10 | <0.01 | 38.78 | <0.04 | 0.05 | | 17.96 | 0.05 | <0.02 | 0.40 | 2.78 | 37.60 | 97.77 |
| SPF-05_ap_014 | 0.05 | <0.01 | | | 0.07 | 0.03 | 0.07 | <0.01 | 39.29 | <0.04 | 0.03 | | 17.88 | 0.12 | <0.02 | 0.16 | 3.05 | 37.73 | 98.46 |
| SPF-05_ap_015 | 0.04 | <0.01 | | | 0.08 | <0.02 | 0.05 | <0.01 | 39.03 | <0.04 | 0.04 | | 17.91 | 0.07 | <0.02 | 0.61 | 2.46 | 37.74 | 98.04 |
| SPF-05_ap_016 | 0.05 | 0.01 | | | 0.07 | <0.02 | 0.07 | <0.01 | 39.07 | 0.05 | 0.03 | | 17.84 | 0.05 | <0.02 | 0.30 | 3.41 | 37.33 | 98.29 |
| SPF-05_ap_017 | 0.06 | <0.01 | | | 0.10 | 0.12 | 0.14 | 0.04 | 38.07 | 0.04 | 0.08 | | 17.67 | 0.05 | <0.02 | 3.51 | 0.90 | 37.17 | 97.96 |
| SPF-05_ap_018 | 0.06 | <0.01 | | | 0.14 | <0.02 | 0.05 | <0.01 | 38.67 | <0.04 | 0.04 | | 17.87 | 0.06 | 0.03 | 0.97 | 2.08 | 37.65 | 97.63 |
| SPF-05_ap_019 | 0.10 | <0.01 | | | 0.07 | <0.02 | <0.03 | 0.01 | 38.49 | <0.04 | 0.04 | | 17.83 | 0.05 | <0.02 | 0.61 | 2.43 | 37.49 | 97.13 |
| SPF-05_ap_020 | 0.05 | <0.01 | | | 0.09 | 0.08 | 0.09 | <0.01 | 38.59 | <0.04 | 0.06 | | 17.86 | 0.09 | <0.02 | 0.69 | 2.91 | 37.36 | 97.86 |
| SPF-05_ap_021 | 0.09 | <0.01 | | | <0.07 | 0.04 | 0.05 | <0.01 | 39.01 | <0.04 | <0.02 | | 17.94 | 0.08 | <0.02 | 0.11 | 3.19 | 37.62 | 98.12 |
| SPF-05_ap_022 | 0.06 | <0.01 | | | 0.09 | <0.02 | 0.07 | <0.01 | 38.88 | <0.04 | 0.06 | | 17.95 | 0.11 | 0.03 | 0.39 | 2.80 | 37.73 | 98.16 |
| SPF-05_ap_023 | 0.05 | <0.01 | | | 0.07 | <0.02 | 0.11 | <0.01 | 39.03 | 0.05 | 0.03 | | 18.03 | 0.02 | 0.02 | 0.35 | 2.74 | 37.80 | 98.29 |
| SPF-05_ap_024 | 0.05 | <0.01 | | | 0.07 | <0.02 | 0.04 | <0.01 | 38.82 | 0.04 | 0.03 | | 17.84 | 0.05 | 0.02 | 1.02 | 1.92 | 37.66 | 97.55 |
| SPF-05_ap_025 | 0.07 | <0.01 | | | 0.09 | <0.02 | 0.08 | <0.01 | 38.88 | <0.04 | 0.04 | | 17.74 | 0.04 | 0.06 | 1.01 | 1.70 | 37.69 | 97.38 |
| SPF-05_ap_026 | 0.07 | <0.01 | | | <0.07 | <0.02 | 0.06 | <0.01 | 38.95 | <0.04 | 0.04 | | 17.97 | 0.07 | 0.02 | 0.22 | 3.31 | 37.54 | 98.25 |
| SPF-05_ap_027 | 0.06 | <0.01 | | | <0.06 | <0.02 | 0.05 | <0.01 | 39.04 | <0.03 | 0.07 | | 17.84 | 0.08 | <0.02 | 0.38 | 2.56 | 37.70 | 97.77 |
| SPF-05_ap_028 | 0.06 | <0.01 | | | 0.07 | 0.02 | 0.04 | <0.01 | 38.91 | <0.04 | 0.05 | | 17.81 | 0.08 | <0.02 | 0.59 | 2.13 | 37.75 | 97.52 |
| SPF-05_ap_029 | 0.08 | <0.01 | | | 0.13 | <0.02 | <0.03 | <0.01 | 38.89 | <0.03 | 0.08 | | 17.94 | 0.10 | <0.02 | 0.41 | 2.41 | 37.89 | 97.92 |
| SPF-05_ap_030 | 0.05 | <0.01 | | | 0.08 | <0.02 | 0.09 | <0.01 | 39.11 | <0.03 | 0.04 | | 18.00 | 0.09 | <0.02 | 0.30 | 2.85 | 37.84 | 98.47 |

*all elements in wt. % (EMPA).

Appendix C: Eastern Sunda arc apatite trace element chemistry (EMPA)

| Analysis ID | Si | Al | La | Ce | Nd | Fe | Mn | Mg | Ca | Sr | Na | K | P | S | As | Cl | F | O.stoi. | TOTAL |
|----------------|------|-------|----|----|-------|------|------|-------|-------|-------|-------|---|-------|-------|-------|------|------|---------|-------|
| SFF-05_ap__031 | 0.67 | 0.27 | | | -0.06 | 0.24 | 0.08 | 0.46 | 37.65 | -0.04 | 0.04 | | 17.37 | 0.12 | <0.02 | 0.22 | 2.86 | 37.79 | 97.76 |
| GBF-04_ap__001 | 0.04 | <0.01 | | | <0.06 | 0.07 | 0.07 | 0.01 | 38.90 | -0.04 | 0.04 | | 17.98 | 0.03 | <0.02 | 0.97 | 2.43 | 37.66 | 98.19 |
| GBF-04_ap__002 | 0.06 | <0.01 | | | 0.08 | 0.11 | 0.09 | <0.01 | 38.74 | -0.04 | 0.04 | | 17.89 | 0.07 | 0.03 | 0.53 | 3.24 | 37.36 | 98.23 |
| GBF-04_ap__003 | 0.04 | <0.01 | | | <0.06 | 0.07 | 0.09 | <0.01 | 39.06 | -0.04 | 0.03 | | 17.99 | 0.02 | 0.04 | 0.76 | 2.64 | 37.69 | 98.42 |
| GBF-04_ap__004 | 0.03 | <0.01 | | | <0.06 | 0.05 | 0.10 | 0.01 | 39.12 | 0.04 | <0.02 | | 18.09 | <0.01 | <0.02 | 0.69 | 2.68 | 37.80 | 98.63 |
| GBF-04_ap__005 | 0.04 | <0.01 | | | <0.06 | 0.08 | 0.14 | 0.01 | 38.90 | -0.04 | 0.03 | | 18.09 | 0.02 | <0.02 | 0.90 | 2.46 | 37.83 | 98.50 |
| GBF-04_ap__006 | 0.04 | <0.01 | | | <0.06 | 0.07 | 0.12 | <0.01 | 38.82 | -0.04 | 0.05 | | 17.97 | 0.03 | 0.02 | 1.14 | 2.17 | 37.72 | 98.15 |
| GBF-04_ap__007 | 0.03 | <0.01 | | | <0.06 | 0.10 | 0.10 | 0.02 | 39.17 | -0.04 | 0.03 | | 18.05 | 0.01 | <0.02 | 0.56 | 2.85 | 37.76 | 98.68 |
| GBF-04_ap__009 | 0.03 | 0.01 | | | <0.07 | 0.08 | 0.08 | 0.02 | 39.07 | -0.04 | <0.02 | | 18.08 | 0.02 | <0.02 | 0.68 | 2.75 | 37.74 | 98.46 |
| GBF-04_ap__010 | 0.03 | <0.01 | | | <0.06 | 0.02 | 0.06 | <0.01 | 39.07 | -0.04 | 0.04 | | 18.04 | 0.02 | 0.02 | 0.97 | 2.31 | 37.76 | 98.25 |
| GBF-04_ap__011 | 0.05 | <0.01 | | | <0.07 | 0.04 | 0.05 | <0.01 | 39.09 | -0.04 | <0.02 | | 18.05 | <0.01 | 0.06 | 0.62 | 2.72 | 37.74 | 98.40 |
| GBF-04_ap__012 | 0.04 | <0.01 | | | 0.06 | 0.07 | 0.05 | <0.01 | 39.24 | -0.04 | 0.02 | | 18.13 | 0.01 | <0.02 | 0.65 | 2.46 | 38.02 | 98.76 |
| GBF-04_ap__013 | 0.04 | <0.01 | | | 0.06 | 0.04 | 0.04 | <0.01 | 38.83 | 0.04 | 0.02 | | 18.04 | <0.01 | <0.02 | 0.59 | 2.89 | 37.58 | 98.21 |
| GBF-04_ap__014 | 0.07 | <0.01 | | | <0.07 | 0.11 | 0.10 | 0.02 | 38.85 | -0.03 | 0.02 | | 18.15 | <0.01 | <0.02 | 0.74 | 2.73 | 37.81 | 98.59 |
| GBF-04_ap__015 | 0.06 | <0.01 | | | <0.06 | 0.06 | 0.05 | <0.01 | 38.80 | -0.03 | 0.03 | | 18.01 | <0.01 | 0.03 | 0.75 | 2.65 | 37.70 | 98.39 |
| GBF-04_ap__016 | 0.05 | <0.01 | | | <0.06 | 0.06 | 0.08 | 0.01 | 39.04 | -0.04 | <0.02 | | 18.02 | <0.01 | 0.02 | 0.64 | 2.76 | 37.63 | 98.19 |
| GBF-04_ap__017 | 0.04 | <0.01 | | | <0.07 | 0.07 | 0.09 | <0.01 | 38.89 | -0.04 | 0.04 | | 17.96 | 0.01 | 0.02 | 0.76 | 2.11 | 37.75 | 97.57 |
| GBF-04_ap__018 | 0.07 | <0.01 | | | <0.06 | 0.04 | 0.07 | <0.01 | 38.86 | -0.03 | 0.03 | | 18.07 | 0.01 | <0.02 | 0.81 | 2.53 | 37.76 | 98.24 |
| GBF-04_ap__019 | 0.03 | <0.01 | | | <0.06 | 0.04 | 0.05 | <0.01 | 39.02 | -0.04 | 0.02 | | 18.13 | <0.01 | <0.02 | 0.71 | 2.77 | 37.74 | 98.50 |
| GBF-04_ap__020 | 0.04 | <0.01 | | | <0.06 | 0.06 | 0.05 | <0.01 | 38.80 | -0.03 | 0.03 | | 17.95 | 0.03 | <0.02 | 0.65 | 2.61 | 37.60 | 97.97 |
| GBF-04_ap__021 | 0.02 | <0.01 | | | <0.06 | 0.05 | 0.07 | <0.01 | 38.91 | -0.04 | <0.02 | | 18.03 | <0.01 | <0.02 | 0.72 | 2.61 | 37.66 | 98.18 |
| GBF-04_ap__022 | 0.05 | <0.01 | | | <0.06 | 0.06 | 0.09 | <0.01 | 38.91 | -0.04 | <0.02 | | 18.00 | 0.02 | <0.02 | 0.68 | 2.61 | 37.66 | 98.11 |
| GBF-04_ap__023 | 0.04 | <0.01 | | | <0.06 | 0.09 | 0.05 | <0.01 | 38.93 | -0.03 | 0.03 | | 18.05 | 0.01 | <0.02 | 0.63 | 2.65 | 37.76 | 98.35 |
| GBF-04_ap__024 | 0.04 | <0.01 | | | <0.07 | 0.04 | 0.07 | <0.01 | 39.05 | -0.04 | 0.04 | | 18.05 | 0.01 | <0.02 | 0.63 | 2.65 | 37.76 | 98.35 |
| GBF-04_ap__025 | 0.04 | <0.01 | | | <0.07 | 0.06 | 0.03 | 0.01 | 38.90 | -0.04 | 0.04 | | 18.08 | 0.01 | 0.03 | 0.68 | 2.58 | 37.76 | 98.23 |
| LB031_ap__001 | 0.11 | <0.01 | | | <0.06 | 0.39 | 0.08 | 0.10 | 38.14 | -0.04 | 0.03 | | 17.86 | <0.01 | <0.02 | 1.36 | 2.16 | 37.43 | 97.67 |
| LB031_ap__002 | 0.09 | <0.01 | | | <0.06 | 0.41 | 0.06 | 0.17 | 38.21 | -0.04 | 0.04 | | 17.88 | <0.01 | <0.02 | 1.38 | 1.49 | 37.80 | 97.54 |
| LB031_ap__003 | 0.12 | 0.01 | | | <0.07 | 0.45 | 0.09 | 0.10 | 38.23 | -0.04 | 0.03 | | 17.97 | <0.01 | <0.02 | 1.69 | 2.00 | 37.64 | 98.33 |
| LB031_ap__004 | 0.10 | <0.01 | | | <0.07 | 0.42 | 0.08 | 0.17 | 38.31 | -0.04 | 0.03 | | 17.88 | 0.02 | <0.02 | 1.59 | 1.28 | 37.90 | 97.77 |
| LB031_ap__005 | 0.12 | <0.01 | | | <0.06 | 0.52 | 0.09 | 0.12 | 38.26 | 0.04 | 0.04 | | 17.91 | <0.01 | 0.02 | 1.61 | 1.92 | 37.65 | 98.29 |
| LB031_ap__006 | 0.10 | <0.01 | | | <0.07 | 0.37 | 0.08 | 0.14 | 38.31 | -0.04 | 0.02 | | 17.98 | 0.01 | <0.02 | 1.31 | 1.55 | 37.94 | 97.82 |
| LB031_ap__007 | 0.15 | <0.01 | | | <0.06 | 0.49 | 0.06 | 0.12 | 38.31 | -0.04 | 0.02 | | 17.94 | <0.01 | <0.02 | 1.64 | 1.92 | 37.71 | 98.36 |
| LB031_ap__008 | 0.13 | <0.01 | | | <0.07 | 0.32 | 0.07 | 0.12 | 38.46 | 0.06 | 0.02 | | 17.85 | <0.01 | 0.02 | 0.92 | 2.36 | 37.61 | 98.02 |
| LB031_ap__009 | 0.12 | <0.01 | | | <0.07 | 0.45 | 0.08 | 0.11 | 38.28 | -0.04 | 0.04 | | 18.00 | <0.01 | <0.02 | 1.61 | 2.00 | 37.71 | 98.41 |
| LB031_ap__010 | 0.14 | <0.01 | | | <0.06 | 0.49 | 0.08 | 0.10 | 38.25 | -0.04 | 0.02 | | 17.84 | <0.01 | <0.02 | 1.72 | 1.84 | 37.56 | 98.04 |
| LB031_ap__011 | 0.14 | <0.01 | | | <0.06 | 0.51 | 0.08 | 0.11 | 38.24 | 0.07 | 0.02 | | 17.93 | <0.01 | <0.02 | 1.67 | 2.33 | 37.48 | 98.58 |
| LB031_ap__012 | 0.10 | <0.01 | | | <0.07 | 0.43 | 0.07 | 0.17 | 38.28 | -0.04 | 0.02 | | 17.89 | 0.02 | <0.02 | 1.29 | 1.46 | 37.90 | 97.69 |
| LB031_ap__013 | 0.11 | <0.01 | | | <0.06 | 0.56 | 0.11 | 0.09 | 38.21 | 0.05 | 0.03 | | 17.93 | <0.01 | <0.02 | 1.53 | 1.93 | 37.65 | 98.19 |
| LB034_ap__001 | 0.10 | <0.01 | | | 0.10 | 0.14 | 0.21 | 0.03 | 37.89 | 0.06 | 0.18 | | 17.69 | 0.12 | <0.02 | 2.43 | 1.49 | 37.31 | 97.76 |
| LB034_ap__002 | 0.07 | 0.01 | | | 0.12 | 0.13 | 0.17 | 0.02 | 38.11 | -0.04 | 0.13 | | 17.72 | 0.10 | <0.02 | 2.45 | 1.45 | 37.35 | 97.83 |
| LB034_ap__003 | 0.10 | <0.01 | | | 0.14 | 0.15 | 0.19 | 0.05 | 38.01 | 0.05 | 0.14 | | 17.71 | 0.09 | <0.02 | 1.99 | 1.81 | 37.29 | 97.70 |
| LB034_ap__004 | 0.09 | <0.01 | | | 0.11 | 0.12 | 0.22 | 0.05 | 38.12 | 0.05 | 0.15 | | 17.68 | 0.12 | <0.02 | 2.27 | 1.48 | 37.40 | 97.85 |
| LB034_ap__005 | 0.11 | <0.01 | | | 0.15 | 0.09 | 0.19 | 0.01 | 37.90 | -0.04 | 0.14 | | 17.67 | 0.11 | <0.02 | 2.40 | 1.24 | 37.35 | 97.36 |
| LB034_ap__006 | 0.10 | <0.01 | | | 0.11 | 0.11 | 0.20 | 0.03 | 37.79 | 0.04 | 0.14 | | 17.74 | 0.13 | 0.02 | 2.48 | 1.40 | 37.35 | 97.65 |
| LB034_ap__007 | 0.05 | <0.01 | | | <0.07 | 0.15 | 0.18 | 0.04 | 38.19 | -0.04 | 0.18 | | 17.72 | 0.15 | <0.02 | 2.16 | 1.60 | 37.45 | 97.87 |
| LB034_ap__008 | 0.11 | <0.01 | | | 0.10 | 0.15 | 0.20 | 0.03 | 38.15 | -0.04 | 0.16 | | 17.67 | 0.14 | <0.02 | 2.28 | 1.56 | 37.42 | 97.99 |
| LB034_ap__009 | 0.16 | <0.01 | | | 0.19 | 0.13 | 0.14 | 0.03 | 38.12 | -0.04 | 0.12 | | 17.59 | 0.13 | <0.02 | 2.12 | 1.69 | 37.31 | 97.74 |
| LB034_ap__010 | 0.10 | <0.01 | | | 0.11 | 0.16 | 0.21 | 0.04 | 38.02 | -0.04 | 0.14 | | 17.80 | 0.09 | <0.02 | 2.31 | 1.54 | 37.46 | 97.98 |
| LB034_ap__011 | 0.15 | 0.03 | | | 0.12 | 0.15 | 0.23 | 0.03 | 37.84 | 0.04 | 0.18 | | 17.73 | 0.13 | <0.02 | 2.07 | 1.74 | 37.42 | 97.86 |
| LB034_ap__012 | 0.05 | <0.01 | | | 0.16 | 0.15 | 0.20 | 0.03 | 37.88 | 0.05 | 0.13 | | 17.77 | 0.08 | <0.02 | 2.10 | 1.58 | 37.31 | 97.48 |

*all elements in wt. % (EMPA).

Appendix C: Eastern Sunda arc apatite trace element chemistry (EMPA)

| Analysis ID | Si | Al | La | Ce | Nd | Fe | Mn | Mg | Ca | Sr | Na | K | P | S | As | Cl | F | O sol. | TOTAL |
|--------------|------|-------|----|----|-------|-------|-------|-------|-------|-------|-------|---|-------|------|-------|------|------|--------|-------|
| LE034_ap_013 | 0.09 | <0.01 | | | 0.11 | 0.16 | 0.18 | 0.05 | 37.71 | <0.04 | | | 17.54 | 0.12 | <0.02 | 2.38 | 1.22 | 37.15 | 96.89 |
| LE034_ap_014 | 0.10 | <0.01 | | | 0.19 | 0.13 | 0.19 | 0.02 | 37.89 | 0.07 | | | 17.65 | 0.14 | <0.02 | 2.16 | 1.49 | 37.34 | 97.54 |
| LE034_ap_015 | 0.11 | <0.01 | | | 0.15 | 0.13 | 0.19 | 0.03 | 37.71 | <0.04 | | | 17.59 | 0.12 | <0.02 | 2.16 | 1.80 | 37.02 | 97.14 |
| LE034_ap_016 | 0.14 | <0.01 | | | 0.21 | 0.13 | 0.21 | 0.03 | 37.75 | <0.04 | | | 17.60 | 0.09 | <0.02 | 2.16 | 1.60 | 37.14 | 97.21 |
| LE034_ap_017 | 0.07 | <0.01 | | | 0.10 | 0.15 | 0.22 | 0.04 | 37.98 | <0.04 | | | 17.78 | 0.15 | <0.02 | 2.26 | 1.44 | 37.52 | 97.89 |
| LE034_ap_018 | 0.12 | <0.01 | | | 0.16 | 0.17 | 0.16 | 0.02 | 37.95 | <0.03 | | | 17.78 | 0.13 | <0.02 | 2.46 | 1.27 | 37.54 | 97.91 |
| LE034_ap_019 | 0.14 | <0.01 | | | 0.09 | 0.12 | 0.20 | 0.02 | 37.85 | <0.04 | | | 17.68 | 0.10 | <0.02 | 2.51 | 1.32 | 37.31 | 97.48 |
| LE034_ap_020 | 0.09 | <0.01 | | | 0.19 | 0.10 | 0.16 | 0.02 | 37.98 | 0.06 | | | 17.73 | 0.13 | <0.02 | 1.98 | 1.73 | 37.36 | 97.68 |
| LE034_ap_021 | 0.07 | <0.01 | | | 0.18 | 0.12 | 0.20 | 0.02 | 38.18 | 0.04 | | | 17.86 | 0.11 | <0.02 | 2.27 | 1.52 | 37.60 | 98.36 |
| LE034_ap_022 | 0.12 | <0.01 | | | 0.18 | 0.14 | 0.22 | 0.03 | 38.01 | <0.04 | | | 17.77 | 0.13 | <0.02 | 2.19 | 1.71 | 37.43 | 98.06 |
| LE034_ap_023 | 0.12 | <0.01 | | | 0.13 | 0.13 | 0.18 | 0.04 | 38.43 | <0.04 | | | 17.76 | 0.12 | <0.02 | 2.36 | 1.46 | 37.64 | 98.52 |
| LE034_ap_024 | 0.12 | <0.01 | | | 0.16 | 0.15 | 0.15 | 0.05 | 38.02 | 0.04 | | | 17.79 | 0.15 | <0.02 | 2.08 | 1.73 | 37.54 | 98.18 |
| LE034_ap_025 | 0.05 | <0.01 | | | 0.10 | 0.10 | 0.24 | 0.05 | 38.01 | <0.04 | | | 17.80 | 0.12 | <0.02 | 2.48 | 1.40 | 37.46 | 97.98 |
| LE037_ap_001 | 0.06 | <0.01 | | | 0.06 | <0.02 | 0.07 | <0.01 | 39.29 | <0.03 | <0.02 | | 18.08 | 0.02 | <0.02 | 0.76 | 2.03 | 38.15 | 98.52 |
| LE037_ap_002 | 0.12 | <0.01 | | | <0.06 | <0.02 | 0.04 | <0.01 | 38.96 | <0.04 | 0.02 | | 17.92 | 0.03 | <0.02 | 1.22 | 1.65 | 37.94 | 97.90 |
| LE037_ap_003 | 0.10 | <0.01 | | | <0.07 | 0.08 | 0.11 | 0.01 | 38.76 | <0.03 | 0.04 | | 17.87 | 0.09 | <0.02 | 1.86 | 1.71 | 37.76 | 98.40 |
| LE037_ap_004 | 0.08 | <0.01 | | | <0.07 | <0.02 | 0.04 | <0.01 | 39.28 | <0.04 | <0.02 | | 18.11 | 0.01 | 0.02 | 0.67 | 2.07 | 38.19 | 98.48 |
| LE037_ap_005 | 0.04 | <0.01 | | | 0.11 | 0.12 | 0.18 | 0.03 | 38.57 | 0.04 | 0.12 | | 17.73 | 0.15 | <0.02 | 1.87 | 1.80 | 37.56 | 98.33 |
| LE037_ap_006 | 0.09 | <0.01 | | | 0.09 | <0.02 | 0.18 | <0.01 | 38.82 | <0.04 | <0.02 | | 18.04 | 0.01 | <0.02 | 0.85 | 1.77 | 38.03 | 97.86 |
| LE037_ap_007 | 0.09 | <0.01 | | | 0.09 | 0.03 | 0.06 | <0.01 | 39.30 | <0.04 | <0.02 | | 18.01 | 0.02 | 0.02 | 0.57 | 2.01 | 38.15 | 98.36 |
| LE037_ap_008 | 0.08 | <0.01 | | | <0.06 | <0.02 | 0.08 | <0.01 | 38.97 | <0.04 | 0.02 | | 18.10 | 0.02 | <0.02 | 0.86 | 1.71 | 38.17 | 98.03 |
| LE037_ap_009 | 0.10 | <0.01 | | | 0.07 | 0.04 | 0.08 | <0.01 | 38.88 | <0.03 | 0.03 | | 18.00 | 0.02 | <0.02 | 0.71 | 2.03 | 37.95 | 97.90 |
| LE037_ap_010 | 0.05 | <0.01 | | | 0.07 | 0.12 | 0.22 | 0.03 | 38.47 | <0.03 | 0.13 | | 17.88 | 0.12 | <0.02 | 1.83 | 1.80 | 37.70 | 98.44 |
| LE037_ap_011 | 0.09 | <0.01 | | | <0.07 | <0.02 | 0.09 | <0.01 | 38.82 | <0.04 | 0.03 | | 17.97 | 0.04 | <0.02 | 1.00 | 1.74 | 37.96 | 97.75 |
| LE037_ap_012 | 0.07 | <0.01 | | | 0.14 | 0.14 | 0.17 | 0.03 | 38.50 | <0.04 | 0.10 | | 17.92 | 0.10 | <0.02 | 1.85 | 1.94 | 37.69 | 98.66 |
| LE037_ap_013 | 0.12 | <0.01 | | | 0.11 | 0.13 | 0.17 | 0.03 | 38.54 | 0.04 | 0.08 | | 17.76 | 0.14 | <0.02 | 1.86 | 1.73 | 37.68 | 98.39 |
| LE037_ap_014 | 0.06 | <0.01 | | | 0.07 | 0.12 | 0.17 | 0.03 | 38.54 | <0.04 | 0.10 | | 17.85 | 0.10 | <0.02 | 1.87 | 1.74 | 37.65 | 98.30 |
| LE037_ap_015 | 0.10 | <0.01 | | | 0.08 | 0.04 | 0.06 | <0.01 | 39.01 | <0.03 | 0.02 | | 18.11 | 0.03 | <0.02 | 0.87 | 1.64 | 38.27 | 98.22 |
| LE037_ap_016 | 0.09 | <0.01 | | | 0.10 | 0.03 | 0.05 | <0.01 | 39.07 | 0.05 | <0.02 | | 18.03 | 0.01 | <0.02 | 0.90 | 1.59 | 38.17 | 98.08 |
| LE037_ap_017 | 0.10 | <0.01 | | | <0.06 | 0.06 | 0.05 | <0.01 | 39.14 | <0.04 | <0.02 | | 18.03 | 0.02 | 0.02 | 0.95 | 1.79 | 38.13 | 98.30 |
| LE037_ap_018 | 0.10 | <0.01 | | | 0.08 | 0.03 | 0.05 | <0.01 | 38.98 | <0.04 | <0.02 | | 17.94 | 0.02 | <0.02 | 0.75 | 1.86 | 37.95 | 97.76 |
| LE037_ap_019 | 0.07 | <0.01 | | | <0.07 | <0.02 | 0.04 | <0.01 | 39.12 | <0.04 | 0.03 | | 18.06 | 0.04 | <0.02 | 0.93 | 2.02 | 38.03 | 98.33 |
| LE037_ap_020 | 0.09 | <0.01 | | | 0.07 | <0.02 | 0.07 | <0.01 | 39.07 | <0.03 | 0.04 | | 17.95 | 0.03 | <0.02 | 1.02 | 1.71 | 38.03 | 98.07 |
| LE037_ap_021 | 0.03 | <0.01 | | | <0.06 | 0.10 | 0.12 | 0.02 | 38.82 | <0.04 | 0.06 | | 18.00 | 0.06 | <0.02 | 1.93 | 1.62 | 37.84 | 98.58 |
| LE037_ap_022 | 0.13 | <0.01 | | | <0.06 | 0.09 | 0.18 | 0.02 | 38.46 | 0.04 | 0.08 | | 17.76 | 0.13 | <0.02 | 1.91 | 1.55 | 37.68 | 98.04 |
| LE037_ap_023 | 0.06 | <0.01 | | | <0.06 | <0.02 | 0.14 | <0.01 | 39.27 | <0.03 | <0.02 | | 18.08 | 0.01 | <0.02 | 0.58 | 2.07 | 38.14 | 98.35 |
| LE037_ap_024 | 0.13 | <0.01 | | | <0.07 | <0.02 | 0.03 | <0.01 | 38.87 | 0.07 | 0.03 | | 18.03 | 0.02 | <0.02 | 0.94 | 1.84 | 38.04 | 98.00 |
| LE037_ap_025 | 0.09 | <0.01 | | | 0.07 | <0.02 | 0.08 | <0.01 | 38.95 | <0.04 | <0.02 | | 18.01 | 0.03 | 0.03 | 1.02 | 1.67 | 38.07 | 98.02 |
| LE037_ap_026 | 0.11 | <0.01 | | | <0.07 | 0.02 | 0.06 | <0.01 | 39.08 | <0.04 | 0.02 | | 17.87 | 0.02 | <0.02 | 1.02 | 1.87 | 37.84 | 97.90 |
| LE037_ap_027 | 0.09 | <0.01 | | | 0.07 | 0.02 | 0.03 | <0.01 | 39.26 | <0.03 | <0.02 | | 17.96 | 0.01 | <0.02 | 0.64 | 2.06 | 38.00 | 98.14 |
| LE037_ap_028 | 0.04 | <0.01 | | | <0.06 | 0.03 | 0.06 | <0.01 | 39.35 | <0.04 | <0.02 | | 18.10 | 0.02 | <0.02 | 0.79 | 2.02 | 38.17 | 98.58 |
| LE037_ap_029 | 0.09 | <0.01 | | | 0.09 | <0.02 | 0.06 | <0.01 | 38.93 | <0.04 | <0.02 | | 18.12 | 0.01 | <0.02 | 1.08 | 1.73 | 38.14 | 98.26 |
| LE037_ap_030 | 0.14 | <0.01 | | | 0.10 | <0.02 | 0.04 | <0.01 | 38.96 | <0.03 | 0.02 | | 17.87 | 0.02 | <0.02 | 0.66 | 2.30 | 37.74 | 97.85 |
| LE037_ap_031 | 0.10 | <0.01 | | | <0.07 | 0.05 | 0.07 | <0.01 | 38.99 | <0.04 | 0.04 | | 17.88 | 0.05 | <0.02 | 1.11 | 1.51 | 38.02 | 97.82 |
| LE037_ap_032 | 0.08 | <0.01 | | | <0.06 | 0.03 | <0.03 | <0.01 | 39.16 | <0.03 | <0.02 | | 17.96 | 0.02 | <0.02 | 0.87 | 1.99 | 37.94 | 98.04 |
| LE037_ap_033 | 0.12 | <0.01 | | | 0.10 | 0.02 | 0.08 | <0.01 | 39.13 | <0.04 | <0.02 | | 17.98 | 0.01 | <0.02 | 0.70 | 1.97 | 38.05 | 98.16 |
| LE037_ap_034 | 0.09 | <0.01 | | | 0.08 | 0.03 | 0.10 | <0.01 | 39.24 | 0.05 | <0.02 | | 18.06 | 0.05 | <0.02 | 0.87 | 2.02 | 38.18 | 98.78 |
| LE037_ap_035 | 0.11 | <0.01 | | | 0.08 | <0.02 | 0.04 | <0.01 | 39.07 | <0.04 | 0.04 | | 17.92 | 0.02 | <0.02 | 0.99 | 1.76 | 37.99 | 98.01 |
| LE037_ap_036 | 0.11 | <0.01 | | | <0.06 | 0.10 | 0.20 | 0.01 | 38.61 | <0.04 | 0.10 | | 17.76 | 0.17 | <0.02 | 1.89 | 1.88 | 37.65 | 98.49 |
| LE037_ap_037 | 0.11 | <0.01 | | | 0.12 | 0.04 | 0.06 | <0.01 | 39.09 | <0.04 | 0.02 | | 18.06 | 0.02 | <0.02 | 0.78 | 2.14 | 38.07 | 98.50 |

*all elements in wt. % (EMPA).

Appendix C: Eastern Sunda arc apatite trace element chemistry (EMPA)

| Analysis ID | Si | Al | La | Ce | Nd | Fe | Mn | Mg | Ca | Sr | Na | K | P | S | As | Cl | F | O.stoi. | TOTAL |
|---------------|------|-------|-------|------|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|---------|-------|
| LB037_ap_038 | 0.09 | <0.01 | | | 0.09 | 0.02 | 0.09 | <0.01 | 39.15 | <0.04 | 0.05 | | 17.95 | 0.03 | <0.02 | 1.05 | 1.98 | 37.94 | 98.43 |
| LB037_ap_039 | 0.06 | <0.01 | | | <0.06 | 0.02 | 0.06 | 0.01 | 39.12 | <0.04 | <0.02 | | 17.97 | 0.03 | <0.02 | 0.97 | 1.61 | 38.08 | 97.93 |
| LB037_ap_040 | 0.09 | <0.01 | | | <0.07 | <0.02 | 0.06 | <0.01 | 39.23 | <0.04 | <0.02 | | 18.03 | 0.01 | <0.02 | 0.72 | 1.95 | 38.11 | 98.20 |
| NEF-02_ap_001 | 0.05 | <0.01 | | | <0.06 | 0.05 | 0.11 | <0.01 | 38.65 | <0.03 | 0.04 | | 17.77 | 0.02 | <0.02 | 1.94 | 1.24 | 37.58 | 97.48 |
| NEF-02_ap_002 | 0.06 | <0.01 | | | 0.11 | 0.04 | 0.28 | <0.01 | 38.75 | 0.04 | 0.04 | | 17.99 | 0.03 | <0.02 | 0.39 | 2.63 | 37.75 | 98.10 |
| NEF-02_ap_003 | 0.05 | <0.01 | | | <0.06 | 0.14 | 0.46 | 0.03 | 38.71 | <0.03 | 0.04 | | 17.97 | 0.02 | <0.02 | 1.07 | 1.93 | 37.91 | 98.32 |
| NEF-02_ap_004 | 0.06 | <0.01 | | | 0.11 | <0.02 | 0.12 | <0.01 | 39.13 | <0.04 | 0.03 | | 17.92 | 0.06 | <0.02 | 0.42 | 2.67 | 37.79 | 98.31 |
| NEF-02_ap_005 | 0.07 | <0.01 | | | <0.06 | 0.05 | 0.14 | 0.01 | 38.55 | 0.04 | 0.07 | | 17.88 | 0.07 | <0.02 | 1.96 | 1.51 | 37.68 | 98.03 |
| NEF-02_ap_006 | 0.07 | <0.01 | | | <0.07 | 0.12 | 0.46 | 0.03 | 37.87 | <0.03 | 0.08 | | 17.73 | 0.04 | <0.02 | 3.25 | 0.68 | 37.37 | 97.68 |
| NEF-02_ap_007 | 0.08 | 0.01 | | | <0.06 | 0.16 | 0.30 | 0.02 | 38.12 | <0.04 | 0.07 | | 17.67 | 0.10 | <0.02 | 2.58 | 0.56 | 37.66 | 97.32 |
| NEF-02_ap_008 | 0.04 | <0.01 | | | <0.06 | <0.02 | 0.12 | <0.01 | 39.04 | <0.03 | <0.02 | | 18.00 | 0.01 | <0.02 | 0.88 | 1.54 | 38.07 | 97.70 |
| NEF-02_ap_009 | 0.08 | <0.01 | | | <0.07 | 0.14 | 0.38 | 0.02 | 38.83 | <0.04 | 0.09 | | 17.71 | 0.10 | <0.02 | 3.17 | 0.75 | 37.45 | 97.92 |
| NEF-02_ap_010 | 0.04 | <0.01 | | | 0.07 | 0.03 | 0.11 | <0.01 | 39.06 | <0.03 | 0.07 | | 17.91 | 0.03 | <0.02 | 0.79 | 2.29 | 37.76 | 98.17 |
| NEF-02_ap_011 | 0.06 | <0.01 | | | 0.08 | 0.14 | 0.34 | 0.02 | 37.89 | <0.04 | 0.11 | | 17.80 | 0.08 | <0.02 | 3.44 | 0.77 | 37.39 | 98.12 |
| NEF-02_ap_012 | 0.05 | <0.01 | | | <0.07 | 0.13 | 0.19 | <0.01 | 38.83 | <0.04 | 0.03 | | 17.95 | <0.01 | 0.02 | 1.27 | 1.88 | 37.76 | 98.00 |
| NEF-02_ap_013 | 0.05 | <0.01 | | | <0.07 | 0.04 | 0.20 | <0.01 | 39.20 | <0.04 | 0.05 | | 18.00 | 0.02 | <0.02 | 0.66 | 2.72 | 37.76 | 98.67 |
| NEF-02_ap_014 | 0.06 | <0.01 | | | <0.06 | 0.03 | 0.12 | <0.01 | 38.66 | <0.04 | 0.03 | | 17.83 | 0.02 | <0.02 | 1.66 | 1.35 | 37.69 | 97.47 |
| NEF-02_ap_015 | 0.03 | <0.01 | | | 0.07 | 0.04 | 0.29 | <0.01 | 39.01 | <0.04 | 0.05 | | 18.01 | 0.01 | <0.02 | 0.49 | 3.16 | 37.57 | 98.76 |
| NEF-02_ap_016 | 0.05 | <0.01 | | | <0.07 | <0.02 | 0.11 | <0.01 | 38.77 | <0.04 | 0.03 | | 17.99 | 0.02 | <0.02 | 1.42 | 1.69 | 37.83 | 97.91 |
| NEF-02_ap_017 | 0.06 | <0.01 | | | <0.06 | <0.02 | 0.07 | <0.01 | 38.97 | <0.04 | <0.02 | | 18.10 | <0.01 | <0.02 | 0.61 | 2.37 | 37.92 | 98.11 |
| NEF-02_ap_018 | 0.06 | <0.01 | | | 0.09 | 0.15 | 0.48 | 0.04 | 37.54 | <0.04 | 0.09 | | 17.64 | 0.07 | <0.02 | 3.90 | 0.47 | 37.13 | 97.67 |
| NEF-02_ap_019 | 0.07 | <0.01 | | | 0.08 | 0.07 | 0.32 | <0.01 | 38.37 | <0.04 | 0.05 | | 17.79 | 0.03 | <0.02 | 2.43 | 0.99 | 37.60 | 97.79 |
| NEF-02_ap_020 | 0.05 | <0.01 | | | <0.06 | 0.09 | 0.23 | <0.01 | 38.13 | <0.04 | 0.03 | | 17.79 | 0.01 | <0.02 | 3.28 | 0.55 | 37.41 | 97.56 |
| NEF-02_ap_021 | 0.05 | <0.01 | | | 0.10 | 0.03 | 0.15 | <0.01 | 38.82 | 0.04 | 0.04 | | 18.11 | 0.02 | <0.02 | 0.76 | 2.01 | 38.04 | 98.21 |
| NEF-02_ap_022 | 0.09 | <0.01 | | | <0.06 | 0.18 | 0.16 | 0.02 | 38.31 | 0.07 | 0.08 | | 17.80 | 0.11 | <0.02 | 2.10 | 0.89 | 37.85 | 97.64 |
| NEF-02_ap_023 | 0.03 | <0.01 | | | <0.06 | 0.05 | 0.29 | <0.01 | 38.98 | <0.04 | 0.03 | | 18.06 | <0.01 | <0.02 | 0.59 | 2.89 | 37.70 | 98.62 |
| NEF-02_ap_024 | 0.07 | <0.01 | | | 0.07 | 0.12 | 0.32 | 0.02 | 38.14 | <0.04 | 0.06 | | 17.68 | 0.09 | <0.02 | 2.45 | 0.86 | 37.54 | 97.42 |
| NEF-02_ap_025 | 0.06 | <0.01 | | | <0.07 | 0.17 | 0.37 | 0.03 | 38.10 | <0.04 | 0.07 | | 17.75 | 0.08 | <0.02 | 2.10 | 1.29 | 37.52 | 97.54 |
| NEF-02_ap_026 | 0.04 | <0.01 | | | <0.06 | 0.05 | 0.24 | <0.01 | 38.88 | <0.04 | 0.04 | | 18.13 | 0.01 | <0.02 | 0.39 | 3.02 | 37.75 | 98.59 |
| NEF-02_ap_027 | 0.05 | 0.01 | | | <0.07 | 0.02 | 0.11 | <0.01 | 38.66 | <0.04 | 0.05 | | 17.89 | 0.04 | <0.02 | 0.98 | 2.03 | 37.64 | 97.47 |
| NEF-02_ap_028 | 0.04 | <0.01 | | | <0.07 | 0.11 | 0.46 | 0.02 | 38.59 | <0.04 | 0.02 | | 17.84 | 0.02 | <0.02 | 1.24 | 1.51 | 37.74 | 97.30 |
| NEF-02_ap_029 | 0.06 | <0.01 | | | <0.07 | 0.05 | 0.11 | <0.01 | 38.66 | <0.04 | 0.06 | | 17.89 | 0.03 | <0.02 | 0.79 | 2.35 | 37.59 | 97.71 |
| NEF-02_ap_030 | 0.06 | <0.01 | | | 0.10 | 0.03 | 0.22 | <0.01 | 38.28 | <0.03 | 0.06 | | 17.71 | 0.10 | <0.02 | 2.04 | 1.16 | 37.60 | 97.49 |
| NEF-02_ap_031 | 0.07 | <0.01 | | | <0.06 | 0.22 | 0.18 | 0.02 | 38.28 | 0.04 | 0.09 | | 17.71 | 0.11 | <0.02 | 2.93 | 0.85 | 37.45 | 97.77 |
| NEF-02_ap_032 | 0.09 | <0.01 | | | 0.09 | 0.12 | 0.49 | 0.02 | 37.76 | 0.04 | 0.09 | | 17.71 | 0.11 | <0.02 | 2.93 | 0.85 | 37.45 | 97.77 |
| SLG-01_ap_001 | 0.03 | <0.01 | <0.09 | | <0.06 | 0.02 | 0.06 | <0.01 | 39.08 | <0.03 | <0.02 | 0.03 | 18.01 | 0.02 | <0.02 | 0.52 | 2.85 | 37.65 | 98.27 |
| SLG-01_ap_002 | 0.03 | <0.01 | <0.09 | | <0.06 | <0.02 | 0.08 | <0.01 | 39.11 | 0.05 | 0.02 | <0.04 | 17.96 | 0.01 | <0.02 | 0.75 | 2.61 | 37.67 | 98.29 |
| SLG-01_ap_003 | 0.02 | 0.01 | <0.09 | | 0.07 | 0.07 | 0.13 | <0.01 | 38.33 | <0.03 | 0.02 | <0.04 | 18.07 | 0.02 | <0.02 | 0.68 | 2.77 | 37.84 | 99.03 |
| SLG-01_ap_004 | 0.03 | <0.01 | <0.09 | | <0.06 | 0.05 | 0.08 | <0.01 | 39.29 | <0.04 | <0.02 | <0.03 | 18.09 | 0.02 | <0.02 | 0.46 | 2.98 | 37.78 | 98.75 |
| SLG-01_ap_005 | 0.02 | <0.01 | <0.09 | 0.10 | 0.08 | 0.05 | 0.06 | 0.01 | 39.47 | <0.04 | 0.02 | <0.03 | 18.14 | 0.02 | <0.02 | 0.62 | 2.85 | 37.98 | 99.44 |
| SLG-01_ap_006 | 0.02 | <0.01 | <0.09 | | <0.06 | <0.02 | 0.08 | <0.01 | 39.27 | <0.04 | 0.04 | | 18.14 | 0.01 | <0.02 | 0.51 | 2.80 | 37.91 | 98.78 |
| SLG-01_ap_007 | 0.02 | <0.01 | <0.09 | | <0.06 | 0.03 | 0.06 | <0.01 | 39.19 | <0.04 | <0.02 | <0.03 | 18.10 | 0.01 | <0.02 | 0.67 | 2.11 | 38.07 | 98.27 |
| SLG-01_ap_008 | 0.03 | <0.01 | <0.08 | | 0.08 | <0.02 | 0.06 | <0.01 | 39.13 | <0.03 | 0.02 | <0.04 | 18.03 | 0.02 | <0.02 | 0.67 | 2.94 | 37.62 | 98.60 |
| SLG-01_ap_009 | 0.02 | <0.01 | <0.08 | | 0.08 | 0.04 | 0.06 | <0.01 | 39.29 | <0.03 | <0.02 | <0.03 | 18.00 | <0.01 | <0.02 | 0.49 | 2.94 | 37.67 | 98.58 |
| SLG-01_ap_010 | 0.04 | 0.01 | <0.08 | | 0.08 | 0.04 | 0.06 | <0.01 | 38.65 | 0.05 | 0.03 | <0.03 | 17.89 | 0.01 | <0.02 | 0.55 | 2.75 | 37.40 | 97.56 |
| SLG-01_ap_011 | 0.04 | <0.01 | <0.08 | | 0.08 | <0.02 | 0.05 | <0.01 | 39.19 | <0.03 | 0.03 | <0.03 | 18.07 | <0.01 | <0.02 | 0.75 | 2.58 | 37.84 | 98.62 |
| SLG-01_ap_012 | 0.05 | <0.01 | <0.09 | | 0.08 | <0.02 | 0.04 | <0.01 | 39.34 | <0.03 | <0.02 | <0.03 | 18.22 | 0.01 | <0.02 | 0.52 | 2.54 | 38.15 | 98.95 |
| SLG-01_ap_013 | 0.02 | <0.01 | <0.09 | 0.16 | <0.07 | 0.02 | 0.09 | <0.01 | 39.38 | <0.03 | 0.03 | <0.04 | 18.08 | 0.04 | <0.02 | 0.53 | 2.83 | 37.91 | 99.09 |
| SLG-01_ap_014 | 0.04 | <0.01 | <0.09 | | <0.06 | 0.04 | 0.14 | <0.01 | 39.12 | <0.03 | 0.04 | 0.03 | 18.11 | 0.01 | 0.02 | 0.31 | 2.33 | 38.14 | 98.33 |
| SLG-01_ap_015 | 0.03 | 0.01 | <0.08 | 0.11 | <0.07 | 0.03 | 0.06 | 0.01 | 39.24 | <0.04 | 0.03 | <0.04 | 18.10 | 0.02 | <0.02 | 0.71 | 2.76 | 37.88 | 99.01 |

*all elements in wt. % (EMPA).

Appendix C: Eastern Sunda arc apatite trace element chemistry (EMPA)

| Analysis ID | Si | Al | La | Ce | Nd | Fe | Mn | Mg | Ca | Sr | Na | K | P | S | As | Cl | F | O stoil. | TOTAL |
|---------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|----------|-------|
| SLG-01_ap_016 | 0.03 | <0.01 | <0.09 | <0.09 | <0.07 | <0.02 | 0.06 | <0.01 | 39.26 | <0.04 | <0.02 | <0.03 | 18.00 | 0.01 | <0.02 | 0.42 | 2.86 | 37.70 | 98.35 |
| SLG-01_ap_017 | 0.02 | <0.01 | <0.09 | <0.09 | <0.06 | <0.02 | 0.05 | <0.01 | 39.29 | <0.04 | 0.03 | <0.04 | 18.03 | 0.01 | <0.02 | 0.67 | 2.62 | 37.81 | 98.54 |
| SLG-01_ap_018 | 0.04 | <0.01 | <0.08 | 0.15 | 0.09 | <0.02 | 0.05 | <0.01 | 38.93 | <0.03 | 0.04 | <0.03 | 18.11 | 0.01 | <0.02 | 0.46 | 2.67 | 37.83 | 98.38 |
| SLG-01_ap_019 | 0.02 | <0.01 | <0.09 | <0.09 | <0.06 | <0.02 | 0.07 | <0.01 | 39.19 | <0.03 | <0.02 | <0.04 | 18.07 | 0.02 | <0.02 | 0.59 | 2.68 | 37.82 | 98.46 |
| SLG-01_ap_020 | 0.02 | <0.01 | 0.08 | 0.13 | 0.09 | 0.04 | 0.07 | <0.01 | 39.05 | <0.03 | <0.02 | <0.04 | 17.94 | 0.01 | <0.02 | 0.48 | 2.61 | 37.69 | 98.21 |
| SLG-01_ap_021 | 0.02 | <0.01 | <0.09 | <0.1 | <0.07 | <0.02 | 0.04 | <0.01 | 38.95 | <0.04 | 0.03 | <0.04 | 17.95 | 0.01 | <0.02 | 0.59 | 2.79 | 37.49 | 97.87 |
| SLG-01_ap_022 | 0.02 | <0.01 | <0.09 | <0.09 | <0.06 | 0.03 | 0.08 | <0.01 | 39.24 | <0.04 | 0.02 | <0.04 | 18.04 | 0.02 | <0.02 | 0.55 | 2.60 | 37.82 | 98.51 |
| SLG-01_ap_023 | 0.02 | <0.01 | <0.09 | <0.09 | <0.07 | 0.03 | 0.06 | <0.01 | 39.18 | <0.03 | 0.02 | <0.04 | 18.02 | 0.02 | <0.02 | 0.55 | 2.55 | 37.79 | 98.24 |
| SLG-01_ap_024 | 0.02 | <0.01 | <0.09 | <0.09 | <0.07 | 0.03 | 0.09 | <0.01 | 38.98 | <0.03 | 0.03 | <0.03 | 17.96 | 0.01 | <0.02 | 0.65 | 2.76 | 37.56 | 98.09 |
| SLG-01_ap_025 | 0.18 | 0.05 | <0.08 | 0.10 | 0.11 | 0.05 | 0.09 | <0.01 | 38.26 | <0.03 | 0.03 | <0.03 | 17.59 | 0.02 | <0.02 | 0.53 | 2.70 | 37.12 | 96.83 |
| SLG-01_ap_026 | 0.07 | 0.04 | <0.09 | <0.09 | <0.07 | 0.03 | 0.06 | <0.01 | 39.30 | <0.04 | <0.02 | <0.03 | 18.01 | 0.03 | <0.02 | 0.50 | 2.82 | 37.84 | 98.72 |
| SLG-01_ap_027 | 0.05 | <0.01 | <0.09 | <0.09 | 0.06 | 0.04 | 0.05 | <0.01 | 39.09 | <0.03 | <0.02 | <0.03 | 17.95 | <0.01 | <0.02 | 0.54 | 3.07 | 37.50 | 98.36 |
| SLG-01_ap_028 | 0.03 | <0.01 | <0.09 | <0.09 | <0.06 | 0.04 | 0.09 | <0.01 | 39.29 | <0.04 | 0.05 | <0.03 | 18.00 | 0.02 | <0.02 | 0.50 | 2.83 | 37.74 | 98.63 |
| SLG-02_ap_001 | 0.08 | 0.01 | <0.09 | 0.22 | 0.08 | 0.09 | 0.19 | 0.03 | 37.75 | <0.04 | 0.13 | <0.03 | 17.61 | 0.05 | <0.02 | 4.15 | 0.38 | 37.11 | 97.89 |
| SLG-02_ap_002 | 0.08 | <0.01 | <0.09 | 0.28 | 0.17 | <0.02 | 0.04 | <0.01 | 38.56 | <0.03 | 0.03 | <0.03 | 17.70 | 0.03 | 0.03 | 0.77 | 0.77 | 37.75 | 97.37 |
| SLG-02_ap_003 | 0.09 | <0.01 | 0.09 | 0.23 | 0.10 | <0.02 | 0.08 | <0.01 | 38.58 | <0.04 | 0.03 | <0.04 | 17.70 | 0.03 | 0.03 | 1.84 | 0.34 | 37.98 | 97.13 |
| SLG-02_ap_004 | 0.07 | <0.01 | 0.13 | 0.16 | 0.09 | 0.10 | 0.15 | 0.03 | 38.00 | <0.04 | 0.12 | 0.03 | 17.62 | 0.04 | <0.02 | 4.35 | 0.38 | 37.14 | 98.40 |
| SLG-02_ap_005 | 0.09 | <0.01 | <0.09 | 0.26 | 0.15 | <0.02 | 0.07 | <0.01 | 38.43 | <0.04 | 0.03 | <0.04 | 17.78 | 0.02 | 0.02 | 2.17 | 0.43 | 37.88 | 97.32 |
| SLG-02_ap_006 | 0.06 | <0.01 | <0.09 | 0.19 | 0.10 | <0.02 | 0.03 | <0.01 | 38.63 | <0.03 | <0.02 | <0.04 | 17.84 | 0.01 | <0.02 | 1.31 | 0.88 | 37.96 | 97.02 |
| SLG-02_ap_007 | 0.06 | <0.01 | 0.10 | 0.18 | 0.15 | 0.10 | 0.09 | 0.03 | 38.16 | <0.04 | 0.13 | <0.03 | 17.75 | 0.06 | 0.02 | 3.58 | 0.79 | 37.38 | 98.59 |
| SLG-02_ap_008 | 0.07 | <0.01 | <0.08 | 0.13 | 0.08 | <0.02 | <0.03 | <0.01 | 38.96 | <0.03 | <0.02 | <0.04 | 18.01 | 0.01 | <0.02 | 0.53 | 1.27 | 38.32 | 97.38 |
| SLG-02_ap_009 | 0.08 | <0.01 | 0.11 | 0.23 | 0.08 | <0.02 | <0.03 | <0.01 | 38.72 | <0.04 | 0.02 | 0.03 | 17.83 | 0.01 | 0.04 | 1.30 | 0.49 | 38.19 | 97.13 |
| SLG-02_ap_010 | 0.08 | <0.01 | 0.09 | 0.24 | 0.13 | <0.02 | 0.06 | <0.01 | 38.60 | <0.04 | 0.03 | <0.04 | 17.69 | 0.03 | 0.03 | 1.92 | 0.64 | 37.80 | 97.33 |
| SLG-02_ap_011 | 0.06 | <0.01 | <0.09 | 0.12 | 0.08 | <0.02 | 0.06 | <0.01 | 38.95 | <0.03 | 0.02 | <0.04 | 17.89 | <0.01 | <0.02 | 1.30 | 0.34 | 38.37 | 97.18 |
| SLG-02_ap_012 | 0.07 | <0.01 | <0.09 | 0.25 | 0.09 | 0.12 | 0.18 | 0.03 | 37.94 | <0.04 | 0.16 | <0.03 | 17.65 | 0.13 | <0.02 | 4.12 | 0.49 | 37.32 | 98.55 |
| SLG-02_ap_013 | 0.08 | <0.01 | 0.10 | 0.27 | 0.10 | <0.02 | 0.06 | <0.01 | 38.52 | <0.04 | <0.02 | <0.04 | 17.69 | 0.03 | <0.02 | 2.48 | 0.09 | 37.86 | 97.29 |
| SLG-02_ap_014 | 0.08 | <0.01 | <0.09 | 0.16 | 0.15 | <0.02 | 0.06 | <0.01 | 38.64 | <0.04 | 0.02 | <0.04 | 17.81 | 0.01 | 0.04 | 1.73 | 0.62 | 37.99 | 97.29 |
| SLG-02_ap_015 | 0.07 | <0.01 | 0.11 | 0.21 | 0.15 | <0.02 | 0.07 | <0.01 | 38.61 | <0.04 | 0.03 | <0.04 | 17.82 | 0.02 | 0.05 | 2.07 | 0.58 | 37.97 | 97.77 |
| SLG-02_ap_016 | 0.06 | <0.01 | <0.09 | 0.15 | <0.07 | 0.15 | 0.14 | 0.04 | 38.37 | <0.04 | 0.09 | <0.03 | 17.79 | 0.08 | <0.02 | 3.18 | 1.00 | 37.52 | 98.56 |
| SLG-02_ap_017 | 0.08 | <0.01 | <0.09 | 0.14 | 0.07 | <0.02 | 0.04 | <0.01 | 38.60 | <0.04 | <0.02 | <0.04 | 17.80 | 0.01 | 0.04 | 1.48 | 0.54 | 38.01 | 96.82 |
| SLG-02_ap_018 | 0.08 | 0.01 | <0.09 | 0.23 | 0.12 | <0.02 | <0.03 | <0.01 | 38.70 | <0.04 | 0.02 | <0.03 | 17.76 | 0.02 | 0.02 | 2.35 | 0.35 | 37.92 | 97.58 |
| SLG-02_ap_019 | 0.07 | <0.01 | 0.10 | 0.18 | 0.09 | <0.02 | 0.05 | <0.01 | 38.89 | <0.04 | 0.02 | <0.03 | 17.76 | 0.02 | 0.04 | 2.28 | 0.37 | 38.00 | 97.92 |
| SLG-02_ap_020 | 0.08 | <0.01 | <0.09 | 0.19 | 0.13 | <0.02 | <0.03 | <0.01 | 38.30 | <0.04 | 0.03 | <0.03 | 17.70 | 0.03 | <0.02 | 2.05 | 0.22 | 37.82 | 96.54 |
| SLG-02_ap_021 | 0.10 | <0.01 | 0.11 | 0.13 | 0.07 | 0.03 | 0.03 | <0.01 | 38.79 | <0.03 | 0.03 | <0.03 | 17.81 | 0.03 | 0.03 | 1.50 | 1.07 | 37.95 | 97.67 |
| SLG-02_ap_022 | 0.07 | <0.01 | 0.10 | 0.24 | 0.10 | 0.12 | 0.13 | 0.03 | 38.19 | <0.04 | 0.12 | <0.03 | 17.78 | 0.06 | <0.02 | 3.24 | 0.81 | 37.54 | 98.53 |
| SLG-02_ap_023 | 0.10 | <0.01 | <0.09 | 0.16 | 0.17 | <0.02 | 0.05 | <0.01 | 38.65 | <0.03 | 0.03 | <0.04 | 17.68 | 0.02 | 0.02 | 1.95 | 0.31 | 37.93 | 97.07 |
| SLG-02_ap_024 | 0.06 | 0.02 | <0.09 | <0.1 | 0.08 | <0.02 | <0.03 | <0.01 | 39.01 | <0.04 | <0.02 | <0.04 | 17.91 | 0.01 | 0.03 | 0.80 | 1.38 | 38.09 | 97.39 |
| SLG-02_ap_025 | 0.09 | <0.01 | <0.09 | 0.19 | 0.12 | <0.02 | 0.06 | <0.01 | 38.80 | <0.04 | <0.02 | <0.04 | 17.81 | 0.02 | 0.04 | 1.50 | 1.12 | 37.92 | 97.67 |
| SLG-02_ap_026 | 0.07 | <0.01 | 0.10 | 0.17 | 0.09 | <0.02 | 0.06 | <0.01 | 38.46 | <0.04 | 0.03 | <0.03 | 17.72 | 0.03 | <0.02 | 1.99 | <0.07 | 38.01 | 96.77 |
| SLG-02_ap_027 | 0.12 | <0.01 | 0.12 | 0.18 | 0.17 | <0.02 | 0.04 | <0.01 | 38.53 | <0.04 | 0.02 | <0.04 | 17.88 | 0.02 | 0.02 | 1.23 | 0.54 | 38.22 | 97.10 |
| ELF-02_ap_001 | 0.04 | <0.01 | <0.09 | 0.11 | 0.11 | 0.08 | 0.22 | 0.02 | 38.92 | <0.04 | 0.04 | <0.03 | 18.00 | 0.01 | 0.02 | 0.37 | 3.27 | 37.54 | 98.73 |
| ELF-02_ap_002 | 0.02 | <0.01 | <0.09 | <0.1 | <0.06 | 0.12 | 0.25 | 0.02 | 38.96 | <0.03 | 0.05 | <0.04 | 18.06 | 0.02 | 0.03 | 0.63 | 2.99 | 37.68 | 98.83 |
| ELF-02_ap_003 | 0.05 | <0.01 | <0.09 | 0.14 | 0.08 | 0.03 | 0.05 | <0.01 | 39.13 | <0.03 | 0.05 | <0.03 | 18.01 | 0.02 | <0.02 | 0.23 | 3.10 | 37.69 | 98.59 |
| ELF-02_ap_004 | 0.06 | <0.01 | <0.09 | <0.09 | <0.06 | 0.11 | 0.19 | 0.02 | 39.15 | <0.04 | 0.05 | <0.03 | 18.03 | 0.03 | 0.03 | 0.36 | 3.12 | 37.77 | 98.95 |
| ELF-02_ap_005 | <0.01 | <0.01 | <0.09 | <0.09 | <0.06 | 0.15 | 0.48 | 0.03 | 38.82 | <0.04 | 0.05 | <0.03 | 18.03 | 0.06 | <0.02 | 0.63 | 2.97 | 37.69 | 98.96 |
| ELF-02_ap_006 | 0.03 | <0.01 | <0.08 | 0.09 | <0.06 | 0.14 | 0.23 | 0.02 | 38.93 | <0.04 | 0.05 | <0.04 | 18.12 | 0.03 | <0.02 | 0.55 | 3.15 | 37.75 | 99.09 |
| ELF-02_ap_007 | 0.02 | <0.01 | <0.09 | <0.1 | <0.06 | 0.07 | 0.19 | 0.01 | 37.76 | <0.04 | <0.02 | <0.04 | 17.85 | 0.02 | <0.02 | 0.27 | 3.58 | 37.27 | 97.52 |
| ELF-02_ap_008 | 0.07 | <0.01 | <0.08 | <0.1 | 0.06 | 0.15 | 0.25 | 0.01 | 38.80 | <0.03 | 0.04 | <0.04 | 17.85 | 0.03 | 0.03 | 0.28 | 3.34 | 37.36 | 98.27 |
| ELF-02_ap_009 | 0.01 | <0.01 | <0.09 | <0.09 | <0.07 | 0.11 | 0.18 | 0.03 | 39.08 | <0.04 | <0.02 | <0.04 | 18.18 | 0.03 | 0.03 | 0.46 | 3.29 | 37.77 | 99.17 |
| ELF-02_ap_010 | 0.03 | <0.01 | <0.09 | <0.09 | <0.06 | 0.17 | 0.30 | 0.03 | 38.93 | 0.04 | 0.06 | <0.03 | 18.12 | 0.04 | <0.02 | 0.41 | 3.53 | 37.66 | 99.31 |

*all elements in wt. % (EMPA).

Appendix C: Eastern Sunda arc apatite trace element chemistry (EMPA)

| Analysis ID | Si | Al | La | Ce | Nd | Fe | Mn | Mg | Ca | Sr | Na | K | P | S | As | Cl | F | O sol. | TOTAL |
|---------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|--------|--------|
| ELF-02_ap_011 | 0.01 | <0.01 | <0.08 | <0.09 | <0.07 | 0.11 | 0.59 | 0.02 | 38.83 | <0.04 | 0.07 | <0.03 | 18.04 | 0.03 | <0.02 | 0.66 | 2.67 | 37.82 | 98.86 |
| ELF-02_ap_012 | 0.02 | <0.01 | <0.09 | <0.09 | <0.06 | <0.06 | <0.03 | <0.01 | 39.40 | 0.04 | 0.08 | <0.04 | 17.96 | 0.22 | <0.02 | 0.07 | 3.66 | 37.77 | 99.27 |
| ELF-02_ap_013 | 0.02 | <0.01 | <0.08 | <0.09 | <0.06 | 0.05 | 0.12 | <0.01 | 39.49 | <0.04 | <0.02 | <0.04 | 18.24 | 0.02 | 0.02 | 0.29 | 3.18 | 38.01 | 99.45 |
| ELF-02_ap_014 | 0.03 | <0.01 | 0.09 | <0.09 | <0.07 | 0.10 | 0.23 | 0.01 | 39.06 | <0.04 | 0.04 | <0.03 | 18.07 | 0.02 | <0.02 | 0.24 | 3.54 | 37.61 | 99.05 |
| ELF-02_ap_015 | 0.02 | <0.01 | <0.09 | <0.09 | 0.07 | 0.10 | 0.22 | 0.02 | 39.61 | <0.04 | 0.04 | <0.04 | 18.20 | 0.02 | <0.02 | 0.43 | 3.40 | 37.99 | 100.12 |
| ELF-02_ap_016 | 0.06 | <0.01 | <0.08 | <0.09 | <0.06 | 0.15 | 0.22 | 0.02 | 38.86 | <0.04 | 0.05 | <0.03 | 18.20 | 0.02 | <0.02 | 0.36 | 3.56 | 37.70 | 99.21 |
| ELF-02_ap_017 | 0.02 | <0.01 | <0.08 | 0.13 | 0.07 | 0.16 | 0.30 | 0.03 | 38.97 | 0.05 | 0.03 | <0.04 | 18.08 | 0.01 | <0.02 | 0.50 | 3.03 | 37.78 | 99.15 |
| ELF-02_ap_018 | 0.02 | <0.01 | <0.08 | <0.09 | <0.07 | 0.11 | 0.28 | 0.01 | 38.91 | 0.04 | 0.06 | <0.04 | 18.16 | 0.01 | <0.02 | 0.39 | 3.46 | 37.65 | 99.09 |
| ELF-02_ap_019 | 0.04 | <0.01 | <0.09 | <0.1 | 0.06 | 0.02 | 0.09 | <0.01 | 39.34 | <0.04 | 0.02 | <0.03 | 18.13 | 0.02 | 0.03 | 2.93 | 3.79 | 37.96 | 98.93 |
| ELF-02_ap_020 | 0.02 | <0.01 | <0.09 | <0.09 | <0.07 | 0.13 | 0.22 | 0.02 | 38.92 | 0.04 | 0.06 | <0.03 | 18.04 | 0.04 | <0.02 | 0.51 | 3.26 | 37.57 | 98.81 |
| ELF-02_ap_021 | <0.01 | <0.01 | <0.09 | 0.14 | <0.06 | 0.06 | 0.16 | <0.01 | 39.20 | <0.04 | 0.05 | <0.03 | 18.17 | 0.02 | <0.02 | 0.32 | 3.45 | 37.73 | 99.31 |
| ELF-02_ap_022 | 0.02 | <0.01 | <0.08 | <0.09 | 0.12 | 0.07 | 0.09 | 0.01 | 39.31 | <0.04 | 0.03 | <0.03 | 18.19 | 0.03 | <0.02 | 0.19 | 3.26 | 37.97 | 99.30 |
| ELF-02_ap_023 | <0.01 | <0.01 | <0.08 | 0.12 | <0.07 | 0.11 | 0.25 | 0.02 | 39.08 | <0.04 | 0.02 | <0.03 | 17.98 | 0.02 | <0.02 | 0.39 | 3.10 | 37.62 | 98.72 |
| ELF-02_ap_024 | <0.01 | <0.01 | <0.09 | <0.09 | <0.06 | 0.10 | 0.18 | 0.01 | 39.23 | 0.05 | 0.03 | <0.04 | 18.12 | 0.01 | 0.03 | 0.27 | 3.46 | 37.68 | 99.18 |
| ELF-02_ap_025 | <0.01 | <0.01 | <0.09 | <0.1 | 0.07 | 0.04 | 0.10 | <0.01 | 39.24 | <0.04 | 0.04 | <0.03 | 17.96 | 0.01 | <0.02 | 0.20 | 2.67 | 37.80 | 98.12 |
| ELF-02_ap_026 | 0.02 | <0.01 | <0.09 | <0.09 | <0.06 | 0.14 | 0.28 | 0.03 | 39.02 | 0.04 | 0.05 | <0.03 | 18.00 | 0.02 | 0.02 | 0.46 | 2.99 | 37.70 | 98.78 |
| ELF-02_ap_027 | 0.02 | <0.01 | <0.08 | <0.09 | 0.07 | 0.14 | 0.19 | 0.02 | 38.93 | 0.04 | 0.04 | <0.04 | 18.09 | 0.02 | <0.02 | 0.61 | 2.89 | 37.75 | 98.79 |
| ELF-02_ap_028 | 0.02 | <0.01 | <0.08 | 0.13 | 0.07 | 0.24 | 0.39 | 0.04 | 38.60 | 0.04 | 0.07 | <0.03 | 18.04 | 0.03 | <0.02 | 0.63 | 3.11 | 37.60 | 99.03 |
| ELF-02_ap_029 | 0.04 | <0.01 | <0.08 | <0.09 | <0.06 | 0.13 | 0.23 | 0.03 | 39.07 | <0.04 | 0.04 | <0.03 | 18.15 | 0.02 | <0.02 | 0.42 | 3.29 | 37.81 | 99.22 |
| ELF-02_ap_030 | 0.03 | <0.01 | <0.09 | <0.09 | <0.06 | 0.19 | 0.30 | 0.03 | 38.96 | 0.05 | 0.10 | <0.03 | 17.93 | 0.14 | <0.02 | 0.58 | 3.01 | 37.75 | 99.08 |
| ELF-02_ap_031 | 0.02 | <0.01 | <0.09 | <0.1 | <0.06 | 0.06 | 0.13 | 0.01 | 39.38 | <0.03 | 0.03 | <0.03 | 18.08 | 0.02 | <0.02 | 0.37 | 2.74 | 37.97 | 98.82 |
| ELF-02_ap_032 | 0.02 | <0.01 | <0.08 | 0.11 | <0.07 | <0.02 | 0.11 | <0.01 | 39.21 | <0.03 | 0.04 | <0.04 | 18.19 | 0.01 | <0.02 | 0.24 | 3.22 | 37.85 | 99.00 |
| ELF-02_ap_033 | <0.01 | <0.01 | <0.09 | <0.09 | <0.06 | 0.21 | 0.63 | 0.04 | 38.54 | 0.06 | 0.06 | <0.03 | 18.03 | 0.10 | <0.02 | 0.76 | 2.98 | 37.70 | 99.11 |
| ELF-01_ap_001 | 0.04 | 0.01 | <0.09 | <0.09 | <0.06 | 0.09 | 0.14 | <0.01 | 38.95 | <0.03 | 0.03 | <0.04 | 17.97 | 0.01 | 0.04 | 1.26 | 2.01 | 37.80 | 98.36 |
| ELF-01_ap_002 | 0.05 | <0.01 | <0.08 | 0.19 | 0.09 | 0.11 | 0.25 | 0.03 | 38.64 | <0.04 | 0.05 | <0.04 | 17.92 | 0.03 | <0.02 | 0.92 | 2.39 | 37.65 | 98.32 |
| ELF-01_ap_003 | 0.02 | <0.01 | <0.08 | <0.09 | <0.06 | 0.08 | 0.19 | 0.01 | 39.10 | 0.05 | 0.05 | <0.04 | 18.00 | 0.01 | <0.02 | 0.52 | 2.72 | 37.78 | 98.54 |
| ELF-01_ap_004 | 0.02 | <0.01 | <0.09 | <0.09 | 0.07 | 0.08 | 0.22 | 0.02 | 38.94 | <0.04 | 0.06 | <0.04 | 18.08 | 0.01 | <0.02 | 0.77 | 2.31 | 37.91 | 98.49 |
| ELF-01_ap_005 | 0.07 | <0.01 | 0.16 | 0.15 | 0.10 | 0.13 | 0.21 | 0.02 | 38.87 | 0.04 | 0.06 | <0.04 | 18.09 | 0.03 | 0.03 | 1.02 | 2.53 | 37.92 | 99.41 |
| ELF-01_ap_006 | 0.06 | <0.01 | <0.09 | <0.09 | <0.07 | 0.15 | 0.27 | 0.03 | 38.33 | <0.03 | 0.06 | <0.03 | 17.83 | 0.03 | <0.02 | 1.01 | 2.41 | 37.36 | 97.53 |
| ELF-01_ap_007 | 0.03 | <0.01 | <0.09 | 0.15 | 0.08 | 0.10 | 0.14 | 0.02 | 39.13 | <0.04 | 0.05 | <0.04 | 18.03 | 0.01 | <0.02 | 0.79 | 2.44 | 37.90 | 98.86 |
| ELF-01_ap_008 | 0.05 | <0.01 | <0.09 | <0.09 | 0.17 | 0.09 | 0.20 | 0.02 | 38.78 | <0.04 | 0.08 | <0.03 | 18.04 | 0.06 | <0.02 | 1.01 | 2.32 | 37.91 | 98.74 |
| ELF-01_ap_009 | 0.02 | <0.01 | 0.08 | <0.09 | <0.06 | 0.08 | 0.22 | 0.02 | 39.07 | <0.04 | 0.03 | <0.03 | 18.16 | 0.03 | <0.02 | 0.53 | 2.70 | 37.99 | 98.94 |
| ELF-01_ap_010 | 0.05 | <0.01 | 0.09 | 0.10 | 0.12 | 0.15 | 0.12 | 0.04 | 38.46 | 0.04 | 0.10 | <0.03 | 17.82 | 0.05 | <0.02 | 2.42 | 1.28 | 37.61 | 98.44 |
| ELF-01_ap_011 | 0.03 | <0.01 | <0.09 | <0.09 | <0.06 | 0.05 | 0.10 | <0.01 | 39.32 | <0.03 | 0.04 | <0.03 | 18.01 | 0.02 | <0.02 | 0.41 | 2.81 | 37.82 | 98.62 |
| ELF-01_ap_012 | 0.13 | <0.01 | <0.08 | <0.1 | <0.06 | 0.08 | 0.22 | <0.01 | 38.92 | <0.04 | 0.06 | <0.03 | 17.89 | 0.07 | <0.02 | 0.59 | 2.75 | 37.73 | 98.44 |
| ELF-01_ap_013 | 0.03 | <0.01 | <0.09 | 0.23 | 0.08 | 0.17 | 0.33 | 0.06 | 38.32 | 0.06 | 0.12 | <0.04 | 17.99 | 0.07 | <0.02 | 1.61 | 1.85 | 37.82 | 98.73 |
| ELF-01_ap_014 | 0.04 | <0.01 | <0.09 | <0.1 | <0.07 | 0.09 | 0.19 | 0.01 | 39.15 | <0.04 | 0.05 | <0.03 | 18.03 | 0.03 | <0.02 | 0.90 | 2.29 | 37.94 | 98.73 |
| ELF-01_ap_015 | 0.02 | <0.01 | <0.09 | <0.09 | <0.06 | 0.12 | 0.23 | 0.04 | 39.03 | <0.03 | 0.05 | <0.04 | 18.01 | 0.01 | <0.02 | 0.93 | 2.21 | 37.90 | 98.56 |
| ELF-01_ap_016 | 0.02 | <0.01 | <0.09 | <0.09 | <0.07 | 0.08 | 0.15 | 0.02 | 39.27 | <0.03 | 0.04 | <0.03 | 18.20 | 0.01 | <0.02 | 0.69 | 2.45 | 38.13 | 99.06 |
| ELF-01_ap_017 | 0.08 | <0.01 | <0.08 | <0.09 | 0.08 | 0.05 | 0.27 | <0.01 | 39.09 | <0.04 | 0.04 | <0.03 | 18.02 | 0.09 | <0.02 | 0.59 | 2.60 | 38.03 | 98.95 |
| ELF-01_ap_018 | 0.01 | <0.01 | <0.08 | <0.1 | <0.06 | 0.21 | 0.35 | 0.04 | 38.60 | <0.04 | 0.08 | <0.03 | 17.97 | 0.02 | <0.02 | 0.88 | 2.55 | 37.63 | 98.36 |
| ELF-01_ap_019 | 0.13 | <0.01 | <0.08 | 0.10 | 0.07 | 0.07 | 0.18 | 0.02 | 38.56 | 0.04 | 0.04 | <0.04 | 17.66 | 0.02 | 0.03 | 0.54 | 2.38 | 37.40 | 97.23 |
| ELF-01_ap_020 | 0.02 | <0.01 | <0.09 | <0.09 | 0.10 | 0.14 | 0.20 | 0.03 | 38.76 | <0.03 | 0.04 | <0.04 | 18.06 | <0.01 | <0.02 | 0.91 | 1.12 | 37.90 | 98.29 |
| ELF-01_ap_021 | 0.03 | <0.01 | <0.09 | <0.09 | 0.06 | 0.06 | 0.16 | 0.01 | 38.82 | <0.04 | 0.05 | <0.04 | 18.05 | 0.01 | <0.02 | 1.14 | 2.21 | 37.79 | 98.40 |
| ELF-01_ap_022 | 0.04 | <0.01 | <0.08 | <0.09 | 0.10 | 0.16 | 0.22 | 0.04 | 38.86 | <0.04 | 0.06 | <0.03 | 18.01 | 0.01 | 0.04 | 0.61 | 2.59 | 37.81 | 98.54 |
| ELF-01_ap_023 | 0.04 | <0.01 | <0.09 | <0.09 | <0.07 | 0.10 | 0.19 | 0.02 | 38.90 | <0.03 | 0.05 | <0.03 | 18.06 | 0.02 | <0.02 | 0.73 | 2.34 | 37.90 | 98.39 |
| ELF-01_ap_024 | 0.05 | <0.01 | <0.08 | 0.14 | <0.07 | 0.06 | 0.08 | 0.02 | 39.16 | 0.04 | 0.05 | <0.04 | 17.94 | 0.03 | <0.02 | 0.79 | 2.34 | 37.87 | 98.51 |
| ELF-01_ap_025 | 0.01 | <0.01 | <0.08 | <0.09 | <0.06 | 0.06 | 0.33 | 0.01 | 39.05 | <0.04 | <0.02 | <0.03 | 18.01 | 0.02 | 0.03 | 0.48 | 2.72 | 37.79 | 98.52 |
| ELF-01_ap_026 | 0.04 | <0.01 | <0.09 | <0.09 | <0.06 | 0.09 | 0.13 | <0.01 | 38.88 | <0.04 | 0.06 | <0.03 | 17.93 | 0.02 | <0.02 | 0.92 | 2.36 | 37.67 | 98.10 |
| ELF-01_ap_027 | 0.05 | <0.01 | <0.09 | 0.10 | <0.07 | 0.08 | 0.22 | 0.02 | 38.66 | <0.04 | 0.09 | <0.03 | 18.01 | 0.04 | <0.02 | 1.16 | 2.31 | 37.75 | 98.51 |

*all elements in wt. % (EMPA).

Appendix C: Eastern Sunda arc apatite trace element chemistry (EMPA)

| Analysis ID | Si | Al | La | Ce | Nd | Fe | Mn | Mg | Ca | Sr | Na | K | P | S | As | Cl | F | O.soi. | TOTAL |
|---------------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|--------|-------|
| ELF-01_ap_028 | 0.06 | <0.01 | <0.09 | 0.12 | <0.06 | 0.11 | 0.15 | 0.03 | 38.96 | <0.04 | 0.04 | <0.03 | 17.90 | 0.01 | <0.02 | 1.02 | 2.25 | 37.72 | 98.37 |
| ELF-01_ap_029 | 0.01 | <0.01 | <0.08 | <0.09 | <0.06 | 0.11 | 0.22 | 0.04 | 38.82 | 0.05 | 0.02 | <0.03 | 18.04 | 0.01 | <0.02 | 0.80 | 2.66 | 37.69 | 98.46 |
| ELF-01_ap_030 | 0.02 | <0.01 | <0.08 | <0.09 | 0.08 | 0.04 | 0.18 | <0.01 | 39.12 | <0.03 | 0.04 | <0.03 | 18.12 | <0.01 | <0.02 | 0.52 | 2.48 | 38.01 | 98.62 |
| ELF-01_ap_031 | 0.03 | <0.01 | <0.09 | 0.09 | <0.07 | 0.12 | 0.21 | 0.02 | 38.90 | 0.04 | 0.06 | <0.03 | 18.00 | 0.04 | <0.02 | 0.66 | 2.67 | 37.76 | 98.61 |
| ELF-01_ap_032 | 0.02 | <0.01 | <0.08 | <0.09 | <0.06 | 0.04 | 0.06 | <0.01 | 39.03 | <0.04 | 0.04 | <0.03 | 18.04 | 0.01 | <0.02 | 0.74 | 2.42 | 37.80 | 98.21 |
| LEB025_ap_001 | 0.05 | <0.01 | <0.09 | <0.09 | <0.06 | <0.02 | 0.03 | <0.01 | 38.96 | <0.04 | <0.02 | <0.03 | 17.90 | 0.05 | 0.03 | 1.68 | 1.32 | 37.90 | 97.93 |
| LEB025_ap_002 | 0.26 | <0.01 | 0.20 | 0.32 | <0.07 | 0.04 | 0.07 | <0.01 | 38.02 | <0.04 | 0.06 | <0.03 | 17.32 | 0.18 | <0.02 | 4.48 | <0.07 | 37.28 | 98.23 |
| LEB025_ap_003 | 0.09 | <0.01 | <0.09 | <0.09 | 0.09 | <0.02 | 0.06 | <0.01 | 38.99 | <0.04 | 0.02 | <0.04 | 17.88 | 0.05 | <0.02 | 0.68 | 1.74 | 38.03 | 97.64 |
| LEB025_ap_004 | 0.08 | <0.01 | <0.09 | 0.12 | <0.06 | <0.02 | 0.04 | <0.01 | 39.10 | <0.04 | <0.02 | <0.03 | 17.83 | 0.04 | 0.05 | 1.35 | 0.84 | 38.18 | 97.63 |
| LEB025_ap_005 | 0.06 | <0.01 | <0.09 | 0.15 | 0.08 | <0.02 | 0.04 | <0.01 | 38.80 | <0.04 | 0.03 | <0.03 | 17.82 | 0.04 | 0.03 | 1.23 | 0.60 | 38.18 | 97.06 |
| LEB025_ap_006 | 0.07 | <0.01 | <0.08 | 0.10 | <0.06 | 0.02 | <0.03 | <0.01 | 38.93 | <0.04 | 0.03 | <0.03 | 17.94 | 0.06 | 0.03 | 0.95 | 2.03 | 37.86 | 98.01 |
| LEB025_ap_007 | 0.05 | <0.01 | <0.09 | <0.09 | <0.06 | <0.02 | 0.03 | <0.01 | 39.08 | <0.03 | <0.02 | <0.04 | 18.07 | 0.04 | 0.03 | 1.39 | 1.34 | 38.21 | 98.20 |
| LEB025_ap_008 | 0.10 | <0.01 | <0.08 | <0.09 | 0.13 | <0.02 | 0.05 | <0.01 | 38.75 | <0.04 | <0.02 | <0.03 | 17.86 | 0.04 | 0.03 | 1.80 | 0.82 | 38.03 | 97.58 |
| LEB025_ap_009 | 0.06 | <0.01 | <0.09 | <0.09 | <0.06 | <0.02 | <0.03 | <0.01 | 39.23 | <0.04 | <0.02 | <0.03 | 17.91 | 0.04 | 0.03 | 1.51 | 1.38 | 38.02 | 98.16 |
| LEB025_ap_010 | 0.04 | <0.01 | 0.10 | <0.09 | 0.07 | <0.02 | <0.03 | <0.01 | 38.85 | <0.04 | <0.02 | <0.03 | 17.90 | 0.04 | 0.03 | 1.92 | 1.13 | 37.89 | 98.02 |
| LEB025_ap_011 | 0.08 | <0.01 | 0.09 | 0.16 | 0.07 | <0.02 | <0.03 | <0.01 | 39.00 | <0.04 | <0.02 | <0.03 | 17.85 | 0.05 | <0.02 | 1.01 | 1.34 | 38.06 | 97.72 |
| LEB025_ap_012 | 0.05 | <0.01 | <0.09 | <0.09 | <0.07 | <0.02 | <0.03 | <0.01 | 38.32 | <0.04 | <0.02 | <0.04 | 18.01 | 0.01 | <0.02 | 0.91 | 1.75 | 38.11 | 98.17 |
| LEB025_ap_013 | 0.05 | <0.01 | <0.09 | <0.09 | 0.09 | 0.03 | 0.18 | <0.01 | 39.11 | <0.04 | 0.02 | <0.03 | 17.95 | 0.02 | 0.03 | 0.86 | 2.71 | 37.65 | 98.70 |
| LEB025_ap_014 | 0.06 | <0.01 | <0.08 | <0.1 | <0.06 | <0.02 | 0.03 | <0.01 | 39.07 | <0.04 | <0.02 | <0.04 | 17.90 | 0.04 | 0.03 | 1.35 | 1.95 | 37.75 | 98.19 |
| LEB025_ap_015 | 0.02 | <0.01 | <0.09 | <0.09 | <0.07 | <0.02 | 0.06 | <0.01 | 39.04 | <0.03 | <0.02 | <0.03 | 17.94 | 0.04 | <0.02 | 2.22 | 1.31 | 37.82 | 98.44 |
| LEB025_ap_016 | 0.07 | <0.01 | <0.08 | <0.09 | <0.06 | <0.02 | <0.03 | <0.01 | 39.13 | <0.03 | <0.02 | <0.03 | 17.92 | 0.06 | 0.02 | 1.21 | 1.50 | 38.08 | 98.00 |
| LEB025_ap_017 | 0.10 | <0.01 | <0.09 | <0.1 | <0.06 | <0.02 | <0.03 | 0.01 | 39.20 | <0.04 | 0.02 | <0.03 | 17.93 | 0.05 | 0.03 | 0.75 | 0.95 | 38.47 | 97.52 |
| LEB025_ap_018 | 0.09 | <0.01 | <0.09 | <0.09 | 0.09 | <0.02 | 0.03 | <0.01 | 39.16 | <0.04 | <0.02 | <0.04 | 17.93 | 0.07 | <0.02 | 0.55 | 0.77 | 38.58 | 97.26 |
| LEB025_ap_019 | 0.06 | <0.01 | 0.14 | 0.16 | <0.06 | 0.03 | 0.10 | 0.02 | 38.36 | <0.03 | 0.07 | <0.03 | 17.67 | 0.05 | <0.02 | 3.38 | 0.44 | 37.46 | 97.92 |
| LEB025_ap_020 | 0.08 | <0.01 | <0.09 | <0.09 | <0.07 | <0.02 | <0.03 | <0.01 | 39.08 | <0.04 | 0.02 | <0.04 | 17.87 | 0.06 | 0.03 | 1.29 | 0.69 | 38.29 | 97.41 |
| LEB025_ap_021 | 0.06 | <0.01 | <0.09 | <0.09 | 0.07 | <0.02 | <0.03 | <0.01 | 39.04 | <0.04 | <0.02 | <0.04 | 17.93 | 0.04 | 0.04 | 1.77 | 0.93 | 38.08 | 97.96 |
| LEB025_ap_022 | 0.07 | <0.01 | <0.09 | <0.09 | <0.06 | <0.02 | <0.03 | <0.01 | 39.21 | <0.04 | <0.02 | <0.03 | 17.99 | 0.08 | 0.02 | 0.68 | 1.32 | 38.40 | 97.78 |
| LEB025_ap_023 | 0.07 | <0.01 | 0.10 | 0.19 | <0.06 | <0.02 | 0.05 | <0.01 | 39.10 | <0.04 | 0.03 | <0.03 | 17.87 | 0.06 | 0.02 | 0.76 | 1.37 | 38.21 | 97.84 |
| LEB025_ap_024 | 0.05 | <0.01 | <0.09 | 0.09 | <0.06 | <0.02 | <0.03 | <0.01 | 39.27 | <0.03 | <0.02 | <0.03 | 17.92 | 0.04 | <0.02 | 1.64 | 1.32 | 38.06 | 98.39 |
| LEB025_ap_025 | 0.10 | <0.01 | <0.09 | <0.09 | 0.07 | <0.02 | <0.03 | <0.01 | 39.41 | <0.03 | <0.02 | <0.04 | 18.05 | 0.10 | 0.03 | 0.46 | 2.09 | 38.35 | 98.67 |
| LEB025_ap_026 | 0.12 | 0.03 | 0.09 | 0.11 | 0.07 | <0.02 | 0.08 | <0.01 | 38.79 | <0.04 | 0.04 | <0.03 | 17.81 | 0.05 | <0.02 | 1.07 | 1.76 | 37.85 | 97.87 |
| LEB025_ap_027 | 0.09 | <0.01 | <0.09 | 0.14 | <0.06 | <0.02 | 0.05 | <0.01 | 39.07 | <0.04 | 0.03 | <0.03 | 17.91 | 0.09 | 0.02 | 1.04 | 1.41 | 38.20 | 98.04 |
| LEB025_ap_028 | 0.08 | <0.01 | <0.09 | <0.1 | <0.07 | <0.02 | <0.03 | <0.01 | 39.11 | <0.03 | <0.02 | <0.04 | 17.89 | 0.05 | 0.03 | 1.50 | 1.02 | 38.14 | 97.81 |
| LEB025_ap_029 | 0.07 | <0.01 | <0.09 | 0.22 | 0.11 | <0.02 | 0.03 | <0.01 | 38.82 | 0.04 | 0.04 | <0.03 | 17.82 | 0.03 | <0.02 | 0.98 | 1.23 | 38.01 | 97.42 |
| LEB025_ap_030 | 0.17 | <0.01 | 0.10 | 0.14 | 0.08 | 0.05 | 0.10 | <0.01 | 38.23 | <0.04 | 0.08 | <0.03 | 17.43 | 0.19 | <0.02 | 4.13 | 0.27 | 37.35 | 98.32 |
| LEB025_ap_031 | 0.10 | <0.01 | 0.13 | <0.09 | 0.12 | <0.02 | <0.03 | <0.01 | 39.17 | 0.05 | <0.02 | <0.04 | 18.00 | 0.06 | 0.03 | 0.57 | 2.02 | 38.19 | 98.45 |
| LEB025_ap_032 | 0.06 | <0.01 | <0.09 | <0.09 | 0.08 | <0.02 | <0.03 | <0.01 | 39.23 | <0.04 | <0.02 | <0.04 | 18.02 | 0.04 | 0.03 | 1.20 | 1.92 | 38.01 | 98.58 |
| LEB025_ap_033 | 0.07 | <0.01 | 0.12 | 0.17 | 0.09 | <0.02 | <0.03 | <0.01 | 39.06 | <0.03 | <0.02 | <0.04 | 17.84 | 0.06 | <0.02 | 0.70 | 1.36 | 38.17 | 97.64 |
| LEB025_ap_034 | 0.11 | <0.01 | <0.08 | 0.18 | <0.07 | <0.02 | 0.03 | <0.01 | 38.99 | <0.03 | 0.02 | <0.03 | 17.83 | 0.05 | <0.02 | 1.22 | 0.77 | 38.27 | 97.47 |
| LEB025_ap_035 | 0.21 | <0.01 | <0.09 | 0.12 | <0.06 | 0.05 | 0.11 | <0.01 | 38.07 | <0.04 | 0.07 | <0.03 | 17.34 | 0.22 | <0.02 | 5.47 | 0.15 | 36.97 | 98.77 |
| NAF-01_ap_001 | 0.08 | <0.01 | <0.08 | 0.16 | <0.07 | <0.02 | <0.03 | <0.01 | 38.91 | <0.04 | 0.02 | <0.04 | 17.83 | 0.01 | 0.06 | 0.95 | 1.35 | 37.96 | 97.34 |
| NAF-01_ap_002 | 0.12 | <0.01 | 0.16 | 0.28 | 0.15 | 0.07 | 0.21 | <0.01 | 38.11 | <0.03 | 0.11 | <0.03 | 17.62 | 0.09 | <0.02 | 3.91 | 0.60 | 37.33 | 98.77 |
| NAF-01_ap_003 | 0.05 | <0.01 | 0.14 | 0.29 | 0.18 | 0.03 | 0.18 | <0.01 | 38.01 | <0.04 | 0.16 | <0.03 | 17.72 | 0.07 | 0.02 | 3.32 | 1.08 | 37.25 | 98.50 |
| NAF-01_ap_004 | 0.16 | <0.01 | 0.09 | 0.35 | 0.24 | 0.05 | <0.03 | <0.01 | 38.38 | <0.04 | 0.06 | <0.03 | 17.70 | 0.04 | 0.02 | 0.54 | 1.77 | 37.72 | 97.12 |
| NAF-01_ap_005 | 0.08 | 0.01 | 0.13 | 0.23 | 0.12 | 0.05 | 0.06 | <0.01 | 38.43 | <0.03 | 0.03 | <0.04 | 17.74 | 0.03 | 0.04 | 2.71 | 1.04 | 37.47 | 98.17 |
| NAF-01_ap_006 | 0.18 | <0.01 | <0.09 | 0.43 | 0.20 | 0.06 | 0.14 | <0.01 | 36.54 | <0.04 | 0.11 | <0.03 | 17.01 | 0.08 | <0.02 | 4.01 | 0.65 | 35.91 | 95.31 |
| NAF-01_ap_007 | 0.16 | <0.01 | 0.11 | 0.22 | 0.15 | <0.02 | <0.03 | <0.01 | 38.77 | 0.05 | 0.02 | <0.03 | 17.93 | 0.02 | <0.02 | 1.39 | 1.27 | 38.11 | 98.21 |
| NAF-01_ap_008 | 0.08 | <0.01 | 0.09 | 0.13 | 0.07 | <0.02 | 0.07 | <0.01 | 39.06 | <0.04 | 0.04 | <0.04 | 17.99 | <0.01 | <0.02 | 1.01 | 1.84 | 38.00 | 98.39 |
| NAF-01_ap_009 | 0.05 | <0.01 | <0.09 | 0.21 | 0.13 | 0.07 | 0.08 | 0.02 | 38.04 | <0.04 | 0.13 | <0.04 | 17.81 | 0.02 | <0.02 | 3.53 | 0.79 | 37.31 | 98.21 |
| NAF-01_ap_010 | 0.06 | <0.01 | 0.09 | 0.11 | 0.07 | <0.02 | 0.07 | <0.01 | 38.86 | <0.04 | 0.03 | <0.03 | 18.02 | <0.01 | 0.03 | 1.30 | 1.44 | 38.05 | 98.12 |

*all elements in wt. % (EMPA).

Appendix C: Eastern Sunda arc apatite trace element chemistry (EMPA)

| Analysis ID | Si | Al | La | Ce | Nd | Fe | Mn | Mg | Ca | Sr | Na | K | P | S | As | Cl | F | O soil | TOTAL |
|---------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|--------|-------|
| NAF-01_ap_011 | 0.03 | <0.01 | <0.08 | 0.10 | <0.06 | <0.02 | 0.04 | <0.01 | 38.30 | <0.04 | <0.02 | <0.03 | 18.05 | 0.01 | 0.04 | 1.09 | 2.07 | 38.00 | 98.73 |
| NAF-01_ap_012 | 0.07 | <0.01 | <0.09 | 0.13 | <0.06 | 0.02 | 0.08 | <0.01 | 38.41 | <0.04 | <0.02 | <0.04 | 17.72 | 0.04 | 0.04 | 2.88 | 0.69 | 37.49 | 97.57 |
| NAF-01_ap_013 | 0.08 | <0.01 | <0.08 | 0.22 | <0.06 | <0.02 | 0.05 | <0.01 | 38.94 | 0.07 | 0.03 | <0.03 | 17.82 | 0.02 | <0.02 | 1.27 | 2.20 | 37.57 | 98.27 |
| NAF-01_ap_014 | 0.12 | <0.01 | <0.09 | 0.23 | 0.16 | <0.02 | 0.09 | <0.01 | 38.74 | 0.04 | 0.04 | <0.03 | 17.81 | 0.01 | 0.04 | 1.33 | 1.90 | 37.66 | 98.16 |
| NAF-01_ap_015 | 0.07 | <0.01 | 0.13 | 0.17 | 0.15 | <0.02 | 0.10 | <0.01 | 38.61 | 0.05 | 0.06 | <0.03 | 17.88 | 0.02 | <0.02 | 1.71 | 1.85 | 37.59 | 98.39 |
| NAF-01_ap_016 | 0.11 | <0.01 | 0.09 | 0.16 | <0.07 | <0.02 | 0.05 | <0.01 | 38.23 | <0.04 | 0.02 | <0.03 | 17.99 | 0.02 | 0.02 | 0.92 | 2.36 | 37.94 | 98.90 |
| NAF-01_ap_017 | 0.05 | <0.01 | <0.09 | 0.18 | <0.07 | 0.04 | 0.06 | <0.01 | 38.98 | <0.04 | 0.04 | <0.03 | 17.93 | 0.01 | <0.02 | 1.08 | 1.97 | 37.81 | 98.15 |
| NAF-01_ap_018 | 0.08 | <0.01 | <0.09 | 0.17 | 0.16 | 0.04 | 0.10 | <0.01 | 38.81 | <0.04 | 0.05 | <0.03 | 17.90 | 0.01 | <0.02 | 1.39 | 1.87 | 37.74 | 98.33 |
| NAF-01_ap_019 | 0.09 | <0.01 | <0.09 | 0.23 | <0.07 | <0.02 | <0.03 | <0.01 | 38.89 | <0.04 | 0.04 | <0.03 | 17.96 | 0.02 | 0.02 | 0.75 | 2.73 | 37.60 | 98.32 |
| NAF-01_ap_020 | 0.07 | <0.01 | <0.08 | 0.19 | 0.09 | 0.02 | 0.06 | <0.01 | 39.00 | 0.04 | 0.03 | <0.03 | 17.85 | 0.01 | 0.03 | 1.15 | 2.01 | 37.71 | 98.25 |
| NAF-01_ap_021 | 0.11 | <0.01 | 0.14 | 0.26 | 0.12 | <0.02 | 0.05 | <0.01 | 38.36 | <0.04 | <0.02 | <0.03 | 17.70 | 0.01 | 0.02 | 2.72 | 0.25 | 37.72 | 97.45 |
| NAF-01_ap_022 | 0.07 | <0.01 | <0.09 | 0.22 | 0.13 | 0.04 | 0.05 | <0.01 | 38.18 | 0.05 | 0.07 | <0.04 | 17.57 | 0.09 | <0.02 | 3.95 | 0.39 | 37.31 | 98.31 |
| NAF-01_ap_023 | 0.07 | <0.01 | 0.18 | 0.22 | 0.12 | 0.04 | 0.05 | <0.01 | 38.51 | <0.04 | <0.02 | <0.03 | 17.67 | 0.02 | 0.05 | 2.66 | 0.68 | 37.55 | 97.85 |
| NAF-01_ap_024 | 0.08 | <0.01 | 0.11 | 0.12 | 0.09 | <0.02 | <0.03 | <0.01 | 39.07 | <0.04 | <0.02 | <0.03 | 17.82 | 0.01 | <0.02 | 0.90 | 1.11 | 38.12 | 97.43 |
| NAF-01_ap_025 | 0.12 | <0.01 | <0.09 | 0.30 | 0.14 | 0.04 | 0.19 | <0.01 | 38.13 | <0.04 | 0.09 | <0.02 | 17.55 | 0.07 | <0.02 | 3.57 | 0.66 | 37.22 | 98.07 |
| NAF-01_ap_026 | 0.06 | 0.01 | <0.09 | 0.22 | <0.07 | <0.02 | 0.05 | <0.01 | 38.76 | 0.03 | 0.02 | <0.04 | 17.71 | <0.01 | 0.04 | 1.86 | 0.70 | 37.80 | 97.27 |
| NAF-01_ap_027 | 0.10 | <0.01 | 0.15 | 0.22 | 0.15 | 0.06 | 0.15 | 0.01 | 37.96 | 0.04 | 0.11 | <0.04 | 17.56 | 0.10 | <0.02 | 3.84 | 0.53 | 37.20 | 98.16 |
| NAF-01_ap_028 | 0.05 | <0.01 | <0.08 | <0.09 | <0.06 | 0.03 | 0.05 | <0.01 | 39.31 | <0.04 | 0.03 | <0.03 | 18.15 | <0.01 | <0.02 | 0.71 | 1.82 | 38.31 | 98.44 |
| NAF-01_ap_029 | 0.06 | <0.01 | 0.11 | <0.09 | 0.12 | 0.02 | 0.04 | <0.01 | 38.79 | <0.04 | 0.03 | <0.03 | 17.87 | 0.02 | 0.03 | 1.53 | 1.27 | 37.87 | 97.75 |
| NAF-01_ap_030 | 0.04 | <0.01 | <0.09 | 0.15 | <0.06 | 0.09 | 0.20 | 0.02 | 38.23 | <0.04 | 0.13 | <0.04 | 17.62 | 0.11 | <0.02 | 4.23 | 0.33 | 37.32 | 98.46 |
| NAF-01_ap_031 | 0.04 | 0.01 | 0.10 | 0.20 | 0.08 | 0.02 | 0.09 | <0.01 | 39.05 | 0.04 | 0.04 | <0.03 | 17.92 | 0.03 | <0.02 | 1.80 | 1.68 | 37.84 | 98.96 |
| NAF-01_ap_032 | 0.06 | <0.01 | <0.09 | 0.24 | 0.14 | 0.05 | 0.09 | <0.01 | 38.05 | <0.04 | 0.08 | <0.03 | 17.78 | 0.02 | <0.02 | 3.57 | 0.72 | 37.29 | 98.10 |
| NAF-01_ap_033 | 0.08 | <0.01 | <0.08 | <0.09 | 0.14 | 0.02 | 0.07 | <0.01 | 39.15 | <0.04 | <0.02 | <0.04 | 18.13 | <0.01 | 0.03 | 0.46 | 2.05 | 38.24 | 98.37 |
| NAF-01_ap_034 | 0.11 | <0.01 | 0.13 | 0.28 | 0.10 | 0.03 | 0.06 | <0.01 | 38.12 | 0.06 | 0.08 | <0.03 | 17.71 | 0.09 | <0.02 | 3.80 | 0.74 | 37.34 | 98.66 |
| NAF-01_ap_035 | 0.11 | <0.01 | 0.19 | 0.29 | 0.29 | 0.06 | 0.12 | 0.02 | 37.72 | <0.04 | 0.15 | <0.03 | 17.59 | 0.03 | <0.02 | 3.59 | 0.70 | 37.09 | 97.94 |
| NAF-01_ap_036 | 0.08 | <0.01 | <0.09 | 0.21 | 0.11 | <0.02 | 0.07 | <0.01 | 38.47 | <0.04 | 0.08 | <0.03 | 17.89 | <0.01 | 0.03 | 1.94 | 1.63 | 37.55 | 98.05 |
| NAF-03_ap_001 | <0.01 | <0.01 | <0.08 | <0.09 | <0.07 | 0.05 | 0.17 | <0.01 | 39.17 | <0.04 | 0.04 | <0.03 | 18.00 | 0.03 | <0.02 | 0.77 | 2.87 | 37.64 | 98.74 |
| NAF-03_ap_002 | 0.02 | 0.01 | <0.08 | <0.1 | <0.07 | 0.04 | 0.15 | <0.01 | 39.16 | <0.03 | 0.03 | <0.04 | 18.08 | 0.02 | <0.02 | 0.65 | 3.45 | 37.52 | 99.12 |
| NAF-03_ap_003 | 0.03 | <0.01 | <0.09 | <0.09 | 0.09 | 0.06 | 0.14 | <0.01 | 39.12 | <0.03 | 0.05 | <0.03 | 18.09 | 0.03 | <0.02 | 0.77 | 3.04 | 37.71 | 99.13 |
| NAF-03_ap_004 | 0.11 | <0.01 | 0.10 | 0.17 | <0.07 | <0.02 | <0.03 | <0.01 | 38.79 | <0.03 | 0.04 | <0.04 | 17.77 | 0.02 | <0.02 | 1.55 | 1.26 | 37.78 | 97.59 |
| NAF-03_ap_005 | 0.07 | <0.01 | <0.09 | <0.09 | 0.08 | 0.04 | 0.19 | <0.01 | 38.74 | <0.03 | 0.10 | <0.03 | 17.98 | 0.15 | <0.02 | 1.15 | 2.61 | 37.75 | 98.86 |
| NAF-03_ap_006 | 0.05 | <0.01 | <0.08 | 0.09 | <0.06 | 0.03 | 0.06 | <0.01 | 39.24 | 0.04 | 0.04 | <0.03 | 18.05 | 0.05 | <0.02 | 0.62 | 2.77 | 37.87 | 98.90 |
| NAF-03_ap_007 | 0.03 | <0.01 | 0.10 | <0.09 | <0.06 | 0.07 | 0.11 | <0.01 | 38.97 | <0.03 | 0.04 | <0.03 | 18.03 | <0.01 | <0.02 | 1.28 | 2.17 | 37.79 | 98.58 |
| NAF-03_ap_008 | 0.02 | <0.01 | <0.09 | <0.1 | 0.08 | 0.04 | 0.08 | <0.01 | 38.89 | <0.04 | 0.03 | <0.03 | 17.97 | 0.01 | <0.02 | 1.84 | 2.19 | 37.50 | 98.65 |
| NAF-03_ap_009 | 0.03 | <0.01 | <0.09 | <0.09 | <0.06 | 0.04 | 0.07 | <0.01 | 38.94 | <0.03 | 0.03 | <0.03 | 17.88 | 0.04 | 0.02 | 1.99 | 1.54 | 37.71 | 98.29 |
| NAF-03_ap_010 | 0.03 | <0.01 | <0.09 | 0.11 | <0.06 | 0.05 | 0.11 | <0.01 | 38.66 | 0.04 | 0.06 | <0.04 | 17.96 | 0.01 | <0.02 | 2.33 | 2.10 | 37.37 | 98.85 |
| NAF-03_ap_011 | 0.02 | <0.01 | <0.09 | <0.09 | <0.06 | 0.08 | 0.21 | <0.01 | 39.16 | 0.04 | 0.05 | <0.03 | 18.05 | 0.02 | 0.02 | 0.79 | 2.70 | 37.83 | 98.99 |
| NAF-03_ap_012 | 0.03 | <0.01 | <0.09 | <0.09 | <0.06 | <0.02 | <0.03 | <0.01 | 38.35 | <0.04 | <0.02 | <0.03 | 18.11 | <0.01 | <0.02 | 0.08 | 3.52 | 37.64 | 98.73 |
| NAF-03_ap_013 | 0.04 | <0.01 | <0.09 | <0.09 | <0.06 | <0.02 | 0.05 | <0.01 | 39.44 | <0.04 | <0.02 | <0.03 | 18.15 | <0.01 | <0.02 | 0.63 | 2.82 | 37.97 | 99.10 |
| NAF-03_ap_014 | 0.03 | <0.01 | <0.08 | 0.10 | <0.07 | 0.10 | 0.03 | <0.01 | 39.10 | <0.04 | 0.02 | <0.03 | 18.10 | 0.01 | <0.02 | 1.27 | 2.67 | 37.72 | 99.15 |
| NAF-03_ap_015 | 0.03 | <0.01 | <0.08 | <0.09 | 0.09 | 0.08 | 0.31 | <0.01 | 38.86 | 0.04 | 0.05 | <0.03 | 18.21 | 0.01 | 0.02 | 0.90 | 2.93 | 37.81 | 99.33 |
| NAF-03_ap_016 | 0.05 | <0.01 | <0.08 | <0.09 | <0.06 | <0.02 | <0.03 | <0.01 | 39.49 | <0.04 | 0.02 | <0.03 | 18.08 | 0.03 | <0.02 | 0.56 | 3.06 | 37.80 | 99.08 |
| NAF-03_ap_017 | 0.04 | <0.01 | <0.08 | <0.09 | <0.06 | 0.07 | 0.25 | <0.01 | 39.07 | <0.04 | 0.04 | <0.04 | 18.06 | <0.01 | <0.02 | 0.95 | 2.73 | 37.76 | 98.97 |
| NAF-03_ap_018 | 0.04 | 0.01 | <0.09 | 0.13 | <0.06 | 0.06 | <0.03 | <0.01 | 39.26 | <0.04 | 0.03 | <0.04 | 18.06 | 0.01 | <0.02 | 0.75 | 2.98 | 37.71 | 99.04 |
| NAF-03_ap_019 | 0.03 | <0.01 | <0.09 | <0.09 | 0.08 | 0.03 | 0.09 | <0.01 | 39.22 | <0.04 | 0.02 | <0.04 | 17.99 | 0.01 | <0.02 | 1.34 | 2.39 | 37.70 | 98.89 |
| NAF-03_ap_020 | 0.06 | 0.03 | <0.08 | 0.09 | <0.06 | 0.05 | 0.19 | 0.02 | 39.05 | <0.04 | 0.03 | 0.04 | 17.98 | <0.01 | <0.02 | 1.01 | 2.72 | 37.64 | 98.91 |
| NAF-03_ap_021 | 0.04 | <0.01 | <0.08 | <0.09 | <0.06 | 0.06 | 0.05 | 0.08 | 38.93 | <0.04 | 0.02 | <0.03 | 17.96 | 0.02 | <0.02 | 1.64 | 2.51 | 37.48 | 98.74 |
| NAF-03_ap_022 | 0.04 | <0.01 | <0.09 | <0.09 | 0.08 | 0.03 | 0.12 | <0.01 | 39.11 | <0.04 | 0.03 | <0.03 | 18.18 | 0.02 | <0.02 | 0.30 | 3.24 | 37.82 | 98.98 |
| NAF-03_ap_023 | 0.05 | <0.01 | 0.13 | <0.09 | 0.07 | <0.02 | <0.03 | <0.01 | 39.42 | 0.05 | <0.02 | <0.04 | 18.14 | <0.01 | <0.02 | 0.68 | 2.74 | 37.99 | 99.28 |
| NAF-03_ap_024 | 0.07 | <0.01 | 0.11 | 0.16 | <0.07 | 0.02 | 0.03 | <0.01 | 39.27 | 0.05 | 0.03 | <0.04 | 18.01 | 0.03 | <0.02 | 0.60 | 2.78 | 37.84 | 98.99 |

*all elements in wt. % (EMPA).

Appendix C: Eastern Sunda arc apatite trace element chemistry (EMPA)

| Analysis ID | Si | Al | La | Ce | Nd | Fe | Mn | Mg | Ca | Sr | Na | K | P | S | As | Cl | F | O total | TOTAL |
|---------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|---------|-------|
| NAF-03_ap_025 | 0.06 | <0.01 | <0.09 | <0.09 | 0.07 | 0.02 | <0.03 | <0.01 | 38.37 | 0.04 | <0.02 | <0.03 | 18.11 | 0.02 | <0.02 | 0.59 | 2.83 | 37.93 | 99.04 |
| NAF-03_ap_026 | 0.02 | <0.01 | <0.08 | <0.09 | 0.08 | 0.03 | 0.14 | <0.01 | 38.87 | 0.05 | 0.05 | <0.04 | 18.01 | 0.03 | <0.02 | 1.26 | 2.61 | 37.57 | 98.72 |
| NAF-03_ap_027 | 0.03 | <0.01 | <0.08 | <0.09 | 0.09 | 0.15 | 0.33 | 0.04 | 38.57 | <0.04 | 0.10 | <0.03 | 17.98 | 0.03 | <0.02 | 0.98 | 3.21 | 37.38 | 98.90 |
| NAF-03_ap_028 | 0.04 | <0.01 | <0.09 | <0.09 | <0.07 | <0.03 | 0.12 | <0.01 | 38.94 | 0.04 | <0.02 | <0.03 | 17.88 | 0.02 | <0.02 | 1.74 | 2.21 | 37.46 | 98.51 |
| NAF-03_ap_029 | 0.07 | <0.01 | <0.09 | <0.09 | <0.07 | 0.03 | 0.08 | <0.01 | 39.30 | <0.03 | <0.02 | <0.03 | 18.03 | 0.01 | 0.02 | 0.66 | 3.06 | 37.67 | 98.93 |
| NAF-03_ap_030 | 0.06 | <0.01 | <0.09 | <0.10 | <0.06 | 0.02 | <0.03 | <0.01 | 39.16 | 0.04 | <0.02 | <0.04 | 18.12 | 0.02 | <0.02 | 0.52 | 2.81 | 37.88 | 98.74 |
| NAF-02_ap_001 | 0.02 | <0.01 | <0.09 | <0.09 | <0.07 | 0.38 | 0.64 | 0.07 | 38.04 | 0.04 | 0.07 | <0.04 | 17.92 | 0.01 | <0.02 | 1.40 | 2.25 | 37.49 | 98.34 |
| NAF-02_ap_002 | <0.01 | <0.01 | 0.09 | 0.11 | 0.11 | 0.48 | 0.64 | 0.10 | 37.79 | 0.05 | 0.07 | <0.04 | 18.00 | 0.04 | <0.02 | 1.52 | 2.62 | 37.42 | 99.03 |
| NAF-02_ap_003 | 0.01 | <0.01 | <0.09 | <0.1 | <0.07 | 0.31 | 0.48 | 0.05 | 38.35 | 0.04 | 0.10 | <0.03 | 18.01 | 0.01 | <0.02 | 1.21 | 2.66 | 37.52 | 98.76 |
| NAF-02_ap_004 | <0.01 | <0.01 | <0.08 | <0.09 | <0.07 | 0.43 | 0.65 | 0.09 | 38.32 | <0.04 | 0.06 | <0.03 | 18.01 | 0.02 | <0.02 | 1.22 | 2.48 | 37.69 | 98.97 |
| NAF-02_ap_005 | <0.01 | <0.01 | <0.09 | <0.09 | <0.06 | 0.26 | 0.48 | 0.05 | 38.68 | 0.05 | 0.04 | <0.03 | 18.11 | 0.01 | <0.02 | 1.06 | 2.94 | 37.65 | 99.33 |
| NAF-02_ap_006 | <0.01 | <0.01 | <0.08 | <0.1 | 0.06 | 0.24 | 0.47 | 0.03 | 38.62 | 0.07 | 0.06 | <0.03 | 18.12 | 0.02 | <0.02 | 1.03 | 3.24 | 37.54 | 99.50 |
| NAF-02_ap_007 | 0.03 | <0.01 | <0.09 | <0.09 | <0.06 | 0.48 | 0.70 | 0.11 | 37.84 | 0.06 | 0.05 | <0.04 | 17.91 | 0.01 | <0.02 | 1.49 | 2.53 | 37.34 | 98.55 |
| NAF-02_ap_008 | 0.01 | <0.01 | <0.09 | <0.09 | 0.07 | 0.33 | 0.50 | 0.05 | 38.37 | <0.04 | 0.06 | <0.03 | 18.09 | 0.02 | <0.02 | 1.32 | 2.56 | 37.66 | 99.04 |
| NAF-02_ap_009 | 0.02 | <0.01 | <0.09 | <0.10 | 0.07 | 0.20 | 0.39 | 0.03 | 38.52 | <0.04 | 0.07 | <0.04 | 18.06 | 0.01 | <0.02 | 1.22 | 2.90 | 37.50 | 99.11 |
| NAF-02_ap_010 | 0.02 | <0.01 | <0.09 | <0.1 | <0.06 | 0.47 | 0.71 | 0.09 | 38.12 | <0.03 | 0.06 | <0.04 | 18.00 | <0.01 | <0.02 | 1.20 | 2.44 | 37.61 | 98.72 |
| NAF-02_ap_011 | 0.07 | 0.03 | <0.09 | <0.09 | <0.06 | 0.50 | 1.06 | 0.09 | 37.86 | <0.04 | 0.09 | <0.04 | 17.88 | 0.10 | <0.02 | 1.45 | 2.73 | 37.45 | 99.10 |
| NAF-02_ap_012 | 0.02 | <0.01 | <0.09 | <0.09 | <0.07 | 0.67 | 0.67 | 0.09 | 37.95 | <0.04 | 0.08 | <0.03 | 17.97 | 0.02 | <0.02 | 1.49 | 2.67 | 37.38 | 98.82 |
| NAF-02_ap_013 | <0.01 | <0.01 | <0.09 | <0.1 | 0.08 | 0.27 | 0.47 | 0.05 | 38.62 | <0.04 | 0.07 | <0.03 | 18.12 | 0.02 | <0.02 | 0.94 | 3.02 | 37.65 | 99.29 |
| NAF-02_ap_014 | <0.01 | <0.01 | <0.08 | <0.09 | <0.06 | 0.40 | 0.64 | 0.07 | 38.04 | <0.04 | 0.07 | <0.04 | 18.08 | 0.01 | <0.02 | 1.18 | 2.85 | 37.47 | 98.88 |
| NAF-02_ap_015 | 0.01 | <0.01 | <0.08 | <0.09 | <0.06 | 0.41 | 0.59 | 0.07 | 38.32 | 0.05 | 0.07 | <0.04 | 18.01 | <0.01 | <0.02 | 1.18 | 2.85 | 37.50 | 99.06 |
| NAF-02_ap_016 | 0.01 | <0.01 | <0.09 | <0.09 | <0.07 | 0.49 | 0.72 | 0.10 | 38.02 | 0.04 | 0.06 | <0.03 | 18.05 | 0.01 | <0.02 | 1.54 | 2.58 | 37.53 | 99.16 |
| NAF-02_ap_017 | 0.01 | <0.01 | <0.09 | <0.1 | <0.06 | 0.06 | 0.19 | <0.01 | 39.52 | <0.03 | <0.02 | <0.03 | 18.14 | <0.01 | <0.02 | 0.49 | 3.07 | 37.88 | 99.36 |
| NAF-02_ap_018 | <0.01 | <0.01 | <0.08 | <0.09 | <0.07 | 0.35 | 0.56 | 0.06 | 38.12 | 0.06 | 0.06 | <0.03 | 18.07 | <0.01 | <0.02 | 1.36 | 2.61 | 37.53 | 98.78 |
| NAF-02_ap_019 | 0.02 | <0.01 | <0.09 | <0.09 | <0.06 | 0.36 | 0.57 | 0.06 | 38.36 | <0.04 | 0.06 | <0.03 | 18.00 | 0.02 | <0.02 | 1.13 | 2.79 | 37.54 | 98.90 |
| NAF-02_ap_020 | 0.67 | 0.49 | <0.09 | <0.09 | <0.07 | 0.57 | 0.73 | 0.20 | 37.04 | <0.04 | 0.04 | <0.03 | 17.41 | 0.02 | <0.02 | 1.25 | 2.67 | 37.68 | 99.02 |
| NAF-02_ap_021 | 0.02 | <0.01 | <0.09 | <0.09 | 0.08 | 0.13 | 0.38 | 0.05 | 39.06 | 0.05 | 0.03 | <0.03 | 18.18 | <0.01 | 0.02 | 0.38 | 3.02 | 37.92 | 99.31 |
| NAF-02_ap_022 | 0.01 | <0.01 | 0.08 | <0.09 | <0.06 | 0.29 | 0.43 | 0.03 | 38.59 | <0.04 | 0.07 | <0.03 | 18.01 | <0.01 | <0.02 | 1.27 | 2.56 | 37.61 | 98.97 |
| NAF-02_ap_023 | <0.01 | <0.01 | 0.09 | <0.09 | 0.07 | 0.40 | 0.63 | 0.07 | 38.29 | <0.03 | 0.07 | <0.04 | 18.10 | 0.01 | <0.02 | 1.08 | 2.87 | 37.63 | 99.32 |
| NAF-02_ap_024 | 0.01 | <0.01 | <0.09 | <0.09 | 0.11 | 0.23 | 0.45 | 0.03 | 38.78 | 0.05 | 0.04 | <0.04 | 17.99 | <0.01 | <0.02 | 0.84 | 3.43 | 37.35 | 99.33 |
| NAF-02_ap_025 | 0.01 | <0.01 | <0.09 | <0.09 | <0.06 | 0.29 | 0.50 | 0.06 | 38.55 | 0.04 | 0.05 | <0.03 | 18.03 | 0.01 | <0.02 | 1.09 | 2.89 | 37.84 | 99.60 |
| PCT-02_ap_001 | 0.10 | <0.01 | <0.08 | 0.10 | 0.09 | 0.30 | 0.16 | 0.05 | 38.53 | <0.04 | 0.03 | <0.03 | 18.03 | <0.01 | <0.02 | 1.02 | 1.88 | 37.97 | 98.25 |
| PCT-02_ap_002 | 0.10 | <0.01 | <0.09 | 0.12 | 0.07 | 0.30 | 0.17 | 0.06 | 38.36 | <0.04 | 0.04 | <0.03 | 18.00 | <0.01 | <0.02 | 0.99 | 1.85 | 37.91 | 98.02 |
| PCT-02_ap_003 | 0.10 | <0.01 | <0.08 | 0.24 | 0.08 | 0.31 | 0.16 | 0.05 | 38.48 | <0.04 | 0.06 | <0.04 | 17.93 | 0.05 | <0.02 | 1.00 | 1.87 | 37.95 | 98.29 |
| PCT-02_ap_004 | 0.10 | <0.01 | <0.09 | 0.16 | 0.12 | 0.29 | 0.18 | 0.06 | 38.38 | 0.07 | 0.04 | <0.04 | 18.07 | <0.01 | <0.02 | 1.04 | 1.88 | 37.99 | 98.37 |
| PCT-02_ap_005 | 0.10 | <0.01 | <0.08 | 0.11 | 0.16 | 0.30 | 0.15 | 0.05 | 38.33 | <0.04 | 0.03 | <0.03 | 18.05 | <0.01 | <0.02 | 1.00 | 1.77 | 37.98 | 98.03 |
| PCT-02_ap_006 | 0.10 | <0.01 | <0.09 | <0.09 | 0.08 | 0.32 | 0.17 | 0.05 | 38.37 | <0.04 | 0.08 | <0.04 | 18.05 | <0.01 | <0.02 | 1.01 | 2.10 | 37.86 | 98.21 |
| PCT-02_ap_007 | 0.08 | <0.01 | <0.08 | <0.09 | <0.06 | 0.33 | 0.14 | 0.06 | 38.64 | 0.05 | 0.03 | <0.03 | 17.94 | <0.01 | <0.02 | 1.03 | 2.04 | 37.81 | 98.14 |
| PCT-02_ap_008 | 0.07 | <0.01 | <0.09 | 0.13 | 0.10 | 0.30 | 0.15 | 0.04 | 38.59 | <0.04 | 0.07 | <0.03 | 18.02 | 0.01 | <0.02 | 1.01 | 1.96 | 37.93 | 98.38 |
| PCT-02_ap_009 | 0.10 | <0.01 | <0.08 | 0.11 | 0.08 | 0.30 | 0.12 | 0.07 | 38.25 | <0.04 | 0.04 | <0.04 | 17.99 | <0.01 | <0.02 | 1.03 | 1.89 | 37.82 | 97.79 |
| PCT-02_ap_010 | 0.08 | <0.01 | <0.09 | 0.13 | 0.08 | 0.31 | 0.16 | 0.05 | 38.67 | <0.04 | 0.04 | <0.03 | 18.11 | <0.01 | <0.02 | 1.02 | 1.85 | 38.13 | 98.61 |
| PCT-02_ap_011 | 0.10 | <0.01 | <0.09 | 0.19 | 0.12 | 0.33 | 0.19 | 0.05 | 38.45 | <0.03 | 0.07 | <0.03 | 17.95 | <0.01 | <0.02 | 0.97 | 1.97 | 37.85 | 98.24 |
| PCT-02_ap_012 | 0.10 | <0.01 | <0.08 | <0.09 | 0.14 | 0.31 | 0.13 | 0.05 | 38.39 | <0.04 | 0.06 | <0.04 | 17.89 | 0.01 | <0.02 | 0.99 | 1.87 | 37.75 | 97.70 |
| PCT-02_ap_013 | 0.10 | <0.01 | <0.08 | 0.13 | 0.09 | 0.30 | 0.15 | 0.06 | 38.45 | <0.03 | 0.04 | <0.04 | 18.03 | 0.01 | <0.02 | 0.99 | 1.87 | 37.97 | 98.19 |
| PCT-02_ap_014 | 0.13 | <0.01 | <0.08 | 0.13 | 0.10 | 0.34 | 0.16 | 0.05 | 38.36 | <0.03 | 0.06 | <0.03 | 17.98 | <0.01 | <0.02 | 1.02 | 1.91 | 37.89 | 98.19 |
| PCT-02_ap_015 | 0.09 | <0.01 | <0.08 | <0.09 | <0.07 | 0.31 | 0.16 | 0.06 | 38.44 | <0.04 | 0.05 | <0.03 | 17.95 | <0.01 | <0.02 | 1.01 | 1.95 | 37.79 | 97.81 |
| PCT-02_ap_016 | 0.11 | <0.01 | <0.08 | 0.09 | 0.11 | 0.31 | 0.13 | 0.06 | 38.41 | 0.04 | 0.05 | <0.04 | 17.87 | <0.01 | 0.02 | 1.01 | 1.83 | 37.76 | 97.80 |
| PCT-02_ap_017 | 0.07 | <0.01 | <0.09 | <0.1 | 0.11 | 0.32 | 0.15 | 0.06 | 38.29 | 0.04 | 0.06 | <0.04 | 18.03 | <0.01 | <0.02 | 1.03 | 1.91 | 37.84 | 97.89 |
| PCT-02_ap_018 | 0.10 | <0.01 | <0.09 | 0.12 | 0.08 | 0.31 | 0.16 | 0.05 | 38.50 | 0.05 | 0.08 | <0.03 | 18.02 | <0.01 | <0.02 | 0.87 | 2.55 | 37.72 | 98.59 |
| PCT-02_ap_019 | 0.09 | <0.01 | <0.09 | <0.09 | 0.07 | 0.32 | 0.14 | 0.05 | 38.52 | 0.06 | 0.02 | <0.04 | 17.96 | 0.02 | <0.02 | 1.01 | 1.88 | 37.88 | 98.03 |

*all elements in wt. % (EMPA).

Appendix C: Eastern Sunda arc apatite trace element chemistry (EMPA)

| Analysis ID | Si | Al | La | Ce | Nd | Fe | Mn | Mg | Ca | Sr | Na | K | P | S | As | Cl | F | O.stoi. | TOTAL |
|---------------|------|-------|-------|-------|-------|-------|------|-------|-------|-------|------|-------|-------|-------|-------|------|------|---------|-------|
| PCT-02_ap_020 | 0.10 | <0.01 | <0.09 | <0.09 | 0.12 | 0.32 | 0.13 | 0.05 | 38.48 | -0.04 | 0.02 | <0.04 | 17.97 | <0.01 | <0.02 | 1.01 | 1.81 | 37.88 | 97.89 |
| PCT-02_ap_021 | 0.09 | <0.01 | <0.08 | <0.09 | 0.10 | 0.32 | 0.18 | 0.04 | 38.59 | -0.04 | 0.05 | <0.04 | 18.05 | <0.01 | <0.02 | 0.98 | 1.90 | 38.03 | 98.33 |
| PCT-02_ap_022 | 0.09 | <0.01 | <0.09 | <0.09 | <0.06 | 0.30 | 0.13 | 0.04 | 38.25 | -0.04 | 0.07 | <0.03 | 18.07 | 0.01 | <0.02 | 1.02 | 1.86 | 37.91 | 97.74 |
| PCT-02_ap_023 | 0.10 | <0.01 | <0.08 | 0.10 | 0.11 | 0.32 | 0.16 | 0.06 | 38.47 | 0.06 | 0.05 | <0.04 | 18.08 | 0.01 | <0.02 | 1.01 | 1.77 | 38.11 | 98.39 |
| PCT-02_ap_024 | 0.13 | <0.01 | <0.09 | 0.12 | 0.09 | 0.29 | 0.15 | 0.06 | 38.24 | -0.04 | 0.05 | <0.04 | 17.94 | <0.01 | <0.02 | 1.03 | 1.84 | 37.79 | 97.72 |
| PCT-02_ap_025 | 0.14 | <0.01 | 0.09 | 0.17 | 0.14 | 0.33 | 0.11 | 0.05 | 38.38 | 0.05 | 0.05 | <0.04 | 18.03 | <0.01 | <0.02 | 0.94 | 2.05 | 37.96 | 98.49 |
| PCT-02_ap_026 | 0.12 | <0.01 | 0.10 | 0.16 | 0.14 | 0.33 | 0.18 | 0.04 | 38.31 | <0.03 | 0.05 | <0.04 | 18.00 | <0.01 | <0.02 | 0.98 | 1.85 | 37.94 | 98.20 |
| PCT-02_ap_027 | 0.13 | <0.01 | <0.08 | <0.09 | 0.11 | 0.31 | 0.19 | 0.05 | 38.18 | <0.03 | 0.05 | <0.03 | 17.96 | 0.01 | <0.02 | 1.01 | 1.68 | 37.88 | 97.57 |
| PCT-02_ap_028 | 0.14 | <0.01 | <0.09 | 0.18 | 0.13 | 0.29 | 0.14 | 0.05 | 38.42 | -0.04 | 0.02 | <0.03 | 17.96 | <0.01 | <0.02 | 0.99 | 1.71 | 37.97 | 98.00 |
| PCT-02_ap_029 | 0.14 | <0.01 | 0.11 | 0.15 | 0.12 | 0.30 | 0.17 | 0.03 | 38.19 | -0.04 | 0.04 | <0.03 | 17.91 | <0.01 | <0.02 | 1.02 | 1.88 | 37.78 | 97.86 |
| PCT-02_ap_030 | 0.09 | <0.01 | <0.08 | <0.1 | 0.10 | 0.32 | 0.17 | 0.04 | 38.40 | -0.04 | 0.06 | <0.03 | 17.96 | 0.02 | <0.02 | 1.02 | 1.92 | 37.85 | 97.95 |
| PCT-02_ap_031 | 0.11 | <0.01 | <0.09 | 0.22 | 0.13 | 0.31 | 0.18 | 0.06 | 38.44 | -0.04 | 0.05 | <0.04 | 18.05 | <0.01 | <0.02 | 1.00 | 1.88 | 38.04 | 98.47 |
| PCT-02_ap_032 | 0.07 | <0.01 | <0.08 | 0.13 | 0.13 | 0.30 | 0.16 | 0.06 | 38.29 | -0.04 | 0.03 | <0.04 | 17.88 | <0.01 | <0.02 | 1.01 | 1.87 | 37.67 | 97.59 |
| PCT-02_ap_033 | 0.09 | <0.01 | <0.09 | <0.09 | 0.09 | 0.27 | 0.14 | 0.06 | 38.38 | -0.04 | 0.03 | <0.03 | 18.01 | 0.01 | <0.02 | 0.87 | 2.27 | 37.75 | 97.97 |
| PCT-02_ap_034 | 0.10 | <0.01 | <0.08 | 0.16 | 0.11 | 0.30 | 0.15 | 0.05 | 38.17 | <0.03 | 0.03 | <0.04 | 17.99 | <0.01 | <0.02 | 1.00 | 1.99 | 37.74 | 97.79 |
| PCT-02_ap_035 | 0.08 | <0.01 | <0.09 | <0.09 | <0.07 | 0.31 | 0.17 | 0.05 | 38.60 | -0.04 | 0.04 | <0.02 | 17.88 | <0.01 | <0.02 | 1.04 | 1.83 | 37.80 | 97.82 |
| PCT-02_ap_036 | 0.09 | <0.01 | <0.09 | 0.18 | 0.07 | 0.31 | 0.17 | 0.06 | 38.53 | -0.04 | 0.05 | <0.03 | 17.92 | <0.01 | <0.02 | 1.04 | 1.83 | 37.87 | 98.12 |
| PCT-01_ap_001 | 0.10 | <0.01 | 0.12 | 0.33 | 0.15 | 0.27 | 0.16 | 0.06 | 37.83 | -0.04 | 0.08 | <0.03 | 17.83 | <0.01 | <0.02 | 1.53 | 1.53 | 37.56 | 97.56 |
| PCT-01_ap_002 | 0.11 | <0.01 | 0.10 | 0.27 | 0.20 | 0.23 | 0.18 | 0.07 | 38.12 | 0.04 | 0.07 | <0.03 | 17.82 | 0.01 | <0.02 | 1.54 | 1.55 | 37.67 | 97.98 |
| PCT-01_ap_003 | 0.02 | <0.01 | <0.08 | <0.09 | <0.06 | 0.03 | 0.06 | <0.01 | 39.01 | -0.04 | 0.06 | <0.03 | 18.18 | 0.04 | <0.02 | 1.11 | 3.61 | 37.67 | 98.79 |
| PCT-01_ap_004 | 0.12 | <0.01 | 0.15 | 0.24 | 0.19 | 0.23 | 0.20 | 0.06 | 38.17 | -0.04 | 0.10 | <0.03 | 17.94 | <0.01 | <0.02 | 1.54 | 1.63 | 37.80 | 98.38 |
| PCT-01_ap_005 | 0.12 | 0.01 | 0.14 | 0.28 | 0.21 | 0.23 | 0.20 | 0.05 | 38.07 | 0.05 | 0.10 | <0.03 | 17.89 | <0.01 | <0.02 | 1.38 | 1.83 | 37.69 | 98.25 |
| PCT-01_ap_006 | 0.09 | <0.01 | 0.12 | 0.16 | 0.17 | 0.25 | 0.20 | 0.05 | 37.94 | -0.04 | 0.10 | <0.04 | 17.88 | <0.01 | <0.02 | 1.55 | 1.59 | 37.60 | 97.69 |
| PCT-01_ap_007 | 0.10 | <0.01 | 0.15 | 0.31 | 0.09 | 0.23 | 0.16 | 0.07 | 38.17 | -0.04 | 0.06 | <0.03 | 17.97 | 0.01 | <0.02 | 1.55 | 1.44 | 37.90 | 98.22 |
| PCT-01_ap_008 | 0.05 | <0.01 | <0.09 | <0.09 | 0.07 | 0.04 | 0.06 | <0.01 | 38.98 | -0.04 | 0.03 | <0.03 | 18.04 | 0.01 | <0.02 | 1.14 | 3.21 | 37.61 | 98.24 |
| PCT-01_ap_009 | 0.13 | <0.01 | <0.09 | 0.22 | 0.18 | 0.25 | 0.13 | 0.06 | 38.01 | -0.04 | 0.08 | <0.03 | 17.94 | 0.01 | 0.02 | 1.51 | 1.50 | 37.79 | 97.85 |
| PCT-01_ap_010 | 0.11 | <0.01 | 0.14 | 0.26 | 0.21 | 0.23 | 0.15 | 0.07 | 37.97 | 0.05 | 0.04 | <0.03 | 17.81 | <0.01 | <0.02 | 1.52 | 1.51 | 37.60 | 97.67 |
| PCT-01_ap_011 | 0.14 | <0.01 | 0.13 | 0.31 | 0.19 | 0.25 | 0.14 | 0.08 | 37.86 | -0.04 | 0.07 | <0.03 | 17.82 | <0.01 | <0.02 | 1.56 | 1.45 | 37.62 | 97.62 |
| PCT-01_ap_012 | 0.14 | <0.01 | <0.09 | 0.24 | 0.18 | 0.25 | 0.15 | 0.08 | 38.06 | <0.03 | 0.07 | <0.03 | 17.94 | <0.01 | <0.02 | 1.55 | 1.43 | 37.87 | 97.94 |
| PCT-01_ap_013 | 0.05 | <0.01 | <0.08 | 0.18 | 0.17 | 0.08 | 0.04 | <0.01 | 38.29 | 0.04 | 0.12 | <0.03 | 16.94 | 0.07 | 0.02 | 0.07 | 3.61 | 35.15 | 92.84 |
| PCT-01_ap_014 | 0.15 | <0.01 | 0.15 | 0.34 | 0.23 | 0.10 | 0.08 | 0.06 | 38.43 | -0.04 | 0.04 | <0.03 | 18.02 | 0.02 | <0.02 | 0.25 | 3.05 | 37.71 | 98.63 |
| PCT-01_ap_015 | 0.22 | 0.03 | <0.09 | 0.25 | 0.24 | 0.30 | 0.20 | 0.07 | 37.55 | <0.03 | 0.11 | <0.03 | 17.72 | 0.02 | <0.02 | 1.39 | 1.74 | 37.47 | 97.31 |
| PCT-01_ap_016 | 0.10 | <0.01 | <0.09 | 0.25 | 0.16 | 0.24 | 0.19 | 0.05 | 37.96 | -0.03 | 0.07 | <0.03 | 17.84 | <0.01 | <0.02 | 1.44 | 1.57 | 37.59 | 97.47 |
| MLG-01_ap_001 | 0.08 | <0.01 | <0.09 | 0.10 | 0.07 | 0.52 | 0.09 | 0.17 | 38.16 | <0.03 | 0.12 | <0.04 | 18.08 | 0.01 | <0.02 | 1.25 | 1.96 | 37.94 | 98.53 |
| MLG-01_ap_002 | 0.10 | <0.01 | <0.09 | 0.11 | <0.07 | 0.41 | 0.05 | 0.15 | 38.36 | -0.04 | 0.07 | <0.04 | 17.94 | <0.01 | <0.02 | 1.36 | 2.77 | 37.40 | 98.72 |
| MLG-01_ap_003 | 0.08 | <0.01 | <0.09 | 0.09 | 0.09 | 0.45 | 0.07 | 0.17 | 38.38 | <0.03 | 0.08 | <0.03 | 17.95 | 0.01 | <0.02 | 1.49 | 2.78 | 37.45 | 99.10 |
| MLG-01_ap_004 | 0.10 | <0.01 | <0.08 | 0.10 | 0.07 | 0.67 | 0.10 | 0.17 | 37.99 | -0.04 | 0.08 | <0.04 | 18.05 | 0.02 | <0.02 | 1.46 | 1.84 | 37.91 | 98.57 |
| MLG-01_ap_005 | 0.07 | <0.01 | <0.08 | <0.09 | 0.06 | 0.46 | 0.05 | 0.18 | 38.21 | 0.04 | 0.08 | <0.03 | 18.11 | 0.01 | <0.02 | 1.41 | 2.87 | 37.55 | 99.11 |
| MLG-01_ap_006 | 0.08 | <0.01 | <0.08 | <0.09 | 0.13 | 0.42 | 0.10 | 0.17 | 38.42 | -0.04 | 0.05 | <0.03 | 18.09 | <0.01 | <0.02 | 1.20 | 3.02 | 37.57 | 99.27 |
| MLG-01_ap_007 | 0.08 | <0.01 | <0.09 | <0.09 | <0.07 | 0.41 | 0.07 | 0.16 | 38.52 | 0.07 | 0.08 | <0.04 | 18.03 | <0.01 | <0.02 | 1.22 | 3.03 | 37.50 | 99.17 |
| MLG-01_ap_008 | 0.12 | <0.01 | 0.13 | <0.1 | 0.12 | 0.45 | 0.05 | 0.18 | 38.27 | <0.03 | 0.07 | <0.03 | 18.02 | <0.01 | <0.02 | 1.26 | 3.02 | 37.46 | 99.15 |
| MLG-01_ap_009 | 0.09 | <0.01 | <0.08 | 0.13 | 0.11 | 0.53 | 0.12 | 0.17 | 37.90 | -0.04 | 0.18 | <0.03 | 17.95 | <0.01 | <0.02 | 1.49 | 1.97 | 37.66 | 98.29 |
| MLG-01_ap_010 | 0.08 | <0.01 | <0.08 | 0.10 | 0.11 | 0.47 | 0.05 | 0.15 | 38.32 | 0.06 | 0.08 | <0.03 | 18.04 | 0.01 | <0.02 | 1.17 | 2.99 | 37.50 | 99.12 |
| MLG-01_ap_011 | 0.09 | <0.01 | <0.09 | <0.09 | <0.06 | 0.54 | 0.09 | 0.16 | 38.20 | -0.04 | 0.09 | <0.03 | 17.95 | 0.01 | <0.02 | 1.41 | 1.79 | 37.80 | 98.12 |
| MLG-01_ap_012 | 0.08 | <0.01 | <0.08 | <0.09 | <0.06 | 0.44 | 0.08 | 0.15 | 38.45 | -0.04 | 0.08 | <0.03 | 18.02 | 0.01 | <0.02 | 1.28 | 2.55 | 37.69 | 98.83 |
| MLG-01_ap_013 | 0.11 | 0.01 | <0.09 | 0.11 | 0.10 | 0.37 | 0.06 | 0.17 | 38.52 | -0.04 | 0.09 | <0.03 | 18.05 | 0.01 | <0.02 | 1.49 | 2.83 | 37.61 | 99.52 |
| MLG-01_ap_014 | 0.08 | <0.01 | 0.09 | <0.09 | 0.11 | <0.06 | 0.60 | 0.06 | 17.38 | -0.04 | 0.09 | <0.03 | 18.03 | 0.02 | <0.02 | 1.62 | 2.72 | 37.55 | 99.43 |
| MLG-01_ap_015 | 0.10 | <0.01 | <0.09 | 0.11 | 0.09 | 0.49 | 0.07 | 0.18 | 38.09 | -0.04 | 0.09 | <0.04 | 18.00 | 0.01 | <0.02 | 1.24 | 1.84 | 37.87 | 98.17 |
| MLG-01_ap_016 | 0.07 | <0.01 | <0.08 | <0.09 | <0.06 | 0.42 | 0.09 | 0.17 | 38.46 | -0.04 | 0.09 | <0.04 | 18.05 | 0.01 | <0.02 | 1.25 | 2.97 | 37.57 | 99.17 |
| MLG-01_ap_017 | 0.08 | 0.01 | <0.08 | <0.09 | 0.12 | 0.55 | 0.11 | 0.20 | 38.21 | <0.03 | 0.06 | <0.04 | 17.98 | <0.01 | <0.02 | 1.41 | 1.78 | 37.87 | 98.36 |

*all elements in wt. % (EMPA).

Appendix C: Eastern Sunda arc apatite trace element chemistry (EMPA)

| Analysis ID | Si | Al | La | Ce | Nd | Fe | Mn | Mg | Ca | Sr | Na | K | P | S | As | Cl | F | O sol. | TOTAL |
|---------------|-------|--------|--------|--------|--------|--------|--------|--------|-------|--------|--------|--------|-------|--------|--------|------|-------|--------|-------|
| MLG-01_ap_018 | 0.09 | <0.01 | <-0.08 | <-0.09 | <-0.06 | 0.50 | 0.05 | 0.16 | 38.27 | <-0.04 | 0.08 | <-0.04 | 17.97 | <-0.01 | <-0.02 | 1.27 | 1.88 | 37.85 | 98.13 |
| MLG-01_ap_019 | 0.08 | <-0.01 | <-0.09 | <-0.09 | <-0.07 | 0.42 | 0.07 | 0.17 | 38.42 | 0.05 | 0.05 | <-0.04 | 18.04 | <-0.01 | <-0.02 | 1.32 | 2.83 | 37.50 | 98.95 |
| MLG-01_ap_020 | 0.23 | 0.07 | <-0.09 | <-0.09 | <-0.06 | 0.57 | 0.08 | 0.25 | 38.24 | 0.04 | 0.08 | <-0.03 | 17.83 | <-0.01 | <-0.02 | 1.41 | 2.82 | 37.51 | 99.14 |
| MLG-01_ap_021 | 0.10 | <-0.01 | <-0.08 | 0.14 | 0.07 | 0.43 | 0.06 | 0.16 | 38.37 | <-0.04 | 0.08 | 0.04 | 18.08 | <-0.01 | <-0.02 | 1.38 | 2.68 | 37.66 | 99.24 |
| MLG-01_ap_022 | 0.09 | <-0.01 | <-0.08 | 0.15 | 0.07 | 0.33 | 0.09 | 0.11 | 38.31 | <-0.03 | 0.04 | <-0.03 | 18.04 | 0.01 | <-0.02 | 1.39 | 1.85 | 37.87 | 98.35 |
| MLG-01_ap_023 | 0.08 | <-0.01 | <-0.08 | <-0.09 | 0.09 | 0.54 | 0.10 | 0.19 | 38.05 | <-0.04 | 0.16 | <-0.03 | 18.06 | <-0.01 | <-0.02 | 1.74 | 1.79 | 37.86 | 98.66 |
| MLG-01_ap_024 | 0.08 | <-0.01 | <-0.08 | <-0.09 | <-0.06 | 0.41 | 0.06 | 0.18 | 38.35 | 0.05 | 0.05 | <-0.04 | 18.03 | <-0.01 | <-0.02 | 1.18 | 2.95 | 37.49 | 98.83 |
| MLG-01_ap_025 | 0.08 | <-0.01 | <-0.09 | <-0.1 | <-0.07 | 0.42 | 0.07 | 0.17 | 38.34 | <-0.03 | 0.07 | <-0.04 | 18.00 | <-0.01 | <-0.02 | 1.37 | 2.96 | 37.38 | 98.85 |
| MLG-01_ap_026 | 0.09 | <-0.01 | <-0.08 | <-0.09 | <-0.06 | 0.46 | 0.06 | 0.16 | 38.16 | <-0.04 | 0.07 | <-0.03 | 17.96 | <-0.01 | <-0.02 | 1.27 | 2.82 | 37.36 | 98.41 |
| MLG-01_ap_027 | 0.08 | <-0.01 | <-0.08 | <-0.09 | 0.12 | 0.48 | 0.07 | 0.16 | 38.20 | <-0.04 | 0.13 | <-0.03 | 18.00 | 0.01 | <-0.02 | 1.43 | 2.34 | 37.63 | 98.64 |
| MLG-01_ap_028 | 0.08 | <-0.01 | <-0.08 | <-0.09 | 0.10 | 0.41 | 0.05 | 0.18 | 38.25 | <-0.04 | 0.08 | <-0.03 | 17.97 | 0.02 | <-0.02 | 1.46 | 2.75 | 37.40 | 98.75 |
| MLG-01_ap_029 | 0.09 | <-0.01 | <-0.09 | <-0.09 | 0.08 | 0.44 | 0.06 | 0.19 | 38.42 | <-0.04 | 0.07 | <-0.04 | 18.05 | <-0.01 | <-0.02 | 1.49 | 3.00 | 37.48 | 99.37 |
| MLG-01_ap_030 | 0.09 | 0.02 | <-0.09 | <-0.09 | 0.13 | 0.47 | 0.06 | 0.17 | 38.36 | <-0.04 | 0.07 | <-0.04 | 18.03 | <-0.01 | <-0.02 | 1.28 | 2.81 | 37.60 | 99.18 |
| MLG-01_ap_031 | 0.12 | <-0.01 | <-0.09 | <-0.09 | 0.07 | 0.58 | 0.06 | 0.17 | 37.71 | <-0.04 | 0.17 | <-0.04 | 17.79 | 0.01 | <-0.02 | 1.48 | 1.79 | 37.48 | 97.42 |
| MLG-01_ap_032 | 0.17 | <-0.01 | <-0.08 | <-0.09 | 0.14 | 0.50 | 0.08 | 0.19 | 38.20 | <-0.03 | 0.09 | <-0.03 | 17.84 | <-0.01 | <-0.02 | 1.58 | 2.74 | 37.35 | 98.88 |
| JEM-02_ap_001 | <0.01 | <-0.01 | <-0.08 | <-0.08 | <-0.04 | <-0.01 | <-0.01 | <-0.01 | 38.15 | <-0.02 | <-0.01 | <-0.03 | 17.96 | <-0.01 | <-0.01 | 0.01 | 0.05 | 38.79 | 95.96 |
| JEM-02_ap_002 | <0.01 | <-0.01 | <-0.08 | <-0.08 | <-0.04 | <-0.01 | <-0.02 | 0.01 | 38.98 | <-0.03 | 0.01 | <-0.03 | 17.93 | <-0.01 | <-0.01 | 0.01 | <0.02 | 38.69 | 95.61 |
| JEM-02_ap_003 | <0.01 | <-0.01 | <-0.08 | <-0.08 | <-0.05 | <-0.01 | <-0.02 | <-0.01 | 35.92 | <-0.03 | <-0.01 | <-0.03 | 16.61 | <-0.01 | <-0.01 | 0.03 | 0.05 | 35.73 | 88.33 |
| JEM-02_ap_004 | <0.01 | <-0.01 | <-0.08 | <-0.09 | <-0.04 | <-0.01 | <-0.02 | <-0.01 | 37.85 | <-0.02 | <-0.01 | <-0.03 | 17.63 | <-0.01 | <-0.01 | 0.07 | <0.02 | 37.81 | 93.35 |
| JEM-02_ap_005 | <0.01 | <-0.01 | <-0.08 | <-0.09 | <-0.05 | <-0.01 | <-0.02 | 0.01 | 38.32 | <-0.03 | <-0.01 | <-0.03 | 17.71 | 0.01 | <-0.01 | 0.02 | 0.02 | 38.14 | 94.24 |
| JEM-02_ap_006 | <0.01 | <-0.01 | <-0.08 | <-0.09 | <-0.04 | <-0.01 | <-0.02 | 0.01 | 38.49 | <-0.03 | <-0.01 | <-0.03 | 17.83 | <-0.01 | <-0.01 | 0.03 | 0.06 | 38.33 | 94.74 |
| JEM-02_ap_007 | <0.01 | <-0.01 | <-0.08 | <-0.08 | 0.05 | 0.01 | <-0.02 | <-0.01 | 38.00 | <-0.03 | <-0.01 | <-0.04 | 17.79 | <-0.01 | <-0.01 | 0.04 | 0.02 | 38.11 | 94.03 |
| BHF-04_ap_001 | 0.05 | <-0.01 | 0.09 | 0.34 | 0.16 | 0.03 | 0.20 | <-0.01 | 38.83 | 0.04 | 0.08 | <-0.03 | 18.16 | 0.03 | <-0.02 | 0.13 | 3.67 | 37.70 | 99.52 |
| BHF-04_ap_002 | 0.04 | <-0.01 | <-0.09 | 0.18 | 0.08 | 0.06 | 0.25 | 0.01 | 38.82 | <-0.04 | 0.05 | <-0.03 | 18.16 | 0.02 | <-0.02 | 0.23 | 3.38 | 37.71 | 98.98 |
| BHF-04_ap_003 | 0.09 | <-0.01 | 0.09 | 0.14 | 0.13 | 0.06 | 0.22 | <-0.01 | 38.93 | 0.04 | 0.04 | <-0.03 | 18.10 | 0.03 | <-0.02 | 0.14 | 3.45 | 37.75 | 99.21 |
| BHF-04_ap_004 | 0.03 | <-0.01 | <-0.09 | <-0.09 | <-0.07 | 0.04 | 0.21 | <-0.01 | 39.20 | <-0.04 | 0.04 | <-0.03 | 18.23 | 0.02 | <-0.02 | 0.11 | 3.09 | 38.02 | 98.99 |
| BHF-04_ap_005 | 0.03 | <-0.01 | <-0.08 | <-0.09 | <-0.07 | 0.13 | 0.44 | 0.02 | 38.61 | 0.07 | 0.04 | <-0.03 | 18.04 | <-0.01 | <-0.02 | 0.19 | 3.46 | 37.49 | 98.53 |
| BHF-04_ap_006 | 0.04 | <-0.01 | <-0.09 | 0.16 | 0.16 | 0.08 | 0.35 | 0.02 | 38.69 | 0.05 | 0.09 | <-0.04 | 18.11 | 0.04 | <-0.02 | 0.15 | 3.49 | 37.67 | 99.11 |
| BHF-04_ap_007 | 0.03 | <-0.01 | 0.16 | 0.19 | 0.10 | 0.08 | 0.33 | 0.03 | 38.58 | <-0.03 | 0.08 | <-0.04 | 18.10 | 0.02 | <-0.02 | 0.24 | 3.27 | 37.65 | 98.88 |
| BHF-04_ap_008 | 0.03 | <-0.01 | <-0.09 | 0.15 | 0.11 | 0.08 | 0.32 | <-0.01 | 38.92 | <-0.04 | 0.08 | <-0.04 | 18.01 | 0.02 | <-0.02 | 0.26 | 3.36 | 37.58 | 98.92 |
| BHF-04_ap_009 | 0.05 | <-0.01 | <-0.09 | 0.18 | 0.09 | 0.07 | 0.32 | 0.02 | 38.47 | 0.04 | 0.12 | <-0.04 | 18.07 | 0.06 | <-0.02 | 0.28 | 3.30 | 37.61 | 98.67 |
| BHF-04_ap_010 | 0.05 | <-0.01 | 0.15 | 0.25 | 0.08 | 0.05 | 0.17 | 0.01 | 38.61 | <-0.03 | 0.06 | <-0.04 | 18.00 | 0.02 | <-0.02 | 0.26 | 3.29 | 37.47 | 98.48 |
| BHF-04_ap_011 | 0.05 | <-0.01 | <-0.09 | 0.10 | 0.12 | 0.07 | 0.26 | 0.02 | 38.72 | <-0.04 | 0.06 | <-0.03 | 18.09 | 0.02 | <-0.02 | 0.24 | 3.23 | 37.69 | 98.67 |
| BHF-04_ap_012 | 0.01 | <-0.01 | <-0.09 | <-0.09 | 0.09 | 0.04 | 0.18 | <-0.01 | 39.16 | <-0.04 | 0.05 | 0.04 | 18.13 | 0.01 | <-0.02 | 0.12 | 2.97 | 37.92 | 98.72 |
| BHF-04_ap_013 | 0.03 | <-0.01 | <-0.09 | <-0.09 | 0.10 | <-0.02 | 0.23 | 0.01 | 38.90 | 0.04 | 0.03 | <-0.03 | 18.21 | 0.01 | <-0.02 | 0.16 | 3.28 | 37.79 | 98.79 |
| BHF-04_ap_014 | 0.06 | <-0.01 | <-0.09 | 0.16 | <-0.07 | 0.07 | 0.33 | 0.02 | 38.70 | <-0.04 | 0.07 | <-0.03 | 18.05 | 0.02 | <-0.02 | 0.20 | 3.38 | 37.57 | 98.63 |
| BHF-04_ap_015 | 0.04 | <-0.01 | <-0.09 | 0.10 | 0.11 | 0.04 | 0.21 | <-0.01 | 39.07 | <-0.03 | 0.04 | <-0.04 | 18.15 | 0.01 | <-0.02 | 0.11 | 3.52 | 37.71 | 99.11 |
| BHF-04_ap_016 | 0.08 | <-0.01 | 0.13 | 0.30 | 0.15 | 0.16 | 0.19 | 0.06 | 37.84 | <-0.04 | 0.18 | <-0.03 | 17.88 | 0.09 | <-0.02 | 2.19 | 1.53 | 37.59 | 98.37 |
| BHF-04_ap_017 | 0.04 | <-0.01 | <-0.09 | 0.11 | 0.10 | 0.10 | 0.34 | 0.02 | 38.70 | 0.05 | 0.11 | <-0.03 | 18.03 | 0.11 | <-0.02 | 0.21 | 3.25 | 37.76 | 98.96 |
| BHF-04_ap_018 | 0.02 | <-0.01 | <-0.09 | 0.18 | 0.09 | 0.06 | 0.42 | <-0.01 | 38.67 | 0.04 | 0.11 | <-0.03 | 18.02 | 0.02 | <-0.02 | 0.44 | 3.16 | 37.57 | 98.82 |
| BHF-04_ap_019 | 0.08 | <-0.01 | <-0.09 | 0.21 | <-0.07 | 0.05 | 0.21 | 0.01 | 39.00 | <-0.03 | 0.04 | <-0.03 | 18.14 | 0.02 | <-0.02 | 0.11 | 3.67 | 37.69 | 99.22 |
| BHF-04_ap_020 | 0.03 | <-0.01 | <-0.09 | 0.10 | <-0.06 | 0.03 | 0.26 | <-0.01 | 38.86 | <-0.04 | 0.06 | <-0.03 | 18.13 | 0.01 | 0.02 | 0.15 | 3.66 | 37.55 | 98.87 |
| BHF-04_ap_021 | 0.05 | <-0.01 | 0.10 | <-0.1 | 0.14 | 0.14 | 0.40 | 0.02 | 38.23 | <-0.04 | 0.12 | <-0.03 | 18.04 | 0.06 | <-0.02 | 0.26 | 3.05 | 37.63 | 98.24 |
| BHF-04_ap_022 | 0.05 | <-0.01 | <-0.08 | 0.20 | 0.16 | 0.10 | 0.38 | 0.02 | 38.61 | <-0.04 | 0.11 | <-0.03 | 18.01 | 0.06 | <-0.02 | 0.22 | 3.49 | 37.57 | 98.97 |
| BHF-04_ap_023 | 0.04 | <-0.01 | <-0.09 | <-0.09 | 0.09 | 0.07 | 0.23 | 0.02 | 38.91 | <-0.04 | 0.05 | <-0.03 | 17.95 | 0.02 | <-0.02 | 0.52 | 2.64 | 37.70 | 98.23 |
| BHF-04_ap_024 | 0.08 | <-0.01 | <-0.09 | 0.22 | 0.10 | 0.06 | 0.23 | <-0.01 | 38.65 | 0.05 | 0.07 | <-0.03 | 18.17 | 0.02 | <-0.02 | 0.19 | 3.36 | 37.76 | 98.96 |
| BHF-04_ap_025 | 0.01 | <-0.01 | <-0.08 | <-0.09 | <-0.06 | 0.03 | 0.04 | <-0.01 | 39.25 | <-0.04 | 0.05 | <-0.03 | 18.19 | <-0.01 | <-0.02 | 0.15 | 3.53 | 37.70 | 98.96 |
| BHF-04_ap_026 | 0.06 | <-0.01 | <-0.08 | 0.10 | 0.12 | 0.03 | 0.19 | <-0.01 | 38.97 | <-0.04 | 0.03 | 0.03 | 18.12 | <-0.01 | <-0.02 | 0.11 | 3.63 | 37.61 | 99.01 |
| BHF-04_ap_027 | 0.07 | <-0.01 | <-0.09 | 0.11 | 0.19 | 0.10 | 0.38 | 0.02 | 38.25 | 0.04 | 0.14 | <-0.04 | 18.02 | 0.09 | <-0.02 | 0.47 | 3.34 | 37.50 | 98.72 |
| BHF-04_ap_028 | 0.04 | <-0.01 | <-0.08 | <-0.09 | <-0.06 | 0.07 | 0.41 | 0.02 | 38.67 | <-0.03 | 0.04 | <-0.04 | 18.08 | <-0.01 | <-0.02 | 0.55 | 3.02 | 37.64 | 98.52 |

*all elements in wt. % (EMPA).

Appendix C: Eastern Sunda arc apatite trace element chemistry (EMPA)

| Analysis ID | Si | Al | La | Ce | Nd | Fe | Mn | Mg | Ca | Sr | Na | K | P | S | As | Cl | F | O.soi. | TOTAL |
|----------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|--------|-------|
| BHF-04_ap_029 | 0.02 | <0.01 | <0.09 | <0.09 | 0.08 | 0.09 | 0.28 | 0.02 | 38.84 | <0.03 | 0.03 | <0.04 | 18.10 | 0.01 | <0.02 | 0.32 | 3.19 | 37.64 | 98.62 |
| BHF-04_ap_030 | 0.04 | <0.01 | <0.09 | <0.09 | <0.06 | 0.09 | 0.24 | 0.02 | 38.74 | <0.04 | 0.08 | <0.03 | 17.99 | 0.04 | <0.02 | 0.27 | 3.33 | 37.50 | 98.33 |
| BHF-04_ap_031 | 0.05 | <0.01 | 0.15 | 0.33 | 0.29 | 0.05 | 0.23 | 0.02 | 37.79 | 0.05 | 0.06 | <0.03 | 18.02 | 0.15 | <0.02 | 0.12 | 3.54 | 37.39 | 98.25 |
| BHF-04_ap_032 | 0.02 | <0.01 | <0.09 | <0.09 | <0.06 | 0.05 | 0.24 | 0.01 | 38.91 | <0.04 | 0.05 | <0.04 | 18.10 | 0.01 | <0.02 | 0.21 | 3.28 | 37.65 | 98.54 |
| BHF-04_ap_033 | <0.01 | <0.01 | <0.08 | 0.09 | <0.06 | 0.18 | 1.32 | <0.01 | 37.50 | 0.14 | 0.21 | <0.04 | 17.77 | 0.27 | <0.02 | 0.60 | 2.83 | 37.58 | 98.50 |
| BHF-04_ap_034 | 0.02 | <0.01 | <0.08 | <0.09 | <0.06 | <0.02 | 0.09 | <0.01 | 39.04 | <0.04 | 0.05 | <0.04 | 18.13 | 0.01 | <0.02 | 0.39 | 3.25 | 37.63 | 98.59 |
| BHF-01_ap_001 | 0.02 | <0.01 | <0.09 | 0.15 | 0.09 | 0.40 | 0.34 | 0.13 | 38.26 | <0.03 | 0.08 | <0.03 | 18.02 | 0.02 | <0.02 | 1.13 | 2.60 | 37.62 | 98.87 |
| BHF-01_ap_002 | 0.04 | <0.01 | <0.08 | <0.09 | <0.06 | 0.05 | 0.04 | 0.05 | 38.99 | 0.09 | 0.17 | <0.03 | 17.71 | 0.29 | <0.01 | 3.87 | 37.43 | 98.72 | |
| BHF-01_ap_003 | 0.05 | <0.01 | <0.09 | 0.12 | 0.08 | 0.29 | 0.23 | 0.08 | 38.35 | 0.04 | 0.04 | <0.04 | 18.02 | 0.01 | <0.02 | 2.79 | 37.45 | 98.75 | |
| BHF-01_ap_004 | 0.02 | <0.01 | <0.08 | <0.09 | <0.06 | 0.09 | 0.08 | <0.01 | 39.15 | 0.04 | 0.02 | <0.03 | 18.18 | <0.01 | <0.02 | 3.62 | 37.67 | 99.11 | |
| BHF-01_ap_005 | 0.05 | <0.01 | <0.08 | <0.09 | <0.06 | 0.28 | 0.24 | 0.09 | 38.34 | 0.07 | 0.07 | <0.03 | 18.09 | 0.01 | <0.02 | 0.98 | 2.74 | 37.64 | 98.60 |
| BHF-01_ap_006 | 0.05 | <0.01 | 0.10 | <0.09 | <0.06 | 0.41 | 0.22 | 0.14 | 38.00 | <0.04 | 0.08 | <0.03 | 18.04 | 0.01 | <0.02 | 1.40 | 2.36 | 37.57 | 98.38 |
| BHF-01_ap_007 | 0.02 | <0.01 | <0.08 | <0.09 | <0.06 | 0.34 | 0.33 | 0.10 | 38.34 | 0.06 | 0.08 | <0.03 | 18.08 | 0.03 | <0.02 | 1.01 | 2.72 | 37.67 | 98.77 |
| BHF-01_ap_008 | 0.04 | <0.01 | <0.08 | <0.09 | <0.07 | 0.29 | 0.23 | 0.08 | 38.19 | 0.05 | 0.08 | <0.03 | 18.09 | <0.01 | <0.02 | 1.23 | 2.52 | 37.58 | 98.37 |
| BHF-01_ap_009 | 0.02 | <0.01 | <0.08 | <0.09 | 0.11 | 0.33 | 0.26 | 0.10 | 38.15 | 0.04 | 0.08 | <0.03 | 17.95 | 0.02 | <0.02 | 1.33 | 2.16 | 37.58 | 98.14 |
| BHF-01_ap_010 | 0.03 | <0.01 | <0.08 | 0.17 | 0.11 | 0.38 | 0.28 | 0.11 | 38.15 | 0.04 | 0.05 | <0.03 | 18.12 | 0.02 | <0.02 | 1.30 | 2.12 | 37.85 | 98.74 |
| BHF-01_ap_011 | 0.02 | <0.01 | <0.09 | <0.09 | <0.07 | 0.37 | 0.41 | 0.11 | 38.15 | 0.07 | 0.11 | <0.03 | 18.10 | 0.06 | <0.02 | 1.28 | 2.46 | 37.79 | 98.95 |
| BHF-01_ap_012 | 0.03 | <0.01 | <0.09 | <0.09 | 0.09 | 0.37 | 0.30 | 0.14 | 38.09 | <0.04 | 0.07 | <0.03 | 17.97 | 0.02 | <0.02 | 1.35 | 2.31 | 37.55 | 98.30 |
| BHF-01_ap_013 | 0.01 | <0.01 | <0.09 | <0.09 | 0.08 | 0.27 | 0.22 | 0.08 | 38.28 | 0.04 | 0.08 | <0.03 | 18.02 | 0.01 | <0.02 | 1.28 | 1.96 | 37.70 | 98.03 |
| BHF-01_ap_014 | 0.03 | <0.01 | <0.08 | 0.09 | 0.13 | 0.38 | 0.31 | 0.10 | 38.30 | <0.04 | 0.07 | <0.03 | 18.06 | 0.02 | <0.02 | 1.00 | 2.31 | 37.82 | 98.62 |
| BHF-01_ap_015 | 0.05 | <0.01 | <0.09 | <0.09 | <0.06 | 0.31 | 0.22 | 0.08 | 38.41 | 0.06 | 0.05 | <0.04 | 18.09 | 0.01 | <0.02 | 1.49 | 2.20 | 37.76 | 98.75 |
| BHF-01_ap_016 | 0.02 | <0.01 | <0.08 | <0.09 | <0.06 | 0.04 | 0.23 | <0.01 | 39.24 | 0.07 | 0.03 | <0.04 | 18.23 | 0.01 | <0.02 | 0.24 | 2.92 | 38.08 | 99.10 |
| BHF-01_ap_017 | 0.01 | <0.01 | <0.09 | <0.09 | 0.07 | 0.26 | 0.19 | 0.07 | 38.60 | 0.05 | 0.07 | <0.03 | 18.05 | 0.01 | <0.02 | 1.13 | 2.27 | 37.78 | 98.58 |
| BHF-01_ap_018 | 0.04 | <0.01 | <0.09 | <0.09 | <0.06 | 0.32 | 0.24 | 0.10 | 38.37 | <0.03 | 0.05 | <0.03 | 18.07 | 0.01 | <0.02 | 1.04 | 2.59 | 37.66 | 98.50 |
| BHF-01_ap_019 | 0.31 | 0.15 | <0.09 | 0.11 | 0.12 | 0.38 | 0.24 | 0.23 | 37.77 | <0.04 | 0.08 | 0.15 | 17.91 | 0.02 | <0.02 | 1.12 | 2.56 | 37.83 | 98.97 |
| BHF-01_ap_020 | 0.04 | <0.01 | <0.09 | 0.10 | <0.06 | 0.16 | 0.03 | <0.01 | 39.03 | 0.04 | 0.06 | <0.04 | 17.25 | 0.15 | <0.02 | 0.02 | 4.34 | 36.40 | 97.63 |
| BHF-01_ap_021 | 0.04 | <0.01 | <0.09 | 0.13 | <0.07 | 0.31 | 0.27 | 0.09 | 38.54 | 0.07 | 0.05 | <0.03 | 18.10 | 0.01 | <0.02 | 1.00 | 2.69 | 37.75 | 99.04 |
| BHF-01_ap_022 | 0.03 | <0.01 | <0.08 | <0.1 | 0.09 | 0.51 | 0.40 | 0.16 | 37.76 | 0.07 | 0.06 | <0.04 | 18.03 | 0.02 | <0.02 | 1.33 | 2.63 | 37.44 | 98.54 |
| BHF-01_ap_023 | 0.02 | <0.01 | 0.13 | <0.09 | <0.07 | 0.44 | 0.41 | 0.11 | 38.09 | 0.05 | 0.08 | <0.03 | 18.00 | 0.02 | <0.02 | 1.12 | 2.65 | 37.53 | 98.64 |
| BHF-01_ap_024 | 0.04 | <0.01 | <0.08 | 0.14 | 0.11 | 0.28 | 0.34 | 0.09 | 38.23 | 0.04 | 0.10 | <0.04 | 18.03 | 0.04 | <0.02 | 1.20 | 2.57 | 37.63 | 98.85 |
| BHF-01_ap_025 | 0.03 | <0.01 | <0.08 | 0.13 | 0.11 | 0.41 | 0.31 | 0.11 | 38.23 | 0.04 | 0.08 | <0.03 | 18.08 | 0.02 | <0.02 | 1.08 | 2.67 | 37.66 | 98.96 |
| SING-01_ap_001 | 0.11 | <0.01 | <0.09 | 0.15 | <0.06 | 0.04 | 0.04 | <0.01 | 38.91 | 0.08 | <0.02 | <0.03 | 17.87 | 0.07 | 0.09 | 1.24 | 2.34 | 37.68 | 98.61 |
| SING-01_ap_005 | 0.10 | <0.01 | 0.09 | <0.09 | 0.07 | <0.02 | <0.03 | <0.01 | 38.58 | 0.07 | 0.04 | <0.04 | 17.58 | 0.06 | 0.03 | 1.01 | 2.64 | 37.08 | 97.38 |
| SING-01_ap_003 | 0.06 | <0.01 | <0.08 | <0.09 | <0.07 | <0.02 | <0.03 | <0.01 | 39.02 | 0.05 | 0.02 | <0.04 | 18.00 | 0.04 | 0.04 | 0.91 | 2.70 | 37.66 | 98.49 |
| SING-01_ap_004 | 0.06 | <0.01 | <0.09 | 0.09 | <0.06 | 0.04 | 0.11 | <0.01 | 38.91 | <0.04 | <0.02 | <0.03 | 18.06 | 0.03 | <0.02 | 1.43 | 2.10 | 37.84 | 98.67 |
| SING-01_ap_001 | 1.48 | 1.13 | <0.08 | <0.09 | 0.17 | 0.10 | <0.02 | <0.03 | 39.19 | 0.06 | 0.02 | <0.03 | 18.01 | 0.06 | 0.04 | 1.14 | 2.37 | 37.95 | 99.22 |
| SLG-03_ap_001 | 0.74 | 0.49 | <0.09 | <0.09 | <0.06 | 0.38 | 0.05 | <0.01 | 34.50 | 0.06 | <0.02 | <0.03 | 16.25 | 0.05 | 0.04 | 0.59 | 2.10 | 37.99 | 97.49 |
| SLG-03_ap_003 | 0.08 | <0.01 | <0.09 | <0.09 | <0.06 | 0.03 | 0.05 | <0.01 | 38.43 | 0.04 | <0.02 | <0.03 | 17.31 | 0.06 | <0.02 | 0.73 | 2.31 | 38.06 | 98.61 |
| SLG-03_ap_004 | 1.15 | 0.89 | <0.08 | <0.09 | <0.06 | 1.37 | 0.04 | 1.04 | 36.00 | <0.04 | 0.04 | <0.03 | 16.73 | 0.15 | 0.02 | 0.43 | 2.37 | 38.33 | 98.56 |
| SLG-03_ap_005 | 0.07 | <0.01 | <0.09 | <0.09 | <0.06 | <0.02 | <0.03 | 0.02 | 38.94 | <0.04 | 0.03 | <0.03 | 17.77 | 0.03 | 0.03 | 0.41 | 2.27 | 37.61 | 97.18 |
| SLG-03_ap_006 | 0.04 | <0.01 | <0.08 | <0.09 | <0.06 | 0.02 | <0.03 | <0.01 | 39.29 | <0.03 | <0.02 | <0.03 | 18.01 | 0.02 | 0.02 | 0.43 | 2.19 | 38.02 | 98.03 |
| TR-03_ap_001 | 0.11 | 0.01 | <0.08 | 0.13 | <0.07 | 0.52 | 1.23 | 0.28 | 36.36 | <0.04 | 0.16 | <0.04 | 17.68 | 0.12 | <0.02 | 1.29 | 2.77 | 36.97 | 97.63 |
| TR-03_ap_002 | 0.04 | 0.01 | <0.09 | <0.09 | 0.09 | 0.22 | 0.49 | 0.15 | 37.53 | <0.04 | 0.17 | <0.03 | 17.77 | 0.11 | <0.02 | 1.08 | 2.77 | 37.13 | 97.56 |
| TR-03_ap_003 | 0.03 | <0.01 | <0.09 | 0.12 | <0.07 | 0.32 | 0.74 | 0.18 | 37.62 | <0.04 | 0.13 | <0.03 | 17.97 | 0.10 | <0.02 | 0.91 | 3.15 | 37.40 | 98.68 |
| TR-03_ap_004 | 0.04 | 0.01 | <0.09 | <0.09 | <0.06 | 0.22 | 0.30 | 0.11 | 38.60 | 0.06 | 0.14 | <0.03 | 18.10 | 0.10 | <0.02 | 1.13 | 2.78 | 37.88 | 99.49 |
| TR-03_ap_005 | 0.04 | <0.01 | <0.08 | 0.14 | <0.06 | 0.47 | 1.08 | 0.28 | 37.29 | 0.04 | 0.18 | <0.03 | 17.93 | 0.13 | <0.02 | 1.17 | 2.26 | 37.81 | 98.81 |
| TR-03_ap_006 | 0.09 | 0.02 | <0.09 | <0.09 | <0.07 | 0.37 | 0.80 | 0.22 | 37.35 | 0.07 | 0.17 | <0.04 | 18.03 | 0.13 | 0.02 | 1.26 | 2.65 | 37.68 | 98.84 |
| TR-03_ap_007 | 0.02 | <0.01 | <0.08 | 0.10 | <0.06 | 0.21 | 0.67 | 0.14 | 38.38 | <0.04 | 0.18 | <0.03 | 18.08 | 0.16 | <0.02 | 1.04 | 2.77 | 37.96 | 99.69 |
| SING-02_ap_001 | 0.08 | 0.02 | <0.09 | <0.09 | <0.06 | 0.14 | 0.16 | 0.10 | 38.78 | 0.10 | 0.11 | <0.04 | 18.08 | 0.14 | <0.02 | 0.72 | 3.39 | 37.76 | 99.57 |

*all elements in wt. % (EMPA).

Appendix C: Eastern Sunda arc apatite trace element chemistry (EMPA)

| Analysis ID | Si | Al | La | Ce | Nd | Fe | Mn | Mg | Ca | Sr | Na | K | P | S | As | Cl | F | O.stoi. | TOTAL |
|----------------|------|-------|-------|-------|-------|-------|------|-------|-------|-------|-------|-------|-------|------|-------|------|------|---------|-------|
| SING-02_ap_002 | 0.04 | <0.01 | <0.09 | <0.09 | <0.06 | 0.13 | 1.35 | 0.06 | 38.93 | 0.09 | 0.09 | 0.03 | 18.03 | 0.11 | <0.02 | 0.62 | 3.48 | 37.61 | 99.37 |
| SING-02_ap_003 | 0.03 | <0.01 | <0.08 | <0.09 | <0.07 | 0.06 | 1.36 | <0.01 | 38.16 | 0.13 | 0.07 | <0.03 | 18.01 | 0.08 | <0.02 | 0.35 | 3.24 | 37.68 | 99.18 |
| SING-02_ap_004 | 0.05 | <0.01 | <0.08 | <0.1 | <0.06 | 0.06 | 1.10 | 0.03 | 39.07 | <0.03 | 0.17 | <0.03 | 18.07 | 0.19 | <0.02 | 0.44 | 3.33 | 37.90 | 99.39 |
| SING-02_ap_005 | 0.18 | 0.07 | <0.08 | 0.11 | <0.06 | 0.16 | 0.19 | 0.16 | 36.28 | 0.07 | 0.05 | <0.03 | 16.95 | 0.04 | <0.02 | 0.97 | 2.82 | 35.56 | 93.60 |
| SING-02_ap_006 | 0.11 | <0.01 | <0.08 | <0.09 | <0.06 | <0.02 | 0.05 | 0.01 | 32.78 | <0.04 | 0.04 | <0.03 | 13.81 | 2.08 | <0.02 | 0.28 | 2.12 | 33.27 | 84.56 |
| SING-02_ap_007 | 0.03 | <0.01 | <0.09 | <0.09 | <0.06 | 0.12 | 0.21 | 0.07 | 38.91 | 0.07 | 0.05 | <0.04 | 18.16 | 0.03 | <0.02 | 0.73 | 3.00 | 37.82 | 99.17 |
| SING-02_ap_008 | 0.04 | 0.01 | <0.09 | 0.11 | <0.07 | 0.16 | 0.42 | 0.05 | 38.53 | 0.04 | 0.07 | <0.04 | 18.05 | 0.02 | <0.02 | 0.66 | 3.41 | 37.41 | 98.97 |
| SING-02_ap_009 | 0.02 | <0.01 | <0.09 | <0.09 | <0.07 | <0.02 | 0.04 | <0.01 | 39.28 | <0.04 | <0.02 | <0.03 | 18.29 | 0.01 | <0.02 | 0.21 | 3.50 | 37.83 | 99.17 |
| SING-02_ap_010 | 0.03 | <0.01 | <0.08 | <0.09 | 0.07 | 0.12 | 0.37 | 0.05 | 38.68 | 0.07 | 0.06 | <0.03 | 18.14 | 0.03 | <0.02 | 0.54 | 3.34 | 37.65 | 99.15 |
| SING-02_ap_011 | 0.04 | <0.01 | <0.08 | <0.09 | 0.08 | 0.04 | 0.06 | 0.02 | 38.34 | <0.04 | 0.04 | <0.03 | 17.64 | 0.03 | <0.02 | 0.33 | 3.42 | 36.76 | 96.78 |
| SING-02_ap_012 | 0.04 | <0.01 | <0.09 | <0.09 | 0.11 | 0.08 | 0.32 | 0.04 | 38.66 | 0.06 | 0.06 | <0.03 | 18.18 | 0.03 | <0.02 | 0.52 | 3.47 | 37.64 | 99.22 |
| SING-02_ap_013 | 0.08 | <0.01 | <0.09 | <0.09 | <0.07 | 0.10 | 0.17 | 0.06 | 38.69 | 0.11 | 0.04 | <0.04 | 18.18 | 0.03 | <0.02 | 0.89 | 3.15 | 37.69 | 99.19 |
| SING-02_ap_014 | 0.13 | 0.03 | <0.09 | <0.09 | <0.06 | 0.09 | 0.18 | 0.06 | 38.27 | 0.08 | 0.07 | <0.03 | 17.65 | 0.05 | <0.02 | 0.68 | 2.84 | 37.12 | 97.24 |
| SING-02_ap_015 | 0.05 | <0.01 | <0.08 | <0.09 | <0.06 | 0.13 | 0.21 | 0.05 | 38.79 | 0.08 | 0.06 | <0.04 | 18.11 | 0.12 | <0.02 | 0.97 | 3.12 | 37.75 | 99.44 |
| SING-02_ap_016 | 0.09 | <0.01 | <0.08 | <0.09 | 0.10 | 0.04 | 0.11 | 0.03 | 38.87 | <0.04 | 0.03 | <0.03 | 18.08 | 0.04 | <0.02 | 0.36 | 3.37 | 37.64 | 98.77 |
| SING-02_ap_017 | 0.04 | <0.01 | <0.09 | <0.09 | <0.06 | 0.07 | 0.18 | 0.06 | 39.06 | 0.06 | 0.05 | <0.04 | 18.07 | 0.02 | <0.02 | 0.65 | 3.01 | 37.74 | 99.01 |
| TR-01_ap_001 | 0.10 | <0.01 | 0.09 | <0.09 | <0.06 | 0.18 | 0.07 | 0.10 | 38.59 | 0.06 | 0.05 | <0.04 | 17.95 | 0.07 | <0.02 | 1.52 | 1.80 | 37.89 | 98.45 |
| TR-01_ap_002 | 0.10 | <0.01 | <0.09 | <0.09 | <0.06 | 0.27 | 0.06 | 0.13 | 38.60 | <0.04 | 0.05 | 0.03 | 17.90 | 0.12 | <0.02 | 1.20 | 1.63 | 38.07 | 98.15 |
| TR-01_ap_003 | 0.09 | <0.01 | <0.08 | <0.09 | <0.06 | 0.22 | 0.08 | 0.13 | 38.69 | <0.03 | 0.05 | <0.04 | 17.90 | 0.10 | <0.02 | 1.05 | 2.20 | 37.85 | 98.35 |
| TR-01_ap_004 | 0.12 | <0.01 | <0.09 | <0.09 | <0.07 | 0.18 | 0.10 | 0.09 | 38.93 | <0.04 | 0.05 | <0.03 | 17.95 | 0.08 | <0.02 | 1.05 | 2.88 | 37.68 | 99.11 |
| TR-01_ap_005 | 0.10 | <0.01 | <0.08 | <0.09 | 0.08 | 0.27 | 0.06 | 0.14 | 38.48 | <0.04 | 0.05 | <0.04 | 18.06 | 0.08 | <0.02 | 1.30 | 2.75 | 37.69 | 99.06 |
| TR-01_ap_006 | 0.11 | <0.01 | <0.09 | <0.09 | 0.16 | 0.07 | 0.17 | 0.11 | 38.63 | <0.04 | 0.05 | <0.03 | 18.09 | 0.05 | <0.02 | 1.13 | 2.64 | 37.80 | 99.09 |
| TR-01_ap_007 | 0.09 | <0.01 | <0.08 | <0.09 | 0.08 | 0.10 | 0.10 | 0.06 | 39.12 | 0.05 | 0.06 | <0.03 | 18.09 | 0.06 | <0.02 | 0.59 | 3.57 | 37.71 | 99.69 |
| TR-01_ap_008 | 0.12 | <0.01 | <0.08 | <0.09 | 0.10 | 0.21 | 0.10 | 0.10 | 38.81 | 0.05 | 0.06 | <0.04 | 18.08 | 0.10 | <0.02 | 0.78 | 3.22 | 37.80 | 99.53 |
| TR-01_ap_009 | 0.15 | 0.01 | <0.08 | <0.09 | <0.06 | 0.14 | 0.05 | 0.04 | 37.92 | <0.04 | 0.08 | <0.03 | 17.45 | 0.14 | <0.02 | 1.30 | 2.82 | 36.70 | 96.79 |
| TR-01_ap_010 | 0.10 | <0.01 | <0.09 | <0.09 | <0.06 | 0.28 | 0.06 | 0.14 | 38.58 | <0.04 | 0.04 | <0.04 | 18.01 | 0.09 | <0.02 | 1.14 | 1.84 | 38.08 | 98.34 |
| TR-01_ap_011 | 0.11 | <0.01 | <0.09 | <0.09 | <0.06 | 0.10 | 0.06 | 0.04 | 38.93 | <0.04 | 0.08 | <0.04 | 17.97 | 0.10 | <0.02 | 1.24 | 2.77 | 37.70 | 99.10 |
| TR-01_ap_012 | 0.12 | <0.01 | <0.09 | <0.09 | 0.10 | 0.07 | 0.11 | 0.06 | 39.01 | <0.03 | 0.07 | <0.03 | 18.04 | 0.06 | <0.02 | 0.72 | 3.21 | 37.73 | 99.34 |
| TR-01_ap_013 | 0.11 | <0.01 | <0.09 | <0.09 | 0.09 | 0.24 | 0.08 | 0.12 | 38.84 | <0.04 | 0.07 | <0.03 | 18.07 | 0.10 | <0.02 | 0.66 | 3.12 | 37.87 | 99.35 |
| TR-01_ap_014 | 0.12 | <0.01 | <0.08 | <0.09 | <0.07 | 0.09 | 0.07 | 0.02 | 38.87 | <0.04 | 0.09 | <0.03 | 18.04 | 0.11 | <0.02 | 0.79 | 3.15 | 37.74 | 99.10 |
| TR-01_ap_015 | 0.12 | 0.01 | <0.09 | 0.10 | <0.06 | 0.14 | 0.07 | 0.04 | 38.91 | <0.04 | 0.06 | <0.04 | 17.96 | 0.10 | <0.02 | 0.61 | 3.07 | 37.71 | 98.90 |
| TR-01_ap_016 | 0.12 | <0.01 | <0.09 | <0.09 | <0.07 | 0.16 | 0.11 | 0.08 | 38.32 | <0.04 | 0.07 | <0.03 | 17.68 | 0.13 | <0.02 | 0.84 | 2.98 | 37.18 | 97.69 |
| TR-01_ap_017 | 0.10 | <0.01 | <0.08 | <0.09 | 0.07 | 0.35 | 0.10 | 0.21 | 38.73 | <0.04 | 0.06 | <0.03 | 18.05 | 0.09 | <0.02 | 0.95 | 3.02 | 37.85 | 99.56 |
| TR-01_ap_018 | 0.34 | 0.03 | <0.08 | 0.20 | 0.09 | 0.16 | 0.05 | 0.16 | 38.37 | <0.04 | 0.07 | <0.03 | 17.76 | 0.07 | 0.03 | 0.99 | 2.54 | 37.75 | 98.61 |
| TR-01_ap_019 | 0.10 | <0.01 | <0.08 | <0.1 | <0.07 | 0.19 | 0.09 | 0.11 | 38.70 | <0.04 | 0.05 | <0.03 | 17.86 | 0.07 | <0.02 | 1.21 | 1.79 | 37.89 | 98.07 |
| TR-01_ap_020 | 0.13 | <0.01 | <0.08 | <0.09 | <0.06 | 0.25 | 0.05 | 0.13 | 38.62 | <0.03 | 0.06 | <0.04 | 17.97 | 0.11 | 0.02 | 1.08 | 2.70 | 37.77 | 98.89 |
| TR-01_ap_021 | 0.10 | <0.01 | <0.09 | <0.09 | <0.07 | 0.11 | 0.05 | 0.07 | 38.86 | <0.04 | 0.07 | <0.04 | 17.93 | 0.10 | <0.02 | 0.89 | 2.87 | 37.64 | 98.73 |
| TR-01_ap_022 | 0.10 | <0.01 | <0.09 | <0.1 | <0.06 | 0.38 | 0.10 | 0.18 | 38.33 | <0.04 | 0.08 | 0.03 | 18.04 | 0.10 | <0.02 | 1.32 | 1.50 | 38.23 | 98.39 |
| TR-01_ap_023 | 0.11 | <0.01 | <0.08 | <0.09 | 0.12 | 0.26 | 0.11 | 0.10 | 38.54 | 0.07 | 0.08 | 0.05 | 17.84 | 0.10 | <0.02 | 1.30 | 2.37 | 37.64 | 98.68 |
| TR-01_ap_024 | 0.10 | <0.01 | <0.08 | <0.09 | <0.06 | 0.20 | 0.10 | 0.08 | 38.68 | 0.05 | 0.04 | <0.04 | 17.94 | 0.07 | <0.02 | 1.30 | 2.67 | 37.59 | 98.82 |
| TR-01_ap_025 | 0.09 | 0.01 | <0.08 | <0.09 | <0.06 | 0.21 | 0.07 | 0.10 | 38.69 | <0.04 | 0.05 | <0.03 | 17.97 | 0.08 | <0.02 | 1.05 | 2.83 | 37.66 | 98.82 |
| TR-01_ap_026 | 0.10 | <0.01 | <0.09 | <0.09 | 0.08 | 0.14 | 0.08 | 0.06 | 39.03 | <0.04 | 0.06 | <0.03 | 17.95 | 0.10 | <0.02 | 0.89 | 3.10 | 37.66 | 99.24 |
| TR-01_ap_027 | 0.11 | <0.01 | <0.08 | <0.09 | 0.07 | 0.29 | 0.04 | 0.12 | 38.84 | 0.05 | 0.07 | <0.03 | 17.98 | 0.10 | <0.02 | 0.41 | 3.31 | 37.74 | 99.13 |
| TR-01_ap_028 | 0.20 | 0.03 | <0.08 | 0.11 | <0.06 | 0.24 | 0.13 | 0.12 | 38.67 | 0.04 | 0.08 | <0.04 | 17.95 | 0.08 | <0.02 | 1.02 | 2.67 | 37.89 | 99.22 |
| TR-01_ap_029 | 0.12 | <0.01 | <0.09 | <0.09 | <0.07 | 0.21 | 0.08 | 0.09 | 38.62 | <0.04 | 0.07 | <0.03 | 17.88 | 0.09 | <0.02 | 1.49 | 2.38 | 37.61 | 98.63 |
| TR-01_ap_030 | 0.10 | <0.01 | 0.09 | <0.09 | <0.07 | 0.17 | 0.08 | 0.07 | 38.97 | <0.04 | 0.08 | <0.03 | 17.94 | 0.09 | <0.02 | 1.17 | 2.83 | 37.69 | 99.28 |
| TR-05_ap_001 | 0.21 | <0.01 | <0.08 | <0.09 | <0.06 | <0.02 | 0.05 | 0.05 | 36.37 | <0.03 | 0.06 | 0.04 | 15.64 | 0.04 | <0.02 | 0.40 | 2.81 | 33.85 | 89.50 |
| TR-05_ap_002 | 0.07 | <0.01 | <0.08 | <0.09 | <0.06 | <0.02 | 0.06 | 0.01 | 39.06 | <0.04 | 0.04 | <0.03 | 18.07 | 0.02 | 0.04 | 0.70 | 2.70 | 37.83 | 98.61 |
| TR-05_ap_003 | 0.07 | <0.01 | <0.08 | <0.09 | <0.06 | 0.05 | 0.11 | <0.01 | 38.94 | <0.04 | 0.06 | <0.03 | 18.02 | 0.04 | <0.02 | 0.59 | 2.92 | 37.66 | 98.44 |
| TR-05_ap_004 | 0.10 | <0.01 | <0.09 | <0.09 | <0.07 | 0.03 | 0.05 | <0.01 | 38.80 | <0.04 | 0.03 | <0.03 | 17.96 | 0.03 | 0.05 | 0.69 | 2.47 | 37.70 | 97.90 |

*all elements in wt. % (EMPA).

Appendix C: Eastern Sunda arc apatite trace element chemistry (EMPA)

| Analysis ID | Si | Al | La | Ce | Nd | Fe | Mn | Mg | Ca | Sr | Na | K | P | S | As | Cl | F | O.soi. | TOTAL |
|---------------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|--------|-------|
| TR-05_ap_005 | 0.08 | <0.01 | <0.09 | 0.12 | <0.06 | <0.02 | 0.06 | <0.01 | 38.67 | <0.04 | 0.03 | <0.04 | 17.68 | 0.01 | 0.03 | 0.75 | 2.48 | 37.24 | 97.15 |
| TR-05_ap_006 | 0.10 | <0.01 | <0.08 | 0.15 | <0.06 | 0.15 | 0.25 | 0.05 | 38.15 | 0.04 | 0.12 | <0.04 | 17.84 | 0.07 | <0.02 | 2.06 | 1.46 | 37.66 | 98.11 |
| TR-05_ap_007 | 0.10 | <0.01 | <0.08 | <0.09 | <0.06 | 0.03 | 0.09 | <0.01 | 38.92 | <0.04 | 0.03 | <0.03 | 18.01 | 0.03 | 0.07 | 0.97 | 1.95 | 38.00 | 98.20 |
| TR-05_ap_008 | 0.07 | <0.01 | <0.09 | <0.09 | <0.06 | <0.02 | 0.11 | <0.01 | 38.83 | 0.05 | 0.10 | <0.03 | 18.03 | 0.07 | <0.02 | 0.62 | 3.07 | 37.66 | 98.62 |
| TR-05_ap_009 | 0.13 | <0.01 | <0.09 | <0.09 | <0.06 | <0.02 | 0.04 | <0.01 | 39.01 | <0.04 | 0.02 | <0.04 | 17.85 | 0.01 | <0.02 | 0.27 | 3.07 | 37.47 | 97.88 |
| TR-05_ap_010 | 0.07 | <0.01 | <0.08 | <0.09 | 0.12 | 0.02 | <0.03 | <0.01 | 39.01 | <0.03 | <0.02 | <0.03 | 17.92 | 0.03 | <0.02 | 0.32 | 2.87 | 37.63 | 98.00 |
| TR-05_ap_011 | 0.09 | <0.01 | <0.09 | <0.09 | <0.07 | 0.06 | 0.09 | <0.01 | 38.86 | <0.04 | 0.05 | <0.03 | 17.93 | 0.07 | <0.02 | 0.84 | 2.11 | 37.86 | 97.94 |
| TR-05_ap_012 | 0.11 | <0.01 | <0.08 | <0.09 | <0.06 | 0.04 | 0.11 | <0.01 | 39.00 | <0.04 | 0.04 | <0.03 | 17.98 | 0.02 | 0.06 | 0.84 | 1.83 | 38.08 | 98.12 |
| TR-05_ap_013 | 0.10 | <0.01 | <0.09 | 0.09 | 0.10 | <0.02 | 0.08 | <0.01 | 39.00 | <0.04 | 0.03 | <0.03 | 18.12 | <0.01 | 0.02 | 0.70 | 2.05 | 38.16 | 98.46 |
| TR-05_ap_014 | 0.07 | <0.01 | <0.09 | <0.09 | <0.06 | 0.04 | 0.08 | <0.01 | 39.31 | <0.04 | 0.03 | <0.04 | 18.11 | 0.03 | 0.05 | 0.85 | 2.46 | 38.05 | 99.07 |
| TR-05_ap_015 | 0.08 | <0.01 | <0.09 | <0.09 | <0.06 | <0.02 | 0.09 | <0.01 | 38.84 | <0.04 | 0.02 | <0.03 | 17.97 | 0.03 | 0.07 | 1.05 | 2.36 | 37.68 | 98.18 |
| TR-05_ap_016 | 0.14 | <0.01 | <0.09 | <0.09 | 0.10 | 0.02 | 0.09 | <0.01 | 38.70 | <0.04 | 0.07 | 0.03 | 17.86 | 0.07 | <0.02 | 0.66 | 2.45 | 37.70 | 97.88 |
| TR-05_ap_017 | 0.10 | <0.01 | <0.09 | <0.09 | 0.10 | <0.02 | 0.11 | <0.01 | 38.12 | <0.04 | 0.10 | <0.03 | 17.99 | 0.09 | <0.02 | 0.65 | 3.00 | 37.79 | 99.04 |
| TR-05_ap_018 | 0.07 | <0.01 | 0.08 | <0.09 | 0.07 | 0.15 | 0.24 | 0.08 | 38.10 | <0.03 | 0.09 | <0.03 | 17.91 | 0.05 | <0.02 | 2.39 | 1.38 | 37.62 | 98.23 |
| TR-05_ap_019 | 0.08 | <0.01 | <0.09 | 0.17 | 0.11 | 0.13 | 0.16 | 0.05 | 38.46 | <0.04 | 0.11 | <0.04 | 17.87 | 0.05 | <0.02 | 2.42 | 1.15 | 37.77 | 98.52 |
| TR-05_ap_020 | 0.14 | 0.02 | <0.08 | <0.09 | <0.07 | 0.10 | 0.04 | 0.03 | 39.00 | <0.04 | 0.02 | <0.03 | 18.02 | 0.02 | 0.03 | 0.71 | 2.72 | 37.86 | 98.72 |
| TR-05_ap_021 | 0.10 | <0.01 | <0.08 | 0.11 | <0.07 | 0.06 | 0.10 | <0.01 | 39.06 | <0.04 | 0.03 | <0.04 | 17.95 | 0.04 | 0.08 | 0.91 | 2.36 | 37.84 | 98.63 |
| TR-05_ap_022 | 0.07 | <0.01 | <0.08 | <0.09 | <0.07 | 0.03 | 0.09 | <0.01 | 39.08 | 0.04 | 0.02 | 0.03 | 18.11 | 0.02 | 0.03 | 0.66 | 2.57 | 37.93 | 98.65 |
| TR-05_ap_023 | 0.09 | <0.01 | <0.08 | <0.09 | 0.08 | <0.02 | 0.05 | <0.01 | 39.09 | <0.04 | 0.03 | <0.03 | 18.03 | 0.02 | 0.05 | 0.74 | 2.38 | 37.91 | 98.48 |
| TR-05_ap_024 | 0.06 | <0.01 | 0.10 | <0.09 | <0.06 | 0.05 | 0.07 | <0.01 | 39.15 | <0.04 | 0.03 | <0.04 | 18.13 | 0.02 | 0.02 | 0.67 | 2.47 | 38.07 | 98.74 |
| TR-05_ap_025 | 0.10 | <0.01 | 0.10 | 0.10 | 0.07 | 0.02 | 0.07 | <0.01 | 39.05 | <0.04 | 0.05 | <0.04 | 18.00 | 0.06 | 0.03 | 0.67 | 2.86 | 37.76 | 98.94 |
| TR-05_ap_026 | 0.07 | <0.01 | <0.09 | 0.11 | 0.06 | <0.02 | 0.12 | <0.01 | 39.01 | <0.03 | 0.07 | <0.03 | 18.04 | 0.05 | 0.05 | 0.52 | 3.13 | 37.69 | 98.93 |
| TR-05_ap_027 | 0.07 | <0.01 | <0.08 | <0.09 | <0.07 | 0.03 | 0.10 | <0.01 | 38.93 | <0.04 | 0.02 | <0.03 | 18.04 | 0.03 | 0.05 | 0.94 | 1.87 | 38.06 | 98.15 |
| TR-05_ap_028 | 0.08 | <0.01 | <0.08 | 0.10 | <0.06 | <0.02 | 0.08 | <0.01 | 38.95 | 0.04 | 0.08 | <0.03 | 17.88 | 0.10 | <0.02 | 0.71 | 2.72 | 37.66 | 98.41 |
| TR-05_ap_029 | 0.04 | <0.01 | 0.11 | <0.09 | 0.09 | <0.02 | 0.10 | <0.01 | 38.90 | 0.05 | 0.09 | <0.04 | 18.02 | 0.06 | <0.02 | 0.61 | 3.01 | 37.65 | 98.73 |
| TR-05_ap_030 | 0.09 | <0.01 | <0.09 | 0.12 | <0.06 | 0.03 | 0.05 | <0.01 | 39.04 | <0.03 | 0.04 | <0.03 | 18.05 | 0.04 | 0.06 | 0.90 | 2.41 | 37.93 | 98.76 |
| NEF-01_ap_001 | 0.02 | <0.01 | <0.08 | <0.09 | <0.06 | 0.16 | 0.06 | 0.10 | 39.37 | 0.04 | 0.02 | <0.03 | 18.16 | 0.01 | <0.02 | 0.24 | 3.27 | 37.94 | 99.40 |
| NEF-01_ap_002 | 0.04 | <0.01 | <0.09 | <0.09 | <0.06 | 0.41 | 0.23 | 0.18 | 38.61 | 0.07 | 0.10 | <0.04 | 18.03 | 0.10 | <0.02 | 0.59 | 3.18 | 37.75 | 99.28 |
| NEF-01_ap_003 | 0.03 | <0.01 | <0.09 | <0.09 | <0.06 | 0.17 | 0.04 | 0.15 | 39.28 | <0.03 | 0.03 | <0.04 | 18.30 | <0.01 | <0.02 | 0.20 | 3.74 | 37.90 | 99.84 |
| NEF-01_ap_004 | 0.04 | <0.01 | <0.09 | <0.09 | <0.06 | 0.26 | 0.21 | 0.11 | 38.96 | <0.04 | 0.05 | <0.03 | 18.13 | 0.04 | <0.02 | 0.33 | 3.51 | 37.75 | 99.39 |
| NEF-03_ap_001 | 0.04 | <0.01 | <0.09 | <0.1 | 0.07 | 0.08 | 0.07 | 0.03 | 39.27 | <0.04 | 0.04 | <0.03 | 18.17 | 0.02 | <0.02 | 0.72 | 3.04 | 37.85 | 99.39 |
| NEF-03_ap_002 | 0.04 | <0.01 | <0.09 | <0.09 | 0.09 | 0.05 | 0.06 | <0.01 | 39.61 | <0.04 | 0.02 | <0.04 | 18.21 | 0.01 | <0.02 | 0.16 | 3.43 | 37.95 | 99.64 |
| NEF-03_ap_003 | 0.03 | <0.01 | <0.09 | <0.09 | <0.06 | 0.07 | 0.09 | 0.03 | 39.42 | <0.03 | 0.04 | <0.03 | 18.20 | 0.02 | <0.02 | 0.28 | 3.17 | 38.01 | 99.36 |
| NEF-03_ap_004 | 0.06 | 0.04 | <0.09 | <0.09 | <0.06 | 0.37 | 0.86 | 0.07 | 38.16 | 0.04 | 0.10 | <0.03 | 18.08 | 0.16 | <0.02 | 0.45 | 3.35 | 37.87 | 99.70 |
| NEF-03_ap_005 | 0.03 | <0.01 | <0.08 | 0.11 | <0.06 | 0.14 | 0.04 | 0.03 | 39.19 | <0.03 | 0.05 | <0.03 | 18.07 | 0.08 | <0.02 | 0.17 | 3.64 | 37.69 | 99.26 |
| NEF-03_ap_006 | 0.04 | <0.01 | <0.09 | <0.09 | <0.06 | 0.15 | 0.09 | 0.05 | 39.49 | <0.04 | <0.02 | <0.04 | 18.26 | <0.01 | <0.02 | 0.37 | 3.53 | 37.94 | 99.92 |
| NEF-03_ap_007 | 0.05 | 0.02 | <0.08 | <0.09 | 0.10 | 0.04 | 0.08 | 0.03 | 39.48 | <0.03 | 0.04 | <0.04 | 18.22 | <0.01 | <0.02 | 0.49 | 3.20 | 38.01 | 99.75 |
| NEF-03_ap_008 | 0.04 | <0.01 | <0.08 | <0.09 | <0.06 | 0.25 | 0.18 | 0.12 | 38.87 | <0.04 | 0.03 | <0.03 | 18.11 | 0.04 | <0.02 | 0.40 | 3.58 | 37.65 | 99.26 |
| NEF-03_ap_009 | 0.03 | <0.01 | <0.09 | <0.09 | <0.06 | 0.08 | 0.08 | 0.03 | 39.34 | <0.04 | 0.05 | <0.03 | 18.18 | 0.04 | <0.02 | 0.68 | 2.98 | 37.94 | 99.51 |
| NEF-03_ap_010 | 0.03 | <0.01 | <0.09 | <0.09 | <0.06 | 0.06 | 0.06 | <0.01 | 39.72 | <0.04 | 0.03 | <0.03 | 18.25 | 0.03 | <0.02 | 0.28 | 3.41 | 38.03 | 99.90 |
| NEF-03_ap_011 | 0.03 | <0.01 | <0.08 | <0.09 | <0.06 | 0.18 | 0.14 | 0.09 | 39.29 | <0.04 | 0.04 | <0.03 | 18.20 | 0.04 | <0.02 | 0.32 | 3.54 | 37.89 | 99.75 |
| NEF-03_ap_012 | 0.03 | <0.01 | <0.09 | <0.09 | <0.06 | 0.14 | 0.11 | 0.06 | 39.39 | <0.04 | 0.04 | <0.03 | 18.23 | 0.01 | <0.02 | 0.41 | 3.35 | 37.94 | 99.72 |
| NEF-03_ap_013 | 0.05 | <0.01 | <0.08 | <0.09 | <0.06 | 0.09 | 0.10 | 0.05 | 39.50 | 0.04 | 0.02 | <0.03 | 18.29 | 0.02 | <0.02 | 0.50 | 3.16 | 38.14 | 99.95 |
| NEF-03_ap_014 | 0.05 | <0.01 | <0.08 | <0.09 | <0.06 | 0.17 | 0.16 | 0.08 | 39.27 | <0.04 | 0.05 | <0.04 | 18.17 | 0.05 | <0.02 | 0.51 | 3.38 | 37.89 | 99.78 |
| NEF-03_ap_015 | 0.03 | <0.01 | <0.08 | <0.09 | <0.06 | 0.06 | 0.08 | 0.01 | 39.43 | <0.04 | 0.03 | <0.03 | 18.11 | 0.02 | 0.03 | 0.35 | 3.11 | 37.87 | 99.14 |
| NEF-03_ap_016 | 0.04 | <0.01 | <0.09 | 0.11 | 0.07 | 0.13 | 0.16 | 0.06 | 39.18 | 0.04 | 0.03 | <0.03 | 18.10 | 0.02 | <0.02 | 0.41 | 3.33 | 37.76 | 99.44 |
| NEF-03_ap_017 | 0.03 | <0.01 | <0.08 | <0.09 | <0.06 | 0.05 | 0.06 | <0.01 | 39.33 | <0.03 | 0.04 | <0.04 | 18.11 | 0.04 | <0.02 | 0.19 | 3.43 | 37.75 | 99.05 |
| NEF-03_ap_018 | 0.04 | 0.01 | <0.08 | <0.09 | <0.06 | 0.20 | 0.13 | 0.07 | 39.13 | <0.03 | 0.12 | <0.03 | 18.01 | 0.13 | <0.02 | 0.47 | 3.44 | 37.76 | 99.50 |
| NEF-03_ap_019 | 0.05 | <0.01 | <0.08 | <0.1 | <0.06 | 0.05 | 0.06 | 0.02 | 39.70 | <0.03 | 0.03 | <0.03 | 18.17 | <0.01 | <0.02 | 0.35 | 2.84 | 38.16 | 99.42 |
| NEF-03_ap_020 | 0.06 | <0.01 | <0.09 | <0.09 | <0.06 | 0.13 | 0.08 | 0.05 | 39.41 | 0.04 | 0.03 | <0.04 | 18.09 | 0.04 | 0.02 | 0.55 | 3.32 | 37.82 | 99.64 |

*all elements in wt. % (EMPA).

Appendix C: Eastern Sunda arc apatite trace element chemistry (EMPA)

| Analysis ID | Si | Al | La | Ce | Nd | Fe | Mn | Mg | Ca | Sr | Na | K | P | S | As | Cl | F | O sol. | TOTAL |
|----------------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|--------|-------|
| NEF-03_ap__001 | 0.04 | <0.01 | <0.08 | <0.09 | <0.06 | 0.07 | 0.13 | 0.02 | 38.83 | <0.06 | 0.21 | <0.03 | 17.82 | 0.31 | <0.02 | 0.15 | 3.74 | 37.56 | 98.92 |
| SEF-01_ap__021 | 0.07 | 0.01 | <0.08 | 0.12 | 0.07 | <0.02 | 0.04 | <0.01 | 38.98 | <0.04 | 0.03 | <0.04 | 17.86 | 0.03 | <0.02 | 1.11 | 1.73 | 37.85 | 97.90 |
| SEF-01_ap__022 | 0.07 | <0.01 | <0.08 | <0.09 | <0.06 | <0.02 | 0.04 | <0.01 | 39.52 | <0.03 | 0.02 | <0.03 | 18.13 | 0.03 | <0.02 | 0.27 | 1.99 | 38.45 | 98.51 |
| SEF-01_ap__003 | 0.04 | <0.01 | <0.08 | <0.09 | <0.06 | <0.02 | 0.05 | <0.01 | <0.02 | <0.04 | <0.02 | <0.03 | 18.25 | 0.02 | 0.03 | 0.78 | 1.80 | 38.64 | 99.43 |
| SEF-01_ap__004 | 0.09 | <0.01 | 0.10 | 0.24 | 0.11 | <0.02 | 0.08 | <0.01 | 38.71 | 0.04 | <0.02 | <0.04 | 17.98 | 0.02 | <0.02 | 2.27 | 2.20 | 38.32 | 98.17 |
| SEF-01_ap__005 | 0.09 | 0.01 | <0.08 | <0.09 | <0.06 | 0.03 | 0.03 | <0.01 | 32.56 | 0.04 | <0.02 | <0.03 | 14.88 | 0.01 | 0.03 | 0.75 | 1.27 | 31.70 | 81.40 |
| SEF-01_ap__006 | 0.07 | <0.01 | <0.09 | 0.12 | <0.06 | 0.02 | 0.05 | <0.01 | 39.38 | <0.04 | 0.02 | <0.04 | 18.10 | 0.05 | <0.02 | 1.05 | 1.48 | 38.45 | 98.79 |
| SEF-01_ap__007 | 0.19 | 0.03 | <0.08 | <0.09 | 0.08 | 0.10 | <0.03 | 0.06 | 38.68 | <0.04 | 0.03 | <0.03 | 17.67 | 0.04 | 0.02 | 0.86 | 1.96 | 37.68 | 97.45 |
| SEF-01_ap__008 | 0.08 | <0.01 | <0.09 | 0.14 | <0.07 | <0.02 | 0.05 | <0.01 | 39.34 | <0.04 | 0.02 | <0.03 | 18.17 | 0.03 | 0.02 | 0.91 | 1.59 | 38.49 | 98.85 |
| SEF-01_ap__009 | 0.09 | <0.01 | <0.08 | <0.09 | 0.12 | <0.02 | <0.03 | <0.01 | 39.19 | <0.04 | <0.02 | <0.03 | 18.02 | 0.01 | 0.02 | 0.92 | 1.32 | 38.33 | 98.03 |
| SEF-01_ap__010 | 0.07 | <0.01 | 0.10 | <0.09 | <0.07 | <0.02 | <0.03 | <0.01 | 39.24 | <0.04 | 0.04 | 0.05 | 18.08 | 0.06 | <0.02 | 0.93 | 2.02 | 38.19 | 98.76 |
| SEF-01_ap__011 | 0.09 | <0.01 | 0.10 | 0.22 | 0.09 | <0.02 | 0.04 | <0.01 | 39.02 | <0.04 | 0.02 | <0.04 | 18.07 | 0.02 | 0.02 | 1.27 | 1.63 | 38.16 | 98.74 |
| SEF-01_ap__012 | 0.08 | <0.01 | <0.09 | <0.09 | 0.07 | 0.11 | 0.14 | 0.02 | 38.25 | <0.04 | 0.12 | <0.04 | 17.79 | 0.07 | <0.02 | 4.74 | 0.31 | 37.40 | 99.09 |
| SEF-01_ap__013 | 0.08 | <0.01 | <0.09 | 0.18 | 0.07 | <0.02 | 0.06 | <0.01 | 39.20 | <0.04 | 0.03 | <0.04 | 18.07 | 0.03 | <0.02 | 1.14 | 1.44 | 38.34 | 98.66 |
| SEF-01_ap__014 | 0.11 | <0.01 | 0.11 | 0.26 | 0.11 | 0.03 | <0.03 | <0.01 | 39.11 | <0.04 | <0.02 | <0.03 | 18.07 | 0.02 | <0.02 | 0.94 | 1.86 | 38.21 | 98.83 |
| SEF-01_ap__015 | 0.08 | <0.01 | <0.09 | 0.10 | <0.06 | 0.03 | <0.03 | <0.01 | 39.26 | <0.04 | <0.02 | <0.03 | 18.11 | 0.04 | <0.02 | 0.98 | 1.55 | 38.41 | 98.56 |
| SEF-01_ap__016 | 0.07 | <0.01 | 0.11 | 0.18 | 0.07 | <0.02 | 0.04 | <0.01 | 39.52 | <0.04 | <0.02 | <0.03 | 18.18 | 0.03 | 0.03 | 1.04 | 1.94 | 38.41 | 99.61 |
| SEF-01_ap__017 | 0.07 | <0.01 | <0.09 | <0.09 | 0.06 | 0.03 | 0.05 | <0.01 | 39.50 | <0.04 | 0.02 | <0.03 | 18.18 | 0.06 | <0.02 | 0.88 | 1.77 | 38.53 | 99.15 |
| SEF-01_ap__018 | 0.08 | <0.01 | <0.09 | 0.15 | 0.11 | 0.02 | 0.03 | <0.01 | 39.46 | <0.04 | 0.03 | <0.04 | 18.06 | 0.03 | <0.02 | 0.76 | 2.14 | 38.20 | 99.07 |
| SEF-01_ap__019 | 0.08 | <0.01 | <0.09 | 0.11 | 0.07 | 0.05 | 0.05 | <0.01 | 39.16 | <0.04 | <0.02 | <0.03 | 18.04 | 0.04 | <0.02 | 1.02 | 1.61 | 38.23 | 98.47 |
| SEF-01_ap__020 | 0.06 | <0.01 | <0.09 | 0.17 | 0.10 | 0.05 | 0.08 | <0.01 | 39.25 | <0.03 | 0.03 | <0.03 | 18.16 | 0.02 | <0.02 | 1.68 | 0.96 | 38.54 | 99.10 |
| TR-04_ap__001 | 0.09 | <0.01 | <0.09 | <0.09 | <0.06 | 0.03 | 0.05 | <0.01 | 39.11 | <0.04 | 0.07 | <0.03 | 17.93 | 0.06 | <0.02 | 0.67 | 2.66 | 37.77 | 98.43 |
| TR-04_ap__002 | 0.09 | <0.01 | <0.09 | 0.11 | <0.06 | <0.02 | 0.04 | <0.01 | 39.26 | 0.04 | 0.05 | <0.04 | 18.04 | 0.03 | <0.02 | 0.70 | 2.64 | 37.91 | 98.90 |
| TR-04_ap__003 | 0.06 | <0.01 | <0.09 | <0.09 | 0.07 | <0.02 | 0.03 | <0.01 | 39.12 | <0.04 | 0.06 | <0.04 | 18.15 | 0.03 | 0.04 | 0.52 | 2.77 | 37.94 | 98.79 |
| TR-04_ap__004 | 0.21 | 0.07 | <0.08 | <0.09 | <0.06 | 0.10 | 0.05 | 0.09 | 34.47 | <0.03 | 0.09 | <0.03 | 15.77 | 0.06 | <0.02 | 0.50 | 2.33 | 33.60 | 87.34 |
| TR-04_ap__005 | 0.06 | <0.01 | <0.09 | 0.13 | <0.07 | 0.05 | 0.03 | <0.01 | 39.38 | 0.04 | 0.07 | <0.03 | 18.14 | 0.04 | <0.02 | 0.41 | 2.98 | 37.99 | 99.29 |
| TR-04_ap__006 | 0.06 | <0.01 | <0.08 | 0.12 | <0.06 | <0.02 | 0.06 | <0.01 | 39.04 | <0.04 | 0.04 | <0.03 | 18.03 | 0.05 | <0.02 | 0.88 | 2.84 | 37.74 | 98.68 |
| TR-04_ap__007 | 0.27 | 0.09 | <0.09 | <0.09 | <0.06 | <0.02 | 0.05 | <0.01 | 38.92 | <0.03 | 0.12 | <0.03 | 18.08 | 0.02 | 0.02 | 0.59 | 2.64 | 38.15 | 98.96 |
| TR-04_ap__008 | 0.06 | <0.01 | <0.08 | <0.09 | <0.06 | 0.05 | 0.05 | 0.02 | 39.15 | <0.04 | 0.04 | <0.03 | 17.97 | 0.02 | <0.02 | 0.60 | 2.66 | 37.75 | 98.38 |
| TR-04_ap__009 | 0.05 | <0.01 | <0.08 | 0.14 | 0.09 | 0.03 | 0.06 | <0.01 | 39.03 | 0.06 | 0.08 | <0.03 | 18.01 | 0.06 | <0.02 | 0.63 | 2.70 | 37.84 | 98.78 |
| TR-04_ap__010 | 0.10 | <0.01 | <0.09 | 0.16 | 0.07 | <0.02 | 0.04 | <0.01 | 39.67 | 0.04 | 0.08 | <0.03 | 18.11 | 0.06 | <0.02 | 0.54 | 2.95 | 38.14 | 99.95 |
| TR-04_ap__011 | 0.28 | 0.10 | <0.09 | <0.09 | <0.06 | 0.20 | 0.06 | 0.14 | 38.61 | 0.05 | 0.04 | 0.11 | 17.68 | 0.03 | <0.02 | 0.52 | 2.91 | 37.58 | 98.28 |
| TR-04_ap__012 | 0.06 | <0.01 | <0.09 | 0.14 | <0.07 | 0.04 | 0.05 | <0.01 | 39.27 | <0.03 | 0.04 | <0.04 | 18.14 | 0.02 | <0.02 | 0.52 | 2.90 | 37.91 | 99.07 |
| TR-04_ap__013 | 0.06 | <0.01 | 0.10 | 0.11 | <0.06 | 0.05 | 0.05 | <0.01 | 39.25 | <0.04 | 0.07 | <0.04 | 18.10 | 0.06 | <0.02 | 0.57 | 2.89 | 37.95 | 99.26 |
| TR-04_ap__014 | 0.04 | <0.01 | <0.08 | <0.09 | <0.07 | <0.02 | 0.05 | <0.01 | 39.42 | <0.04 | 0.03 | <0.03 | 18.24 | 0.03 | <0.02 | 0.80 | 2.56 | 38.16 | 99.32 |
| TR-04_ap__015 | 0.09 | <0.01 | <0.09 | 0.12 | 0.07 | 0.02 | 0.04 | <0.01 | 39.01 | <0.03 | 0.03 | <0.03 | 17.83 | 0.03 | 0.02 | 0.56 | 2.53 | 37.63 | 97.98 |
| SEF-02_ap__001 | 0.10 | <0.01 | 0.17 | 0.13 | 0.08 | <0.02 | <0.03 | <0.01 | 39.22 | <0.04 | 0.04 | <0.03 | 17.99 | 0.03 | <0.02 | 0.81 | 1.11 | 38.49 | 98.17 |
| SEF-02_ap__002 | 0.10 | <0.01 | 0.16 | 0.30 | 0.10 | 0.02 | 0.04 | <0.01 | 38.79 | <0.04 | 0.03 | <0.03 | 17.98 | 0.03 | <0.02 | 1.17 | 1.07 | 38.27 | 98.05 |
| SEF-02_ap__003 | 0.09 | <0.01 | <0.09 | 0.13 | <0.06 | <0.02 | <0.03 | <0.01 | 39.37 | <0.04 | 0.02 | <0.03 | 17.91 | <0.01 | <0.02 | 0.51 | 2.51 | 37.82 | 98.35 |
| SEF-02_ap__004 | 0.27 | 0.04 | <0.09 | <0.09 | <0.06 | 0.09 | <0.03 | 0.13 | 39.16 | <0.04 | <0.02 | <0.03 | 18.01 | 0.01 | 0.03 | 0.39 | 2.93 | 38.07 | 99.13 |
| SEF-02_ap__005 | 0.10 | <0.01 | <0.08 | 0.12 | <0.07 | 0.02 | 0.04 | <0.01 | 39.37 | <0.03 | 0.03 | <0.04 | 17.98 | 0.01 | <0.02 | 0.40 | 2.68 | 37.90 | 98.64 |
| SEF-02_ap__006 | 0.12 | <0.01 | 0.12 | 0.19 | <0.06 | 0.03 | 0.03 | <0.01 | 38.66 | <0.03 | 0.04 | <0.03 | 17.72 | 0.03 | <0.02 | 1.61 | 0.22 | 38.15 | 96.95 |
| SEF-02_ap__007 | 0.10 | <0.01 | <0.09 | 0.20 | 0.13 | <0.02 | 0.04 | 0.01 | 38.98 | <0.03 | 0.02 | <0.04 | 17.79 | 0.01 | <0.02 | 0.58 | 2.41 | 37.61 | 97.89 |
| SEF-02_ap__008 | 0.07 | <0.01 | <0.09 | 0.10 | <0.06 | <0.02 | 0.03 | <0.01 | 39.38 | <0.04 | <0.02 | <0.04 | 18.14 | <0.01 | <0.02 | 0.39 | 2.80 | 38.02 | 98.95 |
| SEF-02_ap__009 | 0.08 | <0.01 | 0.12 | 0.16 | <0.07 | 0.03 | 0.03 | <0.01 | 39.21 | <0.04 | <0.02 | <0.04 | 18.08 | <0.01 | <0.02 | 0.60 | 1.91 | 38.23 | 98.45 |
| SEF-02_ap__010 | 0.12 | <0.01 | 0.20 | 0.23 | 0.15 | <0.02 | 0.06 | <0.01 | 39.22 | <0.03 | 0.04 | <0.04 | 17.95 | 0.05 | 0.02 | 0.94 | 1.85 | 38.19 | 99.00 |
| SEF-02_ap__011 | 0.09 | <0.01 | <0.09 | 0.14 | 0.15 | <0.02 | 0.03 | <0.01 | 39.45 | <0.03 | <0.02 | <0.04 | 18.04 | 0.04 | 0.03 | 0.55 | 2.36 | 38.18 | 99.06 |
| SEF-02_ap__012 | 0.10 | <0.01 | <0.09 | 0.11 | <0.07 | <0.02 | 0.04 | <0.01 | 39.16 | <0.03 | 0.03 | <0.04 | 18.08 | 0.02 | 0.02 | 0.51 | 2.23 | 38.12 | 98.41 |
| SEF-02_ap__013 | 0.06 | <0.01 | <0.08 | <0.09 | 0.07 | 0.03 | 0.04 | 0.01 | 39.23 | <0.04 | <0.02 | <0.03 | 18.09 | 0.01 | <0.02 | 0.54 | 2.51 | 38.01 | 98.61 |
| SEF-02_ap__014 | 0.07 | <0.01 | <0.09 | <0.09 | <0.07 | <0.02 | <0.03 | <0.01 | 39.19 | <0.03 | 0.02 | <0.04 | 17.96 | <0.01 | <0.02 | 0.45 | 2.66 | 37.74 | 98.10 |

*all elements in wt. % (EMPA).

Appendix C: Eastern Sunda arc apatite trace element chemistry (EMPA)

| Analysis ID | Si | Al | La | Ce | Nd | Fe | Mn | Mg | Ca | Sr | Na | K | P | S | As | Cl | F | O sol. | TOTAL |
|----------------|------|--------|--------|--------|--------|--------|--------|-------|-------|--------|-------|--------|-------|--------|--------|------|------|--------|--------|
| SEF-02_ap__015 | 0.08 | <0.01 | <-0.08 | 0.12 | <-0.06 | <-0.02 | 0.04 | <0.01 | 39.32 | 0.04 | 0.02 | <-0.04 | 18.00 | 0.01 | 0.02 | 0.46 | 2.57 | 37.93 | 98.62 |
| SEF-04_ap__001 | 0.13 | <-0.01 | <-0.08 | 0.27 | 0.09 | <-0.02 | 0.04 | 0.02 | 38.87 | <-0.04 | <0.02 | <-0.04 | 17.94 | <-0.01 | <-0.02 | 1.12 | 1.37 | 38.12 | 97.96 |
| SEF-04_ap__002 | 0.08 | <-0.01 | <-0.09 | <-0.09 | <-0.06 | <-0.02 | <-0.03 | <0.01 | 39.38 | <-0.03 | <0.02 | <-0.03 | 18.20 | <-0.01 | <-0.02 | 0.37 | 2.25 | 38.32 | 98.60 |
| SEF-04_ap__003 | 0.10 | <-0.01 | 0.11 | 0.14 | 0.17 | <-0.02 | 0.04 | <0.01 | 38.50 | <-0.03 | 0.04 | <-0.03 | 17.88 | 0.02 | <-0.02 | 1.87 | 0.34 | 38.14 | 97.35 |
| SEF-04_ap__004 | 0.19 | 0.02 | 0.15 | 0.20 | 0.11 | <-0.02 | 0.05 | <0.01 | 38.42 | <-0.04 | 0.05 | <-0.04 | 17.63 | 0.04 | <-0.02 | 0.69 | 1.33 | 37.77 | 96.64 |
| SEF-04_ap__005 | 0.12 | <-0.01 | 0.12 | 0.25 | 0.11 | 0.02 | 0.05 | <0.01 | 38.97 | <-0.03 | 0.02 | <-0.03 | 17.94 | 0.03 | <-0.02 | 1.09 | 1.68 | 38.07 | 98.48 |
| SEF-04_ap__006 | 0.11 | <-0.01 | 0.09 | 0.30 | 0.08 | 0.09 | 0.13 | 0.02 | 38.07 | <-0.04 | 0.10 | <-0.03 | 17.80 | 0.05 | <-0.02 | 3.18 | 0.68 | 37.57 | 98.26 |
| SEF-04_ap__007 | 0.11 | <-0.01 | 0.09 | 0.25 | 0.13 | <-0.02 | 0.05 | <0.01 | 39.29 | <-0.04 | 0.03 | <-0.03 | 18.07 | 0.02 | <-0.02 | 0.35 | 2.57 | 38.12 | 99.07 |
| SEF-04_ap__008 | 0.11 | <-0.01 | 0.09 | 0.31 | 0.20 | 0.02 | 0.04 | <0.01 | 38.92 | <-0.04 | 0.03 | <-0.03 | 18.02 | 0.03 | 0.02 | 0.94 | 1.83 | 38.12 | 98.67 |
| SEF-04_ap__009 | 0.08 | <-0.01 | <-0.08 | 0.25 | 0.09 | <-0.02 | 0.05 | <0.01 | 39.12 | <-0.04 | 0.03 | <-0.03 | 17.98 | 0.02 | 0.02 | 0.69 | 1.84 | 38.11 | 98.28 |
| SEF-04_ap__010 | 0.07 | <-0.01 | <-0.09 | <-0.09 | <-0.06 | 0.03 | 0.04 | <0.01 | 39.38 | <-0.04 | <0.02 | <-0.03 | 18.07 | 0.01 | 0.03 | 0.62 | 2.01 | 38.21 | 98.47 |
| SEF-04_ap__011 | 0.08 | <-0.01 | <-0.08 | <-0.09 | <-0.07 | 0.03 | <-0.03 | <0.01 | 38.69 | <-0.03 | <0.02 | <-0.03 | 17.95 | 0.04 | <-0.02 | 0.61 | 1.74 | 37.95 | 97.07 |
| SEF-04_ap__012 | 0.10 | <-0.01 | <-0.09 | 0.21 | 0.13 | 0.02 | <-0.03 | <0.01 | 39.08 | <-0.04 | <0.02 | <-0.04 | 17.96 | 0.03 | <-0.02 | 1.12 | 0.83 | 38.43 | 97.91 |
| SEF-04_ap__013 | 0.09 | <-0.01 | 0.11 | 0.30 | 0.13 | 0.04 | <-0.03 | <0.01 | 38.88 | <-0.03 | <0.02 | <-0.03 | 17.93 | 0.03 | <-0.02 | 1.03 | 0.69 | 38.43 | 97.66 |
| SEF-04_ap__014 | 0.08 | <-0.01 | <-0.08 | <-0.09 | <-0.06 | 0.05 | <-0.03 | <0.01 | 39.19 | <-0.04 | 0.02 | <-0.03 | 17.87 | 0.02 | <-0.02 | 0.44 | 2.06 | 37.90 | 97.64 |
| SEF-04_ap__015 | 0.81 | 0.29 | <-0.08 | <-0.09 | <-0.06 | 0.29 | <-0.03 | 0.07 | 38.40 | <-0.04 | <0.02 | <-0.03 | 17.76 | 0.02 | 0.02 | 0.28 | 2.53 | 38.49 | 98.95 |
| SEF-04_ap__016 | 0.08 | <-0.01 | <-0.08 | 0.17 | 0.14 | <-0.02 | <-0.03 | <0.01 | 39.10 | <-0.03 | 0.02 | <-0.03 | 17.99 | <-0.01 | <-0.02 | 0.67 | 1.73 | 38.15 | 98.06 |
| SEF-04_ap__017 | 0.12 | 0.01 | <-0.09 | 0.16 | 0.08 | 0.04 | 0.04 | 0.02 | 38.90 | <-0.04 | <0.02 | <-0.03 | 17.80 | 0.01 | 0.03 | 0.76 | 1.94 | 37.79 | 97.71 |
| SEF-04_ap__018 | 0.10 | 0.01 | <-0.09 | 0.12 | 0.10 | <-0.02 | 0.04 | 0.02 | 39.03 | 0.04 | <0.02 | <-0.03 | 17.85 | 0.02 | 0.02 | 0.71 | 2.32 | 37.73 | 98.11 |
| SEF-04_ap__019 | 0.08 | <-0.01 | <-0.09 | 0.13 | <-0.06 | 0.02 | <-0.03 | <0.01 | 39.52 | <-0.04 | <0.02 | <-0.04 | 18.20 | 0.02 | <-0.02 | 0.68 | 2.25 | 38.35 | 99.24 |
| SEF-04_ap__020 | 0.28 | 0.07 | 0.13 | 0.21 | 0.12 | <-0.02 | <-0.03 | <0.01 | 39.08 | <-0.04 | 0.06 | <-0.04 | 17.97 | 0.03 | <-0.02 | 0.54 | 2.26 | 38.27 | 99.02 |
| SEF-04_ap__021 | 0.09 | <-0.01 | <-0.09 | 0.09 | 0.07 | <-0.02 | 0.08 | <0.01 | 39.32 | <-0.04 | 0.02 | <-0.04 | 18.08 | 0.03 | 0.02 | 0.81 | 2.52 | 38.00 | 99.14 |
| SEF-04_ap__022 | 0.10 | <-0.01 | <-0.09 | 0.16 | 0.14 | <-0.02 | 0.04 | <0.01 | 39.15 | <-0.04 | <0.02 | <-0.04 | 18.06 | 0.02 | 0.03 | 0.75 | 2.02 | 38.13 | 98.60 |
| SEF-04_ap__023 | 0.13 | <-0.01 | 0.19 | 0.29 | 0.15 | <-0.02 | <-0.03 | <0.01 | 39.13 | <-0.03 | 0.04 | <-0.03 | 17.97 | 0.02 | <-0.02 | 0.67 | 2.55 | 37.92 | 99.06 |
| SEF-04_ap__024 | 0.07 | <-0.01 | <-0.08 | <-0.09 | 0.07 | <-0.02 | 0.04 | <0.01 | 39.38 | <-0.04 | <0.02 | <-0.03 | 18.15 | 0.02 | 0.02 | 0.64 | 2.28 | 38.22 | 98.90 |
| SEF-04_ap__025 | 0.12 | <-0.01 | 0.12 | 0.32 | 0.19 | <-0.02 | 0.05 | <0.01 | 39.05 | <-0.04 | 0.02 | <-0.03 | 18.08 | <-0.01 | <-0.02 | 0.87 | 1.41 | 38.43 | 98.67 |
| SEF-04_ap__026 | 0.08 | <-0.01 | 0.09 | <0.1 | 0.08 | <-0.02 | 0.04 | <0.01 | 39.49 | <-0.03 | 0.03 | <-0.03 | 18.08 | 0.02 | <-0.02 | 0.84 | 2.07 | 38.24 | 99.06 |
| SEF-04_ap__027 | 0.08 | <-0.01 | <-0.09 | 0.14 | 0.13 | <-0.02 | 0.04 | <0.01 | 39.63 | <-0.04 | 0.03 | <-0.04 | 18.16 | 0.03 | 0.02 | 0.57 | 2.34 | 38.36 | 99.52 |
| SEF-04_ap__028 | 0.12 | <-0.01 | 0.17 | 0.32 | 0.16 | 0.08 | 0.16 | 0.02 | 38.22 | <-0.04 | 0.13 | <-0.03 | 17.83 | 0.07 | <-0.02 | 3.11 | 0.75 | 37.76 | 98.90 |
| TR-02_ap__001 | 0.09 | <-0.01 | <-0.09 | <-0.09 | 0.11 | <-0.02 | 0.04 | <0.01 | 39.40 | <-0.04 | 0.04 | 0.03 | 18.08 | 0.03 | <-0.02 | 0.49 | 2.82 | 37.99 | 99.11 |
| TR-02_ap__002 | 0.08 | <-0.01 | <-0.08 | <-0.09 | <-0.06 | <-0.02 | 0.06 | <0.01 | 39.50 | 0.05 | <0.02 | <-0.03 | 17.93 | 0.02 | 0.05 | 0.44 | 2.96 | 37.76 | 98.86 |
| TR-02_ap__003 | 0.08 | <-0.01 | <-0.08 | 0.11 | 0.09 | <-0.02 | 0.05 | <0.01 | 39.46 | 0.08 | 0.02 | <-0.04 | 18.18 | 0.03 | <-0.02 | 0.43 | 2.84 | 38.15 | 99.51 |
| TR-02_ap__004 | 0.08 | <-0.01 | <-0.08 | 0.10 | 0.06 | <-0.02 | <-0.03 | <0.01 | 39.43 | 0.04 | 0.03 | <-0.03 | 18.18 | 0.04 | 0.02 | 0.26 | 2.93 | 38.13 | 99.29 |
| TR-02_ap__005 | 0.12 | <-0.01 | 0.15 | <-0.09 | 0.07 | <-0.02 | <-0.03 | <0.01 | 39.51 | <-0.03 | 0.02 | <-0.03 | 18.04 | 0.06 | 0.08 | 0.32 | 2.95 | 38.07 | 99.39 |
| TR-02_ap__006 | 0.09 | <-0.01 | <-0.08 | 0.17 | 0.09 | <-0.02 | <-0.03 | <0.01 | 39.19 | <-0.03 | <0.02 | <-0.03 | 18.03 | 0.03 | 0.04 | 0.14 | 2.49 | 38.10 | 98.37 |
| TR-02_ap__007 | 0.12 | <-0.01 | <-0.09 | 0.13 | 0.12 | 0.02 | 0.06 | <0.01 | 39.33 | <-0.04 | <0.02 | <-0.03 | 17.95 | 0.04 | 0.02 | 0.31 | 3.04 | 37.82 | 98.95 |
| TR-02_ap__008 | 0.08 | <-0.01 | <-0.08 | 0.13 | 0.14 | <-0.02 | <-0.03 | <0.01 | 39.38 | <-0.04 | 0.03 | <-0.03 | 17.99 | 0.03 | 0.03 | 0.39 | 2.69 | 37.96 | 98.85 |
| TR-02_ap__009 | 0.72 | 0.35 | <-0.09 | 0.14 | <-0.06 | 0.69 | <-0.03 | 0.51 | 36.28 | <-0.04 | <0.02 | <-0.04 | 16.93 | 0.02 | 0.03 | 0.39 | 2.39 | 37.00 | 95.45 |
| TR-02_ap__010 | 0.07 | 0.01 | <-0.09 | 0.13 | 0.10 | <-0.02 | 0.03 | <0.01 | 39.38 | 0.06 | <0.02 | <-0.03 | 18.27 | 0.03 | 0.02 | 0.29 | 3.36 | 38.02 | 99.77 |
| TR-02_ap__011 | 0.09 | <-0.01 | <-0.08 | 0.13 | <-0.06 | <-0.02 | 0.03 | <0.01 | 39.58 | <-0.04 | <0.02 | <-0.04 | 18.05 | 0.03 | <-0.02 | 0.31 | 3.03 | 37.96 | 99.21 |
| TR-02_ap__012 | 0.11 | 0.02 | <-0.08 | <-0.09 | 0.07 | <-0.02 | 0.04 | <0.01 | 39.59 | 0.06 | 0.02 | 0.04 | 18.07 | 0.02 | <-0.02 | 0.26 | 2.91 | 38.10 | 99.31 |
| TR-02_ap__013 | 0.12 | <-0.01 | <-0.09 | 0.15 | 0.10 | <-0.02 | <-0.03 | <0.01 | 39.52 | <-0.04 | <0.02 | <-0.03 | 17.99 | 0.05 | 0.09 | 0.27 | 3.23 | 37.89 | 99.43 |
| TR-02_ap__014 | 0.09 | <-0.01 | 0.10 | 0.10 | <-0.07 | 0.02 | 0.04 | <0.01 | 39.40 | 0.04 | 0.02 | <-0.03 | 18.18 | 0.03 | <-0.02 | 0.36 | 3.14 | 38.02 | 99.55 |
| TR-02_ap__015 | 0.13 | <-0.01 | <-0.09 | <-0.09 | 0.11 | <-0.02 | <-0.03 | <0.01 | 39.47 | <-0.04 | <0.02 | <-0.03 | 18.12 | 0.05 | 0.03 | 0.37 | 2.46 | 38.31 | 99.06 |
| TR-02_ap__016 | 0.17 | <-0.01 | <-0.09 | 0.10 | <-0.07 | <-0.02 | <-0.03 | <0.01 | 39.43 | <-0.04 | <0.02 | <-0.03 | 18.13 | 0.07 | 0.05 | 0.21 | 3.03 | 38.18 | 99.36 |
| TR-02_ap__017 | 0.57 | 0.25 | <-0.09 | 0.20 | 0.11 | 0.04 | <-0.03 | 0.07 | 38.70 | 0.04 | <0.02 | <-0.03 | 17.79 | 0.03 | 0.04 | 0.37 | 2.62 | 38.27 | 99.08 |
| TR-02_ap__018 | 0.42 | <-0.01 | <-0.09 | <-0.09 | <-0.06 | 0.02 | <-0.03 | <0.01 | 38.68 | <-0.03 | <0.02 | <-0.03 | 17.55 | 0.09 | 0.06 | 0.20 | 2.52 | 37.67 | 97.21 |
| TR-02_ap__019 | 0.06 | <-0.01 | <-0.08 | 0.12 | 0.12 | 0.03 | 0.05 | <0.01 | 39.78 | 0.04 | 0.04 | <-0.03 | 18.24 | 0.03 | 0.02 | 0.38 | 2.73 | 38.40 | 100.03 |
| TR-02_ap__020 | 0.16 | <-0.01 | 0.12 | 0.11 | <-0.06 | 0.04 | 0.03 | 0.03 | 39.17 | <-0.04 | 0.02 | <-0.03 | 17.84 | 0.02 | 0.11 | 0.27 | 3.31 | 37.59 | 98.82 |
| TR-02_ap__021 | 0.21 | <-0.01 | <-0.08 | 0.16 | 0.10 | <-0.02 | <-0.03 | <0.01 | 39.01 | 0.04 | <0.02 | <-0.04 | 17.79 | 0.07 | 0.04 | 0.36 | 2.45 | 37.86 | 98.07 |

*all elements in wt. % (EMPA).

Appendix C: Eastern Sunda arc apatite trace element chemistry (EMPA)

| Analysis ID | Si | Al | La | Ce | Nd | Fe | Mn | Mg | Ca | Sr | Na | K | P | S | As | Cl | F | O.soi. | TOTAL |
|---------------|------|--------|--------|--------|--------|--------|--------|--------|-------|--------|--------|--------|-------|--------|--------|------|------|--------|--------|
| TR-02_ap__022 | 0.08 | <0.01 | <-0.08 | <-0.09 | 0.12 | 0.02 | <-0.03 | <-0.01 | 39.25 | <-0.04 | <-0.02 | <-0.03 | 18.04 | <-0.01 | <-0.02 | 0.38 | 2.90 | 37.80 | 98.54 |
| TR-02_ap__023 | 0.07 | <-0.01 | <-0.09 | 0.13 | 0.12 | 0.02 | 0.05 | <-0.01 | 39.37 | <-0.04 | 0.02 | <-0.03 | 18.14 | 0.02 | 0.02 | 0.30 | 3.19 | 37.93 | 99.38 |
| TR-02_ap__024 | 0.12 | <-0.01 | <-0.08 | 0.16 | 0.09 | <-0.02 | <-0.03 | <-0.01 | 39.39 | 0.03 | 0.02 | <-0.03 | 18.05 | 0.04 | <-0.02 | 0.31 | 2.94 | 38.00 | 99.15 |
| TR-02_ap__025 | 0.67 | 0.22 | <-0.08 | <-0.09 | 0.06 | 0.50 | 0.03 | 0.34 | 38.32 | 0.04 | 0.02 | 0.19 | 17.47 | 0.03 | 0.07 | 0.41 | 2.98 | 38.01 | 99.37 |
| LB001_ap__001 | 0.02 | 0.22 | <-0.09 | 0.10 | 0.09 | 0.04 | 0.20 | <-0.01 | 39.04 | <-0.04 | 0.05 | <-0.03 | 18.05 | 0.02 | 0.02 | 0.96 | 2.87 | 37.84 | 99.52 |
| LB001_ap__002 | 0.05 | 0.41 | <-0.08 | 0.13 | <-0.06 | 0.04 | 0.05 | <-0.01 | 39.13 | <-0.03 | 0.03 | <-0.03 | 18.17 | 0.02 | <-0.02 | 0.27 | 2.69 | 38.42 | 99.40 |
| LB001_ap__003 | 0.04 | 0.04 | <-0.08 | <-0.09 | <-0.07 | 0.02 | 0.15 | <-0.01 | 39.17 | <-0.04 | 0.04 | <-0.03 | 18.14 | 0.05 | <-0.02 | 0.70 | 2.70 | 37.98 | 99.03 |
| LB001_ap__004 | 0.03 | 0.19 | <-0.08 | 0.10 | <-0.06 | <-0.02 | 0.11 | <-0.01 | 39.18 | <-0.04 | 0.03 | <-0.03 | 18.15 | 0.03 | 0.02 | 0.51 | 3.23 | 37.93 | 99.51 |
| LB001_ap__005 | 0.05 | 0.21 | <-0.09 | 0.12 | 0.15 | 0.05 | 0.21 | 0.01 | 38.82 | 0.04 | 0.03 | <-0.04 | 18.09 | 0.03 | <-0.02 | 0.77 | 2.80 | 37.93 | 99.34 |
| LB001_ap__006 | 0.07 | <-0.01 | <-0.09 | <-0.09 | 0.09 | 0.02 | 0.10 | <-0.01 | 39.44 | <-0.04 | 0.04 | <-0.04 | 18.15 | 0.07 | <-0.02 | 0.53 | 3.11 | 38.02 | 99.63 |
| LB001_ap__007 | 0.04 | 0.03 | <-0.08 | 0.13 | 0.08 | <-0.02 | 0.10 | <-0.01 | 39.37 | <-0.04 | 0.03 | <-0.03 | 18.03 | 0.02 | <-0.02 | 0.44 | 2.43 | 38.07 | 98.77 |
| LB001_ap__008 | 0.04 | <-0.01 | <-0.08 | <-0.09 | 0.08 | <-0.02 | 0.10 | <-0.01 | 39.44 | <-0.04 | 0.04 | <-0.04 | 18.21 | 0.03 | <-0.02 | 0.56 | 2.96 | 38.04 | 99.51 |
| LB001_ap__009 | 0.16 | 0.06 | 0.11 | 0.09 | <-0.06 | 0.07 | 0.07 | <-0.01 | 39.31 | <-0.03 | 0.03 | <-0.03 | 18.24 | 0.01 | <-0.02 | 0.40 | 3.10 | 38.20 | 99.86 |
| LB001_ap__010 | 0.04 | <-0.01 | <-0.08 | <-0.09 | 0.13 | <-0.02 | 0.08 | <-0.01 | 39.76 | 0.03 | 0.03 | <-0.03 | 18.26 | 0.03 | <-0.02 | 0.54 | 2.75 | 38.34 | 99.99 |
| LB001_ap__011 | 0.09 | <-0.01 | <-0.08 | <-0.09 | 0.06 | 0.08 | 0.13 | 0.02 | 39.36 | 0.04 | 0.08 | <-0.03 | 18.14 | 0.12 | <-0.02 | 1.37 | 2.10 | 38.39 | 99.99 |
| LB001_ap__012 | 0.04 | <-0.01 | <-0.09 | <-0.09 | <-0.06 | 0.02 | 0.08 | <-0.01 | 39.67 | <-0.04 | <-0.02 | <-0.03 | 18.31 | 0.02 | <-0.02 | 0.40 | 3.18 | 38.15 | 99.87 |
| LB001_ap__013 | 0.03 | 0.21 | <-0.09 | <-0.09 | 0.09 | <-0.02 | 0.10 | <-0.01 | 39.43 | <-0.04 | 0.02 | <-0.04 | 18.29 | 0.04 | <-0.02 | 0.59 | 2.87 | 38.34 | 100.00 |
| LB001_ap__014 | 0.04 | <-0.01 | <-0.09 | <-0.09 | <-0.06 | 0.02 | 0.17 | <-0.01 | 39.63 | <-0.04 | 0.03 | <-0.04 | 18.31 | 0.01 | <-0.02 | 0.07 | 2.43 | 38.56 | 99.28 |
| LB001_ap__015 | 0.13 | 0.06 | <-0.09 | <-0.09 | <-0.06 | 0.03 | 0.09 | <-0.01 | 39.36 | <-0.04 | 0.05 | <-0.04 | 18.04 | 0.08 | <-0.02 | 0.52 | 3.01 | 38.02 | 99.39 |
| LB001_ap__016 | 0.04 | 0.02 | <-0.08 | 0.09 | <-0.07 | 0.05 | 0.19 | <-0.01 | 39.10 | <-0.04 | 0.02 | <-0.04 | 18.13 | 0.01 | <-0.02 | 0.90 | 2.75 | 37.83 | 99.12 |
| LB001_ap__017 | 0.04 | 0.22 | <-0.09 | 0.09 | <-0.06 | <-0.02 | 0.08 | <-0.01 | 39.20 | <-0.04 | 0.03 | <-0.03 | 18.12 | 0.02 | <-0.02 | 0.60 | 2.72 | 38.09 | 99.20 |
| LB001_ap__018 | 0.04 | 0.28 | <-0.09 | <-0.09 | 0.08 | 0.02 | 0.14 | <-0.01 | 39.05 | <-0.04 | 0.04 | <-0.03 | 18.10 | 0.05 | <-0.02 | 0.67 | 2.86 | 38.08 | 99.43 |
| LB010_ap__001 | 0.04 | 0.08 | <-0.09 | <-0.09 | <-0.06 | 0.04 | 0.45 | <-0.01 | 39.24 | <-0.04 | 0.02 | <-0.03 | 18.22 | 0.05 | <-0.02 | 0.61 | 3.00 | 38.07 | 99.51 |
| LB010_ap__002 | 0.04 | 0.08 | <-0.08 | 0.10 | 0.13 | 0.03 | 0.24 | <-0.01 | 38.91 | 0.04 | <-0.02 | <-0.03 | 18.22 | 0.02 | 0.02 | 1.13 | 2.64 | 37.97 | 99.54 |
| LB010_ap__003 | 0.06 | <-0.01 | 0.10 | 0.20 | 0.12 | 0.16 | 0.23 | 0.05 | 38.47 | <-0.04 | 0.16 | <-0.03 | 17.84 | 0.11 | <-0.02 | 1.75 | 1.89 | 37.71 | 98.85 |
| LB010_ap__004 | 0.08 | 0.01 | <-0.08 | <-0.09 | 0.16 | <-0.02 | 0.08 | <-0.01 | 39.55 | <-0.03 | <-0.02 | <-0.03 | 18.19 | <-0.01 | <-0.02 | 0.28 | 2.82 | 38.21 | 99.38 |
| LB010_ap__005 | 0.03 | <-0.01 | <-0.08 | <-0.09 | 0.09 | <-0.02 | 0.16 | <-0.01 | 39.13 | <-0.03 | 0.04 | <-0.03 | 18.22 | 0.02 | <-0.02 | 0.96 | 2.87 | 37.89 | 99.42 |
| LB010_ap__006 | 0.08 | <-0.01 | <-0.09 | 0.12 | <-0.06 | 0.09 | 0.13 | 0.03 | 39.06 | 0.05 | 0.06 | <-0.03 | 18.07 | 0.11 | <-0.02 | 1.85 | 1.97 | 38.07 | 99.68 |
| LB010_ap__007 | 0.05 | 0.29 | <-0.09 | 0.14 | 0.08 | 0.04 | 0.19 | <-0.01 | 39.98 | <-0.03 | 0.05 | <-0.03 | 18.06 | 0.02 | <-0.02 | 0.80 | 2.66 | 38.07 | 99.44 |
| LB010_ap__008 | 0.10 | <-0.01 | 0.12 | 0.24 | 0.16 | 0.15 | 0.14 | 0.04 | 38.24 | <-0.04 | 0.16 | <-0.04 | 17.95 | 0.09 | <-0.02 | 2.09 | 1.38 | 37.90 | 98.76 |
| LB010_ap__009 | 0.01 | 0.17 | <-0.09 | <-0.09 | <-0.06 | 0.04 | 0.45 | <-0.01 | 39.03 | <-0.03 | 0.02 | <-0.03 | 18.11 | 0.01 | <-0.02 | 0.57 | 3.32 | 37.80 | 99.54 |
| LB010_ap__010 | 0.05 | <-0.01 | 0.09 | 0.21 | 0.09 | 0.10 | 0.18 | 0.05 | 38.84 | 0.04 | 0.13 | <-0.04 | 18.00 | 0.10 | <-0.02 | 1.51 | 2.22 | 37.92 | 99.52 |
| LB010_ap__011 | 0.15 | 0.07 | <-0.09 | 0.12 | <-0.06 | 0.11 | 0.17 | 0.09 | 39.08 | <-0.03 | 0.04 | <-0.04 | 17.96 | 0.05 | 0.02 | 0.97 | 2.72 | 37.93 | 99.49 |
| LB010_ap__012 | 0.03 | 0.06 | <-0.08 | <-0.09 | <-0.07 | <-0.02 | 0.14 | <-0.01 | 39.32 | <-0.04 | 0.03 | <-0.03 | 18.19 | 0.02 | <-0.02 | 0.79 | 2.72 | 38.05 | 99.35 |
| LB010_ap__013 | 0.04 | 0.10 | <-0.08 | <-0.09 | <-0.06 | 0.02 | 0.19 | <-0.01 | 39.10 | <-0.03 | 0.05 | <-0.03 | 18.06 | 0.03 | <-0.02 | 0.90 | 2.30 | 38.05 | 98.85 |
| LB010_ap__014 | 0.06 | <-0.01 | <-0.09 | 0.11 | 0.08 | 0.08 | 0.11 | <-0.01 | 39.23 | 0.04 | 0.05 | 0.03 | 18.11 | 0.09 | <-0.02 | 1.97 | 1.67 | 38.21 | 99.83 |
| LB010_ap__015 | 0.08 | <-0.01 | <-0.08 | <-0.09 | <-0.06 | 0.15 | 0.19 | 0.07 | 38.78 | <-0.04 | 0.07 | <-0.03 | 17.93 | 0.12 | <-0.02 | 2.48 | 1.25 | 38.01 | 99.14 |
| LB010_ap__016 | 0.09 | 0.04 | <-0.08 | <-0.09 | <-0.06 | <-0.02 | 0.11 | <-0.01 | 39.46 | <-0.03 | 0.05 | <-0.04 | 18.08 | 0.09 | <-0.02 | 0.49 | 3.04 | 38.05 | 99.50 |
| LB010_ap__017 | 0.06 | <-0.01 | <-0.08 | <-0.09 | <-0.06 | 0.02 | 0.13 | <-0.01 | 39.24 | <-0.04 | 0.06 | <-0.03 | 18.19 | 0.07 | <-0.02 | 0.59 | 2.51 | 38.23 | 99.09 |
| LB010_ap__018 | 0.08 | <-0.01 | <-0.09 | 0.15 | <-0.06 | 0.13 | 0.24 | 0.07 | 38.82 | <-0.04 | 0.09 | <-0.04 | 17.98 | 0.12 | <-0.02 | 1.74 | 1.90 | 38.01 | 99.32 |
| LB010_ap__019 | 0.04 | 0.06 | <-0.09 | <-0.09 | <-0.07 | <-0.02 | 0.11 | <-0.01 | 39.32 | <-0.04 | 0.04 | <-0.04 | 18.17 | 0.05 | <-0.02 | 0.55 | 2.99 | 37.99 | 99.33 |
| LB010_ap__020 | 0.05 | 0.11 | <-0.08 | 0.12 | 0.07 | 0.22 | 0.12 | <-0.01 | 39.21 | <-0.04 | 0.05 | <-0.03 | 18.14 | 0.02 | <-0.02 | 0.32 | 3.33 | 37.94 | 99.70 |
| LB010_ap__021 | 0.04 | 0.05 | 0.12 | 0.10 | <-0.06 | 0.04 | 0.19 | <-0.01 | 39.01 | <-0.04 | 0.06 | <-0.04 | 18.01 | 0.04 | <-0.02 | 0.98 | 2.53 | 37.81 | 98.97 |
| LB010_ap__022 | 0.06 | <-0.01 | <-0.08 | 0.16 | 0.08 | 0.19 | 0.18 | 0.05 | 38.75 | <-0.04 | 0.07 | <-0.03 | 18.05 | 0.08 | <-0.02 | 2.00 | 1.85 | 37.96 | 99.48 |
| LB010_ap__023 | 0.07 | 0.08 | 0.10 | <-0.09 | <-0.06 | <-0.02 | 0.15 | <-0.01 | 39.34 | <-0.03 | 0.04 | <-0.03 | 18.14 | 0.08 | <-0.02 | 0.59 | 3.06 | 38.08 | 99.76 |
| LB010_ap__024 | 0.07 | <-0.01 | <-0.09 | 0.17 | 0.11 | 0.10 | 0.25 | 0.03 | 38.48 | 0.04 | 0.14 | <-0.03 | 17.99 | 0.08 | <-0.02 | 2.30 | 1.70 | 37.79 | 99.24 |
| LB010_ap__025 | 0.03 | 0.04 | <-0.09 | <-0.09 | <-0.01 | 0.10 | 0.02 | 0.19 | 38.94 | <-0.04 | 0.06 | <-0.03 | 18.09 | 0.02 | <-0.02 | 1.04 | 2.60 | 37.76 | 98.86 |
| LB010_ap__026 | 0.24 | 0.60 | <-0.09 | 0.15 | 0.14 | 0.10 | 0.06 | <-0.01 | 38.60 | <-0.04 | 0.03 | 0.03 | 17.88 | 0.01 | <-0.02 | 0.30 | 3.20 | 38.03 | 99.37 |
| LB010_ap__027 | 0.06 | <-0.01 | <-0.09 | 0.10 | 0.11 | 0.02 | 0.07 | <-0.01 | 39.16 | <-0.04 | 0.04 | <-0.03 | 18.11 | 0.03 | <-0.02 | 0.57 | 2.93 | 37.85 | 99.06 |
| LB010_ap__028 | 0.02 | <-0.01 | <-0.09 | <-0.09 | <-0.06 | <-0.02 | 0.09 | <-0.01 | 39.43 | <-0.04 | 0.04 | <-0.04 | 18.24 | 0.01 | <-0.02 | 0.40 | 3.01 | 37.99 | 99.23 |

*all elements in wt. % (EMPA).

Appendix C: Eastern Sunda arc apatite trace element chemistry (EMPA)

| Analysis ID | Si | Al | La | Ce | Nd | Fe | Mn | Mg | Ca | Sr | Na | K | P | S | As | Cl | F | O.soi. | TOTAL |
|--------------|------|--------|--------|--------|--------|--------|--------|--------|-------|--------|--------|--------|-------|--------|--------|------|------|--------|--------|
| LB010_ap_029 | 0.02 | 0.01 | <-0.08 | <-0.09 | 0.07 | 0.03 | 0.15 | <-0.01 | 39.16 | <-0.04 | 0.02 | <-0.04 | 18.15 | 0.01 | <-0.02 | 0.90 | 2.47 | 37.96 | 98.97 |
| LB010_ap_030 | 0.09 | 0.05 | <-0.08 | 0.10 | <-0.06 | <-0.02 | 0.10 | <-0.01 | 39.25 | <-0.04 | 0.05 | <-0.03 | 17.98 | 0.53 | 0.10 | 0.02 | 2.95 | 37.90 | 99.12 |
| LB011_ap_001 | 0.09 | 0.02 | <-0.09 | 0.10 | 0.16 | 0.25 | 0.11 | 0.09 | 38.74 | 0.04 | 0.12 | <-0.04 | 18.14 | 0.07 | <-0.02 | 0.59 | 3.55 | 37.75 | 99.84 |
| LB011_ap_002 | 0.09 | <-0.01 | <-0.09 | 0.13 | 0.09 | 0.27 | 0.08 | 0.14 | 38.91 | <-0.04 | 0.09 | <-0.02 | 17.94 | 0.09 | <-0.02 | 1.30 | 1.99 | 38.07 | 99.19 |
| LB011_ap_003 | 0.08 | <-0.01 | <-0.09 | 0.15 | 0.10 | 0.22 | 0.07 | 0.08 | 38.91 | <-0.04 | 0.12 | <-0.03 | 18.14 | 0.08 | <-0.02 | 0.31 | 3.21 | 37.98 | 99.44 |
| LB011_ap_004 | 0.08 | <-0.01 | <-0.09 | 0.13 | 0.10 | 0.20 | 0.08 | 0.09 | 38.74 | 0.04 | 0.11 | <-0.04 | 18.01 | 0.11 | <-0.02 | 0.83 | 3.42 | 37.57 | 99.49 |
| LB011_ap_005 | 0.09 | <-0.01 | <-0.08 | 0.13 | 0.18 | 0.27 | 0.08 | 0.09 | 39.01 | 0.05 | 0.10 | <-0.04 | 18.10 | 0.09 | <-0.02 | 0.39 | 3.93 | 37.72 | 100.23 |
| LB011_ap_006 | 0.08 | <-0.01 | <-0.09 | 0.23 | 0.18 | 0.24 | 0.10 | 0.09 | 38.84 | <-0.04 | 0.10 | <-0.03 | 18.02 | 0.09 | <-0.02 | 0.30 | 3.64 | 37.68 | 99.58 |
| LB011_ap_007 | 0.10 | <-0.01 | <-0.08 | <-0.1 | <-0.07 | 0.21 | 0.04 | 0.11 | 38.99 | <-0.04 | 0.07 | <-0.03 | 18.11 | 0.11 | <-0.02 | 1.25 | 2.09 | 38.26 | 99.34 |
| LB011_ap_008 | 0.09 | <-0.01 | <-0.09 | 0.10 | 0.14 | 0.28 | 0.07 | 0.10 | 38.90 | 0.04 | 0.11 | <-0.03 | 18.03 | 0.08 | <-0.02 | 0.33 | 3.85 | 37.59 | 99.72 |
| LB011_ap_009 | 0.09 | <-0.01 | <-0.09 | 0.13 | 0.11 | 0.20 | 0.08 | 0.10 | 39.02 | 0.04 | 0.09 | 0.04 | 17.89 | 0.11 | <-0.02 | 0.82 | 3.40 | 37.57 | 99.70 |
| LB011_ap_010 | 0.10 | <-0.01 | <-0.08 | 0.18 | 0.11 | 0.21 | 0.09 | 0.10 | 38.97 | <-0.03 | 0.08 | <-0.03 | 18.12 | 0.07 | <-0.02 | 0.55 | 3.41 | 37.86 | 99.85 |
| LB011_ap_011 | 0.10 | <-0.01 | <-0.09 | 0.11 | <-0.07 | 0.18 | 0.05 | 0.06 | 39.07 | <-0.04 | 0.13 | 0.04 | 17.99 | 0.09 | <-0.02 | 0.84 | 3.61 | 37.57 | 99.83 |
| LB011_ap_012 | 0.11 | 0.01 | <-0.08 | 0.18 | <-0.07 | 0.26 | 0.09 | 0.12 | 39.00 | <-0.04 | 0.08 | <-0.03 | 18.07 | 0.08 | <-0.02 | 1.25 | 2.67 | 38.00 | 99.91 |
| LB011_ap_013 | 0.09 | <-0.01 | <-0.08 | 0.16 | 0.13 | 0.26 | 0.08 | 0.14 | 38.79 | <-0.04 | 0.06 | <-0.03 | 17.95 | 0.11 | <-0.02 | 1.20 | 2.16 | 38.04 | 99.18 |
| LB011_ap_014 | 0.11 | <-0.01 | 0.11 | 0.11 | 0.14 | 0.23 | 0.09 | 0.09 | 39.09 | 0.06 | 0.09 | <-0.03 | 18.00 | 0.08 | <-0.02 | 0.64 | 3.58 | 37.70 | 100.11 |
| LB011_ap_015 | 0.09 | <-0.01 | <-0.08 | <-0.09 | 0.07 | 0.25 | 0.05 | 0.12 | 38.78 | 0.07 | 0.05 | <-0.04 | 17.96 | 0.12 | <-0.02 | 1.23 | 2.10 | 37.94 | 98.79 |
| LB011_ap_016 | 0.09 | <-0.01 | <-0.08 | 0.14 | 0.09 | 0.24 | 0.10 | 0.07 | 38.76 | 0.05 | 0.12 | <-0.04 | 17.92 | 0.11 | <-0.02 | 0.36 | 3.48 | 37.58 | 99.13 |
| LB011_ap_017 | 0.09 | 0.01 | 0.09 | 0.15 | 0.07 | 0.27 | 0.06 | 0.13 | 38.77 | 0.08 | 0.12 | <-0.03 | 17.98 | 0.07 | <-0.02 | 0.50 | 3.23 | 37.72 | 99.34 |
| LB011_ap_018 | 0.09 | 0.01 | <-0.09 | 0.10 | 0.13 | 0.16 | 0.06 | 0.07 | 39.02 | 0.07 | 0.05 | <-0.04 | 18.03 | 0.04 | <-0.02 | 0.51 | 3.53 | 37.62 | 99.50 |
| LB011_ap_019 | 0.09 | <-0.01 | <-0.09 | 0.11 | 0.16 | 0.25 | 0.08 | 0.09 | 39.20 | <-0.04 | 0.10 | <-0.04 | 18.10 | 0.07 | <-0.02 | 0.24 | 3.69 | 37.87 | 100.06 |
| LB011_ap_020 | 0.10 | <-0.01 | <-0.09 | 0.15 | 0.12 | 0.27 | 0.09 | 0.11 | 39.05 | 0.07 | 0.08 | <-0.04 | 17.94 | 0.10 | <-0.02 | 0.92 | 3.25 | 37.68 | 99.92 |
| LB011_ap_021 | 0.10 | <-0.01 | 0.08 | 0.11 | <-0.06 | 0.25 | 0.07 | 0.09 | 39.01 | <-0.04 | 0.07 | <-0.03 | 17.96 | 0.10 | <-0.02 | 1.40 | 2.43 | 37.92 | 99.59 |
| LB011_ap_022 | 0.08 | <-0.01 | <-0.09 | 0.18 | 0.14 | 0.22 | 0.10 | 0.09 | 38.90 | 0.04 | 0.15 | <-0.03 | 18.18 | 0.04 | <-0.02 | 0.53 | 3.37 | 37.88 | 99.87 |
| LB011_ap_023 | 0.06 | <-0.01 | <-0.09 | <-0.09 | 0.22 | 0.16 | 0.23 | 0.06 | 38.69 | 0.04 | 0.09 | <-0.04 | 18.05 | 0.04 | <-0.02 | 0.46 | 3.05 | 37.74 | 98.99 |
| LB011_ap_024 | 0.10 | 0.04 | <-0.08 | <-0.09 | 0.15 | 0.15 | 0.05 | 0.07 | 38.93 | 0.04 | 0.09 | <-0.03 | 17.92 | 0.07 | <-0.02 | 0.95 | 2.58 | 37.82 | 98.96 |
| LB011_ap_025 | 0.10 | 0.01 | <-0.09 | 0.16 | 0.07 | 0.24 | 0.10 | 0.09 | 39.02 | 0.04 | 0.12 | <-0.03 | 17.99 | 0.10 | <-0.02 | 0.56 | 3.29 | 37.84 | 99.76 |
| LB011_ap_026 | 0.09 | <-0.01 | <-0.08 | <-0.09 | 0.11 | 0.24 | 0.08 | 0.13 | 39.10 | <-0.04 | 0.06 | <-0.04 | 18.08 | 0.07 | <-0.02 | 1.44 | 2.53 | 38.01 | 99.94 |
| LB011_ap_027 | 0.09 | <-0.01 | 0.10 | <-0.09 | <-0.06 | 0.23 | 0.11 | 0.12 | 38.92 | <-0.04 | 0.09 | <-0.03 | 17.97 | 0.13 | <-0.02 | 1.15 | 3.16 | 37.69 | 99.75 |
| LB011_ap_028 | 0.09 | <-0.01 | <-0.09 | <-0.09 | <-0.07 | 0.25 | 0.08 | 0.11 | 38.86 | <-0.04 | 0.08 | <-0.03 | 18.03 | 0.10 | <-0.02 | 1.37 | 2.57 | 37.88 | 99.41 |
| LB011_ap_029 | 0.08 | <-0.01 | <-0.09 | <-0.09 | 0.09 | 0.27 | 0.08 | 0.09 | 39.03 | 0.06 | 0.10 | <-0.03 | 18.10 | 0.09 | <-0.02 | 0.35 | 3.14 | 38.03 | 99.51 |
| LB011_ap_030 | 0.10 | 0.01 | <-0.08 | <-0.09 | 0.07 | 0.25 | 0.06 | 0.11 | 38.98 | 0.04 | 0.09 | <-0.03 | 18.05 | 0.11 | <-0.02 | 1.19 | 2.93 | 37.88 | 99.88 |
| LB011_ap_031 | 0.09 | <-0.01 | <-0.09 | 0.20 | 0.14 | 0.24 | 0.09 | 0.08 | 38.81 | 0.04 | 0.11 | <-0.03 | 18.10 | 0.09 | <-0.02 | 0.37 | 3.69 | 37.72 | 99.76 |
| LB011_ap_032 | 0.07 | 0.01 | <-0.09 | 0.11 | 0.06 | 0.22 | 0.07 | 0.14 | 39.05 | 0.04 | 0.09 | <-0.03 | 18.13 | 0.12 | <-0.02 | 1.29 | 2.26 | 38.27 | 99.93 |
| BHF02_ap_001 | 0.06 | <-0.01 | 0.11 | 0.16 | <-0.07 | 0.17 | 0.21 | 0.04 | 38.45 | <-0.04 | 0.12 | <-0.03 | 17.84 | 0.08 | <-0.02 | 1.86 | 1.61 | 37.72 | 98.44 |
| BHF02_ap_002 | 0.03 | <-0.01 | 0.11 | 0.14 | 0.09 | 0.07 | 0.16 | 0.02 | 38.90 | <-0.04 | 0.08 | <-0.03 | 18.04 | 0.03 | <-0.02 | 1.42 | 2.17 | 37.83 | 99.09 |
| BHF02_ap_003 | 0.06 | <-0.01 | <-0.09 | 0.24 | 0.11 | <-0.02 | 0.14 | <-0.01 | 38.92 | <-0.04 | 0.04 | <-0.04 | 18.14 | <-0.01 | <-0.02 | 0.42 | 2.74 | 37.90 | 98.70 |
| BHF02_ap_004 | 0.04 | <-0.01 | <-0.08 | 0.11 | <-0.06 | <-0.02 | 0.20 | <-0.01 | 39.07 | <-0.04 | 0.03 | <-0.03 | 18.13 | 0.01 | <-0.02 | 0.42 | 2.48 | 38.04 | 98.53 |
| BHF02_ap_005 | 0.04 | 0.01 | 0.10 | 0.14 | 0.09 | 0.03 | 0.08 | <-0.01 | 38.79 | <-0.04 | 0.07 | <-0.04 | 18.02 | 0.02 | <-0.02 | 0.41 | 2.45 | 37.82 | 98.06 |
| BHF02_ap_006 | 0.05 | <-0.01 | <-0.09 | 0.23 | 0.13 | 0.11 | 0.11 | 0.03 | 38.69 | <-0.03 | 0.06 | <-0.04 | 17.93 | 0.04 | <-0.02 | 1.14 | 2.31 | 37.70 | 98.71 |
| BHF02_ap_007 | 0.05 | <-0.01 | <-0.09 | 0.14 | 0.09 | 0.06 | 0.16 | <-0.01 | 39.09 | 0.05 | 0.07 | <-0.04 | 18.07 | 0.02 | <-0.02 | 0.55 | 2.51 | 37.98 | 98.85 |
| BHF02_ap_008 | 0.05 | <-0.01 | <-0.09 | 0.15 | 0.15 | 0.12 | 0.15 | 0.05 | 38.19 | <-0.04 | 0.12 | <-0.04 | 17.90 | 0.06 | <-0.02 | 1.96 | 1.73 | 37.55 | 98.19 |
| BHF02_ap_009 | 0.05 | <-0.01 | <-0.09 | <-0.09 | <-0.06 | 0.04 | 0.24 | <-0.01 | 38.95 | <-0.04 | 0.05 | <-0.04 | 18.16 | 0.01 | <-0.02 | 0.52 | 2.64 | 37.96 | 98.63 |
| BHF02_ap_010 | 0.06 | <-0.01 | <-0.09 | <-0.09 | <-0.06 | <-0.02 | <-0.03 | <-0.01 | 39.47 | <-0.03 | <-0.02 | <-0.04 | 18.19 | 0.02 | <-0.02 | 0.16 | 2.86 | 38.13 | 98.89 |
| BHF02_ap_011 | 0.05 | <-0.01 | <-0.08 | 0.15 | 0.09 | 0.03 | 0.10 | <-0.01 | 39.12 | <-0.04 | 0.07 | <-0.03 | 18.11 | 0.01 | <-0.02 | 0.38 | 2.61 | 38.00 | 98.73 |
| BHF02_ap_012 | 0.05 | <-0.01 | 0.12 | 0.19 | 0.08 | 0.26 | 0.44 | 0.10 | 37.98 | 0.04 | 0.15 | <-0.03 | 17.96 | 0.08 | <-0.02 | 1.43 | 2.03 | 37.77 | 98.69 |
| BHF02_ap_013 | 0.04 | <-0.01 | <-0.09 | 0.17 | <-0.06 | 0.04 | 0.16 | <-0.01 | 38.66 | <-0.04 | 0.06 | <-0.03 | 18.06 | <-0.01 | <-0.02 | 1.41 | 1.61 | 37.94 | 98.13 |
| BHF02_ap_014 | 0.10 | <-0.01 | <-0.09 | <-0.09 | <-0.06 | 0.13 | 0.17 | 0.05 | 38.48 | 0.04 | 0.08 | <-0.04 | 17.85 | 0.11 | <-0.02 | 1.99 | 1.37 | 37.85 | 98.23 |
| BHF02_ap_015 | 0.10 | <-0.01 | 0.11 | 0.20 | 0.15 | 0.14 | 0.31 | 0.04 | 37.93 | 0.06 | 0.17 | <-0.04 | 17.73 | 0.18 | <-0.02 | 1.99 | 1.51 | 37.64 | 98.25 |
| BHF02_ap_016 | 0.05 | <-0.01 | <-0.08 | 0.10 | 0.07 | 0.07 | 0.21 | 0.02 | 38.62 | <-0.04 | 0.09 | <-0.03 | 18.06 | 0.03 | <-0.02 | 1.20 | 1.72 | 37.98 | 98.20 |

*all elements in wt. % (EMPA).

Appendix C: Eastern Sunda arc apatite trace element chemistry (EMPA)

| Analysis ID | Si | Al | La | Ce | Nd | Fe | Mn | Mg | Ca | Sr | Na | K | P | S | As | Cl | F | O sto. | TOTAL |
|---------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|--------|-------|
| BHF-02_ap_017 | 0.04 | <0.01 | 0.11 | <0.09 | 0.08 | 0.07 | 0.27 | 0.01 | 38.68 | 0.06 | 0.11 | <0.04 | 17.97 | 0.04 | <0.02 | 0.77 | 2.66 | 37.64 | 98.50 |
| BHF-02_ap_018 | 0.06 | <0.01 | 0.11 | 0.08 | 0.12 | 0.20 | 0.02 | 0.02 | 38.32 | 0.06 | 0.12 | <0.04 | 17.87 | 0.08 | <0.02 | 2.16 | 1.41 | 37.67 | 98.37 |
| BHF-02_ap_019 | 0.05 | <0.01 | <0.09 | <0.09 | 0.09 | <0.02 | 0.17 | <0.01 | 38.84 | 0.05 | 0.09 | <0.03 | 18.03 | 0.03 | <0.02 | 0.85 | 2.37 | 37.84 | 98.41 |
| BHF-02_ap_020 | 0.03 | <0.01 | <0.09 | 0.13 | 0.08 | 0.05 | 0.15 | <0.01 | 38.96 | <0.04 | 0.04 | <0.04 | 18.16 | 0.02 | <0.02 | 0.40 | 2.64 | 38.05 | 98.78 |
| BHF-02_ap_021 | 0.08 | <0.01 | <0.09 | <0.09 | 0.08 | 0.12 | 0.33 | 0.02 | 38.73 | <0.04 | 0.10 | <0.04 | 18.09 | 0.07 | <0.02 | 0.71 | 2.89 | 37.80 | 98.96 |
| BHF-02_ap_022 | 0.06 | <0.01 | <0.09 | <0.09 | 0.08 | <0.02 | 0.07 | <0.01 | 39.36 | <0.04 | <0.02 | <0.04 | 18.12 | 0.01 | 0.02 | 0.38 | 2.35 | 38.17 | 98.62 |
| BHF-02_ap_023 | 0.04 | <0.01 | <0.09 | <0.09 | 0.13 | 0.19 | 0.38 | 0.05 | 38.29 | 0.05 | 0.11 | <0.03 | 18.02 | 0.06 | <0.02 | 1.36 | 2.04 | 37.81 | 98.54 |
| BHF-02_ap_024 | 0.11 | <0.01 | 0.09 | 0.19 | 0.11 | 0.05 | 0.16 | <0.01 | 38.98 | <0.04 | 0.06 | <0.03 | 18.08 | 0.02 | <0.02 | 0.61 | 2.66 | 37.97 | 99.10 |
| BHF-02_ap_025 | 0.09 | <0.01 | <0.09 | 0.20 | 0.13 | 0.07 | 0.17 | <0.01 | 38.83 | <0.04 | 0.09 | <0.03 | 18.11 | 0.04 | <0.02 | 0.73 | 2.45 | 38.03 | 98.94 |
| BHF-02_ap_026 | 0.04 | 0.01 | <0.09 | <0.09 | <0.07 | 0.05 | 0.20 | <0.01 | 39.07 | 0.04 | 0.05 | <0.03 | 18.06 | 0.02 | <0.02 | 0.92 | 1.62 | 38.21 | 98.28 |
| BHF-02_ap_027 | 0.08 | <0.01 | <0.08 | 0.14 | <0.07 | 0.03 | 0.04 | <0.01 | 39.15 | 0.05 | 0.05 | <0.03 | 18.09 | 0.03 | <0.02 | 0.39 | 2.86 | 37.92 | 98.81 |
| BHF-02_ap_028 | 0.06 | <0.01 | <0.09 | <0.09 | <0.07 | <0.02 | 0.17 | <0.01 | 39.19 | <0.04 | 0.04 | <0.03 | 18.06 | 0.01 | <0.02 | 0.39 | 2.55 | 37.99 | 98.46 |
| BHF-02_ap_029 | 0.06 | <0.01 | <0.09 | 0.15 | 0.09 | 0.09 | 0.19 | 0.01 | 38.65 | <0.03 | 0.07 | <0.03 | 18.08 | 0.04 | <0.02 | 1.65 | 1.96 | 37.86 | 98.90 |
| BHF-02_ap_030 | 0.08 | <0.01 | <0.08 | 0.17 | 0.10 | 0.08 | 0.16 | <0.01 | 38.40 | <0.03 | 0.07 | <0.04 | 17.93 | 0.02 | <0.02 | 1.54 | 1.95 | 37.59 | 98.10 |
| BHF-02_ap_031 | 0.06 | <0.01 | <0.08 | <0.09 | <0.06 | <0.02 | 0.06 | <0.01 | 39.46 | <0.03 | <0.02 | <0.03 | 18.14 | <0.01 | <0.02 | 0.31 | 2.80 | 38.05 | 98.88 |
| BHF-02_ap_032 | 0.07 | <0.01 | 0.08 | 0.09 | <0.07 | 0.04 | 0.14 | <0.01 | 39.16 | <0.04 | 0.05 | <0.03 | 18.13 | 0.02 | <0.02 | 0.54 | 2.50 | 38.09 | 98.91 |
| BHF-02_ap_033 | 0.06 | <0.01 | <0.08 | 0.11 | 0.13 | 0.10 | 0.26 | 0.03 | 38.56 | <0.04 | 0.09 | <0.03 | 18.02 | 0.03 | <0.02 | 1.08 | 2.85 | 37.54 | 98.86 |
| BHF-03_ap_001 | 0.05 | <0.01 | <0.08 | <0.09 | 0.07 | 0.05 | 0.41 | <0.01 | 38.98 | <0.04 | 0.04 | <0.03 | 18.15 | 0.01 | <0.02 | 0.32 | 3.11 | 37.87 | 99.05 |
| BHF-03_ap_002 | 0.04 | <0.01 | <0.09 | 0.10 | 0.10 | 0.09 | 0.14 | 0.01 | 38.99 | 0.04 | 0.07 | <0.04 | 18.11 | 0.02 | <0.02 | 0.32 | 3.47 | 37.63 | 99.15 |
| BHF-03_ap_003 | <0.01 | <0.01 | <0.09 | <0.09 | 0.14 | <0.02 | <0.03 | <0.01 | 39.42 | <0.03 | 0.06 | <0.03 | 18.19 | 0.02 | <0.02 | 0.08 | 3.42 | 37.86 | 99.19 |
| BHF-03_ap_004 | 0.08 | <0.01 | <0.08 | 0.17 | 0.12 | <0.02 | 0.19 | <0.01 | 38.89 | <0.03 | 0.06 | <0.04 | 18.11 | 0.02 | <0.02 | 1.42 | 2.29 | 37.66 | 98.76 |
| BHF-03_ap_005 | 0.05 | <0.01 | <0.09 | 0.20 | 0.11 | 0.14 | 0.55 | 0.04 | 38.13 | <0.03 | 0.11 | <0.04 | 17.99 | 0.06 | <0.02 | 0.35 | 3.29 | 37.66 | 99.15 |
| BHF-03_ap_006 | 0.03 | <0.01 | <0.09 | 0.18 | 0.13 | 0.09 | 0.47 | <0.01 | 38.75 | 0.06 | 0.07 | <0.03 | 18.04 | 0.04 | <0.02 | 0.19 | 3.08 | 37.78 | 98.57 |
| BHF-03_ap_007 | 0.03 | <0.01 | <0.08 | <0.09 | 0.06 | <0.02 | 0.35 | <0.01 | 38.88 | <0.04 | 0.05 | <0.04 | 18.13 | 0.01 | <0.02 | 0.19 | 3.08 | 37.78 | 98.57 |
| BHF-03_ap_008 | 0.02 | <0.01 | <0.08 | <0.09 | 0.07 | 0.03 | <0.03 | <0.01 | 39.54 | <0.04 | <0.02 | <0.03 | 18.25 | 0.01 | <0.02 | 0.06 | 3.30 | 38.03 | 99.33 |
| BHF-03_ap_009 | 0.04 | <0.01 | <0.08 | <0.09 | 0.11 | <0.02 | <0.03 | <0.01 | 39.50 | <0.04 | <0.02 | <0.03 | 18.19 | <0.01 | <0.02 | 0.04 | 3.24 | 37.97 | 99.10 |
| BHF-03_ap_010 | 0.05 | <0.01 | <0.09 | <0.09 | <0.06 | 0.20 | 0.32 | 0.04 | 38.37 | 0.05 | 0.12 | <0.03 | 17.93 | 0.06 | <0.02 | 1.71 | 1.30 | 37.95 | 98.10 |
| BHF-03_ap_011 | 0.04 | <0.01 | <0.08 | 0.10 | 0.08 | 0.06 | 0.21 | <0.01 | 39.18 | <0.04 | 0.03 | <0.03 | 18.22 | 0.02 | <0.02 | 0.20 | 3.38 | 37.92 | 99.44 |
| BHF-03_ap_012 | 0.05 | <0.01 | <0.08 | <0.09 | 0.09 | 0.04 | 0.06 | <0.01 | 39.34 | <0.04 | 0.02 | <0.04 | 18.27 | <0.01 | <0.02 | 0.12 | 3.36 | 37.99 | 99.35 |
| BHF-03_ap_013 | 0.05 | <0.01 | <0.08 | <0.09 | <0.07 | 0.02 | 0.10 | 0.01 | 39.07 | 0.04 | 0.05 | <0.03 | 18.13 | 0.02 | 0.04 | 0.17 | 3.47 | 37.70 | 98.90 |
| BHF-03_ap_014 | 0.02 | <0.01 | <0.08 | <0.09 | 0.15 | 0.05 | 0.24 | <0.01 | 39.04 | <0.04 | 0.10 | <0.03 | 18.12 | 0.03 | <0.02 | 0.25 | 3.02 | 37.90 | 98.92 |
| BHF-03_ap_015 | 0.03 | <0.01 | <0.08 | <0.09 | <0.06 | 0.05 | 0.18 | <0.01 | 39.08 | <0.04 | 0.03 | <0.03 | 18.22 | 0.01 | 0.03 | 0.18 | 3.29 | 37.87 | 98.97 |
| BHF-03_ap_016 | 0.05 | <0.01 | <0.09 | 0.10 | 0.13 | <0.02 | 0.05 | <0.01 | 39.25 | <0.03 | 0.05 | <0.04 | 18.18 | 0.02 | <0.02 | 0.17 | 3.01 | 38.01 | 99.01 |
| BHF-03_ap_017 | 0.01 | <0.01 | <0.08 | <0.09 | <0.06 | 0.05 | 0.08 | <0.01 | 39.22 | <0.04 | 0.03 | <0.04 | 18.17 | 0.01 | <0.02 | 0.41 | 2.92 | 37.91 | 98.82 |
| BHF-03_ap_018 | 0.05 | <0.01 | <0.08 | 0.16 | 0.08 | 0.15 | 0.33 | 0.04 | 38.40 | 0.08 | 0.10 | <0.03 | 17.93 | 0.07 | <0.02 | 1.47 | 1.57 | 37.91 | 98.35 |
| BHF-03_ap_019 | 0.04 | <0.01 | <0.09 | <0.09 | <0.06 | 0.05 | 0.05 | <0.01 | 39.53 | <0.04 | <0.02 | <0.04 | 18.17 | 0.02 | 0.04 | 0.15 | 3.46 | 37.90 | 99.41 |
| BHF-03_ap_020 | 0.04 | <0.01 | 0.09 | 0.10 | 0.08 | 0.07 | 0.38 | 0.02 | 38.16 | 0.04 | 0.13 | <0.04 | 17.96 | 0.05 | 0.02 | 2.20 | 1.57 | 37.64 | 98.56 |
| BHF-03_ap_021 | 0.04 | <0.01 | 0.15 | 0.30 | 0.14 | 0.14 | 0.42 | 0.03 | 37.69 | <0.04 | 0.20 | <0.03 | 17.77 | 0.06 | <0.02 | 2.10 | 1.80 | 37.25 | 98.09 |
| BHF-03_ap_022 | 0.05 | <0.01 | <0.09 | 0.21 | 0.14 | 0.56 | 0.71 | 0.20 | 37.16 | 0.06 | 0.15 | <0.03 | 17.98 | 0.06 | <0.02 | 2.21 | 1.55 | 37.69 | 98.73 |
| BHF-03_ap_023 | 0.02 | <0.01 | <0.08 | <0.09 | <0.06 | 0.04 | 0.21 | <0.01 | 39.19 | <0.04 | <0.02 | <0.03 | 18.03 | 0.01 | <0.02 | 0.51 | 3.32 | 37.56 | 98.90 |
| BHF-03_ap_024 | 0.07 | <0.01 | <0.09 | <0.09 | 0.07 | 0.12 | 0.21 | <0.01 | 38.91 | <0.03 | 0.07 | <0.03 | 18.18 | 0.03 | <0.02 | 0.31 | 2.90 | 37.98 | 98.85 |
| GBF-03_ap_001 | 0.03 | <0.01 | <0.09 | <0.09 | <0.06 | 0.04 | 0.06 | <0.01 | 39.32 | <0.04 | 0.05 | <0.04 | 18.22 | 0.01 | <0.02 | 0.80 | 2.74 | 38.00 | 99.27 |
| GBF-03_ap_002 | <0.01 | <0.01 | <0.08 | <0.09 | <0.06 | 0.06 | 0.06 | <0.01 | 39.15 | <0.04 | 0.03 | <0.04 | 18.29 | 0.01 | <0.02 | 0.60 | 3.00 | 37.94 | 99.14 |
| GBF-03_ap_003 | 0.02 | <0.01 | <0.09 | <0.09 | <0.07 | 0.07 | 0.04 | 0.01 | 39.14 | <0.04 | 0.04 | <0.04 | 18.17 | 0.01 | <0.02 | 0.70 | 2.97 | 37.79 | 98.97 |
| GBF-03_ap_004 | 0.03 | <0.01 | <0.09 | 0.11 | 0.10 | 0.08 | 0.08 | 0.01 | 39.14 | <0.04 | 0.03 | <0.04 | 18.20 | 0.02 | <0.02 | 0.58 | 3.04 | 37.86 | 99.25 |
| GBF-03_ap_005 | <0.01 | <0.01 | <0.08 | <0.09 | 0.07 | 0.06 | 0.06 | <0.01 | 38.23 | <0.04 | <0.02 | <0.03 | 18.19 | 0.01 | <0.02 | 0.63 | 3.17 | 37.76 | 99.18 |
| GBF-03_ap_006 | 0.02 | <0.01 | <0.09 | <0.09 | <0.06 | 0.17 | 0.16 | 0.04 | 38.74 | <0.03 | 0.04 | <0.03 | 18.25 | 0.02 | <0.02 | 0.79 | 2.80 | 37.87 | 98.89 |
| GBF-03_ap_007 | 0.01 | <0.01 | <0.08 | <0.09 | 0.09 | 0.03 | 0.06 | <0.01 | 39.09 | <0.04 | 0.04 | <0.03 | 18.14 | 0.02 | <0.02 | 0.66 | 2.84 | 37.80 | 98.79 |
| GBF-03_ap_008 | 0.02 | <0.01 | <0.09 | <0.09 | <0.06 | 0.05 | 0.04 | <0.01 | 39.23 | <0.04 | 0.02 | <0.03 | 18.14 | <0.01 | 0.02 | 0.54 | 3.16 | 37.71 | 98.92 |
| GBF-03_ap_009 | 0.05 | 0.04 | <0.09 | <0.09 | 0.07 | 0.09 | 0.04 | 0.05 | 39.08 | <0.04 | <0.02 | <0.03 | 18.11 | 0.02 | <0.02 | 0.61 | 2.83 | 37.88 | 98.87 |

*all elements in wt. % (EMPA).

Appendix C: Eastern Sunda arc apatite trace element chemistry (EMPA)

| Analysis ID | Si | Al | La | Ce | Nd | Fe | Mn | Mg | Ca | Sr | Na | K | P | S | As | Cl | F | O stoil. | TOTAL |
|---------------|-------|--------|--------|--------|--------|--------|--------|--------|-------|--------|--------|--------|-------|--------|--------|------|------|----------|-------|
| GBF-03_ap_010 | 0.02 | <0.01 | <-0.08 | <-0.09 | 0.07 | 0.09 | 0.02 | 0.02 | 39.15 | <-0.03 | 0.05 | <-0.03 | 18.23 | 0.02 | <-0.02 | 0.45 | 3.22 | 37.88 | 99.30 |
| GBF-03_ap_011 | 0.01 | <-0.01 | <-0.08 | 0.09 | 0.11 | 0.06 | 0.06 | <0.01 | 39.21 | <-0.04 | 0.04 | <-0.03 | 18.14 | 0.02 | 0.02 | 0.71 | 2.73 | 37.90 | 99.08 |
| GBF-03_ap_012 | 0.02 | <-0.01 | <-0.09 | <-0.09 | <-0.06 | 0.07 | 0.05 | 0.01 | 39.06 | <-0.04 | 0.02 | <-0.04 | 18.14 | 0.01 | <-0.02 | 0.54 | 2.99 | 37.74 | 98.66 |
| JEM-01_ap_001 | 0.03 | 0.03 | <-0.09 | <-0.09 | <-0.06 | <-0.04 | <-0.03 | <0.01 | 39.18 | <-0.04 | 0.04 | <-0.03 | 18.06 | 0.01 | <-0.02 | 0.12 | 3.81 | 37.46 | 98.79 |
| JER-01_ap_001 | 0.05 | <-0.01 | <-0.09 | <-0.09 | <-0.06 | 0.28 | 0.18 | 0.10 | 38.30 | 0.08 | 0.07 | <-0.03 | 17.79 | 0.07 | <-0.02 | 2.01 | 0.88 | 37.87 | 97.68 |
| JER-01_ap_002 | 0.03 | <-0.01 | <-0.08 | <-0.09 | <-0.06 | <-0.02 | 0.03 | <0.01 | 39.47 | <-0.04 | <-0.02 | <-0.03 | 18.23 | <-0.01 | 0.04 | 0.05 | 3.02 | 38.09 | 98.96 |
| JER-01_ap_003 | 0.03 | <-0.01 | <-0.09 | 0.17 | <-0.07 | <-0.02 | 0.07 | 0.01 | 39.12 | <-0.04 | <-0.02 | <-0.04 | 18.08 | 0.02 | 0.03 | 0.20 | 2.35 | 38.06 | 98.14 |
| JER-01_ap_004 | 0.02 | <-0.01 | <-0.08 | 0.12 | 0.08 | 0.10 | 0.15 | <-0.01 | 39.16 | 0.05 | <-0.02 | <-0.03 | 18.08 | <-0.01 | <-0.02 | 0.40 | 1.71 | 38.33 | 98.19 |
| JER-01_ap_005 | 0.04 | <-0.01 | <-0.09 | <-0.09 | <-0.06 | <-0.02 | 0.03 | <0.01 | 39.61 | <-0.03 | <-0.02 | <-0.03 | 18.17 | 0.01 | <-0.02 | 0.08 | 3.14 | 38.02 | 99.11 |
| JER-01_ap_006 | 0.08 | <-0.01 | <-0.09 | <-0.09 | <-0.06 | 0.26 | 0.14 | 0.11 | 38.37 | 0.04 | 0.11 | <-0.03 | 17.77 | 0.16 | <-0.02 | 2.19 | 0.76 | 38.01 | 98.01 |
| JER-01_ap_007 | 0.04 | <-0.01 | <-0.08 | <-0.1 | <-0.06 | 0.03 | 0.06 | <0.01 | 39.29 | <-0.04 | 0.02 | <-0.03 | 18.18 | 0.01 | <-0.02 | 0.32 | 2.29 | 38.24 | 98.48 |
| JER-01_ap_008 | 0.03 | <-0.01 | <-0.08 | <-0.09 | <-0.06 | <-0.02 | <-0.03 | <0.01 | 39.36 | <-0.04 | <-0.02 | <-0.03 | 18.22 | 0.02 | <-0.02 | 0.05 | 2.80 | 38.14 | 98.61 |
| JER-01_ap_009 | 0.02 | <-0.01 | <-0.08 | <-0.09 | <-0.06 | 0.13 | 0.10 | <-0.01 | 39.21 | <-0.03 | 0.03 | <-0.03 | 18.17 | <-0.01 | <-0.02 | 0.38 | 2.06 | 38.28 | 98.36 |
| JER-01_ap_010 | 0.04 | <-0.01 | 0.12 | <-0.09 | <-0.06 | <-0.02 | <-0.03 | <0.01 | 39.76 | <-0.04 | <-0.02 | <-0.03 | 18.22 | 0.01 | <-0.02 | 0.12 | 2.80 | 38.31 | 99.38 |
| JER-01_ap_011 | <0.01 | <-0.01 | <-0.08 | <-0.09 | <-0.06 | <-0.02 | 0.03 | <0.01 | 39.62 | <-0.04 | <-0.02 | <-0.04 | 18.33 | <-0.01 | <-0.02 | 0.02 | 2.94 | 38.28 | 99.21 |
| JER-01_ap_012 | 0.02 | <-0.01 | <-0.08 | <-0.09 | 0.09 | 0.02 | 0.05 | <-0.01 | 39.23 | <-0.04 | <-0.02 | <-0.03 | 18.18 | 0.01 | <-0.02 | 0.28 | 2.40 | 38.14 | 98.41 |
| JER-01_ap_013 | 0.03 | <-0.01 | <-0.08 | <-0.09 | 0.06 | 0.04 | 0.04 | 0.01 | 39.43 | <-0.04 | <-0.02 | <-0.03 | 18.15 | 0.01 | 0.02 | 0.23 | 2.78 | 38.08 | 98.88 |
| JER-01_ap_014 | 0.05 | <-0.01 | <-0.08 | 0.10 | <-0.06 | 0.27 | 0.17 | 0.11 | 38.37 | <-0.04 | 0.09 | <-0.03 | 17.88 | 0.07 | <-0.02 | 2.04 | 0.87 | 38.02 | 98.04 |
| JER-01_ap_015 | 0.06 | <-0.01 | <-0.09 | <-0.09 | 0.11 | 0.27 | 0.15 | 0.11 | 38.34 | <-0.04 | 0.07 | <-0.04 | 17.94 | 0.08 | <-0.02 | 2.10 | 0.86 | 38.08 | 98.17 |
| JER-01_ap_016 | 0.02 | <-0.01 | <-0.09 | <-0.09 | 0.07 | <-0.02 | 0.12 | <-0.01 | 39.25 | <-0.04 | <-0.02 | <-0.04 | 18.21 | <-0.01 | <-0.02 | 0.30 | 2.03 | 38.34 | 98.33 |
| JER-01_ap_017 | 0.02 | <-0.01 | <-0.08 | <-0.09 | <-0.07 | 0.04 | 0.14 | <-0.01 | 39.11 | <-0.04 | 0.02 | <-0.03 | 18.15 | <-0.01 | <-0.02 | 0.20 | 2.10 | 38.25 | 98.03 |
| JER-01_ap_018 | 0.08 | <-0.01 | <-0.08 | <-0.09 | <-0.06 | 0.27 | 0.16 | 0.11 | 38.20 | 0.04 | 0.10 | <-0.03 | 17.88 | 0.12 | <-0.02 | 2.11 | 0.91 | 38.01 | 98.01 |
| JER-01_ap_019 | 0.03 | <-0.01 | <-0.09 | <-0.09 | <-0.07 | <-0.02 | 0.03 | <0.01 | 39.53 | <-0.04 | <-0.02 | <-0.03 | 18.20 | 0.01 | <-0.02 | 0.07 | 3.12 | 38.00 | 98.99 |
| JER-01_ap_020 | 0.05 | <-0.01 | <-0.09 | <-0.09 | <-0.06 | 0.25 | 0.17 | 0.10 | 38.30 | 0.08 | 0.07 | <-0.03 | 17.89 | 0.06 | <-0.02 | 2.04 | 0.92 | 37.96 | 97.91 |
| JER-01_ap_021 | 0.02 | <-0.01 | <-0.08 | 0.15 | <-0.06 | 0.06 | 0.10 | <0.01 | 39.12 | <-0.04 | 0.02 | <-0.03 | 18.09 | <-0.01 | <-0.02 | 0.39 | 1.89 | 38.24 | 98.08 |
| JER-01_ap_022 | 0.05 | <-0.01 | <-0.09 | <-0.09 | <-0.06 | 0.24 | 0.17 | 0.12 | 38.31 | <-0.04 | 0.06 | <-0.03 | 17.87 | 0.06 | <-0.02 | 2.07 | 1.08 | 37.83 | 97.85 |
| JER-01_ap_023 | 0.03 | <-0.01 | <-0.09 | <-0.09 | <-0.06 | <-0.02 | <-0.03 | <0.01 | 39.33 | <-0.03 | 0.02 | <-0.03 | 18.17 | 0.01 | <-0.02 | 0.10 | 2.85 | 38.02 | 98.53 |
| LB002_ap_001 | 0.04 | <-0.01 | <-0.08 | 0.15 | <-0.07 | 0.03 | 0.37 | <0.01 | 39.14 | <-0.03 | 0.03 | <-0.03 | 18.08 | 0.01 | <-0.02 | 0.27 | 3.67 | 37.58 | 99.38 |
| LB002_ap_002 | 0.03 | <-0.01 | <-0.09 | <-0.09 | 0.12 | 0.03 | 0.53 | <-0.01 | 38.72 | <-0.03 | 0.05 | <-0.04 | 18.05 | 0.01 | <-0.02 | 0.51 | 3.39 | 37.49 | 98.95 |
| LB002_ap_003 | 0.03 | <-0.01 | 0.10 | 0.22 | 0.14 | 0.03 | 1.01 | <0.01 | 37.83 | 0.05 | 0.10 | <-0.03 | 18.06 | 0.04 | <-0.02 | 0.43 | 3.15 | 37.54 | 98.72 |
| LB002_ap_004 | 0.05 | <-0.01 | <-0.08 | 0.15 | 0.07 | 0.04 | 0.58 | <-0.01 | 38.55 | <-0.03 | 0.05 | <-0.03 | 18.05 | 0.03 | <-0.02 | 0.43 | 3.19 | 37.60 | 98.79 |
| LB002_ap_005 | 0.03 | <-0.01 | <-0.08 | 0.11 | 0.09 | <-0.02 | 0.60 | <-0.01 | 38.68 | <-0.04 | 0.04 | <-0.04 | 18.12 | 0.01 | <-0.02 | 0.30 | 3.78 | 37.45 | 99.22 |
| LB002_ap_006 | 0.04 | <-0.01 | <-0.08 | <-0.1 | <-0.06 | 0.05 | 0.30 | 0.02 | 38.81 | <-0.04 | 0.07 | <-0.03 | 18.11 | 0.01 | 0.05 | 0.25 | 3.53 | 37.58 | 98.82 |
| LB002_ap_007 | 0.04 | <-0.01 | <-0.08 | 0.09 | <-0.06 | 0.03 | 0.59 | <-0.01 | 38.51 | <-0.03 | 0.03 | <-0.04 | 18.12 | 0.01 | <-0.02 | 0.48 | 3.28 | 37.58 | 98.78 |
| LB002_ap_008 | 0.02 | <-0.01 | <-0.08 | <-0.09 | <-0.06 | 0.04 | 0.46 | <-0.01 | 39.11 | <-0.03 | <-0.02 | <-0.03 | 18.10 | <-0.01 | <-0.02 | 0.37 | 3.66 | 37.57 | 99.33 |
| LB002_ap_009 | 0.02 | <-0.01 | <-0.08 | <-0.09 | <-0.06 | 0.06 | 0.63 | <-0.01 | 38.58 | <-0.04 | 0.06 | <-0.03 | 18.06 | 0.01 | <-0.02 | 0.59 | 3.17 | 37.55 | 98.83 |
| LB002_ap_010 | 0.06 | <-0.01 | <-0.09 | <-0.09 | 0.09 | 0.04 | 0.82 | 0.01 | 38.39 | <-0.04 | 0.06 | <-0.03 | 18.07 | 0.01 | <-0.02 | 0.61 | 3.14 | 37.61 | 99.00 |
| LB002_ap_011 | 0.03 | <-0.01 | <-0.08 | <-0.09 | <-0.07 | 0.02 | 0.30 | 0.01 | 39.02 | <-0.03 | 0.04 | <-0.03 | 18.21 | 0.02 | <-0.02 | 0.24 | 3.64 | 37.70 | 99.24 |
| LB002_ap_012 | 0.02 | <-0.01 | <-0.09 | <-0.09 | 0.07 | 0.07 | 1.24 | <-0.01 | 38.06 | <-0.03 | 0.04 | <-0.04 | 18.08 | 0.01 | <-0.02 | 0.75 | 3.47 | 37.35 | 99.15 |
| LB009_ap_001 | 0.10 | <-0.01 | 0.12 | 0.26 | 0.11 | 0.23 | 0.21 | 0.06 | 37.97 | 0.05 | 0.13 | <-0.03 | 17.81 | 0.11 | <-0.02 | 2.61 | 1.25 | 37.62 | 98.61 |
| LB009_ap_002 | 0.17 | <-0.01 | 0.20 | 0.28 | 0.18 | 0.19 | 0.23 | 0.06 | 37.66 | 0.04 | 0.13 | <-0.03 | 17.57 | 0.09 | <-0.02 | 2.63 | 1.29 | 37.25 | 97.97 |
| LB009_ap_003 | 0.10 | <-0.01 | 0.15 | 0.26 | 0.18 | 0.17 | 0.22 | 0.06 | 37.83 | <-0.04 | 0.15 | <-0.04 | 17.73 | 0.11 | <-0.02 | 2.86 | 1.30 | 37.38 | 98.50 |
| LB009_ap_004 | 0.11 | <-0.01 | 0.15 | 0.32 | 0.18 | 0.21 | 0.24 | 0.03 | 37.80 | <-0.04 | 0.15 | <-0.03 | 17.76 | 0.13 | <-0.02 | 2.66 | 1.19 | 37.54 | 98.47 |
| LB009_ap_005 | 0.07 | <-0.01 | 0.18 | 0.29 | 0.14 | 0.29 | 0.20 | 0.06 | 37.93 | <-0.04 | 0.15 | <-0.03 | 17.76 | 0.10 | <-0.02 | 2.43 | 1.26 | 37.57 | 98.44 |
| LB009_ap_006 | 0.09 | <-0.01 | 0.15 | 0.24 | 0.09 | 0.24 | 0.21 | 0.05 | 37.84 | 0.04 | 0.14 | <-0.04 | 17.70 | 0.11 | <-0.02 | 2.61 | 1.33 | 37.38 | 98.23 |
| LB009_ap_007 | 0.10 | <-0.01 | <-0.09 | 0.26 | <-0.07 | 0.19 | 0.20 | 0.06 | 37.90 | <-0.04 | 0.14 | <-0.04 | 17.65 | 0.12 | <-0.02 | 2.69 | 1.24 | 37.36 | 97.91 |
| LB009_ap_008 | 0.13 | <-0.01 | 0.09 | 0.24 | 0.11 | 0.21 | 0.23 | 0.06 | 37.86 | <-0.04 | 0.16 | <-0.04 | 17.73 | 0.11 | <-0.02 | 2.58 | 0.99 | 37.62 | 98.11 |
| LB009_ap_009 | 0.07 | <-0.01 | 0.14 | 0.14 | 0.15 | 0.18 | 0.24 | 0.07 | 38.22 | <-0.04 | 0.10 | <-0.03 | 17.86 | 0.09 | <-0.02 | 2.51 | 1.41 | 37.65 | 98.81 |
| LB009_ap_010 | 0.06 | <-0.01 | <-0.08 | 0.09 | <-0.07 | 0.21 | 0.20 | 0.04 | 38.44 | 0.04 | 0.09 | <-0.04 | 17.87 | 0.07 | <-0.02 | 1.99 | 1.45 | 37.72 | 98.29 |
| LB009_ap_011 | 0.06 | <-0.01 | 0.14 | 0.31 | <-0.06 | 0.19 | 0.19 | 0.05 | 38.13 | 0.07 | 0.13 | <-0.04 | 17.77 | 0.08 | <-0.02 | 2.69 | 1.19 | 37.54 | 98.53 |

*all elements in wt. % (EMPA).

Appendix C: Eastern Sunda arc apatite trace element chemistry (EMPA)

| Analysis ID | Si | Al | La | Ce | Nd | Fe | Mn | Mg | Ca | Sr | Na | K | P | S | As | Cl | F | O.soi. | TOTAL |
|--------------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|--------|-------|
| LB009_ap_012 | 0.09 | <0.01 | 0.18 | 0.41 | 0.15 | 0.22 | 0.21 | 0.05 | 37.88 | 0.04 | 0.16 | <0.03 | 17.72 | 0.10 | <0.02 | 2.76 | 1.10 | 37.52 | 98.98 |
| LB009_ap_013 | 0.12 | <0.01 | <0.09 | 0.28 | 0.15 | 0.33 | 0.20 | 0.06 | 37.92 | 0.05 | 0.15 | <0.03 | 17.73 | 0.12 | <0.02 | 2.58 | 1.09 | 37.64 | 98.43 |
| LB018_ap_001 | 0.13 | <0.01 | <0.08 | 0.19 | 0.23 | 0.09 | 0.15 | 0.03 | 38.36 | <0.04 | 0.11 | <0.04 | 17.96 | 0.03 | <0.02 | 1.30 | 2.40 | 37.60 | 98.56 |
| LB018_ap_002 | 0.09 | <0.01 | 0.10 | 0.11 | 0.09 | 0.06 | 0.07 | <0.01 | 39.20 | 0.06 | <0.02 | <0.04 | 18.01 | 0.01 | <0.02 | 0.37 | 3.09 | 37.74 | 98.98 |
| LB022_ap_001 | 0.08 | <0.01 | <0.09 | <0.09 | 0.07 | 0.05 | 0.60 | <0.01 | 38.26 | <0.04 | 0.08 | <0.03 | 18.01 | 0.02 | 0.02 | 0.37 | 3.19 | 37.48 | 98.25 |
| LB022_ap_002 | 0.06 | <0.01 | <0.08 | 0.12 | 0.17 | 0.05 | 0.28 | 0.01 | 38.81 | <0.04 | 0.07 | <0.04 | 18.02 | 0.01 | 0.02 | 0.32 | 3.32 | 37.55 | 98.82 |
| LB022_ap_003 | 0.05 | <0.01 | <0.09 | <0.09 | 0.07 | 0.09 | 0.29 | <0.01 | 38.76 | <0.04 | 0.08 | <0.03 | 18.12 | 0.03 | <0.02 | 0.29 | 3.11 | 37.76 | 98.64 |
| LB022_ap_004 | 0.11 | <0.01 | <0.08 | <0.09 | 0.14 | 0.05 | 0.17 | <0.01 | 38.88 | <0.04 | 0.04 | <0.03 | 17.97 | 0.01 | 0.02 | 0.25 | 3.31 | 37.55 | 98.50 |
| LB022_ap_005 | 0.05 | <0.01 | <0.09 | <0.09 | <0.06 | 0.06 | 0.29 | <0.01 | 38.66 | <0.04 | 0.08 | <0.03 | 18.03 | 0.02 | <0.02 | 0.29 | 3.21 | 37.55 | 98.23 |
| LB022_ap_006 | 0.06 | <0.01 | <0.08 | <0.09 | <0.06 | 0.12 | 0.31 | <0.01 | 38.63 | <0.04 | 0.07 | <0.04 | 17.98 | 0.02 | <0.02 | 0.33 | 3.28 | 37.45 | 98.24 |
| LB022_ap_007 | 0.05 | <0.01 | <0.09 | <0.1 | <0.06 | 0.03 | 0.26 | <0.01 | 38.94 | <0.04 | 0.06 | <0.03 | 18.11 | 0.01 | <0.02 | 0.30 | 3.38 | 37.61 | 98.76 |
| LB022_ap_008 | 0.07 | <0.01 | 0.17 | 0.12 | 0.13 | 0.03 | 0.28 | <0.01 | 38.52 | <0.03 | 0.07 | <0.03 | 18.03 | 0.01 | <0.02 | 0.28 | 3.16 | 37.53 | 98.40 |
| LB022_ap_009 | 0.02 | <0.01 | <0.09 | <0.09 | <0.06 | 0.18 | 2.09 | 0.02 | 38.88 | <0.04 | 0.03 | <0.04 | 17.87 | 0.03 | <0.02 | 0.88 | 2.72 | 37.22 | 97.94 |
| LB022_ap_010 | 0.08 | <0.01 | 0.08 | 0.09 | <0.07 | 0.02 | 0.17 | <0.01 | 38.90 | <0.03 | 0.04 | <0.04 | 18.08 | <0.01 | <0.02 | 0.27 | 3.68 | 37.48 | 98.89 |
| LB024_ap_001 | 0.02 | <0.01 | <0.08 | <0.09 | <0.06 | 0.21 | 6.63 | 0.01 | 32.96 | <0.04 | 0.06 | <0.04 | 17.54 | 0.02 | <0.02 | 1.54 | 2.61 | 36.46 | 98.06 |
| LB024_ap_002 | 0.02 | <0.01 | <0.09 | <0.09 | <0.06 | 0.04 | 0.27 | <0.01 | 38.38 | 0.07 | 0.41 | <0.03 | 17.24 | 0.61 | <0.02 | 0.01 | 4.09 | 37.05 | 98.20 |
| LB024_ap_003 | 0.03 | <0.01 | <0.08 | <0.09 | <0.06 | 0.03 | 0.09 | <0.01 | 38.70 | 0.08 | 0.10 | <0.03 | 17.97 | 0.14 | <0.02 | <0.01 | 3.93 | 37.40 | 98.63 |
| LB024_ap_004 | 0.06 | <0.01 | <0.08 | <0.09 | <0.06 | 0.03 | 0.09 | <0.01 | 38.70 | 0.08 | 0.19 | <0.04 | 17.19 | 0.45 | <0.02 | 0.01 | 3.85 | 36.91 | 97.56 |
| LB028_ap_001 | 0.10 | <0.01 | <0.09 | 0.33 | 0.14 | 0.10 | 0.10 | 0.04 | 38.30 | <0.04 | 0.10 | <0.03 | 17.84 | 0.07 | <0.02 | 1.37 | 2.44 | 37.42 | 98.36 |
| LB029_ap_001 | 0.08 | <0.01 | <0.08 | <0.09 | 0.10 | <0.02 | <0.03 | <0.01 | 39.20 | <0.04 | 0.05 | <0.03 | 18.12 | 0.01 | <0.02 | 0.15 | 2.80 | 38.01 | 98.53 |
| LB030_ap_001 | 0.08 | <0.01 | <0.09 | <0.09 | 0.07 | 0.48 | 0.04 | 0.14 | 38.06 | <0.04 | 0.04 | <0.03 | 17.90 | 0.01 | <0.02 | 1.87 | 2.08 | 37.38 | 98.15 |
| LB030_ap_002 | 0.05 | <0.01 | <0.09 | <0.09 | 0.06 | 0.35 | 0.09 | 0.14 | 38.55 | <0.04 | 0.03 | <0.03 | 18.02 | <0.01 | <0.02 | 1.00 | 2.33 | 37.77 | 98.38 |
| LB030_ap_003 | 0.08 | <0.01 | <0.09 | <0.09 | <0.06 | 0.43 | 0.11 | 0.17 | 38.22 | 0.04 | 0.10 | <0.03 | 17.88 | 0.06 | <0.02 | 1.73 | 2.01 | 37.62 | 98.45 |
| LB030_ap_004 | 0.06 | <0.01 | <0.08 | <0.09 | <0.06 | 0.49 | 0.09 | 0.14 | 38.42 | 0.04 | 0.06 | <0.03 | 18.04 | <0.01 | <0.02 | 1.70 | 2.15 | 37.72 | 98.91 |
| LB030_ap_005 | 0.07 | <0.01 | <0.09 | <0.09 | <0.06 | 0.48 | 0.08 | 0.17 | 38.41 | <0.03 | 0.05 | <0.04 | 17.94 | 0.01 | <0.02 | 1.74 | 2.10 | 37.62 | 98.66 |
| LB030_ap_006 | 0.06 | <0.01 | <0.08 | <0.09 | 0.10 | 0.49 | 0.07 | 0.16 | 38.28 | 0.04 | 0.04 | <0.04 | 18.02 | 0.01 | <0.02 | 1.70 | 2.10 | 37.68 | 98.75 |
| LB030_ap_007 | 0.05 | <0.01 | <0.08 | 0.09 | <0.06 | 0.41 | 0.07 | 0.15 | 38.52 | <0.04 | 0.03 | <0.03 | 18.07 | 0.01 | <0.02 | 0.87 | 2.25 | 37.92 | 98.44 |
| LB030_ap_008 | 0.06 | <0.01 | <0.08 | 0.10 | <0.06 | 0.44 | 0.09 | 0.16 | 38.36 | <0.04 | 0.03 | <0.04 | 18.05 | <0.01 | <0.02 | 1.47 | 2.18 | 37.75 | 98.68 |
| LB030_ap_009 | 0.07 | <0.01 | <0.08 | <0.09 | 0.11 | 0.50 | 0.07 | 0.16 | 38.31 | <0.04 | 0.06 | <0.03 | 18.00 | 0.02 | <0.02 | 1.58 | 2.16 | 37.71 | 98.77 |
| LB030_ap_010 | 0.07 | <0.01 | <0.09 | 0.09 | 0.08 | 0.41 | 0.08 | 0.14 | 38.60 | <0.03 | 0.05 | <0.04 | 18.01 | 0.02 | <0.02 | 1.06 | 2.16 | 37.89 | 98.66 |
| LB030_ap_011 | 0.06 | <0.01 | <0.08 | <0.09 | <0.06 | 0.49 | 0.07 | 0.14 | 38.29 | <0.04 | 0.05 | <0.03 | 18.01 | <0.01 | <0.02 | 1.78 | 2.03 | 37.66 | 98.59 |
| LB030_ap_012 | 0.06 | <0.01 | <0.08 | <0.09 | <0.06 | 0.46 | 0.10 | 0.15 | 38.48 | <0.04 | 0.02 | <0.04 | 18.04 | <0.01 | <0.02 | 1.68 | 2.11 | 37.74 | 98.83 |
| LB030_ap_013 | 0.07 | <0.01 | <0.09 | <0.09 | <0.06 | 0.43 | 0.11 | 0.14 | 38.61 | <0.04 | 0.02 | <0.03 | 18.09 | <0.01 | <0.02 | 0.97 | 2.18 | 37.98 | 98.59 |
| LB030_ap_014 | 0.12 | <0.01 | <0.08 | <0.1 | <0.06 | 0.55 | 0.09 | 0.14 | 38.37 | <0.04 | 0.06 | <0.03 | 18.11 | <0.01 | <0.02 | 1.69 | 2.01 | 37.93 | 99.07 |
| LB030_ap_015 | 0.06 | <0.01 | 0.13 | <0.09 | <0.06 | 0.40 | 0.09 | 0.15 | 38.65 | <0.04 | 0.03 | <0.03 | 18.12 | 0.02 | <0.02 | 0.90 | 2.08 | 38.15 | 98.78 |
| LB030_ap_016 | 0.09 | <0.01 | <0.08 | <0.09 | <0.07 | 0.48 | 0.09 | 0.15 | 38.40 | <0.03 | 0.06 | <0.04 | 17.99 | 0.04 | <0.02 | 1.69 | 2.25 | 37.68 | 98.90 |
| LB030_ap_017 | 0.06 | <0.01 | <0.08 | <0.09 | <0.06 | 0.46 | 0.09 | 0.16 | 38.39 | <0.03 | 0.07 | <0.03 | 18.05 | 0.01 | <0.02 | 1.84 | 2.23 | 37.68 | 99.04 |
| LB036_ap_001 | 0.44 | 0.35 | <0.08 | <0.09 | <0.06 | 0.21 | 0.62 | 0.15 | 37.74 | 0.04 | 0.27 | 0.06 | 17.38 | 0.36 | <0.02 | 0.05 | 3.71 | 37.74 | 99.12 |
| LB036_ap_002 | 0.43 | 0.41 | <0.09 | <0.09 | <0.07 | 0.31 | 0.43 | 0.06 | 37.72 | 0.04 | 0.15 | <0.03 | 17.67 | 0.14 | <0.02 | 0.07 | 0.67 | 38.95 | 97.05 |
| LB036_ap_003 | 0.04 | <0.01 | <0.08 | 0.14 | 0.07 | 0.10 | 0.19 | 0.03 | 38.71 | 0.06 | 0.12 | <0.03 | 17.92 | 0.10 | <0.02 | 1.91 | 1.87 | 37.78 | 99.05 |

*all elements in wt. % (EMPA).

Appendix C: Eastern Sunda arc apatite trace element chemistry (LA-ICP-MS)

| Analysis ID | Ca | Ce | Dy | Er | Eu | Gd | Ho | La | Lu | Nb | Nd | P | Pb | Pr | Sm | Sr | Tb | Th | Tm | U | V | Yb | Fe |
|----------------|--------|--------|--------|--------|-------|--------|-------|--------|-------|--------|--------|--------|------|-------|-------|-------|-------|--------|-------|-------|-------|-------|---------|
| LB014_322_ap1 | 391586 | 3248.3 | 166.48 | 84.96 | 33.82 | 253.59 | 31.35 | 1371.9 | 7.09 | 1055.5 | 1533.4 | 563467 | 0.98 | 360.7 | 270.8 | 302.2 | 30.65 | 135.57 | 10.28 | 17.35 | 13.85 | 55.29 | 962.3 |
| LB014_322_ap10 | 391497 | 2686.5 | 150.81 | 79.42 | 27.55 | 213.33 | 28.05 | 1226.4 | 6.84 | 1597.3 | 1277.7 | 564213 | 0.84 | 300.0 | 234.3 | 310.3 | 26.95 | 63.29 | 9.42 | 11.07 | 14.40 | 55.94 | 953.5 |
| LB014_322_ap11 | 391819 | 2823.3 | 151.99 | 73.25 | 33.93 | 227.91 | 27.66 | 1261.5 | 5.93 | 1232.8 | 1415.3 | 563893 | 0.95 | 335.4 | 260.3 | 363.6 | 27.43 | 59.58 | 8.67 | 11.79 | 15.75 | 51.50 | 897.9 |
| LB014_322_ap12 | 392138 | 2207.2 | 143.40 | 74.55 | 28.58 | 214.82 | 27.68 | 1231.4 | 6.78 | 1070.3 | 1294.6 | 563904 | 0.82 | 317.3 | 226.3 | 279.0 | 26.13 | 94.77 | 8.93 | 13.04 | 15.69 | 50.91 | 980.8 |
| LB014_322_ap13 | 393294 | 2857.7 | 93.92 | 48.73 | 24.21 | 150.33 | 17.29 | 1107.4 | 4.66 | 836.1 | 969.5 | 564390 | 0.93 | 244.0 | 165.1 | 297.6 | 16.80 | 114.77 | 5.60 | 12.14 | 15.94 | 35.21 | 947.2 |
| LB014_322_ap14 | 391580 | 3334.4 | 169.48 | 81.96 | 43.07 | 262.65 | 30.11 | 1403.7 | 6.26 | 948.7 | 1698.3 | 563268 | 0.89 | 388.4 | 310.1 | 358.5 | 30.98 | 135.97 | 9.16 | 15.61 | 12.82 | 51.56 | 860.4 |
| LB014_322_ap15 | 392367 | 2717.6 | 140.52 | 69.60 | 28.54 | 211.13 | 26.02 | 1282.1 | 6.42 | 985.2 | 1314.6 | 563906 | 0.87 | 311.1 | 234.8 | 273.6 | 25.40 | 107.52 | 8.00 | 17.51 | 13.65 | 46.99 | 902.4 |
| LB014_322_ap16 | 391874 | 3101.3 | 144.73 | 72.74 | 28.82 | 222.38 | 27.03 | 1280.2 | 5.75 | 1079.6 | 1396.5 | 563704 | 0.81 | 340.9 | 245.5 | 366.6 | 26.38 | 82.36 | 8.59 | 13.10 | 16.40 | 45.81 | 891.2 |
| LB014_322_ap17 | 390987 | 3605.0 | 182.30 | 94.29 | 39.47 | 265.96 | 34.31 | 1460.1 | 8.21 | 1220.0 | 1678.3 | 563239 | 0.89 | 399.9 | 300.9 | 348.3 | 32.59 | 134.59 | 11.64 | 14.23 | 16.71 | 64.17 | 800.7 |
| LB014_322_ap18 | 390774 | 3707.7 | 183.39 | 87.00 | 38.92 | 289.48 | 33.49 | 1560.7 | 6.39 | 1204.2 | 1769.8 | 563095 | 0.80 | 420.1 | 316.9 | 336.0 | 34.41 | 112.85 | 9.69 | 13.02 | 11.95 | 51.25 | 942.2 |
| LB014_322_ap19 | 392578 | 2491.3 | 133.06 | 67.49 | 26.54 | 202.05 | 24.62 | 1213.9 | 5.74 | 1027.4 | 1159.6 | 564127 | 0.88 | 284.4 | 216.1 | 318.4 | 23.79 | 122.88 | 7.71 | 11.29 | 13.22 | 45.89 | 897.3 |
| LB014_322_ap20 | 391579 | 3238.1 | 170.78 | 85.37 | 30.66 | 248.17 | 31.67 | 1356.9 | 6.34 | 1097.0 | 1506.2 | 563522 | 0.90 | 360.0 | 272.2 | 287.9 | 30.60 | 120.85 | 9.99 | 17.20 | 12.32 | 53.15 | 961.3 |
| LB014_322_ap21 | 392301 | 3017.1 | 138.58 | 70.32 | 30.93 | 212.04 | 25.98 | 1273.9 | 6.28 | 855.6 | 1378.8 | 563695 | 0.85 | 334.3 | 233.9 | 295.6 | 25.27 | 79.30 | 6.84 | 8.39 | 13.15 | 47.87 | 948.5 |
| LB014_322_ap22 | 393338 | 2209.2 | 110.48 | 55.73 | 24.67 | 176.14 | 20.40 | 1049.9 | 4.59 | 822.9 | 1061.4 | 193.2 | 0.86 | 253.4 | 201.5 | 301.5 | 20.58 | 49.19 | 6.14 | 7.71 | 12.06 | 36.01 | 871.7 |
| LB014_322_ap23 | 392471 | 2659.0 | 129.48 | 66.88 | 27.91 | 196.11 | 24.59 | 1142.7 | 6.02 | 1054.1 | 1188.4 | 564110 | 0.85 | 287.9 | 211.1 | 321.6 | 23.36 | 70.27 | 7.78 | 12.20 | 13.77 | 45.29 | 929.4 |
| LB014_322_ap25 | 391297 | 3516.0 | 167.62 | 82.43 | 31.88 | 260.14 | 31.45 | 1435.3 | 6.62 | 1051.1 | 1621.3 | 563258 | 0.89 | 391.1 | 284.3 | 320.4 | 31.03 | 143.46 | 9.64 | 18.34 | 13.49 | 53.16 | 974.3 |
| LB014_322_ap26 | 391952 | 3004.2 | 141.23 | 72.00 | 25.79 | 213.34 | 26.30 | 1330.1 | 6.11 | 1077.7 | 1336.0 | 563777 | 0.91 | 324.7 | 230.6 | 308.1 | 25.77 | 99.97 | 8.58 | 12.67 | 14.09 | 48.98 | 963.5 |
| LB014_322_ap27 | 392423 | 2703.0 | 127.69 | 63.36 | 24.73 | 201.21 | 23.91 | 1136.8 | 5.24 | 1076.0 | 1256.6 | 564097 | 0.93 | 301.0 | 221.7 | 307.8 | 23.52 | 33.18 | 7.41 | 8.13 | 12.88 | 40.79 | 902.8 |
| LB014_322_ap28 | 392155 | 3051.9 | 130.49 | 68.83 | 28.45 | 201.36 | 24.71 | 1349.4 | 6.37 | 993.4 | 1314.9 | 563769 | 0.89 | 329.1 | 220.6 | 289.1 | 23.82 | 66.49 | 8.20 | 14.70 | 16.12 | 47.87 | 888.4 |
| LB014_322_ap30 | 392543 | 2697.7 | 122.71 | 61.59 | 28.07 | 199.61 | 22.67 | 1309.9 | 5.56 | 843.4 | 1448.7 | 563841 | 1.02 | 302.9 | 213.8 | 302.0 | 22.55 | 202.05 | 7.07 | 20.59 | 15.60 | 51.43 | 912.7 |
| LB014_322_ap31 | 392643 | 2602.5 | 100.86 | 53.93 | 29.04 | 150.00 | 19.23 | 1225.0 | 5.68 | 1082.3 | 1033.6 | 564263 | 1.13 | 265.2 | 167.6 | 318.5 | 18.26 | 66.05 | 6.56 | 9.39 | 17.71 | 41.10 | 879.3 |
| LB014_322_ap32 | 392650 | 2341.1 | 122.94 | 61.37 | 29.52 | 189.39 | 22.83 | 1061.3 | 5.55 | 1099.7 | 1148.0 | 564330 | 0.82 | 270.4 | 208.8 | 291.5 | 22.65 | 75.07 | 7.26 | 9.52 | 14.97 | 43.34 | 992.7 |
| LB014_322_ap33 | 391303 | 3511.0 | 156.97 | 85.47 | 36.44 | 229.06 | 30.33 | 1473.9 | 8.15 | 1135.4 | 1518.8 | 564000 | 1.06 | 277.7 | 190.0 | 322.4 | 27.91 | 124.95 | 10.91 | 14.21 | 12.94 | 64.42 | 938.3 |
| LB014_322_ap34 | 390410 | 2648.8 | 117.18 | 59.78 | 25.40 | 173.77 | 21.87 | 1201.6 | 5.62 | 2531.8 | 1124.5 | 564000 | 0.82 | 379.8 | 256.9 | 306.0 | 27.91 | 124.95 | 10.91 | 14.21 | 12.94 | 64.42 | 938.3 |
| LB014_322_ap35 | 392764 | 2525.6 | 126.13 | 64.06 | 24.94 | 190.52 | 23.59 | 1267.9 | 5.72 | 881.6 | 1143.8 | 564054 | 1.02 | 279.7 | 210.0 | 293.4 | 23.30 | 122.24 | 7.31 | 12.94 | 13.53 | 42.96 | 921.3 |
| LB014_322_ap36 | 390462 | 4038.4 | 182.55 | 85.55 | 40.32 | 285.93 | 32.42 | 1730.0 | 6.89 | 1194.6 | 1857.6 | 562839 | 1.20 | 453.3 | 326.2 | 408.7 | 33.21 | 63.68 | 9.88 | 15.20 | 17.91 | 57.04 | 866.6 |
| LB014_322_ap37 | 392049 | 2873.6 | 151.47 | 74.80 | 32.12 | 226.47 | 27.33 | 1297.1 | 6.40 | 1068.4 | 1406.6 | 563796 | 0.87 | 329.8 | 254.7 | 300.4 | 27.92 | 102.51 | 8.76 | 13.52 | 13.57 | 49.13 | 888.6 |
| LB014_322_ap38 | 392174 | 2399.7 | 132.27 | 66.99 | 23.00 | 193.66 | 24.69 | 1138.9 | 6.19 | 1030.8 | 1136.3 | 564246 | 0.87 | 275.2 | 210.8 | 279.9 | 23.53 | 81.26 | 7.69 | 11.45 | 15.12 | 48.97 | 929.2 |
| LB014_322_ap39 | 392348 | 2754.0 | 142.86 | 72.39 | 29.11 | 207.84 | 26.47 | 1293.6 | 6.66 | 978.1 | 1240.1 | 563910 | 0.69 | 306.3 | 226.2 | 301.0 | 25.80 | 96.33 | 8.72 | 10.13 | 16.35 | 50.91 | 945.8 |
| LB014_322_ap40 | 390760 | 3932.4 | 192.62 | 94.23 | 34.86 | 285.87 | 34.90 | 1672.5 | 7.49 | 1124.3 | 1792.3 | 562914 | 0.86 | 434.9 | 317.5 | 381.0 | 33.94 | 88.33 | 11.03 | 14.37 | 14.78 | 61.98 | 795.6 |
| LB014_322_ap5 | 392522 | 2620.7 | 132.66 | 66.69 | 24.90 | 193.71 | 24.75 | 1110.3 | 5.64 | 1015.9 | 1201.6 | 564122 | 0.81 | 288.7 | 210.3 | 311.0 | 23.83 | 46.54 | 8.19 | 9.72 | 12.24 | 45.13 | 999.9 |
| LB014_322_ap6 | 391543 | 3185.4 | 173.30 | 87.08 | 32.72 | 253.03 | 32.22 | 1268.0 | 6.78 | 1211.9 | 1517.7 | 563841 | 0.80 | 365.1 | 280.9 | 349.1 | 31.37 | 64.36 | 10.06 | 10.34 | 14.10 | 55.83 | 864.8 |
| LB014_322_ap7 | 390501 | 3760.7 | 186.69 | 91.88 | 37.30 | 279.58 | 33.29 | 1630.5 | 7.12 | 1392.1 | 1787.6 | 563121 | 1.20 | 435.6 | 321.4 | 406.0 | 34.37 | 90.63 | 10.44 | 14.21 | 15.30 | 58.55 | 782.1 |
| LB014_322_ap8 | 394342 | 1401.6 | 92.14 | 43.59 | 24.10 | 136.00 | 15.98 | 552.5 | 4.71 | 788.8 | 813.1 | 565066 | 0.74 | 181.7 | 154.3 | 483.0 | 16.73 | 8.37 | 5.34 | 1.95 | 18.09 | 34.21 | 814.1 |
| LB014_322_ap9 | 392992 | 2523.4 | 117.95 | 61.44 | 27.25 | 184.96 | 22.12 | 1226.8 | 5.55 | 717.4 | 1165.5 | 564004 | 0.95 | 280.4 | 201.9 | 294.9 | 21.84 | 105.36 | 7.37 | 6.57 | 12.31 | 43.43 | 975.7 |
| LB025_323_ap1 | 394062 | 1270.1 | 65.82 | 30.77 | 19.01 | 109.47 | 11.88 | 477.9 | 2.82 | 785.9 | 720.0 | 565176 | 0.38 | 165.9 | 129.9 | 322.1 | 12.65 | 5.64 | 3.46 | 1.73 | 27.07 | 20.43 | 1578.8 |
| LB025_323_ap10 | 394317 | 1233.1 | 73.93 | 34.33 | 20.53 | 117.48 | 12.85 | 430.1 | 3.34 | 715.8 | 728.6 | 565184 | 0.53 | 159.3 | 135.9 | 352.5 | 14.18 | 4.92 | 3.93 | 1.69 | 25.02 | 22.98 | 1407.2 |
| LB025_323_ap11 | 393116 | 1290.0 | 117.35 | 47.61 | 21.10 | 157.42 | 18.81 | 447.0 | 4.45 | 599.2 | 802.8 | 565023 | 0.49 | 172.3 | 137.5 | 380.6 | 20.23 | 5.02 | 5.41 | 1.52 | 13.12 | 34.01 | 1394.0 |
| LB025_323_ap12 | 393777 | 1832.0 | 89.80 | 39.90 | 21.51 | 145.75 | 15.72 | 674.9 | 3.43 | 732.0 | 949.5 | 564635 | 0.75 | 220.9 | 167.6 | 248.1 | 16.84 | 6.78 | 4.71 | 1.25 | 15.50 | 25.43 | 1875.5 |
| LB025_323_ap13 | 394475 | 886.5 | 57.89 | 26.40 | 17.37 | 91.02 | 10.28 | 347.5 | 2.37 | 874.4 | 525.2 | 565576 | 1.07 | 115.2 | 98.8 | 330.6 | 11.15 | 3.72 | 3.04 | 1.26 | 36.77 | 16.65 | 1491.4 |
| LB025_323_ap15 | 392986 | 2067.2 | 111.73 | 48.43 | 28.20 | 174.25 | 18.57 | 749.4 | 5.01 | 938.6 | 1201.3 | 564498 | 0.57 | 269.5 | 217.0 | 226.0 | 21.08 | 11.98 | 5.54 | 3.20 | 31.04 | 34.74 | 1352.8 |
| LB025_323_ap16 | 392780 | 509.9 | 72.45 | 32.15 | 25.59 | 101.40 | 12.38 | 175.2 | 3.70 | 581.8 | 377.5 | 565246 | 1.07 | 76.2 | 106.5 | 243.9 | 13.81 | 1.63 | 4.17 | 0.87 | 6.88 | 26.34 | 4599.0 |
| LB025_323_ap17 | 379811 | 1812.5 | 268.85 | 128.26 | 37.71 | 329.24 | 48.59 | 624.2 | 12.76 | 1147.1 | 1279.0 | 561924 | 1.88 | 259.0 | 322.1 | 177.1 | 46.14 | 10.04 | 15.61 | 2.05 | 24.81 | 93.25 | 16622.8 |
| LB025_323_ap18 | 394529 | 721.2 | 117.13 | 44.34 | 19.39 | 167.67 | 18.54 | 224.6 | 3.41 | 659.3 | 575.3 | 565304 | 0.72 | 109.7 | 163.2 | 281.7 | 22.50 | 1.72 | 5.22 | 1.48 | 4.10 | 28.27 | 1871.2 |

*All elements are in ppm.

Appendix C: Eastern Sunda arc apatite trace element chemistry (LA-ICP-MS)

| Analysis ID | Ca | Ce | Dy | Er | Eu | Gd | Ho | La | Lu | Nb | Nd | P | Pb | Pr | Sm | Sr | Tb | Th | Tm | U | V | Yb | Fe |
|----------------|--------|--------|--------|--------|-------|--------|-------|--------|-------|--------|--------|--------|------|-------|-------|-------|-------|-------|-------|-------|-------|--------|---------|
| LB025_323_ap2 | 392620 | 1156.8 | 145.50 | 64.43 | 27.05 | 199.72 | 25.76 | 384.1 | 5.77 | 839.3 | 856.4 | 564847 | 1.08 | 170.7 | 201.7 | 246.3 | 26.56 | 5.71 | 7.72 | 1.60 | 9.28 | 45.06 | 3111.1 |
| LB025_323_ap3 | 394403 | 1113.2 | 66.36 | 28.02 | 19.80 | 106.96 | 11.09 | 414.7 | 2.60 | 620.6 | 676.3 | 565200 | 0.52 | 149.2 | 123.6 | 395.9 | 12.54 | 5.26 | 3.24 | 1.64 | 23.72 | 20.06 | 1601.6 |
| LB025_323_ap4 | 394823 | 1008.6 | 55.52 | 25.10 | 18.29 | 89.26 | 9.06 | 366.9 | 2.45 | 726.1 | 583.5 | 565464 | 0.44 | 132.6 | 108.5 | 363.1 | 10.41 | 5.02 | 2.96 | 1.46 | 27.54 | 17.90 | 1158.0 |
| LB025_323_ap5 | 394929 | 1055.7 | 63.31 | 25.51 | 17.88 | 108.07 | 10.79 | 390.0 | 2.40 | 640.3 | 641.5 | 565180 | 0.43 | 138.9 | 121.3 | 398.9 | 11.77 | 5.76 | 2.95 | 1.65 | 22.13 | 17.58 | 1202.5 |
| LB025_323_ap6 | 392518 | 1907.6 | 187.60 | 85.20 | 26.25 | 262.45 | 33.40 | 635.2 | 6.73 | 1040.0 | 1203.0 | 564474 | 0.76 | 257.4 | 265.4 | 409.8 | 33.41 | 6.27 | 10.13 | 1.83 | 24.77 | 54.16 | 1775.7 |
| LB025_323_ap7 | 393797 | 1460.8 | 111.81 | 50.82 | 23.91 | 164.94 | 19.81 | 517.9 | 4.73 | 828.0 | 916.1 | 564944 | 0.55 | 199.2 | 179.2 | 318.5 | 20.83 | 5.92 | 3.06 | 1.93 | 27.80 | 34.89 | 1385.6 |
| LB025_323_ap8 | 394000 | 1182.7 | 74.51 | 33.87 | 19.91 | 118.74 | 12.78 | 441.5 | 3.40 | 683.6 | 713.2 | 565201 | 0.18 | 157.6 | 136.2 | 432.5 | 13.76 | 4.42 | 4.00 | 1.38 | 22.29 | 23.61 | 1819.4 |
| LB025_323_ap9 | 396070 | 673.0 | 25.37 | 11.66 | 13.23 | 41.36 | 4.60 | 275.2 | 0.87 | 143.8 | 340.7 | 565006 | 2.20 | 82.0 | 51.3 | 164.0 | 4.91 | 0.97 | 1.21 | 0.83 | 13.49 | 6.14 | 1465.8 |
| LB027_324_ap10 | 396929 | 714.5 | 54.30 | 23.14 | 11.40 | 85.84 | 9.83 | 309.5 | 1.35 | 188.3 | 404.0 | 565703 | 3.88 | 86.3 | 80.1 | 259.0 | 9.98 | 3.07 | 2.26 | 0.59 | 7.55 | 10.98 | 98.4 |
| LB027_324_ap11 | 395904 | 625.8 | 31.85 | 13.09 | 12.03 | 50.84 | 5.62 | 239.2 | 0.87 | 331.8 | 331.0 | 565723 | 2.37 | 77.2 | 58.0 | 200.6 | 6.01 | 1.76 | 1.40 | 0.81 | 18.91 | 6.93 | 1354.6 |
| LB027_324_ap12 | 396426 | 772.0 | 32.83 | 15.02 | 15.39 | 52.29 | 5.86 | 302.8 | 0.90 | 251.1 | 382.3 | 565682 | 2.06 | 91.4 | 65.7 | 184.4 | 6.30 | 2.47 | 1.55 | 1.06 | 11.52 | 7.27 | 1063.6 |
| LB027_324_ap13 | 393985 | 756.0 | 30.84 | 13.91 | 12.30 | 54.72 | 5.61 | 346.8 | 0.81 | 326.2 | 366.9 | 565256 | 3.21 | 84.2 | 59.0 | 176.8 | 5.94 | 1.07 | 1.25 | 0.68 | 34.35 | 6.71 | 3468.6 |
| LB027_324_ap14 | 394623 | 721.2 | 20.84 | 8.96 | 10.24 | 37.97 | 3.72 | 331.5 | 0.55 | 251.2 | 324.3 | 565369 | 2.21 | 80.9 | 45.2 | 212.5 | 4.13 | 0.60 | 0.88 | 0.26 | 15.47 | 4.22 | 2928.5 |
| LB027_324_ap15 | 396061 | 726.8 | 53.77 | 27.25 | 12.17 | 71.78 | 10.14 | 307.3 | 2.65 | 252.6 | 401.6 | 565592 | 1.44 | 89.2 | 75.5 | 183.9 | 9.25 | 1.57 | 3.18 | 1.23 | 31.07 | 20.19 | 1063.6 |
| LB027_324_ap16 | 396634 | 671.7 | 45.37 | 23.82 | 10.65 | 64.74 | 8.83 | 285.3 | 1.97 | 420.5 | 362.6 | 565652 | 8.24 | 82.7 | 63.7 | 297.3 | 7.96 | 1.26 | 2.62 | 1.08 | 29.45 | 14.87 | 101.3 |
| LB027_324_ap17 | 394724 | 597.1 | 46.67 | 22.32 | 12.89 | 71.88 | 8.88 | 212.3 | 1.99 | 391.9 | 386.3 | 565507 | 2.97 | 81.6 | 71.3 | 194.5 | 8.75 | 2.20 | 2.41 | 0.96 | 37.08 | 13.95 | 2597.8 |
| LB027_324_ap18 | 394576 | 754.0 | 51.48 | 25.51 | 14.39 | 71.89 | 9.25 | 304.6 | 1.63 | 390.1 | 414.0 | 565394 | 1.87 | 90.7 | 77.0 | 202.9 | 9.16 | 1.26 | 2.74 | 1.18 | 31.70 | 13.39 | 2569.0 |
| LB027_324_ap19 | 395958 | 768.0 | 42.41 | 21.13 | 14.85 | 62.81 | 7.69 | 280.9 | 2.28 | 250.9 | 433.4 | 565566 | 2.12 | 100.2 | 71.2 | 174.5 | 7.80 | 2.08 | 2.52 | 1.01 | 30.86 | 14.75 | 1182.3 |
| LB027_324_ap20 | 396970 | 774.7 | 22.12 | 8.05 | 12.58 | 45.41 | 4.01 | 315.7 | 0.43 | 208.7 | 374.2 | 565768 | 1.43 | 88.7 | 58.6 | 210.7 | 4.84 | 0.63 | 0.79 | 0.21 | 3.81 | 3.58 | 121.2 |
| LB027_324_ap21 | 396931 | 756.9 | 24.71 | 9.22 | 11.14 | 43.02 | 4.41 | 349.9 | 0.49 | 267.3 | 332.0 | 565818 | 3.10 | 82.0 | 49.5 | 192.6 | 4.90 | 2.17 | 0.93 | 0.95 | 22.66 | 3.78 | 86.5 |
| LB031_325_ap1 | 392951 | 548.8 | 179.32 | 88.92 | 28.96 | 183.29 | 33.39 | 180.4 | 8.71 | 403.8 | 491.8 | 564960 | 0.49 | 89.9 | 158.2 | 308.0 | 28.70 | 4.26 | 11.52 | 1.70 | 14.57 | 61.70 | 4262.4 |
| LB031_325_ap10 | 390792 | 571.0 | 153.59 | 82.76 | 30.21 | 150.70 | 29.40 | 182.1 | 8.53 | 251.8 | 454.4 | 564557 | 0.55 | 88.5 | 132.7 | 305.3 | 23.95 | 4.86 | 11.00 | 2.28 | 14.90 | 63.70 | 7187.6 |
| LB031_325_ap11 | 391928 | 565.6 | 150.17 | 80.71 | 28.40 | 147.46 | 27.88 | 182.7 | 8.00 | 358.9 | 437.4 | 564775 | 1.05 | 84.8 | 128.9 | 301.7 | 24.14 | 5.07 | 9.69 | 1.80 | 16.30 | 61.35 | 5674.7 |
| LB031_325_ap12 | 393334 | 364.5 | 138.16 | 69.93 | 19.88 | 161.66 | 26.65 | 111.9 | 5.65 | 327.4 | 367.4 | 565167 | 0.25 | 61.1 | 117.0 | 282.5 | 22.32 | 2.47 | 8.02 | 0.90 | 25.63 | 43.78 | 4342.3 |
| LB031_325_ap13 | 392955 | 449.2 | 129.10 | 69.47 | 24.50 | 136.82 | 24.76 | 139.3 | 6.68 | 310.0 | 384.2 | 563955 | 0.49 | 72.4 | 116.9 | 292.2 | 20.87 | 3.50 | 8.34 | 1.47 | 31.87 | 50.57 | 16716.5 |
| LB031_325_ap14 | 392430 | 508.8 | 150.91 | 78.81 | 26.22 | 158.27 | 29.09 | 159.2 | 7.57 | 281.5 | 445.6 | 564840 | 0.56 | 82.1 | 133.0 | 298.9 | 24.79 | 3.79 | 9.95 | 1.58 | 17.47 | 56.77 | 42584.0 |
| LB031_325_ap15 | 392802 | 686.6 | 202.91 | 102.16 | 29.93 | 210.55 | 37.55 | 208.7 | 9.26 | 275.2 | 578.5 | 564746 | 0.46 | 108.7 | 178.7 | 310.0 | 32.60 | 5.04 | 12.11 | 2.01 | 13.06 | 71.55 | 42964.0 |
| LB031_325_ap16 | 398654 | 665.6 | 205.32 | 102.62 | 30.02 | 216.10 | 38.29 | 213.4 | 9.70 | 381.1 | 584.8 | 563975 | 0.76 | 104.6 | 176.5 | 300.6 | 32.25 | 4.66 | 12.28 | 1.68 | 18.81 | 73.49 | 9198.6 |
| LB031_325_ap17 | 391223 | 901.8 | 251.56 | 112.26 | 24.11 | 319.81 | 44.94 | 279.3 | 6.95 | 485.9 | 833.1 | 564301 | 0.67 | 144.1 | 247.4 | 260.7 | 42.42 | 4.11 | 10.91 | 1.36 | 15.51 | 58.18 | 5450.0 |
| LB031_325_ap18 | 393314 | 467.2 | 157.38 | 76.93 | 22.30 | 197.62 | 29.97 | 145.8 | 5.88 | 313.6 | 465.2 | 565044 | 0.28 | 78.0 | 144.1 | 272.0 | 26.51 | 2.31 | 8.49 | 0.84 | 18.82 | 47.00 | 4161.1 |
| LB031_325_ap19 | 391570 | 667.1 | 213.12 | 105.09 | 28.83 | 228.99 | 39.61 | 210.1 | 9.67 | 313.6 | 607.8 | 564487 | 0.51 | 106.5 | 188.2 | 298.0 | 34.43 | 4.84 | 12.64 | 1.95 | 14.68 | 71.30 | 5785.3 |
| LB031_325_ap20 | 393267 | 475.6 | 140.60 | 61.96 | 23.62 | 185.09 | 24.72 | 144.6 | 4.53 | 362.6 | 474.9 | 565079 | 0.40 | 78.8 | 148.7 | 296.7 | 25.40 | 2.22 | 6.70 | 0.79 | 26.27 | 35.80 | 4129.9 |
| LB031_325_ap21 | 392710 | 641.5 | 196.59 | 98.82 | 29.25 | 211.64 | 37.33 | 198.2 | 9.25 | 247.7 | 578.0 | 564707 | 0.46 | 103.8 | 171.0 | 304.0 | 31.55 | 4.83 | 12.42 | 1.93 | 15.23 | 70.28 | 4618.3 |
| LB031_325_ap22 | 392955 | 654.3 | 150.30 | 72.50 | 22.73 | 192.24 | 27.91 | 244.2 | 5.74 | 512.4 | 506.8 | 565022 | 1.94 | 94.8 | 149.4 | 244.8 | 26.15 | 2.16 | 8.19 | 0.94 | 23.92 | 42.44 | 4037.1 |
| LB031_325_ap23 | 392945 | 626.1 | 181.16 | 92.87 | 28.04 | 195.44 | 34.10 | 195.4 | 8.73 | 286.5 | 532.7 | 564820 | 0.50 | 96.9 | 163.5 | 315.0 | 30.18 | 4.43 | 10.79 | 1.78 | 10.51 | 66.73 | 4353.2 |
| LB034_328_ap1 | 391397 | 2474.4 | 229.86 | 126.92 | 36.13 | 289.79 | 43.97 | 905.9 | 14.00 | 1657.8 | 1373.1 | 564251 | 1.17 | 301.9 | 290.1 | 321.0 | 38.96 | 74.98 | 16.45 | 7.74 | 7.87 | 98.73 | 1040.9 |
| LB034_328_ap10 | 392725 | 2380.3 | 197.62 | 107.37 | 32.17 | 258.81 | 37.69 | 872.3 | 10.67 | 1066.8 | 1281.1 | 564202 | 2.44 | 289.2 | 266.4 | 303.6 | 34.51 | 95.99 | 13.26 | 8.18 | 7.22 | 78.58 | 727.3 |
| LB034_328_ap11 | 398979 | 1789.8 | 160.17 | 85.66 | 27.04 | 199.53 | 30.63 | 724.5 | 8.47 | 3952.6 | 986.9 | 565964 | 1.26 | 223.7 | 204.9 | 363.1 | 26.90 | 28.08 | 10.71 | 5.18 | 2.98 | 64.66 | 1159.0 |
| LB034_328_ap12 | 391197 | 2959.4 | 210.74 | 110.02 | 35.54 | 285.80 | 40.81 | 1154.5 | 10.61 | 1516.9 | 1502.8 | 563853 | 1.07 | 347.2 | 293.7 | 332.0 | 37.36 | 71.30 | 13.79 | 11.80 | 8.34 | 81.15 | 924.4 |
| LB034_328_ap13 | 391220 | 2643.5 | 270.89 | 145.27 | 36.35 | 318.40 | 51.44 | 1001.3 | 13.46 | 1656.5 | 1416.0 | 564077 | 0.90 | 317.3 | 313.0 | 322.8 | 44.77 | 63.56 | 18.44 | 10.53 | 8.76 | 102.29 | 947.0 |
| LB034_328_ap14 | 391168 | 2981.7 | 179.38 | 92.55 | 36.06 | 255.38 | 34.18 | 1154.9 | 8.86 | 1559.8 | 1492.1 | 563907 | 1.11 | 347.9 | 275.4 | 353.3 | 31.68 | 84.66 | 11.79 | 9.52 | 10.05 | 69.94 | 933.9 |
| LB034_328_ap15 | 390370 | 3452.8 | 225.54 | 116.71 | 38.19 | 320.39 | 43.08 | 1319.6 | 11.04 | 1625.1 | 1756.9 | 563428 | 2.30 | 407.5 | 339.0 | 336.1 | 40.34 | 81.27 | 14.32 | 12.09 | 11.33 | 82.80 | 963.7 |
| LB034_328_ap16 | 390875 | 2471.1 | 131.39 | 180.20 | 35.80 | 348.13 | 61.91 | 912.7 | 19.78 | 1880.3 | 1403.9 | 564191 | 1.31 | 307.8 | 325.3 | 296.1 | 50.56 | 76.63 | 23.73 | 13.11 | 8.34 | 144.11 | 1057.9 |
| LB034_328_ap17 | 392267 | 1793.4 | 174.17 | 95.80 | 26.83 | 216.94 | 33.05 | 670.0 | 10.08 | 1000.2 | 1035.4 | 564660 | 1.65 | 227.8 | 207.8 | 317.3 | 31.30 | 82.40 | 12.13 | 6.60 | 10.00 | 74.63 | 2294.9 |
| LB034_328_ap18 | 391425 | 2530.8 | 241.49 | 131.34 | 37.62 | 310.99 | 46.46 | 949.3 | 13.77 | 1663.9 | 1383.5 | 564194 | 0.80 | 309.0 | 297.6 | 329.8 | 42.14 | 98.51 | 16.49 | 13.59 | 8.10 | 101.61 | 853.1 |
| LB034_328_ap19 | 392019 | 2357.9 | 213.92 | 114.24 | 34.48 | 263.25 | 41.28 | 886.9 | 10.95 | 1433.7 | 1261.9 | 564530 | 1.18 | 287.4 | 273.5 | 307.4 | 36.93 | 66.81 | 14.10 | 10.67 | 9.80 | 83.35 | 940.9 |
| LB034_328_ap20 | 390571 | 2947.9 | 312.56 | 167.55 | 39.29 | 384.90 | 59.53 | 1743.3 | 16.45 | 1743.3 | 1659.6 | 563718 | 1.05 | 360.7 | 363.9 | 374.0 | 53.18 | 90.86 | 21.29 | 13.02 | 8.25 | 125.26 | 937.7 |

*All elements are in ppm.

Appendix C: Eastern Sunda arc apatite trace element chemistry (LA-ICP-MS)

| Analysis ID | Ca | Ce | Dy | Er | Eu | Gd | Ho | La | Lu | Nb | Nd | P | Pb | Pr | Sm | Sr | Tb | Th | Tm | U | V | Yb | Fe |
|----------------|--------|--------|--------|--------|--------|--------|-------|--------|-------|--------|--------|--------|------|-------|-------|-------|-------|--------|-------|-------|-------|--------|---------|
| LB034_328_ap21 | 391893 | 2456.6 | 195.07 | 102.18 | 30.07 | 249.14 | 36.34 | 949.4 | 9.75 | 1522.4 | 1264.7 | 564352 | 1.02 | 292.4 | 256.1 | 313.6 | 33.03 | 52.45 | 12.79 | 7.29 | 7.91 | 72.49 | 888.9 |
| LB034_328_ap22 | 391400 | 2844.9 | 202.68 | 107.83 | 35.73 | 282.58 | 38.36 | 1084.6 | 10.64 | 1418.6 | 1480.9 | 563882 | 1.18 | 335.4 | 330.3 | 360.3 | 35.58 | 90.21 | 13.76 | 12.79 | 11.82 | 78.27 | 976.0 |
| LB034_328_ap23 | 391501 | 2646.1 | 239.82 | 123.75 | 37.10 | 322.54 | 45.20 | 956.3 | 11.85 | 1459.2 | 1478.5 | 563989 | 0.97 | 329.4 | 319.0 | 324.8 | 41.72 | 100.25 | 15.00 | 11.25 | 10.66 | 88.43 | 946.4 |
| LB034_328_ap24 | 390828 | 2851.6 | 279.50 | 149.52 | 38.43 | 363.92 | 53.29 | 1032.4 | 14.55 | 1617.2 | 1643.3 | 563759 | 1.42 | 353.9 | 357.1 | 300.4 | 48.09 | 175.43 | 18.51 | 20.00 | 9.93 | 107.57 | 1035.7 |
| LB034_328_ap25 | 391359 | 2439.4 | 277.96 | 150.24 | 34.53 | 335.94 | 53.60 | 886.0 | 14.80 | 1657.5 | 1398.6 | 564191 | 1.03 | 304.1 | 319.3 | 324.9 | 46.73 | 72.55 | 18.98 | 11.04 | 8.68 | 110.59 | 982.3 |
| LB034_328_ap26 | 391421 | 2476.0 | 252.24 | 135.77 | 34.56 | 310.04 | 48.54 | 927.2 | 13.31 | 1586.4 | 1363.3 | 564178 | 1.16 | 304.1 | 301.0 | 322.3 | 42.18 | 67.52 | 17.27 | 8.68 | 6.58 | 100.43 | 1081.0 |
| LB034_328_ap3 | 391300 | 2899.6 | 243.98 | 124.63 | 41.02 | 324.47 | 46.32 | 1096.7 | 11.53 | 1305.5 | 1540.2 | 563689 | 1.41 | 346.7 | 363.4 | 363.4 | 42.22 | 76.28 | 15.26 | 12.74 | 11.16 | 86.99 | 1090.3 |
| LB034_328_ap4 | 391121 | 3014.6 | 255.12 | 131.06 | 38.21 | 349.06 | 48.23 | 1148.3 | 11.91 | 1468.5 | 1403.5 | 564121 | 1.38 | 314.3 | 287.2 | 334.2 | 36.38 | 111.65 | 14.01 | 8.36 | 7.10 | 84.12 | 914.2 |
| LB034_328_ap6 | 391424 | 2629.5 | 227.81 | 123.74 | 38.13 | 296.33 | 44.41 | 1056.5 | 12.11 | 1764.0 | 1481.7 | 564101 | 1.66 | 332.0 | 307.8 | 332.0 | 39.74 | 93.97 | 16.10 | 11.09 | 9.42 | 91.14 | 974.5 |
| LB034_328_ap7 | 392048 | 1908.8 | 161.39 | 82.17 | 29.01 | 215.98 | 30.03 | 730.0 | 7.93 | 1649.5 | 1058.1 | 564844 | 1.27 | 241.5 | 221.1 | 313.5 | 28.12 | 34.42 | 10.27 | 5.48 | 3.28 | 60.38 | 1314.8 |
| LB034_328_ap8 | 391785 | 2280.3 | 225.96 | 124.99 | 37.93 | 291.49 | 43.69 | 826.9 | 13.45 | 1519.8 | 1318.8 | 564225 | 2.49 | 287.3 | 328.1 | 328.1 | 38.86 | 87.50 | 16.16 | 8.10 | 8.29 | 100.16 | 1034.9 |
| LB034_328_ap9 | 391014 | 2873.5 | 193.63 | 104.10 | 32.45 | 272.59 | 37.00 | 1130.4 | 9.91 | 1406.5 | 1454.4 | 563873 | 4.98 | 334.3 | 280.0 | 343.6 | 33.76 | 108.65 | 12.97 | 13.83 | 8.97 | 74.20 | 968.1 |
| LB037_329_ap1 | 397314 | 486.7 | 104.42 | 58.68 | 7.15 | 123.81 | 21.02 | 171.1 | 5.18 | 107.6 | 355.6 | 565608 | 0.28 | 69.5 | 91.6 | 80.2 | 17.13 | 48.32 | 6.46 | 5.16 | 6.93 | 36.90 | 73.9 |
| LB037_329_ap10 | 393981 | 924.4 | 203.76 | 108.62 | 18.34 | 217.94 | 40.30 | 348.7 | 6.49 | 1229.7 | 621.5 | 565509 | 0.65 | 128.5 | 166.3 | 260.1 | 32.77 | 42.55 | 11.60 | 6.13 | 6.40 | 56.75 | 1077.8 |
| LB037_329_ap11 | 394228 | 1525.5 | 309.49 | 175.34 | 28.43 | 325.36 | 60.42 | 627.5 | 16.97 | 599.8 | 986.2 | 564526 | 0.55 | 205.9 | 262.7 | 156.2 | 48.68 | 100.63 | 22.36 | 6.13 | 15.21 | 133.11 | 638.4 |
| LB037_329_ap12 | 394355 | 934.1 | 224.37 | 112.82 | 20.26 | 250.72 | 43.37 | 337.3 | 8.77 | 976.1 | 672.7 | 565354 | 0.87 | 134.3 | 192.9 | 217.3 | 37.46 | 43.23 | 13.17 | 6.01 | 10.24 | 70.59 | 983.0 |
| LB037_329_ap13 | 395366 | 1055.4 | 95.32 | 53.32 | 16.86 | 124.79 | 18.95 | 517.7 | 5.25 | 587.6 | 522.7 | 565393 | 0.74 | 121.0 | 107.9 | 191.1 | 16.32 | 64.18 | 6.38 | 7.49 | 24.72 | 36.06 | 665.9 |
| LB037_329_ap14 | 394796 | 754.1 | 141.84 | 82.27 | 14.12 | 155.82 | 28.73 | 320.6 | 7.73 | 990.1 | 477.9 | 565695 | 0.97 | 99.0 | 121.8 | 203.3 | 22.93 | 37.51 | 10.44 | 4.96 | 5.27 | 61.39 | 967.4 |
| LB037_329_ap15 | 397044 | 586.2 | 188.94 | 98.85 | 4.34 | 185.54 | 34.12 | 147.4 | 8.72 | 105.1 | 508.0 | 565594 | 0.19 | 92.1 | 142.2 | 79.8 | 27.44 | 39.82 | 11.96 | 2.12 | 4.24 | 67.81 | 66.4 |
| LB037_329_ap16 | 397134 | 652.7 | 112.83 | 60.34 | 5.98 | 139.76 | 22.21 | 223.8 | 5.61 | 94.0 | 459.9 | 565647 | 0.23 | 92.0 | 113.6 | 74.7 | 27.44 | 31.37 | 7.37 | 2.48 | 4.68 | 42.51 | 54.2 |
| LB037_329_ap17 | 397408 | 283.6 | 116.11 | 63.16 | 1.58 | 127.68 | 22.32 | 73.4 | 5.28 | 103.4 | 316.8 | 565926 | 0.59 | 52.3 | 97.4 | 78.7 | 18.57 | 35.89 | 7.18 | 0.70 | 3.08 | 41.37 | 206.2 |
| LB037_329_ap18 | 397098 | 591.0 | 131.25 | 74.85 | 4.02 | 154.88 | 26.20 | 163.4 | 6.70 | 114.3 | 490.0 | 565646 | 0.27 | 47.9 | 43.3 | 104.7 | 6.69 | 23.02 | 2.92 | 1.93 | 9.01 | 18.48 | 88.4 |
| LB037_329_ap19 | 397545 | 420.9 | 40.23 | 24.59 | 2.50 | 217.96 | 36.45 | 280.7 | 9.54 | 199.1 | 682.6 | 565288 | 0.37 | 135.7 | 177.2 | 70.3 | 30.08 | 68.71 | 12.72 | 2.62 | 5.84 | 71.72 | 63.2 |
| LB037_329_ap20 | 396711 | 757.3 | 133.38 | 78.24 | 9.24 | 156.24 | 27.26 | 258.0 | 7.42 | 189.0 | 526.7 | 565715 | 0.68 | 106.3 | 129.9 | 70.0 | 21.95 | 68.99 | 9.77 | 2.90 | 6.48 | 55.52 | 155.4 |
| LB037_329_ap21 | 396343 | 631.4 | 76.30 | 42.59 | 14.27 | 95.10 | 15.15 | 314.5 | 4.18 | 424.0 | 339.9 | 565775 | 1.25 | 75.1 | 75.1 | 161.6 | 12.78 | 52.85 | 4.86 | 7.71 | 13.05 | 27.63 | 491.1 |
| LB037_329_ap22 | 395692 | 886.2 | 101.16 | 57.55 | 18.45 | 131.17 | 20.69 | 402.3 | 5.93 | 551.6 | 502.0 | 565528 | 0.60 | 108.7 | 110.3 | 181.6 | 17.24 | 46.00 | 6.89 | 5.13 | 20.76 | 40.46 | 564.5 |
| LB037_329_ap23 | 397746 | 219.2 | 88.11 | 48.29 | 2.26 | 97.06 | 17.28 | 59.6 | 3.46 | 81.2 | 224.8 | 566081 | 0.10 | 37.5 | 73.7 | 77.8 | 14.69 | 25.25 | 5.20 | 0.73 | 4.35 | 29.76 | 62.1 |
| LB037_329_ap24 | 396371 | 922.5 | 225.78 | 127.59 | 10.96 | 250.44 | 45.84 | 312.7 | 10.79 | 139.5 | 698.8 | 565158 | 0.29 | 135.3 | 191.9 | 86.8 | 36.44 | 71.56 | 15.63 | 4.89 | 8.55 | 85.12 | 89.0 |
| LB037_329_ap26 | 396517 | 884.2 | 99.23 | 54.08 | 10.11 | 127.83 | 19.73 | 386.9 | 5.11 | 129.8 | 480.8 | 565484 | 0.23 | 106.0 | 106.8 | 85.5 | 16.70 | 50.87 | 6.55 | 6.87 | 10.59 | 36.94 | 74.5 |
| LB037_329_ap27 | 396995 | 690.5 | 110.77 | 64.18 | 7.40 | 134.90 | 22.88 | 237.4 | 5.96 | 151.4 | 470.0 | 565642 | 0.22 | 96.4 | 111.5 | 74.9 | 18.57 | 29.39 | 7.86 | 1.87 | 9.61 | 44.31 | 72.5 |
| LB037_329_ap29 | 396357 | 923.9 | 219.79 | 129.52 | 12.46 | 241.07 | 44.89 | 283.8 | 11.58 | 172.8 | 724.9 | 565184 | 0.50 | 139.3 | 193.6 | 65.9 | 34.93 | 71.35 | 16.53 | 3.56 | 7.96 | 93.15 | 67.5 |
| LB037_329_ap3 | 396534 | 747.4 | 68.70 | 37.42 | 13.98 | 93.98 | 13.19 | 371.7 | 4.06 | 684.3 | 391.5 | 565721 | 0.53 | 88.0 | 80.5 | 221.3 | 11.76 | 61.05 | 4.53 | 9.27 | 16.73 | 25.64 | 789.2 |
| LB037_329_ap30 | 396258 | 853.5 | 195.27 | 116.23 | 13.14 | 207.76 | 40.29 | 281.1 | 10.61 | 274.6 | 633.1 | 565528 | 0.37 | 126.3 | 172.9 | 105.2 | 31.20 | 54.61 | 14.50 | 4.23 | 9.05 | 84.40 | 185.7 |
| LB037_329_ap31 | 396579 | 720.2 | 150.46 | 90.46 | 8.71 | 172.53 | 30.93 | 242.8 | 8.53 | 234.9 | 532.3 | 565512 | 0.33 | 104.4 | 139.4 | 96.7 | 24.60 | 63.99 | 11.22 | 3.08 | 5.72 | 65.42 | 202.3 |
| LB037_329_ap32 | 397646 | 239.5 | 71.23 | 40.60 | 2.24 | 79.70 | 14.44 | 66.1 | 3.00 | 107.2 | 212.5 | 566096 | 0.24 | 39.1 | 59.1 | 81.4 | 11.82 | 26.17 | 4.72 | 0.87 | 2.28 | 24.54 | 170.4 |
| LB037_329_ap33 | 396012 | 1240.0 | 216.47 | 129.46 | 21.62 | 235.91 | 44.44 | 471.8 | 12.15 | 166.3 | 777.9 | 564936 | 0.30 | 165.2 | 190.6 | 86.8 | 34.69 | 52.14 | 16.43 | 6.55 | 13.06 | 95.40 | 74.0 |
| LB037_329_ap34 | 397033 | 632.1 | 108.58 | 59.35 | 6.38 | 140.77 | 21.62 | 257.4 | 5.03 | 123.2 | 439.7 | 565638 | 0.27 | 86.6 | 109.5 | 107.9 | 18.52 | 64.42 | 6.61 | 3.48 | 6.55 | 36.07 | 94.9 |
| LB037_329_ap35 | 396679 | 594.3 | 243.17 | 144.02 | 2.94 | 257.27 | 49.82 | 143.4 | 11.94 | 159.4 | 614.5 | 565390 | 0.22 | 105.3 | 189.9 | 84.0 | 38.25 | 108.26 | 17.41 | 2.20 | 4.27 | 96.74 | 63.7 |
| LB037_329_ap36 | 395032 | 826.5 | 52.01 | 31.12 | 15.87 | 70.97 | 10.68 | 489.6 | 3.50 | 893.7 | 343.7 | 565766 | 0.82 | 85.7 | 61.2 | 233.4 | 8.91 | 24.03 | 3.85 | 5.91 | 34.16 | 23.45 | 982.2 |
| LB037_329_ap37 | 396779 | 638.4 | 182.13 | 105.80 | 9.50 | 204.95 | 37.08 | 190.5 | 9.47 | 177.0 | 550.4 | 565509 | 1.68 | 101.1 | 156.3 | 67.5 | 29.90 | 71.29 | 13.15 | 1.88 | 3.64 | 73.54 | 87.0 |
| LB037_329_ap38 | 396674 | 919.1 | 112.51 | 63.33 | 9.56 | 152.24 | 22.88 | 367.5 | 6.08 | 143.7 | 570.3 | 565995 | 0.30 | 120.4 | 126.2 | 81.6 | 19.83 | 71.93 | 7.38 | 6.05 | 11.19 | 43.97 | 74.8 |
| LB037_329_ap39 | 362641 | 1014.5 | 126.10 | 67.14 | 16.45 | 148.38 | 24.53 | 418.6 | 6.57 | 114.2 | 558.2 | 565664 | 0.43 | 128.1 | 129.2 | 60.2 | 21.06 | 80.27 | 8.10 | 5.74 | 78.43 | 50.33 | 40734.8 |
| LB037_329_ap4 | 397396 | 384.6 | 124.67 | 72.31 | 2.96 | 137.96 | 25.68 | 110.1 | 6.03 | 114.2 | 349.3 | 565664 | 0.21 | 62.6 | 102.5 | 78.0 | 19.92 | 35.81 | 8.60 | 1.46 | 3.50 | 47.36 | 52.2 |
| LB037_329_ap4 | 397461 | 403.8 | 98.02 | 52.98 | 2.58 | 120.19 | 19.41 | 115.9 | 4.43 | 86.1 | 344.2 | 565681 | 0.40 | 95.0 | 89.1 | 76.2 | 16.22 | 46.04 | 5.99 | 2.38 | 5.26 | 33.51 | 71.2 |
| LB037_329_ap5 | 394550 | 700.9 | 106.06 | 50.26 | 13.50 | 138.33 | 20.06 | 286.4 | 3.09 | 1216.7 | 467.0 | 565975 | 0.78 | 95.0 | 121.2 | 272.2 | 18.66 | 40.72 | 5.22 | 5.82 | 3.51 | 26.92 | 982.1 |
| LB037_329_ap6 | 396931 | 672.7 | 165.64 | 83.29 | 4.66 | 201.56 | 31.72 | 187.4 | 5.93 | 105.1 | 565.8 | 565509 | 0.24 | 104.0 | 153.7 | 75.0 | 27.87 | 52.78 | 9.25 | 2.41 | 4.10 | 47.29 | 59.9 |
| LB037_329_ap7 | 396948 | 801.8 | 55.67 | 6.09 | 133.86 | 19.88 | 319.9 | 5.16 | 105.5 | 165.1 | 491.9 | 565538 | 0.60 | 103.4 | 110.5 | 79.9 | 17.16 | 40.03 | 6.64 | 2.91 | 8.56 | 37.93 | 65.3 |

*All elements are in ppm.

Appendix C: Eastern Sunda arc apatite trace element chemistry (LA-ICP-MS)

| Analysis ID | Ca | Ce | Dy | Er | Eu | Gd | Ho | La | Lu | Nb | Nd | P | Pb | Pr | Sm | Sr | Tb | Th | Tm | U | V | Yb | Fe |
|-----------------|--------|--------|--------|--------|-------|--------|-------|--------|-------|--------|--------|--------|------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|
| LB037_329_ap8 | 397722 | 231.3 | 82.39 | 48.22 | 2.89 | 86.80 | 16.43 | 68.6 | 4.38 | 106.7 | 216.8 | 566099 | 0.26 | 37.9 | 65.3 | 71.2 | 13.21 | 26.57 | 5.87 | 0.83 | 3.63 | 32.96 | 58.0 |
| LB037_329_ap9 | 396210 | 779.2 | 183.32 | 99.03 | 20.97 | 219.47 | 35.67 | 264.1 | 8.43 | 316.2 | 618.6 | 565393 | 0.40 | 116.9 | 172.5 | 138.2 | 30.11 | 46.32 | 12.07 | 4.30 | 8.72 | 66.21 | 254.5 |
| LB042_331_ap1 | 393274 | 1671.4 | 175.78 | 89.70 | 24.10 | 212.71 | 32.37 | 588.0 | 8.90 | 1239.9 | 1033.6 | 564927 | 0.85 | 223.3 | 227.2 | 285.3 | 29.21 | 7.43 | 11.45 | 2.60 | 27.60 | 67.07 | 840.1 |
| LB042_331_ap10 | 392815 | 2349.3 | 218.43 | 84.88 | 23.91 | 241.80 | 31.87 | 796.3 | 8.18 | 1248.4 | 1295.4 | 564472 | 0.83 | 288.8 | 279.4 | 290.9 | 32.36 | 10.74 | 10.01 | 3.00 | 26.15 | 62.43 | 882.8 |
| LB042_331_ap12 | 392714 | 2345.4 | 205.97 | 101.86 | 23.06 | 275.90 | 37.27 | 787.0 | 10.07 | 1018.8 | 1382.4 | 564197 | 0.85 | 300.9 | 286.2 | 263.6 | 35.60 | 10.74 | 13.12 | 4.74 | 18.56 | 74.30 | 881.5 |
| LB042_331_ap13 | 392875 | 2074.8 | 240.78 | 114.71 | 20.41 | 305.86 | 43.85 | 661.1 | 9.17 | 1046.1 | 1372.0 | 564360 | 1.15 | 286.9 | 316.7 | 209.7 | 41.57 | 17.84 | 13.29 | 3.03 | 25.29 | 74.30 | 895.8 |
| LB042_331_ap14 | 392253 | 2794.0 | 193.76 | 93.85 | 29.82 | 273.58 | 35.03 | 1002.4 | 9.06 | 967.3 | 1581.4 | 563804 | 1.13 | 351.2 | 308.4 | 252.6 | 34.61 | 13.65 | 11.77 | 3.06 | 13.72 | 67.55 | 924.1 |
| LB042_331_ap15 | 393358 | 1914.0 | 163.51 | 75.87 | 24.55 | 217.34 | 28.64 | 723.0 | 7.28 | 975.6 | 1168.1 | 564588 | 1.10 | 255.7 | 249.3 | 266.7 | 29.11 | 6.68 | 8.93 | 1.82 | 17.43 | 53.36 | 855.3 |
| LB042_331_ap16 | 392665 | 2323.7 | 203.57 | 94.93 | 23.22 | 260.66 | 35.77 | 873.4 | 8.97 | 1151.9 | 1381.2 | 564245 | 1.33 | 303.3 | 294.3 | 216.6 | 35.64 | 11.78 | 11.85 | 4.19 | 19.15 | 67.58 | 966.2 |
| LB042_331_ap17 | 393662 | 1638.3 | 184.08 | 87.66 | 20.49 | 238.52 | 32.89 | 583.4 | 8.35 | 903.4 | 1073.0 | 564757 | 1.11 | 225.5 | 242.5 | 221.9 | 31.68 | 9.48 | 10.54 | 2.19 | 19.33 | 62.80 | 982.5 |
| LB042_331_ap18 | 391545 | 2004.6 | 203.14 | 96.70 | 21.67 | 270.50 | 37.00 | 724.3 | 8.77 | 1110.1 | 1255.4 | 564220 | 0.89 | 271.9 | 289.8 | 224.7 | 35.21 | 10.25 | 11.63 | 3.14 | 20.47 | 67.97 | 2565.6 |
| LB042_331_ap19 | 391503 | 2091.8 | 184.25 | 86.46 | 23.96 | 245.25 | 32.65 | 784.6 | 7.88 | 1156.3 | 1269.8 | 564217 | 0.92 | 283.3 | 270.9 | 252.0 | 32.41 | 9.39 | 10.38 | 3.19 | 21.69 | 61.83 | 2450.6 |
| LB042_331_ap21 | 392551 | 2194.1 | 216.13 | 96.86 | 21.18 | 284.38 | 38.06 | 799.4 | 8.57 | 1213.5 | 1309.2 | 564369 | 1.30 | 295.4 | 303.2 | 268.8 | 37.48 | 9.66 | 11.26 | 2.54 | 21.01 | 67.69 | 879.4 |
| LB042_331_ap22 | 393775 | 958.2 | 122.28 | 56.53 | 30.39 | 172.14 | 21.69 | 343.0 | 5.10 | 1007.7 | 727.4 | 565349 | 1.37 | 142.8 | 169.3 | 272.1 | 21.77 | 4.77 | 6.60 | 1.47 | 23.24 | 39.18 | 1748.0 |
| LB042_331_ap23 | 393055 | 2003.6 | 147.22 | 71.13 | 23.09 | 197.07 | 26.41 | 712.7 | 6.83 | 1103.5 | 1111.0 | 564650 | 1.18 | 252.8 | 222.9 | 256.8 | 25.86 | 9.43 | 8.81 | 2.61 | 24.88 | 52.83 | 1033.7 |
| LB042_331_ap24 | 393055 | 1755.9 | 110.09 | 53.52 | 25.16 | 156.12 | 20.46 | 674.8 | 5.77 | 1053.9 | 964.4 | 564878 | 1.12 | 222.3 | 180.1 | 278.2 | 19.59 | 7.10 | 6.88 | 2.04 | 22.89 | 41.25 | 1104.9 |
| LB042_331_ap25 | 393055 | 2061.0 | 122.07 | 59.40 | 24.96 | 178.54 | 22.28 | 755.2 | 6.17 | 1130.3 | 1121.9 | 564684 | 1.11 | 254.7 | 208.7 | 258.4 | 22.03 | 7.17 | 7.35 | 1.93 | 26.41 | 44.82 | 964.9 |
| LB042_331_ap5 | 393854 | 1496.6 | 86.61 | 41.23 | 25.06 | 134.75 | 15.84 | 577.0 | 4.31 | 842.1 | 840.0 | 564978 | 0.87 | 190.1 | 163.4 | 414.1 | 16.34 | 9.58 | 5.13 | 2.13 | 33.59 | 30.36 | 1248.2 |
| LB042_331_ap6 | 392813 | 1998.8 | 201.62 | 92.54 | 23.87 | 266.62 | 35.99 | 725.6 | 8.46 | 1042.8 | 1294.5 | 564414 | 0.90 | 275.1 | 280.6 | 248.0 | 35.50 | 10.88 | 10.70 | 2.73 | 17.99 | 67.74 | 1131.7 |
| LB042_331_ap8 | 391152 | 1883.5 | 374.94 | 182.59 | 26.84 | 434.81 | 66.69 | 594.9 | 18.85 | 1345.3 | 1570.1 | 564029 | 1.89 | 292.3 | 418.2 | 344.0 | 63.15 | 12.35 | 22.55 | 2.38 | 17.53 | 137.88 | 2006.7 |
| LB042_331_ap9 | 392990 | 1731.2 | 197.95 | 94.08 | 22.94 | 273.69 | 35.66 | 635.1 | 7.92 | 1275.8 | 1160.0 | 564780 | 1.15 | 243.3 | 268.9 | 268.6 | 39.81 | 7.01 | 10.55 | 1.93 | 23.63 | 61.24 | 874.3 |
| ELF-03_333_ap1 | 397008 | 267.4 | 78.70 | 35.16 | 20.96 | 97.41 | 13.63 | 75.7 | 3.30 | 224.5 | 252.9 | 566001 | 0.54 | 45.0 | 80.2 | 174.3 | 14.06 | 3.49 | 4.88 | 0.87 | 0.62 | 24.33 | 573.5 |
| ELF-03_333_ap10 | 396905 | 334.0 | 75.94 | 39.60 | 18.55 | 86.45 | 14.43 | 117.0 | 4.30 | 291.8 | 257.8 | 565987 | 0.79 | 49.3 | 73.6 | 203.4 | 12.86 | 8.90 | 4.82 | 0.18 | 1.77 | 22.78 | 587.6 |
| ELF-03_333_ap11 | 397092 | 303.2 | 67.17 | 31.84 | 19.05 | 84.08 | 12.19 | 97.7 | 3.02 | 157.1 | 244.9 | 565988 | 2.76 | 46.5 | 72.8 | 164.4 | 11.68 | 3.44 | 3.71 | 0.18 | 1.77 | 22.78 | 587.6 |
| ELF-03_333_ap12 | 397025 | 266.2 | 79.44 | 39.92 | 15.76 | 93.06 | 14.53 | 86.7 | 4.45 | 217.2 | 243.7 | 565987 | 2.59 | 42.7 | 71.7 | 166.6 | 13.34 | 31.38 | 5.07 | 2.18 | 0.95 | 31.32 | 550.6 |
| ELF-03_333_ap13 | 397463 | 265.6 | 69.72 | 32.57 | 16.81 | 85.79 | 12.17 | 82.2 | 3.59 | 124.0 | 238.3 | 566042 | 0.17 | 42.9 | 75.6 | 133.3 | 12.25 | 1.71 | 4.26 | 0.17 | 2.37 | 26.52 | 266.4 |
| ELF-03_333_ap15 | 397632 | 261.2 | 64.67 | 31.56 | 16.73 | 75.54 | 11.62 | 85.7 | 3.14 | 98.6 | 219.3 | 566069 | 1.19 | 40.1 | 69.3 | 144.1 | 10.89 | 3.37 | 3.91 | 0.16 | 0.93 | 24.77 | 130.2 |
| ELF-03_333_ap16 | 375756 | 254.7 | 64.43 | 29.16 | 15.86 | 72.88 | 11.49 | 79.8 | 2.92 | 1494.0 | 211.9 | 572432 | 0.75 | 39.4 | 63.5 | 228.4 | 10.73 | 1.87 | 3.59 | 0.32 | 1.82 | 24.27 | 752.0 |
| ELF-03_333_ap17 | 397630 | 234.9 | 73.88 | 29.49 | 17.10 | 100.20 | 11.86 | 61.8 | 2.65 | 100.6 | 284.1 | 566058 | 0.91 | 42.3 | 86.4 | 154.0 | 13.84 | 1.41 | 3.59 | 0.12 | 0.90 | 20.89 | 100.0 |
| ELF-03_333_ap18 | 397025 | 286.9 | 68.96 | 33.68 | 15.72 | 83.56 | 12.37 | 93.0 | 3.35 | 230.5 | 246.9 | 565991 | 2.51 | 46.7 | 72.2 | 246.8 | 12.05 | 12.13 | 4.04 | 0.84 | 0.90 | 24.21 | 473.9 |
| ELF-03_333_ap19 | 396782 | 322.7 | 71.26 | 36.21 | 16.66 | 83.29 | 13.20 | 110.8 | 3.75 | 264.5 | 247.5 | 565952 | 1.74 | 47.8 | 70.5 | 250.7 | 11.93 | 9.52 | 4.40 | 0.78 | 1.59 | 25.85 | 669.5 |
| ELF-03_333_ap20 | 397340 | 241.6 | 71.07 | 35.54 | 14.46 | 84.31 | 13.25 | 73.5 | 3.89 | 164.9 | 222.9 | 566058 | 0.41 | 39.8 | 70.5 | 154.3 | 12.36 | 3.91 | 4.48 | 0.34 | 1.27 | 27.86 | 361.1 |
| ELF-03_333_ap21 | 396575 | 500.7 | 138.39 | 196.06 | 12.95 | 109.33 | 42.82 | 172.1 | 91.80 | 185.6 | 375.4 | 565421 | 0.94 | 74.9 | 88.6 | 258.9 | 16.60 | 35.69 | 42.05 | 64.25 | 8.82 | 417.36 | 168.4 |
| ELF-03_333_ap22 | 397059 | 336.8 | 82.88 | 42.25 | 17.96 | 97.09 | 15.41 | 106.7 | 4.72 | 217.0 | 278.8 | 565955 | 1.04 | 52.0 | 83.7 | 166.4 | 14.16 | 10.30 | 5.26 | 0.71 | 1.55 | 33.69 | 416.3 |
| ELF-03_333_ap23 | 396901 | 320.1 | 82.55 | 46.68 | 18.79 | 91.61 | 15.84 | 109.8 | 5.15 | 282.0 | 258.2 | 565972 | 0.44 | 48.8 | 75.9 | 197.6 | 13.87 | 26.20 | 5.98 | 1.65 | 1.21 | 35.02 | 489.6 |
| ELF-03_333_ap24 | 397008 | 319.5 | 70.12 | 35.60 | 17.39 | 86.43 | 13.01 | 108.2 | 3.50 | 287.9 | 255.5 | 566032 | 0.94 | 48.5 | 72.6 | 165.3 | 12.31 | 2.97 | 4.25 | 0.16 | 2.29 | 24.90 | 430.3 |
| ELF-03_333_ap25 | 396952 | 289.4 | 60.27 | 27.66 | 16.70 | 76.88 | 10.64 | 92.3 | 2.58 | 358.8 | 235.6 | 566106 | 1.38 | 44.6 | 67.6 | 168.2 | 10.78 | 2.12 | 3.36 | 0.23 | 1.12 | 19.69 | 450.3 |
| ELF-03_333_ap26 | 397229 | 314.0 | 79.67 | 38.97 | 15.77 | 94.00 | 14.32 | 98.6 | 4.34 | 169.4 | 271.4 | 565965 | 0.69 | 49.1 | 84.7 | 168.1 | 13.96 | 27.02 | 4.87 | 2.23 | 0.96 | 31.01 | 322.1 |
| ELF-03_333_ap27 | 397476 | 267.2 | 79.75 | 36.85 | 17.76 | 100.00 | 14.08 | 75.2 | 3.70 | 124.7 | 282.8 | 566022 | 0.85 | 46.8 | 86.6 | 131.6 | 14.44 | 1.86 | 4.54 | 0.33 | 2.63 | 27.66 | 201.1 |
| ELF-03_333_ap28 | 397322 | 322.3 | 79.38 | 40.16 | 18.86 | 95.19 | 14.79 | 93.1 | 4.25 | 141.5 | 281.1 | 565964 | 4.18 | 52.6 | 84.5 | 163.8 | 14.31 | 4.75 | 5.08 | 0.27 | 1.52 | 30.56 | 257.7 |
| ELF-03_333_ap29 | 396838 | 365.9 | 79.06 | 33.28 | 20.76 | 103.98 | 13.18 | 112.5 | 4.16 | 243.8 | 328.0 | 565888 | 3.27 | 59.6 | 99.9 | 175.1 | 161.8 | 11.52 | 4.42 | 1.02 | 1.08 | 28.14 | 443.9 |
| ELF-03_333_ap30 | 397214 | 244.6 | 73.07 | 36.44 | 15.47 | 83.46 | 13.16 | 75.2 | 3.79 | 195.6 | 220.1 | 566048 | 0.78 | 38.6 | 71.5 | 161.8 | 12.48 | 11.52 | 3.96 | 0.76 | 1.15 | 23.41 | 558.8 |
| ELF-03_333_ap31 | 397557 | 225.0 | 70.32 | 33.39 | 15.53 | 83.92 | 12.93 | 62.2 | 3.56 | 125.8 | 218.2 | 566087 | 3.12 | 56.1 | 69.7 | 137.2 | 12.07 | 2.60 | 4.30 | 0.20 | 0.67 | 25.27 | 209.3 |
| ELF-03_333_ap32 | 396838 | 382.6 | 83.26 | 40.39 | 16.30 | 98.58 | 15.12 | 126.7 | 3.87 | 299.9 | 302.8 | 565945 | 2.17 | 56.0 | 86.8 | 172.1 | 13.98 | 2.38 | 5.03 | 0.21 | 1.67 | 30.24 | 475.3 |
| ELF-03_333_ap33 | 397442 | 226.1 | 75.75 | 34.23 | 15.92 | 86.34 | 12.98 | 68.6 | 3.56 | 114.9 | 215.1 | 566047 | 4.58 | 37.3 | 72.6 | 156.8 | 13.08 | 1.51 | 3.96 | 0.11 | 1.75 | 25.75 | 337.4 |
| ELF-03_333_ap34 | 397455 | 288.8 | 76.29 | 33.90 | 16.67 | 90.42 | 12.95 | 78.2 | 3.52 | 136.6 | 254.4 | 566029 | 9.21 | 45.5 | 83.5 | 136.8 | 13.54 | 2.91 | 4.72 | 0.29 | 4.01 | 26.52 | 206.6 |
| ELF-03_333_ap34 | 397160 | 349.3 | 79.28 | 34.90 | 20.20 | 94.70 | 13.61 | 114.2 | 3.43 | 179.2 | 287.1 | 565945 | 2.82 | 54.9 | 93.9 | 163.9 | 14.05 | 2.73 | 4.43 | 0.26 | 0.73 | 28.20 | 353.2 |

*All elements are in ppm.

Appendix C: Eastern Sunda arc apatite trace element chemistry (LA-ICP-MS)

| Analysis ID | Ca | Ce | Dy | Er | Eu | Gd | Ho | La | Lu | Nb | Nd | P | Pb | Pr | Sm | Sr | Tb | Th | Tm | U | V | Yb | Fe |
|-----------------|--------|--------|--------|--------|--------|--------|-------|-------|-------|--------|--------|--------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------|
| ELF-03_333_ap35 | 397408 | 288.1 | 77.23 | 35.43 | 16.49 | 88.43 | 13.43 | 84.9 | 3.92 | 120.3 | 248.5 | 566004 | 1.87 | 45.3 | 80.9 | 152.9 | 13.43 | 2.99 | 4.61 | 0.29 | 1.72 | 28.87 | 277.0 |
| ELF-03_333_ap36 | 397341 | 225.1 | 69.92 | 37.75 | 12.96 | 80.75 | 13.31 | 65.6 | 3.71 | 180.4 | 212.7 | 566076 | 1.75 | 37.1 | 63.2 | 154.7 | 11.88 | 22.19 | 4.69 | 2.11 | 1.47 | 26.54 | 354.2 |
| ELF-03_333_ap5 | 397067 | 305.6 | 81.53 | 41.50 | 15.24 | 94.76 | 14.89 | 94.9 | 4.83 | 218.3 | 270.4 | 565978 | 0.54 | 49.3 | 82.3 | 171.4 | 13.64 | 6.95 | 5.35 | 0.65 | 0.92 | 33.79 | 448.1 |
| ELF-03_333_ap6 | 396949 | 324.3 | 75.17 | 37.56 | 15.60 | 93.17 | 13.41 | 103.7 | 4.01 | 245.0 | 283.8 | 565952 | 16.89 | 51.9 | 84.6 | 163.5 | 13.19 | 17.70 | 4.52 | 1.45 | 1.14 | 27.74 | 504.6 |
| ELF-03_333_ap7 | 397336 | 278.0 | 70.46 | 30.95 | 16.79 | 88.19 | 12.09 | 76.7 | 2.94 | 163.3 | 259.1 | 566028 | 4.19 | 45.0 | 78.8 | 165.2 | 12.50 | 1.43 | 3.75 | 0.11 | 1.14 | 20.66 | 301.0 |
| ELF-03_333_ap8 | 396803 | 341.0 | 113.82 | 60.16 | 22.63 | 123.79 | 21.10 | 116.2 | 7.31 | 318.9 | 302.6 | 565704 | 6.63 | 54.0 | 105.6 | 233.8 | 19.34 | 10.11 | 8.15 | 2.36 | 1.24 | 54.00 | 1564.4 |
| ELF-03_333_ap9 | 396973 | 316.2 | 67.23 | 29.38 | 17.37 | 90.76 | 11.95 | 98.9 | 2.54 | 298.3 | 259.2 | 566036 | 0.31 | 48.8 | 77.4 | 180.0 | 12.40 | 0.61 | 3.39 | 0.16 | 1.50 | 19.88 | 405.4 |
| GBF-04_335_ap10 | 397177 | 169.0 | 126.25 | 57.40 | 17.58 | 155.77 | 22.68 | 31.5 | 5.43 | 229.5 | 269.7 | 566033 | 0.24 | 37.5 | 120.4 | 67.3 | 22.15 | 0.37 | 6.87 | 0.13 | 4.23 | 39.98 | 406.0 |
| GBF-04_335_ap11 | 397680 | 113.4 | 94.91 | 41.14 | 10.97 | 115.98 | 16.29 | 21.8 | 3.67 | 109.7 | 191.3 | 566146 | 2.30 | 25.2 | 88.3 | 52.9 | 17.04 | 0.26 | 4.93 | 0.07 | 5.00 | 28.65 | 228.5 |
| GBF-04_335_ap12 | 397104 | 178.3 | 127.12 | 51.98 | 19.39 | 161.05 | 21.39 | 37.2 | 3.95 | 238.8 | 288.8 | 566016 | 0.28 | 40.1 | 124.4 | 69.6 | 22.76 | 0.20 | 5.71 | 0.14 | 2.99 | 31.33 | 454.8 |
| GBF-04_335_ap13 | 397128 | 159.1 | 134.17 | 53.21 | 23.02 | 177.57 | 22.62 | 24.6 | 3.86 | 237.1 | 319.3 | 566007 | 0.09 | 41.0 | 136.4 | 59.0 | 25.05 | 0.28 | 5.75 | 0.05 | 1.86 | 31.94 | 409.1 |
| GBF-04_335_ap14 | 396346 | 280.1 | 159.55 | 70.80 | 23.13 | 182.72 | 27.92 | 63.8 | 6.38 | 349.3 | 379.8 | 565823 | 0.43 | 58.0 | 143.3 | 99.3 | 27.94 | 0.49 | 8.71 | 0.42 | 6.02 | 51.18 | 891.2 |
| GBF-04_335_ap15 | 397147 | 155.6 | 122.74 | 53.11 | 19.15 | 162.12 | 21.09 | 29.4 | 4.17 | 214.0 | 297.1 | 566011 | 4.53 | 39.5 | 123.5 | 62.8 | 22.48 | 0.33 | 6.16 | 0.08 | 2.31 | 34.72 | 463.3 |
| GBF-04_335_ap16 | 396783 | 251.5 | 139.82 | 61.63 | 19.50 | 166.96 | 24.11 | 57.5 | 5.60 | 312.5 | 342.4 | 565936 | 0.15 | 51.5 | 135.9 | 76.5 | 25.27 | 0.25 | 7.30 | 0.53 | 6.16 | 42.59 | 553.0 |
| GBF-04_335_ap17 | 397404 | 100.2 | 109.84 | 41.23 | 16.85 | 152.43 | 17.57 | 14.5 | 2.83 | 185.4 | 247.6 | 566106 | 1.24 | 29.4 | 118.5 | 49.0 | 20.72 | 0.23 | 4.49 | 0.04 | 1.57 | 24.18 | 351.3 |
| GBF-04_335_ap18 | 396083 | 180.9 | 133.44 | 63.09 | 23.11 | 149.14 | 23.88 | 42.3 | 6.36 | 444.2 | 268.7 | 565950 | 0.20 | 38.3 | 109.8 | 123.8 | 22.63 | 0.25 | 7.49 | 0.89 | 3.73 | 45.55 | 1279.4 |
| GBF-04_335_ap19 | 397172 | 186.0 | 96.81 | 40.97 | 18.16 | 128.66 | 16.18 | 39.3 | 2.95 | 218.4 | 269.1 | 566056 | 0.37 | 38.7 | 101.0 | 72.7 | 17.98 | 0.43 | 4.32 | 0.10 | 2.64 | 24.37 | 492.4 |
| GBF-04_335_ap20 | 396825 | 194.0 | 156.64 | 67.06 | 28.33 | 200.04 | 27.76 | 34.6 | 5.64 | 348.7 | 368.8 | 565953 | 5.88 | 112.1 | 153.6 | 76.7 | 28.12 | 0.54 | 7.84 | 0.10 | 2.09 | 44.18 | 415.4 |
| GBF-04_335_ap21 | 397017 | 156.1 | 131.98 | 60.24 | 19.73 | 161.63 | 23.32 | 29.6 | 5.33 | 296.3 | 295.9 | 566036 | 0.15 | 38.6 | 126.0 | 73.2 | 23.19 | 0.24 | 7.21 | 0.08 | 2.04 | 41.62 | 454.1 |
| GBF-04_335_ap22 | 396031 | 1255.6 | 328.32 | 141.67 | 134.39 | 478.81 | 56.85 | 446.5 | 11.77 | 3577.8 | 1377.7 | 565942 | 57.46 | 226.1 | 430.4 | 113.6 | 61.34 | 0.51 | 17.36 | 0.40 | 3.99 | 93.04 | 1561.4 |
| GBF-04_335_ap23 | 396566 | 300.1 | 162.94 | 71.03 | 24.64 | 191.94 | 28.02 | 65.9 | 7.22 | 318.4 | 393.0 | 565922 | 0.18 | 61.6 | 158.7 | 92.5 | 28.20 | 0.66 | 8.91 | 0.52 | 1.92 | 56.83 | 636.8 |
| GBF-04_335_ap24 | 391948 | 1626.3 | 330.45 | 119.60 | 164.84 | 563.98 | 51.19 | 511.0 | 8.41 | 1049.3 | 1848.7 | 563976 | 102.58 | 311.1 | 590.0 | 178.8 | 67.56 | 2.15 | 13.50 | 1.05 | 14.60 | 73.94 | 1468.9 |
| SFF-05_336_ap1 | 395932 | 639.4 | 136.41 | 54.46 | 24.61 | 200.76 | 22.32 | 178.4 | 4.51 | 404.3 | 630.4 | 565523 | 0.94 | 110.6 | 193.4 | 199.8 | 26.57 | 5.75 | 6.14 | 0.89 | 5.70 | 33.73 | 665.7 |
| SFF-05_336_ap2 | 396165 | 672.5 | 145.89 | 56.58 | 25.67 | 213.87 | 23.68 | 183.8 | 4.78 | 360.4 | 648.2 | 565501 | 0.81 | 107.4 | 174.5 | 173.3 | 23.86 | 1.46 | 4.70 | 0.82 | 6.47 | 37.54 | 364.2 |
| SFF-05_336_ap3 | 396424 | 641.7 | 116.66 | 45.99 | 24.60 | 186.56 | 18.93 | 183.9 | 3.46 | 442.8 | 591.1 | 565692 | 0.81 | 107.4 | 174.5 | 173.3 | 23.86 | 1.46 | 4.70 | 0.82 | 6.47 | 37.54 | 364.2 |
| SFF-05_336_ap4 | 396548 | 461.8 | 175.45 | 78.62 | 22.05 | 217.06 | 30.56 | 78.4 | 7.11 | 445.0 | 637.3 | 563487 | 0.65 | 102.5 | 209.0 | 121.1 | 32.10 | 46.57 | 9.39 | 4.13 | 7.29 | 55.26 | 13422.9 |
| SFF-05_336_ap5 | 396343 | 620.8 | 139.71 | 53.30 | 31.81 | 214.14 | 22.57 | 120.3 | 4.35 | 506.7 | 661.0 | 565675 | 0.45 | 117.1 | 209.6 | 130.7 | 28.19 | 43.93 | 6.13 | 2.55 | 3.79 | 33.49 | 30.9 |
| SFF-05_336_ap6 | 396179 | 594.7 | 155.26 | 65.11 | 23.35 | 205.08 | 25.35 | 179.7 | 6.78 | 310.4 | 554.5 | 565493 | 0.78 | 101.5 | 184.9 | 373.1 | 29.03 | 8.41 | 7.92 | 1.17 | 4.83 | 50.83 | 444.3 |
| SFF-05_336_ap7 | 394323 | 1295.8 | 137.26 | 71.03 | 21.99 | 185.42 | 26.12 | 484.0 | 7.34 | 739.6 | 856.0 | 565016 | 1.21 | 180.3 | 177.6 | 373.3 | 24.27 | 24.72 | 8.77 | 10.50 | 14.66 | 51.27 | 965.0 |
| SFF-05_336_ap8 | 396533 | 924.1 | 166.49 | 92.86 | 23.41 | 252.48 | 35.17 | 262.1 | 9.71 | 355.4 | 760.4 | 565244 | 0.37 | 146.0 | 203.2 | 146.5 | 33.65 | 8.56 | 11.53 | 1.05 | 3.18 | 65.19 | 401.5 |
| SFF-05_336_ap9 | 396133 | 648.9 | 172.89 | 71.01 | 33.38 | 251.03 | 28.98 | 155.5 | 6.08 | 415.0 | 786.4 | 565467 | 0.44 | 131.2 | 252.1 | 124.7 | 33.32 | 6.96 | 8.55 | 0.71 | 2.86 | 49.27 | 221.0 |
| SFF-05_336_ap10 | 396694 | 1000.2 | 179.65 | 92.68 | 27.65 | 243.67 | 33.90 | 292.4 | 10.90 | 390.8 | 795.7 | 565237 | 0.50 | 156.3 | 214.3 | 135.4 | 31.86 | 4.89 | 11.81 | 0.78 | 2.31 | 72.54 | 170.3 |
| SFF-05_336_ap11 | 396054 | 901.9 | 172.50 | 79.02 | 24.35 | 249.99 | 30.94 | 228.2 | 7.92 | 434.4 | 793.7 | 565361 | 0.28 | 150.4 | 220.7 | 158.4 | 32.15 | 4.62 | 9.50 | 0.71 | 3.77 | 55.39 | 28.1 |
| SFF-05_336_ap12 | 396225 | 561.0 | 131.71 | 52.27 | 27.89 | 199.72 | 21.75 | 126.9 | 4.35 | 398.7 | 619.4 | 565630 | 0.90 | 107.4 | 194.9 | 153.0 | 26.12 | 7.24 | 5.98 | 0.27 | 3.30 | 34.20 | 467.7 |
| SFF-05_336_ap13 | 396229 | 565.5 | 169.80 | 72.32 | 27.10 | 231.22 | 28.35 | 99.4 | 6.16 | 583.9 | 677.4 | 565711 | 0.29 | 116.3 | 215.9 | 120.7 | 31.52 | 6.67 | 8.38 | 0.15 | 2.77 | 48.50 | 47.8 |
| SFF-05_336_ap14 | 395956 | 973.7 | 86.71 | 39.21 | 19.54 | 132.34 | 15.26 | 342.6 | 3.89 | 272.8 | 624.3 | 565324 | 0.73 | 136.5 | 140.8 | 244.5 | 16.28 | 32.89 | 4.56 | 12.74 | 7.42 | 26.18 | 586.8 |
| SFF-05_336_ap15 | 396537 | 728.3 | 143.50 | 64.24 | 22.73 | 210.45 | 24.88 | 210.7 | 6.01 | 289.6 | 628.6 | 565520 | 0.28 | 118.0 | 187.6 | 148.2 | 27.51 | 7.16 | 7.24 | 0.84 | 3.11 | 41.15 | 73.3 |
| SFF-05_336_ap16 | 395948 | 957.7 | 167.71 | 87.13 | 26.75 | 231.02 | 31.63 | 280.4 | 9.29 | 364.6 | 787.6 | 565283 | 0.19 | 153.2 | 214.3 | 137.2 | 30.27 | 5.74 | 10.71 | 0.70 | 2.24 | 65.04 | 225.2 |
| SFF-05_336_ap17 | 396227 | 708.7 | 166.54 | 65.60 | 26.65 | 234.90 | 26.31 | 194.0 | 5.66 | 420.8 | 710.3 | 565490 | 1.10 | 125.0 | 221.5 | 210.8 | 31.79 | 14.22 | 7.69 | 2.58 | 3.46 | 43.74 | 60.5 |
| SFF-05_336_ap18 | 394467 | 687.0 | 213.96 | 89.00 | 34.64 | 291.18 | 34.85 | 143.6 | 7.04 | 727.6 | 796.6 | 565300 | 0.27 | 133.1 | 261.6 | 112.6 | 39.52 | 27.80 | 10.28 | 1.23 | 4.76 | 57.13 | 1558.4 |
| SFF-05_336_ap19 | 396035 | 612.3 | 217.92 | 84.05 | 29.82 | 307.88 | 36.04 | 85.1 | 4.86 | 596.8 | 833.6 | 565915 | 0.27 | 138.9 | 280.1 | 124.6 | 41.98 | 12.48 | 8.39 | 0.83 | 2.20 | 43.26 | 28.6 |
| SFF-05_336_ap20 | 394934 | 616.6 | 191.88 | 85.19 | 25.84 | 254.22 | 33.04 | 117.3 | 7.80 | 615.4 | 729.5 | 565404 | 0.33 | 123.8 | 236.5 | 129.0 | 34.52 | 1.58 | 10.57 | 0.19 | 4.63 | 62.02 | 1382.2 |
| SFF-05_336_ap21 | 396453 | 856.1 | 139.70 | 58.94 | 22.16 | 210.31 | 23.92 | 264.1 | 5.44 | 285.1 | 648.0 | 565441 | 0.24 | 127.5 | 187.2 | 147.4 | 27.06 | 8.57 | 6.63 | 1.47 | 3.25 | 36.72 | 45.5 |
| SFF-05_336_ap22 | 396550 | 719.4 | 153.15 | 61.54 | 26.02 | 222.70 | 24.92 | 192.4 | 5.41 | 264.4 | 689.4 | 565480 | 0.69 | 123.0 | 214.4 | 136.8 | 29.98 | 2.49 | 7.03 | 0.77 | 4.48 | 40.94 | 49.6 |
| SFF-05_336_ap23 | 392836 | 565.7 | 125.79 | 44.10 | 23.73 | 184.84 | 18.99 | 161.8 | 3.73 | 500.3 | 540.5 | 565064 | 0.53 | 95.6 | 182.7 | 151.9 | 24.74 | 8.61 | 5.16 | 1.81 | 14.13 | 31.07 | 4413.7 |
| SFF-05_336_ap24 | 396342 | 775.3 | 149.60 | 59.35 | 24.59 | 225.92 | 24.61 | 230.0 | 4.66 | 386.0 | 679.7 | 565504 | 0.77 | 126.7 | 207.3 | 141.3 | 29.30 | 2.88 | 6.74 | 1.07 | 3.30 | 36.79 | 37.5 |
| SFF-05_336_ap25 | 396457 | 612.6 | 137.34 | 51.04 | 22.64 | 216.20 | 21.25 | 151.6 | 3.78 | 435.1 | 652.0 | 565663 | 0.54 | 110.1 | 217.4 | 128.6 | 27.78 | 3.24 | 5.26 | 0.64 | 2.12 | 30.54 | 49.1 |

*All elements are in ppm.

Appendix C: Eastern Sunda arc apatite trace element chemistry (LA-ICP-MS)

| Analysis ID | Ca | Ce | Dy | Er | Eu | Gd | Ho | La | Lu | Nb | Nd | P | Pb | Pr | Sm | Sr | Tb | Th | Tm | U | V | Yb | Fe | |
|-----------------|--------|--------|--------|--------|-------|--------|-------|-------|-------|--------|--------|--------|-------|-------|-------|-------|-------|-------|-------|-------|---|-------|--------|--------|
| SFP-05_336_ap6 | 39537 | 959.7 | 204.52 | 109.75 | 24.84 | 261.20 | 39.16 | 272.3 | 11.91 | 376.5 | 805.2 | 565115 | 0.28 | 155.2 | 219.1 | 141.9 | 35.80 | 7.15 | 13.02 | 0.69 | | 2.32 | 80.67 | 766.9 |
| SFP-05_336_ap7 | 395311 | 1266.2 | 186.17 | 97.39 | 18.92 | 227.68 | 35.70 | 444.1 | 9.82 | 312.3 | 861.8 | 564854 | 0.29 | 179.4 | 207.2 | 400.9 | 32.20 | 31.16 | 11.79 | 14.42 | | 6.92 | 68.70 | 421.7 |
| SFP-05_336_ap8 | 396108 | 665.2 | 121.00 | 46.17 | 22.05 | 194.80 | 19.16 | 188.9 | 3.27 | 370.9 | 619.2 | 565553 | 0.32 | 111.2 | 189.7 | 149.5 | 24.10 | 4.87 | 5.16 | 0.84 | | 4.47 | 26.29 | 572.3 |
| SFP-05_336_ap9 | 396621 | 650.8 | 127.98 | 45.79 | 29.66 | 205.13 | 19.53 | 169.6 | 3.64 | 294.7 | 656.2 | 565980 | 0.38 | 115.3 | 212.7 | 148.9 | 26.30 | 6.10 | 5.10 | 0.86 | | 4.50 | 28.39 | 46.8 |
| NEF-02_337_ap1 | 395949 | 869.5 | 137.40 | 66.41 | 20.40 | 181.68 | 24.93 | 277.4 | 5.68 | 517.8 | 659.1 | 565497 | 0.54 | 130.7 | 159.6 | 233.7 | 23.60 | 6.15 | 7.72 | 1.66 | | 7.13 | 42.07 | 179.9 |
| NEF-02_337_ap10 | 395365 | 815.7 | 161.86 | 65.56 | 26.10 | 202.82 | 26.15 | 249.3 | 4.63 | 609.1 | 644.9 | 565460 | 0.69 | 122.5 | 180.9 | 215.5 | 28.41 | 4.56 | 6.91 | 1.77 | | 7.05 | 36.96 | 762.9 |
| NEF-02_337_ap11 | 393185 | 1946.9 | 164.27 | 74.76 | 22.48 | 173.05 | 27.46 | 686.4 | 7.50 | 1050.9 | 1121.5 | 564634 | 1.25 | 255.8 | 242.9 | 262.3 | 28.43 | 10.47 | 9.42 | 4.89 | | 13.51 | 57.55 | 976.8 |
| NEF-02_337_ap12 | 396209 | 781.6 | 112.91 | 42.71 | 26.64 | 171.19 | 18.30 | 260.3 | 2.20 | 425.3 | 584.7 | 565566 | 17.73 | 114.7 | 161.7 | 207.2 | 21.27 | 3.54 | 4.11 | 0.73 | | 2.77 | 18.54 | 231.4 |
| NEF-02_337_ap13 | 396294 | 638.1 | 119.31 | 47.02 | 24.86 | 163.85 | 19.87 | 207.5 | 3.21 | 492.1 | 509.6 | 565727 | 0.37 | 97.5 | 149.4 | 223.5 | 21.48 | 5.95 | 4.78 | 0.63 | | 2.73 | 26.07 | 220.7 |
| NEF-02_337_ap14 | 395988 | 1161.8 | 63.44 | 25.60 | 22.79 | 95.54 | 10.80 | 446.4 | 2.34 | 434.1 | 612.2 | 565415 | 0.47 | 144.8 | 123.1 | 224.6 | 12.14 | 2.56 | 3.19 | 1.26 | | 9.84 | 17.80 | 181.7 |
| NEF-02_337_ap15 | 396152 | 728.8 | 109.20 | 50.70 | 32.16 | 142.52 | 19.14 | 228.6 | 4.79 | 424.1 | 567.1 | 565597 | 0.66 | 110.6 | 142.5 | 229.5 | 19.29 | 6.74 | 6.30 | 0.98 | | 1.63 | 36.99 | 388.1 |
| NEF-02_337_ap16 | 396334 | 768.8 | 111.63 | 39.92 | 22.40 | 172.85 | 18.42 | 244.7 | 1.98 | 400.4 | 572.6 | 565993 | 1.53 | 116.2 | 157.4 | 254.3 | 22.07 | 2.06 | 3.59 | 0.22 | | 5.67 | 16.42 | 139.3 |
| NEF-02_337_ap17 | 396307 | 785.8 | 141.21 | 54.12 | 18.91 | 203.72 | 23.62 | 211.7 | 3.02 | 378.2 | 683.0 | 565499 | 5.72 | 129.4 | 185.2 | 220.7 | 26.47 | 7.40 | 5.42 | 1.39 | | 4.08 | 25.30 | 74.8 |
| NEF-02_337_ap18 | 393428 | 1689.2 | 87.44 | 37.86 | 20.08 | 133.47 | 14.94 | 646.6 | 4.06 | 973.7 | 866.6 | 564914 | 2.03 | 204.7 | 157.4 | 325.1 | 16.56 | 6.38 | 4.72 | 3.26 | | 14.86 | 29.92 | 1417.3 |
| NEF-02_337_ap19 | 393210 | 1205.8 | 132.22 | 67.93 | 23.55 | 166.96 | 23.01 | 412.1 | 8.09 | 495.9 | 808.7 | 564725 | 0.91 | 167.1 | 177.8 | 235.1 | 21.89 | 10.12 | 9.62 | 5.03 | | 19.48 | 65.53 | 3007.7 |
| NEF-02_337_ap20 | 395113 | 1221.7 | 106.13 | 49.36 | 19.64 | 141.35 | 18.88 | 430.8 | 4.56 | 624.5 | 749.1 | 565242 | 0.92 | 166.7 | 152.1 | 301.2 | 18.49 | 5.91 | 5.97 | 2.24 | | 7.71 | 36.52 | 580.5 |
| NEF-02_337_ap21 | 396107 | 674.2 | 86.59 | 43.95 | 18.75 | 110.72 | 15.88 | 235.3 | 4.67 | 387.2 | 471.5 | 565638 | 6.04 | 94.8 | 109.4 | 272.5 | 15.20 | 5.63 | 5.51 | 1.74 | | 11.30 | 33.96 | 644.1 |
| NEF-02_337_ap22 | 395688 | 711.4 | 45.55 | 20.17 | 14.76 | 70.64 | 7.94 | 274.1 | 1.99 | 622.8 | 436.1 | 565717 | 1.19 | 93.5 | 84.1 | 484.4 | 8.26 | 3.79 | 2.41 | 1.25 | | 13.90 | 14.52 | 781.8 |
| NEF-02_337_ap23 | 396553 | 548.2 | 95.74 | 42.10 | 28.57 | 123.28 | 16.05 | 182.5 | 3.53 | 327.9 | 411.6 | 565759 | 0.52 | 82.0 | 122.3 | 246.7 | 17.18 | 1.70 | 4.72 | 0.19 | | 1.84 | 27.43 | 403.0 |
| NEF-02_337_ap24 | 396550 | 787.1 | 48.53 | 21.37 | 14.62 | 74.07 | 8.18 | 304.5 | 2.44 | 545.5 | 474.9 | 565580 | 1.13 | 105.7 | 89.3 | 375.0 | 8.71 | 3.78 | 2.64 | 1.46 | | 8.72 | 17.59 | 1173.7 |
| NEF-02_337_ap25 | 394417 | 1046.1 | 58.77 | 27.12 | 17.59 | 88.52 | 10.23 | 398.1 | 2.67 | 746.3 | 586.1 | 565390 | 1.97 | 135.1 | 103.8 | 255.6 | 11.00 | 6.68 | 3.25 | 3.20 | | 9.17 | 19.77 | 1680.0 |
| NEF-02_337_ap26 | 396226 | 643.0 | 124.50 | 55.13 | 29.46 | 153.34 | 21.52 | 212.4 | 4.48 | 418.0 | 498.7 | 565309 | 24.09 | 96.5 | 136.9 | 281.9 | 21.89 | 37.3 | 6.23 | 0.74 | | 1.19 | 34.41 | 352.9 |
| NEF-02_337_ap27 | 395100 | 984.8 | 146.37 | 61.59 | 28.16 | 194.66 | 24.60 | 318.1 | 4.47 | 612.5 | 725.4 | 565639 | 0.50 | 145.8 | 183.4 | 236.1 | 25.91 | 8.95 | 6.51 | 3.79 | | 7.58 | 35.54 | 836.2 |
| NEF-02_337_ap28 | 395394 | 818.6 | 82.87 | 41.71 | 26.21 | 110.96 | 15.06 | 274.0 | 4.26 | 461.9 | 548.9 | 565471 | 3.06 | 116.4 | 118.0 | 240.0 | 14.56 | 4.84 | 5.24 | 1.99 | | 6.79 | 31.63 | 1205.8 |
| NEF-02_337_ap29 | 396095 | 1027.5 | 124.30 | 47.61 | 18.54 | 184.61 | 20.54 | 339.4 | 2.56 | 548.3 | 702.1 | 565364 | 38.67 | 147.1 | 173.3 | 260.3 | 23.91 | 11.30 | 4.54 | 3.40 | | 6.40 | 21.41 | 209.7 |
| NEF-02_337_ap30 | 395740 | 788.9 | 76.77 | 34.91 | 16.96 | 112.29 | 13.38 | 242.3 | 3.21 | 352.6 | 557.0 | 565497 | 9.92 | 115.7 | 118.1 | 167.3 | 14.10 | 4.12 | 4.05 | 1.39 | | 5.64 | 23.45 | 1082.4 |
| NEF-02_337_ap31 | 394872 | 807.9 | 41.49 | 18.74 | 14.90 | 69.10 | 7.50 | 308.9 | 2.05 | 710.2 | 482.5 | 565982 | 1.40 | 106.0 | 84.4 | 483.3 | 7.76 | 4.48 | 2.27 | 1.62 | | 18.16 | 14.12 | 1388.1 |
| NEF-02_337_ap32 | 393653 | 1388.3 | 125.95 | 77.12 | 23.91 | 141.32 | 25.38 | 519.8 | 9.15 | 1044.2 | 781.8 | 565130 | 2.23 | 180.8 | 153.9 | 272.1 | 20.07 | 9.38 | 10.96 | 3.35 | | 16.23 | 69.66 | 1338.9 |
| NEF-02_337_ap33 | 395612 | 1347.1 | 84.26 | 39.03 | 22.21 | 113.97 | 14.61 | 514.7 | 3.70 | 331.6 | 733.6 | 565090 | 0.87 | 172.5 | 138.2 | 348.6 | 15.03 | 4.38 | 4.77 | 2.39 | | 10.67 | 28.46 | 366.3 |
| NEF-02_337_ap34 | 395724 | 808.9 | 53.57 | 25.68 | 16.85 | 82.84 | 9.53 | 304.1 | 2.44 | 489.9 | 501.7 | 565573 | 2.25 | 106.4 | 90.7 | 466.5 | 10.02 | 4.10 | 3.10 | 1.40 | | 9.08 | 17.65 | 694.0 |
| NEF-02_337_ap35 | 393974 | 1473.9 | 113.52 | 60.75 | 24.00 | 144.89 | 21.15 | 553.1 | 6.67 | 841.0 | 819.0 | 564995 | 1.74 | 191.3 | 163.4 | 264.2 | 19.55 | 5.66 | 8.28 | 2.77 | | 8.60 | 50.50 | 1355.1 |
| NEF-02_337_ap36 | 394505 | 1118.0 | 82.70 | 40.50 | 18.69 | 116.82 | 14.91 | 409.8 | 3.85 | 763.3 | 674.4 | 565315 | 2.52 | 149.4 | 129.5 | 323.4 | 15.29 | 5.37 | 4.74 | 1.93 | | 17.50 | 28.58 | 1256.9 |
| NEF-02_337_ap37 | 396790 | 522.9 | 70.78 | 30.56 | 15.95 | 121.94 | 12.25 | 154.4 | 2.34 | 363.2 | 454.6 | 565871 | 0.87 | 85.2 | 113.3 | 179.4 | 14.61 | 4.23 | 3.08 | 0.35 | | 4.04 | 16.10 | 167.8 |
| NEF-02_337_ap38 | 393659 | 1438.9 | 141.85 | 73.36 | 23.34 | 174.29 | 25.31 | 525.1 | 8.97 | 1002.5 | 840.3 | 565076 | 0.98 | 192.3 | 189.9 | 266.2 | 24.23 | 10.14 | 9.77 | 7.42 | | 18.87 | 68.60 | 1021.0 |
| NEF-02_337_ap39 | 395955 | 656.0 | 171.53 | 94.83 | 21.07 | 195.37 | 33.29 | 191.6 | 10.75 | 338.1 | 606.1 | 565447 | 0.21 | 109.5 | 160.2 | 129.9 | 28.36 | 15.43 | 11.99 | 2.13 | | 2.92 | 73.11 | 725.1 |
| ELF-01 ap10 | 395037 | 1109.9 | 103.66 | 57.09 | 13.42 | 139.64 | 20.55 | 401.3 | 6.11 | 591.2 | 669.4 | 565262 | 0.21 | 147.5 | 142.0 | 288.3 | 18.10 | 36.23 | 7.09 | 15.71 | | 5.67 | 42.99 | 883.9 |
| ELF-01 ap11 | 396447 | 483.6 | 123.03 | 73.48 | 21.64 | 133.11 | 24.10 | 155.1 | 9.75 | 406.4 | 399.7 | 565787 | 0.28 | 74.6 | 117.6 | 168.5 | 19.87 | 34.73 | 10.07 | 9.95 | | 2.22 | 64.59 | 433.2 |
| ELF-01 ap12 | 396195 | 380.9 | 148.51 | 78.96 | 20.44 | 161.46 | 28.71 | 95.0 | 9.02 | 559.4 | 393.8 | 565900 | 0.33 | 65.6 | 133.0 | 136.4 | 24.23 | 9.92 | 10.13 | 2.26 | | 1.69 | 62.33 | 602.8 |
| ELF-01 ap13 | 393537 | 1328.5 | 114.71 | 66.47 | 16.68 | 144.79 | 22.94 | 523.9 | 8.69 | 1025.6 | 735.0 | 565132 | 3.83 | 171.3 | 151.7 | 288.8 | 19.28 | 22.91 | 8.62 | 7.68 | | 3.84 | 57.49 | 1604.6 |
| ELF-01 ap14 | 394377 | 945.8 | 221.16 | 124.25 | 21.11 | 231.62 | 43.39 | 295.9 | 14.12 | 741.2 | 749.2 | 565159 | 0.85 | 146.7 | 208.7 | 238.5 | 35.39 | 23.90 | 16.13 | 7.45 | | 6.55 | 99.58 | 1291.7 |
| ELF-01 ap15 | 395028 | 562.0 | 176.91 | 125.26 | 22.22 | 166.71 | 37.99 | 168.5 | 24.84 | 523.6 | 486.6 | 565416 | 0.29 | 91.7 | 137.3 | 203.9 | 25.79 | 44.97 | 19.92 | 24.20 | | 2.17 | 152.83 | 1556.9 |
| ELF-01 ap16 | 395938 | 513.4 | 126.47 | 70.66 | 15.65 | 149.68 | 24.59 | 143.8 | 7.96 | 396.9 | 449.2 | 565653 | 0.31 | 82.4 | 128.6 | 210.7 | 21.30 | 17.28 | 8.56 | 7.59 | | 1.74 | 55.14 | 977.4 |
| ELF-01 ap17 | 396236 | 382.6 | 156.31 | 83.39 | 20.17 | 173.85 | 29.76 | 100.3 | 9.42 | 459.0 | 417.1 | 565904 | 0.65 | 70.3 | 142.2 | 132.3 | 26.11 | 16.04 | 10.18 | 2.34 | | 2.29 | 64.59 | 661.1 |
| ELF-01 ap18 | 391994 | 700.0 | 240.82 | 167.29 | 30.36 | 209.39 | 51.79 | 231.5 | 26.52 | 797.7 | 567.5 | 564837 | 0.64 | 107.6 | 174.1 | 270.8 | 35.74 | 29.99 | 24.50 | 17.54 | | 6.60 | 170.80 | 4306.8 |
| ELF-01 ap19 | 395229 | 580.7 | 217.76 | 130.31 | 22.78 | 211.60 | 44.61 | 163.1 | 16.79 | 440.5 | 539.7 | 565486 | 0.36 | 97.5 | 172.2 | 151.6 | 33.25 | 26.75 | 18.49 | 7.67 | | 1.95 | 115.26 | 691.6 |
| ELF-01 ap20 | 395173 | 863.4 | 145.20 | 85.69 | 17.48 | 180.24 | 30.25 | 310.8 | 10.51 | 472.1 | 609.3 | 565280 | 0.59 | 122.9 | 158.5 | 215.2 | 25.94 | 42.79 | 11.70 | 15.60 | | 5.43 | 73.14 | 1150.3 |
| ELF-01 ap21 | 394997 | 584.9 | 196.82 | 118.13 | 23.25 | 209.67 | 40.68 | 163.7 | 15.09 | 540.5 | 567.9 | 565396 | 0.47 | 100.4 | 172.5 | 207.5 | 31.36 | 18.11 | 15.62 | 6.13 | | 1.74 | 101.29 | 1491.2 |
| ELF-01 ap22 | 395586 | 550.8 | 219.20 | 129.35 | 18.69 | 228.59 | 44.21 | 129.0 | 15.18 | 629.1 | 599.0 | 565575 | 0.80 | 100.9 | | | | | | | | | | |

Appendix C: Eastern Sunda arc apatite trace element chemistry (LA-ICP-MS)

| Analysis ID | Ca | Ce | Dy | Er | Eu | Gd | Ho | La | Lu | Nb | Nd | P | Pb | Pr | Sm | Sr | Tb | Th | Tm | U | V | Yb | Fe |
|-------------|--------|--------|--------|--------|-------|--------|-------|-------|-------|--------|--------|--------|------|-------|-------|-------|-------|--------|-------|-------|-------|--------|--------|
| ELF-01 ap23 | 394987 | 797.0 | 224.32 | 121.09 | 24.22 | 242.45 | 42.92 | 244.3 | 14.92 | 579.4 | 717.7 | 565242 | 0.30 | 128.4 | 215.5 | 166.3 | 36.59 | 33.23 | 16.37 | 6.84 | 5.59 | 101.80 | 1050.9 |
| ELF-01 ap24 | 394095 | 1917.0 | 159.27 | 83.72 | 20.15 | 223.66 | 30.74 | 718.3 | 7.97 | 460.6 | 1166.4 | 564354 | 0.38 | 254.7 | 238.5 | 191.5 | 28.16 | 83.48 | 10.12 | 10.59 | 10.78 | 58.40 | 876.5 |
| ELF-01 ap25 | 396764 | 175.1 | 110.23 | 66.28 | 18.82 | 113.19 | 22.90 | 45.4 | 8.48 | 310.4 | 206.1 | 566027 | 1.44 | 32.0 | 83.2 | 143.4 | 17.05 | 10.77 | 8.68 | 5.63 | 0.37 | 51.43 | 776.8 |
| ELF-01 ap26 | 395166 | 800.8 | 198.38 | 119.27 | 24.23 | 217.94 | 39.46 | 244.3 | 15.77 | 567.4 | 673.0 | 565305 | 1.13 | 125.8 | 190.5 | 182.5 | 31.89 | 30.71 | 16.88 | 7.62 | 2.99 | 108.09 | 930.4 |
| ELF-01 ap27 | 395193 | 752.6 | 245.88 | 146.79 | 21.76 | 240.05 | 49.93 | 222.3 | 19.74 | 647.4 | 702.0 | 565328 | 0.46 | 128.7 | 213.4 | 160.6 | 37.60 | 28.96 | 20.48 | 7.93 | 3.47 | 134.92 | 693.5 |
| ELF-01 ap28 | 396201 | 963.6 | 125.73 | 73.89 | 19.50 | 159.64 | 24.68 | 34.11 | 12.00 | 477.0 | 682.0 | 565259 | 0.25 | 136.4 | 154.8 | 173.8 | 21.45 | 27.51 | 11.00 | 7.72 | 5.39 | 77.31 | 1045.9 |
| ELF-01 ap29 | 395494 | 613.5 | 119.18 | 66.51 | 18.91 | 141.49 | 24.02 | 285.2 | 8.87 | 364.2 | 503.5 | 565332 | 0.35 | 96.5 | 127.4 | 215.7 | 19.89 | 379.03 | 9.10 | 31.18 | 2.32 | 59.06 | 1185.5 |
| ELF-01 ap3 | 394283 | 744.7 | 291.29 | 190.22 | 26.34 | 266.96 | 60.72 | 122.9 | 27.87 | 752.4 | 675.7 | 565149 | 0.65 | 123.6 | 214.2 | 207.6 | 43.90 | 49.53 | 26.68 | 12.88 | 2.52 | 180.32 | 1440.1 |
| ELF-01 ap30 | 395274 | 583.4 | 276.73 | 170.55 | 23.98 | 256.69 | 56.36 | 151.1 | 21.86 | 524.0 | 602.0 | 565328 | 0.39 | 103.2 | 205.9 | 177.8 | 42.19 | 38.94 | 23.36 | 9.29 | 2.07 | 148.56 | 978.9 |
| ELF-01 ap31 | 395997 | 549.4 | 166.02 | 96.47 | 25.69 | 182.93 | 32.88 | 177.8 | 14.04 | 366.7 | 516.4 | 565505 | 0.57 | 91.0 | 156.9 | 143.6 | 26.47 | 124.03 | 13.69 | 7.36 | 1.93 | 86.08 | 716.0 |
| ELF-01 ap32 | 396219 | 565.5 | 153.71 | 70.16 | 21.45 | 220.52 | 28.00 | 147.7 | 5.94 | 373.8 | 632.9 | 565572 | 0.23 | 103.0 | 196.7 | 144.5 | 27.54 | 14.19 | 8.08 | 3.26 | 3.77 | 45.08 | 442.6 |
| ELF-01 ap4 | 395608 | 512.4 | 221.03 | 152.73 | 24.63 | 186.03 | 47.66 | 157.8 | 23.08 | 501.1 | 436.2 | 565527 | 0.26 | 81.1 | 141.1 | 234.0 | 31.68 | 17.02 | 22.13 | 7.31 | 0.75 | 151.68 | 914.3 |
| ELF-01 ap5 | 394973 | 1159.6 | 149.47 | 90.84 | 22.48 | 162.12 | 30.35 | 430.5 | 12.96 | 470.3 | 725.4 | 565068 | 0.27 | 157.9 | 164.2 | 157.0 | 23.93 | 53.93 | 12.89 | 14.85 | 9.64 | 83.82 | 1026.2 |
| ELF-01 ap6 | 394937 | 1197.8 | 98.00 | 57.23 | 18.15 | 131.03 | 19.97 | 451.9 | 7.51 | 605.3 | 696.5 | 565213 | 0.21 | 156.8 | 136.0 | 191.5 | 16.67 | 51.53 | 7.70 | 18.96 | 4.87 | 48.64 | 934.1 |
| ELF-01 ap7 | 394683 | 1093.1 | 222.29 | 121.75 | 24.55 | 232.80 | 43.42 | 381.9 | 13.31 | 662.7 | 790.2 | 565066 | 0.30 | 157.3 | 214.0 | 167.7 | 35.82 | 75.88 | 15.65 | 17.24 | 8.75 | 93.94 | 877.9 |
| ELF-01 ap8 | 395283 | 389.1 | 178.85 | 115.83 | 28.22 | 173.46 | 37.95 | 116.8 | 15.84 | 643.2 | 382.9 | 565157 | 1.42 | 67.4 | 129.8 | 223.2 | 28.77 | 14.59 | 16.03 | 7.94 | 14.57 | 102.41 | 4560.1 |
| ELF-01 ap9 | 395338 | 706.5 | 234.02 | 129.19 | 22.47 | 254.32 | 45.65 | 199.5 | 14.60 | 522.9 | 669.2 | 565301 | 1.08 | 119.5 | 210.7 | 218.6 | 38.41 | 58.43 | 16.15 | 7.70 | 2.71 | 100.10 | 787.5 |
| ELF-02 ap10 | 394978 | 489.2 | 315.29 | 224.16 | 37.88 | 243.70 | 69.64 | 153.0 | 37.91 | 630.1 | 451.3 | 565302 | 0.87 | 90.1 | 165.9 | 198.8 | 38.50 | 43.86 | 22.85 | 10.39 | 1.03 | 155.43 | 1275.4 |
| ELF-02 ap11 | 394889 | 455.6 | 345.43 | 232.65 | 34.10 | 288.29 | 73.14 | 127.8 | 38.80 | 614.2 | 514.3 | 565243 | 2.17 | 82.5 | 204.1 | 311.7 | 48.79 | 64.26 | 35.31 | 28.08 | 1.31 | 252.13 | 1111.2 |
| ELF-02 ap12 | 391259 | 378.1 | 57.63 | 27.87 | 36.53 | 69.10 | 10.75 | 174.3 | 2.85 | 2929.0 | 225.0 | 566718 | 0.38 | 47.0 | 61.6 | 497.6 | 10.12 | 3.96 | 4.47 | 0.17 | 20.30 | 2462.9 | |
| ELF-02 ap13 | 395662 | 407.4 | 140.78 | 70.82 | 21.14 | 155.95 | 25.65 | 105.9 | 8.45 | 313.0 | 431.6 | 565763 | 0.38 | 72.7 | 140.2 | 233.1 | 23.31 | 13.25 | 9.17 | 1.79 | 0.38 | 58.73 | 495.4 |
| ELF-02 ap14 | 395293 | 602.4 | 257.20 | 168.56 | 40.63 | 223.98 | 54.85 | 196.8 | 26.06 | 443.5 | 520.5 | 565288 | 1.01 | 97.1 | 172.1 | 187.6 | 37.67 | 49.14 | 25.00 | 15.42 | 0.77 | 170.61 | 1126.8 |
| ELF-02 ap15 | 394978 | 489.2 | 315.29 | 224.16 | 37.88 | 243.70 | 69.64 | 153.0 | 37.91 | 630.1 | 451.3 | 565302 | 0.87 | 90.1 | 165.9 | 198.8 | 38.50 | 43.86 | 22.85 | 10.39 | 1.03 | 155.43 | 1275.4 |
| ELF-02 ap16 | 395277 | 552.8 | 255.53 | 163.70 | 29.77 | 239.73 | 53.07 | 172.4 | 23.92 | 413.1 | 508.0 | 565302 | 0.87 | 90.1 | 165.9 | 198.8 | 38.50 | 43.86 | 22.85 | 10.39 | 1.03 | 155.43 | 1275.4 |
| ELF-02 ap17 | 396281 | 171.9 | 43.71 | 29.90 | 14.62 | 46.19 | 8.85 | 66.4 | 4.04 | 222.9 | 124.3 | 565928 | 1.26 | 25.6 | 38.5 | 435.8 | 6.96 | 1.28 | 3.86 | 15.67 | 0.78 | 24.50 | 1502.6 |
| ELF-02 ap18 | 394234 | 742.7 | 368.89 | 256.66 | 35.46 | 322.54 | 80.75 | 217.1 | 40.22 | 715.8 | 694.0 | 564967 | 0.93 | 122.7 | 225.0 | 272.2 | 55.56 | 75.76 | 37.76 | 24.66 | 1.78 | 259.49 | 1247.9 |
| ELF-02 ap19 | 396138 | 624.3 | 197.10 | 106.94 | 17.43 | 218.86 | 38.26 | 185.7 | 12.45 | 362.1 | 587.3 | 565477 | 1.10 | 104.9 | 181.6 | 182.2 | 32.13 | 27.52 | 13.61 | 3.47 | 2.27 | 85.03 | 401.3 |
| ELF-02 ap2 | 394451 | 789.5 | 266.74 | 163.54 | 25.19 | 254.77 | 53.87 | 245.7 | 23.68 | 617.4 | 671.9 | 565111 | 0.99 | 125.2 | 202.5 | 219.7 | 41.71 | 49.88 | 23.80 | 7.86 | 2.93 | 166.08 | 1514.2 |
| ELF-02 ap20 | 395138 | 784.8 | 236.41 | 145.75 | 28.53 | 243.68 | 48.68 | 249.4 | 20.90 | 576.8 | 700.8 | 565227 | 0.65 | 123.5 | 206.2 | 236.7 | 37.49 | 46.44 | 20.54 | 15.21 | 1.12 | 141.78 | 768.5 |
| ELF-02 ap21 | 395594 | 534.0 | 219.48 | 125.85 | 28.20 | 226.75 | 43.78 | 155.6 | 14.85 | 481.6 | 523.0 | 565486 | 1.09 | 91.2 | 171.7 | 183.5 | 34.20 | 30.72 | 16.33 | 5.02 | 1.75 | 102.88 | 927.9 |
| ELF-02 ap22 | 395499 | 603.9 | 68.86 | 32.84 | 13.66 | 101.04 | 12.67 | 200.9 | 2.85 | 534.3 | 468.9 | 565683 | 0.93 | 90.0 | 103.2 | 306.1 | 12.19 | 5.24 | 3.76 | 0.93 | 9.18 | 20.06 | 1236.1 |
| ELF-02 ap23 | 394631 | 851.5 | 322.57 | 217.91 | 37.04 | 284.89 | 68.34 | 275.3 | 34.07 | 526.5 | 726.0 | 564925 | 0.82 | 133.8 | 220.1 | 191.9 | 47.04 | 85.13 | 31.97 | 13.40 | 1.32 | 224.48 | 1149.2 |
| ELF-02 ap24 | 396796 | 154.9 | 65.27 | 36.88 | 15.28 | 66.61 | 12.90 | 47.0 | 4.47 | 221.8 | 153.1 | 566053 | 1.14 | 26.3 | 52.7 | 203.0 | 10.53 | 2.19 | 4.72 | 2.21 | 1.41 | 30.81 | 1036.5 |
| ELF-02 ap25 | 395757 | 977.4 | 271.67 | 163.01 | 22.65 | 268.71 | 55.01 | 300.5 | 22.44 | 569.7 | 823.2 | 565104 | 0.73 | 154.6 | 232.9 | 174.7 | 41.81 | 35.89 | 22.72 | 5.05 | 3.68 | 150.14 | 341.6 |
| ELF-02 ap26 | 393109 | 439.3 | 217.04 | 144.52 | 37.41 | 178.25 | 47.09 | 146.1 | 21.75 | 644.8 | 370.3 | 565168 | 1.89 | 67.2 | 131.2 | 347.0 | 31.98 | 21.74 | 20.75 | 16.80 | 0.66 | 140.21 | 3685.6 |
| ELF-02 ap27 | 395780 | 269.4 | 226.51 | 160.99 | 24.37 | 183.76 | 50.25 | 75.3 | 26.79 | 269.2 | 293.0 | 565517 | 1.31 | 48.1 | 117.8 | 356.2 | 32.92 | 18.44 | 23.23 | 11.50 | 1.38 | 166.95 | 1344.4 |
| ELF-02 ap28 | 393676 | 788.3 | 279.88 | 169.51 | 32.41 | 276.07 | 57.79 | 248.5 | 22.99 | 726.3 | 715.8 | 564981 | 1.39 | 128.4 | 221.6 | 232.6 | 37.49 | 67.47 | 23.35 | 14.77 | 3.61 | 152.35 | 2135.8 |
| ELF-02 ap29 | 394657 | 732.0 | 174.04 | 101.34 | 26.86 | 209.98 | 35.04 | 199.0 | 14.02 | 409.1 | 681.3 | 565145 | 0.93 | 123.0 | 186.1 | 211.4 | 29.14 | 33.02 | 13.83 | 3.57 | 2.67 | 90.44 | 1920.8 |
| ELF-02 ap3 | 395548 | 917.9 | 205.74 | 125.22 | 22.20 | 246.33 | 41.29 | 286.5 | 19.68 | 499.1 | 786.3 | 565207 | 1.06 | 145.3 | 212.9 | 158.2 | 34.31 | 54.41 | 18.44 | 8.89 | 12.22 | 127.57 | 320.7 |
| ELF-02 ap30 | 397435 | 139.6 | 45.29 | 19.89 | 6.87 | 55.82 | 8.06 | 38.4 | 1.61 | 153.0 | 140.9 | 566195 | 0.94 | 24.0 | 46.8 | 89.5 | 7.93 | 2.49 | 1.04 | 9.42 | 0.54 | 8.11 | 1782.8 |
| ELF-02 ap31 | 394673 | 556.6 | 19.19 | 10.08 | 8.08 | 17.99 | 3.49 | 20.3 | 1.48 | 660.2 | 46.4 | 565984 | 1.42 | 8.8 | 16.3 | 773.8 | 3.01 | 6.34 | 1.37 | 8.94 | 3.06 | 9.94 | 2685.4 |
| ELF-02 ap32 | 395141 | 892.3 | 202.88 | 126.61 | 27.82 | 212.78 | 41.57 | 310.9 | 17.57 | 494.0 | 664.6 | 565162 | 1.47 | 133.2 | 181.3 | 259.3 | 32.80 | 66.00 | 17.70 | 17.84 | 1.73 | 116.23 | 877.4 |
| ELF-02 ap4 | 395141 | 892.3 | 202.88 | 126.61 | 27.82 | 212.78 | 41.57 | 310.9 | 17.57 | 494.0 | 664.6 | 565162 | 1.47 | 133.2 | 181.3 | 259.3 | 32.80 | 66.00 | 17.70 | 17.84 | 1.73 | 116.23 | 877.4 |
| ELF-02 ap5 | 395697 | 96.8 | 32.86 | 17.92 | 11.10 | 34.89 | 6.27 | 31.7 | 2.74 | 464.3 | 88.2 | 565978 | 1.40 | 15.7 | 28.9 | 856.4 | 5.65 | 1.63 | 2.50 | 11.87 | 0.25 | 17.16 | 1594.8 |
| ELF-02 ap6 | 395194 | 687.4 | 191.57 | 112.04 | 24.53 | 210.98 | 38.40 | 217.4 | 13.28 | 506.4 | 592.6 | 565352 | 0.56 | 108.6 | 179.7 | 212.5 | 32.07 | 31.62 | 14.61 | 4.96 | 0.58 | 92.01 | 1181.1 |
| ELF-02 ap7 | 396138 | 356.9 | 208.02 | 134.68 | 35.41 | 184.79 | 44.03 | 96.8 | 19.19 | 331.4 | 374.8 | 565633 | 1.22 | 61.0 | 137.4 | 178.6 | 32.08 | 7.56 | 18.90 | 11.76 | 0.70 | 126.32 | 866.7 |
| ELF-02 ap8 | 395693 | 367.8 | 110.29 | 53.69 | 39.38 | 138.72 | 20.30 | 115.0 | 5.53 | 371.4 | 350.8 | 565731 | 4.32 | 62.4 | 119.8 | 203.3 | 20.66 | 7.96 | 6.73 | 2.51 | 0.91 | 40.62 | 1360.3 |
| ELF-02 ap9 | 396792 | 121.0 | 35.51 | 21.62 | 10.05 | 38.49 | 7.10 | 36.7 | 2.89 | 237.8 | 102.3 | 566139 | 0.97 | 19.3 | 31.3 | 186.3 | 5.88 | 4.51 | 2.86 | 2.09 | 3.41 | 19.45 | 1178.9 |
| LB026 ap1 | 397315 | 421.9 | 84.71 | 44.18 | 4.50 | 102.37 | 16.82 | 146.3 | 3.78 | 126.2 | 379.2 | 565826 | 0.17 | 74.4 | 92.6 | 14 | | | | | | | |

Appendix C: Eastern Sunda arc apatite trace element chemistry (LA-ICP-MS)

| Analysis ID | Ca | Ce | Dy | Er | Eu | Gd | Ho | La | Lu | Nb | Nd | P | Pb | Pr | Sm | Sr | Tb | Th | Tm | U | V | Yb | Fe |
|-------------|--------|--------|--------|--------|--------|--------|-------|--------|-------|--------|--------|--------|-------|-------|-------|-------|-------|---------|-------|-------|-------|--------|---------|
| LB026 ap10 | 397919 | 565.9 | 68.88 | 33.59 | 11.31 | 105.47 | 12.99 | 197.1 | 2.55 | 193.6 | 401.7 | 563997 | 0.24 | 80.3 | 92.3 | 139.2 | 12.64 | 14.53 | 3.34 | 0.65 | 27.80 | 16.15 | 11103.3 |
| LB026 ap11 | 824.7 | 117.98 | 61.46 | 10.95 | 151.69 | 23.37 | 278.5 | 5.71 | 197.8 | 546.2 | 565499 | 0.19 | 114.1 | 132.9 | 137.4 | 20.91 | 68.33 | 7.22 | 2.65 | 7.57 | 38.06 | 32.0 | |
| LB026 ap12 | 397699 | 183.3 | 43.53 | 24.80 | 2.31 | 52.94 | 9.18 | 60.3 | 2.50 | 76.4 | 148.8 | 566198 | 0.07 | 27.6 | 38.9 | 102.2 | 7.07 | 23.39 | 2.92 | 0.38 | 9.03 | 15.72 | 61.2 |
| LB026 ap13 | 396693 | 786.4 | 60.27 | 28.56 | 19.31 | 89.94 | 11.02 | 254.2 | 2.32 | 193.1 | 488.8 | 566330 | 0.37 | 107.9 | 101.2 | 112.0 | 11.67 | 13.17 | 3.28 | 0.38 | 14.22 | 17.47 | 362.2 |
| LB026 ap14 | 396303 | 888.2 | 131.31 | 70.77 | 13.67 | 157.63 | 26.93 | 285.9 | 5.66 | 191.8 | 565388 | 0.13 | 123.7 | 134.1 | 137.3 | 22.26 | 13.17 | 22.26 | 3.25 | 0.17 | 30.81 | 42.91 | 452.5 |
| LB026 ap15 | 397455 | 517.6 | 22.56 | 11.65 | 5.07 | 40.09 | 4.56 | 181.8 | 1.04 | 94.7 | 267.9 | 565957 | 0.15 | 63.9 | 42.3 | 142.4 | 4.64 | 10.83 | 1.31 | 0.27 | 3.97 | 6.77 | 164.3 |
| LB026 ap16 | 397161 | 887.5 | 94.84 | 43.78 | 5.48 | 143.95 | 17.96 | 159.9 | 2.67 | 106.0 | 497.1 | 566881 | 0.18 | 94.1 | 130.4 | 117.8 | 17.74 | 73.45 | 4.35 | 1.19 | 3.49 | 20.52 | 36.3 |
| LB026 ap17 | 396907 | 989.5 | 149.81 | 80.34 | 21.04 | 178.23 | 29.80 | 339.0 | 6.45 | 390.2 | 599.8 | 565322 | 0.47 | 128.3 | 154.4 | 294.5 | 25.88 | 66.25 | 9.84 | 14.95 | 26.40 | 50.85 | 113.5 |
| LB026 ap18 | 396890 | 730.5 | 108.88 | 55.97 | 11.94 | 128.17 | 20.92 | 303.8 | 4.67 | 159.9 | 459.4 | 565575 | 0.44 | 97.7 | 114.4 | 175.9 | 18.68 | 58.05 | 6.69 | 6.75 | 17.17 | 33.86 | 21.2 |
| LB026 ap19 | 395971 | 1042.6 | 105.18 | 53.11 | 10.15 | 147.95 | 20.23 | 371.7 | 3.80 | 347.1 | 652.9 | 565337 | 1.10 | 142.8 | 141.6 | 198.4 | 18.86 | 23.73 | 5.70 | 5.73 | 15.32 | 30.73 | 352.5 |
| LB026 ap2 | 393199 | 2610.0 | 116.49 | 61.14 | 40.33 | 152.44 | 22.02 | 1128.8 | 5.63 | 916.8 | 1079.4 | 564245 | 2.82 | 290.1 | 185.8 | 278.6 | 20.16 | 40.42 | 7.57 | 39.02 | 80.38 | 44.38 | 430.3 |
| LB026 ap20 | 396968 | 612.3 | 111.09 | 55.06 | 6.00 | 136.90 | 21.42 | 198.2 | 4.13 | 140.6 | 443.3 | 566553 | 0.28 | 89.1 | 112.2 | 140.5 | 18.64 | 78.47 | 5.64 | 2.91 | 12.07 | 29.37 | 160.9 |
| LB026 ap21 | 397291 | 552.5 | 70.57 | 34.37 | 4.03 | 102.69 | 13.58 | 158.1 | 2.26 | 120.7 | 414.6 | 565807 | 0.13 | 83.3 | 97.0 | 140.8 | 12.77 | 36.42 | 3.57 | 0.91 | 4.81 | 17.96 | 30.4 |
| LB026 ap22 | 397397 | 457.0 | 37.86 | 18.27 | 9.17 | 58.43 | 6.63 | 169.9 | 1.54 | 192.0 | 264.6 | 566004 | 0.24 | 58.1 | 54.4 | 135.4 | 6.80 | 52.55 | 1.97 | 0.87 | 10.77 | 10.93 | 50.8 |
| LB026 ap23 | 395919 | 1362.6 | 79.48 | 42.00 | 15.82 | 111.44 | 15.26 | 561.5 | 3.21 | 305.4 | 661.6 | 565134 | 0.53 | 164.2 | 125.5 | 331.0 | 14.94 | 43.72 | 5.10 | 7.35 | 23.94 | 25.87 | 46.9 |
| LB026 ap24 | 397461 | 487.5 | 39.34 | 19.86 | 5.94 | 66.42 | 7.58 | 173.0 | 1.58 | 120.9 | 304.3 | 565941 | 0.17 | 64.5 | 60.2 | 142.9 | 7.96 | 36.47 | 2.09 | 1.16 | 7.84 | 10.88 | 37.6 |
| LB026 ap25 | 397110 | 658.6 | 57.36 | 27.96 | 9.98 | 81.71 | 11.24 | 253.2 | 2.20 | 198.5 | 362.5 | 565803 | 0.22 | 83.8 | 77.1 | 136.2 | 10.22 | 32.63 | 3.29 | 6.08 | 13.32 | 17.69 | 42.7 |
| LB026 ap26 | 393580 | 1091.0 | 181.36 | 89.37 | 16.82 | 217.86 | 34.73 | 460.2 | 6.47 | 1189.2 | 667.0 | 564781 | 1.75 | 139.6 | 173.5 | 383.1 | 30.91 | 1319.25 | 9.73 | 63.91 | 10.31 | 50.06 | 501.3 |
| LB026 ap27 | 396827 | 802.0 | 62.96 | 35.17 | 15.26 | 77.25 | 12.31 | 390.2 | 3.47 | 225.2 | 372.1 | 565649 | 0.53 | 90.4 | 78.0 | 172.8 | 11.06 | 57.60 | 4.60 | 10.64 | 33.51 | 25.86 | 41.9 |
| LB026 ap28 | 395374 | 1609.6 | 130.02 | 55.73 | 17.64 | 222.32 | 22.81 | 605.9 | 3.99 | 212.2 | 989.8 | 564080 | 0.51 | 212.6 | 216.8 | 187.9 | 25.45 | 51.68 | 5.87 | 9.95 | 12.55 | 29.26 | 322.3 |
| LB026 ap29 | 394482 | 2073.6 | 172.11 | 78.08 | 20.89 | 257.94 | 32.65 | 841.9 | 5.92 | 490.9 | 1187.7 | 564345 | 0.80 | 266.1 | 252.9 | 256.4 | 31.92 | 50.22 | 8.49 | 10.05 | 13.37 | 44.36 | 76.1 |
| LB026 ap3 | 395129 | 1169.8 | 136.13 | 67.12 | 25.14 | 192.89 | 26.21 | 458.1 | 5.89 | 443.4 | 803.5 | 565048 | 1.25 | 162.5 | 184.2 | 252.6 | 23.86 | 40.31 | 7.63 | 8.08 | 11.28 | 41.48 | 760.9 |
| LB026 ap30 | 393537 | 1795.5 | 179.34 | 96.57 | 27.19 | 205.02 | 35.14 | 757.4 | 10.39 | 1072.5 | 971.1 | 564768 | 2.36 | 226.3 | 213.7 | 277.1 | 43.22 | 12.82 | 12.82 | 17.03 | 75.73 | 76.34 | 565.6 |
| LB026 ap31 | 397240 | 676.5 | 49.66 | 23.50 | 4.93 | 80.82 | 9.53 | 217.6 | 1.57 | 116.4 | 414.2 | 565773 | 0.08 | 90.3 | 79.6 | 138.6 | 9.43 | 17.62 | 2.37 | 0.33 | 8.89 | 11.73 | 34.2 |
| LB026 ap33 | 395177 | 1771.1 | 77.24 | 41.01 | 22.59 | 105.73 | 14.74 | 784.4 | 3.48 | 482.5 | 738.5 | 564895 | 1.26 | 196.4 | 122.9 | 254.8 | 13.66 | 61.00 | 4.86 | 12.88 | 38.75 | 28.16 | 149.4 |
| LB026 ap35 | 395045 | 1120.6 | 70.10 | 44.43 | 29.63 | 86.44 | 12.09 | 538.9 | 5.46 | 827.6 | 521.1 | 565475 | 2.28 | 133.1 | 100.2 | 338.4 | 12.31 | 66.03 | 6.26 | 9.22 | 21.96 | 33.63 | 244.7 |
| LB026 ap4 | 396513 | 850.1 | 53.55 | 29.55 | 12.77 | 67.86 | 10.39 | 345.3 | 2.96 | 202.8 | 411.5 | 565575 | 0.23 | 100.9 | 78.1 | 134.8 | 8.94 | 56.97 | 3.66 | 4.68 | 17.71 | 21.76 | 497.0 |
| LB026 ap5 | 396196 | 1290.0 | 64.82 | 31.88 | 21.13 | 89.08 | 11.81 | 516.6 | 2.58 | 203.9 | 611.0 | 565224 | 0.58 | 155.5 | 108.2 | 201.7 | 11.02 | 25.54 | 3.69 | 8.58 | 25.92 | 21.08 | 175.1 |
| LB026 ap6 | 394752 | 807.4 | 104.63 | 57.10 | 15.43 | 136.88 | 20.38 | 242.6 | 5.99 | 263.2 | 557.3 | 565198 | 0.79 | 116.8 | 128.7 | 133.4 | 17.52 | 19.64 | 6.77 | 0.84 | 17.21 | 41.91 | 2354.3 |
| LB026 ap7 | 397119 | 700.0 | 64.24 | 34.16 | 7.46 | 84.03 | 12.17 | 242.3 | 3.08 | 121.8 | 422.6 | 565703 | 0.18 | 95.4 | 86.9 | 130.1 | 11.02 | 50.56 | 4.12 | 2.26 | 13.97 | 22.31 | 68.9 |
| LB026 ap8 | 396042 | 1451.2 | 120.92 | 62.88 | 8.73 | 156.51 | 22.98 | 553.7 | 6.16 | 127.3 | 802.3 | 564912 | 0.22 | 186.9 | 161.4 | 138.5 | 20.06 | 94.53 | 7.73 | 10.55 | 29.02 | 45.12 | 39.5 |
| LB026 ap9 | 397480 | 509.8 | 36.56 | 18.10 | 6.10 | 53.28 | 6.98 | 164.8 | 1.58 | 103.4 | 299.8 | 565936 | 0.22 | 68.8 | 53.6 | 136.2 | 6.78 | 38.93 | 2.22 | 1.52 | 6.65 | 11.13 | 57.5 |
| NAF-01 ap1 | 395265 | 1694.4 | 102.84 | 53.24 | 11.56 | 154.12 | 19.40 | 621.3 | 5.25 | 465.6 | 916.3 | 564904 | 2.11 | 216.1 | 188.6 | 173.5 | 18.62 | 103.63 | 6.18 | 9.63 | 3.39 | 36.51 | 87.5 |
| NAF-01 ap11 | 397406 | 567.1 | 25.91 | 18.13 | 3.48 | 40.69 | 5.64 | 244.8 | 4.12 | 111.7 | 262.0 | 565908 | 0.50 | 63.4 | 41.7 | 170.6 | 4.63 | 16.02 | 2.69 | 6.15 | 2.83 | 21.38 | 71.5 |
| NAF-01 ap12 | 395455 | 1702.5 | 109.35 | 52.97 | 11.14 | 167.86 | 20.61 | 689.3 | 4.02 | 251.7 | 948.2 | 564709 | 1.10 | 215.1 | 179.3 | 297.7 | 20.28 | 38.46 | 5.88 | 11.34 | 13.10 | 30.85 | 66.2 |
| NAF-01 ap13 | 395638 | 1525.4 | 139.05 | 77.80 | 14.11 | 186.48 | 27.25 | 589.5 | 7.70 | 237.0 | 955.5 | 564790 | 1.31 | 203.3 | 193.9 | 199.2 | 23.93 | 42.04 | 9.92 | 14.53 | 7.70 | 57.49 | 58.0 |
| NAF-01 ap14 | 394322 | 1899.8 | 298.23 | 171.70 | 16.34 | 328.89 | 61.30 | 731.3 | 15.67 | 487.3 | 1163.8 | 564234 | 5.88 | 249.1 | 285.3 | 317.1 | 50.66 | 60.57 | 21.46 | 18.11 | 6.47 | 115.95 | 135.7 |
| NAF-01 ap15 | 395274 | 1549.1 | 154.84 | 79.42 | 10.85 | 212.93 | 29.20 | 557.3 | 7.70 | 431.8 | 961.6 | 564843 | 1.37 | 207.4 | 210.0 | 240.4 | 27.83 | 23.66 | 9.55 | 2.92 | 5.49 | 52.06 | 106.4 |
| NAF-01 ap16 | 394913 | 1836.8 | 209.70 | 114.41 | 12.85 | 260.54 | 40.07 | 653.5 | 11.80 | 323.8 | 1205.4 | 564392 | 5.10 | 254.2 | 264.5 | 176.4 | 34.60 | 60.93 | 14.15 | 19.01 | 8.33 | 85.32 | 96.1 |
| NAF-01 ap17 | 396304 | 970.3 | 146.06 | 78.58 | 9.15 | 180.04 | 28.50 | 322.3 | 8.26 | 250.2 | 684.5 | 565308 | 1.92 | 138.6 | 167.5 | 184.8 | 24.45 | 20.94 | 9.92 | 3.16 | 3.53 | 58.30 | 95.2 |
| NAF-01 ap18 | 394421 | 2014.5 | 234.01 | 116.11 | 12.53 | 298.15 | 44.43 | 762.9 | 6.63 | 502.1 | 1219.9 | 564317 | 1.59 | 262.8 | 276.4 | 247.1 | 39.53 | 23.43 | 12.86 | 9.92 | 7.10 | 67.18 | 99.6 |
| NAF-01 ap19 | 394646 | 2076.0 | 240.02 | 135.91 | 12.74 | 273.73 | 47.04 | 784.4 | 14.08 | 329.4 | 1188.9 | 564205 | 0.41 | 269.5 | 268.2 | 219.6 | 38.77 | 31.98 | 17.73 | 15.99 | 25.51 | 105.08 | 53.5 |
| NAF-01 ap2 | 392293 | 2613.9 | 238.35 | 138.97 | 17.74 | 293.47 | 47.43 | 1042.0 | 15.10 | 1044.9 | 1428.7 | 563820 | 3.24 | 321.7 | 297.3 | 418.2 | 40.19 | 121.38 | 18.32 | 40.73 | 9.24 | 105.64 | 626.7 |
| NAF-01 ap21 | 395816 | 1203.2 | 182.02 | 98.11 | 8.28 | 229.97 | 35.16 | 359.5 | 8.67 | 295.5 | 897.6 | 565021 | 1.89 | 179.4 | 214.5 | 220.3 | 30.17 | 20.16 | 11.47 | 2.21 | 5.91 | 64.52 | 93.0 |
| NAF-01 ap21 | 395981 | 3332.3 | 157.59 | 72.14 | 17.70 | 231.21 | 28.69 | 1259.2 | 5.37 | 231.3 | 1590.9 | 563277 | 4.71 | 399.4 | 276.1 | 236.7 | 28.63 | 123.20 | 8.02 | 42.02 | 10.01 | 42.62 | 40.1 |
| NAF-01 ap22 | 393075 | 2631.1 | 198.02 | 110.21 | 18.05 | 260.85 | 39.85 | 1057.0 | 10.92 | 794.7 | 1391.0 | 563861 | 3.65 | 322.5 | 277.5 | 362.3 | 34.94 | 127.98 | 13.74 | 38.11 | 9.53 | 79.79 | 278.3 |
| NAF-01 ap23 | 395162 | 1934.6 | 132.36 | 66.89 | 7.75 | 194.25 | 25.07 | 757.8 | 5.25 | 236.0 | 1029.5 | 564478 | 3.72 | 236.7 | 199.5 | 190.8 | 27.81 | 87.41 | 7.44 | 22.07 | 9.51 | 38.96 | 147.0 |

*All elements are in ppm.

Appendix C: Eastern Sunda arc apatite trace element chemistry (LA-ICP-MS)

| Analysis ID | Ca | Ce | Dy | Er | Eu | Gd | Ho | La | Lu | Na | Nd | P | Pb | Pt | Sm | Sr | Tb | Th | Tm | U | V | Yb | Fe |
|-------------|--------|--------|---------|--------|--------|---------|--------|--------|--------|--------|--------|--------|-------|--------|--------|-------|--------|---------|--------|--------|--------|--------|--------|
| NAF-01 ap24 | 395233 | 1898.2 | 127.95 | 65.71 | 11.07 | 174.59 | 24.67 | 663.8 | 5.73 | 214.1 | 902.6 | 564741 | 1.34 | 211.4 | 182.1 | 202.8 | 22.12 | 24.38 | 7.94 | 11.86 | 22.03 | 43.89 | 16.1 |
| NAF-01 ap25 | 392831 | 2761.6 | 187.29 | 103.90 | 15.56 | 239.29 | 36.44 | 1117.8 | 11.79 | 914.6 | 1357.2 | 563988 | 2.39 | 329.8 | 258.7 | 349.4 | 31.62 | 99.45 | 13.39 | 27.60 | 13.14 | 83.14 | 324.3 |
| NAF-01 ap26 | 395022 | 1956.7 | 118.18 | 57.07 | 10.37 | 180.62 | 22.45 | 778.6 | 4.81 | 336.6 | 1027.2 | 564513 | 2.49 | 243.1 | 191.7 | 216.6 | 21.46 | 111.77 | 6.98 | 19.35 | 4.44 | 36.89 | 115.5 |
| NAF-01 ap27 | 392649 | 2845.5 | 256.61 | 147.16 | 18.29 | 297.63 | 51.90 | 1048.2 | 14.40 | 956.4 | 1428.0 | 563789 | 4.45 | 332.8 | 307.1 | 353.3 | 43.69 | 115.20 | 19.12 | 39.96 | 10.49 | 109.64 | 458.1 |
| NAF-01 ap28 | 395730 | 782.3 | 89.59 | 49.92 | 13.07 | 107.43 | 17.56 | 306.4 | 5.63 | 248.9 | 458.0 | 565627 | 1.39 | 101.2 | 103.6 | 192.6 | 14.93 | 6.55 | 6.48 | 1.45 | 7.65 | 40.46 | 89.9 |
| NAF-01 ap29 | 394504 | 1717.5 | 150.17 | 82.75 | 13.90 | 188.10 | 29.44 | 684.4 | 9.23 | 351.8 | 944.9 | 564529 | 2.18 | 214.3 | 191.6 | 233.2 | 24.78 | 78.23 | 10.69 | 17.37 | 14.50 | 68.94 | 939.5 |
| NAF-01 ap30 | 391462 | 2722.2 | 443.57 | 210.27 | 14.39 | 504.99 | 83.14 | 951.3 | 13.11 | 1326.9 | 1750.1 | 563567 | 4.09 | 370.2 | 457.9 | 364.3 | 73.22 | 15.43 | 22.52 | 9.54 | 2.47 | 111.23 | 518.5 |
| NAF-01 ap31 | 395833 | 1066.2 | 126.03 | 70.01 | 13.57 | 154.10 | 24.51 | 390.1 | 8.07 | 463.3 | 677.9 | 565326 | 1.91 | 146.4 | 151.2 | 240.1 | 20.82 | 38.57 | 9.24 | 4.31 | 4.70 | 57.07 | 171.9 |
| NAF-01 ap32 | 392453 | 2679.6 | 321.84 | 146.57 | 19.69 | 430.70 | 57.97 | 895.1 | 9.71 | 822.8 | 1818.2 | 563505 | 1.97 | 389.8 | 431.6 | 366.3 | 60.13 | 60.39 | 16.19 | 27.20 | 17.27 | 79.55 | 377.7 |
| NAF-01 ap33 | 396018 | 933.5 | 281.40 | 149.44 | 9.85 | 301.69 | 54.67 | 284.5 | 11.62 | 224.8 | 755.5 | 565078 | 1.82 | 139.8 | 221.1 | 183.3 | 45.25 | 14.86 | 17.67 | 4.03 | 2.22 | 93.69 | 172.3 |
| NAF-01 ap34 | 393220 | 2461.2 | 191.00 | 105.21 | 17.62 | 248.84 | 36.61 | 1009.5 | 10.78 | 835.3 | 1284.9 | 564059 | 3.40 | 296.0 | 255.9 | 367.8 | 31.67 | 113.37 | 13.51 | 33.71 | 12.49 | 79.44 | 339.6 |
| NAF-01 ap35 | 390064 | 3377.4 | 544.69 | 213.86 | 17.82 | 708.35 | 93.66 | 1141.6 | 10.74 | 1369.6 | 2434.2 | 562621 | 2.08 | 488.4 | 663.1 | 372.4 | 100.74 | 44.15 | 21.82 | 28.42 | 5.07 | 97.09 | 577.8 |
| NAF-01 ap36 | 392989 | 2511.4 | 303.80 | 182.62 | 16.67 | 323.63 | 60.84 | 957.3 | 23.74 | 881.9 | 1386.2 | 563882 | 2.08 | 314.8 | 316.3 | 329.3 | 47.86 | 46.71 | 25.38 | 22.09 | 10.16 | 162.27 | 201.4 |
| NAF-01 ap37 | 397248 | 3194.6 | 657.23 | 310.55 | 15.76 | 748.41 | 125.15 | 1059.5 | 17.13 | 1102.2 | 2363.3 | 561963 | 2.28 | 467.8 | 667.1 | 319.7 | 114.60 | 38.19 | 32.24 | 37.06 | 9.86 | 152.91 | 4451.3 |
| NAF-01 ap38 | 394982 | 2171.3 | 66.52 | 35.79 | 14.80 | 115.03 | 12.82 | 864.8 | 3.84 | 390.9 | 973.2 | 564502 | 0.88 | 250.7 | 145.0 | 235.4 | 13.08 | 151.42 | 4.51 | 14.60 | 6.84 | 27.32 | 116.4 |
| NAF-01 ap39 | 391794 | 2547.9 | 387.29 | 191.07 | 15.15 | 455.54 | 73.13 | 938.1 | 12.76 | 1298.6 | 1684.1 | 563736 | 1.42 | 350.1 | 425.9 | 405.1 | 67.06 | 32.53 | 21.96 | 17.97 | 10.37 | 109.27 | 423.1 |
| NAF-01 ap40 | 394920 | 1500.0 | 244.28 | 135.14 | 13.43 | 274.35 | 48.80 | 550.2 | 13.02 | 543.9 | 941.4 | 564763 | 2.21 | 201.2 | 234.1 | 247.2 | 40.10 | 33.76 | 16.45 | 11.44 | 5.22 | 96.20 | 162.9 |
| NAF-02 ap11 | 391420 | 354.8 | 135.28 | 66.39 | 29.44 | 153.80 | 24.33 | 111.6 | 7.82 | 143.3 | 320.6 | 565579 | 13.16 | 58.4 | 118.2 | 336.3 | 22.74 | 115.11 | 18.10 | 22.35 | 10.93 | 103.75 | 130.7 |
| NAF-02 ap12 | 392788 | 595.2 | 247.07 | 149.88 | 38.63 | 209.46 | 53.02 | 199.6 | 19.38 | 638.4 | 446.1 | 564956 | 3.83 | 91.8 | 141.4 | 424.2 | 39.23 | 35.10 | 8.70 | 16.13 | 0.97 | 139.65 | 3741.6 |
| NAF-02 ap13 | 393903 | 426.4 | 219.56 | 127.08 | 30.90 | 168.53 | 44.23 | 136.7 | 15.42 | 675.0 | 347.1 | 565391 | 3.21 | 66.0 | 123.3 | 330.0 | 33.01 | 6.57 | 17.28 | 14.85 | 0.38 | 110.77 | 2786.5 |
| NAF-02 ap14 | 392281 | 1017.0 | 331.82 | 205.68 | 41.41 | 271.59 | 68.32 | 384.9 | 26.49 | 657.6 | 673.3 | 564486 | 10.17 | 140.5 | 199.8 | 351.2 | 48.02 | 48.41 | 28.48 | 21.36 | 0.27 | 185.65 | 3511.4 |
| NAF-02 ap15 | 392842 | 491.2 | 227.93 | 134.34 | 33.47 | 195.56 | 45.79 | 165.7 | 16.64 | 625.3 | 383.1 | 565071 | 5.27 | 73.5 | 132.7 | 344.4 | 34.13 | 36.12 | 18.47 | 14.78 | 1.35 | 118.10 | 982.9 |
| NAF-02 ap16 | 393169 | 514.8 | 226.28 | 133.48 | 34.80 | 186.33 | 45.25 | 174.3 | 16.62 | 666.9 | 383.2 | 565155 | 3.78 | 76.5 | 128.5 | 405.1 | 33.11 | 16.97 | 18.44 | 17.66 | 0.68 | 121.25 | 3465.4 |
| NAF-02 ap17 | 396721 | 213.8 | 119.79 | 59.48 | 21.24 | 127.42 | 22.06 | 55.4 | 6.03 | 241.0 | 232.2 | 565924 | 0.94 | 39.3 | 93.9 | 236.3 | 20.52 | 1.56 | 7.70 | 2.62 | <0.145 | 44.81 | 807.2 |
| NAF-02 ap18 | 393547 | 495.8 | 231.17 | 135.70 | 34.75 | 179.31 | 46.24 | 166.6 | 16.68 | 638.6 | 359.1 | 565229 | 3.85 | 72.2 | 121.2 | 398.2 | 32.87 | 21.69 | 18.41 | 17.45 | 0.43 | 121.40 | 3108.5 |
| NAF-02 ap19 | 393562 | 542.2 | 241.38 | 141.95 | 34.11 | 209.97 | 48.03 | 183.7 | 16.68 | 701.3 | 418.8 | 565228 | 9.23 | 79.7 | 140.2 | 319.9 | 36.26 | 13.48 | 18.74 | 16.86 | 0.31 | 120.37 | 2907.8 |
| NAF-02 ap20 | 395778 | 354.6 | 118.06 | 55.21 | 28.37 | 135.17 | 21.03 | 111.1 | 5.92 | 386.6 | 307.4 | 566587 | 7.05 | 57.3 | 107.9 | 388.9 | 20.17 | 13.03 | 7.11 | 11.21 | 5.70 | 43.70 | 4443.4 |
| NAF-02 ap21 | 394009 | 570.8 | 251.49 | 146.81 | 34.43 | 204.95 | 51.37 | 192.1 | 17.15 | 648.8 | 425.8 | 565246 | 2.86 | 84.8 | 140.1 | 378.8 | 36.88 | 24.00 | 20.32 | 18.70 | 0.61 | 125.81 | 2365.9 |
| NAF-02 ap22 | 392815 | 595.5 | 274.20 | 166.45 | 34.96 | 220.31 | 55.92 | 208.7 | 21.70 | 678.0 | 437.8 | 564992 | 4.92 | 86.2 | 147.5 | 341.9 | 39.88 | 24.83 | 22.80 | 22.22 | 0.78 | 151.02 | 3663.9 |
| NAF-02 ap23 | 393202 | 528.4 | 248.59 | 142.16 | 35.51 | 204.30 | 49.50 | 179.2 | 17.30 | 794.7 | 406.6 | 565217 | 5.70 | 79.5 | 134.8 | 392.4 | 37.10 | 23.69 | 19.06 | 18.16 | 0.57 | 124.75 | 3133.9 |
| NAF-02 ap24 | 392986 | 809.6 | 257.00 | 142.28 | 37.54 | 230.89 | 50.53 | 299.8 | 18.72 | 630.1 | 551.5 | 564870 | 3.61 | 113.9 | 166.5 | 334.1 | 39.66 | 23.03 | 18.96 | 19.25 | 0.20 | 121.59 | 3281.7 |
| NAF-02 ap25 | 392428 | 1398.4 | 243.54 | 132.61 | 33.10 | 263.26 | 47.36 | 458.5 | 15.57 | 778.0 | 986.6 | 564437 | 13.94 | 206.1 | 241.9 | 362.1 | 38.56 | 35.77 | 17.82 | 19.62 | 0.32 | 111.79 | 2717.3 |
| NAF-02 ap26 | 392617 | 591.4 | 299.06 | 182.16 | 36.30 | 243.24 | 61.53 | 206.7 | 23.95 | 643.5 | 449.0 | 564888 | 4.21 | 85.8 | 154.1 | 336.8 | 42.84 | 18.45 | 25.66 | 17.79 | 0.44 | 166.63 | 3901.3 |
| NAF-02 ap27 | 393752 | 393.2 | 163.45 | 86.31 | 28.65 | 153.66 | 31.04 | 127.0 | 9.81 | 454.7 | 321.5 | 565290 | 3.51 | 61.6 | 113.9 | 349.2 | 25.82 | 15.85 | 11.38 | 9.04 | 0.63 | 74.84 | 3519.8 |
| NAF-02 ap28 | 393015 | 502.4 | 206.89 | 119.78 | 33.58 | 172.54 | 40.83 | 168.3 | 15.06 | 594.3 | 370.3 | 565152 | 3.70 | 73.6 | 124.1 | 408.1 | 30.91 | 8.74 | 16.57 | 13.05 | 0.96 | 109.26 | 3616.5 |
| NAF-02 ap29 | 393353 | 492.1 | 233.35 | 136.78 | 34.72 | 189.66 | 46.61 | 169.5 | 16.93 | 786.5 | 376.3 | 565287 | 9.71 | 72.9 | 128.4 | 388.1 | 34.46 | 8.25 | 16.64 | 15.39 | 0.40 | 123.94 | 3067.7 |
| NAF-02 ap30 | 368784 | 1885.0 | 1404.40 | 986.99 | 251.89 | 1446.53 | 315.44 | 8191.3 | 144.28 | 497.5 | 8765.3 | 546191 | 6.92 | 2280.9 | 1722.6 | 340.0 | 216.78 | 1237.13 | 140.37 | 261.72 | 1.14 | 985.87 | 1985.8 |
| NAF-03 ap10 | 395603 | 517.2 | 158.04 | 100.98 | 28.53 | 151.54 | 33.03 | 176.7 | 13.87 | 623.3 | 409.8 | 565703 | 3.74 | 78.9 | 126.0 | 310.1 | 23.86 | 18.85 | 14.07 | 16.51 | 2.90 | 93.75 | 759.9 |
| NAF-03 ap11 | 394531 | 1025.1 | 221.13 | 128.98 | 25.17 | 211.11 | 44.51 | 376.4 | 12.48 | 474.7 | 684.5 | 564993 | 1.44 | 142.0 | 134.3 | 258.1 | 33.89 | 14.05 | 16.73 | 10.10 | 10.94 | 97.31 | 1512.2 |
| NAF-03 ap12 | 396163 | 586.1 | 156.38 | 100.74 | 26.87 | 150.22 | 32.74 | 195.8 | 12.62 | 452.1 | 453.0 | 565637 | 2.32 | 89.3 | 126.0 | 213.6 | 23.65 | 49.93 | 13.98 | 16.18 | 1.96 | 86.41 | 405.7 |
| NAF-03 ap13 | 396296 | 411.8 | 110.19 | 54.32 | 16.90 | 128.72 | 20.20 | 125.6 | 4.57 | 218.7 | 385.1 | 565712 | 1.51 | 67.0 | 113.9 | 154.9 | 18.74 | 4.42 | 6.61 | 0.47 | 3.52 | 34.84 | 1127.4 |
| NAF-03 ap14 | 396821 | 647.3 | 144.34 | 72.55 | 19.73 | 153.75 | 27.47 | 215.4 | 4.70 | 165.6 | 479.9 | 565593 | 1.25 | 95.9 | 136.7 | 153.2 | 23.48 | 10.28 | 8.09 | 1.46 | 4.12 | 39.64 | 180.1 |

*All elements are in ppm.

Appendix C: Eastern Sunda arc apatite trace element chemistry (LA-ICP-MS)

| Analysis ID | Ca | Ce | Dy | Er | Eu | Gd | Ho | La | Lu | Nb | Nd | P | Pb | Pr | Sm | Sr | Tb | Th | Tm | U | V | Yb | Fe |
|-------------|--------|--------|--------|--------|-------|--------|-------|-------|-------|--------|--------|--------|------|-------|-------|-------|-------|--------|-------|-------|--------|--------|--------|
| NAF-03 ap14 | 394229 | 597.4 | 144.20 | 71.12 | 18.68 | 161.51 | 27.32 | 195.2 | 4.85 | 237.3 | 479.2 | 565104 | 1.07 | 91.0 | 140.4 | 238.8 | 24.06 | 77.67 | 7.83 | 15.77 | 15.02 | 38.90 | 3078.3 |
| NAF-03 ap15 | 396272 | 451.9 | 155.66 | 106.42 | 30.06 | 134.78 | 33.34 | 141.9 | 16.87 | 428.7 | 359.3 | 565741 | 1.39 | 69.8 | 111.6 | 223.8 | 22.78 | 24.62 | 15.91 | 13.25 | 0.70 | 109.18 | 533.5 |
| NAF-03 ap16 | 397051 | 396.8 | 132.97 | 52.81 | 20.90 | 173.81 | 22.53 | 117.1 | 2.61 | 195.6 | 416.8 | 565807 | 0.60 | 69.6 | 144.2 | 152.7 | 23.72 | 4.48 | 5.07 | 0.44 | 3.22 | 24.19 | 181.6 |
| NAF-03 ap17 | 395930 | 624.9 | 140.93 | 96.68 | 26.50 | 132.48 | 30.13 | 212.5 | 15.44 | 459.6 | 457.6 | 565597 | 1.75 | 91.8 | 122.1 | 231.2 | 21.01 | 22.22 | 14.39 | 11.99 | 0.65 | 100.02 | 657.7 |
| NAF-03 ap18 | 396414 | 769.1 | 158.81 | 74.74 | 24.36 | 182.70 | 28.61 | 251.7 | 4.59 | 242.8 | 576.8 | 565452 | 1.39 | 113.7 | 162.4 | 204.8 | 26.69 | 5.76 | 8.26 | 0.75 | 3.35 | 30.41 | 253.7 |
| NAF-03 ap19 | 396084 | 723.7 | 144.48 | 72.63 | 20.33 | 159.25 | 27.62 | 248.3 | 5.03 | 254.8 | 513.9 | 565445 | 2.57 | 104.1 | 139.0 | 250.1 | 23.91 | 6.88 | 8.23 | 1.34 | 6.42 | 40.31 | 716.6 |
| NAF-03 ap2 | 397131 | 267.8 | 116.39 | 63.79 | 20.39 | 126.07 | 22.61 | 77.0 | 6.91 | 256.9 | 284.5 | 565976 | 1.14 | 47.4 | 102.9 | 191.3 | 13.94 | 9.34 | 8.11 | 5.63 | 1.98 | 48.68 | 213.8 |
| NAF-03 ap20 | 396066 | 95.5 | 84.84 | 44.29 | 16.30 | 98.83 | 16.67 | 24.4 | 4.31 | 317.3 | 148.9 | 565179 | 2.87 | 20.6 | 70.0 | 229.9 | 19.99 | 2.12 | 5.30 | 0.80 | 43.46 | 30.43 | 6481.2 |
| NAF-03 ap21 | 396607 | 648.7 | 133.51 | 62.37 | 22.05 | 151.08 | 24.55 | 212.4 | 3.82 | 232.2 | 493.4 | 565586 | 1.29 | 96.9 | 135.5 | 272.7 | 22.92 | 8.03 | 6.62 | 1.84 | 5.02 | 31.98 | 239.3 |
| NAF-03 ap22 | 396032 | 681.0 | 156.16 | 99.74 | 26.69 | 156.41 | 32.73 | 219.7 | 14.35 | 433.2 | 534.5 | 565515 | 1.99 | 104.7 | 143.6 | 244.3 | 24.03 | 41.06 | 14.53 | 24.65 | 1.49 | 97.14 | 399.5 |
| NAF-03 ap23 | 395681 | 690.5 | 149.05 | 61.11 | 23.35 | 184.25 | 25.52 | 201.8 | 3.03 | 335.9 | 571.9 | 565250 | 2.53 | 109.0 | 168.1 | 188.7 | 26.64 | 25.84 | 6.27 | 40.89 | 4.38 | 28.38 | 921.9 |
| NAF-03 ap24 | 393347 | 930.0 | 160.34 | 66.76 | 25.87 | 193.43 | 27.96 | 329.2 | 3.96 | 249.9 | 650.8 | 564701 | 3.96 | 133.6 | 181.9 | 348.4 | 27.77 | 17.23 | 7.05 | 18.30 | 24.79 | 35.80 | 3510.3 |
| NAF-03 ap25 | 395704 | 886.5 | 145.35 | 72.70 | 20.37 | 154.97 | 27.27 | 335.3 | 5.29 | 189.6 | 556.3 | 565228 | 0.70 | 120.0 | 147.6 | 229.4 | 24.23 | 10.33 | 8.45 | 4.83 | 13.60 | 43.46 | 1071.4 |
| NAF-03 ap26 | 396428 | 697.0 | 95.38 | 51.22 | 19.18 | 110.19 | 18.63 | 283.2 | 3.88 | 335.9 | 416.6 | 565664 | 0.58 | 91.1 | 99.4 | 240.7 | 15.79 | 15.13 | 5.74 | 6.08 | 2.64 | 29.69 | 370.1 |
| NAF-03 ap27 | 393910 | 1171.1 | 244.00 | 178.37 | 36.53 | 212.46 | 55.85 | 459.8 | 24.33 | 880.1 | 699.1 | 564934 | 3.63 | 152.6 | 177.9 | 310.4 | 35.30 | 166.91 | 24.59 | 39.03 | 1.34 | 160.25 | 1118.8 |
| NAF-03 ap28 | 396663 | 596.7 | 146.20 | 65.49 | 19.96 | 171.10 | 26.52 | 185.3 | 3.54 | 233.1 | 494.0 | 565612 | 1.25 | 92.6 | 148.7 | 248.8 | 25.26 | 7.94 | 6.48 | 0.95 | 5.14 | 29.55 | 215.6 |
| NAF-03 ap29 | 396017 | 702.6 | 141.92 | 62.36 | 22.65 | 170.22 | 25.06 | 220.6 | 2.98 | 166.4 | 536.1 | 565388 | 1.55 | 108.1 | 151.5 | 193.1 | 25.10 | 7.97 | 5.97 | 1.33 | 6.54 | 27.35 | 1016.5 |
| NAF-03 ap4 | 395905 | 1065.0 | 179.49 | 76.26 | 26.72 | 215.15 | 31.76 | 391.0 | 4.95 | 267.7 | 706.3 | 565132 | 2.24 | 146.0 | 200.2 | 253.8 | 31.22 | 14.49 | 8.91 | 16.53 | 10.50 | 45.34 | 267.7 |
| NAF-03 ap6 | 396516 | 590.6 | 140.38 | 69.79 | 28.98 | 156.19 | 25.51 | 212.0 | 6.44 | 295.9 | 454.8 | 569650 | 1.50 | 86.3 | 137.2 | 195.5 | 22.62 | 21.37 | 8.26 | 0.53 | 27.68 | 48.64 | 348.6 |
| NAF-03 ap7 | 395923 | 606.5 | 147.96 | 64.64 | 31.71 | 190.72 | 26.00 | 174.2 | 4.00 | 274.6 | 543.8 | 565440 | 2.18 | 100.3 | 162.6 | 307.1 | 26.16 | 29.41 | 6.86 | 4.31 | 8.07 | 33.68 | 890.0 |
| NAF-03 ap8 | 395646 | 1044.6 | 184.49 | 93.44 | 31.71 | 204.64 | 35.11 | 362.5 | 6.60 | 247.7 | 715.4 | 565102 | 1.13 | 150.6 | 189.0 | 330.9 | 30.51 | 10.97 | 10.57 | 2.75 | 4.70 | 55.14 | 338.1 |
| NAF-03 ap9 | 395839 | 882.1 | 243.37 | 93.26 | 45.49 | 286.24 | 40.27 | 317.1 | 4.85 | 291.8 | 691.9 | 565152 | 1.36 | 133.0 | 239.6 | 279.6 | 42.05 | 2.83 | 4.02 | 8.11 | 0.39 | 6.94 | 346.5 |
| SLG-1 ap1 | 391427 | 772.4 | 156.88 | 68.49 | 36.77 | 189.43 | 26.68 | 187.8 | 5.40 | 330.9 | 623.5 | 565544 | 0.31 | 117.9 | 178.6 | 91.3 | 27.50 | 4.83 | 8.11 | 0.39 | 0.95 | 44.47 | 222.7 |
| SLG-1 ap11 | 396651 | 629.9 | 146.17 | 48.58 | 45.19 | 209.93 | 22.14 | 163.3 | 3.29 | 285.8 | 583.0 | 565613 | 2.33 | 107.8 | 193.5 | 88.2 | 29.07 | 4.10 | 5.19 | 2.25 | 0.28 | 27.48 | 135.9 |
| SLG-1 ap12 | 396451 | 665.6 | 95.41 | 31.49 | 36.04 | 152.00 | 14.35 | 193.6 | 4.87 | 243.24 | 486.0 | 566203 | 9.20 | 93.0 | 151.5 | 96.2 | 25.98 | 16.33 | 7.59 | 10.56 | 403.92 | 40.08 | 2414.7 |
| SLG-1 ap13 | 395401 | 1219.4 | 225.70 | 132.42 | 56.93 | 208.54 | 47.76 | 438.6 | 14.35 | 546.1 | 698.2 | 565130 | 0.68 | 162.2 | 178.4 | 116.3 | 36.14 | 2.89 | 18.37 | 7.87 | -0.337 | 116.02 | 240.8 |
| SLG-1 ap14 | 396772 | 560.9 | 105.00 | 34.87 | 34.87 | 153.32 | 15.70 | 142.4 | 2.02 | 241.7 | 482.4 | 565741 | 0.69 | 92.0 | 143.6 | 81.5 | 20.45 | 0.74 | 3.59 | 0.34 | 0.63 | 18.81 | 359.3 |
| SLG-1 ap15 | 396535 | 525.6 | 132.08 | 48.15 | 35.28 | 185.60 | 20.46 | 142.1 | 2.87 | 360.4 | 480.3 | 565750 | 0.29 | 86.8 | 161.9 | 89.7 | 27.21 | 2.08 | 5.33 | 0.34 | 0.40 | 27.40 | 380.3 |
| SLG-1 ap16 | 395764 | 652.6 | 307.20 | 140.58 | 28.80 | 359.28 | 55.87 | 135.0 | 9.95 | 586.9 | 749.8 | 565393 | 0.43 | 126.9 | 286.1 | 75.4 | 56.63 | 21.11 | 15.87 | 5.79 | -0.354 | 81.91 | 146.8 |
| SLG-1 ap17 | 396610 | 607.0 | 154.77 | 54.67 | 38.28 | 209.77 | 24.76 | 162.1 | 2.93 | 306.8 | 568.6 | 565632 | 0.21 | 103.6 | 185.9 | 87.4 | 30.04 | 9.86 | 5.73 | 0.42 | 0.49 | 28.69 | 175.5 |
| SLG-1 ap18 | 395990 | 649.4 | 159.47 | 72.21 | 35.19 | 194.21 | 28.28 | 174.1 | 5.50 | 379.2 | 563.8 | 565542 | 0.74 | 105.1 | 168.5 | 93.1 | 29.54 | 3.37 | 8.72 | 0.65 | 0.54 | 45.52 | 750.1 |
| SLG-1 ap19 | 396819 | 486.9 | 115.66 | 38.39 | 32.39 | 158.18 | 17.35 | 124.2 | 2.39 | 321.0 | 451.2 | 565833 | 0.29 | 84.3 | 145.7 | 88.6 | 32.74 | 4.00 | 8.84 | 0.30 | 0.22 | 21.48 | 226.7 |
| SLG-1 ap2 | 396256 | 722.3 | 185.06 | 79.50 | 31.62 | 220.82 | 31.65 | 186.8 | 5.77 | 370.6 | 659.9 | 565499 | 0.29 | 123.5 | 192.5 | 88.6 | 21.77 | 0.38 | 4.20 | 0.30 | 0.22 | 21.48 | 226.7 |
| SLG-1 ap20 | 396541 | 603.2 | 152.74 | 59.27 | 36.86 | 212.18 | 25.12 | 156.6 | 3.61 | 322.2 | 574.5 | 565627 | 0.22 | 106.9 | 185.8 | 95.4 | 29.74 | 4.03 | 6.28 | 0.72 | -0.320 | 31.64 | 224.2 |
| SLG-1 ap21 | 396661 | 584.1 | 141.61 | 55.26 | 36.23 | 183.10 | 22.90 | 147.3 | 4.22 | 293.0 | 539.5 | 565673 | 0.22 | 98.9 | 168.9 | 89.6 | 25.73 | 5.88 | 6.37 | 0.49 | 0.49 | 34.70 | 227.1 |
| SLG-1 ap22 | 394450 | 699.9 | 161.99 | 65.75 | 37.77 | 190.68 | 26.88 | 194.4 | 4.54 | 361.8 | 564.3 | 565202 | 1.35 | 113.6 | 172.4 | 99.6 | 28.75 | 2.31 | 7.34 | 0.74 | 1.98 | 39.37 | 2571.6 |
| SLG-1 ap23 | 395447 | 781.6 | 135.12 | 63.79 | 42.36 | 180.01 | 24.45 | 219.3 | 5.16 | 571.4 | 647.3 | 565496 | 0.60 | 128.4 | 173.5 | 105.7 | 24.82 | 14.62 | 7.86 | 1.02 | 1.87 | 40.84 | 886.7 |
| SLG-1 ap24 | 396661 | 522.8 | 106.91 | 37.38 | 29.11 | 154.47 | 16.99 | 121.2 | 2.32 | 385.0 | 472.5 | 565836 | 0.28 | 90.8 | 146.4 | 78.8 | 20.26 | 9.28 | 4.06 | 0.54 | 1.62 | 20.44 | 281.6 |
| SLG-1 ap25 | 396402 | 657.9 | 95.67 | 31.35 | 32.18 | 144.86 | 14.20 | 176.5 | 1.80 | 485.6 | 495.3 | 565803 | 0.33 | 102.1 | 143.1 | 84.3 | 19.10 | 0.77 | 3.18 | 0.12 | 1.16 | 16.91 | 288.1 |
| SLG-1 ap26 | 396504 | 629.1 | 163.34 | 68.22 | 35.97 | 193.25 | 27.72 | 178.4 | 5.06 | 310.9 | 538.6 | 565609 | 0.27 | 103.4 | 168.7 | 98.9 | 28.43 | 3.36 | 7.86 | 0.69 | 0.36 | 42.02 | 281.8 |
| SLG-1 ap27 | 396018 | 841.3 | 202.24 | 94.76 | 33.97 | 217.91 | 36.30 | 222.5 | 8.22 | 424.4 | 691.4 | 565408 | 0.40 | 137.3 | 195.2 | 90.0 | 33.18 | 3.05 | 11.78 | 1.27 | 0.21 | 66.91 | 261.0 |
| SLG-1 ap4 | 396632 | 624.2 | 143.86 | 56.74 | 34.03 | 177.86 | 23.61 | 168.9 | 3.91 | 307.4 | 518.7 | 565671 | 0.27 | 101.3 | 159.1 | 89.7 | 25.89 | 2.04 | 6.43 | 0.39 | 0.67 | 33.79 | 218.7 |
| SLG-1 ap5 | 396128 | 863.8 | 179.91 | 83.68 | 40.28 | 203.09 | 31.85 | 235.5 | 7.67 | 397.0 | 701.4 | 565412 | 0.32 | 138.2 | 195.3 | 90.1 | 31.39 | 7.63 | 10.35 | 1.21 | 0.49 | 61.54 | 178.5 |
| SLG-1 ap6 | 396436 | 656.5 | 156.57 | 71.16 | 36.16 | 191.85 | 27.52 | 166.8 | 6.12 | 316.4 | 626.5 | 565561 | 0.26 | 114.6 | 179.5 | 86.1 | 27.54 | 6.32 | 8.42 | 0.60 | 0.99 | 48.57 | 274.1 |
| SLG-1 ap8 | 396617 | 586.0 | 137.57 | 53.45 | 31.09 | 179.24 | 22.26 | 160.4 | 3.35 | 313.9 | 519.7 | 565691 | 0.58 | 96.9 | 161.4 | 99.2 | 26.84 | 1.40 | 5.90 | 0.54 | -0.327 | 28.70 | 263.6 |
| SLG-1 ap9 | 397051 | 576.7 | 119.99 | 39.18 | 39.71 | 176.15 | 17.77 | 161.9 | 2.27 | 6651.7 | 496.4 | 568387 | 0.40 | 96.0 | 164.7 | 104.2 | 24.52 | 2.41 | 3.96 | 0.29 | -0.401 | 19.79 | 863.4 |
| SLG-2 ap1 | 391672 | 2516.8 | 205.86 | 102.74 | 23.83 | 263.37 | 38.27 | 941.7 | 9.58 | 1443.4 | 1367.5 | 564189 | 1.24 | 315.9 | 277.7 | 277.1 | 34.85 | 57.99 | 12.54 | 4.43 | 19.42 | 69.78 | 1153.6 |

*All elements are in ppm.

Appendix C: Eastern Sunda arc apatite trace element chemistry (LA-ICP-MS)

| Analysis ID | Ca | Ce | Dy | Er | Eu | Gd | Ho | La | Lu | Nb | Nd | P | Pb | Pr | Sm | Sr | Tb | Th | Tm | U | V | Yb | Fe |
|-------------|--------|--------|--------|--------|-------|--------|-------|--------|-------|--------|--------|--------|------|-------|-------|-------|-------|--------|-------|-------|-------|--------|--------|
| SLG-2 ap10 | 395791 | 1574.0 | 103.51 | 48.88 | 10.33 | 153.59 | 19.19 | 555.4 | 3.90 | 271.9 | 881.4 | 564936 | 0.56 | 204.3 | 165.5 | 122.9 | 18.59 | 59.87 | 5.43 | 1.50 | 5.07 | 28.89 | 38.4 |
| SLG-2 ap11 | 396234 | 1010.7 | 85.62 | 40.12 | 5.18 | 126.97 | 16.00 | 314.0 | 2.60 | 280.6 | 635.6 | 565424 | 1.36 | 138.8 | 127.9 | 114.8 | 16.40 | 19.03 | 4.16 | 0.48 | 5.37 | 20.61 | 374.5 |
| SLG-2 ap12 | 391381 | 2561.5 | 144.53 | 70.24 | 24.25 | 191.92 | 26.02 | 1059.7 | 6.79 | 1391.4 | 1191.7 | 564207 | 1.16 | 300.3 | 221.1 | 265.3 | 24.84 | 28.25 | 8.61 | 4.38 | 23.05 | 49.52 | 1816.6 |
| SLG-2 ap13 | 395022 | 2110.9 | 131.70 | 65.51 | 13.71 | 182.48 | 24.54 | 852.2 | 5.54 | 284.8 | 1033.0 | 564422 | 1.30 | 250.5 | 199.5 | 163.0 | 23.28 | 17.35 | 7.36 | 2.56 | 12.20 | 41.11 | 111.8 |
| SLG-2 ap14 | 394705 | 1897.5 | 136.21 | 62.33 | 11.20 | 205.36 | 24.55 | 684.7 | 4.86 | 649.8 | 1083.4 | 564723 | 2.05 | 249.2 | 217.0 | 131.3 | 24.69 | 53.54 | 6.78 | 2.66 | 8.51 | 35.25 | 78.9 |
| SLG-2 ap15 | 396316 | 1447.3 | 183.41 | 86.78 | 10.15 | 238.08 | 34.85 | 475.4 | 6.42 | 470.9 | 984.3 | 564922 | 1.26 | 204.7 | 218.6 | 124.9 | 31.17 | 35.53 | 9.87 | 0.73 | 5.13 | 50.98 | 141.9 |
| SLG-2 ap17 | 395386 | 1565.4 | 147.82 | 70.15 | 8.70 | 205.56 | 27.11 | 552.0 | 5.35 | 439.5 | 947.7 | 564908 | 1.31 | 207.5 | 203.7 | 122.6 | 26.16 | 31.92 | 7.75 | 0.90 | 5.85 | 39.24 | 88.5 |
| SLG-2 ap18 | 394359 | 2334.6 | 162.60 | 75.17 | 15.34 | 231.21 | 29.53 | 872.0 | 6.18 | 494.4 | 1266.0 | 564234 | 2.63 | 293.0 | 251.7 | 139.3 | 29.01 | 66.97 | 8.38 | 3.35 | 11.03 | 45.45 | 65.3 |
| SLG-2 ap19 | 394089 | 2088.5 | 152.35 | 72.04 | 12.28 | 215.30 | 28.05 | 768.2 | 5.83 | 330.8 | 1154.9 | 564389 | 0.79 | 264.5 | 227.3 | 136.6 | 27.06 | 75.19 | 8.47 | 4.33 | 9.47 | 44.64 | 96.6 |
| SLG-2 ap2 | 394924 | 2034.8 | 126.13 | 61.29 | 15.06 | 184.38 | 23.63 | 759.1 | 4.85 | 416.9 | 1091.1 | 564549 | 1.01 | 255.4 | 206.4 | 131.4 | 22.92 | 39.97 | 7.14 | 2.69 | 9.56 | 37.84 | 94.9 |
| SLG-2 ap20 | 394468 | 2144.5 | 208.25 | 98.63 | 15.93 | 268.76 | 38.75 | 810.8 | 7.73 | 468.1 | 1230.9 | 564276 | 0.88 | 276.6 | 266.0 | 194.2 | 35.48 | 48.87 | 11.08 | 2.33 | 14.20 | 60.55 | 52.4 |
| SLG-2 ap21 | 395391 | 1686.9 | 128.60 | 59.84 | 12.95 | 189.99 | 23.55 | 581.8 | 4.96 | 345.0 | 1007.6 | 564791 | 0.75 | 224.5 | 208.5 | 127.2 | 24.69 | 36.10 | 7.40 | 0.98 | 5.17 | 36.38 | 124.4 |
| SLG-2 ap22 | 392995 | 2239.4 | 116.85 | 60.64 | 22.12 | 167.54 | 22.25 | 931.7 | 5.39 | 1039.0 | 1056.4 | 564499 | 0.97 | 261.7 | 191.6 | 253.1 | 21.62 | 37.47 | 7.06 | 3.23 | 18.30 | 39.33 | 1009.3 |
| SLG-2 ap26 | 394040 | 2180.0 | 198.58 | 95.69 | 19.32 | 262.30 | 36.72 | 788.9 | 7.76 | 659.4 | 1260.5 | 564301 | 1.34 | 285.9 | 269.9 | 240.3 | 34.40 | 68.98 | 11.03 | 2.41 | 16.52 | 61.38 | 156.5 |
| SLG-2 ap27 | 394428 | 1947.0 | 144.63 | 76.79 | 15.43 | 191.10 | 27.19 | 765.5 | 7.04 | 240.5 | 1070.8 | 564343 | 0.89 | 249.0 | 201.6 | 118.4 | 24.98 | 32.34 | 8.93 | 2.69 | 16.59 | 47.72 | 1039.6 |
| SLG-2 ap4 | 391918 | 2692.3 | 152.32 | 74.36 | 22.22 | 207.21 | 28.47 | 1049.9 | 6.98 | 1375.4 | 1292.3 | 564188 | 3.09 | 320.7 | 231.9 | 261.4 | 26.81 | 55.68 | 9.07 | 4.35 | 20.31 | 51.83 | 958.6 |
| SLG-2 ap6 | 395445 | 1322.4 | 130.85 | 62.54 | 7.11 | 187.77 | 24.19 | 417.0 | 4.61 | 605.8 | 882.8 | 565206 | 0.73 | 185.4 | 188.1 | 128.9 | 23.50 | 28.11 | 6.51 | 0.55 | 3.82 | 34.06 | 103.2 |
| SLG-2 ap7 | 393505 | 1954.9 | 98.60 | 48.37 | 19.93 | 128.15 | 18.51 | 873.3 | 4.79 | 1026.6 | 847.2 | 564818 | 1.22 | 220.4 | 149.3 | 262.3 | 16.81 | 24.72 | 6.05 | 4.69 | 28.71 | 35.82 | 905.3 |
| SLG-2 ap8 | 394669 | 1651.7 | 105.25 | 54.54 | 11.84 | 164.83 | 19.24 | 583.6 | 4.38 | 946.1 | 960.8 | 565118 | 0.73 | 217.4 | 186.2 | 110.4 | 19.81 | 81.71 | 5.40 | 3.61 | 8.58 | 28.62 | 47.9 |
| SLG-2 ap9 | 394708 | 1846.7 | 173.76 | 83.76 | 12.26 | 234.56 | 32.01 | 678.6 | 6.49 | 593.5 | 1087.7 | 564059 | 1.75 | 241.5 | 233.5 | 134.3 | 30.60 | 46.95 | 9.03 | 2.22 | 9.46 | 48.19 | 124.9 |
| BHF-01 ap1 | 391980 | 1034.6 | 111.35 | 34.57 | 37.82 | 345.9 | 32.62 | 345.9 | 13.59 | 855.6 | 766.0 | 564703 | 0.69 | 154.2 | 191.5 | 447.0 | 30.22 | 36.97 | 15.04 | 9.59 | 2.86 | 93.02 | 3741.5 |
| BHF-01 ap2 | 395469 | 188.1 | 11.89 | 5.44 | 23.14 | 18.44 | 1.96 | 84.8 | 0.60 | 1367.2 | 123.5 | 566604 | 1.16 | 27.6 | 22.7 | 571.0 | 2.11 | 1.80 | 0.67 | 0.11 | 20.76 | 4.69 | 438.8 |
| BHF-01 ap3 | 392966 | 930.7 | 200.94 | 130.27 | 37.43 | 203.61 | 42.03 | 308.0 | 19.20 | 665.8 | 684.4 | 564907 | 1.32 | 139.4 | 180.0 | 419.4 | 30.97 | 49.91 | 18.79 | 10.74 | 1.85 | 128.96 | 3012.0 |
| BHF-01 ap4 | 392344 | 403.8 | 108.97 | 52.53 | 25.29 | 141.97 | 19.71 | 90.6 | 4.94 | 243.0 | 446.0 | 565763 | 0.12 | 76.5 | 130.0 | 297.4 | 18.86 | 0.98 | 6.49 | 0.86 | 0.20 | 35.55 | 414.7 |
| BHF-01 ap5 | 393072 | 879.5 | 208.20 | 131.25 | 36.10 | 212.63 | 42.90 | 275.7 | 18.24 | 682.5 | 696.3 | 564659 | 0.66 | 137.1 | 188.0 | 424.1 | 32.50 | 48.63 | 18.46 | 13.42 | 1.97 | 121.89 | 2888.9 |
| BHF-01 ap6 | 391562 | 989.2 | 270.14 | 194.42 | 39.55 | 229.77 | 59.87 | 322.1 | 31.43 | 803.2 | 718.9 | 564497 | 0.68 | 145.2 | 187.7 | 430.2 | 37.72 | 57.06 | 29.30 | 15.11 | 4.72 | 206.79 | 4186.9 |
| BHF-01 ap7 | 392895 | 857.6 | 164.44 | 107.10 | 37.52 | 155.98 | 33.98 | 305.2 | 15.42 | 741.3 | 576.0 | 564980 | 0.58 | 122.6 | 144.1 | 459.2 | 24.82 | 15.59 | 15.59 | 12.85 | 0.42 | 103.39 | 3230.6 |
| BHF-01 ap8 | 392745 | 1067.6 | 189.28 | 125.35 | 37.87 | 205.33 | 40.39 | 377.7 | 18.19 | 750.0 | 747.4 | 564743 | 1.03 | 155.0 | 185.9 | 434.4 | 31.11 | 46.84 | 17.43 | 11.95 | 1.20 | 117.49 | 2959.9 |
| BHF-01 ap9 | 392344 | 1042.3 | 169.36 | 101.81 | 36.36 | 180.05 | 33.22 | 360.0 | 13.43 | 759.4 | 722.0 | 564743 | 0.69 | 151.2 | 177.0 | 446.7 | 26.37 | 28.91 | 13.66 | 9.32 | 2.24 | 91.81 | 3546.4 |
| BHF-01 ap10 | 391244 | 1242.0 | 212.74 | 131.64 | 41.26 | 219.91 | 43.10 | 421.8 | 19.26 | 1299.5 | 867.0 | 564689 | 0.65 | 180.7 | 214.3 | 447.1 | 33.44 | 70.84 | 18.73 | 18.03 | 1.07 | 127.69 | 3455.2 |
| BHF-01 ap11 | 392138 | 1056.8 | 188.74 | 117.81 | 32.60 | 193.84 | 38.30 | 369.1 | 17.23 | 830.8 | 747.9 | 564703 | 0.57 | 152.0 | 182.7 | 442.1 | 29.13 | 38.61 | 16.94 | 15.38 | 3.00 | 114.74 | 3569.5 |
| BHF-01 ap12 | 392016 | 1041.1 | 183.88 | 107.71 | 24.08 | 201.44 | 36.89 | 344.4 | 12.98 | 771.7 | 764.2 | 564676 | 0.60 | 156.5 | 186.6 | 388.9 | 29.41 | 23.99 | 14.88 | 6.81 | 2.88 | 91.31 | 3917.3 |
| BHF-01 ap13 | 393728 | 691.6 | 159.12 | 99.92 | 34.28 | 160.37 | 32.52 | 227.6 | 14.68 | 571.0 | 537.6 | 565120 | 0.52 | 106.5 | 142.2 | 452.3 | 25.00 | 26.33 | 14.39 | 8.62 | 1.94 | 98.05 | 2747.6 |
| BHF-01 ap14 | 390248 | 988.4 | 197.51 | 125.33 | 38.87 | 196.64 | 40.91 | 351.0 | 19.54 | 2007.7 | 711.6 | 565192 | 0.68 | 147.3 | 180.3 | 500.9 | 30.23 | 31.12 | 18.51 | 12.46 | 0.77 | 127.25 | 3822.2 |
| BHF-01 ap15 | 393944 | 834.2 | 172.85 | 104.81 | 27.79 | 199.23 | 35.09 | 248.1 | 12.24 | 514.7 | 700.0 | 564989 | 0.83 | 134.1 | 187.1 | 387.8 | 29.18 | 46.63 | 13.74 | 9.41 | 3.28 | 85.23 | 2318.7 |
| BHF-01 ap16 | 391475 | 1978.0 | 224.30 | 124.16 | 59.57 | 285.07 | 44.11 | 697.0 | 14.97 | 434.7 | 1327.6 | 563664 | 7.48 | 280.8 | 291.3 | 492.8 | 38.70 | 86.19 | 16.19 | 24.96 | 2.68 | 105.45 | 3418.0 |
| BHF-01 ap17 | 393949 | 801.9 | 155.92 | 91.53 | 25.99 | 171.16 | 30.63 | 260.8 | 11.13 | 604.2 | 613.2 | 565118 | 0.39 | 122.2 | 155.1 | 398.5 | 24.79 | 20.45 | 11.97 | 6.52 | 2.86 | 76.58 | 2447.1 |
| BHF-01 ap18 | 393108 | 1006.5 | 200.95 | 119.74 | 33.16 | 205.71 | 39.17 | 315.4 | 16.50 | 610.9 | 762.4 | 564765 | 0.44 | 152.5 | 195.8 | 384.3 | 31.37 | 47.04 | 16.76 | 8.82 | 3.40 | 112.31 | 2883.5 |
| BHF-01 ap19 | 392118 | 1262.6 | 246.33 | 157.76 | 40.31 | 241.05 | 50.80 | 459.0 | 23.43 | 927.0 | 871.0 | 564548 | 0.41 | 178.7 | 213.1 | 416.1 | 36.71 | 45.61 | 22.69 | 16.00 | 3.06 | 162.01 | 2959.6 |
| BHF-01 ap20 | 394708 | 351.5 | 15.88 | 7.67 | 61.07 | 21.46 | 2.83 | 183.1 | 0.79 | 1102.2 | 147.9 | 566112 | 1.64 | 39.3 | 25.1 | 819.6 | 2.78 | 0.31 | 0.92 | 0.21 | 23.63 | 5.83 | 1364.8 |
| BHF-01 ap21 | 393255 | 769.5 | 163.12 | 89.23 | 26.32 | 191.01 | 31.25 | 226.6 | 9.82 | 537.2 | 662.3 | 564947 | 0.64 | 125.8 | 171.7 | 374.3 | 26.85 | 27.36 | 11.30 | 5.22 | 2.76 | 66.90 | 3278.3 |
| BHF-01 ap22 | 391121 | 1020.4 | 203.76 | 120.88 | 37.56 | 208.56 | 40.41 | 344.0 | 17.23 | 732.8 | 746.2 | 564426 | 0.93 | 151.4 | 190.2 | 471.2 | 31.07 | 42.74 | 17.79 | 14.18 | 3.46 | 118.14 | 4939.9 |
| BHF-01 ap23 | 391854 | 867.0 | 182.29 | 112.69 | 28.53 | 194.53 | 37.38 | 275.2 | 15.96 | 746.5 | 684.4 | 564720 | 0.69 | 132.0 | 177.8 | 404.3 | 29.01 | 26.89 | 15.86 | 10.23 | 2.91 | 110.30 | 4370.6 |
| BHF-01 ap24 | 392776 | 926.6 | 212.91 | 130.78 | 27.50 | 215.75 | 42.51 | 288.5 | 17.63 | 843.6 | 731.8 | 564908 | 0.54 | 144.0 | 193.7 | 361.1 | 32.93 | 20.84 | 18.10 | 9.48 | 2.55 | 119.97 | 2974.0 |
| BHF-01 ap25 | 392304 | 971.5 | 185.39 | 113.79 | 27.97 | 190.72 | 37.75 | 317.8 | 15.20 | 711.5 | 714.5 | 564725 | 0.62 | 147.1 | 181.7 | 420.5 | 29.15 | 25.43 | 15.77 | 9.25 | 1.40 | 103.63 | 3749.9 |
| BHF-04 ap1 | 391626 | 3865.7 | 282.07 | 158.08 | 40.33 | 344.92 | 53.15 | 1411.0 | 23.87 | 557.0 | 2105.6 | 562491 | 0.37 | 490.6 | 408.6 | 310.9 | 47.46 | 188.27 | 22.32 | 7.88 | 5.22 | 153.10 | 405.9 |
| BHF-04 ap2 | 393053 | 2388.2 | 238.60 | 135.40 | 24.91 | 289.03 | 46.53 | 833.2 | 16.48 | 743.0 | 1431.7 | 563935 | 0.40 | 323.2 | 297.6 | 338.9 | 39.09 | 66.41 | 17.23 | 9.61 | 5.84 | 114.96 | 672.3 |
| BHF-04 ap3 | 394423 | 1674.5 | 220.58 | 124.76 | 16.91 | 251.78 | 42.80 | 569.8 | 14.06 | 536.2 | 1111.2 | 564536 | 0.54 | 237.2 | 253.9 | 206.2 | 36.17 | 94.99 | 16.48 | 4.59 | 5.59 | 102.53 | 519.0 |
| BHF-04 ap4 | 394965 | 1715.4 | 204.38 | 107.25 | 20.94 | 252.23 | 38.17 | 539.4 | 11.96 | 444.7 | 1102.3 | 564542 | | | | | | | | | | | |

Appendix C: Eastern Sunda arc apatite trace element chemistry (LA-ICP-MS)

| Analysis ID | Ca | Ce | Dy | Er | Eu | Gd | Ho | La | Lu | Nb | Nd | P | Pb | Pr | Sm | Sr | Tb | Th | Tm | U | V | Yb | Fe |
|-------------|--------|--------|--------|--------|-------|--------|-------|-------|-------|--------|--------|--------|-------|-------|-------|--------|-------|--------|-------|-------|--------|--------|--------|
| BHF-04 ap6 | 394239 | 1083.3 | 250.14 | 163.08 | 26.27 | 249.94 | 51.47 | 327.1 | 26.70 | 862.2 | 845.6 | 564989 | 0.44 | 168.6 | 225.3 | 418.6 | 38.13 | 100.55 | 24.18 | 6.56 | 1.25 | 171.11 | 722.8 |
| BHF-04 ap7 | 394892 | 1161.2 | 182.65 | 110.32 | 21.50 | 205.40 | 36.06 | 371.4 | 16.87 | 573.7 | 825.4 | 565042 | 0.50 | 171.3 | 195.7 | 267.4 | 28.90 | 41.56 | 15.85 | 3.46 | 2.82 | 107.74 | 725.4 |
| BHF-04 ap8 | 395313 | 898.8 | 181.28 | 102.20 | 15.45 | 204.73 | 35.22 | 254.2 | 11.07 | 528.8 | 678.8 | 565284 | 0.30 | 137.2 | 182.1 | 340.7 | 29.07 | 14.95 | 13.12 | 2.83 | 1.66 | 76.96 | 681.8 |
| BHF-04 ap9 | 393558 | 1544.7 | 215.66 | 120.90 | 20.94 | 243.38 | 41.67 | 518.0 | 12.96 | 991.8 | 1048.5 | 564774 | 0.47 | 221.9 | 241.6 | 355.0 | 35.27 | 51.31 | 15.33 | 4.35 | 5.99 | 92.22 | 880.8 |
| BHF-04 ap10 | 392196 | 2526.6 | 297.76 | 172.52 | 27.93 | 334.50 | 58.21 | 864.8 | 21.43 | 985.7 | 1582.3 | 563720 | 0.63 | 345.3 | 342.3 | 482.8 | 48.14 | 118.25 | 24.03 | 8.77 | 7.85 | 148.71 | 804.0 |
| BHF-04 ap11 | 394211 | 1559.4 | 256.47 | 140.31 | 17.89 | 294.50 | 48.99 | 481.0 | 15.00 | 599.6 | 1133.5 | 564544 | 0.33 | 235.0 | 284.9 | 282.0 | 41.73 | 66.19 | 18.86 | 4.15 | 6.04 | 109.94 | 648.2 |
| BHF-04 ap12 | 394925 | 1052.1 | 224.62 | 141.00 | 19.62 | 223.13 | 46.95 | 328.0 | 20.03 | 763.2 | 798.7 | 565174 | 0.34 | 161.2 | 205.2 | 284.6 | 33.06 | 20.43 | 2.62 | 2.16 | 136.47 | 506.7 | |
| BHF-04 ap13 | 395332 | 1940.1 | 236.90 | 144.12 | 31.63 | 258.09 | 47.44 | 644.5 | 22.83 | 716.1 | 1248.4 | 564261 | 0.41 | 274.0 | 271.3 | 295.9 | 38.14 | 107.30 | 21.69 | 7.23 | 3.74 | 154.60 | 742.6 |
| BHF-04 ap15 | 394289 | 1058.3 | 269.79 | 169.29 | 36.23 | 277.47 | 53.44 | 282.8 | 25.03 | 581.1 | 926.8 | 564479 | 0.33 | 177.8 | 256.7 | 274.7 | 42.54 | 917.13 | 24.12 | 13.24 | 3.70 | 168.31 | 673.1 |
| BHF-04 ap16 | 398971 | 2675.5 | 394.01 | 233.52 | 18.21 | 418.02 | 76.64 | 867.6 | 30.56 | 1776.2 | 1779.4 | 563605 | 0.62 | 384.3 | 413.6 | 415.5 | 60.57 | 79.03 | 32.27 | 7.72 | 5.66 | 207.54 | 1556.5 |
| BHF-04 ap17 | 393974 | 1659.9 | 164.21 | 90.81 | 22.31 | 214.04 | 30.85 | 562.9 | 11.26 | 821.2 | 1065.8 | 564729 | 0.65 | 236.2 | 224.1 | 302.7 | 28.27 | 53.95 | 12.23 | 3.14 | 4.13 | 76.11 | 681.5 |
| BHF-04 ap18 | 394807 | 953.0 | 203.18 | 116.23 | 19.95 | 221.17 | 39.35 | 288.2 | 13.89 | 698.5 | 765.5 | 565208 | 0.39 | 148.1 | 201.1 | 342.4 | 32.42 | 29.67 | 15.57 | 2.61 | 1.84 | 96.42 | 795.6 |
| BHF-04 ap20 | 395256 | 1278.6 | 226.10 | 124.74 | 15.13 | 250.11 | 43.77 | 355.4 | 13.96 | 388.2 | 898.9 | 564877 | 0.22 | 200.1 | 244.6 | 150.7 | 36.27 | 37.87 | 16.62 | 5.85 | 3.46 | 102.57 | 315.7 |
| BHF-04 ap21 | 393916 | 1752.6 | 172.82 | 96.57 | 25.61 | 216.62 | 33.06 | 592.2 | 11.84 | 760.2 | 1107.4 | 564621 | 0.34 | 245.6 | 236.6 | 279.5 | 29.06 | 61.53 | 12.80 | 4.24 | 3.24 | 78.55 | 744.2 |
| BHF-04 ap22 | 393619 | 1831.6 | 317.48 | 193.48 | 23.59 | 327.29 | 65.09 | 592.5 | 25.64 | 789.5 | 1294.3 | 564289 | 0.66 | 263.7 | 308.6 | 293.5 | 48.86 | 67.77 | 27.64 | 7.70 | 7.53 | 176.94 | 428.3 |
| BHF-04 ap25 | 395431 | 749.9 | 182.09 | 98.94 | 10.79 | 212.35 | 34.35 | 196.3 | 10.11 | 626.3 | 702.0 | 565431 | 0.50 | 128.9 | 195.2 | 368.1 | 30.22 | 7.13 | 12.78 | 1.33 | 0.83 | 75.77 | 482.4 |
| BHF-04 ap26 | 394130 | 1408.8 | 336.77 | 230.11 | 37.79 | 318.74 | 69.73 | 423.6 | 39.65 | 595.5 | 1047.3 | 564454 | 0.46 | 219.6 | 273.0 | 366.5 | 51.09 | 87.24 | 34.93 | 11.00 | 0.82 | 296.38 | 612.9 |
| BHF-04 ap27 | 393146 | 1780.9 | 279.84 | 157.13 | 21.70 | 315.42 | 54.58 | 526.0 | 17.73 | 1006.7 | 1253.0 | 564445 | 0.40 | 264.6 | 296.0 | 312.7 | 45.66 | 73.10 | 20.39 | 4.81 | 9.39 | 124.46 | 803.9 |
| BHF-04 ap30 | 392901 | 2509.0 | 350.82 | 207.77 | 18.64 | 367.27 | 69.89 | 842.9 | 25.26 | 640.4 | 1577.4 | 563578 | 0.565 | 347.3 | 373.0 | 309.7 | 55.14 | 83.96 | 28.52 | 9.42 | 4.55 | 179.42 | 509.3 |
| BHF-04 ap32 | 394182 | 1312.6 | 181.72 | 100.46 | 22.52 | 209.72 | 34.93 | 415.8 | 12.87 | 545.7 | 919.4 | 564925 | 0.58 | 194.6 | 215.9 | 292.8 | 29.65 | 53.38 | 13.88 | 4.17 | 2.77 | 87.55 | 510.3 |
| BHF-04 ap33 | 393181 | 74.9 | 23.46 | 15.83 | 9.33 | 19.28 | 5.10 | 32.2 | 2.74 | 1653.6 | 47.4 | 566251 | 4.49 | 10.1 | 14.3 | 1516.2 | 3.39 | 2.71 | 2.40 | 9.96 | 7.09 | 17.32 | 2082.8 |
| BHF-04 ap34 | 395567 | 688.0 | 190.31 | 110.72 | 11.84 | 187.01 | 38.19 | 194.9 | 12.19 | 611.3 | 543.8 | 565336 | 0.19 | 106.6 | 154.2 | 344.3 | 29.30 | 20.96 | 14.44 | 1.81 | 2.19 | 87.68 | 566.9 |
| JEM-02 ap1 | 396317 | 1030.7 | 148.81 | 77.57 | 12.84 | 193.56 | 27.77 | 347.3 | 7.54 | 215.4 | 674.6 | 565270 | 0.24 | 145.8 | 168.8 | 116.3 | 25.83 | 18.51 | 9.41 | 5.73 | 5.42 | 51.64 | 129.1 |
| JEM-02 ap2 | 394072 | 1165.7 | 229.09 | 127.95 | 17.83 | 262.03 | 44.22 | 400.9 | 13.62 | 755.2 | 793.8 | 564986 | 1.21 | 166.3 | 215.6 | 191.2 | 37.60 | 11.27 | 16.32 | 13.33 | 2.96 | 97.99 | 1375.8 |
| JEM-02 ap3 | 395392 | 518.9 | 220.42 | 117.69 | 15.24 | 237.01 | 42.00 | 152.6 | 12.29 | 442.6 | 486.5 | 565460 | 1.94 | 86.5 | 172.1 | 134.0 | 35.50 | 15.64 | 14.64 | 4.93 | 2.30 | 88.48 | 1345.5 |
| JEM-02 ap4 | 392914 | 1522.3 | 303.56 | 195.49 | 21.47 | 287.61 | 63.23 | 657.4 | 23.90 | 914.5 | 896.9 | 564512 | 1.15 | 194.5 | 239.4 | 276.1 | 45.99 | 32.60 | 27.17 | 19.73 | 10.85 | 175.80 | 1663.2 |
| JEM-02 ap5 | 392719 | 1848.5 | 454.75 | 234.63 | 24.51 | 540.51 | 86.67 | 514.6 | 22.53 | 840.8 | 1573.6 | 563919 | 0.56 | 299.1 | 452.6 | 143.3 | 76.85 | 29.48 | 28.91 | 15.88 | 13.31 | 171.59 | 988.9 |
| JEM-02 ap6 | 394182 | 708.2 | 230.99 | 127.26 | 22.85 | 240.57 | 44.64 | 243.6 | 14.12 | 683.2 | 559.8 | 565242 | 1.58 | 107.7 | 184.7 | 230.7 | 36.80 | 6.34 | 16.62 | 9.25 | 1.00 | 102.01 | 2002.6 |
| JEM-02 ap7 | 392630 | 1652.0 | 205.17 | 121.64 | 20.00 | 233.32 | 40.64 | 706.1 | 15.42 | 1042.4 | 887.0 | 564629 | 1.56 | 201.9 | 215.2 | 261.6 | 33.34 | 19.29 | 16.31 | 13.51 | 7.67 | 107.06 | 1937.7 |
| MLG-01 ap2 | 391810 | 809.8 | 279.73 | 136.22 | 25.15 | 345.82 | 52.30 | 256.3 | 10.59 | 692.2 | 818.5 | 564983 | 2.20 | 140.1 | 251.1 | 236.7 | 46.37 | 5.83 | 15.38 | 1.79 | 15.90 | 80.96 | 4382.9 |
| MLG-01 ap3 | 392047 | 746.5 | 233.80 | 113.91 | 23.12 | 288.03 | 43.21 | 242.2 | 8.75 | 755.4 | 710.1 | 564799 | 2.88 | 123.8 | 212.9 | 261.4 | 38.68 | 4.46 | 12.77 | 1.70 | 19.60 | 67.11 | 4240.3 |
| MLG-01 ap4 | 390083 | 750.8 | 239.85 | 112.94 | 25.21 | 300.59 | 44.77 | 236.7 | 7.82 | 954.1 | 739.0 | 564544 | 0.93 | 126.9 | 221.7 | 214.5 | 40.96 | 4.37 | 12.45 | 1.51 | 15.28 | 63.59 | 6258.3 |
| MLG-01 ap5 | 391219 | 719.1 | 235.26 | 118.92 | 22.11 | 290.14 | 44.95 | 225.0 | 9.01 | 768.8 | 715.7 | 564659 | 2.22 | 123.9 | 219.1 | 218.5 | 40.06 | 3.82 | 12.95 | 1.26 | 20.33 | 69.30 | 5260.0 |
| MLG-01 ap6 | 391464 | 788.1 | 256.34 | 126.99 | 23.03 | 321.14 | 48.61 | 242.9 | 9.44 | 629.7 | 764.7 | 564537 | 2.44 | 129.4 | 233.0 | 237.4 | 42.72 | 4.46 | 13.83 | 1.49 | 11.44 | 72.97 | 5056.2 |
| MLG-01 ap7 | 392586 | 679.6 | 226.83 | 111.75 | 22.77 | 276.14 | 42.34 | 216.5 | 8.55 | 592.9 | 680.4 | 564947 | 1.76 | 115.8 | 206.3 | 225.5 | 37.23 | 3.95 | 12.40 | 1.35 | 20.37 | 65.59 | 4016.9 |
| MLG-01 ap9 | 389792 | 753.0 | 242.43 | 114.62 | 24.73 | 302.54 | 44.55 | 235.3 | 7.80 | 1797.5 | 742.1 | 565086 | 0.79 | 127.9 | 223.0 | 246.1 | 42.16 | 4.74 | 12.24 | 1.82 | 24.44 | 63.17 | 5110.3 |
| MLG-01 ap10 | 392206 | 773.2 | 238.92 | 117.86 | 23.06 | 290.78 | 45.37 | 253.6 | 9.08 | 636.4 | 731.9 | 564718 | 2.24 | 131.0 | 220.6 | 254.0 | 39.84 | 4.49 | 13.27 | 1.57 | 18.13 | 69.40 | 4189.7 |
| MLG-01 ap11 | 391163 | 616.7 | 234.35 | 125.12 | 24.56 | 267.81 | 47.27 | 192.0 | 8.97 | 1033.0 | 626.0 | 564926 | 0.61 | 105.6 | 193.3 | 207.5 | 39.11 | 5.28 | 14.21 | 2.04 | 12.04 | 72.05 | 5082.9 |
| MLG-01 ap12 | 392368 | 688.9 | 225.40 | 109.98 | 23.84 | 283.66 | 42.98 | 220.4 | 8.58 | 644.0 | 682.5 | 564831 | 2.03 | 118.1 | 204.6 | 241.7 | 38.19 | 4.41 | 12.14 | 1.40 | 20.23 | 64.98 | 4161.4 |
| MLG-01 ap13 | 391861 | 723.0 | 237.65 | 115.08 | 23.75 | 287.76 | 44.85 | 230.0 | 8.81 | 775.5 | 709.1 | 564786 | 2.79 | 121.3 | 219.8 | 247.0 | 39.37 | 4.70 | 12.85 | 1.50 | 12.83 | 67.77 | 4485.3 |
| MLG-01 ap15 | 391613 | 635.9 | 247.11 | 119.25 | 23.31 | 299.65 | 47.15 | 199.9 | 8.15 | 651.7 | 677.1 | 564698 | 0.54 | 112.9 | 214.4 | 198.8 | 40.89 | 4.34 | 13.42 | 1.44 | 23.05 | 68.92 | 5100.3 |
| MLG-01 ap16 | 391845 | 876.0 | 261.89 | 129.75 | 24.90 | 320.38 | 50.49 | 290.8 | 9.88 | 691.8 | 819.1 | 564573 | 2.76 | 143.2 | 238.7 | 276.1 | 44.16 | 5.34 | 14.49 | 2.01 | 8.59 | 78.04 | 4291.3 |
| MLG-01 ap17 | 391612 | 678.4 | 229.62 | 110.44 | 23.98 | 284.54 | 43.61 | 213.6 | 7.36 | 624.1 | 677.5 | 564680 | 0.54 | 117.1 | 208.1 | 203.8 | 38.30 | 4.12 | 11.79 | 1.39 | 17.55 | 59.51 | 5151.8 |
| MLG-01 ap18 | 391114 | 764.7 | 266.82 | 129.84 | 25.03 | 327.82 | 51.36 | 238.7 | 9.45 | 723.4 | 771.8 | 564566 | 0.58 | 132.4 | 242.9 | 242.9 | 45.28 | 4.89 | 14.09 | 1.77 | 10.91 | 73.01 | 5235.3 |

*All elements are in ppm.

Appendix C: Eastern Sunda arc apatite trace element chemistry (LA-ICP-MS)

| Analysis ID | Ca | Ce | Dy | Er | Eu | Gd | Ho | La | Lu | Nb | Nd | P | Pb | Pr | Sm | Sr | Tb | Th | Tm | U | V | Yb | Fe |
|-------------|--------|--------|--------|--------|-------|--------|-------|--------|-------|--------|--------|--------|--------|-------|-------|-------|-------|-------|-------|------|--------|--------|---------|
| MLG-01 ap19 | 392165 | 729.8 | 237.16 | 118.67 | 22.88 | 296.53 | 45.21 | 233.8 | 8.72 | 666.8 | 729.2 | 564758 | 1.83 | 125.4 | 219.8 | 227.4 | 39.69 | 5.08 | 12.71 | 1.55 | 10.77 | 67.64 | 4274.5 |
| MLG-01 ap20 | 393277 | 985.3 | 326.55 | 163.74 | 31.18 | 407.37 | 63.36 | 312.5 | 12.42 | 604.8 | 994.7 | 562608 | 2.41 | 170.3 | 303.8 | 239.1 | 55.90 | 11.23 | 18.05 | 2.71 | 31.93 | 95.70 | 14269.0 |
| MLG-01 ap21 | 391637 | 777.6 | 252.04 | 123.61 | 23.62 | 308.91 | 47.64 | 254.8 | 9.32 | 674.2 | 769.9 | 564600 | 2.78 | 132.3 | 229.5 | 251.4 | 42.33 | 5.78 | 13.49 | 1.70 | 11.37 | 71.63 | 4756.2 |
| MLG-01 ap22 | 393032 | 807.6 | 270.99 | 137.90 | 28.33 | 330.89 | 52.34 | 258.0 | 10.87 | 390.2 | 789.7 | 564691 | 0.62 | 138.0 | 241.0 | 212.1 | 46.53 | 7.33 | 15.51 | 2.13 | 12.60 | 82.04 | 3141.7 |
| MLG-01 ap23 | 390427 | 637.2 | 211.86 | 98.19 | 23.40 | 272.30 | 40.02 | 195.9 | 6.70 | 1456.7 | 662.0 | 565085 | 0.67 | 113.1 | 203.1 | 226.3 | 36.74 | 4.97 | 10.42 | 1.86 | 11.83 | 54.67 | 5216.3 |
| MLG-01 ap26 | 391934 | 811.1 | 280.12 | 129.39 | 24.69 | 311.86 | 49.80 | 260.5 | 10.11 | 647.6 | 783.2 | 564614 | 2.22 | 137.4 | 236.9 | 234.7 | 43.41 | 4.68 | 14.52 | 2.01 | 5.80 | 76.72 | 4403.3 |
| MLG-01 ap27 | 390603 | 784.4 | 261.65 | 129.36 | 25.48 | 321.24 | 49.64 | 248.2 | 9.41 | 1286.9 | 776.5 | 564917 | 3.31 | 135.8 | 242.2 | 254.0 | 43.84 | 5.36 | 14.22 | 1.64 | 17.94 | 74.62 | 4897.1 |
| MLG-01 ap28 | 391988 | 728.5 | 230.63 | 115.09 | 24.01 | 282.39 | 43.94 | 232.2 | 8.77 | 785.1 | 703.6 | 564822 | 2.96 | 121.7 | 213.2 | 259.6 | 38.34 | 4.53 | 12.69 | 1.57 | 15.59 | 67.10 | 4295.6 |
| MLG-01 ap29 | 391851 | 753.9 | 242.66 | 120.30 | 23.53 | 296.54 | 46.56 | 244.3 | 9.30 | 785.3 | 736.3 | 564755 | 2.89 | 128.6 | 222.9 | 259.2 | 40.91 | 4.58 | 13.29 | 1.58 | 16.25 | 70.61 | 4371.6 |
| MLG-01 ap30 | 391275 | 827.5 | 257.85 | 127.39 | 24.37 | 315.95 | 49.84 | 272.3 | 9.55 | 684.6 | 805.8 | 564889 | 2.55 | 138.8 | 242.2 | 256.4 | 43.74 | 5.06 | 13.98 | 2.40 | 9.55 | 75.26 | 5068.9 |
| MLG-01 ap31 | 389490 | 838.9 | 279.25 | 134.55 | 26.60 | 335.06 | 52.35 | 262.8 | 9.39 | 1729.7 | 830.4 | 564861 | 2.69 | 143.8 | 255.1 | 229.6 | 46.79 | 7.39 | 14.67 | 2.13 | 24.11 | 75.06 | 5346.7 |
| MLG-01 ap32 | 391248 | 876.7 | 282.76 | 140.11 | 27.24 | 348.79 | 53.93 | 281.4 | 10.68 | 821.9 | 866.1 | 564511 | 2.12 | 150.0 | 260.2 | 236.0 | 47.67 | 6.49 | 15.35 | 1.90 | 13.18 | 80.65 | 4715.4 |
| PCT-01 ap2 | 391268 | 2471.8 | 316.37 | 158.30 | 24.54 | 419.01 | 60.22 | 893.6 | 13.95 | 673.5 | 1696.6 | 563327 | 0.50 | 353.3 | 378.7 | 238.5 | 55.06 | 11.09 | 18.54 | 3.26 | 2.39 | 101.92 | 2513.2 |
| PCT-01 ap3 | 396312 | 322.9 | 86.93 | 32.90 | 72.21 | 145.64 | 14.23 | 74.8 | 2.46 | 401.7 | 377.5 | 565711 | 205.17 | 63.5 | 134.1 | 274.3 | 18.04 | 11.27 | 3.71 | 9.54 | -0.185 | 20.02 | 521.5 |
| PCT-01 ap4 | 389527 | 3551.4 | 404.51 | 187.08 | 27.34 | 571.32 | 73.88 | 1272.1 | 15.29 | 839.0 | 2488.2 | 562207 | 2.48 | 510.8 | 557.4 | 197.8 | 72.51 | 14.85 | 21.16 | 3.84 | 3.91 | 116.25 | 2333.4 |
| PCT-01 ap6 | 390736 | 2727.3 | 356.88 | 177.06 | 23.52 | 478.45 | 67.64 | 986.4 | 14.52 | 824.4 | 1885.8 | 563095 | 1.02 | 386.5 | 438.7 | 203.8 | 62.81 | 12.28 | 19.90 | 3.45 | 6.28 | 110.59 | 2380.4 |
| PCT-01 ap7 | 391224 | 2484.6 | 320.83 | 162.57 | 26.41 | 413.32 | 60.32 | 892.9 | 14.40 | 746.5 | 1679.7 | 563364 | 1.16 | 349.8 | 380.0 | 243.4 | 56.00 | 17.23 | 19.20 | 3.74 | 2.56 | 108.14 | 2427.3 |
| PCT-01 ap8 | 391198 | 2560.4 | 334.32 | 164.09 | 26.99 | 438.85 | 61.73 | 914.4 | 14.31 | 639.6 | 1780.9 | 563197 | 3.84 | 367.5 | 396.1 | 240.7 | 56.84 | 15.37 | 19.31 | 3.93 | 3.12 | 107.07 | 2454.0 |
| PCT-01 ap11 | 391043 | 2659.3 | 341.63 | 175.62 | 28.41 | 456.30 | 66.46 | 951.1 | 15.29 | 655.0 | 1820.6 | 563093 | 7.72 | 380.0 | 413.3 | 237.6 | 60.07 | 14.95 | 20.54 | 4.24 | 2.25 | 113.99 | 2431.8 |
| PCT-01 ap12 | 391439 | 2365.8 | 303.44 | 152.97 | 24.22 | 400.72 | 57.86 | 857.4 | 13.45 | 669.8 | 363.2 | 563447 | 0.51 | 336.8 | 363.2 | 242.1 | 52.80 | 10.91 | 17.88 | 3.14 | 4.51 | 97.24 | 2508.9 |
| PCT-01 ap14 | 390870 | 2749.8 | 358.10 | 173.67 | 24.15 | 469.98 | 67.45 | 995.9 | 14.59 | 816.6 | 1880.9 | 563111 | 1.47 | 390.2 | 434.5 | 204.3 | 62.36 | 12.70 | 20.07 | 3.35 | 8.07 | 108.97 | 2219.0 |
| PCT-01 ap15 | 389389 | 3176.8 | 423.09 | 208.13 | 26.15 | 559.25 | 78.52 | 1144.5 | 17.67 | 1758.9 | 2248.5 | 562830 | 93.12 | 458.4 | 512.0 | 195.9 | 73.36 | 12.87 | 23.88 | 3.93 | 4.33 | 132.79 | 2575.4 |
| PCT-02 ap1 | 392771 | 1104.9 | 307.42 | 151.83 | 41.85 | 387.35 | 58.68 | 348.2 | 11.44 | 429.4 | 1088.4 | 564292 | 0.21 | 188.9 | 306.4 | 345.3 | 52.56 | 3.05 | 16.70 | 0.95 | 2.15 | 87.88 | 3002.2 |
| PCT-02 ap2 | 392648 | 1104.8 | 294.08 | 137.03 | 39.45 | 359.12 | 54.12 | 325.9 | 10.35 | 485.1 | 1005.0 | 564432 | 2.04 | 173.5 | 285.8 | 342.5 | 48.66 | 2.25 | 15.30 | 0.72 | 8.98 | 80.21 | 3122.7 |
| PCT-02 ap3 | 392287 | 1203.8 | 341.15 | 166.69 | 47.38 | 424.03 | 65.46 | 382.6 | 12.43 | 535.2 | 1194.9 | 564143 | 0.22 | 209.3 | 342.3 | 347.0 | 58.62 | 3.41 | 18.64 | 1.25 | 0.26 | 97.18 | 3119.0 |
| PCT-02 ap4 | 392251 | 1164.4 | 331.16 | 160.23 | 45.02 | 409.39 | 62.17 | 367.7 | 12.27 | 582.5 | 1134.5 | 564227 | 0.24 | 201.0 | 328.1 | 343.6 | 56.62 | 3.09 | 18.01 | 1.16 | 0.41 | 93.32 | 3207.1 |
| PCT-02 ap7 | 393091 | 991.3 | 275.48 | 134.79 | 39.40 | 346.61 | 52.48 | 317.8 | 9.91 | 417.1 | 988.1 | 564476 | 0.33 | 171.0 | 275.6 | 347.5 | 46.41 | 2.09 | 14.89 | 0.83 | 2.47 | 79.18 | 2921.8 |
| PCT-02 ap9 | 392821 | 1089.6 | 300.82 | 149.03 | 42.77 | 377.65 | 57.66 | 344.3 | 10.80 | 429.5 | 1080.5 | 564320 | 0.35 | 185.8 | 304.0 | 342.6 | 51.98 | 2.62 | 16.61 | 0.90 | 1.50 | 85.64 | 2984.0 |
| PCT-02 ap11 | 392093 | 1318.6 | 365.38 | 179.95 | 45.76 | 458.18 | 69.11 | 414.6 | 13.15 | 529.0 | 1302.3 | 563983 | 0.20 | 228.0 | 365.9 | 329.1 | 62.70 | 3.67 | 19.81 | 1.24 | 0.32 | 105.02 | 3111.9 |
| PCT-02 ap12 | 392652 | 1102.1 | 306.16 | 150.71 | 43.94 | 388.70 | 57.89 | 352.7 | 11.42 | 472.0 | 1092.1 | 564294 | 0.49 | 194.4 | 312.0 | 347.0 | 52.07 | 3.01 | 16.67 | 0.91 | 6.07 | 88.79 | 3054.1 |
| PCT-02 ap13 | 392565 | 1175.5 | 328.91 | 163.04 | 45.18 | 425.42 | 62.71 | 371.0 | 12.11 | 420.3 | 1150.2 | 564157 | 3.90 | 201.7 | 323.2 | 342.5 | 29.7 | 17.97 | 17.97 | 1.08 | 0.48 | 92.53 | 3076.9 |
| PCT-02 ap14 | 392066 | 1375.4 | 386.38 | 188.38 | 47.20 | 486.73 | 73.75 | 433.8 | 13.74 | 454.1 | 1369.5 | 563947 | 0.21 | 236.7 | 388.2 | 326.6 | 65.67 | 3.68 | 20.34 | 1.28 | 0.50 | 108.32 | 3106.4 |
| PCT-02 ap15 | 392935 | 988.7 | 273.37 | 136.90 | 45.59 | 331.34 | 52.03 | 304.0 | 10.88 | 484.9 | 952.0 | 564509 | 1.43 | 164.5 | 270.1 | 343.2 | 45.94 | 2.96 | 15.75 | 0.99 | 4.59 | 82.17 | 3093.1 |
| PCT-02 ap16 | 392885 | 1003.6 | 287.15 | 140.58 | 40.45 | 362.07 | 54.15 | 324.1 | 10.74 | 462.3 | 1010.3 | 564435 | 3.06 | 175.0 | 286.9 | 340.8 | 48.76 | 2.72 | 15.38 | 0.88 | 5.91 | 81.78 | 3020.6 |
| PCT-02 ap17 | 392533 | 1041.8 | 295.39 | 144.08 | 40.72 | 370.42 | 55.76 | 336.0 | 10.99 | 632.1 | 1029.1 | 564452 | 2.37 | 179.5 | 300.2 | 342.9 | 50.38 | 2.39 | 15.60 | 0.90 | 0.43 | 86.35 | 3075.9 |
| PCT-02 ap19 | 393637 | 766.6 | 224.65 | 111.99 | 46.78 | 281.55 | 42.91 | 236.4 | 8.94 | 474.9 | 769.8 | 564720 | 1.01 | 134.4 | 218.9 | 368.3 | 37.99 | 2.94 | 12.83 | 0.93 | 8.68 | 68.96 | 3022.8 |
| PCT-02 ap20 | 392541 | 1201.9 | 345.18 | 165.76 | 47.07 | 426.10 | 64.41 | 379.9 | 12.64 | 413.4 | 1199.2 | 564105 | 0.21 | 209.7 | 340.5 | 345.5 | 58.27 | 3.13 | 18.52 | 1.17 | 0.23 | 97.29 | 3023.3 |
| PCT-02 ap21 | 392772 | 1119.0 | 316.61 | 153.67 | 44.15 | 397.86 | 59.99 | 355.8 | 11.50 | 413.4 | 1141.0 | 564222 | 0.20 | 199.8 | 327.8 | 343.8 | 55.15 | 3.04 | 17.08 | 1.12 | 0.27 | 89.40 | 2892.2 |
| PCT-02 ap22 | 392778 | 1038.8 | 290.50 | 140.04 | 40.32 | 366.82 | 55.20 | 331.9 | 10.65 | 455.4 | 1025.1 | 564383 | 8.02 | 179.4 | 288.0 | 338.7 | 49.33 | 2.85 | 15.70 | 0.90 | 8.10 | 83.67 | 3101.9 |
| PCT-02 ap23 | 392812 | 1036.6 | 285.38 | 135.21 | 39.80 | 357.58 | 54.03 | 326.3 | 10.55 | 424.9 | 1011.6 | 564385 | 8.14 | 178.0 | 279.7 | 337.8 | 48.81 | 2.59 | 15.29 | 0.87 | 3.45 | 83.37 | 3156.0 |
| PCT-02 ap24 | 392068 | 1141.0 | 321.31 | 158.28 | 47.49 | 403.00 | 59.25 | 354.5 | 11.71 | 680.1 | 1107.8 | 564282 | 11.63 | 200.0 | 331.4 | 334.9 | 53.62 | 4.08 | 16.42 | 1.13 | 0.72 | 90.81 | 3310.5 |
| PCT-02 ap25 | 392018 | 1376.8 | 387.45 | 188.86 | 57.83 | 497.63 | 73.72 | 430.9 | 14.20 | 436.3 | 1369.0 | 563810 | 0.36 | 240.2 | 393.4 | 334.6 | 67.38 | 5.27 | 21.45 | 1.60 | 0.86 | 114.03 | 3159.9 |
| PCT-02 ap26 | 392503 | 1176.9 | 335.04 | 161.32 | 45.42 | 423.49 | 63.37 | 376.9 | 12.22 | 429.1 | 1174.2 | 564136 | 1.38 | 205.9 | 334.9 | 335.5 | 57.67 | 3.86 | 18.10 | 1.36 | 0.82 | 95.68 | 3106.0 |
| PCT-02 ap27 | 392505 | 1220.0 | 338.29 | 166.56 | 46.75 | 433.41 | 64.51 | 384.7 | 12.46 | 430.1 | 1201.9 | 564102 | 0.33 | 210.5 | 337.1 | 346.4 | 58.76 | 3.24 | 18.11 | 1.19 | 0.24 | 97.13 | 3020.7 |

*All elements are in ppm.

Appendix C: Eastern Sunda arc apatite trace element chemistry (LA-ICP-MS)

| Analysis ID | Ca | Ce | Dy | Er | Eu | Gd | Ho | La | Lu | Nb | Nd | P | Pb | Pr | Sm | Sr | Tb | Th | Tm | U | V | Yb | Fe |
|-------------|--------|--------|--------|--------|-------|--------|-------|-------|-------|--------|--------|--------|-------|-------|-------|-------|-------|-------|-------|------|-------|--------|---------|
| PCT-02 ap28 | 392083 | 1158.7 | 327.46 | 161.19 | 48.75 | 403.93 | 62.18 | 361.1 | 11.99 | 420.3 | 1121.5 | 564207 | 0.18 | 197.3 | 321.3 | 354.0 | 55.30 | 3.26 | 18.05 | 1.19 | 0.52 | 92.68 | 2989.2 |
| PCT-02 ap29 | 391672 | 1285.7 | 374.88 | 183.48 | 50.51 | 474.12 | 71.19 | 412.2 | 13.98 | 434.7 | 1297.4 | 563814 | 19.36 | 224.4 | 370.7 | 339.8 | 64.01 | 4.11 | 20.36 | 1.35 | 0.26 | 106.42 | 3746.8 |
| PCT-02 ap30 | 392442 | 1143.6 | 320.66 | 154.63 | 46.16 | 415.12 | 60.69 | 359.4 | 11.59 | 479.3 | 1156.8 | 564197 | 6.24 | 200.4 | 325.8 | 333.4 | 55.44 | 3.30 | 17.38 | 0.87 | 17.92 | 91.34 | 3154.6 |
| PCT-02 ap31 | 391917 | 1225.8 | 348.58 | 167.92 | 47.10 | 432.71 | 65.59 | 384.9 | 12.95 | 687.4 | 1229.5 | 564152 | 0.22 | 212.3 | 350.1 | 337.2 | 59.12 | 3.18 | 18.40 | 1.17 | 0.87 | 100.61 | 3245.5 |
| PCT-02 ap32 | 393093 | 965.5 | 274.49 | 135.11 | 42.75 | 343.79 | 52.13 | 295.6 | 10.28 | 397.6 | 947.0 | 564495 | 0.42 | 164.2 | 270.9 | 348.0 | 46.14 | 2.79 | 14.77 | 1.09 | 1.23 | 81.38 | 3027.1 |
| PCT-02 ap33 | 392988 | 936.1 | 256.58 | 126.58 | 40.38 | 317.89 | 49.41 | 304.4 | 9.81 | 546.4 | 902.3 | 564628 | 0.45 | 161.7 | 252.7 | 343.6 | 44.33 | 2.13 | 14.50 | 0.65 | 10.56 | 75.87 | 2987.1 |
| PCT-02 ap34 | 392457 | 1234.0 | 344.27 | 169.28 | 48.06 | 431.97 | 66.11 | 388.6 | 12.82 | 418.0 | 1217.4 | 564062 | 6.92 | 212.7 | 342.9 | 346.5 | 58.92 | 3.56 | 18.71 | 1.22 | 0.31 | 100.67 | 3052.9 |
| PCT-02 ap35 | 393985 | 636.5 | 197.98 | 98.61 | 45.41 | 238.55 | 37.32 | 197.0 | 8.33 | 275.4 | 644.3 | 564914 | 0.17 | 111.3 | 186.9 | 359.4 | 33.06 | 2.50 | 11.68 | 0.76 | 11.99 | 64.33 | 3040.1 |
| LB001_ap_1 | 396505 | 613.6 | 102.88 | 43.91 | 21.56 | 148.97 | 18.21 | 196.2 | 3.23 | 447.2 | 462.8 | 565808 | 0.85 | 91.0 | 133.4 | 82.3 | 19.26 | 8.35 | 4.49 | 0.28 | 2.21 | 23.81 | 262.1 |
| LB001_ap_10 | 396315 | 514.7 | 138.16 | 72.57 | 16.96 | 175.69 | 26.88 | 158.4 | 5.84 | 334.1 | 440.4 | 565697 | 0.12 | 78.9 | 129.6 | 85.4 | 23.80 | 17.10 | 7.90 | 0.47 | 2.53 | 43.63 | 714.9 |
| LB001_ap_11 | 394374 | 1049.7 | 193.31 | 97.39 | 26.27 | 227.12 | 36.30 | 356.9 | 8.82 | 983.5 | 774.1 | 565320 | 0.44 | 153.9 | 199.6 | 300.3 | 32.69 | 5.29 | 11.50 | 1.54 | 35.47 | 66.60 | 735.4 |
| LB001_ap_12 | 396516 | 770.3 | 148.41 | 73.80 | 17.93 | 193.18 | 29.00 | 242.1 | 6.41 | 296.8 | 600.3 | 565223 | 0.15 | 112.6 | 158.4 | 89.8 | 26.03 | 19.07 | 8.37 | 1.73 | 3.30 | 46.60 | 116.4 |
| LB001_ap_13 | 396554 | 555.1 | 98.71 | 43.82 | 17.24 | 154.53 | 17.86 | 171.0 | 3.14 | 520.0 | 452.4 | 565891 | 0.54 | 84.2 | 126.0 | 90.4 | 18.62 | 37.37 | 4.57 | 2.69 | 1.99 | 23.75 | 130.5 |
| LB001_ap_14 | 396644 | 872.7 | 211.06 | 115.82 | 20.26 | 227.69 | 42.00 | 274.1 | 12.34 | 656.3 | 658.8 | 565439 | 0.29 | 130.2 | 185.3 | 245.3 | 34.01 | 9.21 | 14.72 | 3.09 | 7.10 | 87.25 | 109.1 |
| LB001_ap_15 | 392299 | 630.9 | 102.96 | 43.62 | 15.66 | 155.12 | 17.98 | 182.7 | 3.35 | 506.0 | 486.6 | 563001 | 0.73 | 92.9 | 129.2 | 102.8 | 19.31 | 50.34 | 4.70 | 3.15 | 36.97 | 24.17 | 17088.4 |
| LB001_ap_16 | 396304 | 770.8 | 124.63 | 60.03 | 16.14 | 176.22 | 23.38 | 251.8 | 4.77 | 440.4 | 579.8 | 565618 | 0.17 | 111.4 | 145.3 | 87.7 | 22.46 | 26.39 | 6.24 | 0.94 | 2.80 | 33.71 | 192.5 |
| LB001_ap_17 | 396006 | 513.4 | 117.47 | 56.58 | 14.40 | 168.85 | 22.21 | 146.5 | 4.40 | 790.0 | 466.3 | 565975 | 0.29 | 83.0 | 130.0 | 83.8 | 21.25 | 33.77 | 6.18 | 2.33 | 2.30 | 31.54 | 324.5 |
| LB001_ap_18 | 396443 | 634.1 | 110.04 | 49.86 | 18.54 | 163.05 | 19.77 | 197.5 | 3.75 | 507.1 | 497.2 | 565802 | 0.39 | 95.7 | 136.6 | 98.5 | 20.28 | 20.12 | 5.24 | 1.31 | 4.02 | 26.31 | 146.0 |
| LB001_ap_19 | 392033 | 1388.6 | 211.24 | 120.42 | 28.17 | 208.63 | 43.26 | 490.8 | 12.55 | 1123.2 | 881.0 | 564918 | 0.94 | 187.0 | 192.6 | 303.6 | 32.63 | 10.10 | 15.38 | 3.28 | 25.16 | 91.40 | 1780.8 |
| LB001_ap_20 | 390782 | 374.7 | 141.44 | 73.84 | 16.98 | 173.81 | 28.03 | 124.0 | 5.93 | 250.6 | 338.0 | 564600 | 0.42 | 58.5 | 113.3 | 78.5 | 23.96 | 22.37 | 8.30 | 1.08 | 5.50 | 44.38 | 7703.4 |
| LB001_ap_21 | 396508 | 583.8 | 102.91 | 43.51 | 19.79 | 155.80 | 17.80 | 192.6 | 3.03 | 522.4 | 449.5 | 565880 | 0.80 | 87.1 | 129.9 | 83.1 | 19.51 | 5.44 | 4.35 | 0.28 | 2.71 | 22.33 | 164.8 |
| LB001_ap_3 | 396116 | 624.0 | 105.55 | 44.79 | 19.22 | 164.86 | 18.75 | 195.3 | 3.47 | 463.1 | 501.0 | 565711 | 0.24 | 95.3 | 139.1 | 85.6 | 19.46 | 25.20 | 4.76 | 2.00 | 2.45 | 24.80 | 634.1 |
| LB001_ap_4 | 396420 | 635.2 | 134.59 | 68.46 | 18.37 | 189.63 | 24.02 | 194.8 | 4.10 | 452.8 | 546.9 | 565704 | 0.30 | 100.8 | 160.8 | 90.4 | 24.70 | 36.79 | 6.30 | 0.86 | 1.99 | 32.96 | 161.6 |
| LB001_ap_5 | 394216 | 1747.7 | 202.77 | 99.35 | 21.99 | 254.87 | 37.64 | 683.8 | 8.66 | 678.7 | 1013.3 | 564642 | 0.67 | 221.4 | 230.7 | 210.3 | 34.60 | 22.62 | 11.40 | 4.25 | 12.35 | 63.63 | 580.4 |
| LB001_ap_6 | 395207 | 678.5 | 125.29 | 58.84 | 16.97 | 175.57 | 23.23 | 206.7 | 4.48 | 906.9 | 536.2 | 565791 | 0.37 | 103.1 | 146.2 | 101.8 | 22.82 | 26.67 | 6.33 | 0.91 | 5.17 | 33.35 | 820.9 |
| LB001_ap_7 | 393950 | 542.9 | 134.35 | 71.60 | 14.79 | 176.72 | 26.71 | 174.3 | 6.01 | 371.8 | 446.8 | 565238 | 0.15 | 80.5 | 126.9 | 76.2 | 23.68 | 29.94 | 7.75 | 1.11 | 7.07 | 42.57 | 3450.2 |
| LB001_ap_8 | 396629 | 582.6 | 117.39 | 96.24 | 19.66 | 231.40 | 36.12 | 185.2 | 8.78 | 393.0 | 596.2 | 565801 | 0.25 | 88.8 | 129.6 | 87.9 | 19.85 | 15.00 | 5.58 | 0.39 | 2.92 | 28.70 | 201.5 |
| LB001_ap_9 | 396363 | 652.7 | 182.18 | 112.18 | 18.77 | 162.57 | 25.83 | 134.5 | 5.75 | 463.5 | 435.2 | 565868 | 8.27 | 75.5 | 136.0 | 117.0 | 24.34 | 2.80 | 7.66 | 0.18 | 2.54 | 42.60 | 153.0 |
| LB010_ap_1 | 396620 | 458.5 | 141.96 | 65.98 | 20.70 | 182.57 | 25.83 | 134.5 | 5.75 | 463.5 | 435.2 | 565868 | 8.27 | 75.5 | 136.0 | 117.0 | 24.34 | 2.80 | 7.66 | 0.18 | 2.54 | 42.60 | 153.0 |
| LB010_ap_10 | 391876 | 2395.9 | 195.17 | 97.87 | 26.27 | 253.24 | 36.38 | 942.9 | 9.05 | 1359.1 | 1229.6 | 564298 | 0.79 | 285.9 | 249.4 | 238.0 | 33.84 | 17.53 | 11.35 | 6.56 | 19.78 | 67.07 | 1348.7 |
| LB010_ap_11 | 394580 | 1035.5 | 180.46 | 92.32 | 21.41 | 225.39 | 34.53 | 321.1 | 8.84 | 513.9 | 766.5 | 565064 | 0.42 | 152.1 | 199.5 | 142.0 | 30.47 | 20.49 | 11.09 | 1.50 | 3.86 | 65.43 | 1528.2 |
| LB010_ap_12 | 396488 | 538.6 | 134.45 | 62.52 | 24.72 | 188.88 | 24.71 | 148.2 | 5.13 | 489.8 | 505.8 | 565790 | 2.57 | 87.5 | 147.3 | 117.9 | 24.74 | 3.66 | 6.60 | 0.36 | 3.16 | 36.77 | 267.3 |
| LB010_ap_13 | 395442 | 893.4 | 244.21 | 120.35 | 16.62 | 296.06 | 44.74 | 242.3 | 8.54 | 719.4 | 808.1 | 565376 | 1.78 | 146.5 | 228.0 | 108.3 | 39.96 | 25.11 | 12.55 | 0.67 | 2.85 | 63.09 | 156.3 |
| LB010_ap_14 | 395594 | 654.5 | 102.90 | 48.34 | 19.59 | 134.59 | 18.77 | 230.3 | 4.12 | 676.3 | 485.3 | 565717 | 0.41 | 95.5 | 120.1 | 362.6 | 17.50 | 5.13 | 5.51 | 1.19 | 19.89 | 30.73 | 655.0 |
| LB010_ap_15 | 394749 | 584.8 | 114.01 | 57.40 | 21.30 | 143.89 | 21.88 | 199.8 | 5.16 | 772.8 | 474.3 | 565657 | 1.48 | 87.0 | 122.5 | 274.4 | 19.54 | 3.17 | 6.47 | 0.90 | 30.61 | 37.22 | 1614.3 |
| LB010_ap_16 | 395702 | 598.1 | 208.81 | 106.76 | 29.00 | 242.02 | 40.40 | 148.2 | 10.58 | 520.0 | 624.4 | 565516 | 4.20 | 104.5 | 183.7 | 107.3 | 34.66 | 19.30 | 12.29 | 0.78 | 5.85 | 69.14 | 705.5 |
| LB010_ap_17 | 396307 | 531.1 | 166.19 | 90.22 | 21.77 | 201.87 | 33.48 | 147.9 | 7.92 | 563.3 | 459.2 | 565801 | 5.01 | 83.6 | 142.7 | 114.5 | 28.37 | 20.43 | 10.73 | 0.93 | 5.08 | 60.21 | 193.2 |
| LB010_ap_18 | 394527 | 747.4 | 126.51 | 62.07 | 25.79 | 165.50 | 23.85 | 256.6 | 5.38 | 821.1 | 585.3 | 565501 | 1.23 | 110.5 | 145.1 | 353.8 | 21.94 | 3.39 | 7.07 | 1.00 | 25.32 | 39.73 | 1442.5 |
| LB010_ap_19 | 396187 | 526.8 | 118.11 | 54.24 | 20.97 | 168.96 | 21.72 | 148.0 | 4.44 | 745.8 | 464.1 | 565967 | 12.11 | 84.9 | 137.1 | 120.3 | 21.48 | 8.06 | 5.75 | 0.27 | 2.29 | 30.27 | 139.9 |
| LB010_ap_20 | 396067 | 625.8 | 269.91 | 169.68 | 24.80 | 269.67 | 56.29 | 178.0 | 19.39 | 430.0 | 570.8 | 565439 | 0.67 | 101.9 | 174.0 | 124.8 | 41.61 | 27.86 | 20.93 | 4.21 | 2.67 | 127.83 | 252.1 |
| LB010_ap_21 | 394623 | 1191.7 | 194.97 | 102.26 | 18.56 | 245.31 | 37.32 | 361.7 | 10.15 | 792.3 | 884.1 | 565147 | 1.55 | 175.4 | 218.3 | 133.9 | 32.52 | 19.77 | 12.01 | 2.32 | 7.03 | 71.34 | 715.3 |
| LB010_ap_22 | 396343 | 1274.6 | 198.58 | 107.05 | 35.26 | 235.42 | 38.26 | 443.4 | 10.98 | 1081.2 | 907.3 | 565017 | 0.59 | 183.5 | 216.7 | 243.8 | 33.13 | 11.10 | 13.07 | 3.34 | 23.23 | 29.43 | 348.7 |
| LB010_ap_23 | 396270 | 602.8 | 119.52 | 52.75 | 23.07 | 169.09 | 21.47 | 179.1 | 3.88 | 508.8 | 490.4 | 565770 | 2.37 | 91.8 | 141.0 | 121.7 | 22.14 | 21.60 | 5.51 | 0.49 | 2.12 | 20.93 | 148.1 |
| LB010_ap_24 | 392794 | 1727.0 | 255.71 | 142.04 | 32.96 | 286.06 | 50.21 | 623.3 | 15.32 | 1229.3 | 1088.2 | 564662 | 0.72 | 232.9 | 259.3 | 253.0 | 41.55 | 23.84 | 18.42 | 8.57 | 17.51 | 113.23 | 1123.5 |
| LB010_ap_25 | 395134 | 1341.9 | 181.72 | 99.14 | 24.15 | 248.89 | 34.79 | 408.6 | 9.96 | 543.6 | 990.8 | 564974 | 0.44 | 194.3 | 213.2 | 101.5 | 31.23 | 48.07 | 11.33 | 3.21 | 3.57 | 67.58 | 335.4 |
| LB010_ap_26 | 395733 | 980.5 | 160.45 | 81.07 | 16.67 | 219.08 | 30.59 | 282.3 | 7.37 | 477.0 | 784.3 | 565321 | 0.86 | 147.8 | 194.6 | 110.2 | 27.54 | 18.60 | 9.20 | 1.36 | 2.90 | 50.46 | 341.5 |
| LB010_ap_27 | 393186 | 1541.3 | 295.46 | 167.69 | 23.79 | 321.67 | 58.09 | 535.6 | 17.17 | 1066.4 | 1026.9 | 564693 | 0.49 | 212.1 | 265.8 | 244.0 | 47.87 | 18.19 | 21.15 | 6.18 | 12.38 | 124.55 | 1113.8 |
| LB010_ap_28 | 396388 | 703.0 | 164.43 | 87.03 | 17.73 | 210.82 | 32.24 | 188.6 | 8.27 | 353.3 | 613.1 | 565531 | 1.20 | 112.0 | 167.5 | 84.6 | 26.99 | 57.35 | 10.40 | 4.31 | 2.53 | 58.56 | 176.9 |
| LB010_ap_3 | 391364 | 2379.0 | 305.59 | 167.43 | 26.28 | 359.83 | 59.07 | 866.9 | 16.31 | 1581.9 | 1426.3 | 564162 | 0.57 | 309.2 | 321.6 | 231.1 | 5 | | | | | | |

Appendix C: Eastern Sunda arc apatite trace element chemistry (LA-ICP-MS)

| Analysis ID | Ca | Ce | Dy | Er | Eu | Gd | Ho | La | Lu | Nb | Nd | P | Pb | Pr | Sm | Sr | Tb | Th | Tm | U | V | Yb | Fe |
|--------------|--------|--------|--------|--------|-------|--------|-------|-------|-------|--------|--------|--------|------|-------|-------|-------|-------|-------|-------|------|-------|--------|--------|
| LB010_ap_4 | 395072 | 1190.1 | 414.95 | 223.25 | 15.33 | 429.95 | 83.80 | 275.1 | 19.10 | 488.1 | 1137.2 | 564691 | 2.26 | 203.7 | 343.5 | 74.6 | 66.61 | 25.95 | 26.79 | 2.07 | 4.28 | 149.15 | 59.6 |
| LB010_ap_5 | 395467 | 1141.4 | 219.13 | 116.23 | 20.42 | 275.21 | 42.37 | 323.2 | 11.72 | 507.5 | 915.4 | 565096 | 1.58 | 174.9 | 238.4 | 95.5 | 37.50 | 20.24 | 13.74 | 2.14 | 4.47 | 82.30 | 192.1 |
| LB010_ap_6 | 394982 | 897.8 | 137.52 | 68.62 | 25.49 | 176.98 | 25.95 | 315.3 | 6.23 | 683.5 | 650.8 | 565383 | 0.28 | 130.3 | 154.9 | 362.8 | 23.41 | 6.25 | 8.01 | 1.69 | 21.66 | 45.08 | 891.6 |
| LB010_ap_7 | 395958 | 810.1 | 133.49 | 60.16 | 23.08 | 190.67 | 24.32 | 254.1 | 5.13 | 606.6 | 610.9 | 565619 | 9.85 | 122.0 | 161.4 | 134.0 | 24.21 | 7.65 | 6.43 | 0.60 | 2.17 | 35.75 | 191.9 |
| LB010_ap_8 | 392360 | 1929.0 | 351.63 | 188.83 | 27.36 | 401.75 | 68.92 | 644.5 | 16.82 | 1202.2 | 1348.6 | 564266 | 1.08 | 271.2 | 342.7 | 196.4 | 59.58 | 52.27 | 22.75 | 7.31 | 12.17 | 129.42 | 1087.1 |
| LB010_ap_9 | 396333 | 567.2 | 125.60 | 51.58 | 35.37 | 166.61 | 21.12 | 171.5 | 4.19 | 370.4 | 495.8 | 565695 | 0.51 | 89.3 | 153.3 | 113.6 | 22.70 | 3.10 | 5.50 | 0.10 | 0.69 | 31.97 | 542.2 |
| LB011_ap_1 | 391345 | 1707.2 | 252.78 | 122.56 | 24.51 | 342.28 | 47.30 | 624.8 | 9.76 | 1287.0 | 1257.7 | 564332 | 2.44 | 180.0 | 305.1 | 449.7 | 43.78 | 4.29 | 14.05 | 1.08 | 32.14 | 74.03 | 2468.2 |
| LB011_ap_10 | 392764 | 1110.0 | 178.81 | 86.97 | 27.13 | 230.40 | 33.58 | 391.5 | 7.48 | 1132.9 | 847.6 | 565023 | 2.24 | 165.2 | 211.5 | 471.7 | 30.22 | 4.17 | 10.12 | 1.14 | 35.94 | 56.44 | 2176.0 |
| LB011_ap_11 | 392876 | 1088.8 | 177.89 | 87.13 | 28.83 | 234.98 | 33.47 | 386.1 | 7.13 | 791.5 | 832.2 | 564809 | 1.41 | 164.8 | 209.5 | 467.9 | 30.75 | 4.53 | 9.94 | 1.16 | 35.42 | 54.85 | 2654.8 |
| LB011_ap_12 | 392876 | 923.2 | 164.32 | 77.80 | 24.53 | 221.11 | 29.42 | 310.4 | 5.60 | 889.1 | 781.7 | 565000 | 0.44 | 141.6 | 195.6 | 483.4 | 28.03 | 4.46 | 8.76 | 1.14 | 28.73 | 43.72 | 2786.5 |
| LB011_ap_13 | 391736 | 1430.7 | 230.52 | 111.26 | 28.39 | 298.10 | 43.44 | 501.7 | 9.33 | 1160.3 | 1089.6 | 564536 | 1.30 | 211.4 | 274.6 | 489.5 | 39.24 | 4.76 | 12.79 | 1.22 | 31.98 | 70.02 | 2687.1 |
| LB011_ap_14 | 393917 | 827.0 | 150.48 | 72.06 | 23.29 | 203.68 | 28.58 | 277.0 | 6.01 | 618.1 | 694.7 | 565110 | 0.71 | 131.3 | 176.8 | 432.5 | 26.01 | 4.34 | 8.19 | 1.19 | 24.39 | 44.78 | 2221.2 |
| LB011_ap_15 | 391854 | 1581.9 | 240.11 | 118.35 | 25.66 | 321.12 | 44.36 | 571.2 | 9.47 | 1076.0 | 1180.0 | 564383 | 1.95 | 236.5 | 287.0 | 461.5 | 41.71 | 4.71 | 13.28 | 1.18 | 37.93 | 71.51 | 2436.1 |
| LB011_ap_16 | 391505 | 1367.8 | 221.25 | 108.57 | 26.47 | 292.66 | 41.69 | 473.8 | 8.81 | 1186.1 | 1041.5 | 564566 | 1.60 | 204.8 | 258.4 | 486.5 | 38.65 | 3.91 | 12.31 | 1.06 | 29.70 | 69.10 | 3052.3 |
| LB011_ap_17 | 393332 | 1154.9 | 193.41 | 92.45 | 25.03 | 265.82 | 35.68 | 387.1 | 7.45 | 969.7 | 939.1 | 564946 | 1.93 | 177.5 | 231.9 | 480.3 | 34.49 | 3.79 | 10.40 | 0.99 | 28.62 | 56.92 | 1623.0 |
| LB011_ap_18 | 391585 | 1610.5 | 237.03 | 115.05 | 24.24 | 325.45 | 43.89 | 583.6 | 9.17 | 1185.5 | 1223.8 | 564384 | 2.16 | 235.4 | 284.6 | 469.6 | 41.49 | 4.32 | 13.10 | 1.11 | 26.17 | 68.22 | 2525.2 |
| LB011_ap_19 | 392967 | 1032.8 | 182.77 | 86.26 | 27.13 | 250.15 | 34.25 | 341.7 | 6.42 | 820.1 | 859.7 | 564870 | 0.55 | 163.1 | 219.5 | 449.2 | 31.62 | 3.80 | 9.79 | 1.00 | 33.99 | 50.77 | 2558.2 |
| LB011_ap_20 | 392590 | 1228.2 | 197.68 | 99.40 | 27.21 | 256.70 | 36.62 | 431.7 | 8.19 | 883.4 | 945.1 | 564705 | 0.87 | 181.7 | 226.6 | 471.8 | 33.44 | 3.70 | 11.09 | 1.05 | 37.27 | 60.79 | 2551.5 |
| LB011_ap_21 | 393640 | 824.5 | 147.99 | 72.62 | 23.07 | 196.46 | 27.49 | 275.1 | 5.84 | 691.8 | 698.6 | 565110 | 0.60 | 127.2 | 169.0 | 463.6 | 24.49 | 3.47 | 8.08 | 1.07 | 30.71 | 45.33 | 2411.6 |
| LB011_ap_22 | 390793 | 1911.7 | 303.89 | 154.40 | 23.70 | 387.63 | 55.16 | 696.0 | 12.51 | 1413.1 | 1455.8 | 564094 | 2.08 | 277.4 | 336.5 | 449.8 | 50.49 | 4.47 | 17.55 | 1.08 | 24.23 | 94.06 | 2439.8 |
| LB011_ap_23 | 391667 | 1489.0 | 235.45 | 116.92 | 27.34 | 306.71 | 42.77 | 530.4 | 9.10 | 971.5 | 1151.4 | 564340 | 1.67 | 220.0 | 265.4 | 453.6 | 39.50 | 5.31 | 12.99 | 1.28 | 26.04 | 70.80 | 3014.5 |
| LB011_ap_24 | 393354 | 1124.6 | 197.41 | 98.40 | 26.68 | 250.81 | 37.44 | 386.1 | 8.59 | 663.3 | 887.7 | 564779 | 2.62 | 169.8 | 224.3 | 365.4 | 34.31 | 4.17 | 11.20 | 0.91 | 29.67 | 63.06 | 2282.1 |
| LB011_ap_25 | 391455 | 1419.4 | 227.87 | 111.94 | 26.34 | 299.63 | 43.58 | 501.2 | 9.41 | 1417.4 | 1083.7 | 564675 | 2.85 | 212.7 | 269.0 | 470.7 | 39.33 | 4.29 | 12.88 | 1.14 | 35.54 | 71.51 | 2606.8 |
| LB011_ap_26 | 393486 | 918.0 | 168.91 | 84.79 | 27.84 | 224.33 | 32.13 | 304.1 | 7.41 | 626.9 | 764.5 | 564931 | 0.89 | 143.9 | 197.0 | 465.0 | 29.46 | 4.55 | 9.72 | 1.16 | 25.30 | 54.48 | 2491.9 |
| LB011_ap_27 | 393668 | 827.8 | 149.05 | 69.28 | 24.33 | 201.11 | 27.52 | 273.1 | 5.27 | 728.7 | 683.4 | 565144 | 0.74 | 127.8 | 170.8 | 479.6 | 24.69 | 3.67 | 7.92 | 1.01 | 34.87 | 41.25 | 2304.7 |
| LB011_ap_28 | 393668 | 895.3 | 162.10 | 81.04 | 22.59 | 223.18 | 30.65 | 288.6 | 6.24 | 794.3 | 774.3 | 565121 | 1.75 | 141.9 | 194.1 | 399.5 | 28.11 | 3.64 | 9.04 | 0.91 | 41.29 | 47.10 | 2065.1 |
| LB011_ap_29 | 392128 | 1481.7 | 226.48 | 111.27 | 23.15 | 297.80 | 41.36 | 532.6 | 8.46 | 989.0 | 1132.4 | 564665 | 1.11 | 215.2 | 262.4 | 466.0 | 38.61 | 3.62 | 12.18 | 0.97 | 30.08 | 65.49 | 2465.7 |
| LB011_ap_30 | 391495 | 1772.1 | 290.82 | 137.21 | 26.15 | 368.68 | 51.85 | 634.7 | 11.37 | 1115.3 | 1348.7 | 564142 | 1.40 | 263.1 | 331.6 | 453.8 | 48.72 | 4.72 | 15.99 | 1.16 | 35.00 | 88.25 | 2370.3 |
| LB011_ap_31 | 393389 | 879.9 | 150.87 | 76.11 | 24.99 | 201.70 | 28.80 | 295.2 | 5.82 | 774.8 | 723.2 | 565083 | 0.80 | 132.0 | 173.0 | 459.6 | 26.22 | 3.72 | 8.31 | 0.95 | 38.00 | 43.55 | 2478.9 |
| LB011_ap_32 | 391656 | 1795.3 | 277.12 | 128.83 | 27.04 | 357.78 | 49.35 | 642.7 | 10.82 | 1063.6 | 1336.0 | 564151 | 1.19 | 258.0 | 314.7 | 452.1 | 45.72 | 4.66 | 15.20 | 1.18 | 35.43 | 80.98 | 2294.7 |
| LB011_ap_4 | 393699 | 701.3 | 128.52 | 61.97 | 20.12 | 175.58 | 24.10 | 226.9 | 5.12 | 768.7 | 801.9 | 565299 | 0.52 | 109.0 | 149.0 | 450.2 | 21.80 | 2.92 | 7.10 | 0.81 | 39.20 | 35.97 | 2470.8 |
| LB011_ap_5 | 392843 | 1168.0 | 191.26 | 94.04 | 27.32 | 250.91 | 35.86 | 409.3 | 8.47 | 979.3 | 902.2 | 564866 | 1.45 | 176.1 | 222.1 | 466.2 | 32.79 | 3.69 | 11.07 | 1.02 | 37.59 | 62.24 | 2209.3 |
| LB011_ap_6 | 392048 | 1538.0 | 233.36 | 115.48 | 24.20 | 313.31 | 43.02 | 560.2 | 9.22 | 935.1 | 1187.3 | 564353 | 1.15 | 223.5 | 269.8 | 460.8 | 40.38 | 3.78 | 12.40 | 1.05 | 28.55 | 66.19 | 2529.9 |
| LB011_ap_7 | 392980 | 941.7 | 171.54 | 84.02 | 26.07 | 238.41 | 32.33 | 308.3 | 6.77 | 667.2 | 816.1 | 564830 | 0.45 | 148.9 | 207.6 | 452.1 | 30.38 | 4.29 | 9.27 | 1.15 | 29.78 | 51.93 | 2961.7 |
| LB011_ap_8 | 391747 | 1519.1 | 236.61 | 113.03 | 25.36 | 312.84 | 43.89 | 539.1 | 8.83 | 1020.8 | 1148.0 | 564369 | 1.06 | 223.4 | 283.2 | 488.9 | 40.44 | 4.40 | 12.67 | 1.19 | 32.19 | 67.66 | 2760.6 |
| LB011_ap_9 | 392955 | 1053.5 | 175.75 | 88.50 | 28.57 | 227.28 | 33.18 | 361.2 | 8.06 | 1087.7 | 808.7 | 565070 | 2.10 | 159.1 | 203.9 | 477.6 | 30.75 | 4.36 | 10.12 | 1.16 | 31.23 | 58.92 | 2121.8 |
| NEF-01_ap_3 | 395744 | 212.1 | 101.92 | 48.94 | 16.69 | 125.36 | 18.06 | 50.3 | 4.98 | 332.3 | 263.3 | 565921 | 0.67 | 40.7 | 96.5 | 144.4 | 18.22 | 7.68 | 5.82 | 0.40 | 1.81 | 36.41 | 1908.1 |
| NEF-01_ap_4 | 394932 | 180.9 | 106.02 | 41.56 | 19.38 | 144.19 | 17.48 | 47.6 | 3.40 | 532.8 | 258.8 | 565749 | 1.14 | 36.9 | 109.8 | 355.5 | 11.84 | 4.77 | 3.46 | 2.91 | 25.54 | 2494.1 | |
| NEF-01_ap_5 | 394210 | 367.3 | 111.88 | 45.57 | 18.69 | 160.12 | 18.18 | 109.1 | 2.98 | 478.6 | 417.0 | 565455 | 1.91 | 66.1 | 138.1 | 269.2 | 21.44 | 3.89 | 4.78 | 0.97 | 1.59 | 24.03 | 3071.9 |
| NEF-01_ap_6 | 395091 | 192.8 | 97.07 | 32.33 | 18.73 | 149.61 | 14.62 | 47.7 | 1.60 | 333.1 | 314.6 | 565676 | 1.11 | 43.5 | 122.5 | 182.8 | 18.64 | 2.36 | 3.24 | 0.60 | 1.74 | 15.94 | 2637.4 |
| NEF-01_ap_7 | 392683 | 283.1 | 102.12 | 37.20 | 20.25 | 155.32 | 16.55 | 74.3 | 3.57 | 965.6 | 361.0 | 565559 | 1.63 | 58.2 | 126.4 | 328.1 | 19.05 | 7.82 | 4.71 | 3.75 | 2.98 | 25.63 | 4182.0 |
| NEF-03_ap_1 | 395075 | 445.8 | 158.59 | 41.73 | 32.80 | 317.13 | 20.97 | 110.8 | 1.98 | 871.3 | 661.7 | 565702 | 0.23 | 94.8 | 286.3 | 173.0 | 37.16 | 0.43 | 3.85 | 0.09 | 1.50 | 18.43 | 943.8 |
| NEF-03_ap_10 | 397626 | 86.1 | 61.48 | 18.79 | 9.89 | 108.10 | 9.11 | 19.0 | 1.15 | 110.3 | 167.3 | 566177 | 0.25 | 20.2 | 86.6 | 117.4 | 13.10 | 0.16 | 1.89 | 0.01 | 1.49 | 9.43 | 355.1 |
| NEF-03_ap_11 | 395466 | 174.8 | 108.02 | 38.74 | 20.11 | 168.62 | 17.06 | 44.4 | 2.75 | 466.7 | 266.6 | 565947 | 0.48 | 36.0 | 133.2 | 213.5 | 21.52 | 0.33 | 4.10 | 0.08 | 6.63 | 22.18 | 1940.9 |
| NEF-03_ap_12 | 395916 | 356.9 | 98.20 | 36.19 | 26.70 | 135.23 | 15.56 | 108.0 | 3.52 | 458.0 | 363.0 | 565947 | 0.48 | 61.5 | 118.9 | 191.5 | 17.24 | 1.29 | 4.56 | 0.14 | 1.78 | 27.11 | 1222.4 |
| NEF-03_ap_14 | 396378 | 160.5 | 93.14 | 34.59 | 18.86 | 143.54 | 14.50 | 42.3 | 3.42 | 358.1 | 230.0 | 565993 | 0.48 | 32.7 | 110.1 | 195.6 | 18.25 | 0.48 | 4.25 | 0.16 | 2.21 | 23.92 | 1141.2 |
| NEF-03_ap_15 | 396539 | 331.2 | 74.95 | 30.59 | 27.04 | 110.75 | 12.66 | 96.4 | 2.39 | 300.6 | 330.2 | 565903 | 0.28 | 56.7 | 101.8 | 173.7 | 14.37 | 2.89 | 3.47 | 0.10 | 1.98 | 18.69 | 867.6 |
| NEF-03_ap_16 | 396235 | 200.5 | 96.84 | 36.29 | 19.41 | 140.15 | 15.48 | 57.5 | 2.84 | 276.9 | 249.6 | 565975 | 0.37 | 37.4 | 107.4 | 137.6 | 18.31 | 0.55 | 3.91 | 0.16 | 2.02 | 16.64 | 1386.9 |

*All elements are in ppm.

Appendix C: Eastern Sunda arc apatite trace element chemistry (LA-ICP-MS)

| Analysis ID | Ca | Ce | Dy | Er | Eu | Gd | Ho | La | Lu | Na | Nd | P | Pb | Pr | Sm | Sr | Tb | Th | Tm | U | V | Yb | Fe |
|--------------|--------|--------|--------|-------|-------|--------|-------|--------|------|--------|--------|--------|-------|-------|-------|-------|-------|--------|------|------|-------|-------|--------|
| NEF-03_ap_17 | 397042 | 191.1 | 114.82 | 39.12 | 15.39 | 172.23 | 17.68 | 49.4 | 1.94 | 276.6 | 292.6 | 568015 | 0.54 | 40.5 | 135.1 | 155.9 | 22.56 | 0.70 | 3.87 | 0.03 | 2.23 | 18.26 | 391.3 |
| NEF-03_ap_18 | 394028 | 236.5 | 132.58 | 41.86 | 30.59 | 217.25 | 19.75 | 65.9 | 2.67 | 1344.1 | 364.0 | 566080 | 0.80 | 48.6 | 183.6 | 246.7 | 27.57 | 0.32 | 4.53 | 0.15 | 3.40 | 24.03 | 1896.7 |
| NEF-03_ap_19 | 396957 | 235.9 | 98.53 | 46.87 | 11.88 | 112.46 | 18.98 | 69.0 | 4.19 | 206.4 | 293.5 | 565978 | 0.32 | 39.2 | 80.1 | 134.5 | 16.68 | 26.24 | 5.26 | 2.10 | 5.57 | 29.71 | 688.0 |
| NEF-03_ap_20 | 395864 | 208.0 | 99.93 | 38.55 | 18.54 | 148.73 | 15.52 | 57.1 | 3.54 | 503.6 | 272.3 | 565955 | 0.47 | 39.8 | 118.2 | 181.0 | 19.35 | 0.55 | 4.41 | 0.19 | 4.18 | 27.17 | 1420.1 |
| NEF-03_ap_21 | 393947 | 137.4 | 24.80 | 12.28 | 15.48 | 27.24 | 4.43 | 61.6 | 1.70 | 1862.9 | 91.6 | 566713 | 0.82 | 18.9 | 27.4 | 40.5 | 4.14 | 4.42 | 1.73 | 0.43 | 20.53 | 11.61 | 1602.4 |
| NEF-03_ap_3 | 396584 | 382.7 | 98.77 | 38.53 | 16.00 | 153.32 | 16.37 | 120.4 | 2.61 | 393.2 | 418.8 | 565890 | 0.21 | 68.2 | 138.7 | 145.6 | 19.21 | 2.18 | 4.04 | 0.06 | 3.75 | 21.71 | 471.9 |
| NEF-03_ap_4 | 393871 | 186.8 | 113.15 | 44.54 | 23.79 | 159.32 | 18.38 | 53.7 | 4.45 | 1215.3 | 244.3 | 565990 | 0.43 | 36.0 | 121.0 | 392.8 | 21.49 | 0.42 | 5.71 | 0.44 | 5.82 | 33.44 | 2337.0 |
| NEF-03_ap_7 | 396634 | 245.9 | 88.94 | 26.89 | 20.49 | 170.00 | 12.99 | 62.6 | 1.58 | 350.5 | 353.4 | 565955 | 0.27 | 50.3 | 144.5 | 178.3 | 20.14 | 0.47 | 2.67 | 0.05 | 2.15 | 12.63 | 666.3 |
| NEF-03_ap_8 | 392450 | 143.7 | 137.70 | 55.38 | 18.14 | 190.29 | 23.10 | 29.9 | 3.92 | 574.1 | 281.7 | 565299 | 1.56 | 35.2 | 143.3 | 224.7 | 26.08 | 0.62 | 6.17 | 0.09 | 44.06 | 34.54 | 5275.5 |
| NEF-03_ap_9 | 395078 | 328.7 | 119.50 | 38.36 | 22.47 | 219.99 | 17.55 | 81.9 | 3.19 | 796.5 | 481.2 | 565935 | 0.67 | 89.0 | 201.3 | 166.8 | 26.14 | 0.72 | 4.34 | 0.15 | 1.78 | 24.90 | 1480.6 |
| SEF-01_ap_1 | 395687 | 1757.8 | 51.97 | 25.10 | 11.44 | 84.78 | 9.58 | 775.7 | 2.52 | 327.9 | 714.3 | 564984 | 0.57 | 185.0 | 109.5 | 96.4 | 9.87 | 19.64 | 3.03 | 2.78 | 11.93 | 17.86 | 100.8 |
| SEF-01_ap_10 | 396501 | 981.1 | 58.06 | 29.73 | 12.33 | 88.85 | 10.81 | 34.3 | 3.09 | 297.4 | 541.1 | 565958 | 0.22 | 128.3 | 92.4 | 108.6 | 10.39 | 34.21 | 3.58 | 0.38 | 4.81 | 21.43 | 180.0 |
| SEF-01_ap_11 | 395365 | 1974.4 | 71.86 | 33.20 | 10.43 | 121.19 | 13.13 | 845.0 | 2.75 | 355.8 | 843.3 | 564768 | 0.45 | 217.9 | 136.6 | 108.7 | 13.66 | 27.41 | 3.64 | 2.73 | 16.89 | 20.20 | 47.1 |
| SEF-01_ap_12 | 394040 | 1138.7 | 62.41 | 32.70 | 16.43 | 96.45 | 12.37 | 467.3 | 3.43 | 1141.1 | 586.6 | 565572 | 2.31 | 140.8 | 104.7 | 366.7 | 11.54 | 19.21 | 3.76 | 4.68 | 12.24 | 24.05 | 1188.3 |
| SEF-01_ap_13 | 395281 | 2172.5 | 74.71 | 34.78 | 17.90 | 119.62 | 13.63 | 955.6 | 3.31 | 269.9 | 875.4 | 564584 | 0.43 | 231.7 | 136.0 | 103.9 | 13.75 | 11.10 | 4.16 | 3.25 | 14.09 | 24.14 | 55.3 |
| SEF-01_ap_14 | 395663 | 1476.3 | 55.35 | 26.48 | 8.05 | 86.67 | 10.22 | 586.9 | 2.41 | 400.2 | 644.4 | 565263 | 1.13 | 169.0 | 100.6 | 89.9 | 10.36 | 26.74 | 3.12 | 1.76 | 9.72 | 17.00 | 46.8 |
| SEF-01_ap_15 | 395972 | 1114.5 | 53.21 | 24.33 | 8.66 | 82.52 | 9.65 | 422.2 | 2.00 | 414.0 | 543.8 | 565484 | 0.83 | 133.6 | 91.4 | 98.0 | 9.76 | 22.63 | 2.71 | 0.45 | 6.88 | 14.18 | 488.4 |
| SEF-01_ap_16 | 396104 | 1450.4 | 54.18 | 25.11 | 9.26 | 86.02 | 9.86 | 598.0 | 2.29 | 301.1 | 645.1 | 565223 | 0.40 | 186.9 | 101.6 | 103.7 | 10.11 | 28.82 | 2.88 | 1.56 | 10.20 | 16.48 | 48.7 |
| SEF-01_ap_17 | 396663 | 946.7 | 64.92 | 31.64 | 10.77 | 97.00 | 12.23 | 303.4 | 3.14 | 305.9 | 540.8 | 565596 | 0.20 | 126.5 | 100.4 | 101.7 | 11.74 | 17.23 | 3.78 | 0.32 | 7.15 | 21.89 | 133.3 |
| SEF-01_ap_2 | 396749 | 750.6 | 76.94 | 43.70 | 10.30 | 99.41 | 14.62 | 276.0 | 4.97 | 337.0 | 477.1 | 565792 | 0.35 | 101.6 | 98.9 | 122.5 | 12.31 | 15.99 | 5.84 | 2.71 | 12.57 | 34.00 | 22.5 |
| SEF-01_ap_20 | 395191 | 1913.9 | 77.39 | 38.03 | 15.93 | 126.51 | 14.64 | 877.8 | 3.50 | 478.0 | 831.0 | 564828 | 0.79 | 213.3 | 138.6 | 114.5 | 15.47 | 15.47 | 4.81 | 0.93 | 13.00 | 24.30 | 52.2 |
| SEF-01_ap_3 | 395118 | 1172.9 | 46.73 | 22.45 | 7.59 | 70.69 | 8.41 | 458.7 | 2.88 | 328.1 | 510.1 | 565248 | 0.64 | 133.5 | 81.8 | 85.3 | 8.41 | 17.41 | 2.81 | 2.81 | 21.05 | 16.44 | 164.0 |
| SEF-01_ap_4 | 394492 | 2647.4 | 59.03 | 25.73 | 16.26 | 103.94 | 10.08 | 1289.7 | 2.30 | 335.1 | 936.6 | 564179 | 1.57 | 285.0 | 130.6 | 341.4 | 11.36 | 20.46 | 2.91 | 4.29 | 21.26 | 16.11 | 106.2 |
| SEF-01_ap_5 | 395624 | 932.3 | 57.25 | 27.20 | 9.02 | 83.69 | 10.55 | 319.5 | 2.31 | 371.5 | 482.9 | 565494 | 0.30 | 116.0 | 87.9 | 101.2 | 10.23 | 15.50 | 3.05 | 0.12 | 8.93 | 16.50 | 1225.2 |
| SEF-01_ap_6 | 395904 | 1586.5 | 51.18 | 21.64 | 9.52 | 87.35 | 8.92 | 667.5 | 1.65 | 367.0 | 659.3 | 565169 | 0.53 | 174.5 | 101.6 | 93.8 | 9.66 | 21.74 | 2.41 | 1.08 | 8.32 | 13.04 | 39.2 |
| SEF-01_ap_7 | 393721 | 641.2 | 61.24 | 30.96 | 9.69 | 88.70 | 11.48 | 998.8 | 2.40 | 291.9 | 408.6 | 565213 | 0.30 | 89.2 | 85.1 | 96.4 | 10.93 | 11.29 | 3.29 | 0.10 | 17.42 | 18.33 | 3989.1 |
| SEF-01_ap_8 | 395653 | 1242.4 | 70.02 | 32.83 | 8.16 | 111.61 | 13.16 | 518.0 | 2.76 | 614.9 | 612.4 | 565489 | 0.71 | 145.4 | 110.2 | 84.9 | 13.19 | 15.57 | 3.55 | 1.73 | 8.54 | 19.16 | 27.8 |
| SEF-01_ap_9 | 396431 | 1371.1 | 45.81 | 22.15 | 9.98 | 73.18 | 8.43 | 581.7 | 2.15 | 189.1 | 580.1 | 565290 | 0.64 | 151.1 | 84.7 | 90.0 | 8.29 | 11.74 | 2.70 | 1.94 | 15.46 | 14.69 | 33.2 |
| SEF-02_ap_10 | 394832 | 2076.0 | 71.06 | 35.31 | 21.11 | 110.53 | 13.17 | 1016.0 | 3.65 | 398.0 | 782.1 | 564629 | 0.33 | 210.3 | 123.4 | 117.7 | 13.03 | 33.89 | 4.08 | 4.91 | 16.35 | 24.39 | 462.9 |
| SEF-02_ap_11 | 396092 | 1402.5 | 94.92 | 45.22 | 15.32 | 151.09 | 17.84 | 534.1 | 4.14 | 210.4 | 784.6 | 565071 | 0.24 | 176.9 | 154.2 | 94.5 | 18.09 | 32.85 | 5.31 | 3.75 | 21.36 | 29.23 | 40.7 |
| SEF-02_ap_12 | 394989 | 1876.5 | 63.10 | 30.12 | 12.56 | 103.75 | 11.32 | 738.1 | 2.61 | 590.9 | 797.7 | 564959 | 0.43 | 210.5 | 120.6 | 93.5 | 11.80 | 32.42 | 3.35 | 1.33 | 9.49 | 18.36 | 323.9 |
| SEF-02_ap_13 | 397048 | 782.6 | 47.60 | 20.16 | 9.65 | 88.38 | 8.48 | 229.4 | 1.45 | 151.3 | 521.5 | 565684 | 0.46 | 113.3 | 92.6 | 84.5 | 9.55 | 18.71 | 2.11 | 0.11 | 3.95 | 10.89 | 59.9 |
| SEF-02_ap_14 | 396645 | 1082.5 | 44.72 | 19.84 | 10.41 | 82.28 | 8.03 | 387.7 | 1.54 | 199.7 | 579.9 | 565476 | 2.01 | 136.0 | 92.9 | 85.2 | 9.61 | 28.75 | 2.05 | 0.25 | 4.83 | 11.23 | 87.4 |
| SEF-02_ap_15 | 395994 | 1583.8 | 56.08 | 25.42 | 12.62 | 103.37 | 10.30 | 608.2 | 2.16 | 216.3 | 752.2 | 565033 | 2.86 | 188.8 | 118.0 | 82.6 | 11.32 | 61.64 | 2.62 | 0.98 | 7.14 | 15.21 | 108.3 |
| SEF-02_ap_2 | 394548 | 2809.2 | 90.10 | 42.41 | 21.98 | 147.72 | 16.97 | 1171.3 | 3.90 | 304.4 | 1079.1 | 564109 | 1.73 | 281.4 | 170.7 | 109.7 | 17.27 | 120.14 | 4.81 | 5.82 | 16.33 | 28.53 | 97.7 |
| SEF-02_ap_3 | 395483 | 1674.6 | 67.46 | 29.85 | 16.53 | 109.82 | 12.06 | 734.5 | 2.17 | 232.2 | 727.0 | 564886 | 0.30 | 185.2 | 122.6 | 114.6 | 12.74 | 22.31 | 3.19 | 1.34 | 17.11 | 17.11 | 527.9 |
| SEF-02_ap_4 | 397169 | 480.1 | 43.45 | 19.22 | 9.26 | 77.95 | 7.80 | 114.3 | 1.61 | 125.3 | 385.1 | 565895 | 0.38 | 73.5 | 77.4 | 84.1 | 8.93 | 7.03 | 1.97 | 0.09 | 3.48 | 10.94 | 423.6 |
| SEF-02_ap_5 | 396430 | 1189.9 | 72.86 | 33.62 | 12.99 | 119.36 | 13.31 | 385.4 | 2.54 | 208.5 | 697.5 | 565319 | 0.45 | 159.4 | 131.4 | 83.2 | 14.11 | 29.87 | 3.51 | 0.30 | 3.67 | 18.70 | 69.8 |
| SEF-02_ap_6 | 394161 | 2431.0 | 87.26 | 42.34 | 22.25 | 138.81 | 16.16 | 1155.1 | 3.99 | 705.8 | 963.8 | 564444 | 0.70 | 251.0 | 155.1 | 178.0 | 16.20 | 83.44 | 4.89 | 7.71 | 29.93 | 28.12 | 85.9 |
| SEF-02_ap_7 | 395640 | 1724.7 | 66.32 | 30.32 | 13.60 | 115.48 | 12.05 | 697.4 | 2.44 | 236.1 | 787.6 | 564884 | 0.51 | 189.8 | 127.3 | 92.3 | 12.54 | 46.00 | 3.33 | 1.59 | 9.50 | 17.38 | 279.5 |
| SEF-02_ap_8 | 396566 | 1136.8 | 74.32 | 35.09 | 8.28 | 117.07 | 13.83 | 355.5 | 3.24 | 154.9 | 699.0 | 565332 | 0.23 | 155.1 | 125.8 | 87.6 | 14.03 | 34.19 | 3.81 | 0.59 | 3.80 | 22.64 | 56.2 |
| SEF-02_ap_9 | 396111 | 1584.1 | 55.75 | 25.34 | 13.27 | 94.12 | 10.09 | 642.5 | 2.15 | 194.4 | 683.9 | 565072 | 0.21 | 177.1 | 108.7 | 94.6 | 10.63 | 31.48 | 2.82 | 1.08 | 7.90 | 14.64 | 61.1 |
| SEF-04_ap_1 | 396504 | 2237.8 | 120.59 | 57.08 | 14.95 | 186.93 | 22.33 | 798.3 | 5.54 | 228.8 | 1177.0 | 564306 | 10.13 | 277.5 | 207.5 | 89.5 | 22.26 | 86.64 | 6.71 | 6.53 | 6.33 | 39.05 | 79.0 |
| SEF-04_ap_10 | 396290 | 1206.5 | 105.32 | 51.03 | 9.72 | 156.72 | 19.40 | 343.1 | 4.32 | 184.1 | 851.7 | 565173 | 0.85 | 175.3 | 161.3 | 88.2 | 19.34 | 48.30 | 5.58 | 0.61 | 2.51 | 33.67 | 68.2 |
| SEF-04_ap_11 | 396972 | 793.7 | 66.02 | 30.01 | 9.05 | 106.81 | 11.89 | 209.3 | 2.11 | 158.6 | 563.9 | 565643 | 2.10 | 119.0 | 113.9 | 73.5 | 12.78 | 8.68 | 3.39 | 0.12 | 1.83 | 16.86 | 79.5 |
| SEF-04_ap_12 | 395350 | 1716.1 | 86.94 | 40.20 | 10.30 | 148.22 | 15.83 | 633.8 | 3.67 | 194.2 | 919.6 | 564701 | 5.38 | 217.4 | 160.2 | 104.7 | 16.78 | 117.75 | 4.30 | 4.55 | 7.83 | 25.62 | 510.9 |
| SEF-04_ap_13 | 394981 | 2222.6 | 113.29 | 55.25 | 15.15 | 174.54 | 20.72 | 833.9 | 4.42 | 227.4 | 1092.2 | 564388 | 2.03 | 285.9 | 191.3 | 130.8 | 21.13 | 79.99 | 6.42 | 3.89 | 11.09 | 34.46 | 162.2 |

*All elements are in ppm.

Appendix C: Eastern Sunda arc apatite trace element chemistry (LA-ICP-MS)

| Analysis ID | Ca | Ce | Dy | Er | Eu | Gd | Ho | La | Lu | Na | Nd | P | Pb | Pr | Sm | Sr | Tb | Th | Tm | U | V | Yb | Fe |
|---------------|--------|--------|---------|---------|-------|--------|--------|--------|--------|--------|--------|--------|-------|-------|-------|--------|--------|--------|--------|-------|-------|---------|---------|
| SEF-04_ap_14 | 397716 | 384.8 | 32.78 | 14.79 | 5.84 | 53.83 | 5.98 | 115.5 | 1.37 | 88.9 | 280.6 | 566070 | 1.34 | 55.8 | 53.7 | 75.7 | 6.21 | 2.08 | 1.60 | 0.06 | 1.51 | 8.75 | 41.7 |
| SEF-04_ap_16 | 395643 | 1789.5 | 110.58 | 52.47 | 12.81 | 166.72 | 20.67 | 598.6 | 5.23 | 194.9 | 1003.9 | 564712 | 1.70 | 236.6 | 182.8 | 78.7 | 20.52 | 64.35 | 6.28 | 1.48 | 4.05 | 36.95 | 57.1 |
| SEF-04_ap_17 | 395711 | 1715.7 | 111.48 | 49.68 | 12.80 | 173.50 | 20.39 | 592.3 | 4.32 | 214.5 | 949.3 | 564793 | 0.96 | 222.5 | 181.1 | 90.3 | 20.82 | 41.41 | 5.74 | 1.34 | 4.88 | 31.33 | 50.9 |
| SEF-04_ap_18 | 395681 | 1150.9 | 91.91 | 42.37 | 12.88 | 168.41 | 16.80 | 330.1 | 3.80 | 191.3 | 759.0 | 565149 | 0.91 | 161.6 | 149.8 | 78.3 | 16.98 | 8.25 | 4.75 | 0.14 | 4.16 | 25.02 | 980.5 |
| SEF-04_ap_19 | 395673 | 1584.7 | 105.66 | 51.45 | 10.68 | 158.44 | 19.30 | 505.7 | 4.81 | 212.0 | 929.2 | 564908 | 2.36 | 211.5 | 175.1 | 87.8 | 19.43 | 37.79 | 6.12 | 1.16 | 2.67 | 33.17 | 57.0 |
| SEF-04_ap_2 | 393363 | 883.0 | 79.58 | 35.96 | 10.05 | 123.02 | 13.85 | 242.6 | 3.01 | 251.7 | 623.1 | 564893 | 24.54 | 132.7 | 126.3 | 80.6 | 14.49 | 20.22 | 3.96 | 0.27 | 10.68 | 21.00 | 4021.9 |
| SEF-04_ap_20 | 394052 | 2707.2 | 176.68 | 85.39 | 20.68 | 253.47 | 32.89 | 1047.0 | 7.54 | 369.2 | 1428.0 | 563926 | 0.98 | 332.9 | 288.4 | 115.3 | 32.62 | 78.69 | 10.05 | 5.87 | 15.82 | 55.57 | 76.4 |
| SEF-04_ap_21 | 396240 | 1229.4 | 90.67 | 42.61 | 16.75 | 142.22 | 16.70 | 379.5 | 3.80 | 268.3 | 768.0 | 565263 | 0.67 | 170.4 | 147.2 | 97.7 | 17.48 | 18.74 | 4.89 | 0.48 | 3.78 | 27.55 | 53.4 |
| SEF-04_ap_23 | 393614 | 2931.1 | 190.12 | 93.79 | 20.75 | 261.36 | 35.53 | 1172.6 | 8.64 | 469.0 | 1493.1 | 563668 | 3.02 | 358.2 | 263.4 | 162.9 | 32.80 | 43.07 | 11.28 | 4.86 | 18.68 | 64.18 | 76.5 |
| SEF-04_ap_24 | 395926 | 1089.5 | 79.95 | 37.13 | 12.28 | 128.83 | 14.79 | 316.6 | 2.93 | 428.3 | 677.6 | 565281 | 2.02 | 149.2 | 132.2 | 83.8 | 15.39 | 416.89 | 4.11 | 12.68 | 2.14 | 21.65 | 183.7 |
| SEF-04_ap_25 | 394684 | 2381.7 | 163.81 | 77.90 | 16.72 | 247.23 | 30.00 | 838.1 | 6.78 | 259.6 | 1320.1 | 564105 | 0.52 | 301.3 | 251.8 | 94.9 | 30.34 | 69.12 | 8.76 | 3.97 | 12.04 | 49.98 | 45.7 |
| SEF-04_ap_26 | 396120 | 1392.8 | 94.02 | 45.30 | 10.63 | 152.43 | 17.62 | 430.2 | 4.23 | 231.2 | 847.8 | 565112 | 0.46 | 189.7 | 158.5 | 78.8 | 17.89 | 15.17 | 5.23 | 0.36 | 3.46 | 29.50 | 42.0 |
| SEF-04_ap_27 | 395233 | 1929.3 | 139.66 | 67.06 | 10.78 | 203.80 | 26.36 | 662.8 | 6.00 | 260.0 | 1120.5 | 564519 | 0.82 | 253.4 | 212.1 | 93.7 | 25.30 | 94.19 | 7.94 | 4.75 | 5.20 | 44.88 | 81.3 |
| SEF-04_ap_28 | 391961 | 2960.7 | 175.89 | 85.42 | 24.85 | 246.31 | 32.85 | 1183.9 | 8.25 | 1137.5 | 1427.4 | 563819 | 2.27 | 351.6 | 285.2 | 291.5 | 30.39 | 53.53 | 10.71 | 5.81 | 20.22 | 60.46 | 843.5 |
| SEF-04_ap_5 | 393316 | 2761.7 | 178.72 | 86.04 | 22.44 | 255.35 | 33.37 | 1059.5 | 7.66 | 407.2 | 1385.4 | 563789 | 1.55 | 335.2 | 284.4 | 174.2 | 33.22 | 70.28 | 10.24 | 4.78 | 17.73 | 57.67 | 226.2 |
| SEF-04_ap_6 | 395374 | 1953.5 | 95.80 | 45.04 | 14.48 | 147.56 | 17.28 | 740.3 | 4.29 | 275.8 | 994.3 | 564650 | 1.39 | 234.0 | 164.3 | 103.7 | 17.47 | 58.22 | 4.90 | 1.93 | 5.49 | 29.61 | 66.1 |
| SEF-04_ap_8 | 394330 | 2421.7 | 186.09 | 87.93 | 17.46 | 266.50 | 34.54 | 897.4 | 6.76 | 424.0 | 1315.7 | 563566 | 1.33 | 369.4 | 285.7 | 311.2 | 33.41 | 75.58 | 10.94 | 6.94 | 20.00 | 60.69 | 1339.1 |
| SEF-04_ap_9 | 395117 | 137.67 | 69.86 | 39.79 | 14.38 | 201.98 | 26.21 | 715.8 | 7.23 | 250.3 | 1132.4 | 564425 | 1.08 | 263.2 | 212.4 | 89.0 | 24.87 | 86.55 | 8.37 | 3.52 | 7.22 | 51.08 | 49.4 |
| SING-01_ap_1 | 396177 | 920.8 | 83.75 | 39.79 | 14.45 | 123.71 | 15.49 | 308.8 | 3.45 | 258.4 | 641.7 | 565318 | 0.19 | 131.7 | 127.8 | 62.70 | 14.61 | 13.00 | 4.68 | 7.46 | 19.79 | 25.48 | 182.3 |
| SING-01_ap_3 | 396349 | 820.1 | 63.06 | 28.54 | 14.62 | 101.61 | 11.32 | 275.5 | 2.16 | 217.8 | 574.0 | 565425 | 0.14 | 120.3 | 105.2 | 66.28 | 11.94 | 11.85 | 3.07 | 6.70 | 15.87 | 16.57 | 162.7 |
| SING-01_ap_4 | 396437 | 607.9 | 44.70 | 21.88 | 10.63 | 72.44 | 8.58 | 207.1 | 1.49 | 470.6 | 413.0 | 567543 | 0.85 | 87.5 | 73.8 | 560.3 | 8.14 | 11.47 | 2.37 | 4.48 | 13.56 | 11.06 | 1077.1 |
| SING-01_ap_5 | 396639 | 456.0 | 89.71 | 44.16 | 17.27 | 115.04 | 16.33 | 116.3 | 3.64 | 204.9 | 421.0 | 565709 | 0.33 | 78.3 | 102.9 | 455.5 | 15.16 | 6.78 | 5.04 | 1.70 | 42.31 | 28.15 | 430.7 |
| SING-01_ap_6 | 396341 | 937.3 | 85.08 | 39.85 | 12.06 | 134.41 | 14.94 | 272.1 | 2.99 | 181.6 | 727.0 | 565311 | 0.20 | 145.8 | 139.9 | 448.8 | 16.03 | 8.45 | 4.52 | 4.88 | 8.68 | 23.55 | 138.8 |
| SING-02_ap_1 | 395873 | 274.9 | 90.81 | 52.12 | 17.73 | 90.35 | 17.51 | 99.3 | 6.39 | 586.6 | 237.6 | 565897 | 0.23 | 42.7 | 69.0 | 793.5 | 14.43 | 31.70 | 6.82 | 1.08 | 3.34 | 43.48 | 754.3 |
| SING-02_ap_10 | 395120 | 481.8 | 157.31 | 78.74 | 35.24 | 177.68 | 29.01 | 123.6 | 8.63 | 786.6 | 495.6 | 565685 | 0.78 | 87.8 | 153.1 | 465.8 | 26.37 | 11.19 | 10.28 | 1.24 | 2.30 | 64.72 | 995.4 |
| SING-02_ap_11 | 395686 | 456.0 | 103.99 | 65.55 | 26.24 | 177.68 | 29.01 | 123.6 | 9.07 | 577.3 | 322.0 | 565732 | 2.37 | 66.1 | 81.2 | 698.4 | 15.08 | 35.85 | 8.96 | 1.33 | 9.65 | 59.67 | 757.7 |
| SING-02_ap_12 | 395671 | 351.5 | 176.03 | 100.67 | 26.66 | 177.01 | 35.47 | 90.3 | 11.33 | 413.7 | 388.5 | 565607 | 0.75 | 67.2 | 131.5 | 419.5 | 26.91 | 17.73 | 13.07 | 1.42 | 10.78 | 83.72 | 1178.2 |
| SING-02_ap_13 | 395114 | 495.2 | 142.84 | 86.37 | 36.48 | 134.40 | 27.32 | 159.8 | 11.72 | 478.0 | 435.9 | 565454 | 0.64 | 80.9 | 115.0 | 674.7 | 20.54 | 14.55 | 11.83 | 1.23 | 38.85 | 78.53 | 1387.5 |
| SING-02_ap_14 | 395867 | 354.5 | 59.29 | 29.88 | 27.31 | 64.62 | 10.66 | 134.4 | 3.53 | 352.1 | 239.5 | 565757 | 0.34 | 50.9 | 56.1 | 690.4 | 9.30 | 3.05 | 4.01 | 1.32 | 24.37 | 26.69 | 1233.0 |
| SING-02_ap_15 | 394610 | 359.8 | 44.38 | 27.16 | 15.50 | 44.30 | 9.02 | 163.1 | 4.37 | 987.2 | 203.3 | 565880 | 0.34 | 47.0 | 44.9 | 1238.8 | 6.99 | 20.19 | 3.96 | 1.81 | 2.59 | 28.73 | 1256.6 |
| SING-02_ap_16 | 394412 | 384.3 | 97.54 | 56.87 | 25.02 | 96.74 | 19.21 | 144.6 | 7.19 | 675.6 | 286.0 | 565575 | 15.25 | 56.8 | 82.1 | 810.8 | 14.89 | 30.27 | 7.87 | 0.83 | 26.23 | 52.32 | 2108.6 |
| SING-02_ap_17 | 395170 | 563.2 | 158.72 | 74.32 | 46.35 | 208.24 | 28.21 | 145.0 | 8.13 | 543.3 | 622.7 | 565400 | 0.22 | 107.7 | 196.6 | 562.5 | 28.16 | 16.93 | 9.53 | 1.23 | 1.78 | 58.13 | 1049.1 |
| SING-02_ap_18 | 394452 | 320.7 | 72.44 | 48.28 | 22.83 | 66.02 | 15.56 | 115.9 | 7.61 | 1224.4 | 212.6 | 566080 | 1.27 | 45.2 | 54.3 | 814.5 | 10.80 | 18.93 | 7.19 | 1.13 | 14.49 | 50.32 | 1342.4 |
| SING-02_ap_3 | 395465 | 443.9 | 61.11 | 33.47 | 23.20 | 67.50 | 11.75 | 173.8 | 3.82 | 601.1 | 280.1 | 565784 | 0.38 | 59.6 | 62.3 | 768.8 | 9.97 | 11.01 | 4.55 | 1.35 | 6.95 | 27.43 | 1078.3 |
| SING-02_ap_4 | 392426 | 484.6 | 1221.07 | 1028.30 | 71.04 | 648.46 | 304.55 | 159.9 | 154.75 | 1073.7 | 461.7 | 563841 | 0.72 | 79.7 | 237.7 | 466.0 | 146.94 | 179.97 | 153.51 | 23.62 | 46.01 | 1095.74 | 695.0 |
| SING-02_ap_5 | 395320 | 537.9 | 170.63 | 96.92 | 38.35 | 162.20 | 33.98 | 188.1 | 11.32 | 706.6 | 434.2 | 565620 | 0.16 | 81.7 | 126.5 | 575.2 | 25.86 | 19.59 | 13.32 | 0.93 | 3.47 | 86.18 | 746.2 |
| SING-02_ap_6 | 396549 | 291.9 | 96.02 | 43.59 | 24.05 | 125.25 | 16.96 | 83.2 | 4.45 | 344.6 | 326.1 | 565869 | 1.67 | 54.9 | 107.4 | 464.9 | 17.01 | 16.65 | 5.25 | 0.52 | 4.24 | 32.49 | 519.6 |
| SING-02_ap_8 | 395439 | 364.4 | 169.66 | 128.78 | 39.12 | 125.98 | 38.98 | 127.7 | 20.53 | 461.5 | 271.5 | 565554 | 0.39 | 56.8 | 82.8 | 747.7 | 23.16 | 19.85 | 19.51 | 1.86 | 0.57 | 138.83 | 1165.4 |
| SING-02_ap_9 | 395423 | 440.3 | 139.75 | 81.05 | 30.28 | 139.60 | 28.29 | 127.7 | 10.08 | 423.9 | 394.9 | 565500 | 0.79 | 74.8 | 114.8 | 788.0 | 22.04 | 13.50 | 10.96 | 1.32 | 1.81 | 72.41 | 1160.2 |
| SING-03_ap_1 | 395101 | 264.1 | 148.24 | 98.78 | 16.09 | 133.13 | 31.21 | 78.9 | 13.65 | 1283.3 | 269.3 | 566139 | 29.72 | 47.0 | 96.9 | 784.6 | 21.96 | 28.14 | 14.00 | 1.13 | 6.87 | 95.53 | 270.0 |
| SING-03_ap_2 | 392892 | 0.6 | 21.61 | 18.25 | 0.50 | 8.72 | 5.56 | 0.11 | 1.33 | 245.2 | 1.3 | 565331 | 0.21 | 0.1 | 2.3 | 75.9 | 2.06 | 0.03 | 2.15 | 0.06 | 21.40 | 11.22 | 6057.4 |
| SING-03_ap_3 | 397915 | 21.7 | 32.66 | 22.37 | 1.83 | 19.82 | 7.73 | 9.1 | 1.41 | 171.1 | 17.6 | 566406 | 0.43 | 3.1 | 7.9 | 78.5 | 4.12 | 2.58 | 2.66 | 0.09 | 12.50 | 13.12 | 348.8 |
| SING-03_ap_4 | 396672 | 5.6 | 10.56 | 5.71 | 1.01 | 9.75 | 2.03 | 2.4 | 0.44 | 497.6 | 8.0 | 566172 | 0.23 | 1.2 | 3.9 | 85.2 | 1.54 | 0.76 | 0.60 | 0.03 | 27.82 | 3.03 | 2888.4 |
| SING-03_ap_6 | 396972 | 1.4 | 31.18 | 24.85 | 0.61 | 15.27 | 7.71 | 1.2 | 2.08 | 356.4 | 4.7 | 564741 | 0.42 | 0.6 | 3.8 | 72.9 | 3.47 | 0.10 | 3.12 | 0.15 | 31.01 | 16.58 | 11009.4 |
| SING-03_ap_7 | 395683 | 266.5 | 19.08 | 6.39 | 8.17 | 34.84 | 2.80 | 105.9 | 0.40 | 205.1 | 158.1 | 565943 | 0.61 | 34.9 | 36.5 | 76.6 | 3.91 | 23.76 | 0.63 | 0.47 | 34.68 | 3.59 | 2450.3 |
| SING-03_ap_8 | 392119 | 2.3 | 13.81 | 6.48 | 1.09 | 11.16 | 2.55 | 0.3 | 0.26 | 230.6 | 4.7 | 565358 | 0.36 | 0.5 | 3.7 | 64.7 | 2.18 | 0.07 | 0.52 | 0.01 | 31.96 | 2.42 | 7142.8 |
| SING-03_ap_8 | 397585 | 2.3 | 5.31 | 4.34 | 0.77 | 4.47 | 1.37 | 0.8 | 0.48 | 187.6 | 2.7 | 566411 | 6.77 | 0.6 | 1.6 | 84.1 | 0.79 | 0.85 | 0.51 | 0.11 | 9.06 | 3.37 | 680.9 |

*All elements are in ppm.

Appendix C: Eastern Sunda arc apatite trace element chemistry (LA-ICP-MS)

| Analysis ID | Ca | Ce | Dy | Er | Eu | Gd | Ho | La | Lu | Nb | Nd | P | Pb | Pr | Sm | Sr | Tb | Th | Tm | U | V | Yb | Fe |
|-------------|--------|--------|--------|--------|-------|--------|-------|-------|-------|-------|--------|--------|-------|-------|-------|-------|-------|-------|-------|------|--------|-------|---------|
| SLG-03_ap_9 | 380632 | 37.5 | 42.44 | 29.36 | 2.70 | 21.52 | 9.86 | 17.2 | 2.29 | 476.4 | 23.9 | 563182 | 1.76 | 4.5 | 9.2 | 156.4 | 5.11 | 4.24 | 3.63 | 0.35 | 123.94 | 19.16 | 20163.1 |
| TR-01_ap_1 | 395271 | 432.6 | 123.85 | 60.62 | 21.79 | 163.51 | 23.22 | 133.3 | 4.74 | 426.6 | 437.9 | 566564 | 1.26 | 75.7 | 126.9 | 399.4 | 21.78 | 2.04 | 6.81 | 0.65 | 33.66 | 36.11 | 1671.4 |
| TR-01_ap_10 | 394356 | 356.7 | 107.29 | 52.04 | 19.46 | 134.83 | 20.17 | 109.2 | 4.38 | 503.2 | 370.3 | 565514 | 0.47 | 62.8 | 109.9 | 395.7 | 18.09 | 1.81 | 6.07 | 0.60 | 33.31 | 32.96 | 2789.8 |
| TR-01_ap_11 | 395745 | 391.0 | 102.31 | 49.67 | 19.76 | 136.28 | 19.14 | 124.3 | 4.03 | 640.5 | 387.6 | 565983 | 1.04 | 66.8 | 108.0 | 281.6 | 17.94 | 1.86 | 5.46 | 0.49 | 41.64 | 29.32 | 931.9 |
| TR-01_ap_12 | 394919 | 552.4 | 140.97 | 68.78 | 22.29 | 174.31 | 27.20 | 183.2 | 5.93 | 561.0 | 509.0 | 565491 | 0.68 | 93.4 | 143.5 | 343.9 | 24.09 | 1.58 | 8.16 | 0.60 | 30.50 | 45.32 | 1651.0 |
| TR-01_ap_13 | 394040 | 431.2 | 125.95 | 63.17 | 21.61 | 157.79 | 24.24 | 131.3 | 5.32 | 647.9 | 468.7 | 565476 | 0.59 | 75.5 | 125.1 | 383.1 | 22.01 | 1.87 | 6.98 | 0.63 | 29.80 | 38.92 | 2754.3 |
| TR-01_ap_14 | 395056 | 627.1 | 142.34 | 69.66 | 21.61 | 174.36 | 26.61 | 211.1 | 6.00 | 760.9 | 544.5 | 565638 | 1.05 | 102.5 | 146.7 | 230.0 | 23.82 | 1.51 | 8.09 | 0.44 | 42.14 | 47.36 | 1117.2 |
| TR-01_ap_15 | 394983 | 472.2 | 130.67 | 63.66 | 22.07 | 159.08 | 24.44 | 152.0 | 5.12 | 540.1 | 456.0 | 565540 | 1.04 | 77.8 | 126.6 | 379.7 | 21.88 | 1.84 | 7.28 | 0.58 | 41.36 | 38.58 | 1844.1 |
| TR-01_ap_16 | 395308 | 404.5 | 112.55 | 55.66 | 20.24 | 147.30 | 21.27 | 126.2 | 4.51 | 623.0 | 406.2 | 565752 | 3.65 | 70.6 | 117.0 | 354.5 | 19.25 | 1.64 | 6.24 | 0.57 | 43.47 | 33.29 | 1365.3 |
| TR-01_ap_17 | 394013 | 383.5 | 111.44 | 51.81 | 23.59 | 151.13 | 20.75 | 120.6 | 3.80 | 473.1 | 410.9 | 566388 | 0.48 | 68.7 | 119.1 | 399.3 | 19.54 | 1.38 | 5.52 | 0.44 | 32.66 | 29.64 | 3171.6 |
| TR-01_ap_18 | 393519 | 1256.7 | 293.10 | 142.90 | 20.87 | 349.39 | 56.12 | 399.1 | 11.43 | 908.2 | 1085.9 | 564772 | 1.52 | 206.5 | 294.1 | 235.5 | 49.48 | 6.61 | 16.44 | 1.69 | 32.00 | 88.93 | 1251.2 |
| TR-01_ap_19 | 394534 | 400.7 | 121.89 | 59.46 | 20.55 | 153.46 | 22.93 | 124.9 | 4.77 | 630.7 | 416.6 | 565586 | 1.25 | 70.9 | 121.5 | 382.0 | 20.92 | 4.98 | 6.54 | 0.66 | 35.97 | 35.02 | 2236.0 |
| TR-01_ap_2 | 394102 | 380.9 | 113.13 | 56.64 | 20.95 | 144.92 | 21.84 | 118.2 | 4.67 | 619.1 | 394.9 | 565517 | 0.48 | 67.0 | 115.9 | 397.3 | 19.75 | 1.92 | 6.43 | 0.64 | 39.15 | 34.00 | 2822.8 |
| TR-01_ap_20 | 394403 | 388.2 | 116.53 | 56.61 | 21.09 | 150.85 | 21.84 | 122.5 | 4.51 | 606.4 | 409.3 | 565552 | 0.58 | 69.8 | 118.9 | 396.7 | 19.94 | 2.00 | 6.07 | 0.66 | 35.25 | 33.86 | 2452.9 |
| TR-01_ap_21 | 395617 | 374.1 | 106.78 | 53.27 | 21.07 | 137.18 | 20.19 | 116.5 | 4.39 | 643.7 | 375.0 | 565670 | 4.35 | 65.4 | 110.0 | 299.4 | 18.32 | 1.64 | 6.04 | 0.49 | 41.93 | 33.70 | 1075.5 |
| TR-01_ap_22 | 393357 | 455.9 | 129.82 | 64.30 | 20.87 | 168.96 | 24.97 | 141.0 | 5.08 | 639.1 | 461.7 | 565303 | 0.53 | 79.8 | 133.5 | 398.0 | 22.43 | 2.23 | 7.28 | 0.73 | 27.92 | 39.52 | 3516.2 |
| TR-01_ap_23 | 394232 | 463.2 | 121.78 | 62.30 | 21.01 | 154.51 | 23.75 | 133.3 | 5.37 | 619.7 | 466.2 | 565473 | 0.48 | 81.3 | 124.3 | 394.5 | 20.99 | 2.01 | 6.97 | 0.64 | 32.34 | 40.99 | 2515.5 |
| TR-01_ap_24 | 394074 | 403.8 | 120.08 | 57.82 | 21.69 | 152.33 | 23.00 | 126.3 | 4.75 | 720.9 | 411.7 | 565564 | 1.06 | 71.7 | 119.3 | 377.9 | 20.39 | 1.98 | 6.50 | 0.65 | 28.29 | 36.55 | 2854.3 |
| TR-01_ap_25 | 395150 | 405.8 | 113.16 | 56.90 | 22.59 | 143.16 | 21.85 | 131.7 | 4.83 | 501.0 | 399.2 | 565634 | 1.00 | 69.6 | 113.4 | 352.6 | 19.45 | 2.02 | 6.48 | 0.67 | 32.49 | 36.16 | 1789.9 |
| TR-01_ap_26 | 394594 | 387.1 | 116.24 | 58.31 | 22.50 | 151.05 | 22.61 | 121.5 | 4.81 | 505.8 | 401.0 | 565523 | 0.67 | 69.1 | 116.6 | 389.1 | 20.13 | 1.98 | 6.85 | 0.66 | 32.46 | 36.34 | 2417.0 |
| TR-01_ap_27 | 394799 | 447.9 | 123.43 | 60.00 | 22.14 | 158.83 | 23.14 | 144.4 | 4.81 | 581.0 | 441.1 | 565575 | 0.75 | 76.6 | 127.6 | 351.8 | 20.87 | 1.63 | 6.83 | 0.57 | 33.24 | 37.32 | 1961.3 |
| TR-01_ap_28 | 393711 | 626.7 | 152.41 | 74.94 | 24.86 | 189.81 | 28.71 | 206.3 | 6.22 | 717.7 | 576.0 | 565304 | 1.36 | 104.9 | 157.9 | 277.4 | 25.68 | 1.99 | 8.79 | 0.66 | 34.33 | 48.38 | 2718.7 |
| TR-01_ap_29 | 395212 | 333.0 | 99.59 | 47.94 | 18.84 | 127.78 | 18.76 | 102.6 | 3.94 | 544.4 | 348.8 | 565745 | 0.85 | 59.6 | 100.1 | 382.0 | 17.04 | 1.60 | 5.43 | 0.55 | 33.66 | 29.58 | 1768.8 |
| TR-01_ap_3 | 395263 | 381.9 | 113.08 | 55.86 | 20.62 | 147.06 | 21.80 | 118.3 | 4.62 | 478.3 | 397.4 | 565646 | 1.47 | 67.4 | 113.4 | 389.7 | 19.53 | 1.83 | 6.37 | 0.62 | 29.02 | 34.24 | 1887.6 |
| TR-01_ap_30 | 395299 | 363.5 | 107.98 | 53.56 | 18.54 | 138.38 | 20.74 | 111.4 | 4.56 | 526.5 | 375.3 | 565717 | 0.67 | 64.2 | 110.0 | 361.4 | 18.48 | 1.92 | 6.07 | 0.65 | 34.11 | 33.59 | 1630.7 |
| TR-01_ap_4 | 394902 | 404.1 | 113.24 | 55.13 | 21.48 | 145.39 | 21.17 | 130.4 | 4.61 | 478.4 | 399.8 | 565567 | 0.95 | 70.1 | 114.7 | 366.9 | 18.90 | 1.61 | 6.21 | 0.55 | 22.48 | 34.47 | 2119.8 |
| TR-01_ap_5 | 394681 | 598.7 | 162.30 | 81.24 | 24.53 | 206.17 | 30.93 | 190.8 | 6.55 | 446.7 | 593.9 | 565275 | 0.67 | 103.4 | 168.2 | 376.0 | 27.78 | 2.44 | 8.95 | 0.78 | 20.51 | 49.22 | 1943.4 |
| TR-01_ap_6 | 394712 | 439.3 | 117.42 | 56.66 | 19.66 | 143.75 | 22.53 | 142.4 | 5.35 | 680.0 | 413.8 | 565651 | 0.61 | 75.6 | 118.8 | 361.3 | 19.82 | 1.48 | 6.97 | 0.52 | 39.14 | 38.10 | 1931.2 |
| TR-01_ap_7 | 394195 | 416.8 | 122.28 | 59.88 | 21.83 | 158.14 | 23.40 | 128.2 | 4.88 | 529.6 | 426.4 | 565431 | 0.51 | 73.9 | 126.5 | 394.5 | 20.91 | 2.21 | 6.72 | 0.72 | 30.94 | 37.35 | 2788.2 |
| TR-02_ap_1 | 395931 | 1180.1 | 155.08 | 58.71 | 11.34 | 222.61 | 26.04 | 380.8 | 2.91 | 237.8 | 866.5 | 565034 | 1.40 | 178.4 | 211.7 | 367.9 | 28.83 | 28.35 | 5.39 | 5.17 | 16.72 | 24.96 | 43.5 |
| TR-02_ap_10 | 395688 | 1077.0 | 170.00 | 74.07 | 11.27 | 217.43 | 30.90 | 374.5 | 4.43 | 240.7 | 782.1 | 565104 | 6.14 | 163.1 | 196.9 | 388.9 | 29.81 | 18.02 | 7.49 | 3.44 | 11.32 | 35.74 | 256.3 |
| TR-02_ap_11 | 396247 | 928.9 | 119.54 | 44.88 | 9.42 | 175.04 | 20.09 | 317.7 | 2.00 | 270.8 | 686.3 | 565340 | 2.69 | 141.6 | 164.0 | 362.4 | 22.22 | 10.56 | 4.22 | 1.93 | 18.70 | 17.77 | 90.4 |
| TR-02_ap_12 | 395972 | 1064.3 | 133.60 | 49.67 | 9.68 | 194.96 | 22.28 | 363.2 | 2.22 | 247.6 | 755.8 | 565157 | 2.04 | 158.8 | 183.7 | 400.0 | 24.90 | 12.71 | 4.64 | 3.09 | 15.70 | 19.96 | 199.9 |
| TR-02_ap_13 | 396482 | 1160.4 | 66.81 | 28.42 | 10.02 | 101.31 | 11.40 | 422.8 | 1.99 | 175.6 | 682.5 | 565327 | 1.73 | 154.1 | 118.3 | 161.8 | 12.52 | 6.82 | 2.83 | 0.81 | 14.00 | 15.69 | 59.6 |
| TR-02_ap_14 | 394540 | 1165.8 | 140.57 | 53.40 | 10.71 | 201.63 | 24.08 | 411.4 | 2.52 | 994.6 | 820.1 | 565332 | 3.98 | 172.9 | 196.0 | 355.0 | 26.66 | 25.59 | 4.95 | 5.06 | 17.72 | 20.66 | 470.6 |
| TR-02_ap_15 | 394621 | 1187.5 | 98.33 | 37.07 | 12.07 | 163.65 | 15.99 | 375.7 | 2.32 | 197.3 | 854.1 | 564817 | 2.15 | 180.1 | 176.9 | 330.6 | 19.33 | 19.01 | 3.54 | 2.37 | 11.26 | 18.80 | 1852.4 |
| TR-02_ap_16 | 395552 | 1232.0 | 149.76 | 56.67 | 11.66 | 232.38 | 25.91 | 404.6 | 2.84 | 216.8 | 943.8 | 564876 | 12.00 | 193.0 | 224.3 | 340.1 | 28.90 | 39.99 | 5.21 | 5.20 | 38.53 | 23.81 | 373.4 |
| TR-02_ap_17 | 392860 | 1226.5 | 112.74 | 44.87 | 12.69 | 184.44 | 19.56 | 366.0 | 2.66 | 159.0 | 942.8 | 565284 | 2.44 | 148.7 | 173.2 | 346.3 | 23.43 | 23.43 | 4.60 | 4.10 | 13.16 | 22.12 | 45.4 |
| TR-02_ap_18 | 396176 | 984.2 | 127.67 | 49.10 | 9.80 | 181.39 | 21.69 | 337.7 | 2.32 | 287.9 | 717.9 | 565285 | 2.44 | 148.7 | 173.2 | 346.3 | 23.43 | 23.43 | 4.60 | 4.10 | 13.16 | 22.12 | 45.4 |
| TR-02_ap_19 | 392372 | 1330.9 | 69.85 | 28.78 | 10.23 | 114.82 | 12.18 | 466.1 | 1.83 | 183.2 | 795.4 | 564392 | 1.93 | 176.9 | 132.9 | 156.7 | 12.80 | 11.02 | 2.94 | 1.05 | 23.75 | 15.16 | 4688.0 |
| TR-02_ap_20 | 395986 | 1010.2 | 136.71 | 54.89 | 10.39 | 188.53 | 23.68 | 340.9 | 2.91 | 365.4 | 743.3 | 565280 | 2.46 | 154.2 | 172.1 | 353.8 | 24.58 | 19.12 | 5.17 | 1.21 | 5.85 | 24.57 | 91.9 |
| TR-02_ap_21 | 395975 | 1078.5 | 153.12 | 58.65 | 10.17 | 217.69 | 25.64 | 352.7 | 2.94 | 278.3 | 821.4 | 565139 | 1.44 | 170.0 | 203.6 | 335.2 | 28.43 | 16.63 | 5.41 | 2.74 | 32.62 | 26.05 | 63.8 |
| TR-02_ap_22 | 396166 | 1077.1 | 148.75 | 59.62 | 12.90 | 204.37 | 26.36 | 362.4 | 2.87 | 200.4 | 772.9 | 565155 | 1.91 | 161.5 | 185.7 | 278.2 | 26.70 | 24.86 | 5.49 | 7.54 | 8.02 | 24.25 | 65.5 |
| TR-02_ap_23 | 391947 | 1287.0 | 69.77 | 28.20 | 9.31 | 116.68 | 11.85 | 432.6 | 1.76 | 200.5 | 767.0 | 564385 | 0.98 | 179.0 | 135.2 | 199.3 | 13.31 | 11.23 | 2.90 | 0.88 | 29.11 | 14.32 | 5246.0 |
| TR-02_ap_24 | 395682 | 1194.6 | 134.87 | 54.49 | 10.32 | 193.97 | 23.51 | 397.1 | 3.16 | 269.5 | 852.8 | 565056 | 2.24 | 179.1 | 188.9 | 406.1 | 25.16 | 21.05 | 5.26 | 4.25 | 7.79 | 25.39 | 55.1 |
| TR-02_ap_4 | 396117 | 923.6 | 187.59 | 83.69 | 11.13 | 225.02 | 34.01 | 208.2 | 4.94 | 296.2 | 713.2 | 565256 | 1.48 | 141.2 | 190.8 | 324.5 | 31.69 | 12.58 | 8.82 | 4.92 | 17.90 | 42.47 | 64.1 |
| TR-02_ap_5 | 396700 | 901.7 | 109.31 | 45.23 | 8.16 | 173.93 | 19.18 | 349.1 | 2.90 | 113.5 | 747.8 | 565353 | 0.26 | 148.4 | 167.7 | 116.0 | 21.04 | 59.71 | 4.58 | 3.27 | 5.54 | 21.76 | 28.3 |
| TR-02_ap_6 | 395095 | 1895.1 | 146.19 | 62.90 | 16.60 | 231.12 | 26.53 | 660.0 | 3.71 | 229.7 | 1188.7 | 564428 | 0.69 | 266.2 | 237.6 | 265.7 | 27.74 | 39.56 | 6.41 | 8.46 | 14.07 | 29.12 | 119.9 |
| TR-02_ap_7 | 395602 | 1179.6 | 133.43 | 53.08 | 12.87 | 198.76 | 23.01 | 382.3 | 2.94 | 342.3 | 873.1 | 565115 | 1.55 | 180.8 | 197.8 | 289.3 | 25.24 | 21.78 | 5.16 | 3.50 | 11.61 | 24.11 | 1 |

Appendix C: Eastern Sunda arc apatite trace element chemistry (LA-ICP-MS)

| Analysis ID | Ca | Ce | Dy | Er | Eu | Gd | Ho | La | Lu | Nb | Nd | P | Pb | Pr | Sm | Sr | Tb | Th | Tm | U | V | Yb | Fe |
|-------------|--------|--------|--------|--------|-------|--------|-------|-------|-------|--------|--------|--------|-------|-------|-------|-------|-------|--------|-------|------|-------|--------|--------|
| TR-02_ap_9 | 395284 | 1322.4 | 187.41 | 72.39 | 13.24 | 264.40 | 32.19 | 419.5 | 4.21 | 204.3 | 1022.0 | 564717 | 1.91 | 208.9 | 254.6 | 327.3 | 34.40 | 31.18 | 7.21 | 5.48 | 19.80 | 34.56 | 529.9 |
| TR-03_ap_1 | 390781 | 557.0 | 213.32 | 125.75 | 27.55 | 200.16 | 41.87 | 155.3 | 16.52 | 1569.6 | 558.4 | 565265 | 6.70 | 98.4 | 158.1 | 426.0 | 31.88 | 15.41 | 17.22 | 6.48 | 2.15 | 112.47 | 4608.4 |
| TR-03_ap_2 | 392729 | 761.5 | 199.30 | 117.72 | 26.09 | 203.59 | 38.03 | 235.8 | 14.11 | 1318.1 | 705.4 | 565345 | 1.93 | 125.6 | 175.2 | 434.8 | 30.69 | 10.43 | 15.22 | 2.83 | 2.59 | 95.80 | 2409.5 |
| TR-03_ap_3 | 391671 | 684.5 | 185.96 | 106.32 | 28.81 | 190.95 | 37.17 | 207.2 | 11.66 | 1567.6 | 625.1 | 565387 | 4.61 | 115.2 | 170.1 | 463.1 | 29.21 | 8.57 | 13.46 | 4.65 | 6.00 | 85.04 | 3390.9 |
| TR-03_ap_4 | 391491 | 731.6 | 212.98 | 123.16 | 23.36 | 218.45 | 42.97 | 230.6 | 14.89 | 1232.3 | 631.0 | 565052 | 1.91 | 121.9 | 177.9 | 449.2 | 33.06 | 11.94 | 16.43 | 4.91 | 7.82 | 103.11 | 4066.0 |
| TR-03_ap_5 | 390526 | 723.1 | 223.05 | 121.94 | 25.64 | 240.43 | 43.95 | 228.2 | 12.77 | 1522.9 | 669.9 | 565029 | 6.44 | 121.2 | 202.2 | 532.4 | 36.02 | 6.05 | 15.17 | 5.23 | 5.21 | 95.01 | 4602.3 |
| TR-03_ap_6 | 396955 | 889.9 | 218.81 | 138.22 | 26.46 | 200.10 | 45.68 | 176.3 | 20.01 | 2299.7 | 563.7 | 565388 | 3.61 | 101.5 | 166.8 | 450.8 | 32.42 | 12.73 | 19.27 | 6.40 | 2.26 | 133.65 | 4244.8 |
| TR-03_ap_7 | 395101 | 985.5 | 293.77 | 186.03 | 27.70 | 257.74 | 59.59 | 355.1 | 20.47 | 791.0 | 722.5 | 565229 | 8.48 | 145.4 | 205.5 | 167.3 | 41.46 | 48.59 | 24.23 | 2.91 | 4.40 | 155.07 | 149.7 |
| TR-04_ap_10 | 394235 | 937.7 | 355.65 | 239.96 | 30.43 | 290.95 | 76.41 | 290.6 | 32.41 | 1305.4 | 725.6 | 565343 | 14.42 | 144.0 | 223.7 | 268.7 | 49.91 | 51.60 | 34.64 | 0.79 | 8.57 | 231.76 | 95.6 |
| TR-04_ap_11 | 394728 | 610.6 | 321.58 | 212.77 | 21.45 | 260.63 | 66.89 | 197.4 | 23.03 | 652.2 | 521.8 | 565281 | 3.36 | 95.3 | 174.2 | 195.8 | 44.31 | 38.09 | 27.89 | 1.65 | 6.61 | 173.70 | 1339.5 |
| TR-04_ap_12 | 396080 | 497.3 | 344.07 | 230.32 | 14.11 | 270.31 | 74.96 | 143.2 | 25.32 | 476.7 | 489.6 | 565472 | 1.77 | 82.9 | 169.4 | 149.5 | 45.99 | 50.30 | 29.67 | 1.67 | 2.10 | 181.22 | 165.5 |
| TR-04_ap_13 | 395611 | 689.9 | 247.08 | 171.48 | 26.26 | 204.41 | 54.25 | 236.6 | 23.01 | 704.8 | 508.3 | 565494 | 2.20 | 99.0 | 148.9 | 300.8 | 34.49 | 109.52 | 23.85 | 2.54 | 1.82 | 154.23 | 149.7 |
| TR-04_ap_14 | 397228 | 226.8 | 102.33 | 56.00 | 11.64 | 122.84 | 20.22 | 50.0 | 4.00 | 326.3 | 275.0 | 566102 | 2.60 | 44.1 | 88.5 | 167.6 | 16.90 | 4.41 | 6.03 | 0.06 | 2.47 | 32.11 | 108.4 |
| TR-04_ap_15 | 396027 | 549.4 | 284.05 | 185.49 | 15.88 | 227.85 | 59.98 | 156.8 | 21.22 | 551.6 | 505.9 | 565563 | 4.30 | 89.8 | 163.8 | 148.0 | 39.47 | 27.34 | 25.62 | 1.33 | 3.97 | 160.81 | 183.5 |
| TR-04_ap_2 | 396298 | 740.6 | 185.96 | 106.72 | 20.21 | 170.38 | 36.85 | 257.2 | 12.98 | 393.1 | 538.9 | 565520 | 1.90 | 110.4 | 147.9 | 172.9 | 27.26 | 12.24 | 15.24 | 1.64 | 5.18 | 99.70 | 121.0 |
| TR-04_ap_3 | 395230 | 687.6 | 350.08 | 234.87 | 15.71 | 293.60 | 74.18 | 178.5 | 29.62 | 806.2 | 677.7 | 565357 | 3.08 | 116.6 | 214.7 | 160.6 | 48.57 | 68.67 | 32.07 | 1.07 | 1.61 | 206.24 | 209.1 |
| TR-04_ap_5 | 394285 | 1126.7 | 312.97 | 198.02 | 40.52 | 279.14 | 62.70 | 389.6 | 23.36 | 720.0 | 832.4 | 564876 | 1.38 | 163.6 | 227.4 | 261.8 | 45.48 | 42.00 | 26.77 | 5.49 | 1.97 | 174.19 | 901.9 |
| TR-04_ap_6 | 395522 | 927.2 | 250.32 | 153.39 | 32.07 | 217.84 | 50.09 | 343.7 | 18.31 | 641.4 | 625.7 | 565325 | 3.40 | 130.1 | 182.3 | 207.1 | 36.45 | 26.92 | 21.67 | 3.03 | 6.67 | 136.17 | 135.8 |
| TR-04_ap_7 | 395466 | 787.8 | 255.13 | 156.84 | 23.55 | 225.56 | 52.08 | 242.6 | 19.24 | 703.2 | 630.8 | 565432 | 6.02 | 120.1 | 184.2 | 184.3 | 36.99 | 20.88 | 22.07 | 1.34 | 4.09 | 139.68 | 277.6 |
| TR-04_ap_8 | 395630 | 419.7 | 226.37 | 141.00 | 18.69 | 201.34 | 46.43 | 121.7 | 15.47 | 637.4 | 417.7 | 565740 | 3.30 | 68.4 | 138.9 | 201.6 | 31.90 | 20.32 | 19.03 | 0.92 | 4.03 | 113.67 | 579.2 |
| TR-04_ap_9 | 393170 | 966.8 | 295.52 | 200.87 | 35.57 | 241.26 | 62.47 | 340.9 | 24.54 | 2161.3 | 675.6 | 565961 | 1.18 | 136.0 | 189.8 | 215.9 | 40.75 | 26.91 | 27.93 | 2.85 | 6.24 | 177.76 | 138.1 |
| TR-05_ap_1 | 395289 | 787.1 | 197.64 | 126.80 | 23.01 | 189.60 | 41.94 | 271.7 | 18.00 | 931.1 | 563.8 | 565610 | 1.43 | 115.3 | 158.9 | 266.4 | 29.89 | 64.55 | 17.82 | 2.20 | 5.29 | 120.89 | 166.8 |
| TR-05_ap_10 | 396174 | 1124.8 | 118.42 | 61.96 | 14.24 | 144.90 | 22.48 | 420.6 | 6.76 | 279.6 | 685.8 | 565270 | 0.56 | 115.1 | 154.9 | 124.7 | 20.43 | 11.39 | 8.13 | 2.96 | 12.40 | 51.06 | 127.1 |
| TR-05_ap_11 | 395663 | 857.7 | 170.13 | 81.50 | 15.97 | 202.30 | 31.44 | 306.2 | 6.97 | 690.5 | 624.4 | 565523 | 0.41 | 126.3 | 170.8 | 277.5 | 28.11 | 28.64 | 9.51 | 1.11 | 12.98 | 51.82 | 119.5 |
| TR-05_ap_12 | 394040 | 688.1 | 206.41 | 115.64 | 9.34 | 206.94 | 41.22 | 201.3 | 11.85 | 340.4 | 598.5 | 565415 | 1.01 | 124.2 | 131.3 | 384.0 | 25.19 | 67.84 | 11.69 | 1.98 | 14.32 | 70.57 | 110.9 |
| TR-05_ap_13 | 396041 | 570.7 | 143.45 | 78.51 | 6.08 | 147.94 | 28.22 | 78.6 | 6.89 | 346.1 | 343.2 | 565968 | 0.21 | 84.7 | 118.4 | 118.5 | 22.55 | 15.63 | 8.26 | 1.15 | 9.63 | 46.84 | 455.3 |
| TR-05_ap_14 | 394465 | 903.1 | 97.81 | 48.48 | 7.11 | 192.26 | 33.48 | 156.3 | 8.21 | 237.2 | 552.6 | 565551 | 0.23 | 100.3 | 162.4 | 138.2 | 28.78 | 24.08 | 10.85 | 0.55 | 6.21 | 61.89 | 359.2 |
| TR-05_ap_15 | 396520 | 584.5 | 175.78 | 88.66 | 18.42 | 163.59 | 32.10 | 246.4 | 10.08 | 855.8 | 529.5 | 565737 | 0.53 | 107.9 | 139.3 | 228.4 | 25.19 | 67.84 | 11.69 | 1.98 | 14.32 | 70.57 | 110.9 |
| TR-05_ap_16 | 395643 | 734.0 | 159.57 | 91.44 | 18.42 | 163.59 | 32.10 | 246.4 | 10.08 | 855.8 | 529.5 | 565737 | 0.53 | 107.9 | 139.3 | 228.4 | 25.19 | 67.84 | 11.69 | 1.98 | 14.32 | 70.57 | 110.9 |
| TR-05_ap_18 | 394135 | 1212.3 | 166.86 | 95.85 | 28.48 | 177.67 | 33.42 | 467.9 | 11.65 | 929.0 | 727.3 | 565167 | 0.97 | 160.9 | 169.3 | 332.5 | 26.79 | 32.12 | 12.98 | 4.52 | 13.26 | 82.32 | 1011.8 |
| TR-05_ap_19 | 395583 | 756.6 | 132.31 | 73.43 | 13.23 | 154.36 | 25.80 | 245.3 | 8.26 | 240.5 | 572.7 | 565525 | 0.24 | 113.5 | 145.2 | 118.1 | 21.66 | 13.28 | 9.90 | 1.23 | 6.12 | 59.51 | 180.1 |
| TR-05_ap_20 | 394852 | 391.1 | 167.96 | 90.03 | 5.13 | 187.49 | 33.05 | 100.8 | 8.66 | 321.9 | 442.0 | 565415 | 1.01 | 124.2 | 131.3 | 384.0 | 25.19 | 67.84 | 11.69 | 1.98 | 14.32 | 70.57 | 110.9 |
| TR-05_ap_21 | 396601 | 602.1 | 145.57 | 74.02 | 6.48 | 172.17 | 27.90 | 171.6 | 6.42 | 377.9 | 522.3 | 565705 | 2.33 | 97.3 | 145.7 | 141.2 | 23.95 | 18.25 | 8.77 | 0.50 | 6.66 | 48.79 | 91.4 |
| TR-05_ap_22 | 396727 | 381.9 | 141.89 | 81.22 | 7.62 | 143.01 | 29.18 | 120.9 | 8.21 | 492.9 | 336.8 | 565978 | 0.43 | 60.8 | 106.4 | 143.0 | 22.27 | 24.54 | 9.89 | 1.00 | 3.85 | 59.26 | 119.8 |
| TR-05_ap_23 | 395938 | 795.0 | 201.48 | 105.09 | 16.07 | 218.47 | 38.41 | 246.8 | 9.57 | 542.8 | 636.0 | 565492 | 0.35 | 124.3 | 178.2 | 151.1 | 33.17 | 20.20 | 12.79 | 0.92 | 10.61 | 73.51 | 154.8 |
| TR-05_ap_24 | 396184 | 388.5 | 191.50 | 118.28 | 9.91 | 180.65 | 40.57 | 112.2 | 13.23 | 720.2 | 392.3 | 565919 | 0.32 | 67.7 | 131.0 | 132.2 | 29.32 | 91.55 | 15.28 | 0.84 | 5.24 | 90.98 | 154.9 |
| TR-05_ap_25 | 395691 | 931.9 | 212.82 | 123.35 | 18.38 | 211.81 | 42.82 | 308.8 | 13.84 | 527.0 | 686.1 | 565323 | 0.48 | 137.4 | 183.8 | 156.1 | 32.88 | 28.37 | 16.38 | 2.46 | 9.30 | 101.32 | 240.7 |
| TR-05_ap_26 | 395057 | 483.3 | 195.49 | 121.86 | 15.45 | 191.56 | 41.08 | 127.9 | 15.57 | 733.2 | 461.5 | 565612 | 1.16 | 84.1 | 143.0 | 211.5 | 29.99 | 92.21 | 16.21 | 0.50 | 6.91 | 102.97 | 1244.1 |
| TR-05_ap_27 | 396600 | 673.7 | 151.67 | 82.33 | 8.33 | 165.03 | 29.21 | 196.9 | 7.85 | 312.6 | 540.7 | 565614 | 0.25 | 105.1 | 143.7 | 141.5 | 24.35 | 20.75 | 10.05 | 0.75 | 5.08 | 59.33 | 104.7 |
| TR-05_ap_28 | 395186 | 587.5 | 205.41 | 126.29 | 18.37 | 202.83 | 43.35 | 175.6 | 14.34 | 1036.5 | 504.0 | 565900 | 0.49 | 95.1 | 151.6 | 173.0 | 31.93 | 70.49 | 16.23 | 1.44 | 5.53 | 101.49 | 451.6 |
| TR-05_ap_29 | 396097 | 627.9 | 141.47 | 74.13 | 18.13 | 160.81 | 27.24 | 214.9 | 7.78 | 627.1 | 465.1 | 565766 | 1.15 | 94.0 | 129.8 | 258.3 | 23.64 | 16.29 | 9.19 | 0.97 | 4.07 | 89.88 | 636.3 |
| TR-05_ap_30 | 392027 | 453.6 | 199.34 | 118.63 | 14.78 | 197.50 | 40.80 | 123.2 | 12.32 | 3275.2 | 444.7 | 566889 | 0.41 | 77.7 | 148.1 | 117.8 | 30.92 | 82.33 | 15.14 | 0.91 | 4.07 | 89.88 | 636.3 |
| TR-05_ap_4 | 394260 | 704.1 | 179.85 | 96.45 | 9.85 | 196.81 | 34.93 | 219.6 | 9.08 | 1837.9 | 569.9 | 566180 | 1.26 | 110.2 | 162.0 | 137.9 | 28.97 | 32.66 | 11.87 | 1.53 | 7.21 | 66.82 | 140.4 |
| TR-05_ap_5 | 396722 | 372.9 | 108.09 | 57.34 | 4.89 | 127.00 | 21.31 | 93.8 | 5.42 | 559.8 | 373.8 | 566069 | 0.51 | 65.2 | 110.5 | 119.4 | 18.07 | 13.84 | 6.82 | 0.30 | 4.38 | 39.93 | 105.6 |
| TR-05_ap_6 | 392905 | 1153.1 | 241.03 | 136.60 | 30.36 | 243.96 | 47.49 | 403.2 | 15.63 | 1160.7 | 822.7 | 565007 | 0.62 | 170.5 | 215.8 | 281.5 | 37.67 | 31.56 | 18.37 | 3.01 | 13.42 | 116.00 | 1944.6 |
| TR-05_ap_7 | 393803 | 811.7 | 153.76 | 86.23 | 17.85 | 164.35 | 30.90 | 267.7 | 9.58 | 324.4 | 575.7 | 564980 | 0.28 | 119.9 | 149.6 | 120.2 | 24.49 | 20.44 | 11.33 | 1.67 | 13.90 | 70.13 | 3243.3 |
| TR-05_ap_8 | 396017 | 629.6 | 182.03 | 99.61 | 16.04 | 189.74 | 35.78 | 199.3 | 9.82 | 527.8 | 504.1 | 565960 | 0.34 | 97.8 | 148.0 | 190.2 | 28.72 | 50.48 | 12.39 | 1.48 | 8.11 | 73.96 | 116.7 |

*All elements are in ppm.

Appendix C: Eastern Sunda arc apatite trace element chemistry (LA-ICP-MS)

| Analysis ID | Ca | Ce | Dy | Er | Eu | Gd | Ho | La | Lu | Nb | Nd | P | Pb | Pr | Sm | Sr | Tb | Th | Tm | U | V | Yb | Fe |
|-------------|--------|--------|--------|--------|-------|--------|-------|--------|-------|--------|--------|--------|------|-------|-------|-------|-------|--------|-------|-------|-------|--------|--------|
| TR-05_ap_9 | 396272 | 983.3 | 110.90 | 57.23 | 20.44 | 136.93 | 20.98 | 362.8 | 5.95 | 291.0 | 631.1 | 565396 | 0.65 | 136.4 | 137.7 | 133.4 | 19.22 | 9.04 | 7.51 | 2.67 | 13.81 | 44.56 | 205.0 |
| BHF-02_ap1 | 394351 | 1218.5 | 194.47 | 106.28 | 25.78 | 222.13 | 37.74 | 370.1 | 12.47 | 805.9 | 938.6 | 565021 | 0.58 | 186.5 | 220.2 | 345.1 | 32.94 | 42.47 | 13.77 | 6.88 | 5.83 | 85.68 | 755.7 |
| BHF-02_ap10 | 394663 | 1594.5 | 223.43 | 127.02 | 22.93 | 258.20 | 43.12 | 527.7 | 14.44 | 527.0 | 1112.5 | 564597 | 0.65 | 228.8 | 249.9 | 363.8 | 36.71 | 51.89 | 16.73 | 11.45 | 7.11 | 102.34 | 221.1 |
| BHF-02_ap11 | 394198 | 1487.5 | 216.69 | 121.33 | 28.81 | 236.95 | 41.74 | 501.2 | 14.81 | 857.4 | 1015.5 | 564942 | 0.84 | 213.4 | 232.3 | 341.2 | 35.19 | 40.68 | 16.65 | 6.37 | 2.15 | 105.67 | 442.7 |
| BHF-02_ap12 | 391354 | 1478.8 | 262.18 | 161.22 | 34.55 | 257.55 | 53.06 | 478.4 | 26.07 | 1362.9 | 1054.4 | 564530 | 1.20 | 215.4 | 245.9 | 434.3 | 40.17 | 80.90 | 24.17 | 10.23 | 5.94 | 167.93 | 2719.6 |
| BHF-02_ap13 | 396600 | 840.0 | 218.58 | 125.64 | 22.07 | 221.59 | 42.85 | 231.9 | 14.71 | 489.7 | 741.5 | 565271 | 0.14 | 139.3 | 200.3 | 357.0 | 34.95 | 18.78 | 16.74 | 5.46 | 3.44 | 102.20 | 292.2 |
| BHF-02_ap14 | 394615 | 926.3 | 297.41 | 33.21 | 24.01 | 104.88 | 12.89 | 343.2 | 3.38 | 699.3 | 619.2 | 565652 | 0.88 | 129.5 | 117.2 | 583.1 | 42.95 | 3.90 | 4.04 | 1.28 | 13.25 | 24.20 | 1296.5 |
| BHF-02_ap15 | 393688 | 1680.6 | 240.82 | 143.33 | 30.95 | 247.40 | 47.28 | 581.0 | 20.38 | 819.2 | 1088.1 | 564528 | 0.79 | 234.3 | 247.9 | 437.9 | 37.87 | 83.95 | 20.37 | 8.84 | 2.23 | 134.56 | 715.2 |
| BHF-02_ap16 | 393799 | 1810.4 | 262.52 | 162.36 | 34.41 | 267.50 | 52.47 | 592.9 | 25.01 | 584.0 | 1201.5 | 564242 | 0.71 | 259.9 | 271.0 | 387.0 | 41.77 | 127.23 | 23.53 | 8.49 | 1.58 | 160.88 | 683.0 |
| BHF-02_ap17 | 392940 | 1677.4 | 224.49 | 127.84 | 28.65 | 242.20 | 43.93 | 576.1 | 16.63 | 1194.8 | 1109.4 | 564681 | 0.37 | 235.6 | 244.8 | 442.4 | 36.10 | 55.35 | 17.75 | 7.63 | 6.42 | 113.58 | 977.2 |
| BHF-02_ap18 | 394442 | 1336.9 | 241.99 | 142.97 | 27.26 | 245.63 | 48.65 | 447.3 | 18.40 | 721.9 | 959.9 | 564784 | 1.81 | 198.7 | 233.2 | 354.3 | 38.66 | 194.46 | 19.44 | 16.67 | 3.77 | 124.81 | 405.2 |
| BHF-02_ap21 | 393738 | 980.6 | 191.10 | 119.20 | 31.63 | 175.68 | 39.07 | 321.6 | 18.74 | 1105.3 | 692.9 | 565272 | 0.56 | 144.3 | 169.5 | 473.4 | 28.99 | 59.06 | 17.41 | 8.58 | 2.90 | 118.96 | 1289.8 |
| BHF-02_ap22 | 396489 | 702.1 | 189.19 | 94.83 | 15.68 | 199.75 | 32.77 | 173.9 | 6.30 | 264.1 | 716.8 | 565447 | 0.19 | 124.8 | 186.4 | 184.1 | 28.17 | 17.10 | 12.17 | 1.24 | 1.40 | 61.83 | 71.3 |
| BHF-02_ap23 | 393802 | 1340.2 | 206.90 | 117.46 | 27.32 | 220.97 | 40.07 | 439.4 | 16.84 | 892.2 | 937.4 | 564885 | 1.34 | 196.6 | 218.6 | 387.1 | 33.25 | 44.49 | 16.44 | 7.44 | 2.77 | 109.01 | 1056.5 |
| BHF-02_ap24 | 394178 | 1394.1 | 245.65 | 140.68 | 32.17 | 261.62 | 47.99 | 445.4 | 17.48 | 810.3 | 1037.4 | 564783 | 0.38 | 210.2 | 249.5 | 303.3 | 39.34 | 102.94 | 19.08 | 14.41 | 2.33 | 122.28 | 542.1 |
| BHF-02_ap25 | 394789 | 1384.8 | 265.98 | 154.47 | 31.98 | 286.34 | 52.37 | 413.6 | 21.82 | 559.2 | 1083.0 | 564703 | 0.58 | 212.7 | 288.0 | 285.3 | 42.44 | 64.56 | 22.01 | 7.89 | 5.38 | 144.56 | 200.4 |
| BHF-02_ap27 | 393783 | 1625.8 | 239.21 | 130.40 | 26.47 | 284.53 | 45.92 | 541.3 | 14.53 | 900.6 | 1201.9 | 564614 | 0.68 | 241.7 | 278.8 | 375.5 | 40.24 | 62.72 | 16.40 | 11.86 | 11.04 | 99.08 | 453.6 |
| BHF-02_ap28 | 396650 | 745.3 | 208.22 | 129.38 | 22.31 | 192.68 | 43.04 | 209.9 | 16.94 | 503.3 | 641.9 | 565408 | 0.32 | 121.3 | 168.1 | 299.6 | 31.06 | 51.28 | 18.01 | 7.71 | 2.93 | 118.82 | 209.9 |
| BHF-02_ap29 | 394800 | 1270.5 | 249.97 | 141.79 | 26.05 | 265.98 | 49.19 | 382.1 | 16.75 | 578.8 | 998.6 | 564927 | 0.37 | 197.6 | 280.9 | 336.3 | 40.42 | 54.92 | 18.90 | 9.43 | 4.17 | 114.20 | 365.9 |
| BHF-02_ap30 | 395137 | 1137.0 | 203.09 | 115.01 | 23.10 | 220.39 | 39.44 | 367.3 | 14.85 | 584.0 | 868.7 | 565063 | 0.54 | 170.7 | 211.0 | 337.9 | 32.82 | 37.33 | 15.94 | 5.30 | 6.01 | 101.83 | 307.0 |
| BHF-02_ap31 | 394001 | 1537.1 | 255.39 | 139.20 | 31.12 | 280.15 | 48.44 | 492.5 | 15.90 | 763.1 | 1142.2 | 564602 | 0.45 | 223.7 | 271.9 | 385.5 | 41.73 | 74.88 | 18.54 | 9.56 | 4.35 | 112.93 | 542.0 |
| BHF-02_ap32 | 395986 | 535.0 | 185.65 | 112.87 | 19.85 | 180.86 | 38.01 | 133.6 | 13.69 | 759.0 | 538.8 | 566908 | 0.72 | 93.6 | 155.6 | 188.7 | 29.05 | 37.07 | 15.29 | 1.46 | 1.45 | 95.87 | 69.4 |
| BHF-02_ap33 | 394545 | 1329.4 | 348.44 | 228.84 | 29.86 | 321.56 | 72.89 | 423.5 | 32.40 | 578.8 | 1003.8 | 564590 | 0.71 | 201.8 | 260.8 | 359.0 | 52.10 | 71.26 | 32.10 | 12.97 | 13.16 | 217.44 | 273.3 |
| BHF-02_ap34 | 393300 | 2134.3 | 244.93 | 140.73 | 37.73 | 274.47 | 47.92 | 732.6 | 19.88 | 733.4 | 1326.7 | 564110 | 0.44 | 286.5 | 288.6 | 335.2 | 40.63 | 81.03 | 19.92 | 8.00 | 2.80 | 129.68 | 702.2 |
| BHF-02_ap4 | 394559 | 1587.4 | 227.19 | 135.71 | 28.26 | 234.16 | 45.53 | 559.2 | 19.20 | 546.0 | 1042.7 | 564606 | 0.49 | 222.1 | 234.5 | 328.4 | 35.20 | 59.53 | 24.98 | 7.64 | 1.90 | 128.61 | 371.1 |
| BHF-02_ap5 | 393259 | 2141.2 | 301.29 | 182.82 | 34.46 | 311.66 | 60.80 | 756.9 | 24.42 | 786.4 | 1382.8 | 564016 | 1.20 | 295.0 | 306.4 | 345.3 | 46.86 | 146.64 | 25.98 | 19.30 | 9.60 | 163.59 | 370.5 |
| BHF-02_ap6 | 393533 | 1352.6 | 261.70 | 162.73 | 31.24 | 262.16 | 53.61 | 433.4 | 24.67 | 880.8 | 1005.7 | 564995 | 0.45 | 202.1 | 243.0 | 384.9 | 41.11 | 95.49 | 23.69 | 7.20 | 3.69 | 189.99 | 1142.4 |
| BHF-02_ap7 | 394150 | 1609.4 | 214.03 | 117.49 | 26.41 | 241.89 | 41.03 | 517.0 | 13.73 | 776.8 | 1112.0 | 564692 | 1.11 | 231.4 | 238.5 | 358.5 | 35.15 | 51.16 | 15.94 | 9.49 | 7.17 | 97.62 | 440.9 |
| BHF-02_ap8 | 392494 | 1769.1 | 240.91 | 132.18 | 27.45 | 280.81 | 45.59 | 598.2 | 14.60 | 1234.7 | 1260.8 | 564514 | 0.46 | 259.4 | 278.7 | 436.3 | 40.20 | 36.65 | 17.10 | 7.77 | 9.63 | 102.74 | 1200.3 |
| BHF-02_ap9 | 394076 | 1819.5 | 273.16 | 151.50 | 35.16 | 289.02 | 53.01 | 586.1 | 20.50 | 584.2 | 1257.2 | 564305 | 1.30 | 257.9 | 284.4 | 328.1 | 44.12 | 78.47 | 21.86 | 13.43 | 3.97 | 138.51 | 376.3 |
| BHF-03_ap10 | 395985 | 1113.5 | 171.36 | 89.28 | 19.33 | 214.79 | 31.98 | 309.2 | 10.36 | 367.1 | 886.4 | 565156 | 0.70 | 176.5 | 213.9 | 119.8 | 29.63 | 27.45 | 11.26 | 6.78 | 3.67 | 67.56 | 88.6 |
| BHF-03_ap11 | 393980 | 691.6 | 152.44 | 89.87 | 38.15 | 152.47 | 29.75 | 205.5 | 13.10 | 421.4 | 537.0 | 565089 | 0.37 | 108.2 | 143.9 | 443.2 | 24.74 | 10.65 | 13.02 | 4.59 | 1.00 | 88.22 | 2762.0 |
| BHF-03_ap12 | 394517 | 1355.7 | 230.13 | 137.21 | 23.50 | 242.14 | 46.03 | 431.4 | 17.89 | 759.1 | 970.1 | 564905 | 0.71 | 205.3 | 238.1 | 314.0 | 37.62 | 10.92 | 18.73 | 8.97 | 2.50 | 126.65 | 400.9 |
| BHF-03_ap13 | 394507 | 1589.3 | 292.22 | 157.43 | 25.41 | 346.28 | 54.85 | 419.2 | 17.24 | 647.6 | 1329.9 | 564599 | 0.24 | 257.4 | 343.6 | 151.9 | 48.65 | 11.32 | 19.64 | 4.32 | 2.17 | 121.72 | 91.1 |
| BHF-03_ap14 | 393987 | 1637.3 | 272.22 | 147.28 | 27.38 | 318.16 | 51.14 | 484.2 | 18.21 | 665.7 | 1316.4 | 564455 | 0.35 | 260.8 | 319.0 | 206.7 | 56.45 | 8.96 | 20.02 | 5.10 | 4.19 | 126.48 | 622.1 |
| BHF-03_ap15 | 396499 | 464.1 | 147.49 | 67.63 | 23.32 | 202.25 | 25.30 | 91.4 | 5.78 | 410.7 | 580.6 | 565739 | 0.55 | 93.1 | 188.7 | 140.8 | 27.84 | 1.33 | 8.16 | 1.19 | 0.49 | 45.86 | 235.2 |
| BHF-03_ap16 | 393586 | 1090.8 | 232.80 | 175.18 | 20.27 | 146.64 | 53.19 | 373.3 | 28.20 | 1218.8 | 737.8 | 565212 | 0.77 | 154.2 | 142.9 | 582.9 | 28.35 | 6.49 | 27.09 | 13.09 | 10.09 | 185.03 | 973.5 |
| BHF-03_ap17 | 397407 | 333.4 | 69.50 | 39.04 | 4.59 | 80.53 | 14.02 | 99.7 | 4.89 | 231.7 | 276.5 | 566073 | 0.42 | 53.1 | 71.2 | 88.8 | 11.34 | 10.05 | 5.12 | 2.14 | 2.14 | 33.06 | 88.1 |
| BHF-03_ap18 | 395139 | 1084.8 | 292.69 | 166.11 | 19.06 | 325.27 | 57.41 | 277.0 | 20.70 | 476.2 | 1045.5 | 564863 | 0.40 | 189.0 | 286.7 | 184.1 | 49.01 | 22.53 | 22.64 | 12.79 | 2.49 | 142.50 | 310.9 |
| BHF-03_ap19 | 393716 | 1629.7 | 260.44 | 141.79 | 28.76 | 311.53 | 50.06 | 516.7 | 17.14 | 977.9 | 1272.5 | 564639 | 2.75 | 250.2 | 302.0 | 259.5 | 44.46 | 13.69 | 19.12 | 11.06 | 7.91 | 115.25 | 410.2 |
| BHF-03_ap20 | 391095 | 3340.1 | 369.91 | 201.97 | 27.64 | 427.63 | 69.78 | 1205.4 | 23.56 | 1021.8 | 2017.4 | 562948 | 1.43 | 447.3 | 441.4 | 326.1 | 61.67 | 15.85 | 26.88 | 12.09 | 7.65 | 162.23 | 748.3 |
| BHF-03_ap21 | 398773 | 2009.0 | 327.24 | 203.44 | 31.85 | 327.23 | 66.61 | 667.0 | 30.90 | 1627.6 | 1312.9 | 563710 | 1.19 | 282.2 | 341.4 | 346.1 | 50.89 | 18.01 | 29.96 | 7.65 | 7.57 | 202.23 | 5292.6 |
| BHF-03_ap22 | 394655 | 1141.4 | 204.74 | 110.36 | 17.60 | 232.90 | 38.80 | 354.9 | 12.70 | 801.8 | 889.6 | 565107 | 3.59 | 178.6 | 220.8 | 220.5 | 34.31 | 9.59 | 14.57 | 9.74 | 5.05 | 90.96 | 841.9 |
| BHF-03_ap23 | 395806 | 831.0 | 239.42 | 127.63 | 22.72 | 274.77 | 46.96 | 192.0 | 13.82 | 477.8 | 863.1 | 566377 | 0.49 | 239.5 | 244.0 | 377.6 | 31.82 | 16.86 | 11.95 | 5.18 | 4.05 | 72.11 | 200.1 |
| BHF-03_ap24 | 395129 | 1540.5 | 185.44 | 104.76 | 21.78 | 212.15 | 35.84 | 539.8 | 13.58 | 432.7 | 986.8 | 564762 | 0.60 | 213.2 | 217.5 | 280.3 | 30.62 | 13.80 | 14.58 | 10.06 | 3.72 | 92.15 | 158.1 |
| BHF-03_ap4 | 393229 | 1994.5 | 259.85 | 135.52 | 29.74 | 308.14 | 48.27 | 630.0 | 17.79 | 1121.8 | 1421.8 | 564247 | 0.27 | 293.4 | 317.3 | 182.4 | 43.49 | 66.18 | 17.90 | 35.81 | 8.98 | 119.21 | 1371.8 |
| BHF-03_ap5 | 392005 | 1643.4 | 127.40 | 72.02 | 25.94 | 169.72 | 24.35 | 604.7 | 12.30 | 859.0 | 998.2 | 564447 | 0.31 | 223.9 | 194.2 | 336.4 | 22.74 | 8.04 | 10.66 | 6.70 | 7.25 | 76.37 | 3118.3 |

*All elements are in ppm.

Appendix C: Eastern Sunda arc apatite trace element chemistry (LA-ICP-MS)

| Analysis ID | Ca | Ce | Dy | Er | Eu | Gd | Ho | La | Lu | Nb | Nd | P | Pb | Pr | Sm | Sr | Tb | Th | Tm | U | V | Yb | Fe |
|-------------|--------|--------|--------|--------|--------|--------|-------|-------|-------|---------|--------|--------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|
| BHF-03_ap7 | 394747 | 1488.5 | 312.33 | 174.80 | 35.32 | 332.48 | 59.69 | 462.1 | 22.99 | 477.5 | 1152.7 | 564517 | 1.07 | 229.2 | 306.0 | 188.7 | 51.26 | 58.32 | 23.98 | 22.53 | 5.45 | 155.15 | 174.7 |
| BHF-03_ap8 | 396035 | 700.4 | 197.42 | 88.14 | 32.71 | 271.81 | 34.11 | 144.4 | 8.48 | 428.4 | 883.3 | 565374 | 0.22 | 142.2 | 262.7 | 142.1 | 35.90 | 11.86 | 10.87 | 2.15 | 0.86 | 60.08 | 132.5 |
| BHF-03_ap9 | 395946 | 809.9 | 233.98 | 103.73 | 30.40 | 296.16 | 40.35 | 153.2 | 9.54 | 417.1 | 918.4 | 565251 | 0.13 | 159.6 | 275.8 | 151.3 | 42.00 | 17.05 | 12.80 | 11.88 | 0.89 | 72.23 | 46.3 |
| GBF-03_ap10 | 396293 | 352.0 | 152.05 | 54.91 | 39.99 | 209.95 | 24.19 | 80.7 | 4.25 | 356.6 | 504.3 | 565727 | 0.86 | 73.9 | 188.7 | 143.0 | 27.87 | 0.19 | 6.61 | 0.40 | 2.85 | 34.12 | 722.6 |
| GBF-03_ap11 | 396786 | 262.1 | 103.31 | 44.21 | 34.43 | 142.37 | 18.03 | 61.3 | 3.74 | 318.4 | 315.0 | 565976 | 0.50 | 51.5 | 116.2 | 107.8 | 19.40 | 0.28 | 4.87 | 0.12 | 1.94 | 28.69 | 602.6 |
| GBF-03_ap12 | 396842 | 275.1 | 127.95 | 48.71 | 33.51 | 187.42 | 20.41 | 51.2 | 3.49 | 299.0 | 410.7 | 565896 | 11.94 | 59.0 | 161.6 | 84.5 | 24.81 | 0.31 | 5.15 | 0.07 | 1.21 | 28.50 | 418.5 |
| GBF-03_ap13 | 396516 | 319.4 | 151.78 | 58.48 | 42.21 | 196.22 | 25.33 | 62.6 | 4.56 | 314.2 | 471.2 | 565781 | 0.52 | 66.7 | 172.3 | 110.3 | 26.48 | 0.14 | 6.67 | 0.13 | 2.07 | 35.86 | 633.2 |
| GBF-03_ap14 | 396047 | 300.9 | 127.81 | 51.70 | 34.18 | 161.13 | 20.51 | 72.6 | 4.88 | 394.6 | 372.3 | 565814 | 0.63 | 57.0 | 137.0 | 136.7 | 22.97 | 0.56 | 6.38 | 0.39 | 1.57 | 36.44 | 1192.9 |
| GBF-03_ap3 | 396070 | 428.3 | 156.07 | 57.97 | 49.15 | 227.74 | 24.56 | 97.1 | 4.49 | 422.5 | 586.0 | 565645 | 22.35 | 89.1 | 205.8 | 107.8 | 30.18 | 0.29 | 6.29 | 0.17 | 2.08 | 35.26 | 710.8 |
| GBF-03_ap6 | 395814 | 296.4 | 98.85 | 32.86 | 37.25 | 147.81 | 14.90 | 72.6 | 1.99 | 345.3 | 395.7 | 565742 | 30.34 | 60.2 | 139.1 | 107.8 | 19.38 | 0.53 | 3.33 | 0.39 | 1.26 | 16.19 | 1595.0 |
| GBF-03_ap8 | 396856 | 259.6 | 133.28 | 50.23 | 34.87 | 185.77 | 21.88 | 48.8 | 3.81 | 284.9 | 404.2 | 565998 | 0.33 | 57.9 | 160.7 | 98.8 | 25.93 | 0.35 | 5.47 | 0.09 | 1.05 | 29.37 | 437.9 |
| GBF-03_ap9 | 392004 | 1057.0 | 285.75 | 97.90 | 131.73 | 464.84 | 43.44 | 338.5 | 6.53 | 958.2 | 1232.8 | 564436 | 71.80 | 194.3 | 424.4 | 131.7 | 58.19 | 0.35 | 10.55 | 0.30 | 7.13 | 54.10 | 2926.4 |
| JEM-01_ap1 | 396558 | 439.9 | 158.11 | 73.77 | 49.54 | 193.54 | 28.47 | 138.4 | 6.17 | 18239.9 | 451.1 | 573050 | 23.24 | 75.3 | 158.9 | 265.0 | 29.78 | 2.15 | 8.45 | 3.61 | <0.330 | 47.02 | 2978.3 |
| JEM-01_ap3 | 398854 | 299.2 | 104.33 | 39.63 | 48.00 | 160.58 | 16.70 | 99.3 | 3.92 | 1919.9 | 296.6 | 565498 | 14.53 | 52.3 | 121.6 | 212.3 | 19.84 | 1.99 | 4.73 | 3.79 | 6.42 | 26.15 | 7182.6 |
| JEM-01_ap4 | 393728 | 406.0 | 190.67 | 107.95 | 41.91 | 188.91 | 32.70 | 146.5 | 10.15 | 701.3 | 341.3 | 565414 | 31.91 | 72.3 | 142.4 | 222.7 | 27.05 | 2.24 | 12.72 | 3.83 | <0.840 | 67.73 | 3078.3 |
| JEM-01_ap5 | 393091 | 1079.0 | 330.24 | 183.01 | 54.23 | 322.60 | 67.63 | 417.2 | 16.42 | 1023.7 | 753.1 | 564345 | 26.31 | 143.5 | 238.9 | 260.6 | 50.61 | 8.70 | 23.36 | 13.13 | <0.428 | 125.69 | 5102.7 |
| JEM-01_ap6 | 395261 | 405.1 | 191.23 | 82.57 | 44.55 | 231.32 | 34.12 | 139.2 | 5.01 | 381.8 | 363.7 | 565508 | 2.28 | 64.9 | 141.7 | 227.6 | 31.01 | 3.42 | 8.54 | 8.11 | <0.474 | 41.74 | 1821.5 |
| JEM-01_ap7 | 394072 | 849.1 | 64.61 | 29.57 | 21.72 | 102.79 | 11.40 | 301.8 | 2.84 | 625.5 | 585.2 | 565278 | 0.78 | 123.8 | 108.9 | 476.6 | 12.35 | 4.31 | 3.54 | 1.35 | 9.32 | 19.35 | 2294.1 |
| JEM-01_ap8 | 397566 | 381.2 | 32.66 | 16.08 | 7.40 | 51.11 | 5.97 | 122.7 | 1.42 | 59.4 | 288.6 | 565984 | 0.30 | 58.9 | 53.9 | 204.0 | 6.03 | 3.38 | 1.79 | 0.57 | 3.78 | 10.08 | 140.1 |
| JEM-01_ap11 | 397154 | 713.3 | 53.86 | 24.28 | 13.22 | 85.50 | 9.47 | 224.7 | 2.41 | 59.2 | 318.3 | 565644 | 0.10 | 108.5 | 95.5 | 198.1 | 10.03 | 4.79 | 2.93 | 1.17 | 3.53 | 16.17 | 56.6 |
| JEM-01_ap12 | 396371 | 475.9 | 47.35 | 22.25 | 15.01 | 70.24 | 8.66 | 152.7 | 2.11 | 167.1 | 352.8 | 565731 | 0.17 | 73.0 | 73.8 | 235.5 | 10.53 | 4.37 | 2.64 | 0.72 | 9.36 | 14.51 | 1161.5 |
| JEM-01_ap13 | 393893 | 814.0 | 52.91 | 25.36 | 17.23 | 85.61 | 9.72 | 303.6 | 2.38 | 656.7 | 529.0 | 565313 | 0.83 | 116.7 | 95.4 | 478.5 | 10.00 | 4.88 | 2.87 | 1.51 | 11.25 | 17.43 | 2557.2 |
| JEM-01_ap15 | 395863 | 543.9 | 50.25 | 23.65 | 15.08 | 76.31 | 8.96 | 172.6 | 2.40 | 384.9 | 416.2 | 565765 | 0.98 | 84.4 | 83.2 | 467.5 | 9.27 | 5.55 | 2.85 | 1.01 | 4.61 | 15.65 | 1114.3 |
| JEM-01_ap16 | 397113 | 593.3 | 40.01 | 19.39 | 13.30 | 63.85 | 7.44 | 212.7 | 1.89 | 104.7 | 390.2 | 565765 | 0.14 | 85.0 | 72.0 | 271.7 | 7.66 | 4.67 | 2.41 | 0.67 | 5.29 | 13.63 | 211.1 |
| JEM-01_ap17 | 396857 | 736.7 | 52.09 | 24.57 | 14.90 | 83.10 | 9.64 | 250.8 | 2.51 | 139.2 | 497.9 | 565620 | 0.14 | 105.5 | 91.7 | 288.3 | 9.88 | 3.66 | 2.79 | 0.64 | 4.33 | 17.08 | 187.5 |
| JEM-01_ap18 | 392958 | 933.4 | 65.64 | 31.72 | 20.58 | 103.52 | 11.93 | 339.8 | 3.23 | 1106.8 | 617.6 | 565349 | 0.87 | 135.3 | 111.2 | 479.2 | 12.22 | 9.98 | 3.81 | 2.69 | 32.25 | 21.23 | 2649.3 |
| JEM-01_ap19 | 397733 | 230.1 | 23.16 | 10.97 | 3.99 | 34.40 | 4.23 | 72.5 | 1.00 | 54.4 | 198.1 | 566141 | 0.13 | 35.3 | 35.3 | 176.7 | 4.19 | 4.44 | 1.30 | 0.32 | 1.54 | 7.35 | 248.6 |
| JEM-01_ap20 | 393738 | 785.9 | 48.91 | 21.95 | 15.85 | 77.09 | 8.60 | 294.4 | 2.37 | 753.1 | 498.1 | 565385 | 1.09 | 110.0 | 87.8 | 477.8 | 9.01 | 4.50 | 2.61 | 1.43 | 6.98 | 14.73 | 2654.3 |
| JEM-01_ap21 | 393666 | 911.8 | 60.91 | 27.64 | 19.23 | 98.72 | 10.90 | 336.1 | 2.73 | 665.6 | 601.7 | 565192 | 0.90 | 128.9 | 108.7 | 493.5 | 11.73 | 5.05 | 3.28 | 1.46 | 11.45 | 18.13 | 2622.8 |
| JEM-01_ap22 | 396935 | 603.8 | 43.79 | 20.66 | 12.46 | 68.45 | 8.07 | 202.5 | 2.09 | 139.5 | 420.9 | 565733 | 0.18 | 90.0 | 78.3 | 302.4 | 8.32 | 3.97 | 2.44 | 0.72 | 4.07 | 14.08 | 305.5 |
| JEM-01_ap24 | 397109 | 549.7 | 40.73 | 19.68 | 11.73 | 63.72 | 7.29 | 191.2 | 1.90 | 123.2 | 381.0 | 565805 | 0.47 | 80.5 | 89.5 | 256.2 | 7.71 | 4.74 | 2.30 | 1.32 | 7.63 | 13.19 | 251.8 |
| JEM-01_ap25 | 393671 | 770.2 | 52.80 | 24.11 | 16.36 | 82.41 | 9.24 | 286.1 | 2.31 | 808.3 | 509.4 | 565941 | 0.08 | 63.3 | 59.1 | 287.8 | 6.32 | 3.17 | 1.92 | 0.51 | 2.51 | 10.55 | 207.1 |
| JEM-01_ap6 | 397097 | 610.1 | 42.99 | 19.89 | 13.53 | 67.73 | 7.54 | 211.9 | 2.09 | 115.3 | 418.1 | 565749 | 0.09 | 88.3 | 75.7 | 284.2 | 8.04 | 4.46 | 2.32 | 1.01 | 5.26 | 13.30 | 161.3 |
| JEM-01_ap8 | 397569 | 388.4 | 34.56 | 15.98 | 7.29 | 54.55 | 6.38 | 128.6 | 1.55 | 73.6 | 291.2 | 565990 | 0.08 | 59.8 | 57.9 | 186.7 | 6.61 | 3.31 | 2.00 | 0.45 | 3.69 | 10.50 | 108.2 |
| JEM-01_ap9 | 396201 | 643.4 | 42.48 | 19.69 | 13.36 | 66.76 | 7.71 | 231.6 | 1.89 | 185.8 | 414.1 | 565594 | 0.35 | 90.5 | 73.0 | 356.4 | 8.15 | 5.83 | 2.33 | 0.89 | 2.65 | 12.93 | 1024.8 |
| LB002_ap1 | 395972 | 707.5 | 188.15 | 104.07 | 37.35 | 176.45 | 33.97 | 129.2 | 14.66 | 480.5 | 739.5 | 565467 | 1.75 | 137.4 | 179.2 | 164.9 | 27.23 | 71.93 | 14.85 | 1.63 | 0.29 | 96.81 | 272.3 |
| LB002_ap10 | 394845 | 1043.8 | 214.44 | 128.99 | 41.72 | 226.95 | 42.98 | 296.5 | 18.16 | 616.2 | 869.1 | 565061 | 4.11 | 170.1 | 215.8 | 198.9 | 34.01 | 71.51 | 18.12 | 3.44 | 1.17 | 121.27 | 753.4 |
| LB002_ap11 | 395977 | 632.0 | 171.88 | 90.08 | 47.78 | 193.06 | 32.32 | 129.2 | 9.50 | 427.8 | 734.8 | 565463 | 2.11 | 130.9 | 194.1 | 157.4 | 28.90 | 61.91 | 11.65 | 3.49 | 0.52 | 66.61 | 430.8 |
| LB002_ap12 | 396596 | 555.6 | 105.17 | 49.79 | 33.95 | 135.31 | 18.43 | 103.7 | 5.46 | 275.5 | 582.0 | 565876 | 1.00 | 108.2 | 147.6 | 169.0 | 18.87 | 10.22 | 6.53 | 0.56 | 0.20 | 38.55 | 361.8 |
| LB002_ap13 | 396248 | 625.0 | 153.72 | 79.21 | 31.80 | 173.06 | 28.41 | 156.2 | 8.50 | 420.8 | 587.3 | 565605 | 1.89 | 108.9 | 164.0 | 199.0 | 26.46 | 12.36 | 9.95 | 0.68 | 0.37 | 61.79 | 291.2 |
| LB002_ap14 | 396972 | 1562.6 | 103.74 | 52.69 | 87.42 | 115.42 | 19.52 | 761.8 | 4.44 | 2288.4 | 688.8 | 565119 | 12.74 | 174.6 | 120.4 | 846.0 | 16.42 | 16.56 | 6.07 | 2.01 | 6.88 | 35.57 | 2975.4 |
| LB002_ap15 | 392730 | 2098.4 | 326.96 | 204.51 | 52.64 | 317.24 | 68.14 | 781.6 | 31.59 | 1160.4 | 1300.0 | 564200 | 2.52 | 279.8 | 310.6 | 259.2 | 49.28 | 82.85 | 28.90 | 25.83 | 0.69 | 206.44 | 479.6 |
| LB002_ap2 | 395459 | 881.5 | 199.23 | 134.05 | 30.24 | 195.13 | 41.78 | 243.9 | 22.51 | 526.2 | 695.2 | 565271 | 3.35 | 136.6 | 180.8 | 229.0 | 30.81 | 49.55 | 20.50 | 2.98 | 0.44 | 141.84 | 501.6 |
| LB002_ap3 | 394823 | 1144.3 | 242.02 | 187.81 | 42.67 | 198.73 | 55.10 | 394.5 | 36.77 | 749.8 | 736.9 | 565067 | 1.14 | 156.1 | 183.4 | 210.6 | 33.67 | 83.56 | 30.55 | 22.49 | 0.88 | 221.65 | 370.5 |
| LB002_ap4 | 395390 | 1114.0 | 110.24 | 10.24 | 36.40 | 199.68 | 36.48 | 336.2 | 17.55 | 546.1 | 165.8 | 565163 | 6.35 | 165.6 | 197.6 | 227.5 | 29.36 | 21.38 | 16.36 | 5.17 | 0.23 | 111.97 | 290.0 |
| LB002_ap5 | 395293 | 948.0 | 185.98 | 102.77 | 34.87 | 208.81 | 34.85 | 267.7 | 13.73 | 638.4 | 754.2 | 565285 | 3.92 | 149.2 | 194.3 | 207.2 | 30.21 | 96.90 | 14.22 | 2.81 | <0.162 | 90.67 | 440.5 |
| LB002_ap7 | 395325 | 1094.1 | 160.57 | 102.26 | 41.56 | 162.67 | 33.17 | 346.9 | 18.03 | 537.7 | 694.1 | 565204 | 3.21 | 154.8 | 162.0 | 193.8 | 24.99 | 70.76 | 15.73 | 9.17 | 0.51 | 108.60 | 533.5 |
| LB002_ap8 | 396716 | 545.5 | 99.89 | 44.05 | 32.21 | 145.75 | 17.48 | 157.9 | 4.53 | 282.2 | 505.9 | 565716 | 1.16 | 93.5 | 141.8 | 172.2 | 18.81 | 31.36 | 5.50 | 0.36 | 0.39 | 32.16 | 233.8 |

*All elements are in ppm.

Appendix C: Eastern Sunda arc apatite trace element chemistry (LA-ICP-MS)

| Analysis ID | Ca | Ce | Dy | Er | Eu | Gd | Ho | La | Lu | Na | Nd | P | Pb | Pr | Sm | Sr | Tb | Th | Tm | U | V | Yb | Fe |
|-------------|--------|--------|--------|--------|--------|--------|--------|--------|-------|--------|--------|--------|-------|-------|-------|--------|-------|--------|-------|-------|-------|--------|---------|
| LB002_ap9 | 395696 | 586.6 | 298.99 | 260.09 | 38.62 | 232.05 | 73.99 | 162.0 | 52.92 | 445.0 | 529.6 | 565262 | 1.28 | 98.5 | 170.3 | 238.7 | 40.98 | 38.53 | 42.48 | 10.87 | 0.56 | 306.23 | 410.0 |
| LB009_ap1 | 390910 | 2958.5 | 154.41 | 72.58 | 30.62 | 232.15 | 1441.6 | 1213.2 | 7.15 | 1440.6 | 563851 | 1.82 | 347.0 | 259.1 | 302.4 | 27.84 | 20.85 | 8.85 | 6.76 | 14.94 | 51.05 | 1618.3 | |
| LB009_ap10 | 394197 | 1201.8 | 57.41 | 27.57 | 20.17 | 97.36 | 10.26 | 459.4 | 3.02 | 864.5 | 684.3 | 565275 | 1.93 | 157.3 | 116.9 | 514.8 | 11.23 | 4.99 | 3.16 | 1.57 | 13.09 | 20.09 | 1254.6 |
| LB009_ap11 | 391344 | 2781.1 | 110.64 | 52.36 | 29.68 | 116.82 | 19.65 | 1168.2 | 5.27 | 1448.9 | 1262.9 | 564140 | 1.97 | 313.3 | 213.1 | 339.2 | 20.88 | 11.13 | 6.44 | 4.95 | 17.17 | 37.76 | 1496.9 |
| LB009_ap12 | 391164 | 2807.5 | 163.25 | 80.63 | 30.35 | 234.52 | 29.60 | 1084.4 | 7.80 | 1386.2 | 1420.1 | 563940 | 1.74 | 336.0 | 267.7 | 328.2 | 29.62 | 18.04 | 9.89 | 7.95 | 12.97 | 55.88 | 1581.6 |
| LB009_ap14 | 392156 | 1522.9 | 69.87 | 34.04 | 26.83 | 117.35 | 12.87 | 575.5 | 3.80 | 1363.1 | 862.0 | 565008 | 0.85 | 192.8 | 142.2 | 513.6 | 13.03 | 7.34 | 4.08 | 2.13 | 23.04 | 23.94 | 2334.2 |
| LB009_ap15 | 389898 | 3555.6 | 237.32 | 112.06 | 47.37 | 334.64 | 43.50 | 1473.0 | 10.16 | 1280.5 | 1951.9 | 562901 | 2.03 | 447.6 | 374.3 | 365.8 | 43.08 | 120.24 | 13.01 | 20.48 | 15.00 | 74.28 | 1701.7 |
| LB009_ap2 | 393064 | 3369.7 | 191.41 | 93.73 | 29.58 | 275.80 | 35.07 | 1347.8 | 9.65 | 1640.8 | 1654.1 | 565574 | 2.80 | 398.0 | 309.4 | 287.4 | 34.54 | 37.86 | 11.53 | 8.06 | 15.67 | 66.42 | 1240.3 |
| LB009_ap3 | 389635 | 3594.9 | 198.42 | 94.65 | 31.85 | 301.63 | 36.27 | 1379.3 | 9.23 | 1594.7 | 1836.9 | 563257 | 1.57 | 432.2 | 337.4 | 309.1 | 36.73 | 60.31 | 11.42 | 8.52 | 15.68 | 66.98 | 1548.2 |
| LB009_ap4 | 390177 | 3306.1 | 170.71 | 81.95 | 26.10 | 248.63 | 30.99 | 1324.4 | 8.01 | 1660.7 | 1570.3 | 563649 | 1.64 | 385.5 | 280.4 | 319.6 | 31.55 | 12.16 | 9.92 | 3.83 | 19.38 | 57.24 | 1630.1 |
| LB009_ap5 | 390787 | 3054.0 | 179.17 | 83.83 | 34.15 | 275.14 | 32.01 | 1196.4 | 7.39 | 1314.1 | 1588.6 | 563584 | 1.99 | 370.9 | 304.9 | 359.8 | 33.61 | 62.42 | 9.58 | 9.86 | 13.06 | 53.91 | 1642.3 |
| LB009_ap6 | 392782 | 2008.6 | 74.70 | 36.57 | 32.54 | 120.09 | 13.14 | 892.0 | 3.89 | 1149.6 | 917.1 | 564700 | 2.09 | 230.1 | 151.5 | 304.5 | 13.90 | 7.37 | 4.29 | 5.00 | 15.64 | 26.81 | 1476.4 |
| LB009_ap7 | 390511 | 3116.8 | 168.39 | 77.93 | 34.18 | 263.75 | 30.27 | 1227.2 | 7.03 | 1446.3 | 1601.3 | 563638 | 1.68 | 376.8 | 296.2 | 364.2 | 31.17 | 31.30 | 9.00 | 6.37 | 15.79 | 50.17 | 1593.2 |
| LB009_ap8 | 390626 | 3063.0 | 208.70 | 99.36 | 30.74 | 287.21 | 37.45 | 1228.8 | 9.44 | 1411.7 | 1564.9 | 563603 | 1.72 | 382.3 | 305.8 | 338.4 | 37.99 | 45.56 | 11.97 | 9.33 | 16.94 | 68.18 | 1630.2 |
| LB018_ap1 | 392782 | 2008.6 | 74.70 | 36.57 | 32.54 | 120.09 | 13.14 | 892.0 | 3.89 | 1149.6 | 917.1 | 564700 | 2.09 | 230.1 | 151.5 | 304.5 | 13.90 | 7.37 | 4.29 | 5.00 | 15.64 | 26.81 | 1476.4 |
| LB018_ap10 | 390504 | 2442.0 | 179.88 | 238.32 | 21.55 | 541.04 | 90.00 | 836.4 | 19.28 | 2301.5 | 1825.3 | 565929 | 1.95 | 365.1 | 490.7 | 252.8 | 77.86 | 27.49 | 27.33 | 5.97 | 9.10 | 151.60 | 1360.2 |
| LB018_ap3 | 392017 | 2437.5 | 330.94 | 148.81 | 25.61 | 445.57 | 59.20 | 827.4 | 9.78 | 833.5 | 1750.4 | 565580 | 1.32 | 349.0 | 428.2 | 255.2 | 58.72 | 26.84 | 14.96 | 6.18 | 23.94 | 76.93 | 1291.4 |
| LB018_ap5 | 390893 | 2475.1 | 409.53 | 199.97 | 24.25 | 511.73 | 76.44 | 784.5 | 16.18 | 1164.7 | 1860.3 | 563451 | 1.99 | 386.1 | 464.4 | 227.1 | 69.19 | 39.33 | 22.98 | 6.42 | 11.97 | 125.97 | 1795.9 |
| LB018_ap6 | 390589 | 1344.3 | 222.88 | 98.33 | 14.80 | 299.09 | 38.97 | 413.3 | 6.55 | 402.2 | 1051.8 | 563895 | 2.24 | 197.9 | 269.5 | 183.0 | 38.86 | 31.68 | 10.15 | 3.66 | 34.16 | 55.03 | 5796.4 |
| LB018_ap7 | 390518 | 3643.1 | 475.54 | 228.72 | 30.24 | 640.24 | 90.15 | 1278.2 | 17.17 | 884.0 | 2568.3 | 562242 | 1.52 | 512.0 | 618.8 | 218.8 | 84.43 | 106.73 | 25.84 | 12.37 | 16.28 | 137.50 | 660.7 |
| LB018_ap8 | 392213 | 2277.5 | 199.40 | 87.87 | 36.10 | 277.78 | 35.59 | 788.7 | 7.45 | 827.4 | 1683.3 | 562794 | 2.10 | 325.3 | 322.2 | 361.1 | 35.20 | 78.22 | 10.26 | 6.94 | 6.79 | 56.77 | 1681.0 |
| LB018_ap9 | 391415 | 3154.9 | 383.54 | 177.73 | 26.83 | 514.81 | 69.49 | 1128.1 | 13.80 | 674.8 | 2093.3 | 562794 | 1.33 | 445.5 | 506.5 | 200.9 | 70.00 | 78.22 | 19.69 | 10.20 | 7.87 | 109.73 | 1103.2 |
| LB022_ap1 | 394854 | 879.6 | 446.75 | 271.59 | 35.19 | 414.91 | 91.48 | 253.5 | 31.93 | 591.9 | 889.1 | 564842 | 0.88 | 152.2 | 298.8 | 175.7 | 68.63 | 39.53 | 36.28 | 2.42 | 2.80 | 223.03 | 396.2 |
| LB022_ap10 | 393977 | 961.2 | 387.06 | 232.65 | 33.38 | 361.85 | 77.81 | 302.5 | 28.33 | 802.8 | 855.4 | 564866 | 0.63 | 153.5 | 272.2 | 202.8 | 59.16 | 29.01 | 32.25 | 4.43 | 4.05 | 203.23 | 1152.7 |
| LB022_ap11 | 391890 | 1066.7 | 493.38 | 304.21 | 39.56 | 428.52 | 100.54 | 345.2 | 38.67 | 743.3 | 978.5 | 564162 | 3.47 | 177.7 | 318.5 | 204.4 | 72.37 | 44.59 | 42.01 | 9.38 | 12.66 | 271.50 | 3229.4 |
| LB022_ap12 | 394784 | 724.8 | 476.08 | 333.83 | 30.51 | 380.23 | 104.30 | 208.6 | 47.82 | 666.7 | 723.8 | 564946 | 0.55 | 125.2 | 251.6 | 120.7 | 67.47 | 78.15 | 48.33 | 10.78 | 2.58 | 316.47 | 590.2 |
| LB022_ap13 | 393942 | 1001.3 | 607.67 | 345.44 | 33.23 | 583.82 | 120.84 | 261.6 | 36.91 | 863.8 | 1148.4 | 564519 | 0.52 | 184.3 | 406.6 | 96.3 | 93.38 | 82.04 | 44.85 | 8.16 | 1.93 | 268.92 | 347.9 |
| LB022_ap15 | 393426 | 1105.7 | 496.06 | 292.92 | 50.51 | 467.65 | 98.78 | 331.6 | 33.44 | 1071.6 | 1063.2 | 564659 | 2.13 | 188.7 | 353.1 | 204.6 | 76.42 | 63.75 | 39.02 | 6.16 | 2.71 | 239.05 | 735.2 |
| LB022_ap2 | 394182 | 1094.7 | 492.31 | 299.25 | 38.66 | 436.78 | 98.97 | 327.9 | 36.91 | 874.2 | 1004.3 | 564712 | 0.57 | 180.9 | 324.3 | 145.6 | 71.44 | 67.93 | 41.44 | 8.26 | 3.15 | 262.98 | 295.5 |
| LB022_ap3 | 394333 | 950.7 | 476.01 | 289.48 | 32.11 | 431.95 | 97.57 | 266.7 | 35.26 | 775.0 | 934.4 | 564799 | 0.50 | 161.6 | 310.0 | 97.5 | 71.54 | 52.18 | 39.75 | 8.57 | 3.45 | 245.85 | 587.8 |
| LB022_ap4 | 394079 | 1100.0 | 600.08 | 392.86 | 46.83 | 503.76 | 128.45 | 343.5 | 51.67 | 701.5 | 1010.7 | 564379 | 0.66 | 181.4 | 339.8 | 195.7 | 87.88 | 99.55 | 56.00 | 13.66 | 3.36 | 362.03 | 321.3 |
| LB022_ap5 | 394988 | 862.2 | 451.23 | 282.98 | 32.09 | 388.52 | 92.04 | 247.7 | 35.86 | 597.7 | 826.2 | 564907 | 0.54 | 148.4 | 278.7 | 109.9 | 66.77 | 50.36 | 39.22 | 8.17 | 2.91 | 247.40 | 335.2 |
| LB022_ap6 | 394860 | 727.0 | 552.77 | 358.09 | 34.52 | 461.94 | 117.99 | 201.5 | 44.47 | 601.2 | 816.1 | 564794 | 0.54 | 130.5 | 296.9 | 112.1 | 80.04 | 119.14 | 49.61 | 13.89 | 7.82 | 306.01 | 292.9 |
| LB022_ap7 | 394028 | 962.0 | 516.17 | 320.40 | 33.73 | 464.23 | 107.21 | 269.7 | 38.85 | 1084.2 | 959.1 | 564869 | 0.50 | 166.9 | 325.8 | 98.1 | 76.45 | 53.43 | 44.22 | 6.21 | 1.84 | 280.24 | 273.0 |
| LB022_ap8 | 394169 | 1088.0 | 472.56 | 296.51 | 39.93 | 416.54 | 96.56 | 344.2 | 37.97 | 893.6 | 982.8 | 564780 | 0.72 | 180.0 | 312.2 | 103.0 | 70.26 | 42.05 | 41.57 | 6.50 | 2.06 | 265.90 | 367.5 |
| LB024_ap1 | 394971 | 301.2 | 97.43 | 45.17 | 44.23 | 109.39 | 17.14 | 101.1 | 4.71 | 637.1 | 274.4 | 565603 | 7.36 | 49.4 | 93.8 | 327.0 | 16.77 | 3.14 | 5.64 | 0.66 | 5.09 | 35.60 | 2043.2 |
| LB024_ap2 | 393808 | 193.6 | 12.29 | 5.17 | 21.68 | 20.35 | 1.93 | 74.8 | 0.54 | 2447.1 | 129.2 | 567033 | 12.25 | 28.1 | 26.1 | 64.53 | 2.31 | 0.28 | 0.60 | 0.18 | 6.14 | 4.13 | 516.1 |
| LB024_ap3 | 394734 | 486.5 | 124.52 | 48.22 | 103.99 | 189.66 | 19.44 | 134.8 | 5.04 | 846.2 | 512.2 | 565669 | 3.03 | 88.6 | 176.7 | 331.3 | 24.24 | 9.94 | 6.09 | 1.52 | 55.24 | 35.31 | 1381.9 |
| LB024_ap4 | 394664 | 387.8 | 19.38 | 7.79 | 100.87 | 34.65 | 3.05 | 164.2 | 1.06 | 1741.8 | 200.9 | 566474 | 13.92 | 50.5 | 44.2 | 868.7 | 3.92 | 0.01 | 0.09 | 0.41 | 5.80 | 6.94 | 284.5 |
| LB024_ap5 | 396152 | 144.3 | 9.44 | 3.18 | 47.85 | 18.71 | 1.43 | 47.3 | 0.34 | 1127.7 | 106.3 | 566597 | 4.18 | 22.5 | 23.8 | 55.31 | 2.00 | 0.09 | 0.43 | 0.03 | 2.16 | 2.48 | 129.6 |
| LB024_ap6 | 393101 | 403.8 | 34.80 | 15.95 | 19.03 | 48.86 | 6.11 | 188.6 | 1.79 | 1467.8 | 231.4 | 565929 | 15.10 | 51.0 | 52.4 | 1107.0 | 6.34 | 0.11 | 1.97 | 0.37 | 21.91 | 12.35 | 2270.2 |
| LB024_ap8 | 394026 | 101.2 | 4.10 | 1.69 | 6.70 | 6.21 | 0.63 | 39.4 | 0.29 | 3779.9 | 55.2 | 566113 | 14.66 | 13.2 | 9.0 | 774.8 | 0.78 | 0.28 | 0.29 | 0.28 | 1.75 | 2.37 | 10034.9 |
| LB029_ap1 | 392453 | 367.9 | 68.79 | 40.66 | 20.24 | 75.39 | 13.63 | 125.1 | 5.76 | 1552.6 | 267.9 | 566262 | 12.36 | 54.5 | 70.0 | 663.4 | 11.39 | 9.89 | 5.63 | 0.27 | 1.64 | 37.45 | 1049.5 |
| LB029_ap2 | 392750 | 3371.1 | 158.28 | 79.70 | 25.83 | 218.17 | 28.10 | 1520.9 | 8.07 | 355.5 | 1414.3 | 563231 | 2.02 | 374.5 | 249.8 | 176.3 | 28.26 | 18.15 | 9.68 | 6.53 | 14.56 | 59.33 | 946.5 |
| LB029_ap3 | 393250 | 1932.4 | 264.37 | 106.28 | 43.91 | 361.59 | 45.56 | 720.5 | 6.63 | 414.4 | 1290.5 | 561977 | 2.29 | 273.7 | 331.1 | 324.6 | 47.36 | 35.77 | 11.57 | 3.49 | 17.43 | 57.86 | 13480.5 |
| LB029_ap2 | 395288 | 680.3 | 96.77 | 50.61 | 16.23 | 255.4 | 4.48 | 185.3 | 185.3 | 185.3 | 536.9 | 565296 | 1.00 | 116.8 | 133.5 | 165.8 | 16.91 | 12.73 | 8.23 | 2.03 | 6.80 | 33.96 | 1948.2 |

*All elements are in ppm.

Appendix C: Eastern Sunda arc apatite trace element chemistry (LA-ICP-MS)

| Analysis ID | Ca | Ce | Dy | Er | Eu | Gd | Ho | La | Lu | Na | Nd | P | Pb | Pr | Sm | Sr | Tb | Th | Tm | U | V | Yb | Fe |
|-------------|--------|--------|--------|-------|-------|--------|-------|-------|------|--------|-------|--------|-------|-------|-------|-------|-------|------|-------|------|--------|-------|---------|
| LB029_ap3 | 394857 | 1156.7 | 83.04 | 39.51 | 24.73 | 127.66 | 15.00 | 446.8 | 3.55 | 612.6 | 724.8 | 565200 | 0.67 | 152.6 | 137.2 | 485.6 | 14.86 | 8.80 | 4.36 | 2.08 | 17.46 | 25.99 | 858.6 |
| LB030_ap1 | 391733 | 440.6 | 155.39 | 75.76 | 24.42 | 187.37 | 29.46 | 137.0 | 5.86 | 602.2 | 459.1 | 564951 | 0.33 | 76.0 | 139.9 | 308.1 | 26.25 | 2.33 | 8.39 | 0.94 | 18.43 | 44.94 | 5573.8 |
| LB030_ap10 | 393620 | 492.3 | 168.80 | 84.46 | 24.46 | 198.51 | 31.72 | 146.5 | 6.78 | 358.7 | 489.4 | 565086 | 0.26 | 81.5 | 149.7 | 294.2 | 27.87 | 2.20 | 9.24 | 0.87 | 27.30 | 50.22 | 3749.0 |
| LB030_ap11 | 391647 | 564.7 | 174.74 | 85.30 | 24.55 | 219.47 | 33.41 | 171.4 | 6.51 | 509.7 | 541.0 | 564789 | 0.56 | 91.2 | 160.2 | 300.4 | 29.40 | 2.41 | 9.50 | 0.95 | 17.47 | 49.40 | 5601.5 |
| LB030_ap12 | 392952 | 469.4 | 151.75 | 75.33 | 24.08 | 190.00 | 29.00 | 143.3 | 5.97 | 523.3 | 463.8 | 565127 | 0.24 | 78.3 | 139.5 | 293.3 | 25.85 | 2.07 | 8.39 | 0.83 | 17.11 | 44.08 | 4234.8 |
| LB030_ap13 | 392984 | 548.6 | 195.68 | 94.67 | 28.10 | 228.11 | 36.20 | 167.0 | 7.66 | 332.7 | 554.7 | 564876 | 0.28 | 92.9 | 171.5 | 299.8 | 32.01 | 2.51 | 10.84 | 1.01 | 16.58 | 55.67 | 4262.7 |
| LB030_ap14 | 391799 | 467.7 | 158.01 | 79.12 | 25.12 | 194.95 | 30.48 | 143.6 | 6.38 | 606.1 | 461.1 | 564949 | 0.63 | 79.0 | 142.7 | 301.3 | 26.35 | 2.46 | 8.88 | 0.96 | 22.10 | 47.69 | 5447.6 |
| LB030_ap15 | 393994 | 416.2 | 148.46 | 74.12 | 25.53 | 180.40 | 28.02 | 125.9 | 6.05 | 271.3 | 422.1 | 565176 | 0.25 | 70.5 | 131.5 | 298.8 | 25.01 | 2.23 | 8.51 | 0.82 | 21.50 | 44.37 | 3628.2 |
| LB030_ap16 | 390698 | 362.4 | 131.89 | 63.32 | 21.65 | 153.88 | 24.58 | 109.9 | 5.32 | 826.0 | 369.3 | 565011 | 0.40 | 62.4 | 114.3 | 297.8 | 21.19 | 1.87 | 7.25 | 0.72 | 29.12 | 38.95 | 6646.1 |
| LB030_ap17 | 391603 | 436.5 | 156.60 | 78.70 | 25.53 | 185.36 | 29.59 | 132.5 | 6.23 | 1166.2 | 442.6 | 565341 | 0.30 | 74.0 | 135.2 | 302.9 | 25.97 | 2.21 | 8.86 | 0.89 | 20.34 | 46.19 | 4779.4 |
| LB030_ap2 | 379938 | 564.1 | 162.64 | 81.67 | 24.24 | 199.03 | 30.85 | 178.0 | 7.18 | 959.6 | 520.2 | 562782 | 0.39 | 91.8 | 150.0 | 280.5 | 27.47 | 2.66 | 9.41 | 0.99 | 20.56 | 51.12 | 18917.5 |
| LB030_ap3 | 391967 | 588.7 | 182.88 | 90.46 | 23.86 | 211.61 | 34.62 | 175.7 | 7.27 | 814.7 | 546.3 | 565034 | 0.39 | 94.9 | 164.3 | 291.6 | 30.29 | 2.14 | 10.20 | 0.81 | 23.95 | 54.33 | 4669.9 |
| LB030_ap4 | 391252 | 552.6 | 179.75 | 88.26 | 25.39 | 226.31 | 34.40 | 172.9 | 7.15 | 669.7 | 543.8 | 564790 | 0.31 | 93.1 | 165.5 | 294.2 | 31.02 | 2.07 | 9.91 | 0.90 | 11.13 | 52.51 | 5797.2 |
| LB030_ap5 | 392427 | 466.6 | 161.18 | 79.53 | 25.57 | 194.31 | 30.67 | 144.8 | 6.48 | 523.4 | 466.0 | 565011 | 0.56 | 79.3 | 143.0 | 303.3 | 26.27 | 2.56 | 8.86 | 0.96 | 22.08 | 47.39 | 4829.0 |
| LB030_ap6 | 392408 | 472.0 | 164.85 | 80.71 | 26.38 | 198.38 | 30.96 | 144.1 | 6.68 | 506.4 | 470.5 | 564986 | 0.34 | 79.4 | 147.3 | 304.3 | 27.45 | 2.28 | 8.99 | 0.91 | 20.46 | 49.23 | 4864.0 |
| LB030_ap7 | 393710 | 437.4 | 156.35 | 77.32 | 26.23 | 189.81 | 29.64 | 132.0 | 6.36 | 285.1 | 436.4 | 565124 | 0.24 | 74.4 | 137.9 | 298.9 | 25.96 | 2.24 | 8.61 | 0.84 | 21.80 | 47.71 | 3770.4 |
| LB030_ap8 | 393099 | 550.0 | 185.84 | 89.48 | 26.18 | 225.34 | 35.02 | 166.8 | 7.01 | 343.7 | 544.3 | 564921 | 0.26 | 91.0 | 162.4 | 303.8 | 31.22 | 2.41 | 10.07 | 0.97 | 14.16 | 51.67 | 4137.9 |
| LB030_ap9 | 391956 | 630.5 | 189.75 | 95.90 | 26.11 | 229.27 | 36.56 | 196.7 | 7.85 | 536.2 | 587.7 | 564772 | 0.36 | 103.0 | 173.8 | 292.8 | 32.46 | 2.66 | 10.85 | 0.90 | 8.25 | 58.76 | 5051.2 |
| LB036_ap1 | 390592 | 18.8 | 7.43 | 3.24 | 2.86 | 9.57 | 1.48 | 8.5 | 0.29 | 2972.6 | 14.3 | 567003 | 13.62 | 2.6 | 5.4 | 128.1 | 1.48 | 0.27 | 0.41 | 0.08 | 1.58 | 2.26 | 4197.3 |
| LB036_ap2 | 391039 | 25.1 | 7.45 | 2.86 | 4.35 | 10.09 | 1.18 | 17.5 | 0.19 | 1707.2 | 12.5 | 566188 | 21.30 | 2.8 | 5.2 | 191.0 | 1.56 | 0.11 | 0.29 | 0.20 | 2.89 | 1.55 | 5769.1 |
| LB036_ap4 | 396294 | 36.8 | 11.68 | 4.40 | 5.46 | 15.38 | 1.93 | 15.2 | 0.30 | 766.3 | 32.7 | 566530 | 15.52 | 5.9 | 12.1 | 78.2 | 2.23 | 0.36 | 0.50 | 0.40 | 1.23 | 2.36 | 1152.5 |
| LB036_ap5 | 394116 | 21.7 | 11.74 | 5.56 | 6.20 | 14.31 | 2.21 | 11.6 | 0.50 | 2006.0 | 17.6 | 566921 | 50.34 | 3.1 | 7.1 | 38.12 | 1.79 | 8.57 | 0.59 | 0.44 | 8.49 | 3.91 | 1354.9 |
| LB036_ap6 | 395756 | 129.7 | 51.51 | 17.48 | 19.59 | 70.79 | 7.97 | 36.4 | 0.99 | 1169.4 | 141.0 | 566518 | 42.25 | 23.8 | 59.5 | 295.8 | 10.21 | 3.27 | 1.76 | 1.00 | 1.58 | 9.39 | 595.3 |
| LB036_ap8 | 391411 | 18.9 | 50.68 | 15.38 | 7.47 | 32.56 | 7.13 | 9.0 | 0.95 | 1643.8 | 17.5 | 566157 | 31.55 | 3.1 | 9.0 | 231.2 | 8.18 | 2.90 | 1.74 | 3.01 | 419.32 | 8.50 | 4881.6 |

***All elements are in ppm.**

Appendix C: Eastern Sunda arc rutile trace element chemistry (EMPA)

| Analysis ID | Ti | O | Al | Si | Ca | V | Cr | Mn | Fe | Cu | Zr | Nb | Mo | Sn | Ta | W |
|-----------------|-------|-------|-------|--------|--------|--------|--------|--------|-------|--------|--------|--------|--------|--------|--------|--------|
| LB025_323_rut1 | 59.08 | 39.69 | 0.011 | 0.023 | 0.051 | 0.028 | 0.014 | <0.003 | 0.322 | <0.004 | 0.087 | 0.041 | <0.007 | 0.002 | <0.01 | <0.009 |
| LB025_323_rut10 | 58.27 | 39.45 | 0.060 | 0.192 | 0.077 | 0.109 | 0.024 | 0.017 | 0.386 | <0.004 | 0.083 | 0.025 | <0.007 | 0.003 | <0.01 | <0.009 |
| LB025_323_rut11 | 58.35 | 39.47 | 0.036 | 0.086 | 0.037 | 0.163 | 0.066 | 0.014 | 0.382 | 0.073 | 0.068 | 0.024 | <0.007 | 0.003 | <0.01 | <0.009 |
| LB025_323_rut12 | 58.42 | 39.43 | 0.032 | 0.083 | 0.061 | 0.127 | 0.021 | 0.008 | 0.438 | 0.011 | 0.104 | 0.031 | <0.007 | 0.003 | <0.01 | <0.009 |
| LB025_323_rut13 | 58.51 | 39.44 | 0.032 | 0.030 | 0.082 | 0.085 | 0.021 | <0.003 | 0.385 | 0.039 | 0.097 | 0.033 | <0.007 | 0.003 | <0.01 | <0.009 |
| LB025_323_rut14 | 50.97 | 50.97 | 0.028 | 44.669 | 0.006 | <0.018 | <0.003 | <0.003 | 0.010 | <0.003 | <0.008 | <0.008 | <0.008 | <0.002 | <0.008 | <0.009 |
| LB025_323_rut15 | 57.88 | 39.46 | 0.103 | 0.338 | 0.163 | 0.138 | 0.039 | 0.027 | 0.363 | <0.004 | 0.118 | 0.021 | <0.007 | 0.004 | <0.01 | <0.009 |
| LB025_323_rut16 | 58.53 | 39.45 | 0.030 | 0.067 | 0.048 | 0.134 | 0.032 | 0.006 | 0.378 | 0.009 | 0.046 | 0.035 | <0.006 | 0.004 | <0.01 | <0.009 |
| LB025_323_rut17 | 58.09 | 39.31 | 0.030 | 0.071 | 0.292 | 0.181 | 0.050 | 0.008 | 0.422 | 0.021 | 0.064 | 0.033 | <0.006 | 0.006 | <0.01 | <0.009 |
| LB025_323_rut18 | 57.29 | 39.37 | 0.132 | 0.455 | 0.326 | 0.146 | 0.015 | 0.020 | 0.713 | 0.031 | 0.091 | 0.026 | <0.007 | 0.003 | <0.01 | <0.009 |
| LB025_323_rut19 | 56.97 | 39.47 | 0.201 | 0.646 | 0.297 | 0.288 | 0.041 | 0.043 | 0.601 | 0.005 | 0.088 | 0.024 | <0.006 | 0.003 | <0.01 | <0.009 |
| LB025_323_rut20 | 58.53 | 39.43 | 0.017 | 0.043 | 0.058 | 0.118 | 0.028 | 0.007 | 0.375 | 0.014 | 0.093 | 0.037 | <0.007 | 0.006 | <0.01 | <0.009 |
| LB025_323_rut21 | 58.18 | 39.55 | 0.083 | 0.252 | 0.108 | 0.183 | 0.023 | 0.023 | 0.443 | 0.023 | 0.064 | 0.025 | <0.006 | 0.003 | <0.01 | <0.009 |
| LB025_323_rut22 | 58.68 | 39.62 | 0.026 | 0.075 | 0.108 | 0.202 | 0.050 | 0.004 | 0.361 | <0.004 | 0.071 | 0.034 | <0.007 | 0.009 | <0.01 | <0.009 |
| LB025_323_rut23 | 58.10 | 39.32 | 0.039 | 0.108 | 0.043 | 0.220 | 0.010 | 0.009 | 0.541 | 0.115 | 0.081 | 0.030 | <0.007 | 0.004 | <0.01 | <0.009 |
| LB025_323_rut24 | 58.63 | 39.53 | 0.030 | 0.023 | <0.002 | 0.089 | 0.508 | <0.003 | 0.065 | <0.004 | <0.006 | 0.012 | <0.007 | 0.035 | <0.01 | 0.018 |
| LB032_326_rut1 | 57.81 | 39.25 | 0.084 | 0.136 | 0.025 | 0.107 | 0.025 | 0.104 | 0.741 | <0.004 | <0.006 | 0.041 | <0.007 | 0.019 | <0.01 | 0.012 |
| LB032_326_rut10 | 58.14 | 39.50 | 0.126 | 0.143 | 0.022 | 0.129 | 0.420 | <0.003 | 0.395 | <0.004 | <0.006 | 0.015 | <0.007 | 0.016 | <0.01 | <0.009 |
| LB032_326_rut11 | 58.48 | 39.67 | 0.138 | 0.137 | 0.037 | 0.187 | 0.295 | <0.003 | 0.223 | <0.004 | <0.006 | 0.014 | <0.007 | 0.015 | <0.01 | 0.014 |
| LB032_326_rut12 | 54.05 | 38.15 | 0.227 | 0.344 | 0.016 | 0.139 | 0.482 | 0.006 | 3.925 | 0.032 | <0.006 | 0.016 | <0.007 | 0.023 | <0.01 | 0.040 |
| LB032_326_rut13 | 58.23 | 39.46 | 0.018 | 0.028 | 0.003 | 0.046 | 1.002 | <0.003 | 0.010 | <0.004 | <0.006 | 0.019 | <0.007 | 0.040 | <0.01 | <0.009 |
| LB032_326_rut14 | 57.96 | 39.41 | 0.012 | 0.034 | 0.005 | 0.147 | 1.149 | <0.003 | 0.024 | <0.004 | <0.006 | 0.017 | <0.007 | 0.098 | <0.01 | 0.018 |
| LB032_326_rut15 | 58.56 | 39.49 | 0.083 | 0.077 | 0.007 | 0.107 | 0.154 | <0.003 | 0.213 | <0.004 | <0.006 | 0.019 | <0.007 | 0.025 | <0.01 | <0.008 |
| LB032_326_rut16 | 57.55 | 39.16 | 0.146 | 0.142 | 0.032 | 0.113 | 0.352 | <0.003 | 0.598 | 0.005 | <0.006 | 0.013 | <0.007 | 0.021 | <0.01 | 0.017 |
| LB032_326_rut17 | 57.35 | 39.03 | 0.163 | 0.164 | 0.034 | 0.213 | 0.302 | <0.003 | 0.421 | <0.004 | <0.006 | 0.014 | <0.007 | 0.017 | <0.01 | 0.011 |
| LB032_326_rut18 | 57.90 | 39.37 | 0.052 | 0.059 | 0.009 | 0.069 | 1.032 | <0.003 | 0.160 | <0.004 | <0.006 | 0.013 | <0.007 | 0.020 | <0.01 | 0.011 |
| LB032_326_rut19 | 55.16 | 38.63 | 0.198 | 0.205 | 0.015 | 0.118 | 0.874 | 0.004 | 3.081 | <0.004 | <0.006 | 0.018 | <0.007 | 0.037 | <0.01 | 0.023 |
| LB032_326_rut2 | 54.79 | 38.44 | 0.131 | 0.197 | 0.004 | 0.119 | 0.823 | <0.003 | 3.612 | 0.026 | <0.006 | 0.012 | 0.007 | 0.039 | <0.01 | 0.014 |
| LB032_326_rut3 | 58.35 | 39.36 | 0.037 | 0.070 | 0.012 | 0.063 | 0.123 | 0.009 | 0.476 | 0.016 | <0.006 | 0.049 | <0.007 | 0.011 | 0.010 | 0.017 |
| LB032_326_rut4 | 57.28 | 39.11 | 0.119 | 0.131 | 0.016 | 0.167 | 0.878 | <0.003 | 0.272 | <0.004 | <0.006 | 0.014 | <0.007 | 0.029 | <0.01 | <0.009 |
| LB032_326_rut5 | 58.73 | 39.94 | 0.055 | 0.072 | 0.010 | 0.324 | 0.772 | <0.003 | 0.072 | <0.004 | <0.006 | 0.026 | <0.007 | 0.093 | <0.01 | <0.009 |
| LB032_326_rut6 | 56.60 | 38.94 | 0.241 | 0.280 | 0.019 | 0.194 | 0.406 | 0.005 | 1.081 | 0.007 | <0.006 | 0.011 | <0.007 | 0.031 | <0.01 | 0.013 |
| LB032_326_rut7 | 57.71 | 39.20 | 0.045 | 0.063 | 0.005 | 0.074 | 0.684 | <0.003 | 0.532 | <0.004 | <0.006 | 0.023 | <0.007 | 0.032 | <0.01 | 0.041 |
| LB032_326_rut8 | 58.90 | 39.57 | 0.025 | 0.029 | 0.007 | 0.134 | <0.003 | <0.003 | 0.235 | <0.004 | 0.039 | 0.038 | <0.007 | 0.008 | <0.01 | 0.012 |
| LB033_327_rut1 | 58.84 | 39.62 | 0.121 | 0.027 | <0.002 | 0.179 | 0.076 | <0.003 | 0.075 | <0.004 | 0.007 | 0.021 | <0.007 | 0.060 | <0.01 | 0.009 |
| LB033_327_rut10 | 58.97 | 39.70 | 0.032 | 0.033 | 0.003 | 0.337 | <0.003 | <0.003 | 0.192 | <0.004 | 0.013 | 0.012 | <0.007 | 0.026 | <0.01 | 0.019 |
| LB033_327_rut11 | 59.04 | 39.70 | 0.037 | 0.028 | 0.010 | 0.163 | 0.007 | <0.003 | 0.240 | <0.004 | 0.039 | 0.038 | <0.007 | 0.011 | <0.01 | 0.010 |
| LB033_327_rut12 | 58.96 | 39.66 | 0.027 | 0.036 | 0.002 | 0.170 | 0.005 | <0.003 | 0.256 | <0.004 | 0.035 | 0.044 | 0.007 | 0.034 | <0.01 | 0.052 |
| LB033_327_rut13 | 59.07 | 39.69 | 0.032 | 0.023 | <0.002 | 0.184 | 0.005 | <0.003 | 0.242 | <0.004 | 0.022 | 0.011 | <0.007 | 0.017 | <0.01 | <0.008 |
| LB033_327_rut14 | 59.13 | 39.76 | 0.038 | 0.022 | 0.006 | 0.184 | 0.009 | <0.003 | 0.217 | <0.004 | 0.029 | 0.038 | <0.007 | 0.026 | <0.01 | 0.011 |
| LB033_327_rut15 | 59.05 | 39.74 | 0.034 | 0.030 | 0.003 | 0.226 | 0.007 | <0.003 | 0.252 | <0.004 | 0.032 | 0.038 | <0.007 | 0.032 | <0.01 | 0.016 |
| LB033_327_rut16 | 59.15 | 39.77 | 0.044 | 0.025 | 0.002 | 0.219 | 0.020 | <0.003 | 0.200 | <0.004 | 0.018 | 0.015 | <0.007 | 0.010 | <0.01 | <0.009 |
| LB033_327_rut17 | 58.43 | 39.55 | 0.031 | 0.120 | 0.031 | 0.534 | 0.072 | 0.008 | 0.039 | <0.004 | 0.011 | 0.030 | <0.007 | 0.069 | <0.01 | 0.015 |
| LB033_327_rut18 | 58.93 | 39.62 | 0.043 | 0.042 | 0.014 | 0.163 | 0.028 | 0.014 | 0.127 | <0.004 | 0.014 | 0.029 | <0.007 | 0.030 | <0.01 | <0.009 |
| LB033_327_rut19 | 59.05 | 39.68 | 0.036 | 0.018 | 0.007 | 0.149 | 0.007 | <0.003 | 0.218 | <0.004 | 0.034 | 0.039 | <0.007 | 0.027 | <0.01 | 0.020 |
| LB033_327_rut20 | | | | | | | | | | | | | | | | |

*All elements are in wt. % (EMPA).

Appendix C: Eastern Sunda arc rutile trace element chemistry (EMPA)

| Analysis ID | Ti | O | Al | Si | Ca | V | Cr | Mn | Fe | Cu | Zr | Nb | Mo | Sn | Ta | W |
|------------------|-------|-------|--------|-------|--------|--------|--------|--------|-------|--------|--------|--------|--------|--------|-------|--------|
| LB033_327_rut4 | 59.15 | 39.82 | 0.035 | 0.026 | 0.003 | 0.299 | 0.011 | <0.003 | 0.198 | <0.004 | 0.044 | 0.025 | <0.007 | 0.032 | <0.01 | 0.020 |
| LB033_327_rut5 | 59.30 | 39.93 | 0.043 | 0.022 | <0.002 | 0.289 | 0.014 | <0.003 | 0.198 | <0.004 | 0.034 | 0.051 | <0.007 | 0.019 | <0.01 | 0.022 |
| LB033_327_rut6 | 59.14 | 39.74 | 0.029 | 0.033 | 0.008 | 0.175 | <0.003 | <0.003 | 0.183 | <0.004 | 0.029 | 0.024 | <0.007 | 0.022 | <0.01 | 0.012 |
| LB033_327_rut7 | 59.06 | 39.66 | 0.032 | 0.015 | 0.002 | 0.147 | 0.018 | <0.003 | 0.203 | <0.004 | 0.026 | 0.021 | <0.007 | 0.015 | <0.01 | <0.009 |
| LB033_327_rut8 | 58.98 | 39.62 | 0.034 | 0.030 | 0.013 | 0.129 | <0.003 | <0.003 | 0.244 | <0.004 | 0.012 | 0.020 | <0.007 | 0.012 | <0.01 | <0.009 |
| LB033_327_rut9 | 59.03 | 39.71 | 0.032 | 0.017 | <0.002 | 0.227 | 0.019 | <0.003 | 0.221 | <0.004 | 0.032 | 0.030 | <0.007 | 0.072 | <0.01 | <0.009 |
| LB041_330_rut1 | 58.53 | 39.55 | 0.008 | 0.015 | <0.002 | 0.320 | 0.051 | <0.003 | 0.718 | <0.004 | 0.021 | 0.056 | <0.007 | 0.035 | <0.01 | 0.012 |
| LB041_330_rut10 | 58.43 | 39.46 | 0.011 | 0.019 | <0.002 | 0.258 | 0.072 | <0.003 | 0.615 | <0.004 | 0.042 | 0.062 | 0.015 | 0.032 | <0.01 | 0.028 |
| LB041_330_rut11 | 58.93 | 39.71 | 0.005 | 0.022 | <0.002 | 0.144 | 0.039 | <0.003 | 0.617 | <0.004 | 0.020 | 0.022 | <0.007 | 0.060 | <0.01 | 0.035 |
| LB041_330_rut12 | | | | | | | | | | | | | | | | |
| LB041_330_rut13 | | | | | | | | | | | | | | | | |
| LB041_330_rut14 | | | | | | | | | | | | | | | | |
| LB041_330_rut15 | | | | | | | | | | | | | | | | |
| LB041_330_rut2 | 59.28 | 39.93 | 0.004 | 0.017 | <0.002 | 0.128 | 0.096 | <0.003 | 0.557 | <0.004 | 0.009 | <0.006 | <0.007 | 0.026 | <0.01 | 0.106 |
| LB041_330_rut3 | 57.66 | 39.08 | 0.007 | 0.024 | 0.004 | 0.056 | 0.081 | <0.003 | 1.325 | 0.005 | 0.031 | 0.059 | 0.015 | 0.048 | <0.01 | 0.104 |
| LB041_330_rut4 | 58.28 | 39.35 | 0.004 | 0.022 | 0.002 | 0.100 | 0.075 | <0.003 | 0.722 | <0.004 | 0.026 | 0.042 | <0.007 | 0.031 | <0.01 | 0.227 |
| LB041_330_rut5 | 58.29 | 39.44 | 0.006 | 0.023 | 0.004 | 0.191 | 0.065 | <0.003 | 0.851 | <0.004 | 0.044 | 0.064 | 0.032 | 0.051 | <0.01 | 0.100 |
| LB041_330_rut6 | 58.63 | 39.62 | 0.008 | 0.037 | 0.003 | 0.245 | 0.038 | <0.003 | 0.742 | <0.004 | 0.031 | 0.042 | 0.012 | 0.024 | <0.01 | 0.042 |
| LB041_330_rut7 | 58.47 | 39.68 | 0.027 | 0.018 | <0.002 | 0.622 | 0.108 | <0.003 | 0.586 | <0.004 | 0.015 | 0.025 | 0.049 | 0.024 | <0.01 | 0.049 |
| LB041_330_rut8 | 58.51 | 39.53 | 0.003 | 0.021 | 0.002 | 0.159 | 0.062 | <0.003 | 0.830 | <0.004 | 0.042 | 0.036 | 0.021 | 0.092 | <0.01 | 0.051 |
| LB041_330_rut9 | 58.39 | 39.47 | 0.005 | 0.024 | 0.003 | 0.291 | 0.066 | <0.003 | 0.740 | <0.004 | 0.017 | 0.068 | 0.013 | 0.023 | <0.01 | 0.015 |
| LB045_332_rut1 | 58.82 | 39.55 | 0.019 | 0.128 | 0.038 | <0.021 | <0.003 | 0.004 | 0.170 | <0.004 | 0.055 | 0.020 | <0.007 | 0.003 | <0.01 | <0.009 |
| LB045_332_rut10 | 58.93 | 39.54 | 0.009 | 0.043 | 0.017 | <0.021 | 0.004 | <0.003 | 0.224 | 0.006 | 0.054 | 0.019 | <0.007 | <0.002 | <0.01 | <0.009 |
| LB045_332_rut11 | 58.84 | 39.57 | 0.018 | 0.118 | 0.040 | <0.021 | <0.003 | <0.003 | 0.265 | <0.004 | 0.046 | 0.013 | <0.007 | <0.002 | <0.01 | <0.009 |
| LB045_332_rut12 | 58.48 | 39.61 | 0.050 | 0.325 | 0.108 | <0.021 | 0.005 | 0.008 | 0.195 | <0.004 | 0.044 | <0.006 | <0.007 | <0.002 | <0.01 | <0.009 |
| LB045_332_rut13 | 57.38 | 39.40 | 0.106 | 0.683 | 0.302 | <0.021 | <0.003 | 0.005 | 0.165 | 0.004 | 0.054 | 0.028 | <0.007 | <0.003 | <0.01 | <0.009 |
| LB045_332_rut14 | 58.14 | 39.40 | 0.117 | 0.229 | 0.079 | 0.121 | <0.003 | 0.015 | 0.221 | 0.005 | 0.044 | 0.035 | <0.007 | 0.004 | <0.01 | <0.009 |
| LB045_332_rut15 | 58.86 | 39.51 | 0.007 | 0.017 | 0.005 | <0.021 | 0.102 | <0.003 | 0.257 | 0.006 | 0.046 | 0.034 | <0.007 | <0.003 | <0.01 | <0.009 |
| LB045_332_rut16 | 58.52 | 39.26 | 0.006 | 0.019 | <0.002 | 0.022 | 0.003 | <0.003 | 0.357 | 0.007 | 0.051 | 0.017 | <0.007 | <0.002 | <0.01 | <0.009 |
| LB045_332_rut17 | 58.58 | 39.31 | 0.006 | 0.016 | 0.004 | 0.022 | 0.003 | <0.003 | 0.376 | <0.004 | 0.076 | 0.011 | <0.007 | <0.002 | <0.01 | <0.009 |
| LB045_332_rut18 | 58.50 | 39.60 | 0.059 | 0.317 | 0.074 | <0.021 | <0.003 | 0.013 | 0.146 | <0.004 | 0.048 | 0.014 | <0.007 | <0.002 | <0.01 | <0.009 |
| LB045_332_rut19 | 55.55 | 38.89 | 0.594 | 0.771 | 0.232 | 0.410 | <0.003 | 0.047 | 0.099 | <0.004 | 0.087 | 0.021 | <0.007 | <0.003 | <0.01 | <0.009 |
| LB045_332_rut2 | 58.23 | 39.31 | 0.034 | 0.221 | 0.088 | <0.021 | 0.004 | 0.004 | 0.242 | <0.004 | 0.057 | 0.009 | <0.007 | <0.003 | <0.01 | <0.009 |
| LB045_332_rut3 | 58.81 | 39.41 | 0.006 | 0.026 | 0.003 | <0.021 | 0.005 | <0.003 | 0.194 | 0.004 | 0.042 | 0.026 | <0.007 | 0.003 | <0.01 | <0.009 |
| LB045_332_rut4 | 58.89 | 39.49 | 0.013 | 0.065 | 0.020 | <0.021 | <0.003 | <0.003 | 0.141 | <0.004 | 0.049 | <0.006 | <0.007 | <0.002 | <0.01 | <0.009 |
| LB045_332_rut5 | 58.47 | 39.54 | 0.046 | 0.285 | 0.083 | <0.021 | <0.003 | 0.008 | 0.172 | 0.034 | 0.050 | 0.009 | <0.007 | <0.002 | <0.01 | <0.009 |
| LB045_332_rut6 | 58.78 | 39.43 | 0.008 | 0.019 | 0.007 | 0.063 | <0.003 | <0.003 | 0.272 | 0.004 | 0.047 | 0.011 | <0.007 | <0.002 | <0.01 | <0.009 |
| LB045_332_rut7 | 58.91 | 39.50 | 0.006 | 0.012 | 0.003 | <0.021 | 0.006 | <0.003 | 0.339 | <0.004 | 0.047 | 0.017 | <0.007 | <0.002 | <0.01 | <0.009 |
| LB045_332_rut8 | 59.01 | 39.54 | 0.003 | 0.017 | 0.002 | <0.021 | <0.003 | <0.003 | 0.214 | <0.004 | 0.051 | 0.007 | <0.007 | <0.002 | <0.01 | <0.009 |
| LB045_332_rut9 | 58.84 | 39.53 | 0.016 | 0.099 | 0.039 | 0.027 | <0.003 | 0.005 | 0.170 | <0.004 | 0.038 | 0.016 | <0.007 | <0.002 | <0.01 | <0.009 |
| ELF-03_333_rut1 | 58.69 | 39.46 | <0.002 | 0.016 | 0.013 | 0.103 | 0.007 | <0.003 | 0.504 | <0.004 | <0.006 | 0.017 | <0.007 | 0.057 | <0.01 | 0.016 |
| ELF-03_333_rut10 | 58.86 | 39.59 | 0.003 | 0.015 | 0.026 | 0.091 | 0.005 | <0.003 | 0.550 | <0.004 | 0.007 | 0.029 | <0.007 | 0.024 | <0.01 | 0.061 |
| ELF-03_333_rut12 | 58.74 | 39.58 | 0.006 | 0.021 | 0.037 | 0.271 | 0.056 | <0.003 | 0.382 | <0.004 | 0.008 | 0.023 | <0.007 | 0.029 | <0.01 | 0.049 |
| ELF-03_333_rut13 | 58.76 | 39.53 | 0.008 | 0.021 | 0.049 | 0.122 | 0.009 | <0.003 | 0.491 | <0.004 | <0.006 | 0.007 | <0.007 | 0.037 | <0.01 | 0.011 |
| ELF-03_333_rut14 | 58.69 | 39.69 | 0.004 | 0.013 | 0.029 | 0.207 | <0.003 | <0.003 | 0.442 | <0.004 | <0.006 | 0.012 | <0.007 | 0.042 | <0.01 | <0.009 |
| ELF-03_333_rut15 | 58.74 | 39.56 | 0.003 | 0.021 | 0.018 | 0.196 | 0.072 | <0.003 | 0.453 | <0.004 | 0.010 | 0.006 | <0.007 | 0.076 | <0.01 | <0.009 |
| ELF-03_333_rut16 | 58.73 | 39.53 | 0.006 | 0.018 | 0.038 | 0.069 | <0.003 | 0.004 | 0.561 | <0.004 | 0.006 | 0.017 | 0.007 | 0.055 | <0.01 | 0.119 |
| ELF-03_333_rut17 | 59.42 | 39.93 | 0.003 | 0.013 | 0.012 | 0.107 | 0.007 | <0.003 | 0.489 | <0.004 | 0.006 | 0.008 | <0.007 | 0.039 | <0.01 | <0.009 |
| ELF-03_333_rut18 | 58.73 | 39.62 | 0.008 | 0.022 | 0.200 | 0.176 | 0.081 | <0.003 | 0.402 | <0.004 | 0.008 | 0.024 | <0.007 | 0.065 | <0.01 | 0.041 |
| ELF-03_333_rut2 | 58.79 | 39.51 | 0.007 | 0.021 | 0.017 | 0.106 | 0.008 | <0.003 | 0.440 | <0.004 | <0.006 | 0.012 | <0.007 | 0.018 | <0.01 | <0.009 |

*All elements are in wt. % (EMPA).

Appendix C: Eastern Sunda arc rutile trace element chemistry (EMPA)

| Analysis ID | Ti | O | Al | Si | Ca | V | Cr | Mn | Fe | Cu | Zr | Nb | Mo | Sn | Ta | W |
|------------------|-------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| ELF-03_333_rut3 | 58.66 | 39.59 | 0.005 | 0.021 | 0.081 | 0.243 | 0.168 | <0.003 | 0.346 | <0.004 | 0.008 | 0.020 | <0.007 | 0.075 | <0.01 | 0.070 |
| ELF-03_333_rut4 | 58.35 | 39.21 | 0.010 | 0.021 | 0.050 | 0.081 | 0.007 | <0.003 | 0.477 | <0.004 | <0.006 | <0.006 | <0.007 | 0.006 | <0.01 | <0.009 |
| ELF-03_333_rut5 | 58.86 | 39.56 | <0.002 | 0.014 | 0.083 | 0.145 | 0.010 | <0.003 | 0.344 | <0.004 | <0.006 | 0.017 | <0.007 | 0.013 | <0.01 | <0.009 |
| ELF-03_333_rut6 | 58.59 | 39.75 | 0.004 | 0.017 | 0.037 | 0.691 | 0.138 | <0.003 | 0.302 | <0.004 | <0.006 | 0.021 | <0.007 | 0.049 | <0.01 | 0.252 |
| ELF-03_333_rut7 | 58.61 | 39.48 | 0.004 | 0.018 | 0.018 | 0.164 | 0.063 | <0.003 | 0.476 | <0.004 | <0.006 | 0.016 | <0.007 | 0.072 | <0.01 | 0.042 |
| ELF-03_333_rut8 | 58.80 | 39.62 | 0.002 | 0.016 | 0.028 | 0.294 | 0.035 | <0.003 | 0.456 | <0.004 | 0.008 | 0.010 | <0.007 | 0.035 | <0.01 | 0.011 |
| ELF-03_333_rut9 | 60.06 | 40.43 | <0.002 | 0.021 | 0.042 | 0.122 | 0.020 | <0.003 | 0.545 | <0.004 | <0.006 | 0.015 | <0.007 | 0.046 | <0.01 | 0.055 |
| GBF-04_335_rut2 | 58.81 | 39.67 | 0.004 | 0.020 | 0.012 | 0.548 | 0.005 | <0.003 | 0.292 | <0.004 | <0.006 | 0.012 | <0.007 | 0.006 | <0.01 | 0.010 |
| GBF-04_335_rut3 | 58.46 | 39.41 | 0.011 | 0.034 | 0.064 | 0.134 | 0.009 | 0.006 | 0.443 | <0.004 | 0.011 | 0.018 | <0.007 | 0.016 | <0.01 | 0.229 |
| GBF-04_335_rut4 | 58.48 | 39.42 | 0.004 | 0.026 | 0.063 | 0.137 | 0.005 | <0.003 | 0.510 | <0.004 | <0.006 | 0.012 | <0.007 | 0.070 | <0.01 | 0.225 |
| GBF-04_335_rut5 | 58.68 | 39.66 | 0.006 | 0.035 | 0.066 | 0.572 | 0.013 | <0.003 | 0.268 | <0.004 | <0.006 | <0.006 | <0.007 | 0.125 | <0.01 | 0.021 |
| GBF-04_335_rut6 | | | | | | | | | | | | | | | | |
| GBF-04_335_rut7 | 58.97 | 39.72 | 0.016 | 0.046 | 0.041 | 0.255 | <0.003 | <0.003 | 0.365 | <0.004 | <0.006 | 0.009 | <0.007 | 0.058 | <0.01 | 0.013 |
| GBF-04_335_rut8 | 58.37 | 39.39 | 0.004 | 0.022 | 0.045 | 0.113 | <0.003 | <0.003 | 0.634 | <0.004 | 0.028 | 0.009 | <0.007 | 0.052 | <0.01 | 0.290 |
| GBF-04_335_rut9 | 58.81 | 39.57 | 0.004 | 0.029 | 0.022 | 0.176 | <0.003 | <0.003 | 0.453 | <0.004 | 0.007 | 0.010 | <0.007 | 0.028 | <0.01 | 0.036 |
| SPF-05_336_rut2 | | | | | | | | | | | | | | | | |
| SPF-05_336_rut3 | | | | | | | | | | | | | | | | |
| SPF-05_336_rut4 | | | | | | | | | | | | | | | | |
| SPF-05_336_rut5 | | | | | | | | | | | | | | | | |
| SPF-05_336_rut6 | | | | | | | | | | | | | | | | |
| NEF-02_337_rut1 | 58.04 | 39.30 | <0.002 | 0.016 | 0.005 | 0.255 | 0.313 | <0.003 | 0.473 | <0.004 | 0.008 | 0.029 | <0.007 | 0.011 | <0.01 | 0.324 |
| NEF-02_337_rut10 | 58.65 | 39.47 | 0.003 | 0.024 | 0.013 | 0.177 | 0.171 | <0.003 | 0.229 | <0.004 | 0.009 | 0.010 | <0.007 | 0.022 | <0.01 | 0.028 |
| NEF-02_337_rut11 | 58.45 | 39.47 | 0.005 | 0.032 | 0.049 | 0.239 | 0.154 | <0.003 | 0.557 | <0.004 | 0.010 | <0.003 | <0.007 | 0.021 | <0.01 | 0.023 |
| NEF-02_337_rut12 | 58.30 | 39.38 | 0.006 | 0.031 | 0.044 | 0.204 | 0.253 | <0.003 | 0.266 | <0.004 | 0.037 | 0.013 | <0.007 | 0.026 | <0.01 | 0.209 |
| NEF-02_337_rut13 | 58.46 | 39.44 | 0.006 | 0.035 | 0.068 | 0.263 | 0.037 | <0.003 | 0.502 | <0.004 | 0.028 | 0.020 | <0.007 | 0.012 | <0.01 | <0.008 |
| NEF-02_337_rut14 | 58.21 | 39.24 | 0.007 | 0.026 | 0.051 | 0.069 | 0.019 | <0.003 | 0.519 | <0.004 | 0.017 | 0.025 | <0.007 | 0.039 | <0.01 | 0.252 |
| NEF-02_337_rut15 | 58.47 | 39.43 | 0.005 | 0.021 | 0.059 | 0.205 | 0.199 | <0.003 | 0.320 | <0.004 | 0.018 | 0.013 | <0.007 | 0.026 | <0.01 | 0.065 |
| NEF-02_337_rut16 | 58.62 | 39.51 | 0.006 | 0.021 | 0.020 | 0.197 | 0.176 | <0.003 | 0.312 | <0.004 | 0.021 | 0.024 | <0.007 | 0.022 | <0.01 | 0.080 |
| NEF-02_337_rut17 | 58.63 | 39.65 | 0.008 | 0.034 | 0.077 | 0.277 | 0.029 | 0.007 | 0.375 | <0.004 | <0.006 | 0.017 | <0.007 | 0.023 | <0.01 | <0.009 |
| NEF-02_337_rut2 | 58.57 | 39.55 | 0.007 | 0.018 | 0.313 | 0.123 | 0.190 | <0.003 | 0.333 | <0.004 | <0.006 | 0.012 | <0.007 | 0.018 | <0.01 | 0.056 |
| NEF-02_337_rut3 | 58.74 | 39.59 | 0.006 | 0.021 | 0.101 | 0.278 | 0.023 | <0.003 | 0.440 | <0.004 | <0.006 | 0.011 | <0.007 | 0.008 | <0.01 | 0.010 |
| NEF-02_337_rut4 | 58.33 | 39.34 | 0.006 | 0.030 | 0.055 | 0.256 | 0.093 | 0.004 | 0.373 | <0.004 | <0.006 | 0.009 | <0.007 | 0.019 | <0.01 | 0.108 |
| NEF-02_337_rut5 | 58.91 | 39.74 | 0.006 | 0.029 | 0.045 | 0.288 | 0.059 | <0.003 | 0.380 | <0.004 | 0.041 | 0.041 | <0.007 | 0.038 | <0.01 | 0.062 |
| NEF-02_337_rut6 | 57.04 | 38.61 | 0.012 | 0.060 | 0.202 | 0.229 | 0.110 | <0.003 | 0.356 | <0.004 | 0.020 | 0.038 | <0.007 | 0.022 | <0.01 | 0.129 |
| NEF-02_337_rut7 | 58.37 | 39.32 | 0.004 | 0.013 | 0.018 | 0.227 | 0.033 | <0.003 | 0.431 | <0.004 | 0.035 | 0.054 | 0.008 | 0.013 | <0.01 | 0.039 |
| NEF-02_337_rut8 | 58.55 | 39.42 | 0.005 | 0.022 | 0.050 | 0.150 | 0.202 | <0.003 | 0.272 | <0.004 | <0.006 | 0.013 | <0.007 | 0.014 | <0.01 | <0.009 |
| NEF-02_337_rut9 | 58.58 | 39.44 | 0.006 | 0.022 | 0.057 | 0.114 | 0.016 | <0.003 | 0.615 | <0.004 | <0.006 | 0.015 | <0.007 | 0.022 | <0.01 | <0.009 |
| ELF-01_rut1 | 58.80 | 39.65 | 0.0127 | 0.0375 | 0.0211 | 0.1020 | 0.0146 | <0.003 | 0.8276 | 0.0061 | <0.005 | 0.0159 | <0.007 | 0.0185 | <0.01 | 0.0116 |
| ELF-01_rut10 | 59.10 | 39.76 | 0.0081 | 0.0163 | 0.0276 | 0.1367 | 0.0039 | <0.003 | 0.5265 | 0.0057 | <0.005 | 0.0411 | <0.006 | 0.0164 | <0.01 | <0.01 |
| ELF-01_rut11 | 58.69 | 39.55 | 0.0229 | 0.0109 | 0.0183 | 0.0413 | <0.003 | <0.003 | 0.7350 | <0.004 | 0.0087 | 0.0242 | <0.007 | 0.0091 | <0.01 | 0.2922 |
| ELF-01_rut12 | 59.05 | 39.74 | 0.0081 | 0.0102 | 0.0239 | 0.1308 | 0.0031 | <0.003 | 0.6396 | <0.004 | 0.0136 | 0.0211 | <0.007 | 0.0052 | <0.01 | 0.0191 |
| ELF-01_rut13 | 59.15 | 39.92 | 0.0086 | 0.0535 | 0.0788 | 0.1440 | 0.0077 | <0.003 | 0.6708 | 0.0050 | <0.005 | 0.0203 | <0.007 | 0.0371 | <0.01 | 0.0905 |
| ELF-01_rut14 | 58.02 | 39.53 | 0.0114 | 0.0079 | 0.0221 | 0.2111 | 0.0902 | <0.003 | 1.5970 | <0.004 | 0.0085 | 0.0086 | <0.007 | 0.0226 | <0.01 | 0.5464 |
| ELF-01_rut15 | 56.77 | 38.86 | 0.0181 | 0.0289 | 0.0289 | 0.0699 | <0.003 | <0.003 | 1.8635 | <0.005 | 0.0143 | 0.0130 | <0.007 | 0.0122 | <0.01 | 1.2659 |
| ELF-01_rut16 | 58.95 | 39.66 | 0.0065 | 0.0171 | 0.0199 | 0.1752 | <0.003 | <0.003 | 0.4948 | <0.004 | 0.0092 | 0.0237 | <0.006 | 0.0323 | <0.01 | <0.01 |
| ELF-01_rut17 | 55.84 | 38.55 | 0.0165 | 0.0303 | 0.0355 | 0.1961 | 0.0362 | <0.003 | 1.7216 | <0.005 | 0.0280 | 0.0340 | <0.007 | 0.0223 | <0.012 | 2.2652 |
| ELF-01_rut18 | 59.15 | 40.04 | 0.0098 | 0.0388 | 0.0280 | 0.2356 | 0.0098 | <0.003 | 0.0384 | <0.004 | 0.0127 | 0.0665 | <0.007 | 0.0127 | <0.011 | 0.4849 |
| ELF-01_rut19 | 59.11 | 39.80 | 0.0084 | 0.0093 | 0.0538 | 0.1113 | 0.0134 | <0.003 | 0.6737 | <0.004 | <0.006 | 0.0263 | <0.007 | 0.0277 | <0.01 | <0.01 |
| ELF-01_rut2 | 58.80 | 39.60 | 0.0130 | 0.0050 | 0.0617 | 0.0783 | <0.003 | 0.0066 | 0.7396 | 0.0049 | <0.005 | 0.0170 | 0.0067 | 0.0236 | <0.01 | <0.01 |
| ELF-01_rut20 | 58.93 | 39.77 | 0.0028 | 0.0065 | 0.0326 | 0.0874 | <0.003 | <0.003 | 1.0066 | <0.004 | 0.0141 | 0.0248 | <0.007 | 0.0306 | <0.01 | 0.1057 |

*All elements are in wt. % (EMPA).

Appendix C: Eastern Sunda arc rutile trace element chemistry (EMPA)

| Analysis ID | Ti | O | Al | Si | Ca | V | Cr | Mn | Fe | Cu | Zr | Nb | Mo | Sn | Ta | W |
|-------------|-------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| ELF-01_ru21 | 55.07 | 38.30 | 0.0622 | 0.0102 | 0.0227 | 0.1632 | 0.0645 | <0.003 | 1.9947 | <0.005 | 0.0219 | 0.0152 | <0.007 | 0.0209 | <0.012 | 3.0061 |
| ELF-01_ru22 | 58.94 | 39.66 | 0.0144 | 0.0092 | 0.0382 | 0.0428 | <0.003 | <0.003 | 0.6988 | <0.004 | 0.0101 | 0.0271 | <0.007 | 0.0245 | <0.01 | <0.01 |
| ELF-01_ru23 | 59.09 | 39.82 | 0.0098 | 0.0093 | 0.0810 | 0.1174 | <0.003 | <0.003 | 0.7463 | <0.004 | <0.005 | 0.0239 | <0.006 | 0.0289 | <0.01 | 0.0265 |
| ELF-01_ru24 | 58.04 | 39.28 | 0.0298 | 0.0171 | 0.0805 | 0.0652 | <0.003 | <0.003 | 0.9308 | <0.004 | 0.0090 | 0.0287 | <0.007 | 0.0250 | <0.011 | 0.4794 |
| ELF-01_ru25 | 58.72 | 39.61 | 0.0197 | 0.0097 | 0.0315 | 0.0571 | <0.003 | <0.003 | 0.9103 | <0.004 | 0.0074 | 0.0258 | <0.007 | 0.0317 | <0.01 | 0.1046 |
| ELF-01_ru26 | 59.02 | 39.69 | 0.0161 | 0.0080 | 0.0206 | 0.0345 | <0.003 | <0.003 | 0.6715 | <0.004 | 0.0056 | 0.0231 | <0.007 | 0.0187 | <0.01 | <0.01 |
| ELF-01_ru27 | 58.51 | 39.51 | 0.0159 | 0.0134 | 0.0389 | 0.0486 | <0.003 | 0.0035 | 0.8844 | <0.004 | <0.006 | 0.0343 | <0.007 | 0.0343 | <0.01 | 0.1819 |
| ELF-01_ru28 | 59.23 | 39.83 | 0.0085 | 0.0164 | 0.1002 | 0.0741 | <0.003 | <0.003 | 0.4750 | <0.004 | <0.006 | 0.0441 | <0.006 | 0.0136 | <0.01 | 0.0183 |
| ELF-01_ru29 | 59.26 | 39.81 | 0.0111 | 0.0075 | 0.0089 | 0.0527 | 0.0034 | <0.003 | 0.4928 | 0.0052 | 0.0056 | 0.0172 | <0.006 | 0.0172 | <0.01 | <0.01 |
| ELF-01_ru30 | 58.99 | 39.72 | 0.0068 | 0.0100 | 0.0574 | 0.0639 | 0.0253 | 0.0040 | 0.6832 | 0.0064 | <0.005 | 0.0447 | <0.007 | 0.0230 | <0.01 | <0.01 |
| ELF-01_ru31 | 57.59 | 39.25 | 0.0055 | 0.0150 | 0.0181 | 0.2537 | 0.0113 | <0.003 | 1.1372 | <0.005 | 0.0198 | 0.0758 | <0.007 | 0.0133 | <0.011 | 1.0336 |
| ELF-01_ru32 | 57.89 | 39.27 | 0.0330 | 0.0049 | 0.0623 | 0.0499 | <0.003 | 0.0032 | 1.0609 | <0.004 | 0.0073 | 0.0158 | <0.007 | 0.0158 | <0.011 | 0.8027 |
| ELF-01_ru33 | 58.45 | 39.65 | 0.0184 | 0.0081 | 0.0361 | 0.1409 | 0.0032 | <0.003 | 0.9691 | <0.005 | 0.0102 | 0.0214 | <0.007 | 0.0116 | <0.011 | 0.8113 |
| ELF-01_ru34 | 58.56 | 39.59 | 0.0072 | 0.0030 | 0.0600 | 0.0694 | 0.0036 | <0.003 | 0.9526 | <0.004 | 0.0096 | 0.0257 | <0.007 | 0.0114 | <0.011 | 0.4378 |
| ELF-01_ru35 | 57.95 | 39.32 | 0.0209 | 0.0107 | 0.0382 | 0.0634 | <0.003 | <0.003 | 0.9404 | <0.005 | 0.0132 | 0.0692 | <0.007 | 0.0124 | <0.011 | 0.9009 |
| ELF-01_ru36 | 59.07 | 39.84 | 0.0124 | <0.002 | 0.0718 | 0.0350 | <0.003 | <0.003 | 0.7465 | <0.004 | 0.0120 | 0.0857 | 0.0084 | 0.0306 | <0.01 | 0.2149 |
| ELF-01_ru37 | 58.97 | 39.81 | 0.0105 | 0.0033 | 0.1452 | 0.1224 | 0.1967 | <0.003 | 0.4637 | <0.004 | 0.0100 | 0.0187 | <0.007 | 0.0143 | <0.01 | 0.1968 |
| ELF-02_ru1 | 58.68 | 39.58 | 0.0085 | 0.0199 | 0.0670 | 0.1640 | <0.003 | 0.0033 | 0.5445 | <0.004 | <0.005 | 0.0181 | <0.006 | 0.0248 | <0.011 | 0.2662 |
| ELF-02_ru10 | 57.50 | 39.23 | 0.0214 | 0.0078 | 0.0478 | 0.3166 | 0.0727 | <0.003 | 0.9409 | <0.005 | 0.0261 | 0.0113 | <0.007 | 0.0224 | <0.011 | 1.2512 |
| ELF-02_ru11 | 59.10 | 40.02 | 0.0067 | 0.0045 | 0.0164 | 0.3150 | 0.0627 | <0.003 | 0.9520 | <0.004 | 0.0320 | 0.0395 | <0.006 | 0.0109 | <0.01 | 0.1286 |
| ELF-02_ru12 | 56.63 | 39.04 | 0.0197 | 0.0045 | 0.0437 | 0.3510 | 0.0896 | <0.003 | 1.2885 | <0.005 | 0.0132 | 0.0341 | <0.007 | 0.0203 | <0.012 | 1.7980 |
| ELF-02_ru13 | 58.85 | 39.71 | 0.0174 | 0.0085 | 0.0503 | 0.1197 | 0.0336 | <0.003 | 0.7017 | <0.004 | <0.005 | 0.0245 | <0.006 | 0.0198 | <0.011 | 0.2356 |
| ELF-02_ru14 | 58.10 | 39.44 | 0.0822 | 0.0043 | 0.0449 | 0.2028 | 0.0424 | <0.003 | 1.2418 | <0.004 | <0.006 | 0.0251 | <0.006 | 0.0179 | <0.011 | 0.1758 |
| ELF-02_ru15 | 58.13 | 39.79 | 0.0157 | 0.0064 | 0.0401 | 0.0867 | <0.003 | <0.003 | 0.6490 | 0.0058 | <0.005 | 0.0283 | <0.006 | 0.0068 | <0.01 | <0.01 |
| ELF-02_ru16 | 57.80 | 39.52 | 0.0168 | 0.0124 | 0.0318 | 0.8546 | 0.0055 | <0.003 | 0.6779 | <0.005 | 0.0172 | 0.0452 | <0.007 | 0.0203 | <0.011 | 0.9749 |
| ELF-02_ru17 | 56.64 | 39.97 | 0.0255 | 0.0049 | 0.0437 | 0.3690 | 0.0602 | <0.003 | 1.3463 | <0.005 | 0.0226 | 0.0384 | <0.007 | 0.0207 | <0.012 | 1.9226 |
| ELF-02_ru18 | 56.47 | 38.80 | 0.0367 | 0.0074 | 0.0345 | 0.2426 | 0.1140 | <0.003 | 1.2792 | <0.005 | 0.0258 | 0.0125 | <0.007 | 0.0295 | <0.012 | 1.9054 |
| ELF-02_ru19 | 58.87 | 39.71 | 0.0116 | 0.0112 | 0.1137 | 0.2015 | 0.0052 | <0.003 | 0.7157 | <0.004 | 0.0138 | 0.1655 | <0.006 | 0.0156 | <0.01 | 0.1179 |
| ELF-02_ru2 | 58.94 | 39.87 | 0.0094 | 0.0077 | 0.0645 | 0.3733 | 0.0040 | <0.003 | 0.5446 | <0.004 | 0.0202 | 0.0852 | <0.007 | 0.0237 | <0.011 | 0.2880 |
| ELF-02_ru20 | 58.37 | 39.49 | 0.0178 | 0.0083 | 0.0397 | 0.2022 | 0.0693 | <0.003 | 0.7332 | <0.004 | 0.0114 | 0.0290 | <0.006 | 0.0194 | <0.011 | 0.4076 |
| ELF-02_ru21 | 58.82 | 39.71 | 0.0154 | 0.0067 | 0.0482 | 0.2212 | 0.0369 | <0.003 | 0.5868 | <0.004 | <0.005 | 0.0256 | <0.007 | 0.0206 | <0.011 | 0.2954 |
| ELF-02_ru22 | 58.86 | 39.69 | 0.0259 | 0.0036 | 0.0377 | 0.1388 | 0.0423 | <0.003 | 0.5856 | <0.004 | <0.005 | 0.0234 | <0.007 | 0.0273 | <0.01 | 0.2239 |
| ELF-02_ru23 | 59.12 | 39.88 | 0.0250 | 0.0108 | 0.0811 | 0.2586 | 0.0074 | <0.003 | 0.5023 | <0.004 | <0.005 | 0.0121 | <0.007 | 0.0642 | <0.01 | 0.1310 |
| ELF-02_ru24 | 56.70 | 39.43 | 0.0601 | 0.0072 | 0.1102 | 1.5980 | 0.0312 | <0.003 | 0.6241 | <0.005 | 0.0147 | <0.006 | <0.007 | 0.0635 | <0.012 | 1.9698 |
| ELF-02_ru25 | 58.04 | 39.44 | 0.0294 | 0.0122 | 0.0367 | 0.3037 | <0.003 | <0.003 | 0.7689 | <0.004 | 0.0173 | 0.0888 | <0.007 | 0.0218 | <0.011 | 0.7774 |
| ELF-02_ru26 | 57.05 | 39.10 | 0.0351 | 0.0070 | 0.0608 | 0.1876 | 0.0639 | <0.003 | 1.2749 | <0.005 | 0.0076 | 0.0394 | <0.007 | 0.0251 | <0.012 | 1.7110 |
| ELF-02_ru27 | 58.66 | 39.75 | 0.0178 | 0.0101 | 0.0541 | 0.5160 | 0.0061 | <0.003 | 0.5191 | <0.004 | 0.0081 | 0.1002 | <0.007 | 0.0722 | <0.011 | 0.4066 |
| ELF-02_ru28 | 58.77 | 39.65 | 0.0169 | 0.0116 | 0.0344 | 0.1135 | 0.0417 | <0.003 | 0.6709 | <0.004 | 0.0106 | 0.0392 | <0.006 | 0.0214 | <0.011 | 0.2379 |
| ELF-02_ru29 | 59.50 | 40.08 | 0.0202 | 0.0102 | 0.0624 | 0.2737 | <0.003 | 0.0033 | 0.4175 | <0.004 | <0.005 | 0.1500 | <0.006 | 0.0605 | <0.01 | <0.01 |
| ELF-02_ru3 | 56.76 | 39.01 | 0.0255 | 0.0074 | 0.0363 | 0.4206 | 0.0541 | <0.003 | 1.2036 | <0.005 | 0.0198 | 0.1029 | <0.007 | 0.0327 | <0.012 | 1.8482 |
| ELF-02_ru30 | 57.73 | 39.35 | 0.0129 | 0.0084 | 0.0338 | 0.2135 | 0.0861 | <0.003 | 1.0425 | <0.005 | 0.0251 | 0.0345 | <0.006 | 0.0310 | <0.011 | 1.1284 |
| ELF-02_ru31 | 59.18 | 39.91 | 0.0144 | 0.0068 | 0.0283 | 0.2359 | 0.1630 | <0.003 | 0.3955 | <0.004 | 0.0195 | 0.0135 | 0.0113 | 0.0112 | <0.01 | 0.0838 |
| ELF-02_ru32 | 58.76 | 39.63 | 0.0185 | 0.0100 | 0.0466 | 0.1129 | 0.0286 | <0.003 | 0.7119 | <0.004 | 0.0074 | 0.0290 | <0.007 | 0.0285 | <0.01 | 0.1583 |
| ELF-02_ru4 | 58.63 | 39.66 | 0.0144 | 0.0071 | 0.0690 | 0.2467 | 0.1390 | <0.003 | 0.5532 | <0.004 | 0.0163 | 0.0149 | <0.006 | 0.0309 | <0.011 | 0.3351 |
| ELF-02_ru5 | 56.96 | 39.09 | 0.0362 | 0.0057 | 0.0135 | 0.5145 | <0.003 | <0.003 | 1.0361 | <0.005 | 0.0237 | 0.0133 | <0.007 | 0.0166 | <0.012 | 1.8100 |
| ELF-02_ru6 | 59.34 | 40.00 | 0.0299 | 0.0129 | 0.0450 | 0.2840 | <0.003 | <0.003 | 0.4550 | <0.004 | 0.0130 | 0.0271 | <0.007 | 0.0250 | <0.01 | 0.0655 |
| ELF-02_ru7 | 57.55 | 39.25 | 0.0400 | 0.0098 | 0.0625 | 0.2849 | <0.003 | <0.003 | 0.9553 | <0.005 | 0.0099 | 0.0415 | <0.007 | 0.0434 | <0.011 | 1.2302 |
| ELF-02_ru8 | 57.51 | 39.29 | 0.0223 | 0.0053 | 0.0756 | 0.2927 | 0.0236 | <0.003 | 1.1173 | <0.005 | 0.0212 | 0.0556 | <0.007 | 0.0228 | <0.011 | 1.2713 |
| ELF-02_ru9 | 58.29 | 39.60 | 0.0164 | 0.0131 | 0.0473 | 0.4498 | 0.0328 | <0.003 | 0.7081 | <0.004 | <0.006 | 0.0199 | <0.006 | 0.0133 | <0.011 | 0.7000 |
| LB005_rut1 | 59.02 | 39.69 | 0.0032 | 0.0061 | 0.0178 | 0.2553 | 0.0142 | <0.003 | 0.3223 | <0.004 | 0.0075 | 0.0470 | <0.007 | 0.0045 | <0.01 | <0.01 |

*All elements are in wt. % (EMPA).

Appendix C: Eastern Sunda arc rutile trace element chemistry (EMPA)

| Analysis ID | Ti | O | Al | Si | Ca | V | Cr | Mn | Fe | Cu | Zr | Nb | Mo | Sn | Ta | W |
|--------------|-------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| LB005_rut0 | 59.57 | 40.03 | <0.002 | 0.0076 | 0.0186 | 0.2360 | 0.0035 | <0.003 | 0.3047 | <0.004 | 0.0156 | 0.0134 | <0.007 | 0.0054 | <0.01 | <0.01 |
| LB005_rut2 | 59.19 | 39.79 | <0.003 | 0.0063 | 0.0178 | 0.2075 | 0.0044 | 0.0039 | 0.3491 | <0.004 | 0.0423 | 0.0487 | <0.006 | 0.0043 | <0.01 | <0.01 |
| LB005_rut3 | 59.20 | 39.78 | 0.0032 | 0.0069 | 0.0247 | 0.2487 | <0.003 | <0.003 | 0.2803 | 0.0054 | 0.0090 | 0.0054 | <0.007 | 0.0042 | <0.01 | <0.01 |
| LB005_rut4 | 59.04 | 39.77 | 0.0030 | 0.0131 | 0.0815 | 0.2747 | <0.003 | 0.0041 | 0.4148 | <0.004 | 0.0069 | 0.0430 | <0.007 | 0.0141 | <0.01 | 0.0108 |
| LB005_rut5 | 60.79 | 40.85 | 0.0044 | 0.0074 | 0.0234 | 0.2384 | <0.003 | <0.003 | 0.2769 | <0.004 | <0.005 | 0.0370 | <0.007 | 0.0071 | <0.01 | <0.01 |
| LB005_rut6 | | | | | | | | | | | | | | | | |
| LB005_rut8 | | | | | | | | | | | | | | | | |
| LB005_rut9 | | | | | | | | | | | | | | | | |
| NAF-01_rut1 | 59.00 | 39.83 | 0.0031 | 0.0041 | 0.0616 | 0.2307 | 0.0280 | <0.003 | 0.5018 | <0.004 | 0.0075 | 0.0277 | 0.0068 | 0.1052 | <0.011 | 0.3102 |
| NAF-01_rut10 | | | | | | | | | | | | | | | | |
| NAF-01_rut11 | | | | | | | | | | | | | | | | |
| NAF-01_rut12 | | | | | | | | | | | | | | | | |
| NAF-01_rut2 | 58.99 | 39.66 | 0.0034 | 0.0117 | 0.0332 | 0.0834 | 0.0493 | <0.003 | 0.4794 | <0.004 | <0.005 | <0.006 | <0.007 | 0.0741 | <0.01 | <0.01 |
| NAF-01_rut3 | 58.90 | 39.67 | 0.0026 | 0.0079 | 0.0671 | 0.1120 | 0.0225 | 0.0038 | 0.5100 | <0.004 | <0.005 | 0.0361 | <0.007 | 0.0404 | <0.01 | 0.1991 |
| NAF-01_rut4 | 58.86 | 39.58 | 0.0029 | 0.0079 | 0.0575 | 0.1316 | 0.0565 | <0.003 | 0.5602 | <0.004 | <0.005 | 0.0148 | <0.006 | 0.0903 | <0.011 | 0.3196 |
| NAF-01_rut5 | 59.20 | 39.84 | 0.0051 | 0.0195 | 0.0380 | 0.1394 | 0.0104 | <0.003 | 0.4973 | <0.004 | 0.0108 | 0.0543 | <0.007 | 0.0278 | <0.01 | <0.01 |
| NAF-01_rut6 | 59.05 | 39.75 | 0.0055 | 0.0056 | 0.0541 | 0.1623 | 0.0472 | <0.003 | 0.4078 | <0.004 | 0.0091 | 0.0972 | <0.006 | 0.0091 | <0.01 | 0.0141 |
| NAF-01_rut7 | 58.54 | 39.54 | 0.0034 | 0.0094 | 0.0158 | 0.1256 | 0.0369 | <0.003 | 0.5938 | <0.004 | <0.006 | 0.0554 | <0.007 | 0.1878 | <0.011 | 0.3726 |
| NAF-01_rut8 | | | | | | | | | | | | | | | | |
| NAF-01_rut9 | | | | | | | | | | | | | | | | |
| NAF-02_rut1 | | | | | | | | | | | | | | | | |
| NAF-02_rut10 | 59.19 | 39.75 | 0.0054 | 0.0060 | 0.0062 | 0.0361 | 0.0083 | <0.003 | 0.4623 | <0.004 | 0.0162 | 0.0237 | <0.007 | 0.0807 | <0.01 | <0.01 |
| NAF-02_rut11 | 58.95 | 39.70 | 0.0051 | 0.0049 | 0.0608 | 0.0616 | 0.0046 | <0.003 | 0.5794 | <0.004 | 0.0280 | 0.0844 | <0.006 | 0.1098 | <0.01 | 0.0242 |
| NAF-02_rut12 | 59.01 | 39.78 | 0.0049 | 0.0048 | 0.0301 | 0.0412 | 0.0113 | <0.003 | 0.5668 | <0.004 | 0.0150 | 0.2461 | <0.006 | 0.0951 | <0.01 | 0.0316 |
| NAF-02_rut13 | 59.39 | 39.86 | 0.0045 | 0.0057 | 0.0070 | 0.0512 | <0.003 | <0.003 | 0.4473 | <0.004 | 0.0105 | 0.0292 | <0.006 | 0.0280 | <0.01 | <0.01 |
| NAF-02_rut14 | 59.38 | 40.02 | 0.0044 | 0.0143 | 0.0041 | 0.0411 | <0.003 | <0.003 | 0.6166 | <0.004 | 0.0151 | 0.1108 | <0.007 | 0.2832 | <0.01 | <0.01 |
| NAF-02_rut15 | 59.01 | 39.63 | 0.0067 | 0.0139 | 0.0180 | 0.0554 | 0.0076 | <0.003 | 0.4459 | <0.004 | 0.0094 | 0.0109 | <0.007 | 0.0558 | <0.01 | <0.01 |
| NAF-02_rut16 | 58.83 | 39.65 | 0.0061 | 0.0074 | 0.0091 | 0.0594 | 0.0073 | <0.003 | 0.5718 | <0.004 | 0.0115 | 0.2450 | <0.006 | 0.0657 | 0.0430 | <0.01 |
| NAF-02_rut17 | 59.37 | 39.90 | 0.0062 | 0.0081 | 0.0092 | 0.0531 | <0.003 | <0.003 | 0.4817 | <0.004 | 0.0106 | 0.0748 | <0.007 | 0.0607 | <0.01 | <0.01 |
| NAF-02_rut18 | 59.09 | 39.77 | 0.0029 | 0.0112 | 0.0300 | 0.0584 | 0.0033 | <0.003 | 0.5339 | 0.0043 | 0.0089 | 0.0141 | <0.007 | 0.2620 | <0.01 | <0.01 |
| NAF-02_rut19 | 58.90 | 39.65 | 0.0056 | 0.0081 | 0.0027 | 0.0674 | 0.0084 | <0.003 | 0.4563 | <0.004 | 0.0182 | 0.0610 | <0.006 | 0.3068 | <0.01 | <0.01 |
| NAF-02_rut2 | 59.24 | 39.75 | 0.0069 | 0.0048 | 0.0040 | 0.0710 | <0.003 | <0.003 | 0.4367 | <0.004 | <0.005 | 0.0062 | <0.006 | 0.0067 | <0.01 | <0.01 |
| NAF-02_rut20 | 58.98 | 39.67 | 0.0074 | 0.0057 | 0.0026 | 0.0459 | 0.0081 | <0.003 | 0.5220 | <0.004 | 0.0074 | 0.1133 | <0.007 | 0.0881 | <0.01 | <0.01 |
| NAF-02_rut21 | 59.08 | 39.70 | 0.0059 | 0.0114 | 0.0048 | 0.0479 | 0.0243 | <0.003 | 0.4783 | 0.0046 | 0.0060 | 0.0084 | <0.007 | 0.1208 | <0.01 | <0.01 |
| NAF-02_rut3 | 59.20 | 39.79 | 0.0052 | 0.0061 | 0.0302 | 0.0393 | 0.0034 | <0.003 | 0.4891 | <0.004 | 0.0056 | 0.0385 | <0.006 | 0.1095 | <0.01 | <0.01 |
| NAF-02_rut4 | 59.42 | 39.90 | 0.0053 | 0.0043 | 0.0109 | 0.0586 | 0.0030 | <0.003 | 0.4578 | <0.004 | 0.0066 | 0.0276 | <0.007 | 0.0588 | <0.01 | <0.01 |
| NAF-02_rut5 | 59.20 | 39.75 | 0.0070 | 0.0157 | 0.0188 | 0.0559 | 0.0081 | <0.003 | 0.4417 | 0.0052 | <0.005 | 0.0114 | <0.007 | 0.0194 | <0.01 | <0.01 |
| NAF-02_rut6 | 58.99 | 39.70 | 0.0054 | 0.0054 | 0.0250 | 0.0743 | 0.0034 | <0.003 | 0.4606 | 0.0043 | 0.0114 | 0.0733 | <0.006 | 0.2254 | <0.01 | <0.01 |
| NAF-02_rut7 | 59.21 | 39.77 | 0.0058 | 0.0067 | 0.0056 | 0.0417 | 0.0045 | <0.003 | 0.5622 | <0.004 | 0.0076 | 0.0236 | <0.007 | 0.0140 | <0.01 | <0.01 |
| NAF-02_rut8 | 59.24 | 39.83 | 0.0037 | 0.0066 | 0.1385 | 0.0678 | <0.003 | <0.003 | 0.4869 | <0.004 | 0.0076 | 0.0293 | <0.007 | 0.0103 | <0.01 | <0.01 |
| NAF-02_rut9 | 59.12 | 39.73 | 0.0042 | 0.0066 | 0.0082 | 0.0613 | 0.0052 | 0.0036 | 0.4807 | <0.004 | 0.0128 | 0.0129 | <0.007 | 0.1456 | <0.01 | <0.01 |
| NAF-03_rut1 | 58.90 | 39.78 | 0.0059 | 0.0085 | 0.1765 | 0.2881 | 0.1765 | <0.003 | 0.2930 | <0.004 | <0.005 | 0.0315 | <0.006 | 0.0447 | <0.011 | 0.2098 |
| NAF-03_rut10 | 58.88 | 39.79 | 0.0041 | 0.0204 | 0.0523 | 0.2629 | 0.2767 | <0.003 | 0.2840 | <0.004 | 0.0280 | 0.0152 | <0.007 | 0.0407 | <0.01 | 0.1881 |
| NAF-03_rut11 | 59.07 | 39.77 | 0.0067 | 0.0173 | 0.0069 | 0.2654 | 0.0197 | <0.003 | 0.3486 | <0.004 | 0.0390 | 0.0237 | 0.0085 | 0.0332 | <0.01 | 0.0360 |
| NAF-03_rut12 | 58.90 | 39.85 | <0.003 | 0.0038 | 0.0037 | 0.4394 | 0.0327 | <0.003 | 0.8494 | <0.004 | 0.0277 | 0.0152 | <0.006 | 0.0157 | <0.01 | 0.0102 |
| NAF-03_rut13 | | | | | | | | | | | | | | | | |
| NAF-03_rut14 | | | | | | | | | | | | | | | | |
| NAF-03_rut15 | | | | | | | | | | | | | | | | |
| NAF-03_rut2 | 59.02 | 39.80 | 0.0060 | 0.0133 | 0.0323 | 0.1990 | 0.0159 | 0.0037 | 0.6585 | <0.004 | 0.0391 | 0.0502 | <0.007 | 0.0259 | <0.01 | 0.0261 |
| NAF-03_rut3 | 59.04 | 39.70 | 0.0047 | 0.0134 | 0.0057 | 0.2176 | 0.0196 | <0.003 | 0.3291 | <0.004 | 0.0402 | 0.0100 | 0.0067 | 0.0128 | <0.01 | <0.01 |

*All elements are in wt. % (EMPA).

Appendix C: Eastern Sunda arc rutile trace element chemistry (EMPA)

| Analysis ID | Ti | O | Al | Si | Ca | V | Cr | Mn | Fe | Cu | Zr | Nb | Mo | Sn | Ta | W |
|--------------|-------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| NAF-03_rut4 | 59.10 | 39.75 | <0.003 | 0.0141 | 0.0058 | 0.2210 | 0.0509 | <0.003 | 0.3024 | <0.004 | 0.0101 | 0.0464 | <0.007 | 0.0471 | <0.01 | <0.01 |
| NAF-03_rut5 | 59.41 | 40.02 | <0.003 | 0.0129 | 0.0150 | 0.3338 | 0.0230 | <0.003 | 0.3605 | <0.004 | 0.0619 | 0.0191 | <0.006 | 0.0288 | <0.01 | <0.01 |
| NAF-03_rut6 | 59.09 | 39.79 | 0.0048 | 0.0128 | 0.0186 | 0.2865 | 0.0159 | <0.003 | 0.3198 | <0.004 | 0.0646 | 0.0142 | 0.0069 | 0.0388 | <0.01 | 0.0580 |
| NAF-03_rut7 | 59.21 | 40.12 | <0.003 | 0.0079 | 0.0743 | 0.5557 | 0.2752 | <0.003 | 0.1262 | <0.004 | 0.0303 | <0.006 | <0.006 | 0.0483 | <0.011 | 0.2874 |
| NAF-03_rut8 | 59.00 | 39.74 | 0.0061 | 0.0258 | 0.0188 | 0.3489 | 0.0126 | <0.003 | 0.3005 | <0.004 | 0.0371 | <0.006 | <0.006 | 0.0204 | <0.01 | 0.0128 |
| NAF-03_rut9 | 58.78 | 39.65 | 0.0085 | 0.0169 | 0.0529 | 0.2179 | 0.1204 | <0.003 | 0.4079 | <0.004 | 0.0288 | 0.0326 | <0.007 | 0.0231 | <0.01 | 0.1309 |
| SLG-01_rut1 | 59.19 | 39.79 | 0.0068 | 0.0080 | 0.0031 | 0.0983 | 0.0035 | <0.003 | 0.4739 | <0.004 | 0.0588 | 0.0567 | <0.007 | 0.0047 | <0.01 | <0.01 |
| SLG-01_rut10 | 58.44 | 39.35 | 0.0092 | 0.0344 | 0.0161 | 0.1218 | 0.0118 | 0.0110 | 0.4251 | <0.004 | 0.0612 | 0.0772 | <0.006 | 0.0283 | <0.01 | 0.0328 |
| SLG-01_rut11 | 59.13 | 39.74 | 0.0053 | 0.0076 | 0.0022 | 0.0926 | 0.0150 | <0.003 | 0.4822 | <0.004 | 0.0612 | 0.0221 | <0.007 | 0.0606 | <0.01 | <0.01 |
| SLG-01_rut13 | 58.94 | 39.66 | 0.0066 | 0.0133 | 0.0212 | 0.0860 | 0.0037 | 0.0073 | 0.4903 | <0.004 | 0.0670 | 0.0809 | <0.007 | 0.0074 | <0.01 | <0.01 |
| SLG-01_rut14 | 58.77 | 39.59 | 0.0056 | 0.0048 | 0.0020 | 0.0974 | 0.0034 | <0.003 | 0.5884 | <0.004 | 0.0372 | 0.1523 | <0.006 | 0.0406 | <0.01 | 0.0418 |
| SLG-01_rut15 | 58.72 | 39.58 | 0.0069 | 0.0131 | 0.0040 | 0.0072 | 0.0074 | <0.003 | 0.6018 | <0.004 | 0.0229 | 0.1162 | 0.0069 | 0.0803 | <0.01 | 0.1457 |
| SLG-01_rut16 | 58.97 | 39.65 | 0.0059 | 0.0208 | 0.0025 | <0.02 | 0.0037 | <0.003 | 0.5504 | <0.004 | 0.0143 | 0.0487 | <0.007 | 0.0802 | <0.01 | 0.0419 |
| SLG-01_rut17 | 58.90 | 39.71 | 0.0026 | 0.0184 | 0.0041 | 0.1061 | 0.0111 | <0.003 | 0.5137 | <0.004 | 0.0683 | 0.1949 | <0.007 | 0.0651 | <0.01 | 0.0867 |
| SLG-01_rut18 | 58.74 | 39.55 | 0.0074 | 0.0212 | 0.0061 | 0.0955 | 0.0273 | <0.003 | 0.4973 | <0.004 | 0.0184 | 0.1141 | <0.006 | 0.0304 | <0.01 | 0.0349 |
| SLG-01_rut19 | 59.61 | 40.06 | 0.0103 | 0.0214 | 0.0137 | 0.0282 | 0.0063 | 0.0062 | 0.4841 | <0.004 | 0.0519 | 0.0438 | <0.006 | 0.0040 | <0.01 | <0.01 |
| SLG-01_rut2 | 58.93 | 39.65 | 0.0043 | 0.0101 | 0.0281 | 0.0543 | 0.0074 | <0.003 | 0.5205 | <0.004 | 0.0689 | 0.0519 | <0.007 | 0.0582 | <0.01 | 0.0389 |
| SLG-01_rut20 | 59.05 | 39.78 | 0.0081 | 0.0156 | 0.0805 | 0.0573 | 0.0090 | 0.0042 | 0.5498 | <0.004 | 0.0265 | 0.1361 | <0.007 | 0.0108 | <0.01 | 0.0257 |
| SLG-01_rut3 | 58.97 | 39.68 | 0.0061 | 0.0141 | 0.0313 | 0.1632 | 0.0082 | 0.0042 | 0.4360 | <0.004 | 0.0414 | 0.0677 | <0.007 | 0.0276 | <0.01 | <0.01 |
| SLG-01_rut4 | 58.69 | 39.56 | 0.0040 | 0.0133 | 0.0025 | 0.1668 | <0.003 | <0.003 | 0.5054 | <0.004 | 0.0156 | 0.2063 | <0.007 | 0.0454 | <0.01 | <0.01 |
| SLG-01_rut5 | 55.15 | 38.82 | 0.0208 | <0.003 | 0.0120 | 0.0570 | 0.0058 | 0.0034 | 1.9810 | <0.004 | 0.0159 | 3.0756 | <0.007 | 0.0537 | <0.011 | <0.011 |
| SLG-01_rut6 | 58.95 | 39.67 | 0.0089 | 0.0151 | 0.0316 | 0.0732 | 0.0071 | 0.0051 | 0.5006 | <0.004 | 0.0713 | 0.0954 | <0.006 | 0.0267 | <0.01 | 0.0239 |
| SLG-01_rut7 | 58.95 | 39.79 | 0.0059 | 0.0132 | 0.0029 | 0.1381 | 0.0091 | <0.003 | 0.5503 | <0.004 | 0.0272 | 0.2856 | <0.006 | 0.0465 | <0.01 | 0.0518 |
| SLG-01_rut8 | 58.93 | 39.64 | 0.0066 | 0.0213 | 0.0289 | 0.1009 | 0.0126 | 0.0136 | 0.4114 | <0.004 | 0.0681 | 0.0432 | <0.007 | 0.0172 | <0.01 | 0.0263 |
| SLG-01_rut9 | 59.02 | 39.72 | 0.0070 | 0.0120 | 0.0147 | 0.0450 | 0.0142 | 0.0032 | 0.5486 | <0.004 | 0.0225 | 0.1375 | <0.006 | 0.0315 | <0.01 | <0.01 |
| SPF-06_rut10 | 58.81 | 39.78 | 0.0110 | 0.0044 | <0.001 | 0.5767 | 0.0697 | <0.003 | 0.3417 | <0.004 | 0.0432 | <0.006 | <0.007 | 0.0491 | <0.01 | 0.2342 |
| SPF-06_rut11 | 58.85 | 39.68 | 0.0082 | 0.0105 | 0.0083 | 0.1920 | 0.0086 | <0.003 | 0.6733 | <0.004 | <0.006 | <0.006 | <0.006 | 0.0172 | <0.01 | 0.2001 |
| SPF-06_rut12 | 58.83 | 39.66 | 0.0059 | 0.0202 | 0.0033 | 0.1530 | 0.0157 | <0.003 | 0.5599 | <0.004 | 0.0222 | 0.0124 | 0.0085 | 0.0561 | <0.01 | 0.2188 |
| SPF-06_rut13 | 58.85 | 39.78 | 0.0203 | 0.0059 | 0.0026 | 0.2439 | 0.0250 | <0.003 | 0.5987 | <0.004 | 0.0508 | 0.0390 | <0.007 | 0.0247 | <0.011 | 0.4261 |
| SPF-06_rut14 | 59.00 | 39.70 | 0.0031 | 0.0062 | 0.0026 | 0.1621 | 0.0056 | <0.003 | 0.5015 | <0.004 | 0.0382 | 0.0623 | <0.007 | 0.0395 | <0.01 | 0.0264 |
| SPF-06_rut15 | 57.82 | 39.32 | 0.0149 | 0.0055 | 0.0033 | 0.4929 | 0.3677 | <0.003 | 0.3113 | <0.004 | 0.0062 | <0.006 | <0.007 | 0.0656 | <0.01 | 0.6737 |
| SPF-06_rut16 | 59.12 | 39.80 | 0.0103 | 0.0074 | 0.0071 | 0.2531 | 0.0420 | <0.003 | 0.3247 | <0.004 | 0.0487 | 0.0251 | <0.006 | 0.0199 | <0.01 | 0.0517 |
| SPF-06_rut17 | 58.51 | 39.53 | 0.0081 | 0.0104 | 0.0019 | 0.2388 | 0.0145 | <0.003 | 0.5916 | <0.004 | 0.0112 | 0.0063 | <0.007 | 0.0240 | <0.011 | 0.5330 |
| SPF-06_rut18 | 59.11 | 39.87 | <0.002 | 0.0134 | 0.0034 | 0.4129 | 0.1028 | <0.003 | 0.3564 | <0.004 | 0.0076 | <0.006 | <0.007 | 0.0275 | <0.01 | 0.0234 |
| SPF-06_rut19 | 58.98 | 39.73 | 0.0112 | 0.0039 | 0.0018 | 0.1988 | 0.0069 | 0.0035 | 0.5284 | <0.004 | 0.0180 | 0.0300 | 0.0078 | 0.0167 | <0.01 | 0.1623 |
| SPF-06_rut2 | 59.07 | 39.93 | 0.0145 | <0.002 | 0.0019 | 0.4927 | 0.0338 | <0.003 | 0.4272 | <0.004 | 0.0332 | <0.006 | <0.006 | 0.0315 | <0.011 | 0.2575 |
| SPF-06_rut20 | 59.30 | 39.86 | 0.0060 | 0.0050 | 0.0030 | 0.0428 | 0.0139 | <0.003 | 0.5669 | <0.004 | 0.0347 | 0.0195 | <0.006 | 0.0202 | <0.01 | 0.0549 |
| SPF-06_rut21 | 59.20 | 39.88 | 0.0044 | 0.0077 | 0.0025 | 0.2805 | 0.0350 | <0.003 | 0.4970 | <0.004 | 0.0083 | 0.0134 | <0.006 | 0.0487 | <0.01 | 0.0294 |
| SPF-06_rut22 | 58.67 | 39.66 | 0.0095 | 0.0079 | 0.0030 | 0.3259 | 0.1714 | <0.003 | 0.4133 | <0.004 | 0.0090 | <0.006 | <0.007 | 0.0376 | <0.011 | 0.3371 |
| SPF-06_rut23 | 59.01 | 39.78 | 0.0038 | 0.0051 | 0.0017 | 0.1559 | 0.0037 | <0.003 | 0.6149 | <0.004 | 0.0142 | 0.0478 | <0.007 | 0.0196 | <0.011 | 0.2847 |
| SPF-06_rut24 | 58.68 | 39.70 | 0.0114 | 0.0130 | 0.0031 | 0.2886 | 0.0094 | <0.003 | 0.6498 | <0.004 | 0.0490 | 0.0648 | <0.007 | 0.0277 | <0.011 | 0.3700 |
| SPF-06_rut25 | 59.13 | 39.92 | 0.0056 | 0.0060 | 0.0023 | 0.5509 | 0.1066 | <0.003 | 0.2236 | 0.0046 | <0.005 | <0.006 | <0.007 | 0.0256 | <0.01 | 0.0589 |
| SPF-06_rut26 | 59.48 | 40.16 | 0.0054 | 0.0038 | 0.0044 | 0.1397 | 0.0094 | <0.003 | 0.7111 | <0.004 | 0.0134 | 0.0254 | <0.007 | 0.0213 | <0.011 | 0.4725 |
| SPF-06_rut27 | 58.95 | 39.64 | 0.0026 | <0.001 | 0.0592 | 0.0290 | 0.0039 | <0.003 | 0.5195 | <0.004 | 0.0131 | <0.006 | <0.007 | 0.0452 | <0.01 | 0.1899 |
| SPF-06_rut28 | 58.79 | 39.68 | 0.0117 | 0.0063 | 0.0015 | 0.1055 | 0.0166 | <0.003 | 0.9025 | <0.004 | 0.0498 | 0.0177 | <0.007 | 0.0171 | <0.01 | 0.1478 |
| SPF-06_rut29 | 59.08 | 39.80 | 0.0067 | 0.0074 | 0.0026 | 0.2379 | 0.0071 | <0.003 | 0.5137 | <0.004 | 0.0155 | 0.0261 | <0.007 | 0.0164 | <0.01 | 0.1325 |
| SPF-06_rut3 | 59.18 | 39.78 | 0.0036 | 0.0034 | 0.0048 | 0.1513 | 0.0034 | <0.003 | 0.4021 | <0.004 | 0.0109 | 0.0267 | <0.007 | 0.0236 | <0.01 | 0.0230 |
| SPF-06_rut30 | 59.74 | 40.17 | 0.0057 | 0.0297 | 0.0019 | 0.0404 | 0.0506 | <0.003 | 0.5235 | <0.004 | 0.0323 | 0.0229 | <0.007 | 0.0220 | <0.01 | <0.01 |
| SPF-06_rut4 | 58.73 | 39.71 | 0.0117 | 0.0110 | 0.0084 | 0.0504 | 0.0279 | <0.003 | 0.8146 | <0.004 | 0.0467 | 0.0258 | <0.006 | 0.0203 | <0.011 | 0.6079 |
| SPF-06_rut5 | 58.41 | 39.67 | 0.0114 | 0.0104 | 0.0019 | 0.5402 | 0.3119 | <0.003 | 0.2587 | <0.004 | 0.0055 | 0.0125 | <0.007 | 0.0363 | <0.011 | 0.5672 |

*All elements are in wt. % (EMPA).

Appendix C: Eastern Sunda arc rutile trace element chemistry (EMPA)

| Analysis ID | Ti | O | Al | Si | Ca | V | Cr | Mn | Fe | Cu | Zr | Nb | Mo | Sn | Ta | W |
|----------------|-------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| SPF-06_rut6 | 58.98 | 39.69 | 0.0085 | 0.0108 | 0.0050 | 0.1489 | 0.0090 | <0.003 | 0.5221 | <0.004 | <0.006 | 0.0059 | <0.007 | 0.0258 | <0.01 | 0.1194 |
| SPF-06_rut7 | 58.90 | 39.63 | 0.0053 | 0.0380 | 0.0067 | 0.0401 | 0.0069 | <0.003 | 0.5784 | <0.004 | <0.003 | 0.0263 | <0.006 | 0.0190 | <0.01 | 0.1206 |
| SPF-06_rut8 | 59.00 | 39.74 | 0.0087 | 0.0065 | 0.0065 | 0.2194 | 0.0149 | <0.003 | 0.5280 | <0.004 | 0.0365 | 0.0133 | <0.007 | 0.0154 | <0.01 | 0.0747 |
| SPF-06_rut9 | 56.92 | 38.51 | 0.0093 | 0.0110 | 0.0549 | 0.2207 | 0.0087 | 0.2270 | 0.7343 | 0.0053 | 0.0185 | 0.0249 | 0.0076 | 0.0156 | <0.01 | 0.1037 |
| UG012184_rut1 | 59.07 | 39.77 | 0.1573 | 0.0163 | 0.0064 | 0.1123 | 0.0058 | <0.003 | 0.0409 | <0.004 | 0.0113 | 0.0298 | <0.007 | 0.1985 | <0.01 | 0.0536 |
| UG012184_rut10 | 59.15 | 39.82 | 0.1647 | 0.0802 | 0.0239 | 0.0726 | 0.0051 | <0.003 | 0.0384 | <0.004 | <0.005 | 0.0086 | <0.007 | 0.0314 | <0.01 | 0.0264 |
| UG012184_rut11 | 58.88 | 39.65 | 0.1315 | 0.0185 | <0.001 | 0.1983 | 0.0108 | 0.0036 | 0.0933 | <0.004 | <0.005 | 0.0388 | <0.007 | 0.4441 | <0.011 | 0.2154 |
| UG012184_rut12 | 59.55 | 39.96 | 0.0747 | 0.0119 | 0.0081 | 0.1471 | <0.003 | <0.003 | 0.0192 | <0.004 | <0.005 | 0.0378 | <0.007 | 0.0327 | <0.01 | <0.01 |
| UG012184_rut13 | 59.24 | 39.95 | 0.0426 | 0.0271 | 0.0141 | 0.5939 | 0.0056 | <0.003 | 0.0296 | <0.004 | <0.005 | 0.0214 | <0.007 | 0.0035 | <0.01 | <0.01 |
| UG012184_rut14 | 59.66 | 40.15 | 0.0608 | 0.0393 | 0.0218 | 0.2904 | 0.0103 | <0.003 | 0.0545 | 0.0044 | <0.005 | 0.0216 | <0.007 | 0.0285 | <0.01 | 0.0242 |
| UG012184_rut15 | 58.58 | 40.28 | 1.1192 | 0.0469 | 0.0052 | 0.0751 | 0.0043 | <0.003 | 0.0938 | <0.004 | 0.0093 | 0.0591 | <0.007 | 0.0238 | <0.01 | 0.0116 |
| UG012184_rut16 | 58.47 | 39.96 | 0.0959 | 0.0197 | 0.0022 | 0.0911 | 0.0064 | <0.003 | 0.0740 | <0.004 | <0.005 | 0.0322 | <0.006 | 0.0895 | <0.01 | 0.0588 |
| UG012184_rut17 | 59.20 | 39.93 | 0.3030 | 0.0242 | 0.0021 | 0.0489 | <0.003 | 0.0034 | 0.1522 | <0.004 | <0.005 | 0.0365 | <0.007 | 0.0035 | <0.01 | <0.01 |
| UG012184_rut18 | 58.90 | 39.58 | 0.1191 | 0.0478 | 0.0176 | 0.0701 | <0.003 | <0.003 | 0.0273 | 0.0084 | 0.0057 | 0.0226 | 0.0089 | 0.0320 | <0.01 | 0.0192 |
| UG012184_rut19 | 58.94 | 39.70 | 0.2505 | 0.0178 | 0.0130 | 0.0975 | 0.0033 | 0.0072 | 0.0451 | 0.0047 | 0.0055 | 0.0283 | <0.007 | 0.0150 | <0.01 | <0.01 |
| UG012184_rut2 | 59.26 | 39.94 | 0.0443 | 0.0133 | 0.0042 | 0.3755 | 0.0165 | <0.003 | 0.0525 | <0.004 | <0.006 | 0.0200 | <0.007 | 0.3124 | <0.01 | <0.01 |
| UG012184_rut20 | 59.27 | 39.90 | 0.1105 | 0.0540 | 0.0310 | 0.2207 | 0.0035 | 0.0078 | 0.0265 | <0.004 | <0.005 | 0.0385 | <0.006 | 0.0029 | <0.01 | <0.01 |
| UG012184_rut21 | 59.37 | 39.89 | 0.0827 | 0.0131 | 0.0025 | 0.1164 | 0.0033 | <0.003 | 0.0962 | <0.004 | <0.005 | 0.0706 | <0.007 | 0.0521 | <0.01 | 0.0324 |
| UG012184_rut22 | 59.24 | 39.79 | 0.0595 | 0.0132 | 0.0052 | 0.2171 | 0.0058 | 0.0037 | 0.0505 | 0.0049 | <0.005 | 0.0179 | <0.006 | 0.0662 | <0.01 | <0.01 |
| UG012184_rut23 | 59.40 | 39.91 | 0.1543 | 0.0086 | 0.0030 | 0.0920 | 0.0107 | <0.003 | 0.0341 | 0.0049 | 0.0069 | 0.0090 | <0.007 | 0.0524 | <0.01 | 0.0178 |
| UG012184_rut24 | 59.36 | 39.95 | 0.0232 | 0.0200 | 0.0098 | 0.4598 | 0.0033 | 0.0075 | 0.0530 | <0.004 | <0.005 | 0.0248 | <0.007 | <0.002 | <0.01 | <0.01 |
| UG012184_rut25 | 60.30 | 40.45 | 0.1023 | 0.0125 | 0.0023 | 0.0756 | <0.003 | <0.003 | 0.0408 | 0.0051 | 0.0120 | 0.0190 | <0.006 | 0.0058 | <0.01 | <0.01 |
| UG012184_rut26 | 59.07 | 39.88 | 0.3335 | 0.0293 | 0.0107 | 0.0726 | 0.0059 | 0.0061 | 0.0546 | 0.0067 | <0.005 | 0.0132 | <0.007 | 0.0775 | <0.01 | 0.0217 |
| UG012184_rut27 | 59.31 | 39.99 | 0.2015 | 0.0151 | 0.0124 | 0.2999 | <0.003 | <0.003 | 0.0183 | 0.0088 | <0.005 | 0.0239 | <0.007 | 0.0028 | <0.01 | <0.01 |
| UG012184_rut28 | 59.13 | 39.87 | 0.1101 | 0.1134 | 0.0044 | 0.1945 | <0.003 | <0.003 | 0.0793 | <0.004 | <0.005 | 0.0305 | <0.007 | 0.0371 | <0.01 | <0.01 |
| UG012184_rut3 | 59.51 | 40.03 | 0.1690 | 0.0134 | 0.0026 | 0.0930 | 0.0110 | <0.003 | 0.0488 | <0.004 | <0.005 | 0.0199 | <0.007 | 0.0477 | <0.01 | 0.0777 |
| UG012184_rut4 | 59.47 | 39.96 | 0.0820 | 0.0126 | 0.0015 | 0.0945 | 0.0090 | <0.003 | 0.2877 | <0.004 | <0.005 | 0.0158 | <0.007 | 0.0249 | <0.01 | 0.0138 |
| UG012184_rut5 | 59.43 | 40.00 | 0.0979 | 0.0308 | 0.0134 | 0.3207 | <0.003 | <0.003 | 0.0399 | <0.004 | <0.005 | 0.0174 | <0.007 | 0.0040 | <0.01 | <0.01 |
| UG012184_rut6 | 57.06 | 39.86 | 1.7669 | 0.0336 | 0.0034 | 0.1170 | 0.0491 | <0.003 | 0.0464 | <0.004 | 0.0180 | 0.0118 | <0.007 | 0.0097 | <0.01 | <0.01 |
| UG012184_rut7 | 58.72 | 39.91 | 0.1216 | 0.2453 | 0.0034 | 0.4756 | <0.003 | 0.0122 | 0.0305 | <0.004 | 0.0077 | 0.0290 | <0.006 | 0.0126 | <0.01 | 0.1127 |
| UG012184_rut8 | 59.28 | 40.02 | 0.0594 | 0.0492 | 0.0336 | 0.5554 | <0.003 | <0.003 | 0.0338 | <0.004 | <0.005 | 0.0439 | <0.007 | 0.0045 | <0.01 | <0.01 |
| UG012184_rut9 | 58.13 | 39.79 | 0.1319 | 0.0276 | 0.0117 | 0.1041 | 0.0038 | <0.003 | 0.0990 | 0.0061 | 0.0087 | 0.0756 | <0.007 | 0.0414 | <0.01 | 0.0242 |
| UG012186_rut1 | 59.04 | 39.74 | 0.0269 | 0.0056 | 0.0056 | 0.2190 | 0.0077 | <0.003 | 0.3499 | <0.004 | 0.0510 | 0.0624 | <0.006 | 0.0319 | <0.01 | <0.01 |
| UG012186_rut10 | 58.88 | 39.69 | 0.0989 | 0.0086 | 0.0048 | 0.2075 | 0.0079 | 0.0046 | 0.4454 | <0.004 | 0.0396 | 0.0197 | <0.006 | 0.0233 | <0.01 | <0.01 |
| UG012186_rut11 | 59.05 | 39.88 | 0.0179 | 0.0082 | 0.0042 | 0.6070 | 0.0063 | <0.003 | 0.2796 | <0.004 | 0.0402 | 0.0348 | <0.007 | 0.0184 | <0.01 | <0.01 |
| UG012186_rut12 | 59.03 | 39.72 | 0.0286 | 0.0026 | 0.0027 | 0.2772 | 0.0031 | <0.003 | 0.3438 | <0.004 | 0.0121 | 0.0096 | <0.007 | 0.0587 | <0.01 | 0.0129 |
| UG012186_rut13 | 59.19 | 39.80 | 0.0152 | 0.0035 | 0.0025 | 0.2633 | <0.003 | <0.003 | 0.2989 | 0.0053 | 0.0473 | 0.0264 | <0.007 | 0.0188 | <0.01 | <0.01 |
| UG012186_rut14 | 59.91 | 39.62 | 0.0230 | 0.0047 | 0.0091 | 0.1159 | 0.0086 | <0.003 | 0.4909 | <0.004 | 0.0335 | 0.0272 | <0.007 | 0.0366 | <0.01 | 0.0174 |
| UG012186_rut15 | 59.22 | 39.81 | 0.0193 | 0.0057 | 0.0028 | 0.1758 | 0.0095 | <0.003 | 0.3578 | <0.004 | <0.005 | 0.0301 | <0.006 | 0.0173 | <0.01 | <0.01 |
| UG012186_rut16 | 58.98 | 39.72 | 0.0206 | 0.0073 | 0.0039 | 0.3236 | 0.0047 | <0.003 | 0.3353 | <0.004 | 0.0373 | 0.0266 | <0.007 | 0.0331 | <0.01 | <0.01 |
| UG012186_rut17 | 59.08 | 39.73 | 0.0231 | 0.0112 | 0.0044 | 0.1387 | 0.0039 | <0.003 | 0.4117 | 0.0045 | 0.0310 | 0.0330 | <0.006 | 0.0516 | <0.01 | <0.01 |
| UG012186_rut18 | 59.12 | 39.73 | 0.0254 | 0.0062 | 0.0037 | 0.1215 | <0.003 | <0.003 | 0.3943 | <0.004 | 0.0400 | 0.0226 | <0.007 | 0.0195 | <0.01 | <0.01 |
| UG012186_rut19 | 58.85 | 39.71 | 0.0551 | 0.0491 | 0.0267 | 0.2666 | 0.0095 | 0.0053 | 0.3854 | <0.004 | 0.0546 | 0.0211 | <0.007 | 0.0249 | <0.01 | 0.0160 |
| UG012186_rut2 | 59.07 | 39.68 | 0.0189 | <0.001 | <0.001 | 0.1121 | <0.003 | <0.003 | 0.4345 | <0.004 | 0.0241 | 0.0157 | <0.007 | 0.0129 | <0.01 | <0.01 |
| UG012186_rut20 | 58.91 | 39.68 | 0.0465 | 0.0101 | 0.0020 | 0.2526 | 0.0066 | <0.003 | 0.3446 | <0.004 | 0.0074 | 0.0261 | <0.007 | 0.0657 | <0.01 | 0.0809 |
| UG012186_rut21 | 58.81 | 39.61 | 0.0306 | 0.0415 | 0.0216 | 0.1879 | <0.003 | <0.003 | 0.3838 | <0.004 | 0.0534 | 0.0288 | <0.007 | 0.0248 | <0.01 | <0.01 |
| UG012186_rut22 | 58.89 | 39.61 | 0.0434 | 0.0223 | 0.0182 | 0.0640 | 0.0033 | <0.003 | 0.4275 | <0.004 | 0.0493 | 0.0349 | <0.006 | 0.0245 | <0.01 | <0.01 |
| UG012186_rut23 | 59.04 | 39.72 | 0.0214 | 0.0029 | 0.0023 | 0.2256 | <0.003 | <0.003 | 0.3706 | <0.004 | 0.0326 | 0.0274 | <0.007 | 0.0422 | <0.01 | <0.01 |
| UG012186_rut24 | 59.94 | 36.46 | 2.2092 | 0.0165 | 0.0034 | 0.0519 | 0.0111 | 0.0165 | 1.3177 | 0.0062 | 0.0627 | 0.0153 | <0.007 | 0.0276 | <0.01 | <0.01 |
| UG012186_rut3 | 58.88 | 39.65 | 0.0223 | 0.0031 | 0.0020 | 0.3099 | 0.0034 | <0.003 | 0.3141 | 0.0042 | 0.0321 | 0.0591 | <0.007 | 0.0418 | <0.01 | <0.01 |

*All elements are in wt. % (EMPA).

Appendix C: Eastern Sunda arc rutile trace element chemistry (EMPA)

| Analysis ID | Ti | O | Al | Si | Ca | V | Cr | Mn | Fe | Cu | Zr | Nb | Mo | Sn | Ta | W |
|----------------|-------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|--------|
| UG012186_rut4 | 58.86 | 39.61 | 0.0391 | 0.0159 | 0.0047 | 0.1321 | <0.003 | <0.003 | 0.3919 | <0.004 | 0.0395 | 0.0535 | <0.007 | 0.0370 | <0.01 | 0.0164 |
| UG012186_rut5 | 58.99 | 39.73 | 0.0170 | 0.0056 | 0.0022 | 0.2767 | 0.0141 | <0.003 | 0.3980 | <0.004 | 0.0405 | 0.0387 | <0.006 | 0.0428 | <0.01 | <0.01 |
| UG012186_rut6 | 59.07 | 39.71 | 0.0272 | 0.0043 | 0.0051 | 0.1157 | <0.003 | <0.003 | 0.4177 | <0.004 | 0.0436 | 0.0368 | <0.007 | 0.0178 | <0.01 | <0.01 |
| UG012186_rut7 | 58.93 | 39.59 | 0.0183 | 0.0031 | 0.0031 | 0.0657 | <0.003 | <0.003 | 0.4469 | <0.004 | 0.0284 | 0.0420 | <0.007 | 0.0302 | <0.01 | <0.01 |
| UG012186_rut8 | 58.96 | 39.69 | 0.0256 | <0.002 | 0.0017 | 0.2013 | <0.003 | <0.003 | 0.4486 | <0.004 | 0.0379 | 0.0370 | <0.006 | 0.0763 | <0.01 | <0.01 |
| UG012186_rut9 | 59.14 | 39.75 | 0.0192 | 0.0054 | 0.0022 | 0.1337 | 0.0056 | <0.003 | 0.3778 | <0.004 | 0.0377 | 0.0158 | <0.006 | 0.0373 | <0.01 | <0.01 |
| UG012190_rut1 | 58.91 | 39.71 | 0.0428 | 0.0103 | 0.0016 | 0.0773 | 0.0053 | <0.003 | 0.5599 | <0.004 | 0.0340 | 0.0279 | <0.007 | 0.0279 | <0.01 | 0.0278 |
| UG012190_rut10 | 58.11 | 39.75 | 0.0435 | 0.0111 | 0.0031 | <0.02 | 0.0036 | 0.0042 | 0.4852 | <0.004 | 0.0287 | 0.0393 | 0.0169 | 0.0398 | <0.01 | 0.0332 |
| UG012190_rut11 | 58.97 | 39.74 | 0.0152 | 0.0061 | 0.0025 | 0.0974 | 0.0073 | <0.003 | 0.6531 | <0.004 | 0.0243 | 0.0093 | 0.0441 | 0.0441 | <0.01 | 0.0329 |
| UG012190_rut12 | 56.94 | 39.31 | 0.0418 | 0.0073 | 0.0016 | 0.1280 | 0.0078 | <0.003 | 1.2253 | 0.0054 | 0.0454 | 1.8015 | <0.007 | 0.0358 | <0.01 | <0.01 |
| UG012190_rut13 | 59.03 | 39.79 | 0.0792 | 0.0113 | 0.0029 | 0.0323 | 0.0034 | <0.003 | 0.4500 | <0.004 | 0.0197 | 0.1909 | 0.0109 | 0.0722 | <0.01 | 0.0260 |
| UG012190_rut14 | 58.98 | 39.66 | 0.0189 | 0.0107 | <0.001 | 0.0390 | 0.0035 | <0.003 | 0.5664 | 0.0053 | 0.0303 | 0.0362 | 0.0076 | 0.0315 | <0.01 | 0.0158 |
| UG012190_rut15 | 58.99 | 39.74 | 0.0448 | 0.0134 | 0.0015 | 0.0317 | 0.0064 | <0.003 | 0.6136 | <0.004 | 0.0379 | 0.0787 | 0.0131 | 0.0614 | <0.01 | 0.0278 |
| UG012190_rut16 | 59.07 | 39.73 | 0.0397 | 0.0111 | 0.0015 | 0.0382 | <0.003 | <0.003 | 0.4825 | 0.0178 | 0.0080 | 0.0473 | 0.0132 | 0.0931 | <0.01 | 0.0199 |
| UG012190_rut17 | 58.96 | 39.71 | 0.0443 | 0.0098 | <0.001 | 0.0324 | 0.0038 | <0.003 | 0.6131 | 0.0076 | 0.0399 | 0.1072 | <0.007 | 0.0388 | <0.01 | 0.0115 |
| UG012190_rut18 | 58.91 | 39.72 | 0.0231 | 0.0078 | 0.0019 | 0.1812 | <0.003 | 0.0036 | 0.5830 | 0.0082 | 0.0109 | 0.1256 | <0.007 | 0.0328 | <0.01 | 0.0354 |
| UG012190_rut19 | 59.16 | 39.83 | 0.0211 | 0.0069 | <0.001 | 0.0991 | 0.0062 | <0.003 | 0.5352 | <0.004 | 0.0314 | 0.0644 | 0.0129 | 0.0573 | <0.01 | 0.0567 |
| UG012190_rut2 | 58.97 | 39.70 | 0.0225 | 0.0086 | 0.0021 | 0.0726 | 0.0044 | <0.003 | 0.6228 | <0.004 | 0.0295 | 0.0705 | 0.0088 | 0.0377 | <0.01 | 0.0244 |
| UG012190_rut20 | 59.08 | 39.73 | 0.0340 | 0.0083 | 0.0045 | 0.0577 | 0.0051 | <0.003 | 0.5059 | <0.004 | 0.0393 | 0.0214 | 0.0144 | 0.0396 | <0.01 | 0.0356 |
| UG012190_rut21 | 59.11 | 39.79 | 0.0410 | 0.0081 | 0.0017 | 0.0706 | 0.0074 | <0.003 | 0.5524 | <0.004 | 0.0325 | 0.0596 | 0.0113 | 0.0513 | <0.01 | 0.0194 |
| UG012190_rut22 | 58.89 | 39.77 | 0.0201 | 0.0134 | 0.0016 | 0.0406 | <0.003 | <0.003 | 0.6888 | 0.0075 | 0.0416 | 0.3025 | 0.0111 | 0.0445 | <0.01 | 0.0195 |
| UG012190_rut23 | 58.72 | 39.63 | 0.0388 | 0.0094 | 0.0021 | 0.1036 | 0.0072 | 0.0038 | 0.5715 | <0.004 | 0.0096 | 0.1797 | 0.0217 | 0.0466 | <0.01 | 0.1256 |
| UG012190_rut24 | 59.28 | 39.87 | 0.0351 | 0.0108 | <0.001 | 0.0387 | 0.0040 | <0.003 | 0.4857 | <0.004 | 0.0137 | 0.0500 | 0.0091 | 0.0796 | <0.01 | 0.0332 |
| UG012190_rut25 | 59.22 | 39.83 | 0.0337 | 0.0113 | <0.002 | 0.0578 | 0.0074 | <0.003 | 0.4429 | 0.0050 | 0.0246 | 0.0946 | 0.0081 | 0.0387 | <0.01 | 0.0109 |
| UG012190_rut26 | 58.98 | 39.79 | 0.0281 | 0.0112 | 0.0101 | 0.1539 | 0.0060 | <0.003 | 0.5848 | 0.0124 | 0.0142 | 0.1486 | 0.0110 | 0.0762 | <0.01 | 0.0244 |
| UG012190_rut27 | 58.86 | 39.63 | 0.0268 | 0.0116 | 0.0018 | 0.0687 | 0.0044 | <0.003 | 0.5795 | <0.004 | 0.0189 | 0.1038 | 0.0139 | 0.0400 | <0.01 | 0.0142 |
| UG012190_rut28 | 58.85 | 39.67 | 0.0298 | 0.0130 | 0.0031 | 0.1126 | 0.0075 | <0.003 | 0.6018 | <0.004 | 0.0408 | 0.0678 | 0.0093 | 0.1213 | <0.01 | 0.0213 |
| UG012190_rut29 | 59.11 | 39.82 | 0.0634 | 0.0108 | 0.0016 | 0.1340 | 0.0054 | <0.003 | 0.4969 | <0.004 | 0.0218 | 0.0586 | <0.006 | 0.0558 | <0.01 | <0.01 |
| UG012190_rut3 | 58.99 | 39.76 | 0.0306 | 0.0069 | 0.0019 | 0.0555 | <0.003 | <0.003 | 0.7053 | <0.004 | 0.0396 | 0.0691 | <0.007 | 0.0746 | <0.01 | <0.01 |
| UG012190_rut30 | 58.91 | 39.69 | 0.0356 | 0.0135 | 0.0017 | 0.0446 | <0.003 | <0.003 | 0.5328 | 0.0084 | 0.0543 | 0.1549 | <0.007 | 0.0355 | <0.01 | 0.0968 |
| UG012190_rut31 | 58.83 | 39.73 | 0.0636 | 0.0097 | 0.0017 | 0.0563 | 0.0040 | <0.003 | 0.5092 | 0.0045 | 0.0410 | 0.3050 | 0.0148 | 0.0683 | <0.01 | 0.0267 |
| UG012190_rut32 | 58.51 | 39.55 | 0.0148 | 0.0085 | <0.001 | 0.2180 | 0.0060 | <0.003 | 0.6827 | <0.004 | 0.0199 | 0.2463 | 0.0123 | 0.0560 | <0.01 | 0.0241 |
| UG012190_rut4 | 58.91 | 39.66 | 0.0203 | 0.0060 | 0.0025 | 0.0922 | 0.0093 | <0.003 | 0.5805 | <0.004 | 0.0334 | 0.0427 | 0.0213 | 0.0588 | <0.01 | 0.0365 |
| UG012190_rut5 | 58.94 | 39.74 | 0.0178 | 0.0100 | 0.0025 | 0.1116 | 0.0054 | <0.003 | 0.5703 | <0.004 | 0.0265 | 0.1986 | <0.007 | 0.0486 | <0.01 | 0.0190 |
| UG012190_rut6 | 59.14 | 39.82 | 0.0340 | 0.0090 | <0.001 | 0.0982 | 0.0047 | <0.003 | 0.4942 | <0.004 | 0.0056 | 0.1130 | 0.0130 | 0.0558 | <0.01 | 0.0248 |
| UG012190_rut7 | 59.18 | 39.87 | 0.0553 | 0.0087 | 0.0017 | 0.0681 | 0.0047 | <0.003 | 0.5021 | 0.0054 | 0.0254 | 0.1189 | 0.0110 | 0.1054 | <0.01 | 0.0303 |
| UG012190_rut8 | 59.13 | 39.75 | 0.0330 | 0.0124 | 0.0016 | 0.0380 | 0.0052 | <0.003 | 0.5114 | 0.0044 | 0.0108 | 0.0308 | 0.0127 | 0.0343 | <0.01 | 0.0107 |
| UG012190_rut9 | 58.97 | 39.74 | 0.0231 | 0.0085 | <0.001 | <0.02 | 0.0032 | <0.003 | 0.5922 | <0.004 | 0.0205 | 0.2105 | 0.0083 | 0.0812 | <0.01 | 0.0281 |
| UG012193_rut1 | 58.92 | 39.73 | 0.0213 | 0.0055 | <0.001 | 0.4299 | 0.0031 | <0.003 | 0.4147 | 0.0050 | 0.0173 | 0.0148 | <0.007 | 0.0184 | <0.01 | <0.01 |
| UG012193_rut10 | 58.94 | 39.67 | 0.0319 | 0.0079 | 0.0057 | 0.2816 | 0.0061 | <0.003 | 0.3704 | <0.004 | 0.0120 | 0.0174 | <0.007 | 0.0179 | <0.01 | <0.01 |
| UG012193_rut11 | 58.61 | 39.63 | 0.0265 | 0.0106 | 0.0058 | 0.6815 | <0.003 | <0.003 | 0.3108 | <0.004 | 0.0352 | 0.0193 | <0.007 | 0.0224 | <0.01 | 0.0203 |
| UG012193_rut12 | 58.84 | 39.86 | 0.0180 | 0.0092 | <0.001 | 0.8116 | 0.0034 | <0.003 | 0.4076 | <0.004 | 0.0188 | 0.0182 | <0.006 | 0.0113 | <0.01 | 0.0105 |
| UG012193_rut13 | 58.90 | 39.70 | 0.0260 | 0.0052 | 0.0057 | 0.3498 | <0.003 | <0.003 | 0.4550 | 0.0065 | 0.0166 | 0.0200 | <0.006 | 0.0134 | <0.01 | 0.0123 |
| UG012193_rut14 | 58.85 | 39.78 | 0.0244 | 0.0029 | 0.0028 | 0.6593 | <0.003 | <0.003 | 0.3600 | <0.004 | 0.0240 | 0.0165 | <0.007 | 0.0268 | <0.01 | <0.01 |
| UG012193_rut15 | 58.91 | 39.73 | 0.0239 | 0.0110 | 0.0060 | 0.3971 | 0.0033 | <0.003 | 0.3981 | <0.004 | 0.0382 | 0.0223 | <0.006 | 0.0136 | <0.01 | <0.01 |
| UG012193_rut16 | 58.73 | 39.59 | 0.0320 | 0.0065 | 0.0034 | 0.3302 | <0.003 | <0.003 | 0.4431 | 0.0078 | 0.0346 | 0.0183 | <0.006 | 0.0236 | <0.01 | 0.0133 |
| UG012193_rut17 | | | | | | | | | | | | | | | | |
| UG012193_rut18 | | | | | | | | | | | | | | | | |
| UG012193_rut2 | 59.15 | 39.96 | 0.0266 | 0.0043 | 0.0056 | 0.5991 | 0.0038 | <0.003 | 0.3564 | <0.004 | 0.0198 | 0.0227 | <0.007 | 0.0177 | <0.01 | 0.0286 |
| UG012193_rut3 | 58.75 | 39.58 | 0.0321 | 0.0199 | 0.0061 | 0.2057 | <0.003 | <0.003 | 0.4544 | <0.004 | 0.0840 | 0.0197 | <0.006 | 0.0140 | <0.01 | 0.0102 |

*All elements are in wt. % (EMPA).

Appendix C: Eastern Sunda arc rutile trace element chemistry (EMPA)

| Analysis ID | Ti | O | Al | Si | Ca | V | Cr | Mn | Fe | Cu | Zr | Nb | Mo | Sn | Ta | W |
|----------------|-------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| UG012193_rui4 | 58.92 | 39.72 | 0.0218 | 0.0280 | 0.0104 | 0.2841 | <0.003 | <0.003 | 0.4601 | <0.004 | 0.0543 | 0.0159 | <0.006 | 0.0057 | <0.01 | <0.01 |
| UG012193_rui5 | 58.96 | 39.76 | 0.0180 | 0.0123 | 0.0041 | 0.3637 | <0.003 | <0.003 | 0.4523 | <0.004 | 0.0276 | 0.0280 | <0.007 | 0.0298 | <0.01 | 0.0478 |
| UG012193_rui6 | 58.85 | 39.82 | 0.0222 | 0.0053 | 0.0033 | 0.6976 | 0.0056 | 0.0040 | 0.3996 | 0.0064 | 0.0356 | 0.0187 | <0.007 | 0.0236 | <0.01 | 0.0136 |
| UG012193_rui7 | 58.90 | 39.70 | 0.0240 | 0.0069 | 0.0079 | 0.3297 | <0.003 | <0.003 | 0.4526 | <0.004 | 0.0500 | 0.0154 | <0.007 | 0.0257 | <0.01 | 0.0135 |
| UG012193_rui8 | 58.98 | 39.80 | 0.0408 | 0.0044 | 0.0030 | 0.4501 | 0.0039 | <0.003 | 0.4019 | <0.004 | 0.0355 | 0.0137 | <0.007 | 0.0178 | <0.01 | <0.01 |
| UG012193_rui9 | 59.05 | 39.74 | 0.0171 | 0.0050 | 0.0035 | 0.1915 | 0.0049 | <0.003 | 0.5198 | <0.004 | 0.0060 | 0.0221 | <0.006 | 0.0035 | <0.01 | 0.0576 |
| UG012195_rui1 | 59.47 | 39.79 | 0.0051 | <0.002 | <0.001 | <0.02 | <0.003 | <0.003 | 0.0889 | <0.004 | 0.0328 | 0.0409 | <0.006 | <0.002 | <0.01 | <0.01 |
| UG012195_rui10 | 59.50 | 39.94 | 0.0667 | <0.002 | 0.0020 | 0.0643 | <0.003 | <0.003 | 0.2971 | 0.0061 | 0.0182 | 0.0232 | <0.007 | 0.0078 | <0.01 | <0.01 |
| UG012195_rui11 | 58.42 | 39.66 | 0.0893 | 0.1922 | 0.0691 | 0.4515 | 0.0089 | 0.0128 | 0.0623 | <0.004 | 0.1128 | 0.0459 | <0.007 | 0.0147 | <0.01 | 0.0376 |
| UG012195_rui12 | | | | | | | | | | | | | | | | |
| UG012195_rui13 | | | | | | | | | | | | | | | | |
| UG012195_rui14 | | | | | | | | | | | | | | | | |
| UG012195_rui15 | | | | | | | | | | | | | | | | |
| UG012195_rui2 | 59.17 | 39.63 | 0.0121 | 0.0031 | 0.0024 | <0.02 | <0.003 | <0.003 | 0.1453 | <0.004 | 0.0742 | 0.0368 | <0.006 | <0.002 | <0.01 | <0.01 |
| UG012195_rui3 | 59.14 | 39.82 | 0.2169 | 0.0069 | <0.001 | 0.2025 | <0.003 | <0.003 | 0.0138 | <0.004 | 0.0418 | 0.0103 | <0.007 | 0.0048 | <0.01 | <0.01 |
| UG012195_rui4 | 59.37 | 39.76 | 0.0206 | 0.0044 | <0.001 | 0.0339 | <0.003 | <0.003 | 0.1138 | <0.004 | 0.0289 | 0.0334 | <0.007 | <0.002 | <0.01 | <0.01 |
| UG012195_rui5 | 59.28 | 39.69 | 0.0131 | <0.002 | 0.0023 | 0.0210 | <0.003 | <0.003 | 0.1620 | <0.004 | 0.0312 | 0.0358 | <0.006 | <0.002 | <0.01 | <0.01 |
| UG012195_rui6 | 59.43 | 39.82 | 0.0308 | 0.0041 | 0.0016 | 0.0303 | <0.003 | 0.0109 | 0.1161 | <0.004 | 0.0294 | 0.0357 | <0.006 | 0.0062 | <0.01 | <0.01 |
| UG012195_rui7 | 59.48 | 39.99 | 0.1948 | 0.0052 | 0.0023 | 0.0831 | <0.003 | <0.003 | 0.0287 | <0.004 | 0.0245 | 0.0382 | <0.006 | 0.0043 | <0.01 | <0.01 |
| UG012195_rui8 | 58.70 | 39.67 | 0.0550 | 0.0061 | 0.0168 | 0.5800 | 0.0073 | <0.003 | 0.0491 | <0.004 | 0.0274 | 0.0379 | <0.007 | 0.0114 | <0.01 | 0.0205 |
| UG012195_rui9 | 59.54 | 39.83 | 0.0074 | 0.0036 | <0.001 | <0.02 | <0.003 | <0.003 | 0.0723 | <0.004 | 0.0237 | 0.0247 | <0.007 | <0.002 | <0.01 | <0.01 |
| UG012197_rui1 | 58.24 | 39.55 | 0.1383 | 0.3286 | 0.0786 | <0.02 | <0.003 | 0.0073 | 0.3230 | 0.0059 | 0.0074 | 0.0169 | <0.007 | <0.002 | <0.01 | 0.0580 |
| UG012197_rui2 | 58.74 | 39.58 | 0.0246 | 0.0716 | 0.0151 | 0.0438 | <0.003 | 0.0068 | 0.5616 | 0.0137 | 0.0088 | 0.0242 | <0.006 | 0.0757 | <0.01 | 0.0439 |
| UG012197_rui3 | 58.12 | 39.31 | 0.0258 | 0.0814 | 0.0047 | <0.02 | <0.003 | 0.0069 | 1.1932 | 0.0109 | <0.005 | 0.0094 | <0.007 | 0.0105 | <0.01 | 0.0191 |
| UG012197_rui4 | 58.80 | 39.56 | 0.0157 | 0.0428 | 0.0066 | 0.0322 | <0.003 | 0.0039 | 0.5333 | 0.0062 | 0.0144 | 0.0507 | <0.007 | 0.0527 | <0.01 | 0.0137 |
| UG012197_rui5 | 58.54 | 39.45 | 0.0156 | 0.0205 | 0.0029 | 0.0486 | <0.003 | <0.003 | 0.6434 | <0.004 | 0.0727 | 0.0576 | 0.0258 | 0.0940 | <0.01 | 0.0432 |
| UG012197_rui6 | 59.07 | 39.72 | 0.0161 | 0.0195 | 0.0021 | 0.0285 | <0.003 | <0.003 | 0.5657 | 0.0054 | 0.0126 | 0.0593 | <0.007 | 0.0588 | <0.01 | <0.01 |
| UG012197_rui7 | 58.77 | 39.67 | 0.0301 | 0.0643 | 0.0082 | 0.0272 | <0.003 | <0.003 | 0.8715 | 0.0126 | 0.0469 | 0.0226 | <0.007 | 0.0541 | <0.01 | 0.0145 |
| UG012197_rui8 | 58.86 | 39.60 | 0.0124 | 0.0191 | 0.0025 | 0.0940 | <0.003 | <0.003 | 0.6835 | 0.0049 | 0.0454 | 0.0948 | 0.0124 | 0.1689 | <0.01 | 0.1218 |
| UG012197_rui9 | | | | | | | | | | | | | | | | |
| UG012198_rui1 | 59.16 | 39.86 | 0.0516 | 0.0048 | 0.0018 | 0.1684 | 0.0047 | <0.003 | 0.5139 | <0.004 | 0.0303 | 0.0620 | <0.006 | 0.0174 | <0.01 | 0.0168 |
| UG012198_rui10 | 60.67 | 40.89 | 0.0208 | 0.0379 | 0.0037 | 0.2191 | 0.0201 | 0.0168 | 0.4333 | <0.004 | 0.0159 | 0.0120 | <0.006 | 0.0969 | <0.01 | 0.0615 |
| UG012198_rui11 | 58.79 | 39.67 | 0.0521 | 0.0309 | 0.0474 | 0.2193 | 0.0038 | <0.003 | 0.4388 | 0.0098 | 0.0325 | 0.0487 | <0.006 | 0.0443 | <0.01 | 0.0459 |
| UG012198_rui12 | 59.06 | 39.80 | 0.0293 | 0.0041 | 0.0017 | 0.2319 | 0.0085 | <0.003 | 0.4428 | <0.004 | 0.0751 | 0.0067 | <0.007 | 0.1264 | <0.01 | 0.0265 |
| UG012198_rui13 | 59.03 | 39.79 | 0.0554 | 0.0088 | 0.0089 | 0.1400 | 0.0077 | <0.003 | 0.5589 | <0.004 | 0.0754 | 0.0188 | <0.006 | 0.0846 | <0.01 | <0.01 |
| UG012198_rui14 | 59.17 | 39.81 | 0.0452 | 0.0075 | 0.0023 | 0.0655 | 0.0198 | <0.003 | 0.4959 | <0.004 | 0.0145 | 0.0103 | 0.0079 | 0.0703 | <0.01 | 0.0692 |
| UG012198_rui15 | 58.83 | 39.68 | 0.0285 | 0.0098 | 0.0028 | 0.1996 | 0.0043 | <0.003 | 0.5636 | <0.004 | 0.0339 | 0.1175 | <0.007 | 0.0519 | <0.01 | 0.0171 |
| UG012198_rui16 | 59.28 | 39.88 | 0.0404 | 0.0109 | 0.0046 | 0.2007 | 0.0187 | <0.003 | 0.3974 | 0.0045 | 0.0166 | 0.0416 | <0.006 | 0.0097 | <0.01 | <0.01 |
| UG012198_rui17 | 59.19 | 39.82 | 0.0412 | 0.0061 | 0.0023 | 0.0761 | 0.0098 | <0.003 | 0.4680 | <0.004 | 0.0609 | 0.0416 | <0.007 | 0.0559 | <0.01 | <0.01 |
| UG012198_rui18 | 59.07 | 39.87 | 0.0423 | 0.0134 | <0.001 | 0.3947 | 0.0099 | <0.003 | 0.3720 | <0.004 | 0.0544 | 0.0088 | <0.007 | 0.0761 | <0.01 | 0.0900 |
| UG012198_rui19 | 58.83 | 39.70 | 0.0634 | 0.0053 | 0.0027 | 0.1844 | 0.0055 | <0.003 | 0.5937 | <0.004 | 0.0722 | 0.0408 | <0.006 | 0.1036 | <0.01 | 0.0172 |
| UG012198_rui2 | 59.65 | 40.12 | 0.0362 | 0.0070 | 0.0023 | 0.1707 | 0.0033 | <0.003 | 0.3999 | <0.004 | 0.0383 | 0.0343 | <0.006 | 0.0129 | <0.01 | <0.01 |
| UG012198_rui20 | 58.91 | 39.67 | 0.0211 | <0.002 | <0.001 | 0.1063 | 0.0068 | <0.003 | 0.6190 | <0.004 | 0.0437 | 0.0543 | <0.007 | 0.0534 | <0.01 | 0.0281 |
| UG012198_rui21 | 58.86 | 39.75 | 0.0180 | 0.0040 | <0.001 | 0.2159 | 0.0059 | <0.003 | 0.6729 | <0.004 | 0.0201 | 0.0124 | <0.007 | 0.0937 | <0.011 | 0.3114 |
| UG012198_rui22 | 58.90 | 39.68 | 0.0488 | 0.0138 | 0.0017 | 0.1424 | 0.0075 | <0.003 | 0.4990 | 0.0072 | 0.0640 | 0.0093 | <0.006 | 0.1115 | <0.01 | 0.0225 |
| UG012198_rui23 | 59.37 | 39.99 | 0.0333 | 0.0030 | <0.001 | 0.2930 | 0.0034 | <0.003 | 0.3616 | <0.004 | 0.0434 | 0.0558 | <0.007 | 0.0217 | <0.01 | 0.0236 |
| UG012198_rui24 | 58.96 | 39.71 | 0.0568 | 0.0166 | 0.0015 | 0.0764 | 0.0045 | <0.003 | 0.5400 | <0.004 | 0.0583 | 0.0218 | <0.007 | 0.0685 | <0.01 | <0.01 |
| UG012198_rui25 | 58.59 | 39.53 | 0.0397 | 0.0099 | 0.0018 | 0.1509 | 0.0099 | <0.003 | 0.5889 | <0.004 | 0.0073 | <0.006 | <0.006 | 0.0721 | <0.011 | 0.3087 |
| UG012198_rui26 | 58.44 | 39.64 | 0.0479 | 0.1384 | 0.0045 | 0.3036 | <0.003 | 0.0035 | 0.4363 | <0.004 | 0.2276 | 0.0592 | <0.006 | 0.0293 | <0.01 | 0.0515 |

*All elements are in wt. % (EMPA).

Appendix C: Eastern Sunda arc rutile trace element chemistry (EMPA)

| Analysis ID | Ti | O | Al | Si | Ca | V | Cr | Mn | Fe | Cu | Zr | Nb | Mo | Sn | Ta | W |
|----------------|-------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|--------|
| UG012198_rui27 | 59.06 | 39.73 | 0.0284 | 0.0048 | 0.0099 | 0.2382 | 0.0149 | 0.0032 | 0.3614 | <0.004 | 0.0196 | 0.0127 | <0.007 | 0.0164 | <0.01 | <0.01 |
| UG012198_rui28 | 60.59 | 40.85 | 0.0438 | 0.0069 | 0.0020 | 0.3606 | 0.0066 | <0.003 | 0.3368 | 0.0444 | 0.0141 | <0.006 | <0.007 | 0.1217 | <0.01 | 0.0294 |
| UG012198_rui29 | 58.81 | 39.69 | 0.0308 | 0.0098 | <0.001 | 0.2563 | 0.0034 | <0.003 | 0.5381 | <0.004 | 0.0246 | 0.0075 | <0.006 | 0.1336 | <0.01 | 0.1437 |
| UG012198_rui3 | 58.79 | 39.66 | 0.0417 | 0.0075 | 0.0170 | 0.1770 | 0.0142 | <0.003 | 0.4290 | 0.0043 | 0.0131 | 0.1677 | <0.007 | 0.0887 | <0.01 | 0.0637 |
| UG012198_rui30 | 58.95 | 39.78 | 0.0258 | 0.0091 | 0.0041 | 0.4512 | 0.0076 | 0.0035 | 0.3695 | <0.004 | 0.0226 | 0.0560 | 0.0074 | 0.0209 | <0.01 | <0.01 |
| UG012198_rui4 | 58.96 | 39.76 | 0.0350 | 0.0051 | 0.0015 | 0.2720 | 0.0074 | <0.003 | 0.4251 | <0.004 | 0.0128 | 0.0489 | <0.007 | 0.0564 | <0.01 | 0.1608 |
| UG012198_rui5 | 58.86 | 39.71 | 0.0438 | <0.002 | 0.0015 | 0.1961 | 0.0126 | <0.003 | 0.6179 | <0.004 | 0.0325 | 0.0325 | <0.007 | 0.0980 | <0.01 | 0.0263 |
| UG012198_rui6 | 59.01 | 39.75 | 0.0309 | 0.0064 | <0.001 | 0.2197 | 0.0074 | 0.0034 | 0.4223 | <0.004 | 0.0068 | 0.0131 | <0.006 | 0.0917 | <0.01 | 0.1187 |
| UG012198_rui7 | 58.84 | 39.70 | 0.0444 | 0.0037 | 0.0031 | 0.3563 | 0.0069 | <0.003 | 0.4123 | <0.004 | 0.0253 | 0.0156 | <0.007 | 0.0801 | <0.01 | 0.0939 |
| UG012198_rui8 | 58.92 | 39.70 | 0.0381 | 0.0045 | <0.001 | 0.2195 | 0.0062 | <0.003 | 0.4126 | <0.004 | 0.0441 | 0.0247 | <0.006 | 0.1036 | <0.01 | 0.0847 |
| UG012198_rui9 | 59.06 | 39.78 | 0.0227 | 0.0065 | 0.0027 | 0.1714 | 0.0046 | <0.003 | 0.5836 | <0.004 | 0.0075 | 0.0114 | <0.006 | 0.0893 | <0.01 | 0.0721 |
| BHF-01_rui1 | 57.57 | 39.35 | 0.0276 | 0.0095 | 0.0027 | 0.7399 | 0.0638 | <0.003 | 0.6897 | <0.005 | 0.0248 | 0.0329 | 0.0100 | 0.0253 | <0.01 | 0.9845 |
| BHF-01_rui4 | 58.58 | 39.67 | 0.0213 | 0.0172 | 0.0021 | 0.5672 | 0.0171 | <0.003 | 0.5069 | <0.004 | 0.0162 | 0.0320 | 0.0375 | 0.0213 | <0.01 | 0.1551 |
| BHF-01_rui5 | 59.15 | 40.06 | 0.0061 | 0.0085 | 0.0029 | 0.6849 | 0.0333 | <0.003 | 0.4224 | <0.004 | 0.0244 | 0.0503 | 0.0280 | 0.0215 | <0.01 | 0.1063 |
| BHF-01_rui6 | 58.77 | 39.83 | 0.0107 | 0.0079 | 0.0029 | 0.5999 | 0.0678 | 0.0034 | 0.5131 | <0.004 | 0.0218 | 0.0303 | 0.0201 | 0.0209 | <0.01 | 0.2254 |
| BHF-01_rui8 | 58.65 | 39.68 | 0.0038 | 0.0177 | 0.0054 | 0.4786 | 0.0441 | <0.003 | 0.4999 | <0.004 | 0.0411 | 0.0220 | 0.0358 | 0.0176 | <0.01 | 0.1364 |
| BHF-01_rui11 | 58.63 | 39.66 | 0.0082 | 0.0107 | 0.0075 | 0.5590 | 0.0372 | <0.003 | 0.5080 | <0.004 | 0.0124 | 0.0454 | 0.0190 | 0.0182 | <0.01 | 0.0268 |
| BHF-01_rui12 | 58.79 | 39.75 | 0.0110 | 0.0170 | 0.0018 | 0.4898 | 0.0086 | <0.003 | 0.4931 | <0.004 | 0.0511 | 0.0084 | 0.0466 | 0.0185 | <0.01 | 0.0650 |
| BHF-01_rui13 | 58.87 | 39.84 | 0.0066 | 0.0121 | 0.0036 | 0.6733 | 0.0373 | <0.003 | 0.3970 | <0.004 | 0.0217 | 0.0111 | 0.0100 | 0.0237 | <0.01 | 0.0815 |
| BHF-01_rui14 | 58.46 | 39.67 | 0.0047 | 0.0085 | 0.0063 | 0.4344 | 0.0418 | <0.003 | 0.4264 | <0.004 | 0.0315 | 0.0585 | 0.0258 | 0.0194 | <0.01 | 0.3303 |
| BHF-01_rui15 | 58.69 | 39.78 | 0.0185 | 0.0124 | 0.0079 | 0.5787 | 0.0418 | <0.003 | 0.4377 | <0.004 | 0.0283 | 0.1063 | 0.0200 | 0.0233 | <0.01 | 0.2298 |
| BHF-01_rui16 | 58.46 | 39.61 | 0.0111 | 0.0090 | 0.0029 | 0.4274 | 0.0422 | <0.003 | 0.6332 | <0.004 | 0.0343 | 0.0110 | <0.007 | 0.0365 | <0.01 | 0.4230 |
| BHF-01_rui17 | 58.57 | 39.58 | 0.0116 | 0.0111 | 0.0066 | 0.2407 | 0.0558 | <0.003 | 0.6332 | <0.004 | 0.0185 | 0.0406 | <0.007 | 0.0370 | <0.01 | 0.2815 |
| BHF-01_rui18 | 58.85 | 39.76 | 0.0169 | 0.0123 | 0.0041 | 0.5048 | 0.0185 | <0.003 | 0.3869 | <0.004 | 0.0102 | 0.0295 | 0.0182 | 0.0178 | <0.01 | 0.0849 |
| BHF-01_rui19 | 58.75 | 39.85 | 0.0276 | 0.0089 | 0.0018 | 0.6813 | 0.0447 | <0.003 | 0.4515 | <0.004 | 0.0259 | 0.0159 | 0.0234 | 0.0199 | <0.01 | 0.2662 |
| BHF-01_rui20 | 58.68 | 39.76 | 0.0133 | 0.0069 | 0.0033 | 0.5872 | 0.0253 | <0.003 | 0.4848 | <0.004 | 0.0296 | 0.0467 | 0.0251 | 0.0172 | <0.01 | 0.2533 |
| BHF-01_rui21 | 58.74 | 39.64 | 0.0105 | 0.0124 | 0.0018 | 0.3123 | 0.0379 | <0.003 | 0.5604 | <0.004 | 0.0126 | 0.0210 | 0.0104 | 0.0191 | <0.01 | 0.0961 |
| BHF-01_rui22 | 58.77 | 39.76 | 0.0087 | 0.0083 | 0.0031 | 0.4885 | 0.0354 | <0.003 | 0.4711 | <0.004 | 0.0115 | 0.0819 | 0.0086 | 0.0195 | <0.01 | 0.2045 |
| BHF-01_rui23 | 58.98 | 39.92 | 0.0177 | 0.0063 | 0.0038 | 0.6242 | 0.0415 | <0.003 | 0.4604 | <0.004 | 0.0090 | 0.1016 | 0.0197 | 0.0202 | <0.01 | 0.0726 |
| BHF-01_rui24 | 58.70 | 39.66 | 0.0109 | 0.0148 | 0.0022 | 0.4872 | 0.0354 | <0.003 | 0.4257 | <0.004 | 0.0415 | 0.0140 | 0.0305 | 0.0132 | <0.01 | 0.0519 |
| BHF-01_rui25 | 58.92 | 39.80 | 0.0119 | 0.0111 | 0.0022 | 0.5165 | 0.0264 | <0.003 | 0.4847 | <0.004 | 0.0133 | 0.0074 | 0.0090 | 0.0137 | <0.01 | 0.0272 |
| BHF-01_rui26 | 58.49 | 39.60 | 0.0087 | 0.0064 | 0.0046 | 0.4279 | 0.0485 | <0.003 | 0.6376 | <0.004 | 0.0307 | <0.006 | 0.0500 | 0.0105 | <0.01 | 0.2589 |
| BHF-01_rui27 | 58.26 | 39.53 | 0.0111 | 0.0076 | 0.0081 | 0.3495 | 0.0422 | <0.003 | 0.7491 | <0.004 | 0.0322 | 0.0697 | 0.0189 | 0.0182 | <0.01 | 0.5448 |
| BHF-01_rui28 | 59.02 | 39.96 | 0.0146 | 0.0065 | 0.0036 | 0.5253 | 0.0464 | <0.003 | 0.5078 | <0.004 | 0.0130 | 0.0257 | 0.0135 | 0.0374 | <0.01 | 0.2523 |
| BHF-01_rui29 | 58.70 | 39.74 | 0.0181 | 0.0069 | 0.0036 | 0.8019 | 0.0379 | <0.003 | 0.4601 | <0.004 | 0.0291 | 0.0169 | 0.0148 | 0.0174 | <0.01 | 0.1563 |
| BHF-01_rui30 | 58.94 | 39.85 | 0.0129 | 0.0043 | 0.0026 | 0.5650 | 0.0394 | <0.003 | 0.4819 | <0.004 | 0.0140 | 0.0161 | 0.0185 | 0.0239 | <0.01 | 0.0229 |
| BHF-01_rui31 | 58.58 | 39.75 | 0.0185 | 0.0065 | 0.0024 | 0.6107 | 0.0224 | <0.003 | 0.4082 | <0.004 | 0.0196 | 0.1652 | 0.0237 | 0.0188 | <0.01 | 0.2387 |
| BHF-01_rui32 | 59.13 | 39.84 | 0.0065 | 0.0082 | 0.0052 | 0.2391 | 0.0063 | <0.003 | 0.5929 | <0.004 | 0.0174 | 0.0352 | 0.0082 | 0.0168 | <0.01 | 0.0172 |
| BHF-01_rui33 | 58.67 | 39.67 | 0.0113 | 0.0104 | 0.0032 | 0.4235 | 0.0228 | <0.003 | 0.5979 | <0.004 | 0.0265 | 0.0130 | 0.0198 | 0.0244 | <0.01 | 0.1660 |
| BHF-01_rui34 | 58.50 | 39.61 | 0.0054 | 0.0073 | 0.0021 | 0.4485 | 0.0382 | <0.003 | 0.8804 | <0.004 | 0.0164 | 0.0066 | 0.0164 | 0.0124 | <0.01 | 0.0655 |
| BHF-01_rui35 | 58.69 | 39.71 | 0.0117 | 0.0074 | 0.0149 | 0.5648 | 0.0171 | <0.003 | 0.4696 | <0.004 | 0.0210 | 0.0122 | 0.0087 | 0.0181 | <0.01 | 0.1950 |
| BHF-01_rui36 | 58.34 | 39.72 | 0.0156 | 0.0066 | 0.0077 | 0.7455 | 0.0719 | <0.003 | 0.5530 | <0.004 | 0.0203 | 0.0113 | 0.0131 | 0.0260 | <0.01 | 0.6331 |
| BHF-01_rui37 | 58.91 | 39.75 | 0.0071 | 0.0116 | 0.0041 | 0.3014 | 0.0077 | <0.003 | 0.5660 | <0.004 | 0.0243 | 0.0387 | 0.0068 | 0.0208 | <0.01 | 0.1290 |
| BHF-01_rui38 | 58.88 | 39.82 | 0.0050 | 0.0102 | 0.0027 | 0.5590 | 0.0047 | <0.003 | 0.5149 | <0.004 | 0.0342 | 0.0407 | 0.0068 | 0.0132 | <0.01 | 0.0270 |
| BHF-01_rui39 | 58.67 | 39.80 | 0.0189 | 0.0073 | 0.0151 | 0.6552 | 0.0449 | <0.003 | 0.4478 | <0.004 | 0.0257 | 0.0670 | 0.0189 | 0.0243 | <0.01 | 0.2669 |
| BHF-01_rui40 | 58.57 | 39.62 | 0.0138 | 0.0097 | 0.0285 | 0.3769 | 0.0360 | <0.003 | 0.5776 | <0.004 | 0.0418 | 0.0471 | 0.0233 | 0.0149 | <0.01 | 0.1985 |
| BHF-04_rui2 | 58.80 | 39.60 | 0.0044 | 0.0098 | 0.0125 | 0.3288 | 0.0328 | <0.003 | 0.3065 | <0.004 | <0.005 | <0.006 | <0.006 | 0.0408 | <0.01 | 0.1122 |
| BHF-04_rui3 | 57.05 | 38.77 | 0.0138 | 0.0300 | 1.0824 | 0.0388 | <0.003 | <0.003 | 0.5388 | <0.004 | <0.005 | 0.0141 | <0.007 | 0.0164 | <0.01 | <0.01 |
| BHF-04_rui4 | 56.95 | 38.82 | 0.0163 | 0.0431 | 0.0227 | 0.0659 | <0.003 | <0.003 | 1.1215 | <0.005 | 0.0098 | 0.0122 | <0.007 | 0.1683 | <0.01 | 1.2454 |
| BHF-04_rui5 | 58.49 | 39.47 | 0.0070 | 0.0051 | 0.0076 | 0.0536 | <0.003 | <0.003 | 0.7576 | <0.004 | <0.005 | 0.0098 | <0.007 | 0.0601 | <0.01 | 0.4880 |

*All elements are in wt. % (EMPA).

Appendix C: Eastern Sunda arc rutile trace element chemistry (EMPA)

| Analysis ID | Ti | O | Al | Si | Ca | V | Cr | Mn | Fe | Cu | Zr | Nb | Mo | Sn | Ta | W |
|--------------|-------|-------|--------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| BHF-04 rut8 | 57.21 | 38.95 | 0.0127 | 0.0058 | 0.0475 | 0.0646 | <0.003 | <0.003 | 1.2449 | <0.005 | 0.0208 | 0.0140 | <0.007 | 0.0323 | <0.011 | 1.1854 |
| BHF-04 rut8 | 58.58 | 39.51 | 0.0219 | 0.0194 | 0.0950 | <0.003 | <0.003 | <0.003 | 0.6042 | <0.004 | 0.0068 | 0.0092 | 0.0072 | 0.1045 | <0.011 | 0.2303 |
| BHF-04 rut9 | 58.83 | 39.51 | 0.0035 | 0.0186 | 0.0432 | <0.003 | <0.003 | <0.003 | 0.4879 | <0.004 | <0.005 | <0.006 | <0.007 | 0.0551 | <0.01 | <0.01 |
| BHF-04 rut10 | 58.64 | 39.47 | 0.0076 | 0.0130 | 0.0057 | <0.003 | <0.003 | <0.003 | 0.6017 | <0.004 | <0.005 | 0.0391 | <0.006 | 0.0482 | <0.01 | 0.1364 |
| BHF-04 rut11 | 59.05 | 39.65 | 0.0042 | 0.0053 | 0.0027 | <0.003 | <0.003 | <0.003 | 0.5532 | <0.004 | 0.0139 | 0.0069 | <0.007 | 0.0201 | <0.01 | 0.0323 |
| BHF-04 rut12 | 57.09 | 38.91 | 0.0090 | 0.0088 | 0.0050 | <0.003 | <0.003 | <0.003 | 1.2145 | <0.005 | 0.0200 | 0.0451 | <0.007 | 0.1518 | <0.011 | 1.2769 |
| BHF-04 rut13 | 57.89 | 39.34 | 0.0062 | 0.0078 | 0.0107 | <0.003 | <0.003 | <0.003 | 1.8411 | <0.004 | <0.005 | <0.006 | <0.007 | 0.0610 | <0.01 | 0.0128 |
| BHF-04 rut14 | 58.33 | 39.42 | 0.0059 | 0.0113 | 0.0051 | <0.003 | <0.003 | <0.003 | 0.7301 | <0.004 | 0.0067 | 0.0564 | <0.007 | 0.1422 | <0.011 | 0.4484 |
| BHF-04 rut15 | 57.56 | 39.12 | 0.0073 | 0.0116 | 0.0049 | <0.003 | <0.003 | <0.003 | 1.1465 | <0.005 | 0.0107 | 0.0312 | <0.007 | 0.1775 | <0.011 | 0.8788 |
| BHF-04 rut16 | 58.88 | 39.64 | 0.0182 | 0.00612 | 0.0288 | <0.003 | <0.003 | <0.003 | 0.5099 | <0.004 | 0.0107 | 0.0070 | <0.007 | 0.0621 | <0.01 | 0.0699 |
| BHF-04 rut17 | 59.38 | 39.92 | 0.0072 | 0.0085 | 0.0077 | <0.003 | <0.003 | <0.003 | 0.5778 | <0.004 | <0.005 | 0.0330 | <0.007 | 0.0419 | <0.01 | 0.0183 |
| BHF-04 rut18 | 58.92 | 39.59 | 0.0084 | 0.0056 | <0.001 | <0.003 | <0.003 | <0.003 | 0.4912 | <0.004 | 0.0103 | 0.0234 | <0.007 | 0.0411 | <0.01 | 0.0123 |
| BHF-04 rut19 | 57.67 | 39.18 | 0.0098 | 0.0080 | 0.0046 | <0.003 | <0.003 | <0.003 | 0.9702 | <0.005 | 0.0109 | 0.0130 | <0.007 | 0.0668 | <0.011 | 0.9749 |
| BHF-04 rut20 | 56.93 | 39.09 | 0.1201 | 0.03019 | 0.1040 | <0.003 | <0.003 | <0.003 | 1.5840 | <0.004 | <0.005 | 0.0067 | <0.007 | 0.0877 | <0.01 | 0.0764 |
| BHF-04 rut21 | 57.94 | 39.37 | 0.0053 | 0.0097 | 0.0073 | <0.003 | <0.003 | <0.003 | 2.0392 | 0.0115 | 0.0058 | 0.107 | <0.006 | 0.0238 | <0.01 | 0.0527 |
| BHF-04 rut22 | 58.90 | 39.62 | 0.0031 | 0.0139 | 0.0059 | <0.003 | <0.003 | <0.003 | 0.6153 | <0.004 | <0.005 | <0.006 | <0.006 | 0.0818 | <0.01 | 0.0133 |
| JEM-02 rut1 | 58.50 | 39.53 | 0.0051 | 0.0108 | 0.0104 | <0.003 | <0.003 | <0.003 | 0.6846 | <0.004 | 0.0316 | 0.0503 | <0.007 | 0.1178 | <0.011 | 0.3758 |
| JEM-02 rut1 | 58.50 | 39.53 | 0.0051 | 0.0108 | 0.0104 | <0.003 | <0.003 | <0.003 | 0.6846 | <0.004 | 0.0316 | 0.0503 | <0.007 | 0.1178 | <0.011 | 0.3758 |
| PCT-01 rut2 | 58.18 | 39.50 | 0.0112 | 0.0257 | 0.0946 | 0.3167 | 0.0100 | <0.003 | 0.3906 | <0.004 | 0.1909 | 0.4817 | 0.0084 | 0.0240 | 0.0146 | <0.01 |
| PCT-01 rut4 | 58.61 | 39.54 | 0.0139 | 0.0113 | 0.0028 | 0.0819 | 0.0071 | <0.003 | 0.6250 | <0.004 | <0.005 | 0.2784 | <0.007 | 0.0262 | 0.0184 | <0.01 |
| PCT-01 rut5 | 58.65 | 39.63 | 0.0134 | 0.0144 | 0.0095 | 0.3025 | 0.1406 | <0.003 | 0.3271 | <0.004 | 0.0115 | 0.0334 | <0.007 | 0.3265 | <0.01 | 0.0403 |
| PCT-01 rut6 | 58.52 | 39.65 | 0.0792 | 0.2462 | 0.0417 | <0.02 | <0.003 | 0.0162 | 0.2012 | <0.004 | 0.0284 | 0.0965 | <0.007 | <0.002 | <0.011 | 0.3857 |
| PCT-01 rut7 | | | | | | | | | | | | | | | | |
| PCT-01 rut8 | | | | | | | | | | | | | | | | |
| PCT-02 rut1 | 58.09 | 38.95 | 0.0157 | 0.0222 | 0.0104 | <0.02 | <0.003 | 0.0058 | 0.1739 | <0.004 | 0.0960 | 0.0330 | <0.007 | 0.0047 | <0.01 | <0.01 |
| PCT-02 rut2 | 56.56 | 39.38 | 0.2792 | 0.9697 | 0.3861 | <0.02 | <0.003 | 0.0708 | 0.1898 | <0.004 | 0.0626 | 0.0274 | <0.006 | <0.002 | <0.01 | <0.01 |
| PCT-02 rut3 | 58.46 | 39.54 | 0.0548 | 0.2308 | 0.0877 | <0.02 | <0.003 | 0.0108 | 0.2611 | <0.004 | 0.1126 | 0.0302 | <0.007 | 0.0028 | <0.01 | <0.01 |
| PCT-02 rut4 | 58.60 | 39.62 | 0.0671 | 0.2006 | 0.0629 | <0.02 | <0.003 | 0.0370 | 0.1912 | <0.004 | 0.2365 | 0.0363 | <0.007 | <0.002 | <0.01 | <0.01 |
| PCT-02 rut5 | 58.48 | 39.46 | 0.0420 | 0.1881 | 0.0916 | <0.02 | <0.003 | 0.0190 | 0.2365 | <0.004 | 0.0526 | 0.0219 | <0.007 | <0.002 | <0.01 | <0.01 |
| PCT-02 rut6 | 58.86 | 39.60 | 0.0543 | 0.1786 | 0.1270 | 0.0259 | <0.003 | 0.0127 | 0.1985 | <0.004 | 0.0520 | 0.0271 | <0.007 | <0.002 | <0.01 | <0.01 |
| PCT-02 rut7 | 59.11 | 39.72 | 0.0184 | 0.0911 | 0.0501 | <0.02 | <0.003 | <0.003 | 0.2936 | <0.004 | 0.0540 | 0.0428 | <0.007 | <0.002 | <0.01 | <0.01 |
| PCT-02 rut8 | 58.14 | 39.52 | 0.0905 | 0.3709 | 0.1688 | <0.02 | <0.003 | 0.0148 | 0.2863 | <0.004 | 0.0567 | 0.0266 | <0.007 | <0.003 | <0.01 | <0.01 |
| PCT-02 rut9 | 58.61 | 39.59 | 0.0438 | 0.1975 | 0.0825 | <0.02 | <0.003 | 0.0182 | 0.3185 | <0.004 | 0.0914 | 0.0371 | <0.006 | 0.0032 | <0.01 | <0.01 |
| PCT-02 rut10 | 58.87 | 39.55 | 0.0201 | 0.0246 | 0.0495 | 0.0318 | <0.003 | <0.003 | 0.3871 | <0.004 | 0.0528 | 0.0285 | <0.007 | <0.002 | <0.01 | <0.01 |
| PCT-02 rut11 | 59.15 | 39.75 | 0.0156 | 0.0735 | 0.0296 | <0.02 | <0.003 | 0.0091 | 0.2813 | <0.004 | 0.0898 | 0.0322 | <0.007 | 0.0032 | <0.01 | <0.01 |
| PCT-02 rut12 | 58.86 | 39.61 | 0.0140 | 0.0413 | 0.0590 | <0.02 | <0.003 | 0.0075 | 0.1965 | <0.004 | 0.3731 | 0.0411 | <0.006 | <0.002 | <0.01 | <0.01 |
| PCT-02 rut13 | 58.56 | 39.40 | 0.0369 | 0.0913 | 0.0319 | 0.0406 | <0.003 | 0.0105 | 0.2452 | <0.004 | 0.0755 | 0.0322 | <0.007 | 0.0075 | <0.01 | <0.01 |
| PCT-02 rut14 | 58.86 | 39.51 | 0.0287 | 0.1111 | 0.0643 | <0.02 | <0.003 | 0.0065 | 0.3399 | <0.004 | 0.0719 | 0.0394 | <0.006 | <0.002 | <0.01 | <0.01 |
| PCT-02 rut15 | 58.71 | 39.60 | 0.0351 | 0.1590 | 0.0835 | <0.02 | <0.003 | 0.0098 | 0.2836 | <0.004 | 0.0646 | 0.0321 | <0.007 | 0.0030 | <0.01 | <0.01 |
| PCT-02 rut16 | 58.40 | 39.63 | 0.0795 | 0.3313 | 0.1489 | <0.02 | <0.003 | 0.0129 | 0.2620 | <0.004 | 0.0646 | 0.0321 | <0.007 | 0.0030 | <0.01 | <0.01 |
| PCT-02 rut17 | 59.22 | 39.76 | 0.0155 | 0.0185 | 0.0209 | <0.02 | <0.003 | 0.0053 | 0.4199 | <0.004 | 0.0659 | 0.0268 | <0.007 | <0.002 | <0.01 | <0.01 |
| PCT-02 rut19 | 58.59 | 39.53 | 0.0452 | 0.1725 | 0.0994 | <0.02 | <0.003 | 0.0090 | 0.2361 | <0.004 | 0.0876 | 0.0343 | <0.007 | <0.002 | <0.01 | <0.01 |
| PCT-02 rut20 | 57.37 | 39.46 | 0.1519 | 0.6853 | 0.2740 | <0.02 | <0.003 | 0.0555 | 0.1700 | <0.004 | 0.0822 | 0.0257 | <0.007 | <0.002 | <0.01 | <0.01 |
| PCT-02 rut21 | 58.65 | 39.39 | 0.0163 | 0.0357 | 0.0340 | <0.02 | <0.003 | <0.003 | 0.2318 | <0.004 | 0.1678 | 0.0289 | <0.007 | 0.0093 | <0.01 | <0.01 |
| PCT-02 rut22 | 58.56 | 39.50 | 0.0386 | 0.1706 | 0.0984 | 0.0254 | <0.003 | 0.0084 | 0.2058 | <0.004 | 0.0810 | 0.0312 | <0.007 | <0.002 | <0.01 | <0.01 |
| PCT-02 rut23 | 56.43 | 39.26 | 0.2127 | 0.9986 | 0.2772 | <0.02 | <0.003 | 0.0472 | 0.2164 | <0.004 | 0.1013 | 0.0251 | <0.007 | <0.002 | <0.01 | <0.01 |
| PCT-02 rut24 | 58.68 | 39.60 | 0.0503 | 0.1889 | 0.0715 | 0.0306 | <0.003 | 0.0088 | 0.2140 | <0.004 | 0.0606 | 0.0212 | <0.007 | <0.002 | <0.01 | <0.01 |
| PCT-02 rut25 | 57.40 | 39.30 | 0.1320 | 0.5627 | 0.2195 | <0.02 | <0.003 | 0.0193 | 0.2737 | <0.004 | 0.0689 | 0.0395 | <0.007 | <0.003 | <0.01 | <0.01 |
| PCT-02 rut26 | 58.86 | 39.63 | 0.0334 | 0.1286 | 0.0585 | <0.02 | <0.003 | 0.0116 | 0.2463 | <0.004 | 0.0511 | 0.0248 | 0.0067 | <0.003 | <0.01 | 0.0121 |
| PCT-02 rut28 | 57.25 | 39.37 | 0.1485 | 0.7016 | 0.2455 | <0.02 | <0.003 | 0.0408 | 0.1637 | <0.004 | 0.0590 | 0.0245 | <0.007 | <0.002 | <0.01 | <0.01 |

*All elements are in wt. % (EMPA).

Appendix C: Eastern Sunda arc rutile trace element chemistry (EMPA)

| Analysis ID | Ti | O | Al | Si | Ca | V | Cr | Mn | Fe | Cu | Zr | Nb | Mo | Sn | Ta | W |
|---------------|-------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|--------|
| PCT-02 rut29 | 59.65 | 40.15 | 0.0308 | 0.1131 | 0.0432 | <0.02 | <0.003 | 0.0084 | 0.2371 | <0.004 | 0.0902 | 0.0298 | <0.007 | 0.0048 | <0.01 | <0.01 |
| PCT-02 rut30 | 58.45 | 39.50 | 0.0466 | 0.2138 | 0.1037 | <0.02 | <0.003 | 0.0122 | 0.3086 | <0.004 | 0.0585 | 0.0302 | <0.007 | <0.002 | <0.01 | <0.01 |
| PCT-02 rut31 | 58.17 | 39.43 | 0.0759 | 0.2779 | 0.1412 | <0.02 | <0.003 | 0.0161 | 0.2675 | <0.004 | 0.0811 | 0.0272 | <0.007 | <0.002 | <0.01 | <0.01 |
| PCT-02 rut32 | 58.27 | 39.52 | 0.0861 | 0.1205 | 0.3031 | <0.02 | <0.003 | 0.0211 | 0.2328 | <0.004 | 0.0739 | 0.0349 | <0.006 | 0.0026 | <0.01 | <0.01 |
| PCT-02 rut33 | 56.33 | 39.15 | 0.2485 | 0.9292 | 0.3614 | <0.02 | <0.003 | 0.0583 | 0.1421 | <0.004 | 0.0908 | 0.0245 | <0.007 | 0.0030 | <0.01 | <0.01 |
| PCT-02 rut34 | 58.88 | 39.58 | 0.0221 | 0.0631 | 0.0272 | <0.02 | <0.003 | <0.003 | 0.3096 | <0.004 | 0.0677 | 0.0470 | <0.007 | <0.002 | <0.01 | <0.01 |
| PCT-02 rut36 | 59.45 | 40.03 | 0.0386 | 0.1285 | 0.0504 | <0.02 | <0.003 | 0.0079 | 0.2569 | <0.004 | 0.0608 | 0.0348 | <0.007 | <0.002 | <0.01 | <0.01 |
| SINA-02 rut1 | 55.03 | 38.07 | 0.2267 | 0.4377 | 0.0763 | 0.1819 | 0.0215 | 0.0671 | 1.1686 | 0.3092 | 0.0232 | 0.0610 | <0.007 | 0.0244 | <0.01 | 0.1800 |
| SINA-02 rut3 | 57.77 | 39.03 | 0.1030 | 0.2200 | 0.0339 | <0.02 | <0.003 | 0.0371 | 0.1197 | 0.0265 | 0.0119 | 0.0457 | <0.006 | <0.002 | <0.01 | <0.01 |
| SINA-02 rut4 | 55.48 | 37.85 | 0.2377 | 0.4192 | 0.0419 | <0.02 | <0.003 | 0.0525 | 0.0588 | 0.0621 | 0.0192 | 0.0599 | <0.006 | <0.002 | <0.01 | <0.01 |
| SINA-02 rut5 | 57.68 | 39.35 | 0.3359 | 0.3634 | 0.0453 | <0.02 | <0.003 | 0.0665 | 0.0982 | 0.0170 | 0.0333 | 0.0539 | <0.007 | <0.002 | <0.01 | <0.01 |
| SINA-02 rut6 | 58.28 | 39.58 | 0.1273 | 0.3199 | 0.0390 | 0.0388 | <0.003 | 0.0536 | 0.2815 | 0.0168 | 0.0358 | 0.0329 | <0.007 | <0.002 | <0.01 | <0.01 |
| SINA-02 rut7 | | | | | | | | | | | | | | | | |
| SINA-02 rut9 | | | | | | | | | | | | | | | | |
| SINA-02 rut10 | | | | | | | | | | | | | | | | |
| SINA-01 rut1 | 58.54 | 39.72 | 0.1754 | 0.2390 | 0.0637 | 0.0522 | <0.003 | 0.0349 | 0.0875 | <0.004 | 0.0373 | 0.0597 | <0.007 | 0.0023 | <0.01 | <0.01 |
| SINA-01 rut2 | 56.17 | 39.57 | 0.4111 | 1.2850 | 0.2757 | <0.02 | <0.003 | 0.0890 | 0.0878 | <0.004 | 0.0635 | 0.0589 | <0.006 | 0.0035 | <0.01 | <0.01 |
| SINA-01 rut3 | 58.92 | 39.75 | 0.1012 | 0.2258 | 0.0531 | 0.0253 | <0.003 | 0.0281 | 0.0731 | <0.004 | 0.0347 | 0.0599 | <0.006 | 0.0094 | <0.01 | 0.0131 |
| SINA-01 rut4 | 58.05 | 39.92 | 0.2136 | 0.6919 | 0.1205 | 0.0246 | <0.003 | 0.0602 | 0.1234 | <0.004 | 0.0333 | 0.0733 | <0.006 | 0.0050 | <0.01 | <0.01 |
| SINA-01 rut5 | 57.10 | 39.61 | 0.3221 | 0.8839 | 0.1560 | 0.0543 | <0.003 | 0.0665 | 0.0919 | <0.004 | 0.0305 | 0.0543 | <0.006 | 0.0061 | <0.01 | <0.01 |
| SINA-01 rut6 | 59.03 | 40.03 | 0.1774 | 0.2689 | 0.0557 | 0.0672 | <0.003 | 0.0380 | 0.0968 | <0.004 | 0.0288 | 0.0579 | <0.007 | 0.0067 | <0.01 | <0.01 |
| SINA-01 rut8 | | | | | | | | | | | | | | | | |
| SINA-01 rut9 | | | | | | | | | | | | | | | | |
| SINA-01 rut10 | | | | | | | | | | | | | | | | |
| LB043_rut_1 | 59.22 | 40.07 | 0.0137 | 0.0288 | 0.0034 | 0.7515 | 0.0308 | <0.003 | 0.2220 | <0.004 | 0.0210 | 0.0171 | <0.007 | 0.0469 | <0.01 | <0.01 |
| LB043_rut_11 | 58.51 | 39.52 | 0.0113 | 0.0375 | 0.0029 | 0.2958 | 0.0389 | <0.003 | 0.6147 | <0.004 | 0.0247 | 0.0225 | <0.006 | 0.0535 | <0.01 | 0.0146 |
| LB043_rut_12 | 58.67 | 39.54 | 0.0148 | 0.0389 | 0.0250 | 0.0353 | <0.003 | <0.003 | 0.6745 | <0.004 | 0.1530 | 0.0237 | <0.007 | 0.0033 | <0.01 | <0.01 |
| LB043_rut_13 | 33.09 | 40.29 | 7.0265 | 9.7043 | 0.0287 | 0.3807 | 0.1555 | 0.0030 | 0.5628 | 0.0093 | <0.006 | 0.0265 | <0.007 | 0.0028 | <0.01 | 1.6363 |
| LB043_rut_14 | 58.62 | 39.41 | 0.0054 | 0.0403 | 0.0056 | <0.02 | <0.003 | <0.003 | 0.4881 | <0.004 | 0.1120 | 0.0216 | <0.006 | <0.002 | <0.01 | 0.0119 |
| LB043_rut_15 | 58.98 | 39.73 | 0.0166 | 0.0444 | 0.0043 | 0.6385 | 0.2142 | <0.003 | 0.3507 | <0.004 | 0.0423 | 0.0111 | <0.006 | 0.0101 | <0.01 | <0.01 |
| LB043_rut_16 | 58.49 | 39.84 | 0.1173 | 0.3178 | 0.0148 | 0.2722 | 0.1561 | 0.0112 | 0.2040 | <0.004 | 0.0070 | 0.0094 | <0.006 | 0.0391 | <0.01 | 0.0515 |
| LB043_rut_17 | 58.65 | 39.50 | 0.0099 | 0.0756 | 0.0193 | <0.02 | <0.003 | <0.003 | 0.3967 | <0.004 | 0.2610 | 0.0224 | <0.007 | <0.002 | <0.01 | 0.0140 |
| LB043_rut_18 | | | | | | | | | | | | | | | | |
| LB043_rut_2 | 53.90 | 37.98 | 0.6139 | 0.8802 | 0.0163 | 0.3886 | 0.0065 | <0.003 | 0.5570 | 0.0068 | 0.0146 | <0.006 | <0.007 | 0.0713 | <0.01 | 0.1465 |
| LB043_rut_3 | 59.03 | 39.75 | 0.0030 | 0.0293 | 0.0023 | 0.1404 | 0.0093 | <0.003 | 0.5475 | <0.004 | 0.0474 | 0.0250 | <0.007 | 0.0597 | <0.01 | 0.0117 |
| LB043_rut_4 | 50.50 | 36.86 | 1.1379 | 1.4692 | 0.0143 | 0.2454 | 0.0898 | <0.003 | 0.6514 | <0.004 | 0.0087 | 0.0312 | <0.006 | 0.0127 | <0.01 | 0.2435 |
| LB043_rut_5 | 58.75 | 39.90 | 0.0126 | 0.0363 | <0.001 | 0.9275 | 0.0277 | <0.003 | 0.3650 | <0.004 | 0.0298 | <0.006 | <0.007 | 0.0775 | <0.01 | <0.01 |
| LB043_rut_6 | 58.97 | 39.82 | 0.0654 | 0.0688 | 0.0145 | 0.2818 | 0.0388 | 0.0051 | 0.3230 | <0.004 | 0.0080 | 0.0443 | <0.006 | 0.0562 | <0.01 | 0.0145 |
| LB043_rut_7 | 58.14 | 39.51 | 0.0166 | 0.0280 | 0.0026 | 1.0518 | 0.0426 | <0.003 | 0.2144 | <0.004 | 0.0371 | 0.0110 | <0.006 | 0.0935 | <0.01 | <0.01 |
| LB043_rut_8 | 58.54 | 39.83 | <0.003 | 0.2726 | 0.0017 | 0.3472 | 0.0925 | <0.003 | 0.4798 | <0.004 | 0.0214 | 0.0182 | <0.007 | 0.0847 | <0.01 | 0.1080 |
| LB043_rut_9 | 55.01 | 39.36 | 0.5641 | 1.4121 | 0.0030 | 0.3187 | 0.0891 | <0.003 | 0.6881 | <0.004 | 0.0232 | <0.006 | 0.0070 | 0.1135 | <0.01 | 0.2903 |
| LB044_rut_1 | 58.62 | 39.48 | 0.0230 | 0.1586 | 0.1104 | 0.0421 | 0.0097 | 0.0088 | 0.1179 | 0.0058 | 0.0195 | 0.0154 | <0.007 | 0.0034 | <0.01 | 0.0161 |
| LB044_rut_10 | 59.04 | 39.65 | 0.0208 | 0.0701 | 0.0112 | 0.0447 | 0.0072 | 0.0044 | 0.1777 | <0.004 | 0.0823 | 0.0165 | <0.007 | 0.0058 | <0.01 | <0.01 |
| LB044_rut_12 | 59.04 | 39.77 | 0.0173 | 0.1052 | 0.0219 | 0.2539 | 0.0076 | 0.0113 | 0.1527 | <0.004 | 0.0294 | 0.0113 | <0.002 | <0.002 | <0.01 | 0.0120 |
| LB044_rut_13 | 58.88 | 39.74 | 0.0046 | 0.0275 | 0.0042 | 0.2747 | 0.0063 | <0.003 | 0.5001 | <0.004 | 0.2162 | 0.0206 | 0.0141 | 0.0063 | <0.01 | 0.0139 |
| LB044_rut_14 | 57.42 | 39.42 | 0.0860 | 0.6256 | 0.2464 | 0.1127 | 0.0040 | 0.0296 | 0.2060 | <0.004 | 0.0607 | 0.0109 | <0.007 | <0.002 | <0.01 | 0.0940 |
| LB044_rut_15 | 58.85 | 39.68 | 0.0336 | 0.1409 | 0.0916 | 0.0464 | <0.003 | 0.0249 | 0.1101 | <0.004 | 0.1335 | 0.0494 | <0.006 | 0.0066 | <0.01 | 0.0234 |
| LB044_rut_16 | 58.73 | 39.83 | 0.0303 | 0.3236 | 0.3317 | <0.02 | <0.003 | 0.0107 | 0.0897 | <0.004 | 0.0465 | 0.0206 | <0.007 | <0.002 | <0.01 | 0.0469 |
| LB044_rut_17 | 57.10 | 39.26 | 0.0967 | 0.2643 | 0.0546 | 0.0684 | <0.003 | 0.0159 | 2.1469 | 0.0253 | 0.0725 | 0.0171 | <0.007 | 0.0032 | <0.01 | 0.0483 |
| LB044_rut_2 | 58.18 | 39.45 | 0.0861 | 0.2623 | 0.0509 | 0.0555 | 0.0034 | 0.0216 | 0.4274 | 0.0223 | 0.0222 | 0.0148 | <0.006 | 0.0034 | <0.01 | 0.0397 |

*All elements are in wt. % (EMPA).

Appendix C: Eastern Sunda arc rutile trace element chemistry (EMPA)

| Analysis ID | Ti | O | Al | Si | Ca | V | Cr | Mn | Fe | Cu | Zr | Nb | Mo | Sn | Ta | W |
|---------------|-------|-------|--------|--------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|--------|
| LB044_rut_3 | 58.78 | 39.63 | 0.0120 | 0.0244 | 0.0033 | 0.2808 | 0.0088 | <0.003 | 0.4696 | <0.004 | 0.0897 | 0.0188 | 0.0230 | 0.0071 | <0.01 | <0.01 |
| LB044_rut_4 | 50.69 | 38.24 | 0.3328 | 1.4432 | 0.0474 | 0.3075 | 0.0065 | 0.0435 | 7.6055 | 0.0345 | 0.0090 | 0.0180 | <0.007 | <0.002 | <0.01 | 0.2517 |
| LB044_rut_5 | 56.97 | 38.31 | 0.0422 | 0.1419 | 0.0282 | <0.019 | <0.003 | 0.0055 | 0.0889 | <0.004 | 0.0057 | 0.0073 | <0.006 | <0.002 | <0.01 | 0.0204 |
| LB044_rut_6 | 58.22 | 39.91 | 0.0480 | 0.1887 | 0.0743 | <0.02 | <0.003 | 0.0411 | 0.0875 | 0.0167 | 0.0137 | <0.006 | <0.007 | 0.0074 | <0.01 | 0.0281 |
| LB044_rut_7 | 58.89 | 39.78 | 0.0068 | 0.0229 | 0.0054 | 0.2430 | 0.0207 | <0.003 | 0.5273 | <0.004 | 0.1306 | <0.005 | 0.0468 | 0.0072 | <0.01 | 0.1321 |
| LB044_rut_9 | 59.00 | 39.76 | 0.0053 | 0.0284 | 0.0025 | 0.2183 | 0.0186 | <0.003 | 0.5396 | <0.004 | 0.0819 | 0.0137 | 0.0075 | 0.0049 | <0.01 | <0.01 |
| NEF-01_rut_10 | 58.30 | 39.49 | 0.0517 | 0.1578 | 0.0483 | 0.1251 | 0.0839 | 0.0053 | 0.5059 | <0.004 | 0.0125 | 0.0440 | 0.0077 | 0.0463 | <0.01 | 0.0483 |
| NEF-01_rut_11 | 58.46 | 39.97 | 0.0055 | 0.0170 | 0.0028 | 0.1451 | 0.0119 | <0.003 | 0.4900 | <0.004 | <0.005 | 0.0140 | <0.006 | 0.0188 | <0.01 | <0.01 |
| NEF-01_rut_12 | 58.91 | 39.70 | 0.0128 | 0.0316 | 0.0189 | 0.0905 | 0.0391 | <0.003 | 0.6620 | 0.0077 | 0.0128 | 0.0381 | 0.0095 | 0.0174 | <0.01 | <0.01 |
| NEF-01_rut_13 | | | | | | | | | | | | | | | | |
| NEF-01_rut_14 | 58.90 | 39.71 | 0.0094 | 0.0232 | 0.0076 | 0.2893 | 0.0954 | <0.003 | 0.4304 | <0.004 | 0.0076 | 0.0189 | <0.007 | 0.0399 | <0.01 | <0.01 |
| NEF-01_rut_15 | 58.93 | 39.74 | 0.0192 | 0.0532 | 0.0080 | 0.2218 | 0.0335 | <0.003 | 0.4945 | <0.004 | 0.0058 | 0.0375 | <0.007 | 0.0213 | <0.01 | 0.0331 |
| NEF-01_rut_16 | 58.25 | 39.32 | 0.0064 | 0.0471 | 0.0045 | 0.1745 | 0.0435 | <0.003 | 0.4954 | <0.004 | 0.0378 | 0.0560 | 0.0117 | 0.0531 | <0.01 | 0.1861 |
| NEF-01_rut_17 | 59.20 | 39.79 | 0.0039 | 0.0137 | 0.0028 | 0.1141 | 0.0111 | <0.003 | 0.5240 | <0.004 | <0.005 | 0.0279 | <0.006 | 0.0180 | <0.01 | <0.01 |
| NEF-01_rut_18 | 58.40 | 39.33 | 0.0131 | 0.0383 | 0.0045 | 0.1296 | 0.0113 | 0.0037 | 0.5803 | 0.0046 | <0.005 | 0.0285 | <0.006 | 0.0135 | <0.01 | <0.01 |
| NEF-01_rut_19 | | | | | | | | | | | | | | | | |
| NEF-01_rut_2 | 58.88 | 39.65 | 0.0041 | 0.0493 | 0.0038 | 0.0799 | 0.0253 | <0.003 | 0.4913 | <0.004 | 0.0547 | 0.0543 | <0.007 | 0.0223 | <0.01 | 0.0313 |
| NEF-01_rut_20 | 58.96 | 39.67 | 0.0037 | 0.0414 | 0.0050 | 0.1158 | 0.0032 | <0.003 | 0.5155 | <0.004 | <0.005 | 0.0205 | <0.007 | 0.0303 | <0.01 | <0.01 |
| NEF-01_rut_21 | 58.60 | 39.47 | 0.0185 | 0.0352 | 0.0100 | 0.1374 | 0.0111 | 0.0119 | 0.5575 | 0.0052 | 0.0125 | 0.0303 | <0.007 | 0.0183 | <0.01 | <0.01 |
| NEF-01_rut_22 | 59.25 | 39.80 | 0.0033 | 0.0134 | 0.0033 | 0.0749 | 0.0106 | <0.003 | 0.4691 | <0.004 | 0.0091 | 0.0205 | <0.007 | 0.0208 | <0.01 | <0.01 |
| NEF-01_rut_23 | 59.21 | 39.85 | 0.0070 | 0.0378 | 0.0133 | 0.1567 | 0.0472 | 0.0148 | 0.4188 | <0.004 | <0.005 | 0.0364 | <0.006 | 0.0173 | <0.01 | <0.01 |
| NEF-01_rut_24 | 58.85 | 39.55 | 0.0029 | 0.0152 | <0.001 | 0.0640 | 0.0311 | <0.003 | 0.4799 | <0.004 | 0.0249 | 0.0383 | <0.006 | 0.0356 | <0.01 | <0.01 |
| NEF-01_rut_3 | 58.74 | 39.58 | 0.0088 | 0.0293 | 0.0124 | 0.2183 | 0.0455 | 0.0086 | 0.4776 | <0.004 | 0.0074 | 0.0372 | <0.007 | 0.0319 | <0.01 | 0.0188 |
| NEF-01_rut_4 | 59.36 | 39.91 | 0.0067 | 0.0214 | 0.0057 | 0.0783 | 0.0034 | <0.003 | 0.4990 | <0.004 | 0.0377 | 0.0346 | <0.006 | 0.0491 | <0.01 | <0.01 |
| NEF-01_rut_5 | 59.74 | 40.23 | 0.0060 | 0.0629 | 0.0034 | 0.0489 | 0.0217 | <0.003 | 0.5851 | <0.004 | 0.0188 | 0.0351 | <0.006 | 0.0380 | <0.01 | 0.0129 |
| NEF-01_rut_6 | 59.42 | 39.94 | 0.0071 | 0.0204 | 0.0019 | 0.0687 | 0.0128 | <0.003 | 0.4985 | <0.004 | 0.0246 | 0.0285 | <0.006 | 0.0480 | <0.01 | <0.01 |
| NEF-01_rut_7 | 55.59 | 38.70 | 0.0116 | 0.0983 | 0.0059 | 0.8044 | 0.1302 | 0.0070 | 3.3111 | <0.004 | 0.0480 | 0.0362 | <0.007 | 0.0288 | <0.01 | 0.0240 |
| NEF-01_rut_8 | 59.18 | 39.77 | 0.0060 | 0.0215 | 0.0035 | 0.1232 | 0.0186 | <0.003 | 0.4087 | <0.004 | <0.005 | 0.0114 | <0.007 | 0.0415 | <0.01 | <0.01 |
| NEF-01_rut_9 | 59.35 | 39.89 | 0.0038 | 0.0219 | 0.0053 | 0.0882 | 0.0286 | <0.003 | 0.4516 | <0.004 | 0.0132 | 0.0197 | <0.007 | 0.0407 | <0.01 | <0.01 |
| NEF-03_rut_1 | 58.85 | 39.59 | 0.0488 | 0.0980 | 0.01218 | 0.0831 | <0.003 | 0.0036 | 0.5493 | <0.004 | <0.005 | 0.0096 | <0.007 | 0.0145 | <0.01 | <0.01 |
| NEF-03_rut_10 | 58.77 | 39.77 | 0.0206 | 0.0668 | 0.0522 | 0.6355 | 0.0040 | <0.003 | 0.2605 | <0.004 | 0.0114 | 0.0085 | <0.007 | 0.0118 | <0.01 | <0.01 |
| NEF-03_rut_11 | 58.50 | 39.49 | 0.0061 | 0.0987 | 0.0357 | 0.1564 | <0.003 | 0.0056 | 0.6952 | <0.004 | 0.0168 | 0.0074 | <0.007 | 0.0114 | <0.01 | <0.01 |
| NEF-03_rut_12 | 58.74 | 39.71 | 0.0157 | 0.1022 | 0.0459 | 0.4802 | 0.0048 | 0.0062 | 0.2753 | <0.004 | <0.005 | 0.0080 | 0.0074 | 0.0152 | <0.01 | <0.01 |
| NEF-03_rut_13 | 58.28 | 39.31 | 0.0067 | 0.0637 | 0.0538 | 0.2292 | <0.003 | 0.0034 | 0.5350 | <0.004 | 0.0079 | <0.006 | <0.007 | 0.0130 | <0.01 | <0.01 |
| NEF-03_rut_14 | 58.98 | 39.74 | 0.0134 | 0.0574 | 0.0727 | 0.2324 | <0.003 | 0.0046 | 0.3960 | <0.004 | 0.0080 | 0.0110 | <0.007 | 0.0167 | <0.01 | <0.01 |
| NEF-03_rut_15 | 58.55 | 40.13 | 0.0089 | 0.0489 | 0.0880 | 0.2045 | <0.003 | <0.003 | 0.4918 | 0.0049 | 0.0104 | 0.0116 | <0.007 | 0.0124 | <0.01 | <0.01 |
| NEF-03_rut_16 | | | | | | | | | | | | | | | | |
| NEF-03_rut_2 | 57.90 | 39.77 | 0.3386 | 0.4031 | 0.0743 | 0.3022 | <0.003 | 0.0061 | 0.4346 | <0.004 | 0.0106 | <0.006 | <0.007 | 0.0121 | <0.01 | 0.0614 |
| NEF-03_rut_3 | 58.96 | 39.77 | 0.0170 | 0.1410 | 0.0092 | 0.0654 | <0.003 | <0.003 | 0.5312 | <0.004 | 0.0113 | 0.0119 | <0.007 | 0.0046 | <0.01 | 0.0140 |
| NEF-03_rut_4 | 59.34 | 40.06 | 0.0071 | 0.0479 | 0.0063 | 0.5110 | <0.003 | <0.003 | 0.3833 | <0.004 | 0.0165 | 0.0059 | <0.007 | 0.0105 | <0.01 | <0.01 |
| NEF-03_rut_5 | 59.04 | 39.74 | 0.0154 | 0.0580 | 0.0354 | 0.1193 | <0.003 | 0.0269 | 0.4813 | <0.004 | <0.005 | 0.0081 | <0.007 | 0.0046 | <0.01 | <0.01 |
| NEF-03_rut_6 | 58.35 | 39.75 | 0.0754 | 0.2354 | 0.2657 | 0.2862 | <0.003 | 0.0106 | 0.5001 | <0.004 | 0.0133 | <0.006 | <0.007 | 0.0121 | <0.01 | 0.0356 |
| NEF-03_rut_7 | 58.96 | 39.86 | 0.0273 | 0.0781 | 0.0581 | 0.4291 | <0.003 | <0.003 | 0.4425 | <0.004 | 0.0073 | 0.0081 | <0.007 | 0.0094 | <0.01 | <0.01 |
| NEF-03_rut_8 | 54.99 | 39.48 | 1.0332 | 1.4215 | 0.0486 | 0.1885 | <0.003 | 0.0161 | 1.0253 | <0.004 | <0.005 | <0.006 | <0.007 | <0.002 | <0.01 | 0.2227 |
| NEF-03_rut_9 | 58.68 | 39.70 | 0.0092 | 0.0905 | 0.0836 | 0.4934 | 0.0047 | <0.003 | 0.3587 | <0.004 | 0.0158 | <0.006 | <0.006 | 0.0103 | <0.01 | <0.01 |
| SEF-02_rut_1 | 58.76 | 39.54 | 0.0028 | 0.0278 | 0.0109 | 0.0770 | 0.1284 | <0.003 | 0.4826 | <0.004 | <0.005 | <0.006 | <0.006 | 0.0337 | <0.01 | <0.01 |
| SEF-02_rut_2 | 58.64 | 39.53 | 0.0032 | 0.0399 | 0.0132 | 0.0939 | 0.1433 | <0.003 | 0.5794 | <0.004 | 0.0083 | 0.0171 | <0.006 | 0.0436 | <0.01 | 0.0113 |
| SEF-02_rut_3 | | | | | | | | | | | | | | | | |
| SINA-04_rut_1 | 58.06 | 39.64 | 0.1876 | 0.4657 | 0.0929 | 0.0929 | <0.003 | 0.0234 | 0.1102 | 0.0628 | 0.0246 | 0.0595 | <0.007 | 0.0068 | <0.01 | 0.0663 |
| SINA-04_rut_2 | 58.18 | 39.54 | 0.1790 | 0.3316 | 0.0764 | <0.002 | <0.003 | 0.0174 | 0.1223 | 0.0592 | 0.0446 | 0.0534 | <0.006 | 0.0044 | <0.01 | 0.0567 |

*All elements are in wt. % (EMPA).

Appendix C: Eastern Sunda arc rutile trace element chemistry (EMPA)

| Analysis ID | Ti | O | Al | Si | Ca | V | Cr | Mn | Fe | Cu | Zr | Nb | Mo | Sn | Ta | W |
|-----------------|-------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|--------|
| SINA-04_rut_3 | 57.56 | 39.42 | 0.2155 | 0.5410 | 0.0877 | 0.0379 | <0.003 | 0.0213 | 0.1065 | 0.0770 | 0.0353 | 0.0534 | <0.007 | 0.0075 | <0.01 | 0.0951 |
| SINA-04_rut_4 | 58.53 | 39.76 | 0.1940 | 0.2992 | 0.0885 | <0.02 | <0.003 | 0.0256 | 0.1365 | 0.0117 | 0.0469 | 0.0548 | <0.007 | <0.002 | <0.01 | 0.0505 |
| SINA-04_rut_5 | | | | | | | | | | | | | | | | |
| SINA-04_rut_6 | | | | | | | | | | | | | | | | |
| SINA-04_rut_7 | | | | | | | | | | | | | | | | |
| SINA-04_rut_8 | | | | | | | | | | | | | | | | |
| SINA-05_rut_1 | 57.68 | 39.58 | 0.2307 | 0.5861 | 0.1428 | <0.02 | <0.003 | 0.0171 | 0.1321 | <0.004 | 0.0331 | 0.0508 | <0.007 | 0.0516 | <0.01 | 0.0886 |
| SINA-05_rut_2 | | | | | | | | | | | | | | | | |
| SINA-05_rut_3 | | | | | | | | | | | | | | | | |
| SING-01_rut_1 | 58.86 | 39.76 | 0.0039 | 0.0165 | 0.0835 | 0.4546 | 0.0062 | <0.003 | 0.3511 | <0.004 | 0.0904 | 0.0355 | <0.007 | 0.0279 | <0.01 | 0.0235 |
| SING-01_rut_2 | 58.90 | 39.69 | 0.0044 | 0.0088 | 0.0581 | 0.3479 | 0.0055 | <0.003 | 0.3844 | <0.004 | 0.0352 | <0.006 | <0.007 | 0.0538 | <0.01 | 0.0372 |
| SING-01_rut_3 | | | | | | | | | | | | | | | | |
| SING-02_rut_10 | 58.76 | 39.72 | 0.0041 | 0.0276 | 0.1161 | 0.5908 | 0.0269 | <0.003 | 0.2162 | <0.004 | 0.0192 | 0.0356 | <0.007 | 0.0164 | <0.01 | 0.0304 |
| SING-02_rut_11 | 58.89 | 39.65 | 0.0064 | 0.0233 | 0.0751 | 0.2211 | 0.0365 | <0.003 | 0.3112 | <0.004 | 0.0326 | 0.0321 | 0.0069 | 0.0184 | <0.01 | 0.0180 |
| SING-02_rut_12 | 58.83 | 39.68 | 0.0052 | 0.0267 | 0.0654 | 0.3264 | 0.0263 | <0.003 | 0.2675 | <0.004 | 0.0456 | 0.0441 | <0.006 | 0.0866 | <0.01 | 0.0345 |
| SING-02_rut_13 | 58.94 | 39.67 | 0.0036 | 0.0206 | 0.0519 | 0.2567 | 0.0139 | <0.003 | 0.3178 | <0.004 | 0.0094 | 0.0416 | <0.007 | 0.0151 | <0.01 | <0.01 |
| SING-02_rut_14 | | | | | | | | | | | | | | | | |
| SING-02_rut_15 | | | | | | | | | | | | | | | | |
| SING-02_rut_2 | 58.78 | 39.64 | 0.0036 | 0.0419 | 0.1899 | 0.2847 | 0.0211 | <0.003 | 0.2783 | <0.004 | 0.0132 | 0.0227 | <0.007 | 0.0213 | <0.01 | 0.0239 |
| SING-02_rut_3 | 59.13 | 39.87 | 0.0033 | 0.0112 | 0.1291 | 0.3573 | 0.0521 | <0.003 | 0.2489 | <0.004 | 0.0263 | 0.0193 | 0.0100 | 0.0212 | <0.01 | <0.01 |
| SING-02_rut_4 | 58.73 | 39.62 | 0.0074 | 0.0238 | 0.1105 | 0.3994 | 0.0238 | <0.003 | 0.2230 | <0.004 | 0.0075 | 0.0525 | <0.006 | 0.0131 | <0.01 | 0.0625 |
| SING-02_rut_5 | 59.39 | 40.02 | 0.0059 | 0.0217 | 0.1072 | 0.3724 | 0.0631 | 0.0053 | 0.1806 | <0.004 | 0.0096 | 0.0185 | <0.007 | 0.0140 | <0.01 | <0.01 |
| SING-02_rut_6 | 58.43 | 39.84 | 0.0421 | 0.1709 | 0.6008 | 0.4817 | 0.0496 | <0.003 | 0.1586 | <0.004 | 0.0155 | 0.0289 | <0.007 | 0.0373 | <0.01 | 0.0375 |
| SING-02_rut_7 | 58.87 | 39.68 | 0.0045 | 0.0265 | 0.0644 | 0.3177 | 0.0932 | <0.003 | 0.2176 | <0.004 | 0.0484 | 0.0254 | <0.007 | 0.0186 | <0.01 | <0.01 |
| SING-02_rut_8 | 58.92 | 39.75 | 0.0068 | 0.0305 | 0.1289 | 0.3211 | 0.0449 | <0.003 | 0.2446 | <0.004 | 0.0090 | 0.0187 | <0.006 | 0.0206 | <0.01 | <0.01 |
| SING-02_rut_9 | 58.98 | 39.78 | 0.0043 | 0.0197 | 0.1579 | 0.3801 | 0.0571 | <0.003 | 0.1982 | <0.004 | 0.0395 | 0.0146 | <0.007 | 0.0145 | <0.01 | <0.01 |
| SING-02_rut_1 | 53.86 | 39.86 | 0.4857 | 1.9030 | 2.4946 | 0.0727 | <0.003 | 0.0080 | 0.5265 | 0.0205 | <0.005 | 0.0137 | <0.007 | 0.0305 | <0.01 | 0.3201 |
| TR-04_rut_10 | | | | | | | | | | | | | | | | |
| TR-04_rut_2 | 58.05 | 39.64 | 0.0539 | 0.3395 | 0.5465 | 0.0410 | <0.003 | 0.0106 | 0.4610 | 0.0362 | 0.0665 | 0.0172 | <0.007 | 0.0161 | <0.01 | 0.0609 |
| TR-04_rut_3 | 58.73 | 39.67 | 0.0068 | 0.0535 | 0.1969 | 0.0615 | <0.003 | <0.003 | 0.4768 | 0.0218 | 0.2856 | 0.0217 | <0.006 | 0.0104 | <0.01 | 0.0229 |
| TR-04_rut_4 | 52.94 | 40.08 | 0.5135 | 2.3798 | 2.7992 | 0.0514 | <0.003 | 0.0071 | 0.5560 | 0.0054 | 0.3584 | 0.0151 | <0.007 | 0.0194 | <0.01 | 0.4148 |
| TR-04_rut_5 | 57.52 | 39.67 | 0.1771 | 0.5113 | 0.5797 | 0.0382 | <0.003 | 0.0153 | 0.6455 | 0.0138 | 0.0404 | 0.0446 | <0.007 | 0.0136 | <0.01 | 0.0989 |
| TR-04_rut_6 | | | | | | | | | | | | | | | | |
| TR-04_rut_7 | | | | | | | | | | | | | | | | |
| TR-04_rut_8 | | | | | | | | | | | | | | | | |
| TR-04_rut_9 | | | | | | | | | | | | | | | | |
| TR-05_rut_1 | 58.38 | 39.35 | 0.0070 | 0.0469 | 0.0740 | 0.0742 | <0.003 | 0.0198 | 0.5795 | 0.0612 | 0.0858 | 0.0182 | <0.007 | 0.0025 | <0.01 | 0.0117 |
| TR-05_rut_2 | 58.71 | 39.52 | 0.0039 | 0.0261 | 0.0159 | 0.0602 | 0.0030 | <0.003 | 0.5704 | 0.0327 | 0.1263 | 0.0150 | <0.007 | 0.0115 | <0.01 | <0.01 |
| TR-05_rut_3 | 58.85 | 39.46 | 0.0074 | 0.0191 | 0.0143 | 0.0258 | <0.003 | <0.003 | 0.2757 | 0.0463 | 0.0068 | 0.0217 | <0.007 | 0.0042 | <0.01 | <0.01 |
| TR-05_rut_4 | | | | | | | | | | | | | | | | |
| TR-05_rut_5 | | | | | | | | | | | | | | | | |
| UG012183_rut_1 | 59.23 | 39.80 | 0.0786 | 0.0044 | 0.0021 | 0.1400 | 0.0037 | 0.0041 | 0.1579 | <0.004 | 0.0162 | 0.0482 | <0.007 | 0.0353 | <0.01 | <0.01 |
| UG012183_rut_10 | 59.11 | 39.78 | 0.0332 | 0.0062 | 0.0019 | 0.4160 | 0.0073 | <0.003 | 0.1047 | <0.004 | 0.0117 | 0.0234 | <0.006 | 0.0342 | <0.01 | <0.01 |
| UG012183_rut_11 | 59.02 | 39.83 | 0.0317 | 0.0125 | <0.001 | 0.6326 | 0.0049 | <0.003 | 0.0737 | <0.004 | 0.0201 | 0.0061 | <0.006 | 0.0618 | <0.01 | 0.0148 |
| UG012183_rut_12 | 58.38 | 39.62 | 0.1169 | 0.0055 | <0.001 | 0.6060 | 0.0060 | <0.003 | 0.2266 | <0.004 | 0.0540 | 0.0350 | 0.0066 | 0.3661 | <0.01 | 0.0546 |
| UG012183_rut_13 | 58.85 | 39.81 | 0.2251 | 0.0079 | 0.0057 | 0.3918 | 0.0044 | <0.003 | 0.1610 | <0.004 | 0.0120 | 0.0331 | <0.007 | 0.1256 | <0.01 | 0.0206 |
| UG012183_rut_14 | 59.12 | 40.06 | 0.1270 | 0.0083 | <0.001 | 0.4681 | 0.0040 | <0.003 | 0.3390 | <0.004 | 0.0457 | 0.0332 | <0.006 | 0.182 | <0.01 | 0.0560 |
| UG012183_rut_15 | 59.77 | 40.29 | 0.0966 | 0.0430 | 0.0199 | 0.3064 | 0.0042 | <0.003 | 0.1319 | <0.004 | 0.0067 | 0.0369 | <0.007 | 0.0285 | <0.01 | 0.0355 |
| UG012183_rut_16 | 59.42 | 40.18 | 0.1738 | 0.0051 | <0.001 | 0.5609 | 0.0123 | <0.003 | 0.1002 | <0.004 | 0.0147 | 0.0120 | <0.007 | 0.0742 | <0.01 | 0.0131 |
| UG012183_rut_17 | 59.30 | 39.90 | 0.0331 | 0.0028 | <0.001 | 0.3990 | 0.0063 | <0.003 | 0.0987 | <0.004 | 0.0259 | <0.006 | <0.007 | 0.0694 | <0.01 | <0.01 |

*All elements are in wt. % (EMPA).

Appendix C: Eastern Sunda arc rutile trace element chemistry (EMPA)

| Analysis ID | Ti | O | Al | Si | Ca | V | Cr | Mn | Fe | Cu | Zr | Nb | Mo | Sn | Ta | W |
|-----------------|-------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| UG012183_rut_18 | 59.08 | 39.74 | 0.0279 | 0.0059 | 0.0020 | 0.3079 | <0.003 | <0.003 | 0.2084 | <0.004 | <0.005 | 0.0197 | <0.006 | 0.0597 | <0.01 | <0.01 |
| UG012183_rut_19 | 59.14 | 39.85 | 0.0731 | 0.0068 | <0.001 | 0.3855 | 0.0104 | <0.003 | 0.1157 | <0.004 | 0.0338 | 0.0121 | <0.006 | 0.0823 | <0.01 | 0.0282 |
| UG012183_rut_2 | 58.65 | 39.49 | 0.0471 | 0.0129 | 0.0078 | 0.3363 | 0.0049 | 0.0655 | 0.1807 | <0.004 | 0.0137 | 0.0211 | <0.007 | 0.0229 | <0.01 | <0.01 |
| UG012183_rut_20 | 58.47 | 39.67 | 0.1888 | 0.0065 | <0.001 | 0.3652 | <0.003 | <0.003 | 0.3507 | <0.004 | 0.0623 | 0.0220 | <0.007 | 0.4467 | <0.01 | 0.0195 |
| UG012183_rut_21 | 59.34 | 39.91 | 0.0176 | 0.0046 | <0.001 | 0.3952 | 0.0104 | <0.003 | 0.0988 | <0.004 | 0.0189 | 0.0063 | <0.006 | 0.0655 | <0.01 | <0.01 |
| UG012183_rut_22 | 59.30 | 40.12 | 0.0649 | 0.0585 | <0.001 | 0.6673 | 0.0100 | <0.003 | 0.0855 | <0.004 | 0.0163 | 0.0179 | <0.006 | 0.0291 | <0.01 | 0.0347 |
| UG012183_rut_23 | 56.74 | 39.39 | 0.6518 | 0.4600 | <0.001 | 0.3653 | 0.0086 | <0.003 | 0.1292 | <0.004 | 0.0316 | <0.006 | <0.007 | 0.0891 | <0.01 | 0.1019 |
| UG012183_rut_25 | 59.08 | 39.75 | 0.0369 | 0.0072 | 0.0018 | 0.3114 | 0.0085 | <0.003 | 0.1404 | <0.004 | 0.0113 | 0.0715 | <0.007 | 0.0503 | <0.01 | 0.0192 |
| UG012183_rut_26 | 57.21 | 39.02 | 0.0961 | 0.1280 | <0.001 | 0.7724 | 0.0038 | <0.003 | 0.1381 | <0.004 | 0.0850 | 0.0243 | <0.006 | 0.3668 | <0.01 | 0.0729 |
| UG012183_rut_27 | 59.03 | 39.71 | 0.0391 | 0.0129 | 0.0081 | 0.3506 | <0.003 | 0.0089 | 0.1256 | <0.004 | 0.0065 | 0.0286 | <0.007 | 0.0088 | <0.01 | <0.01 |
| UG012183_rut_28 | 59.09 | 39.79 | 0.0329 | 0.0075 | <0.001 | 0.3470 | 0.0073 | <0.003 | 0.1266 | <0.004 | 0.0410 | 0.0261 | <0.007 | 0.1116 | <0.01 | 0.0767 |
| UG012183_rut_29 | 58.78 | 39.60 | 0.1327 | 0.0057 | 0.0019 | 0.0932 | 0.0221 | <0.003 | 0.2105 | <0.004 | 0.0171 | 0.0362 | <0.006 | 0.1876 | <0.01 | 0.0599 |
| UG012183_rut_3 | 58.94 | 39.74 | 0.0636 | 0.0035 | 0.0021 | 0.3386 | 0.0121 | <0.003 | 0.2472 | <0.004 | 0.0170 | <0.006 | <0.006 | 0.1708 | <0.01 | 0.0483 |
| UG012183_rut_30 | 59.14 | 39.80 | 0.0287 | 0.0052 | <0.001 | 0.4646 | 0.0071 | <0.003 | 0.0669 | <0.004 | 0.0120 | 0.0219 | <0.007 | 0.0292 | <0.01 | <0.01 |
| UG012183_rut_4 | 58.82 | 39.70 | 0.1194 | 0.0474 | 0.0238 | 0.2880 | 0.0086 | <0.003 | 0.1385 | <0.004 | 0.0058 | 0.0479 | <0.006 | 0.0457 | <0.01 | 0.0683 |
| UG012183_rut_5 | 58.81 | 39.68 | 0.0351 | 0.0156 | 0.0028 | 0.4642 | 0.0048 | <0.003 | 0.1205 | <0.004 | 0.0285 | 0.0111 | <0.006 | 0.2238 | <0.01 | 0.0408 |
| UG012183_rut_6 | 58.80 | 39.76 | 0.1264 | 0.0484 | 0.0018 | 0.3201 | 0.0108 | <0.003 | 0.1818 | <0.004 | 0.0236 | <0.006 | <0.006 | 0.2531 | <0.01 | 0.0825 |
| UG012183_rut_7 | 59.06 | 39.78 | 0.0780 | 0.0057 | 0.0014 | 0.4124 | 0.0067 | <0.003 | 0.0952 | <0.004 | 0.0178 | 0.0161 | <0.006 | 0.0383 | <0.01 | <0.01 |
| UG012183_rut_8 | 58.69 | 39.72 | 0.1226 | 0.0040 | 0.0018 | 0.5134 | 0.0067 | <0.003 | 0.1605 | <0.004 | 0.0248 | 0.0082 | <0.007 | 0.2101 | <0.01 | 0.1694 |
| UG012183_rut_9 | 59.22 | 39.86 | 0.0332 | <0.002 | <0.001 | 0.3979 | 0.0073 | <0.003 | 0.0977 | <0.004 | 0.0305 | 0.0112 | <0.006 | 0.1067 | <0.01 | 0.0133 |
| UG012185_rut_1 | 58.44 | 39.53 | 0.0141 | 0.0241 | 0.0082 | 0.3307 | <0.003 | <0.003 | 0.6200 | <0.004 | 0.0198 | 0.1064 | <0.007 | 0.1429 | <0.01 | 0.0777 |
| UG012185_rut_10 | 58.47 | 39.45 | 0.0090 | 0.0318 | 0.0032 | 0.0521 | <0.003 | <0.003 | 0.4709 | <0.004 | 0.0249 | 0.1291 | 0.0139 | 0.2871 | <0.01 | 0.1394 |
| UG012185_rut_11 | 58.26 | 39.35 | 0.0230 | 0.0228 | 0.0022 | <0.02 | <0.003 | 0.0044 | 0.7266 | <0.004 | 0.0129 | 0.1903 | 0.0100 | 0.2678 | <0.01 | 0.0479 |
| UG012185_rut_12 | | | | | | | | | | | | | | | | |
| UG012185_rut_13 | | | | | | | | | | | | | | | | |
| UG012185_rut_14 | | | | | | | | | | | | | | | | |
| UG012185_rut_15 | | | | | | | | | | | | | | | | |
| UG012185_rut_2 | 58.58 | 39.68 | 0.0438 | 0.0325 | 0.0032 | 0.4715 | 0.0046 | <0.003 | 0.5684 | <0.004 | 0.0415 | 0.0451 | 0.0092 | 0.1095 | <0.01 | 0.0346 |
| UG012185_rut_3 | 58.65 | 39.54 | 0.0174 | 0.0339 | 0.0027 | 0.0443 | <0.003 | <0.003 | 0.5149 | <0.004 | 0.0327 | 0.1149 | 0.0162 | 0.1642 | <0.01 | 0.0798 |
| UG012185_rut_4 | 58.53 | 39.52 | 0.0240 | 0.0318 | 0.0045 | 0.0622 | <0.003 | <0.003 | 0.5426 | <0.004 | 0.0313 | 0.1967 | 0.0226 | 0.1636 | <0.01 | 0.1221 |
| UG012185_rut_5 | 59.12 | 39.81 | 0.0060 | 0.0412 | 0.0023 | 0.0323 | <0.003 | <0.003 | 0.4534 | <0.004 | 0.0154 | 0.0941 | 0.0070 | 0.2111 | <0.01 | 0.0506 |
| UG012185_rut_6 | 58.72 | 39.56 | 0.0129 | 0.0092 | 0.0032 | <0.02 | <0.003 | 0.0095 | 0.5648 | 0.0100 | 0.0274 | 0.0666 | 0.0068 | 0.2402 | <0.01 | 0.0997 |
| UG012185_rut_7 | 58.73 | 39.51 | 0.0149 | 0.0087 | 0.0028 | <0.02 | <0.003 | <0.003 | 0.4842 | <0.004 | 0.0247 | 0.0411 | 0.0104 | 0.1765 | <0.01 | 0.1013 |
| UG012185_rut_8 | 58.49 | 39.46 | 0.0325 | 0.0158 | 0.0024 | 0.0901 | <0.003 | <0.003 | 0.7010 | <0.004 | 0.0319 | 0.0773 | 0.0066 | 0.1256 | <0.01 | 0.0684 |
| UG012185_rut_9 | 0.03 | 0.10 | 0.0025 | 0.0655 | 0.0046 | <0.011 | <0.002 | <0.002 | <0.002 | <0.002 | <0.004 | <0.005 | <0.005 | 0.0016 | <0.006 | 0.0090 |
| UG012187_rut_1 | 58.85 | 39.68 | 0.0253 | 0.0106 | 0.0053 | 0.3469 | <0.003 | <0.003 | 0.4604 | <0.004 | 0.0113 | 0.0420 | <0.007 | 0.0132 | <0.01 | 0.0155 |
| UG012187_rut_10 | 58.85 | 39.71 | 0.0273 | 0.0260 | 0.0063 | 0.4376 | <0.003 | <0.003 | 0.3669 | <0.004 | 0.0495 | 0.0115 | <0.007 | 0.0148 | <0.01 | 0.0115 |
| UG012187_rut_11 | 58.81 | 39.93 | 0.3416 | 0.0169 | <0.001 | 0.5921 | 0.0086 | <0.003 | 0.0150 | <0.004 | <0.006 | 0.0119 | <0.006 | 0.1031 | <0.01 | <0.01 |
| UG012187_rut_12 | 59.18 | 39.83 | 0.2215 | 0.0114 | <0.002 | 0.1263 | <0.003 | <0.003 | 0.0179 | 0.0051 | <0.005 | 0.0119 | <0.006 | 0.0238 | <0.01 | <0.01 |
| UG012187_rut_13 | | | | | | | | | | | | | | | | |
| UG012187_rut_14 | | | | | | | | | | | | | | | | |
| UG012187_rut_15 | | | | | | | | | | | | | | | | |
| UG012187_rut_3 | 59.03 | 39.71 | 0.0591 | 0.0129 | 0.0035 | 0.1792 | 0.0052 | 0.0075 | 0.3169 | 0.0086 | 0.0164 | 0.0328 | <0.007 | 0.0162 | <0.01 | 0.0221 |
| UG012187_rut_4 | 58.50 | 39.71 | 0.2873 | 0.0066 | <0.001 | 0.3355 | 0.0055 | <0.003 | 0.0128 | <0.004 | 0.0146 | 0.0345 | <0.007 | 0.6935 | <0.01 | <0.01 |
| UG012187_rut_5 | 58.82 | 39.80 | 0.3315 | 0.0111 | 0.0016 | 0.3186 | 0.0069 | <0.003 | 0.0138 | <0.004 | 0.0057 | 0.0257 | <0.006 | 0.0826 | <0.01 | <0.01 |
| UG012187_rut_6 | 59.06 | 39.89 | 0.2357 | 0.0226 | 0.0020 | 0.3143 | <0.003 | <0.003 | 0.0705 | <0.004 | 0.0089 | 0.0236 | <0.006 | 0.0468 | <0.01 | <0.01 |
| UG012187_rut_5 | 58.53 | 39.40 | 0.0629 | 0.0089 | 0.0100 | 0.1843 | <0.003 | 0.0219 | 0.3351 | <0.004 | 0.0039 | 0.0545 | <0.007 | 0.0189 | <0.01 | 0.0166 |
| UG012187_rut_7 | 59.09 | 39.87 | 0.0264 | 0.0118 | <0.001 | 0.4565 | <0.003 | <0.003 | 0.3547 | <0.004 | 0.0553 | 0.0146 | <0.006 | 0.0160 | <0.01 | <0.01 |
| UG012187_rut_8 | 59.10 | 39.79 | 0.0754 | 0.0335 | 0.0063 | 0.2532 | 0.0083 | <0.003 | 0.1772 | <0.004 | 0.0064 | 0.0235 | <0.007 | 0.0313 | <0.01 | 0.0350 |
| UG012187_rut_9 | 58.98 | 39.68 | 0.0292 | 0.0066 | <0.002 | 0.1899 | 0.0051 | <0.003 | 0.4624 | <0.004 | 0.0125 | 0.0340 | <0.007 | 0.0122 | <0.01 | <0.01 |

*All elements are in wt. % (EMPA).

Appendix C: Eastern Sunda arc rutile trace element chemistry (EMPA)

| Analysis ID | Ti | O | Al | Si | Ca | V | Cr | Mn | Fe | Cu | Zr | Nb | Mo | Sn | Ta | W |
|-----------------|-------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|--------|
| UG012188_rut_10 | 58.49 | 39.49 | 0.0182 | 0.0136 | 0.0048 | 0.3764 | <0.003 | <0.003 | 0.5994 | <0.004 | <0.005 | 0.0087 | <0.007 | 0.0479 | <0.01 | 0.0887 |
| UG012188_rut_11 | 58.04 | 39.26 | 0.0292 | 0.0194 | <0.001 | 0.3684 | <0.003 | <0.003 | 0.6395 | <0.004 | 0.0221 | <0.006 | <0.007 | 0.2240 | <0.01 | 0.0510 |
| UG012188_rut_11 | 58.04 | 39.26 | 0.0292 | 0.0194 | <0.001 | 0.3684 | <0.003 | <0.003 | 0.6395 | <0.004 | 0.0221 | <0.006 | <0.007 | 0.2240 | <0.01 | 0.0510 |
| UG012188_rut_12 | 58.98 | 39.95 | 0.0352 | 0.0182 | <0.001 | 0.5084 | <0.003 | <0.003 | 0.5412 | <0.004 | 0.0134 | 0.0096 | <0.007 | 0.2231 | <0.01 | 0.1253 |
| UG012188_rut_13 | 58.08 | 39.45 | 0.0337 | 0.0208 | <0.001 | 0.6565 | 0.0040 | <0.003 | 0.6478 | <0.004 | 0.0192 | <0.006 | <0.007 | 0.2275 | <0.01 | 0.1430 |
| UG012188_rut_14 | | | | | | | | | | | | | | | | |
| UG012188_rut_15 | 58.61 | 39.75 | 0.0266 | 0.0100 | 0.0024 | 0.6183 | 0.0037 | <0.003 | 0.5638 | <0.004 | 0.0182 | <0.006 | <0.007 | 0.3167 | <0.01 | 0.0602 |
| UG012188_rut_16 | 58.50 | 39.72 | 0.0319 | 0.0269 | <0.001 | 0.6222 | 0.0046 | <0.003 | 0.5751 | <0.004 | 0.0217 | <0.006 | <0.007 | 0.3225 | <0.01 | 0.1150 |
| UG012188_rut_17 | 58.08 | 39.64 | 0.0332 | 0.0119 | <0.001 | 0.8544 | <0.003 | <0.003 | 0.7002 | <0.004 | 0.0287 | 0.0070 | <0.007 | 0.2168 | <0.01 | 0.5195 |
| UG012188_rut_18 | 57.79 | 39.34 | 0.0375 | 0.0162 | 0.0015 | 0.4073 | <0.003 | <0.003 | 0.8480 | <0.004 | 0.0099 | 0.0093 | <0.007 | 0.2478 | <0.01 | 0.6970 |
| UG012188_rut_19 | 58.57 | 39.62 | 0.0256 | 0.0134 | <0.001 | 0.4744 | <0.003 | <0.003 | 0.5206 | <0.004 | 0.0102 | <0.006 | <0.006 | 0.2014 | <0.01 | 0.0896 |
| UG012188_rut_2 | 58.44 | 39.52 | 0.0474 | 0.0089 | 0.0018 | 0.3440 | <0.003 | <0.003 | 0.6349 | <0.004 | 0.0192 | <0.006 | <0.007 | 0.2133 | <0.01 | 0.0848 |
| UG012188_rut_20 | 57.81 | 39.46 | 0.0460 | 0.0144 | <0.001 | 0.6744 | 0.0068 | <0.003 | 0.7573 | <0.004 | 0.0236 | <0.006 | <0.007 | 0.3603 | <0.01 | 0.5896 |
| UG012188_rut_21 | 58.28 | 39.60 | 0.0252 | 0.0151 | <0.001 | 0.8580 | 0.0037 | <0.003 | 0.6248 | <0.004 | 0.0221 | 0.0067 | <0.006 | 0.2389 | <0.01 | 0.2541 |
| UG012188_rut_22 | 58.39 | 39.57 | 0.0348 | 0.0151 | 0.0023 | 0.5604 | 0.0041 | <0.003 | 0.5568 | <0.004 | 0.0173 | 0.0081 | <0.007 | 0.1889 | <0.01 | 0.1185 |
| UG012188_rut_23 | 59.02 | 39.73 | 0.0163 | 0.0129 | <0.001 | 0.1078 | <0.003 | <0.003 | 0.6275 | <0.004 | 0.0328 | <0.006 | <0.007 | 0.1228 | <0.01 | <0.01 |
| UG012188_rut_24 | | | | | | | | | | | | | | | | |
| UG012188_rut_26 | 58.83 | 39.74 | 0.0295 | 0.0092 | 0.0046 | 0.4705 | <0.003 | <0.003 | 0.4853 | <0.004 | <0.006 | <0.006 | <0.006 | 0.0873 | <0.01 | 0.0333 |
| UG012188_rut_27 | 58.28 | 39.59 | 0.0209 | 0.0080 | <0.001 | 0.7056 | <0.003 | <0.003 | 0.6813 | <0.004 | 0.0174 | 0.0089 | <0.007 | 0.1684 | <0.01 | 0.2121 |
| UG012188_rut_29 | 59.14 | 39.86 | 0.0170 | 0.0087 | <0.001 | 0.5218 | <0.003 | <0.003 | 0.2013 | <0.004 | <0.005 | <0.006 | <0.006 | 0.0559 | <0.01 | <0.01 |
| UG012188_rut_3 | 58.53 | 39.62 | 0.0343 | 0.0091 | <0.001 | 0.4487 | 0.0034 | <0.003 | 0.6228 | <0.004 | 0.0146 | 0.0105 | <0.007 | 0.1847 | <0.01 | 0.1155 |
| UG012188_rut_30 | 57.95 | 39.49 | 0.0289 | 0.0102 | 0.0022 | 0.7223 | 0.0039 | <0.003 | 0.7123 | <0.004 | 0.0254 | 0.0112 | <0.006 | 0.2272 | <0.01 | 0.5279 |
| UG012188_rut_31 | 58.51 | 39.60 | 0.0299 | 0.0124 | <0.001 | 0.3450 | <0.003 | <0.003 | 0.6623 | <0.004 | 0.0176 | <0.006 | <0.006 | 0.2718 | <0.01 | 0.1477 |
| UG012188_rut_32 | 58.14 | 39.48 | 0.0346 | 0.0115 | 0.0023 | 0.4158 | 0.0031 | <0.003 | 0.8477 | <0.004 | 0.0214 | <0.006 | <0.007 | 0.1812 | <0.01 | 0.4086 |
| UG012188_rut_33 | 58.73 | 39.69 | 0.0227 | 0.0143 | 0.0029 | 0.5236 | <0.003 | <0.003 | 0.5029 | <0.004 | <0.005 | 0.0198 | <0.006 | 0.0264 | <0.01 | 0.0321 |
| UG012188_rut_34 | 58.31 | 39.52 | 0.0264 | 0.0100 | <0.002 | 0.4426 | <0.003 | <0.003 | 0.6618 | <0.004 | 0.0138 | 0.0448 | <0.007 | 0.1443 | <0.01 | 0.2893 |
| UG012188_rut_4 | 58.42 | 39.82 | 0.0389 | 0.0082 | <0.001 | 0.7856 | 0.0088 | <0.003 | 0.5901 | <0.004 | 0.0261 | <0.006 | <0.007 | 0.2722 | <0.01 | 0.1810 |
| UG012188_rut_5 | 58.63 | 39.82 | 0.0389 | 0.0082 | <0.001 | 0.6745 | 0.0091 | <0.003 | 0.6372 | <0.004 | 0.0139 | <0.006 | <0.007 | 0.1476 | <0.01 | 0.2160 |
| UG012188_rut_6 | 59.02 | 40.20 | 0.0167 | 0.0189 | <0.001 | 1.1068 | 0.0064 | <0.003 | 0.4562 | <0.004 | 0.0071 | 0.0074 | <0.006 | 0.1637 | <0.01 | 0.0828 |
| UG012188_rut_7 | 58.59 | 39.71 | 0.0258 | 0.0121 | <0.001 | 0.6249 | <0.003 | 0.0036 | 0.5368 | <0.004 | 0.0119 | 0.0432 | <0.007 | 0.0643 | <0.01 | 0.1655 |
| UG012188_rut_8 | 58.70 | 39.56 | 0.0240 | 0.0127 | <0.001 | 0.1000 | <0.003 | <0.003 | 0.7098 | <0.004 | <0.005 | <0.006 | <0.007 | 0.0899 | <0.01 | 0.1342 |
| UG012188_rut_9 | 58.35 | 39.53 | 0.0303 | 0.0154 | <0.001 | 0.3635 | 0.0044 | <0.003 | 0.7312 | <0.004 | 0.0195 | 0.0085 | <0.007 | 0.2132 | <0.01 | 0.2298 |
| UG012188_rut_1 | 58.35 | 39.38 | 0.0079 | 0.0153 | 0.0028 | 0.0830 | <0.003 | <0.003 | 0.7140 | <0.004 | 0.0188 | 0.0972 | 0.0140 | 0.1505 | <0.01 | 0.1207 |
| UG012188_rut_10 | 58.59 | 39.46 | 0.0186 | 0.0077 | 0.0016 | 0.1066 | <0.003 | <0.003 | 0.6480 | <0.004 | 0.0310 | 0.0292 | 0.0126 | 0.0832 | <0.01 | 0.0221 |
| UG012188_rut_11 | 58.65 | 39.52 | 0.0177 | 0.0142 | <0.001 | 0.0370 | <0.003 | 0.0041 | 0.6882 | <0.004 | 0.0277 | 0.0655 | 0.0216 | 0.1132 | <0.01 | 0.0202 |
| UG012188_rut_12 | | | | | | | | | | | | | | | | |
| UG012188_rut_13 | 58.20 | 39.40 | 0.0598 | 0.0168 | 0.0034 | 0.2646 | 0.0047 | <0.003 | 0.6185 | <0.004 | 0.0364 | 0.1233 | 0.0162 | 0.0986 | <0.01 | 0.1510 |
| UG012188_rut_14 | 57.28 | 38.94 | 0.0229 | 0.0216 | <0.001 | 0.0325 | 0.0061 | <0.003 | 1.0056 | <0.005 | 0.0211 | 0.0693 | <0.007 | 0.3921 | <0.01 | 0.7029 |
| UG012188_rut_15 | 58.63 | 39.54 | 0.0168 | 0.0294 | 0.0031 | 0.0490 | 0.0317 | <0.003 | 0.6470 | <0.004 | 0.0224 | 0.0933 | 0.0129 | 0.0989 | <0.01 | 0.0658 |
| UG012188_rut_16 | 58.59 | 39.58 | 0.0195 | 0.0120 | 0.0024 | 0.1767 | 0.0059 | <0.003 | 0.6660 | <0.004 | 0.0479 | 0.1641 | 0.0209 | 0.0776 | <0.01 | 0.0576 |
| UG012188_rut_17 | 58.47 | 39.45 | 0.0100 | 0.0207 | 0.0026 | 0.2356 | 0.0069 | <0.003 | 0.6349 | <0.004 | 0.0138 | 0.0353 | 0.0075 | 0.1148 | <0.01 | 0.0240 |
| UG012188_rut_18 | 58.41 | 39.55 | 0.0125 | 0.0257 | 0.0029 | 0.3191 | 0.0055 | <0.003 | 0.7582 | 0.0047 | 0.0433 | 0.1346 | 0.0131 | 0.1125 | <0.01 | 0.0442 |
| UG012188_rut_19 | 58.57 | 39.61 | 0.0111 | 0.0373 | <0.001 | 0.3145 | 0.0062 | <0.003 | 0.5947 | <0.004 | 0.0346 | 0.1407 | 0.0185 | 0.0764 | <0.01 | 0.0300 |
| UG012188_rut_2 | 58.63 | 39.51 | 0.0147 | 0.0238 | 0.0022 | 0.1503 | 0.0032 | <0.003 | 0.5986 | <0.004 | 0.0309 | 0.0508 | 0.0113 | 0.0687 | <0.01 | 0.0267 |
| UG012188_rut_20 | 58.86 | 39.69 | 0.0146 | 0.0181 | <0.001 | 0.1755 | 0.0032 | <0.003 | 0.5731 | <0.004 | 0.0482 | 0.0535 | 0.0167 | 0.0851 | <0.01 | 0.0445 |
| UG012188_rut_21 | 58.40 | 39.49 | 0.0111 | 0.0118 | <0.001 | 0.1869 | <0.003 | <0.003 | 0.8524 | <0.004 | 0.0349 | 0.1745 | 0.0174 | 0.0824 | <0.01 | <0.01 |
| UG012188_rut_3 | 58.89 | 39.70 | 0.0148 | 0.0165 | <0.001 | 0.2297 | <0.003 | <0.003 | 0.5418 | <0.004 | 0.0309 | 0.0465 | 0.0099 | 0.0598 | <0.01 | 0.0250 |
| UG012188_rut_4 | 58.39 | 39.55 | 0.0159 | 0.0151 | <0.001 | 0.3948 | 0.0063 | <0.003 | 0.6437 | <0.004 | 0.0416 | 0.1638 | 0.0157 | 0.0685 | <0.01 | 0.1139 |
| UG012188_rut_5 | 58.05 | 39.38 | 0.0146 | 0.0159 | 0.0017 | 0.2166 | 0.0046 | <0.003 | 1.2433 | 0.0061 | 0.0476 | 0.0998 | 0.0125 | 0.0948 | <0.01 | 0.0382 |
| UG012188_rut_6 | 58.67 | 39.63 | 0.0096 | 0.0226 | <0.001 | 0.2831 | 0.0074 | <0.003 | 0.6108 | <0.004 | 0.0317 | 0.0844 | 0.0176 | 0.0779 | <0.01 | 0.0496 |

*All elements are in wt. % (EMPA).

Appendix C: Eastern Sunda arc rutile trace element chemistry (EMPA)

| Analysis ID | Ti | O | Al | Si | Ca | V | Cr | Mn | Fe | Cu | Zr | Nb | Mo | Sn | Ta | W |
|-----------------|-------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|--------|
| UG012189_rut_7 | 58.28 | 39.38 | 0.0188 | 0.0158 | 0.0017 | 0.0534 | 0.0035 | <0.003 | 1.0394 | <0.004 | 0.0324 | 0.0334 | 0.0257 | 0.0704 | <0.01 | 0.1150 |
| UG012189_rut_8 | 58.49 | 39.53 | 0.0159 | 0.0129 | 0.0041 | 0.2969 | 0.0074 | <0.003 | 0.7062 | <0.004 | 0.0253 | 0.0390 | 0.0078 | 0.0956 | <0.01 | 0.0972 |
| UG012189_rut_9 | 59.23 | 39.94 | 0.0151 | 0.0191 | 0.0027 | 0.1192 | <0.003 | <0.003 | 0.6474 | <0.004 | 0.0387 | 0.0530 | <0.007 | 0.1089 | <0.01 | 0.1086 |
| UG012191_rut_1 | 59.75 | 40.19 | 0.0329 | 0.0183 | 0.0936 | <0.003 | <0.003 | <0.003 | 0.3614 | <0.004 | 0.0683 | 0.0274 | <0.007 | 0.0090 | <0.01 | <0.01 |
| UG012191_rut_10 | 59.30 | 39.96 | 0.0319 | 0.0247 | <0.001 | 0.3016 | 0.0066 | <0.003 | 0.2422 | <0.004 | 0.0288 | 0.0508 | <0.007 | 0.0860 | <0.01 | 0.0703 |
| UG012191_rut_12 | 59.27 | 39.89 | 0.0300 | 0.0370 | 0.0019 | 0.1683 | 0.0095 | <0.003 | 0.3415 | <0.004 | 0.0301 | 0.0234 | <0.007 | 0.0422 | <0.01 | 0.0416 |
| UG012191_rut_13 | 58.64 | 39.75 | 0.0369 | 0.0247 | <0.001 | 0.3681 | 0.0215 | <0.003 | 0.4247 | <0.004 | 0.0181 | 0.0106 | <0.007 | 0.3070 | <0.01 | 0.4790 |
| UG012191_rut_14 | 58.88 | 39.78 | 0.0929 | 0.0769 | 0.0025 | 0.2245 | 0.0241 | <0.003 | 0.2450 | <0.004 | 0.0652 | <0.006 | <0.007 | 0.0899 | <0.01 | 0.1569 |
| UG012191_rut_15 | 58.41 | 39.66 | 0.0779 | 0.0995 | <0.001 | 0.2574 | 0.0274 | <0.003 | 0.4006 | <0.004 | 0.0153 | <0.006 | <0.007 | 0.3248 | <0.01 | 0.4758 |
| UG012191_rut_16 | 59.16 | 39.80 | 0.0325 | 0.0282 | <0.001 | 0.1739 | 0.0112 | <0.003 | 0.2667 | <0.004 | 0.0407 | 0.0344 | <0.007 | 0.0558 | <0.01 | 0.0181 |
| UG012191_rut_18 | 58.72 | 39.70 | 0.0254 | 0.0183 | 0.0026 | 0.2543 | 0.0823 | <0.003 | 0.2841 | <0.004 | 0.0478 | <0.006 | <0.007 | 0.4761 | <0.01 | 0.1692 |
| UG012191_rut_19 | 58.98 | 39.77 | 0.0530 | 0.0334 | 0.0334 | 0.2356 | <0.003 | <0.003 | 0.2552 | <0.004 | 0.0444 | 0.0474 | <0.007 | 0.0276 | <0.01 | 0.0598 |
| UG012191_rut_20 | 59.22 | 39.89 | 0.0266 | 0.0205 | <0.001 | 0.1605 | 0.0043 | <0.003 | 0.3634 | <0.004 | 0.0552 | 0.1183 | <0.007 | 0.0509 | <0.01 | 0.0239 |
| UG012191_rut_21 | 59.26 | 39.89 | 0.0319 | 0.0144 | 0.0018 | 0.2294 | 0.0087 | <0.003 | 0.2756 | <0.004 | 0.0276 | 0.0766 | <0.007 | 0.0426 | <0.01 | 0.0356 |
| UG012191_rut_22 | 59.19 | 39.82 | 0.0365 | 0.0249 | <0.001 | 0.2198 | 0.0100 | <0.003 | 0.2436 | <0.004 | 0.0243 | 0.0238 | <0.007 | 0.0564 | <0.01 | 0.0177 |
| UG012191_rut_23 | 58.90 | 39.78 | 0.0399 | 0.0355 | <0.001 | 0.3111 | 0.0122 | <0.003 | 0.2723 | <0.004 | 0.0135 | 0.0126 | <0.007 | 0.2754 | <0.01 | 0.1763 |
| UG012191_rut_24 | 59.02 | 39.73 | 0.0207 | 0.0283 | <0.001 | 0.2470 | 0.0209 | <0.003 | 0.2465 | <0.004 | 0.0213 | 0.0352 | <0.006 | 0.0599 | <0.01 | 0.0403 |
| UG012191_rut_25 | 59.30 | 39.87 | 0.0676 | 0.0306 | <0.001 | 0.0283 | 0.0073 | <0.003 | 0.3258 | <0.004 | 0.0398 | 0.0317 | <0.007 | 0.0484 | <0.01 | 0.0166 |
| UG012191_rut_26 | 59.09 | 39.83 | 0.0351 | 0.0281 | 0.0144 | 0.2961 | 0.0130 | <0.003 | 0.2752 | <0.004 | 0.0180 | 0.0543 | <0.007 | 0.0828 | <0.01 | 0.0300 |
| UG012191_rut_27 | 59.02 | 39.77 | 0.0239 | 0.0219 | 0.0049 | 0.3169 | 0.0075 | <0.003 | 0.3309 | 0.0312 | 0.0111 | 0.0498 | <0.007 | 0.0354 | <0.01 | 0.0189 |
| UG012191_rut_28 | 59.42 | 40.01 | 0.0520 | 0.0311 | 0.0022 | 0.2423 | 0.0098 | <0.003 | 0.2785 | <0.004 | 0.0152 | 0.0121 | <0.007 | 0.0618 | <0.01 | 0.0545 |
| UG012191_rut_3 | 58.78 | 39.71 | 0.0257 | 0.0258 | <0.001 | 0.2621 | <0.003 | <0.003 | 0.4010 | <0.004 | 0.0351 | 0.0159 | <0.006 | 0.2906 | <0.01 | 0.2195 |
| UG012191_rut_4 | 58.78 | 39.71 | 0.0257 | 0.0258 | <0.001 | 0.2621 | <0.003 | <0.003 | 0.4010 | <0.004 | 0.0351 | 0.0159 | <0.006 | 0.2906 | <0.01 | 0.2195 |
| UG012191_rut_5 | 59.07 | 39.77 | 0.0481 | 0.0405 | 0.0018 | 0.2364 | 0.0126 | <0.003 | 0.2329 | <0.004 | 0.0203 | 0.0120 | <0.007 | 0.0606 | <0.01 | 0.0220 |
| UG012191_rut_4 | 58.60 | 39.65 | 0.0384 | 0.0219 | <0.001 | 0.3407 | 0.0241 | <0.003 | 0.3178 | <0.004 | 0.0275 | <0.006 | <0.007 | 0.3225 | <0.01 | 0.3162 |
| UG012191_rut_6 | 58.91 | 39.76 | 0.0568 | 0.0608 | 0.0032 | 0.0495 | 0.0113 | <0.003 | 0.4575 | <0.004 | 0.0386 | 0.2075 | <0.007 | 0.0438 | <0.01 | 0.0456 |
| UG012191_rut_7 | 58.84 | 40.09 | 0.2039 | 0.2652 | <0.001 | 0.2200 | <0.003 | 0.0038 | 0.4434 | <0.004 | 0.0247 | 0.0313 | <0.007 | 0.0940 | <0.01 | 0.0918 |
| UG012191_rut_8 | 59.19 | 39.85 | 0.0259 | 0.0216 | <0.001 | 0.2390 | 0.0103 | <0.003 | 0.2911 | <0.004 | 0.0535 | 0.0378 | <0.007 | 0.0709 | <0.01 | 0.0168 |
| UG012191_rut_9 | 59.06 | 39.81 | 0.0323 | 0.0274 | 0.0020 | 0.0909 | 0.0080 | <0.003 | 0.4405 | <0.004 | 0.0382 | 0.2000 | <0.007 | 0.0387 | <0.01 | 0.0501 |
| UG012192_rut_1 | 58.78 | 39.83 | 0.0505 | 0.0129 | <0.001 | 0.6225 | 0.0081 | <0.003 | 0.3357 | <0.004 | 0.0310 | 0.0141 | <0.007 | 0.1302 | <0.01 | 0.2339 |
| UG012192_rut_10 | 58.81 | 39.78 | 0.0515 | 0.0172 | <0.001 | 0.5392 | 0.0064 | <0.003 | 0.2791 | <0.004 | 0.0286 | 0.0210 | <0.007 | 0.1359 | <0.01 | 0.1297 |
| UG012192_rut_11 | 59.11 | 40.04 | 0.0475 | 0.0107 | <0.002 | 0.7208 | 0.0093 | <0.003 | 0.2952 | <0.004 | 0.0571 | 0.0203 | <0.007 | 0.1149 | <0.01 | 0.0404 |
| UG012192_rut_12 | 59.17 | 40.02 | 0.0314 | 0.0130 | <0.001 | 0.7426 | 0.0243 | <0.003 | 0.1913 | <0.004 | 0.0096 | 0.0094 | <0.007 | 0.0593 | <0.01 | 0.0535 |
| UG012192_rut_13 | | | | | | | | | | | | | | | | |
| UG012192_rut_14 | | | | | | | | | | | | | | | | |
| UG012192_rut_2 | 58.82 | 39.85 | 0.0787 | 0.0230 | <0.001 | 0.7470 | 0.0083 | <0.003 | 0.1121 | <0.004 | 0.0465 | 0.0824 | <0.007 | 0.0895 | <0.01 | <0.01 |
| UG012192_rut_3 | 58.84 | 39.78 | 0.0472 | 0.0196 | <0.001 | 0.6094 | 0.0102 | <0.003 | 0.2206 | <0.004 | 0.0221 | 0.0374 | <0.007 | 0.0526 | <0.01 | 0.0287 |
| UG012192_rut_4 | 58.76 | 39.87 | 0.1200 | 0.0184 | 0.0056 | 0.5322 | 0.0059 | <0.003 | 0.3148 | <0.004 | 0.0189 | 0.2009 | 0.0068 | 0.0424 | <0.01 | 0.1613 |
| UG012192_rut_6 | 58.72 | 39.83 | 0.0392 | 0.0210 | 0.0048 | 0.8657 | 0.0168 | <0.003 | 0.1360 | <0.004 | 0.0149 | 0.1155 | <0.007 | 0.0587 | <0.01 | 0.0533 |
| UG012192_rut_7 | 58.76 | 39.85 | 0.0321 | 0.0126 | <0.001 | 0.7020 | 0.0113 | <0.003 | 0.2728 | <0.004 | 0.0401 | 0.1227 | <0.007 | 0.1400 | <0.01 | 0.1088 |
| UG012192_rut_8 | 59.09 | 40.02 | 0.0603 | 0.0116 | <0.001 | 0.6853 | 0.0106 | <0.003 | 0.3183 | <0.004 | 0.0529 | 0.0148 | <0.007 | 0.0904 | <0.01 | 0.0525 |
| UG012192_rut_9 | 59.23 | 40.13 | 0.0618 | 0.0149 | <0.001 | 0.7389 | 0.0179 | <0.003 | 0.1956 | <0.004 | 0.0129 | 0.0161 | <0.007 | 0.1044 | <0.01 | 0.1481 |
| UG012194_rut_1 | 58.52 | 39.60 | 0.2829 | 0.0705 | 0.0072 | 0.1120 | 0.0054 | <0.003 | 0.3376 | <0.004 | <0.005 | 0.0168 | <0.007 | 0.0145 | <0.01 | <0.01 |
| UG012194_rut_10 | 58.59 | 39.45 | 0.0519 | 0.0332 | 0.0188 | 0.0742 | 0.0149 | <0.003 | 0.3877 | <0.004 | 0.0229 | 0.0584 | 0.0082 | 0.0344 | <0.01 | 0.0978 |
| UG012194_rut_11 | 59.32 | 39.93 | 0.0447 | 0.0436 | 0.0044 | 0.2078 | <0.003 | <0.003 | 0.3447 | <0.004 | <0.005 | 0.0234 | <0.007 | 0.0044 | <0.01 | <0.01 |
| UG012194_rut_12 | 58.70 | 39.56 | 0.1076 | 0.0337 | 0.0033 | 0.0783 | 0.0177 | <0.003 | 0.4401 | <0.004 | 0.0332 | 0.0079 | <0.007 | 0.0317 | <0.01 | 0.0666 |
| UG012194_rut_13 | 58.66 | 39.58 | 0.2413 | 0.0331 | 0.0069 | 0.0345 | 0.0072 | <0.003 | 0.3216 | <0.004 | 0.0121 | 0.0331 | <0.006 | 0.0152 | <0.01 | <0.01 |
| UG012194_rut_14 | | | | | | | | | | | | | | | | |
| UG012194_rut_15 | | | | | | | | | | | | | | | | |
| UG012194_rut_2 | 58.45 | 39.37 | 0.0657 | 0.0943 | 0.0174 | 0.0895 | 0.0067 | 0.0072 | 0.2607 | <0.004 | 0.0062 | 0.0124 | <0.007 | 0.0212 | <0.01 | 0.0135 |

*All elements are in wt. % (EMPA).

Appendix C: Eastern Sunda arc rutile trace element chemistry (EMPA)

| Analysis ID | Ti | O | Al | Si | Ca | V | Cr | Mn | Fe | Cu | Zr | Nb | Mo | Sn | Ta | W |
|-----------------|-------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| UG012194_rut_3 | 59.22 | 39.81 | 0.0354 | 0.0239 | 0.0032 | 0.1551 | 0.0063 | <0.003 | 0.3466 | <0.004 | 0.0104 | 0.0269 | <0.007 | 0.0205 | <0.01 | <0.01 |
| UG012194_rut_4 | 58.99 | 39.63 | 0.0423 | 0.0236 | 0.0054 | 0.0956 | 0.0046 | <0.003 | 0.2778 | <0.004 | 0.0056 | 0.0259 | <0.007 | 0.0219 | <0.01 | 0.0317 |
| UG012194_rut_5 | 58.81 | 39.65 | 0.0577 | 0.0257 | 0.0037 | 0.3842 | 0.0437 | <0.003 | 0.1867 | <0.004 | 0.0422 | 0.0172 | <0.006 | 0.0088 | <0.01 | <0.01 |
| UG012194_rut_6 | 58.89 | 39.68 | 0.0579 | 0.0161 | <0.001 | 0.0368 | 0.0108 | <0.003 | 0.4660 | <0.004 | 0.0396 | 0.0792 | 0.0114 | 0.0325 | <0.01 | 0.1943 |
| UG012194_rut_7 | 55.07 | 39.34 | 1.0045 | 1.1974 | 0.0019 | 0.1124 | 0.0071 | 0.0274 | 0.4296 | <0.004 | 0.0206 | 0.0304 | <0.007 | 0.0385 | <0.01 | 0.3077 |
| UG012194_rut_8 | 59.00 | 39.68 | 0.0740 | 0.0444 | 0.0152 | 0.0940 | <0.003 | <0.003 | 0.2406 | <0.004 | <0.005 | 0.0444 | <0.006 | 0.0318 | <0.01 | <0.01 |
| UG012194_rut_9 | 58.98 | 39.73 | 0.0499 | 0.0771 | 0.0084 | 0.1705 | 0.0036 | <0.003 | 0.2466 | <0.004 | <0.006 | 0.0449 | <0.006 | 0.0238 | <0.01 | 0.0403 |
| UG012198_rut_1 | 58.98 | 39.93 | 0.1072 | 0.0305 | 0.0054 | 0.6570 | 0.0636 | <0.003 | 0.0818 | <0.004 | 0.0061 | 0.0469 | <0.006 | 0.0234 | <0.01 | <0.01 |
| UG012198_rut_10 | 59.23 | 39.95 | 0.0800 | 0.0194 | 0.0032 | 0.4847 | 0.0284 | <0.003 | 0.0547 | <0.004 | 0.0085 | 0.0482 | <0.006 | 0.0294 | <0.01 | <0.01 |
| UG012198_rut_11 | | | | | | | | | | | | | | | | |
| UG012198_rut_12 | | | | | | | | | | | | | | | | |
| UG012198_rut_2 | 59.04 | 39.83 | 0.0649 | 0.0213 | 0.0075 | 0.4948 | 0.0235 | <0.003 | 0.1169 | <0.004 | <0.005 | 0.0273 | <0.007 | 0.0204 | <0.01 | <0.01 |
| UG012198_rut_3 | 58.54 | 39.73 | 0.1379 | 0.0580 | 0.0026 | 0.7168 | 0.0124 | <0.003 | 0.1050 | <0.004 | 0.0118 | 0.0379 | <0.007 | 0.0590 | <0.01 | 0.0833 |
| UG012198_rut_4 | 58.86 | 39.70 | 0.0591 | 0.0232 | 0.0081 | 0.4799 | 0.0212 | 0.0044 | 0.1075 | <0.004 | 0.0109 | 0.0301 | <0.007 | 0.0280 | <0.01 | <0.01 |
| UG012198_rut_5 | 58.57 | 39.64 | 0.0823 | 0.0484 | 0.0034 | 0.4467 | 0.0411 | <0.003 | 0.3761 | <0.004 | 0.0112 | 0.0377 | <0.007 | 0.0774 | <0.01 | 0.0292 |
| UG012198_rut_6 | 58.18 | 39.95 | 0.0703 | 0.0226 | 0.0041 | 0.5171 | 0.0054 | <0.003 | 0.1519 | <0.004 | <0.005 | 0.0705 | <0.007 | 0.0194 | <0.01 | <0.01 |
| UG012198_rut_8 | 58.54 | 39.61 | 0.0974 | 0.0282 | 0.0074 | 0.4334 | 0.0484 | <0.003 | 0.3795 | <0.004 | 0.0078 | 0.0647 | <0.006 | 0.0266 | <0.01 | 0.0197 |
| UG012198_rut_9 | 58.33 | 39.51 | 0.0798 | 0.0299 | 0.0073 | 0.4568 | 0.0398 | <0.003 | 0.5545 | <0.004 | 0.0079 | 0.0615 | <0.007 | 0.0361 | <0.01 | <0.01 |
| UG012200_rut_1 | 58.72 | 39.82 | 0.0218 | 0.0234 | <0.001 | 0.9559 | 0.0255 | <0.003 | 0.1433 | <0.004 | <0.005 | <0.006 | <0.007 | 0.0768 | <0.01 | 0.0735 |
| UG012200_rut_10 | 58.74 | 39.82 | 0.0240 | 0.0153 | <0.001 | 0.7292 | 0.0248 | <0.003 | 0.3762 | <0.004 | 0.0157 | 0.0278 | <0.007 | 0.0537 | <0.01 | 0.1693 |
| UG012200_rut_11 | 58.88 | 39.92 | 0.0102 | 0.0094 | <0.001 | 1.0320 | 0.0215 | <0.003 | 0.0948 | <0.004 | <0.005 | 0.0689 | <0.007 | 0.0179 | <0.01 | <0.01 |
| UG012200_rut_12 | 60.76 | 41.14 | 0.0141 | 0.0070 | <0.001 | 1.0064 | 0.0429 | <0.003 | 0.0507 | <0.004 | <0.005 | 0.0157 | <0.006 | 0.0380 | <0.01 | 0.0158 |
| UG012200_rut_13 | 57.52 | 39.62 | 0.0529 | 0.0023 | 0.0083 | 1.3486 | 0.0219 | <0.003 | 0.3756 | <0.005 | 0.0227 | 0.0627 | <0.007 | 0.0680 | <0.012 | 1.4189 |
| UG012200_rut_14 | 58.46 | 39.76 | 0.0330 | 0.0110 | 0.0018 | 1.0469 | 0.0284 | <0.003 | 0.1139 | <0.004 | 0.0198 | 0.0326 | <0.006 | 0.1044 | <0.011 | 0.3163 |
| UG012200_rut_15 | 58.70 | 39.89 | 0.0279 | 0.0081 | <0.001 | 1.0127 | 0.0095 | <0.003 | 0.0822 | <0.004 | 0.0344 | 0.0612 | <0.007 | 0.1879 | <0.01 | 0.1829 |
| UG012200_rut_16 | 58.85 | 39.93 | 0.0447 | 0.0103 | 0.0035 | 1.0006 | 0.0290 | <0.003 | 0.0298 | <0.004 | 0.0135 | 0.0461 | <0.007 | 0.0877 | <0.01 | 0.0896 |
| UG012200_rut_17 | 58.43 | 39.62 | 0.0135 | 0.0073 | 0.0018 | 0.8996 | 0.0780 | 0.1030 | 0.0795 | <0.004 | <0.005 | 0.0477 | <0.006 | 0.0424 | <0.01 | 0.0659 |
| UG012200_rut_18 | 58.81 | 39.89 | 0.0216 | 0.0095 | <0.001 | 0.9812 | 0.0440 | <0.003 | 0.0933 | <0.004 | 0.0097 | 0.0170 | <0.006 | 0.0579 | <0.01 | 0.1445 |
| UG012200_rut_19 | 58.59 | 39.84 | 0.0407 | 0.0066 | <0.001 | 1.0505 | 0.0445 | <0.003 | 0.0866 | <0.004 | 0.0216 | 0.0405 | <0.007 | 0.1059 | <0.011 | 0.2600 |
| UG012200_rut_2 | 58.94 | 39.97 | 0.0167 | 0.0136 | 0.0016 | 1.0495 | 0.0300 | <0.003 | 0.0579 | <0.004 | <0.005 | 0.0579 | <0.006 | 0.0225 | <0.01 | 0.0203 |
| UG012200_rut_20 | 58.92 | 39.87 | 0.0154 | 0.0094 | <0.001 | 0.8238 | 0.0608 | <0.003 | 0.0638 | <0.004 | <0.005 | 0.0938 | <0.007 | 0.0153 | <0.01 | 0.0228 |
| UG012200_rut_21 | 59.03 | 39.92 | 0.0117 | 0.0106 | 0.0019 | 0.7930 | 0.0436 | <0.003 | 0.1313 | <0.004 | 0.0059 | 0.0190 | <0.007 | 0.0552 | <0.01 | 0.0234 |
| UG012200_rut_22 | 58.57 | 39.81 | 0.0403 | 0.0042 | <0.001 | 1.0227 | 0.0285 | <0.003 | 0.1174 | <0.004 | 0.0292 | 0.0075 | <0.007 | 0.2245 | <0.01 | 0.1446 |
| UG012200_rut_23 | 58.90 | 39.92 | 0.0143 | 0.0150 | <0.001 | 0.9064 | 0.0606 | <0.003 | 0.0668 | <0.004 | 0.0111 | 0.0141 | <0.007 | 0.0495 | <0.01 | 0.1685 |
| UG012200_rut_24 | 58.09 | 39.56 | 0.0495 | 0.0206 | 0.0136 | 0.8484 | 0.0442 | 0.0145 | 0.2081 | <0.004 | 0.0340 | 0.0479 | 0.0229 | 0.0818 | <0.011 | 0.5230 |
| UG012200_rut_25 | 58.96 | 39.94 | 0.0779 | 0.0047 | <0.001 | 0.7443 | 0.0556 | 0.0054 | 0.1537 | <0.004 | 0.0102 | 0.0131 | <0.007 | 0.1012 | <0.01 | 0.0826 |
| UG012200_rut_26 | 59.01 | 39.93 | 0.0118 | 0.0148 | <0.001 | 0.9015 | 0.0321 | <0.003 | 0.0930 | 0.0045 | <0.005 | 0.0067 | <0.006 | 0.0382 | <0.01 | 0.0120 |
| UG012200_rut_27 | 58.71 | 39.83 | 0.0335 | 0.0054 | <0.001 | 0.9600 | 0.0317 | <0.003 | 0.1209 | 0.0046 | 0.0060 | 0.1137 | <0.007 | 0.0571 | <0.01 | 0.0223 |
| UG012200_rut_28 | 58.96 | 39.96 | 0.0351 | 0.0127 | 0.0023 | 0.9411 | 0.0258 | 0.0047 | 0.0230 | <0.004 | 0.0061 | 0.0673 | <0.007 | 0.0374 | <0.01 | 0.0289 |
| UG012200_rut_29 | 58.85 | 39.91 | 0.0341 | 0.0139 | <0.001 | 1.0513 | 0.0196 | 0.0032 | 0.0247 | <0.004 | <0.006 | 0.0073 | <0.006 | 0.0618 | <0.01 | 0.0502 |
| UG012200_rut_3 | 59.64 | 40.48 | 0.0184 | 0.0188 | 0.0041 | 1.0419 | 0.0278 | 0.0032 | 0.0829 | <0.004 | 0.0119 | 0.0352 | <0.006 | 0.0585 | <0.01 | 0.1266 |
| UG012200_rut_30 | 58.79 | 39.87 | 0.0296 | 0.0065 | 0.0024 | 0.9325 | 0.0145 | <0.003 | 0.0337 | <0.004 | 0.0187 | 0.0207 | 0.0072 | 0.1153 | <0.011 | 0.2248 |
| UG012200_rut_4 | 57.93 | 39.42 | 0.0608 | 0.0122 | <0.001 | 0.5119 | 0.0346 | <0.003 | 0.4586 | <0.004 | 0.0861 | 0.1016 | 0.0107 | 0.0563 | <0.011 | 0.7221 |
| UG012200_rut_5 | 58.77 | 39.82 | 0.0272 | 0.0210 | 0.0017 | 0.9009 | 0.0362 | <0.003 | 0.1041 | <0.004 | 0.0059 | 0.0324 | <0.007 | 0.0279 | <0.01 | 0.0376 |
| UG012200_rut_6 | 58.74 | 39.83 | 0.0404 | 0.0109 | <0.001 | 0.8717 | 0.0341 | 0.0045 | 0.1181 | <0.004 | 0.0162 | 0.0301 | <0.007 | 0.0690 | <0.01 | 0.1372 |
| UG012200_rut_7 | 59.03 | 40.03 | 0.0241 | 0.0117 | <0.001 | 1.0361 | 0.0370 | <0.003 | 0.0600 | 0.0061 | <0.005 | 0.0458 | <0.007 | 0.0341 | <0.01 | 0.0162 |
| UG012200_rut_8 | 58.38 | 39.76 | 0.0329 | 0.0148 | 0.0023 | 1.0457 | 0.0143 | <0.003 | 0.1860 | <0.004 | 0.0178 | 0.0439 | 0.0383 | 0.0589 | <0.011 | 0.4023 |
| UG012200_rut_9 | 58.88 | 39.86 | 0.0448 | 0.0142 | <0.001 | 0.8470 | 0.0582 | 0.0031 | 0.0301 | <0.004 | <0.005 | 0.0291 | <0.007 | 0.0613 | <0.01 | 0.0327 |
| UG012201_rut_1 | 58.56 | 39.63 | 0.0923 | 0.0349 | 0.0022 | 0.4066 | 0.0070 | <0.003 | 0.3631 | <0.004 | 0.1288 | 0.0331 | 0.0107 | 0.0329 | <0.01 | 0.0382 |

*All elements are in wt. % (EMPA).

Appendix C: Eastern Sunda arc rutile trace element chemistry (EMPA)

| Analysis ID | Ti | O | Al | Si | Ca | V | Cr | Mn | Fe | Cu | Zr | Nb | Mo | Sn | Ta | W |
|----------------|-------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| UG012201_rut_2 | 58.56 | 39.65 | 0.1367 | 0.0095 | <0.001 | 0.3715 | 0.0073 | <0.003 | 0.4355 | <0.004 | 0.0945 | 0.0384 | 0.0248 | 0.0355 | <0.01 | 0.0580 |
| UG012201_rut_3 | 58.85 | 39.88 | 0.1928 | 0.0045 | 0.0015 | 0.1802 | 0.0283 | <0.003 | 0.4626 | <0.003 | 0.0582 | 0.0089 | 0.0089 | 0.0227 | <0.011 | 0.4504 |
| UG012201_rut_4 | 57.98 | 39.40 | 0.2165 | 0.0086 | <0.001 | 0.2803 | 0.0310 | <0.003 | 0.3874 | <0.004 | 0.1364 | 0.0296 | 0.0128 | 0.0218 | <0.011 | 0.5892 |
| UG012201_rut_5 | 58.55 | 39.59 | 0.2403 | 0.0037 | <0.001 | 0.2322 | 0.0183 | <0.003 | 0.3036 | <0.004 | 0.0576 | 0.0289 | <0.007 | 0.0215 | <0.01 | 0.0865 |
| UG012201_rut_6 | 58.65 | 39.60 | 0.1256 | 0.0036 | 0.0015 | 0.2604 | 0.0213 | <0.003 | 0.3446 | <0.004 | 0.0322 | 0.1149 | <0.007 | 0.0225 | <0.01 | 0.0203 |
| UG012201_rut_7 | | | | | | | | | | | | | | | | |
| UG012201_rut_8 | | | | | | | | | | | | | | | | |
| UG012201_rut_9 | | | | | | | | | | | | | | | | |
| UG012202_rut_1 | 58.68 | 39.93 | 0.0049 | 0.0115 | 0.0024 | 1.2114 | 0.0306 | <0.003 | 0.1547 | <0.004 | 0.0643 | 0.0207 | 0.0084 | 0.0806 | <0.01 | 0.1038 |
| UG012202_rut_2 | 58.70 | 39.92 | 0.0126 | 0.0168 | 0.0045 | 1.1715 | 0.0235 | 0.0032 | 0.1833 | <0.004 | 0.0098 | 0.0354 | <0.006 | 0.0500 | <0.01 | 0.0770 |
| UG012202_rut_3 | | | | | | | | | | | | | | | | |
| UG012202_rut_4 | 58.91 | 39.65 | 0.0026 | 0.0178 | 0.0277 | 0.1166 | <0.003 | <0.003 | 0.6021 | 0.0049 | 0.0082 | 0.0310 | <0.006 | 0.0231 | <0.01 | 0.0373 |
| BHF-02 rut1 | | | | | | | | | | | | | | | | |
| BHF-02 rut2 | | | | | | | | | | | | | | | | |
| BHF-02 rut3 | | | | | | | | | | | | | | | | |
| BHF-02 rut4 | | | | | | | | | | | | | | | | |
| BHF-03 rut1 | 58.91 | 39.59 | 0.0305 | 0.0390 | 0.0088 | 0.0277 | <0.003 | <0.003 | 0.4008 | 0.0152 | 0.0199 | 0.0398 | <0.007 | 0.0054 | <0.01 | <0.01 |
| BHF-03 rut11 | | | | | | | | | | | | | | | | |
| BHF-03 rut12 | | | | | | | | | | | | | | | | |
| BHF-03 rut13 | | | | | | | | | | | | | | | | |
| BHF-03 rut14 | | | | | | | | | | | | | | | | |
| BHF-03 rut2 | 59.06 | 39.68 | 0.0036 | 0.0048 | 0.0079 | 0.0551 | 0.0198 | 0.0035 | 0.5435 | 0.0184 | 0.0118 | 0.0130 | <0.006 | 0.0257 | <0.01 | 0.0144 |
| BHF-03 rut3 | 58.73 | 39.51 | 0.0047 | 0.0088 | 0.0076 | 0.0589 | <0.003 | 0.0098 | 0.6915 | 0.0333 | 0.0098 | 0.0185 | 0.0109 | 0.0196 | <0.01 | <0.01 |
| BHF-03 rut5 | 59.00 | 39.62 | 0.0088 | 0.0091 | 0.0084 | 0.0474 | <0.003 | <0.003 | 0.3700 | 0.0878 | 0.0221 | 0.0566 | <0.006 | 0.0112 | <0.01 | <0.01 |
| BHF-03 rut6 | 58.91 | 39.57 | 0.0107 | 0.0120 | 0.0186 | 0.0402 | <0.003 | <0.003 | 0.4446 | 0.1080 | 0.0071 | 0.0769 | <0.007 | <0.002 | <0.01 | <0.01 |
| BHF-03 rut7 | | | | | | | | | | | | | | | | |
| BHF-03 rut8 | | | | | | | | | | | | | | | | |
| BHF-03 rut9 | | | | | | | | | | | | | | | | |
| GBF-01 rut1 | 57.20 | 39.30 | 0.1547 | 0.0069 | <0.002 | 0.5109 | 0.0484 | <0.003 | 0.6626 | <0.005 | 0.0170 | 0.0221 | <0.007 | 0.0409 | <0.012 | 1.8949 |
| GBF-01 rut10 | 59.02 | 40.06 | 0.0060 | 0.0172 | 0.0018 | 1.0349 | 0.0476 | <0.003 | 0.0962 | <0.004 | <0.005 | 0.0388 | <0.006 | 0.0675 | <0.01 | 0.1398 |
| GBF-01 rut11 | 59.17 | 39.86 | 0.0184 | 0.0179 | 0.0022 | 0.3716 | 0.0107 | 0.0041 | 0.1442 | <0.004 | 0.0062 | 0.0071 | <0.006 | 0.0414 | <0.01 | 0.2166 |
| GBF-01 rut12 | 58.33 | 40.18 | 0.0045 | 0.0214 | 0.0055 | 0.8533 | 0.0042 | <0.003 | 0.1083 | <0.004 | 0.0102 | 0.0236 | <0.006 | 0.0356 | <0.011 | 0.2178 |
| GBF-01 rut13 | 58.91 | 39.74 | 0.0377 | 0.0152 | 0.0038 | 0.3228 | 0.0089 | <0.003 | 0.2385 | <0.004 | 0.0107 | 0.0212 | <0.006 | 0.0361 | <0.011 | 0.3458 |
| GBF-01 rut14 | 58.90 | 40.09 | 0.0104 | 0.0140 | 0.0022 | 1.1114 | 0.2963 | <0.003 | 0.0966 | <0.004 | <0.005 | <0.006 | <0.007 | 0.0767 | <0.01 | 0.0450 |
| GBF-01 rut15 | 58.86 | 39.77 | 0.0470 | 0.0674 | 0.0307 | 0.4429 | 0.0145 | <0.003 | 0.1355 | <0.004 | <0.006 | 0.0122 | <0.007 | 0.0506 | <0.01 | 0.1700 |
| GBF-01 rut16 | 58.25 | 40.18 | 0.0057 | 0.0219 | 0.0038 | 1.0028 | 0.0210 | <0.003 | 0.1282 | <0.004 | <0.006 | <0.006 | <0.007 | 0.0297 | <0.01 | 0.1535 |
| GBF-01 rut17 | 59.15 | 40.01 | 0.0159 | 0.0186 | 0.0089 | 0.6968 | 0.0217 | <0.003 | 0.1163 | <0.004 | <0.005 | 0.0189 | <0.007 | 0.0323 | <0.011 | 0.2628 |
| GBF-01 rut18 | 59.74 | 40.35 | 0.0139 | 0.0125 | <0.001 | 0.8290 | <0.003 | 0.0034 | 0.0446 | <0.004 | <0.005 | 0.0080 | <0.006 | 0.0108 | <0.01 | <0.01 |
| GBF-01 rut19 | 58.85 | 40.13 | 0.0050 | 0.0100 | 0.0021 | 1.5004 | 0.0040 | <0.003 | 0.0732 | <0.004 | 0.0086 | 0.0102 | <0.007 | 0.0345 | <0.01 | 0.1877 |
| GBF-01 rut2 | 58.16 | 40.21 | 0.0085 | 0.0132 | 0.0021 | 1.1785 | 0.0046 | <0.003 | 0.1180 | <0.004 | <0.005 | 0.0216 | <0.007 | 0.0439 | <0.011 | 0.2268 |
| GBF-01 rut20 | 58.85 | 39.93 | 0.0106 | 0.0161 | <0.001 | 0.9278 | 0.0218 | <0.003 | 0.1241 | <0.004 | 0.0085 | <0.006 | <0.007 | 0.0385 | <0.011 | 0.3996 |
| GBF-01 rut21 | 59.09 | 39.91 | 0.0387 | 0.0248 | 0.0036 | 0.5127 | 0.0052 | <0.003 | 0.1611 | <0.004 | <0.005 | 0.0093 | <0.007 | 0.0324 | <0.011 | 0.2942 |
| GBF-01 rut22 | 59.46 | 40.07 | 0.0181 | 0.0148 | 0.0043 | 0.4934 | 0.0037 | <0.003 | 0.1166 | <0.004 | <0.005 | 0.0120 | <0.006 | 0.0310 | <0.01 | 0.1252 |
| GBF-01 rut23 | 58.55 | 39.84 | 0.0117 | 0.0073 | 0.0019 | 0.9837 | 0.0312 | <0.003 | 0.0788 | <0.004 | 0.0097 | 0.0067 | <0.007 | 0.0548 | <0.011 | 0.6571 |
| GBF-01 rut24 | 59.43 | 40.12 | 0.0212 | 0.0175 | 0.0016 | 0.6116 | 0.0040 | <0.003 | 0.0781 | <0.004 | 0.0075 | <0.006 | <0.007 | 0.0482 | <0.011 | 0.2312 |
| GBF-01 rut25 | 58.79 | 40.14 | 0.0066 | 0.0113 | 0.0024 | 1.4869 | 0.0055 | <0.003 | 0.0979 | <0.004 | 0.0089 | 0.0125 | <0.007 | 0.0426 | <0.011 | 0.3632 |
| GBF-01 rut26 | 59.02 | 39.79 | 0.0476 | 0.0102 | <0.001 | 0.2533 | 0.0368 | <0.003 | 0.0370 | <0.004 | 0.0093 | 0.0313 | <0.007 | 0.0344 | <0.011 | 0.3158 |
| GBF-01 rut27 | 58.10 | 40.02 | 0.0150 | 0.0148 | 0.0030 | 0.8179 | 0.0151 | <0.003 | 0.1204 | <0.004 | 0.0088 | <0.006 | <0.007 | 0.0486 | <0.011 | 0.2895 |
| GBF-01 rut28 | 57.35 | 39.89 | 0.5138 | 0.4850 | 0.0035 | 0.5972 | 0.0662 | 0.0040 | 0.2093 | <0.004 | 0.0107 | 0.0128 | <0.007 | 0.0654 | <0.011 | 0.6782 |
| GBF-01 rut29 | 58.21 | 39.56 | 0.0529 | 0.0071 | 0.0029 | 0.5998 | 0.0390 | <0.003 | 0.2710 | <0.005 | 0.0084 | 0.0093 | <0.007 | 0.0417 | <0.011 | 0.9288 |

*All elements are in wt. % (EMPA).

Appendix C: Eastern Sunda arc rutile trace element chemistry (EMPA)

| Analysis ID | Ti | O | Al | Si | Ca | V | Cr | Mn | Fe | Cu | Zr | Nb | Mo | Sn | Ta | W |
|--------------|-------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| GBF-01 rut30 | 56.27 | 39.26 | 0.0736 | 0.0088 | <0.002 | 1.7090 | 0.0305 | <0.003 | 0.3531 | <0.005 | 0.0192 | 0.0768 | <0.007 | 0.1631 | <0.012 | 2.4324 |
| GBF-01 rut31 | 59.16 | 39.89 | 0.0244 | 0.0121 | 0.0026 | 0.5219 | 0.0049 | <0.003 | 0.1347 | <0.004 | 0.0056 | 0.0078 | <0.007 | 0.0458 | <0.01 | 0.1227 |
| GBF-01 rut32 | 59.28 | 40.07 | 0.0550 | 0.0114 | 0.0025 | 0.3480 | 0.0536 | <0.003 | 0.2371 | <0.004 | 0.0123 | 0.0103 | <0.007 | 0.0385 | <0.011 | 0.5450 |
| GBF-01 rut4 | 58.36 | 39.99 | 0.0242 | 0.0030 | 0.0030 | 0.3844 | 0.0122 | <0.003 | 0.1688 | <0.004 | <0.005 | 0.0198 | <0.006 | 0.0260 | <0.01 | 0.1895 |
| GBF-01 rut5 | 59.46 | 40.06 | 0.0409 | 0.0090 | <0.001 | 0.2959 | 0.0209 | <0.003 | 0.2047 | <0.004 | <0.005 | 0.0541 | <0.007 | 0.0323 | <0.01 | 0.1978 |
| GBF-01 rut6 | 59.14 | 40.04 | 0.0059 | 0.0128 | <0.001 | 0.8023 | 0.0439 | <0.003 | 0.1349 | <0.004 | <0.005 | 0.0082 | <0.007 | 0.0579 | <0.01 | 0.2255 |
| GBF-01 rut7 | 59.27 | 40.14 | 0.0072 | 0.0132 | 0.0024 | 0.8616 | 0.0089 | <0.003 | 0.1096 | <0.004 | 0.0060 | 0.0062 | <0.007 | 0.0352 | <0.011 | 0.2790 |
| GBF-01 rut8 | 59.27 | 39.98 | 0.0145 | 0.0109 | 0.0034 | 0.5552 | 0.0061 | <0.003 | 0.1274 | <0.004 | 0.0058 | 0.0252 | <0.007 | 0.0372 | <0.01 | 0.1766 |
| GBF-01 rut9 | 59.19 | 39.92 | 0.0508 | 0.0541 | 0.0205 | 0.3040 | 0.0141 | <0.003 | 0.1816 | <0.004 | 0.0076 | 0.0248 | <0.006 | 0.0281 | <0.011 | 0.1735 |
| GBF-03 rut10 | 58.66 | 39.53 | 0.0100 | 0.0066 | 0.0041 | 0.1741 | 0.0132 | <0.003 | 0.6018 | <0.004 | 0.0082 | 0.0137 | 0.0074 | 0.0294 | <0.011 | 0.1632 |
| GBF-03 rut11 | 59.39 | 39.94 | 0.0026 | 0.0163 | 0.0086 | 0.3020 | <0.003 | <0.003 | 0.3235 | <0.004 | <0.005 | 0.0088 | <0.007 | 0.0198 | <0.01 | <0.01 |
| GBF-03 rut12 | 58.70 | 39.62 | 0.0054 | 0.0097 | 0.0028 | 0.1858 | <0.003 | <0.003 | 0.6278 | <0.004 | 0.0173 | 0.0122 | <0.007 | 0.0433 | <0.011 | 0.1513 |
| GBF-03 rut13 | 59.34 | 39.88 | 0.0032 | 0.0115 | 0.0023 | 0.0944 | 0.0031 | <0.003 | 0.5154 | <0.004 | 0.0139 | <0.006 | <0.007 | 0.0268 | <0.01 | 0.0646 |
| GBF-03 rut14 | 59.06 | 39.73 | 0.0058 | 0.0082 | 0.0017 | 0.0824 | <0.003 | <0.003 | 0.5831 | <0.004 | 0.0149 | <0.006 | <0.006 | 0.0835 | <0.01 | 0.1343 |
| GBF-03 rut15 | 58.15 | 39.72 | 0.0161 | 0.0089 | 0.0033 | 0.0751 | <0.003 | <0.003 | 0.4552 | <0.004 | <0.005 | 0.0128 | <0.007 | 0.0170 | <0.01 | 0.0154 |
| GBF-03 rut16 | 59.29 | 40.01 | 0.0127 | 0.0246 | 0.0126 | 0.4019 | <0.003 | <0.003 | 0.3969 | <0.004 | <0.006 | <0.006 | <0.007 | 0.0271 | <0.01 | 0.1932 |
| GBF-03 rut17 | 58.76 | 39.56 | 0.0106 | 0.0058 | 0.0025 | 0.0664 | <0.003 | <0.003 | 0.8010 | <0.004 | <0.006 | <0.006 | <0.006 | 0.0324 | <0.01 | 0.0404 |
| GBF-03 rut19 | 59.29 | 39.94 | 0.0028 | 0.0101 | 0.0382 | 0.1200 | <0.003 | <0.003 | 0.6380 | <0.004 | 0.0101 | <0.006 | <0.007 | 0.0275 | <0.01 | 0.2055 |
| GBF-03 rut2 | 59.41 | 40.01 | 0.0114 | 0.0073 | 0.0127 | 0.3947 | <0.003 | <0.003 | 0.2150 | <0.004 | <0.005 | <0.006 | <0.007 | 0.0089 | <0.01 | 0.0486 |
| GBF-03 rut20 | 58.75 | 39.60 | 0.0086 | 0.0139 | 0.0054 | 0.0988 | <0.003 | 0.0053 | 0.6040 | <0.004 | 0.0154 | 0.0113 | <0.007 | 0.0635 | <0.011 | 0.3497 |
| GBF-03 rut21 | 58.77 | 39.64 | 0.0066 | 0.0160 | 0.0035 | 0.3039 | <0.003 | <0.003 | 0.5161 | <0.004 | <0.005 | <0.006 | <0.007 | 0.0461 | <0.011 | 0.1810 |
| GBF-03 rut23 | 59.14 | 39.72 | 0.0086 | 0.0054 | 0.0024 | 0.0651 | <0.003 | <0.003 | 0.5046 | <0.004 | 0.0110 | <0.006 | <0.007 | 0.0252 | <0.01 | 0.0431 |
| GBF-03 rut3 | 57.43 | 39.14 | 0.0119 | 0.0201 | 0.0055 | 0.2167 | <0.003 | <0.003 | 1.0620 | <0.005 | 0.0183 | 0.0172 | <0.007 | 0.0614 | <0.011 | 1.2767 |
| GBF-03 rut4 | 59.02 | 39.86 | 0.0074 | 0.0181 | 0.0070 | 0.5294 | <0.003 | <0.003 | 0.2976 | <0.004 | <0.005 | 0.0440 | <0.007 | 0.0565 | <0.01 | 0.1189 |
| GBF-03 rut6 | 59.04 | 39.75 | 0.0057 | 0.0195 | 0.0113 | 0.3450 | 0.0042 | <0.003 | 0.3531 | <0.004 | <0.006 | <0.006 | <0.006 | 0.0166 | <0.01 | 0.0133 |
| GBF-03 rut7 | 56.78 | 38.71 | 0.0191 | 0.0197 | 0.0088 | 0.1161 | <0.003 | <0.003 | 1.3123 | <0.005 | 0.0140 | 0.0185 | <0.007 | 0.0304 | <0.011 | 1.924 |
| GBF-03 rut9 | 59.76 | 40.22 | 0.0095 | 0.0141 | 0.0027 | 0.1444 | <0.003 | <0.003 | 0.5255 | <0.004 | 0.0143 | 0.0163 | <0.007 | 0.0280 | <0.01 | 0.1194 |
| JEM-01 rut1 | 58.68 | 39.53 | 0.0121 | 0.0068 | <0.001 | 0.0328 | <0.003 | <0.003 | 0.6806 | <0.004 | 0.0325 | 0.0089 | <0.007 | 0.0566 | <0.011 | 0.3319 |
| JEM-01 rut10 | 60.29 | 40.52 | 0.0099 | 0.0086 | <0.001 | 0.0552 | <0.003 | <0.003 | 0.5270 | <0.004 | 0.0201 | 0.0110 | 0.0088 | 0.0620 | <0.01 | 0.0969 |
| JEM-01 rut11 | 59.21 | 39.78 | 0.0037 | 0.0054 | 0.0064 | 0.0815 | <0.003 | <0.003 | 0.5170 | <0.004 | <0.005 | 0.0251 | <0.007 | 0.0274 | <0.01 | 0.0195 |
| JEM-01 rut12 | 59.17 | 39.78 | 0.0098 | 0.0077 | 0.0020 | 0.0426 | <0.003 | <0.003 | 0.5561 | 0.0046 | 0.0253 | 0.0500 | <0.006 | 0.0441 | <0.01 | 0.0230 |
| JEM-01 rut13 | 58.88 | 39.56 | 0.0112 | 0.0116 | 0.0028 | 0.0343 | <0.003 | 0.0038 | 0.5106 | <0.004 | 0.0346 | 0.0088 | <0.007 | 0.0508 | <0.01 | 0.0406 |
| JEM-01 rut14 | 59.24 | 39.77 | 0.0071 | 0.0086 | 0.0024 | <0.02 | <0.003 | <0.003 | 0.5305 | <0.004 | 0.0085 | 0.0241 | <0.007 | 0.0216 | <0.01 | <0.01 |
| JEM-01 rut15 | 58.99 | 39.66 | 0.0114 | 0.0045 | 0.0019 | 0.0555 | <0.003 | <0.003 | 0.5100 | <0.004 | 0.0213 | 0.0163 | <0.006 | 0.0618 | <0.01 | 0.1295 |
| JEM-01 rut16 | 59.08 | 39.70 | 0.0104 | 0.0098 | 0.0038 | <0.02 | <0.003 | <0.003 | 0.5630 | <0.004 | 0.0291 | <0.006 | <0.007 | 0.0495 | <0.01 | 0.0482 |
| JEM-01 rut17 | 59.13 | 39.73 | 0.0099 | 0.0073 | <0.001 | 0.0295 | <0.003 | <0.003 | 0.5490 | <0.004 | 0.0330 | <0.006 | <0.007 | 0.0483 | <0.01 | 0.0257 |
| JEM-01 rut19 | 59.09 | 39.75 | 0.0136 | 0.0075 | 0.0025 | 0.0256 | <0.003 | <0.003 | 0.6051 | <0.004 | 0.0298 | 0.0136 | <0.007 | 0.0618 | <0.01 | 0.1325 |
| JEM-01 rut2 | 58.38 | 39.41 | 0.0143 | 0.0055 | <0.001 | 0.0554 | <0.003 | <0.003 | 0.7500 | <0.004 | 0.0160 | 0.0070 | <0.007 | 0.0699 | <0.011 | 0.5017 |
| JEM-01 rut20 | 59.10 | 39.77 | 0.0134 | 0.0071 | 0.0028 | 0.0985 | <0.003 | <0.003 | 0.5283 | <0.004 | 0.0077 | 0.0390 | <0.007 | 0.0341 | <0.01 | 0.1394 |
| JEM-01 rut21 | 59.12 | 39.79 | 0.0131 | 0.0058 | <0.001 | 0.0473 | <0.003 | <0.003 | 0.6301 | <0.004 | 0.0253 | 0.0300 | <0.006 | 0.0330 | <0.011 | 0.2035 |
| JEM-01 rut22 | 59.07 | 39.71 | 0.0114 | 0.0061 | 0.0064 | 0.0707 | <0.003 | <0.003 | 0.5196 | <0.004 | 0.0079 | 0.0137 | <0.006 | 0.0373 | <0.01 | 0.1002 |
| JEM-01 rut23 | 58.46 | 39.49 | 0.0075 | 0.0075 | 0.0019 | <0.02 | <0.003 | <0.003 | 1.3405 | <0.004 | 0.0290 | 0.0079 | <0.007 | 0.0406 | <0.01 | <0.01 |
| JEM-01 rut24 | 59.06 | 39.70 | 0.0087 | 0.0118 | <0.001 | 0.0568 | <0.003 | <0.003 | 0.5337 | <0.004 | 0.0435 | 0.0154 | <0.007 | 0.0323 | <0.01 | 0.0493 |
| JEM-01 rut25 | 59.18 | 39.80 | 0.0072 | 0.0066 | <0.001 | 0.0825 | <0.003 | <0.003 | 0.5232 | <0.004 | 0.0218 | 0.0436 | 0.0092 | 0.0828 | <0.01 | 0.0258 |
| JEM-01 rut26 | 58.53 | 39.49 | 0.0134 | 0.0055 | 0.0020 | 0.1139 | <0.003 | <0.003 | 0.6226 | <0.004 | 0.0165 | <0.006 | <0.007 | 0.0528 | <0.011 | 0.5029 |
| JEM-01 rut27 | 59.05 | 39.69 | 0.0106 | 0.0042 | <0.001 | 0.0539 | <0.003 | <0.003 | 0.5069 | <0.004 | 0.0220 | 0.0130 | <0.007 | 0.0738 | <0.01 | 0.0779 |
| JEM-01 rut28 | 59.08 | 39.70 | 0.0116 | 0.0102 | 0.0021 | 0.0285 | <0.003 | <0.003 | 0.5519 | <0.004 | 0.0226 | 0.0088 | <0.007 | 0.0536 | <0.01 | 0.0388 |
| JEM-01 rut3 | 59.02 | 39.69 | 0.0101 | 0.0086 | 0.0019 | 0.0642 | <0.003 | <0.003 | 0.5750 | <0.004 | 0.0276 | 0.0327 | <0.007 | 0.0489 | <0.01 | 0.0387 |
| JEM-01 rut30 | 58.98 | 39.66 | 0.0104 | 0.0047 | <0.001 | 0.0822 | <0.003 | <0.003 | 0.4954 | <0.004 | 0.0171 | 0.0325 | <0.006 | 0.0425 | <0.01 | 0.1192 |

*All elements are in wt. % (EMPA).

Appendix C: Eastern Sunda arc rutile trace element chemistry (EMPA)

| Analysis ID | Ti | O | Al | Si | Ca | V | Cr | Mn | Fe | Cu | Zr | Nb | Mo | Sn | Ta | W |
|--------------|-------|-------|--------|--------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| JEM-01 rut4 | 59.49 | 39.94 | 0.0124 | 0.0026 | 0.0017 | <0.02 | <0.003 | <0.003 | 0.5491 | <0.004 | 0.0205 | <0.006 | <0.007 | 0.0436 | <0.01 | <0.01 |
| JEM-01 rut5 | 59.04 | 39.66 | 0.0058 | 0.0037 | 0.0019 | 0.0200 | <0.003 | <0.003 | 0.5729 | <0.004 | 0.0110 | 0.0493 | <0.007 | 0.0221 | <0.01 | <0.01 |
| JEM-01 rut6 | 59.17 | 39.74 | 0.0092 | 0.0048 | <0.001 | 0.0485 | 0.0033 | <0.003 | 0.4774 | <0.004 | <0.006 | 0.0064 | <0.006 | 0.0438 | <0.01 | 0.0599 |
| JEM-01 rut7 | 58.63 | 39.54 | 0.0246 | <0.002 | 0.0043 | 0.0628 | <0.004 | 0.0043 | 0.7079 | <0.004 | 0.0217 | 0.0111 | <0.007 | 0.0386 | <0.011 | 0.3790 |
| JEM-01 rut8 | 59.08 | 39.71 | 0.0102 | 0.0078 | 0.0018 | <0.02 | 0.0044 | <0.003 | 0.5672 | <0.004 | 0.0300 | 0.0549 | <0.007 | 0.0548 | <0.01 | 0.0336 |
| JEM-01 rut9 | 59.01 | 39.66 | 0.0051 | 0.0126 | 0.0023 | 0.0458 | <0.003 | <0.003 | 0.5280 | <0.004 | 0.0200 | 0.0077 | <0.007 | 0.0425 | <0.01 | 0.0832 |
| JER-01 rut1 | 58.82 | 39.66 | 0.0638 | 0.0343 | 0.1079 | 0.1375 | 0.0087 | 0.0111 | 0.1519 | <0.004 | 0.0751 | 0.0122 | <0.007 | <0.002 | <0.01 | 0.0508 |
| JER-01 rut10 | 59.31 | 39.79 | 0.0117 | 0.0209 | 0.1146 | 0.0233 | 0.0087 | <0.003 | 0.1371 | <0.004 | 0.0635 | 0.0231 | <0.007 | <0.002 | <0.01 | <0.01 |
| JER-01 rut11 | 58.13 | 39.38 | 0.0143 | 0.0105 | 0.0276 | <0.02 | 0.0160 | <0.003 | 1.0980 | <0.004 | 0.1104 | 0.0234 | <0.006 | <0.002 | <0.01 | 0.0177 |
| JER-01 rut12 | 59.41 | 39.83 | 0.0107 | 0.0034 | 0.0407 | 0.0230 | 0.0179 | 0.0059 | 0.1585 | <0.004 | 0.0864 | 0.0162 | 0.0064 | <0.002 | <0.01 | 0.0158 |
| JER-01 rut13 | 59.21 | 39.71 | 0.0171 | 0.0115 | 0.0438 | <0.02 | 0.0095 | <0.003 | 0.1974 | <0.004 | 0.0709 | 0.0185 | <0.007 | <0.002 | <0.01 | 0.0153 |
| JER-01 rut14 | 59.05 | 39.70 | 0.0322 | 0.0610 | 0.0579 | <0.02 | 0.0085 | 0.0047 | 0.2163 | <0.004 | 0.0777 | 0.0210 | <0.007 | <0.002 | <0.01 | 0.0585 |
| JER-01 rut15 | 59.28 | 39.79 | 0.0153 | 0.0259 | 0.0228 | <0.02 | 0.0084 | <0.003 | 0.2231 | <0.004 | 0.1083 | 0.0296 | <0.006 | 0.0022 | <0.01 | <0.01 |
| JER-01 rut16 | 58.34 | 39.42 | 0.0313 | 0.0062 | 0.0674 | <0.02 | 0.0207 | <0.003 | 1.2179 | <0.004 | 0.0471 | <0.006 | <0.007 | <0.002 | <0.01 | <0.01 |
| JER-01 rut18 | | | | | | | | | | | | | | | | |
| JER-01 rut19 | | | | | | | | | | | | | | | | |
| JER-01 rut2 | 58.76 | 39.67 | 0.0761 | 0.1983 | 0.0903 | 0.0327 | 0.0069 | 0.0098 | 0.0973 | <0.004 | 0.0775 | 0.0148 | <0.006 | <0.002 | <0.01 | 0.0138 |
| JER-01 rut3 | 59.15 | 39.72 | 0.0212 | 0.0446 | 0.0439 | 0.0212 | 0.0079 | 0.0041 | 0.1993 | <0.004 | 0.0791 | 0.0224 | <0.007 | <0.002 | <0.01 | 0.0164 |
| JER-01 rut4 | 59.64 | 40.00 | 0.0054 | 0.0053 | 0.0939 | <0.02 | 0.0128 | <0.003 | 0.2441 | <0.004 | 0.0399 | 0.0300 | <0.007 | <0.002 | <0.01 | 0.0151 |
| JER-01 rut5 | 58.88 | 39.90 | 0.0783 | 0.1940 | 0.04514 | 0.0312 | <0.003 | 0.0195 | 0.0956 | <0.004 | 0.0916 | 0.0180 | <0.007 | <0.002 | <0.01 | <0.01 |
| JER-01 rut6 | 58.79 | 39.45 | 0.0156 | 0.0175 | 0.0630 | 0.0329 | 0.0124 | 0.0035 | 0.1900 | <0.004 | 0.0724 | 0.0196 | <0.006 | 0.0024 | <0.01 | 0.0239 |
| JER-01 rut7 | 59.80 | 40.34 | 0.0660 | 0.1632 | 0.1801 | 0.0301 | 0.0063 | 0.0135 | 0.0914 | <0.004 | 0.0647 | 0.0161 | <0.006 | 0.0033 | <0.01 | <0.01 |
| JER-01 rut8 | 59.09 | 39.68 | 0.0255 | 0.0420 | 0.0480 | 0.0306 | 0.0080 | 0.0037 | 0.1950 | <0.004 | 0.0714 | 0.0145 | <0.006 | <0.002 | <0.01 | 0.0290 |
| JER-01 rut9 | 59.27 | 39.73 | 0.0121 | 0.0047 | 0.0283 | 0.0200 | 0.0215 | <0.003 | 0.1480 | <0.004 | 0.1001 | 0.0140 | <0.007 | 0.0046 | <0.01 | <0.01 |
| LB002 rut1 | 59.29 | 39.74 | 0.0071 | 0.0094 | 0.0047 | <0.02 | <0.003 | <0.003 | 0.3654 | 0.0055 | <0.005 | 0.0092 | <0.006 | 0.0040 | <0.01 | <0.01 |
| LB002 rut10 | 59.00 | 39.82 | 0.0047 | 0.0210 | 0.0035 | 0.3717 | 0.0446 | <0.003 | 0.4663 | 0.0050 | 0.0315 | 0.0593 | <0.006 | 0.0243 | <0.01 | <0.01 |
| LB002 rut11 | 58.87 | 39.90 | 0.0032 | 0.0244 | <0.001 | 0.5619 | 0.0299 | <0.003 | 0.7139 | <0.004 | 0.0405 | 0.0819 | <0.007 | 0.0240 | <0.01 | <0.01 |
| LB002 rut12 | 58.86 | 39.70 | 0.0078 | 0.0165 | 0.0029 | 0.0372 | <0.003 | <0.003 | 0.7701 | <0.004 | 0.0316 | 0.0774 | <0.007 | 0.0280 | <0.011 | 0.2455 |
| LB002 rut13 | 59.14 | 39.72 | <0.003 | 0.0203 | 0.0036 | 0.0285 | 0.0071 | <0.003 | 0.5252 | <0.004 | <0.005 | 0.0123 | <0.006 | 0.0332 | <0.01 | <0.01 |
| LB002 rut14 | 59.35 | 39.77 | 0.0055 | 0.0106 | 0.0018 | <0.02 | <0.003 | <0.003 | 0.3358 | <0.004 | 0.0060 | 0.0100 | <0.007 | <0.002 | <0.01 | <0.01 |
| LB002 rut15 | 58.13 | 39.50 | 0.0119 | 0.0064 | 0.0024 | 0.0990 | 0.1009 | <0.003 | 0.6981 | <0.004 | 0.1247 | 0.5578 | 0.0348 | 0.0140 | <0.011 | 0.1928 |
| LB002 rut16 | 56.94 | 38.91 | 0.0117 | 0.0089 | <0.002 | 0.0495 | <0.003 | <0.003 | 1.3611 | <0.005 | 0.0378 | 0.1932 | <0.007 | 0.0488 | <0.011 | 1.3507 |
| LB002 rut17 | 58.05 | 39.32 | 0.0146 | 0.0084 | <0.001 | 0.0312 | <0.003 | <0.003 | 0.8497 | <0.004 | 0.0266 | 0.3635 | <0.007 | 0.0482 | <0.011 | 0.3325 |
| LB002 rut18 | | | | | | | | | | | | | | | | |
| LB002 rut19 | 59.16 | 39.70 | 0.0132 | 0.0306 | 0.0132 | 0.0305 | <0.003 | <0.003 | 0.3721 | 0.0179 | <0.005 | 0.0067 | <0.006 | <0.002 | <0.01 | <0.01 |
| LB002 rut2 | | | | | | | | | | | | | | | | |
| LB002 rut20 | | | | | | | | | | | | | | | | |
| LB002 rut3 | 59.06 | 39.70 | 0.0079 | 0.0130 | <0.001 | 0.0260 | <0.003 | <0.003 | 0.6175 | <0.004 | <0.005 | 0.0168 | <0.006 | 0.0327 | <0.01 | 0.0562 |
| LB002 rut4 | 59.19 | 39.69 | 0.0132 | 0.0312 | 0.0146 | <0.02 | <0.003 | <0.003 | 0.3127 | <0.004 | <0.005 | <0.006 | <0.007 | <0.002 | <0.01 | <0.01 |
| LB002 rut5 | 57.93 | 39.48 | 0.0096 | 0.0083 | <0.001 | 0.0946 | 0.1380 | <0.003 | 0.8035 | <0.004 | 0.1184 | 0.7755 | 0.0173 | 0.0124 | <0.01 | 0.1607 |
| LB002 rut6 | 59.48 | 40.01 | 0.0049 | 0.0068 | 0.0044 | 0.1324 | 0.0046 | <0.003 | 0.4936 | <0.004 | 0.0105 | 0.0641 | <0.006 | 0.0485 | <0.01 | <0.01 |
| LB002 rut7 | 59.20 | 39.96 | 0.0061 | 0.0118 | 0.0019 | 0.4116 | 0.1358 | <0.003 | 0.4166 | <0.004 | 0.0104 | <0.006 | <0.007 | 0.0251 | <0.01 | <0.01 |
| LB002 rut9 | 58.39 | 39.88 | 0.1297 | 0.4725 | 0.2020 | <0.02 | <0.003 | 0.0288 | 0.4276 | 0.0085 | 0.0176 | 0.0176 | <0.006 | <0.002 | <0.01 | <0.01 |
| LB018 rut1 | 58.92 | 39.58 | 0.0166 | 0.0244 | 0.0495 | 0.0817 | <0.003 | 0.0033 | 0.3780 | <0.004 | 0.0075 | <0.006 | <0.007 | 0.0025 | <0.01 | <0.01 |
| LB018 rut10 | | | | | | | | | | | | | | | | |
| LB018 rut2 | 59.03 | 39.67 | 0.0138 | 0.0125 | 0.0164 | 0.0480 | 0.0035 | <0.003 | 0.5469 | <0.004 | 0.0274 | 0.0405 | <0.006 | <0.002 | <0.01 | <0.01 |
| LB018 rut3 | 58.69 | 39.47 | 0.0288 | 0.0332 | 0.0276 | 0.0271 | 0.0202 | 0.0041 | 0.4616 | <0.004 | 0.0283 | 0.0602 | <0.006 | <0.002 | <0.01 | <0.01 |
| LB018 rut4 | | | | | | | | | | | | | | | | |
| LB018 rut6 | | | | | | | | | | | | | | | | |

*All elements are in wt. % (EMPA).

Appendix C: Eastern Sunda arc rutile trace element chemistry (EMPA)

| Analysis ID | Ti | O | Al | Si | Ca | V | Cr | Mn | Fe | Cu | Zr | Nb | Mo | Sn | Ta | W |
|-------------|-------|-------|---------|--------|---------|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| LB018 rut7 | | | | | | | | | | | | | | | | |
| LB018 rut8 | | | | | | | | | | | | | | | | |
| LB018 rut9 | | | | | | | | | | | | | | | | |
| LB022 rut1 | 59.17 | 39.99 | 0.0170 | 0.0115 | 0.0057 | 0.5516 | 0.0098 | 0.0211 | 0.4475 | <-0.004 | 0.0282 | 0.0155 | <-0.006 | 0.0502 | <-0.01 | <-0.01 |
| LB022 rut10 | | | | | | | | | | | | | | | | |
| LB022 rut2 | 58.58 | 39.80 | 0.0080 | 0.0079 | 0.0029 | 0.6746 | 0.0156 | <-0.003 | 0.8726 | <-0.004 | 0.0378 | 0.0127 | <-0.007 | 0.0373 | <-0.01 | 0.1868 |
| LB022 rut3 | 58.43 | 39.62 | 0.0061 | 0.0076 | 0.0027 | 0.2897 | 0.0153 | <-0.003 | 1.2257 | <-0.004 | 0.1362 | 0.0262 | 0.0140 | 0.0298 | <-0.01 | 0.0237 |
| LB022 rut6 | 58.28 | 39.56 | 0.0071 | 0.0057 | 0.0016 | 0.4012 | 0.0077 | 0.0048 | 1.3361 | <-0.004 | 0.0389 | 0.0175 | 0.0107 | 0.0295 | <-0.01 | <-0.01 |
| LB022 rut7 | | | | | | | | | | | | | | | | |
| LB022 rut8 | | | | | | | | | | | | | | | | |
| LB022 rut9 | | | | | | | | | | | | | | | | |
| LB028 rut1 | 59.15 | 39.78 | 0.0091 | 0.0110 | 0.1360 | 0.0257 | <-0.003 | <-0.003 | 0.5089 | <-0.004 | 0.0197 | 0.0442 | <-0.006 | 0.0093 | <-0.01 | <-0.01 |
| LB028 rut10 | | | | | | | | | | | | | | | | |
| LB028 rut2 | 58.73 | 39.55 | 0.0318 | 0.1165 | 0.0463 | 0.0419 | 0.0067 | 0.0182 | 0.3020 | <-0.004 | 0.0170 | 0.0435 | <-0.007 | <-0.002 | <-0.01 | <-0.01 |
| LB028 rut3 | | | | | | | | | | | | | | | | |
| LB028 rut4 | | | | | | | | | | | | | | | | |
| LB028 rut5 | | | | | | | | | | | | | | | | |
| LB028 rut6 | | | | | | | | | | | | | | | | |
| LB028 rut8 | | | | | | | | | | | | | | | | |
| LB028 rut9 | | | | | | | | | | | | | | | | |
| LB029 rut1 | 58.39 | 39.58 | 0.0221 | 0.0338 | 0.0153 | 0.1103 | <-0.003 | <-0.003 | 1.3459 | <-0.004 | 0.0892 | 0.0761 | <-0.007 | 0.0092 | <-0.01 | <-0.01 |
| LB029 rut10 | | | | | | | | | | | | | | | | |
| LB029 rut2 | 57.16 | 38.94 | 0.0285 | 0.0352 | 0.0215 | 0.1069 | <-0.003 | <-0.003 | 1.9313 | <-0.004 | 0.0987 | 0.0770 | <-0.006 | 0.0153 | <-0.01 | 0.0154 |
| LB029 rut3 | 58.01 | 39.49 | 0.0367 | 0.0319 | 0.0123 | 0.1438 | <-0.003 | <-0.003 | 1.7949 | <-0.004 | 0.0935 | 0.0960 | <-0.007 | 0.0175 | <-0.01 | <-0.01 |
| LB029 rut5 | | | | | | | | | | | | | | | | |
| LB029 rut6 | 57.78 | 39.21 | 0.0379 | 0.0690 | 0.0253 | 0.1043 | <-0.003 | 0.0036 | 1.2792 | <-0.004 | 0.0909 | 0.0511 | 0.0070 | 0.0053 | <-0.01 | 0.0163 |
| LB029 rut7 | | | | | | | | | | | | | | | | |
| LB029 rut8 | | | | | | | | | | | | | | | | |
| LB029 rut9 | | | | | | | | | | | | | | | | |
| LB036 rut1 | 58.85 | 39.63 | 0.0131 | 0.0110 | 0.0125 | 0.1588 | 0.0030 | <-0.003 | 0.5789 | <-0.004 | 0.0134 | 0.0769 | <-0.006 | 0.0107 | <-0.01 | <-0.01 |
| LB036 rut10 | 58.82 | 39.59 | 0.0142 | 0.0240 | 0.0022 | <-0.02 | 0.0083 | <-0.003 | 0.7292 | <-0.004 | 0.0327 | 0.0253 | <-0.007 | 0.0187 | <-0.01 | 0.0110 |
| LB036 rut11 | 59.10 | 39.75 | 0.0080 | 0.0100 | 0.0020 | 0.0319 | <-0.003 | <-0.003 | 0.6494 | <-0.004 | 0.0109 | 0.0711 | <-0.007 | 0.0341 | <-0.01 | <-0.01 |
| LB036 rut12 | 45.81 | 35.18 | 0.0250 | 0.0065 | 0.0017 | 0.3932 | 0.0309 | 0.0296 | 15.0277 | <-0.004 | 0.0293 | 0.0360 | <-0.007 | 0.0156 | <-0.011 | <-0.011 |
| LB036 rut13 | 58.95 | 39.62 | 0.0126 | 0.0070 | <-0.001 | <-0.02 | <-0.003 | <-0.003 | 0.6648 | <-0.004 | 0.0305 | 0.0158 | <-0.007 | 0.0229 | <-0.01 | <-0.01 |
| LB036 rut14 | 58.81 | 39.85 | <-0.003 | 0.0136 | 0.0021 | 0.8799 | 0.0033 | <-0.003 | 0.3561 | <-0.004 | 0.0356 | 0.0142 | <-0.007 | 0.0237 | <-0.01 | <-0.01 |
| LB036 rut15 | | | | | | | | | | | | | | | | |
| LB036 rut16 | | | | | | | | | | | | | | | | |
| LB036 rut17 | | | | | | | | | | | | | | | | |
| LB036 rut18 | | | | | | | | | | | | | | | | |
| LB036 rut3 | 58.93 | 39.61 | 0.0100 | 0.0133 | 0.0021 | 0.0227 | <-0.003 | 0.0112 | 0.5400 | <-0.004 | 0.0105 | 0.0830 | <-0.007 | 0.0247 | <-0.01 | <-0.01 |
| LB036 rut4 | 58.08 | 39.47 | 0.0693 | 0.1655 | 0.0024 | 0.4576 | 0.0041 | <-0.003 | 0.5616 | <-0.004 | 0.0405 | 0.0393 | <-0.007 | 0.0166 | <-0.01 | 0.0102 |
| LB036 rut5 | 59.49 | 40.04 | 0.0134 | 0.0110 | 0.0019 | 0.0884 | <-0.003 | 0.0040 | 0.6610 | <-0.004 | 0.0490 | 0.0278 | <-0.006 | 0.0323 | <-0.01 | <-0.01 |
| LB036 rut6 | 58.78 | 39.55 | 0.0227 | 0.0026 | <-0.001 | 0.1328 | 0.0091 | <-0.003 | 0.6013 | <-0.004 | <-0.005 | 0.0261 | <-0.007 | 0.0112 | <-0.01 | <-0.01 |
| LB036 rut7 | 58.82 | 39.60 | 0.0068 | 0.0122 | 0.0017 | 0.1556 | <-0.003 | 0.0033 | 0.5948 | <-0.004 | 0.0131 | 0.0606 | <-0.007 | 0.0092 | <-0.01 | <-0.01 |
| LB036 rut8 | 58.67 | 39.52 | 0.0137 | 0.0041 | 0.0025 | 0.0531 | <-0.003 | <-0.003 | 0.7291 | <-0.004 | 0.0455 | 0.0348 | <-0.007 | 0.0193 | <-0.01 | <-0.01 |
| LB036 rut9 | 58.86 | 39.44 | 0.0236 | 0.0142 | 0.0057 | 0.0326 | 0.0070 | <-0.003 | 0.6073 | <-0.004 | 0.0200 | <-0.006 | <-0.007 | 0.0240 | <-0.01 | 0.0182 |

***All elements are in wt. % (EMPA).**

Appendix C: Eastern Sunda arc rutile trace element chemistry (LA-ICP-MS)

| Analysis ID | Al | Ca | Ce | Dy | Er | Eu | Fe | Gd | Hf | Mg | Mn | Nb | Nd | Pb | Si | Sm | Sn | Ta | Th | U | W | Y | Yb | Zr | Ti |
|-------------|-------|----------|--------|-------|-------|-----|--------|-------|------|--------|--------|-------|-------|------|-------|-------|--------|-------|-------|-------|--------|------|------|--------|--------|
| LB025_r1 | 815 | 4822 | 47.24 | 8.61 | 4.48 | 1.4 | 4068 | 10.47 | 20.9 | 138.1 | 203.8 | 317.5 | 32.57 | 45.6 | 2317 | 8.78 | 16.8 | 21.07 | 0.94 | 2.56 | 31.4 | 41.9 | 4.01 | 455.8 | 587084 |
| LB025_r10 | 1015 | 352 | 10.93 | 1.29 | 0.88 | 0.2 | 6246 | 1.17 | 40.1 | 1289.9 | 122.7 | 356.3 | 4.83 | 21.2 | 3134 | 1.01 | 18.1 | 16.62 | 0.60 | 0.85 | 34.3 | 7.0 | 0.88 | 805.9 | 586600 |
| LB025_r11 | 1993 | 649 | 26.25 | 4.86 | 3.63 | 0.6 | 6596 | 3.85 | 49.5 | 2094.2 | 229.1 | 328.6 | 14.47 | 41.1 | 4289 | 3.00 | 19.8 | 13.87 | 0.81 | 2.63 | 38.1 | 23.3 | 3.67 | 945.9 | 582449 |
| LB025_r12 | 1079 | 596 | 19.47 | 5.64 | 3.70 | 0.7 | 4649 | 4.13 | 33.6 | 1677.7 | 167.7 | 293.0 | 14.10 | 48.3 | 2392 | 4.13 | 29.1 | 16.65 | 0.83 | 2.58 | 33.0 | 25.8 | 4.72 | 661.8 | 589356 |
| LB025_r13 | 3810 | 840 | 27.74 | 4.17 | 2.31 | 0.8 | 8254 | 4.02 | 33.2 | 4245.2 | 340.6 | 275.7 | 16.48 | 54.9 | 8494 | 4.13 | 23.3 | 14.25 | 0.38 | 2.26 | 38.4 | 23.9 | 2.39 | 759.3 | 571523 |
| LB025_r14 | 821 | 473 | 33.74 | 5.12 | 3.06 | 1.0 | 4924 | 4.00 | 36.8 | 357.1 | 132.9 | 304.7 | 16.56 | 28.6 | 3252 | 2.89 | 20.3 | 12.19 | 1.14 | 2.43 | 36.4 | 30.1 | 3.71 | 1047.8 | 588295 |
| LB025_r15 | 1028 | 1088 | 49.77 | 11.07 | 7.52 | 1.4 | 4536 | 9.36 | 35.2 | 114.7 | 272.8 | 219.5 | 31.41 | 76.1 | 2722 | 7.66 | 17.2 | 11.65 | 0.55 | 2.91 | 26.5 | 55.0 | 6.96 | 884.9 | 588757 |
| LB025_r16 | 2073 | 884 | 32.68 | 5.56 | 2.76 | 0.6 | 5916 | 5.02 | 38.9 | 205.8 | 182.2 | 252.9 | 20.34 | 59.2 | 5511 | 4.90 | 21.6 | 14.62 | 0.10 | 1.36 | 22.6 | 26.0 | 3.10 | 1060.2 | 582988 |
| LB025_r17 | 1051 | 955 | 33.33 | 4.79 | 3.14 | 0.8 | 5451 | 3.72 | 48.4 | 288.5 | 262.3 | 261.3 | 16.96 | 58.5 | 2586 | 3.43 | 16.9 | 15.41 | 1.28 | 3.06 | 32.4 | 22.8 | 3.72 | 1152.0 | 587964 |
| LB025_r18 | 1192 | 1401 | 36.94 | 5.94 | 3.60 | 0.9 | 4413 | 5.61 | 33.6 | 215.2 | 326.0 | 263.0 | 21.93 | 82.4 | 3604 | 4.70 | 16.3 | 14.83 | 0.33 | 2.15 | 22.5 | 32.5 | 3.53 | 819.8 | 587188 |
| LB025_r19 | 1330 | 1348 | 35.23 | 3.99 | 2.25 | 0.9 | 5438 | 4.16 | 24.3 | 447.4 | 226.5 | 282.6 | 19.37 | 55.0 | 3367 | 4.23 | 22.0 | 14.28 | 0.59 | 1.68 | 44.3 | 22.2 | 2.41 | 507.0 | 586709 |
| LB025_r2 | 895 | 2100 | 20.55 | 5.21 | 3.47 | 0.6 | 4117 | 4.43 | 34.1 | 286.5 | 110.7 | 334.0 | 14.50 | 31.0 | 2516 | 3.63 | 29.2 | 14.35 | 0.88 | 1.36 | 30.7 | 24.1 | 3.61 | 723.0 | 588750 |
| LB025_r4 | 4952 | 7646 | 93.02 | 13.65 | 10.41 | 2.0 | 5430 | 12.55 | 45.3 | 632.4 | 262.5 | 342.3 | 54.79 | 61.4 | 10317 | 11.54 | 18.3 | 20.02 | 1.47 | 1.87 | 28.3 | 73.2 | 9.80 | 1116.4 | 567519 |
| LB025_r5 | 1533 | 1899 | 119.86 | 14.57 | 7.46 | 3.7 | 7883 | 17.05 | 30.5 | 217.1 | 302.5 | 270.7 | 60.50 | 87.1 | 4275 | 12.88 | 17.1 | 13.60 | 0.51 | 2.79 | 36.9 | 94.7 | 6.47 | 646.2 | 589255 |
| LB025_r6 | 364 | 352 | 19.35 | 3.62 | 2.27 | 0.4 | 4530 | 3.09 | 39.2 | 105.4 | 77.8 | 336.6 | 10.72 | 24.4 | 1640 | 2.33 | 28.4 | 11.56 | 0.49 | 1.26 | 44.8 | 19.4 | 2.36 | 965.8 | 591636 |
| LB025_r7 | 990 | 1648 | 33.45 | 6.73 | 5.01 | 0.7 | 4887 | 5.72 | 41.2 | 704.9 | 121.6 | 388.1 | 19.06 | 23.6 | 2277 | 4.25 | 21.5 | 14.89 | 0.92 | 1.98 | 43.4 | 33.8 | 4.73 | 686.2 | 588268 |
| LB025_r8 | 3394 | 1873 | 24.94 | 7.11 | 5.16 | 0.8 | 5082 | 7.35 | 37.3 | 1200.9 | 138.1 | 338.8 | 19.30 | 19.2 | 7057 | 5.83 | 34.6 | 14.44 | 0.97 | 1.33 | 36.7 | 44.7 | 4.53 | 739.3 | 578570 |
| LB025_r9 | 521 | 1247 | 22.37 | 5.04 | 2.96 | 0.4 | 4166 | 4.08 | 31.4 | 105.1 | 115.2 | 302.5 | 15.07 | 36.1 | 1729 | 3.89 | 28.1 | 11.79 | 0.29 | 2.07 | 44.6 | 24.5 | 2.99 | 773.8 | 591008 |
| LB032_r1 | 4470 | 460 | 2.81 | 0.47 | 0.25 | 0.2 | 88150 | 0.46 | 1.7 | 102.1 | 17.3 | 135.2 | 1.86 | 18.1 | 4379 | 0.39 | 141.0 | 4.12 | 3.04 | 1.00 | 342.9 | 1.9 | 0.25 | 17.7 | 519664 |
| LB032_r10 | 2995 | 199 | 12.34 | 3.47 | 2.42 | 1.2 | 57088 | 3.49 | 2.4 | 184.6 | 40.3 | 235.5 | 11.36 | 10.6 | 2197 | 3.29 | 187.7 | 14.29 | 12.54 | 6.85 | 408.9 | 19.4 | 2.69 | 22.1 | 547981 |
| LB032_r11 | 7132 | 575 | 11.05 | 1.65 | 0.98 | 0.6 | 48668 | 1.97 | 1.9 | 108.8 | 41.3 | 142.7 | 8.26 | 23.2 | 3612 | 1.95 | 124.0 | 12.19 | 11.18 | 3.81 | 262.0 | 7.1 | 1.01 | 24.7 | 547956 |
| LB032_r12 | 4352 | 312 | 7.80 | 2.14 | 2.09 | 0.6 | 63177 | 2.17 | 3.1 | 121.1 | 51.9 | 154.2 | 5.50 | 25.2 | 3046 | 1.49 | 147.7 | 8.36 | 11.08 | 4.14 | 220.6 | 16.0 | 2.43 | 73.3 | 540823 |
| LB032_r13 | 2386 | 451 | 18.61 | 3.73 | 2.59 | 1.7 | 61756 | 3.81 | 2.2 | 150.6 | 46.7 | 211.5 | 13.63 | 9.2 | 3268 | 3.36 | 107.1 | 18.83 | 10.29 | 4.00 | 334.4 | 18.9 | 2.73 | 19.7 | 543651 |
| LB032_r14 | 1572 | 238 | 17.69 | 2.91 | 2.26 | 1.1 | 3555 | 3.05 | 5.8 | 107.2 | 31.7 | 234.4 | 11.95 | 13.0 | 3519 | 2.70 | 184.9 | 12.31 | 21.37 | 5.35 | 155.9 | 32.2 | 4.35 | 20.2 | 570522 |
| LB032_r15 | 12165 | 1555 | 44.15 | 4.84 | 4.42 | 1.0 | 11063 | 5.36 | 2.4 | 177.4 | 46.9 | 193.3 | 24.86 | 57.5 | 3425 | 6.16 | 154.9 | 12.31 | 21.37 | 5.35 | 155.9 | 32.2 | 4.35 | 20.2 | 570522 |
| LB032_r16 | 1722 | <239.608 | 15.20 | 2.44 | 1.61 | 1.8 | 45200 | 2.84 | 2.5 | 124.2 | 26.7 | 165.8 | 10.59 | 7.2 | 2474 | 2.64 | 173.9 | 5.92 | 8.21 | 2.89 | 456.8 | 11.5 | 1.57 | 15.6 | 556534 |
| LB032_r17 | 1735 | 451 | 8.09 | 1.80 | 1.39 | 0.6 | 16263 | 1.78 | 1.5 | 127.9 | 35.5 | 117.9 | 6.74 | 10.6 | 2133 | 1.81 | 120.4 | 8.47 | 12.20 | 3.41 | 305.6 | 10.5 | 1.60 | 13.1 | 581081 |
| LB032_r18 | 2996 | 708 | 28.02 | 5.39 | 5.02 | 1.6 | 65996 | 4.90 | 5.3 | 192.3 | 179.5 | 179.6 | 15.86 | 47.4 | 6021 | 3.08 | 134.0 | 8.90 | 17.44 | 4.92 | 180.6 | 34.0 | 4.54 | 135.3 | 535760 |
| LB032_r19 | 2856 | 499 | 15.15 | 2.29 | 1.96 | 0.7 | 19044 | 2.45 | 4.7 | 119.2 | 29.5 | 167.3 | 9.06 | 17.7 | 3626 | 2.41 | 176.0 | 10.23 | 11.45 | 3.19 | 198.1 | 15.2 | 1.71 | 46.1 | 575671 |
| LB032_r2 | 2622 | 321 | 24.01 | 5.18 | 3.87 | 1.3 | 37104 | 4.95 | 2.5 | 123.0 | 78.0 | 203.7 | 16.51 | 29.1 | 4806 | 4.09 | 134.4 | 11.50 | 18.20 | 6.23 | 158.3 | 29.4 | 3.99 | 37.3 | 560594 |
| LB032_r4 | 2491 | <172.212 | 1.76 | 0.31 | 0.17 | 0.2 | 62220 | 0.53 | 3.2 | 109.2 | 19.5 | 105.6 | 1.22 | 4.7 | 32309 | 0.35 | 156.8 | 3.06 | 5.60 | 1.97 | 175.0 | 1.1 | 0.20 | 23.4 | 506616 |
| LB032_r5 | 3206 | 327 | 1.75 | 0.31 | 0.26 | 0.2 | 65018 | 0.32 | 2.1 | 151.4 | 29.1 | 120.3 | 1.46 | 9.9 | 5263 | 0.29 | 140.7 | 8.45 | 8.56 | 4.88 | 515.2 | 2.2 | 0.29 | 20.9 | 537335 |
| LB032_r6 | 3130 | 287 | 28.52 | 3.97 | 3.10 | 1.3 | 15804 | 3.89 | 2.7 | 123.0 | 49.4 | 198.8 | 17.47 | 19.0 | 6746 | 3.61 | 146.3 | 9.13 | 18.89 | 7.08 | 174.3 | 22.0 | 3.15 | 45.6 | 574001 |
| LB032_r7 | 3797 | 667 | 13.05 | 3.79 | 2.50 | 1.0 | 39070 | 3.32 | 2.7 | 141.0 | 27.3 | 183.1 | 9.29 | 35.2 | 4124 | 2.78 | 216.3 | 10.44 | 9.41 | 4.04 | 190.0 | 21.3 | 2.57 | 34.9 | 556311 |
| LB032_r8 | 5403 | <152.464 | 11.86 | 2.36 | 1.75 | 1.1 | 17838 | 2.25 | 3.6 | 119.0 | 61.6 | 157.5 | 10.81 | 14.6 | 7652 | 2.45 | 225.9 | 11.37 | 13.19 | 4.76 | 198.4 | 13.3 | 1.87 | 56.5 | 568916 |
| LB032_r9 | 3108 | 457 | 23.04 | 3.40 | 2.02 | 1.7 | 77071 | 3.69 | 2.7 | 164.4 | 30.5 | 211.2 | 15.77 | 8.2 | 2788 | 4.09 | 105.6 | 10.14 | 28.19 | 7.03 | 387.9 | 13.6 | 2.28 | 16.8 | 531578 |
| LB033_r1 | 769 | <209.465 | 7.53 | 1.06 | 0.53 | 0.5 | 2419 | 0.95 | 15.7 | 93.1 | 6.7 | 404.0 | 4.39 | 1.1 | 1727 | 1.41 | 90.8 | 35.27 | 3.45 | 4.86 | 223.6 | 4.0 | 0.82 | 301.4 | 593408 |
| LB033_r10 | 1510 | <139.001 | 4.18 | 0.64 | 0.21 | 0.3 | 1103 | 0.95 | 9.7 | 96.0 | 25.3 | 220.0 | 3.12 | 0.6 | 1023 | 1.17 | 1170.4 | 20.31 | 7.47 | 5.39 | 1230.4 | 1.8 | 0.24 | 166.6 | 593172 |
| LB033_r11 | 1529 | <247.886 | 4.43 | 0.69 | 0.29 | 0.2 | 1601 | 0.98 | 10.7 | 91.6 | 36.5 | 153.4 | 2.80 | 0.4 | 4387 | 1.56 | 134.2 | 7.33 | 3.02 | 8.25 | 226.0 | 2.3 | 0.32 | 217.5 | 590023 |
| LB033_r12 | 1609 | <134.858 | 14.86 | 2.04 | 1.23 | 0.9 | 2097 | 2.14 | 10.4 | 91.6 | 7.2 | 346.4 | 8.62 | 0.3 | 2907 | 2.25 | 93.9 | 18.37 | 1.26 | 4.11 | 152.4 | 9.8 | 1.47 | 228.5 | 591935 |
| LB033_r13 | 359 | 169 | 8.87 | 1.16 | 0.62 | 0.4 | 2109 | 1.29 | 18.3 | 89.0 | 22.5 | 273.9 | 5.46 | 1.6 | 411 | 1.32 | 68.8 | 12.99 | 6.71 | 4.71 | 80.9 | 4.3 | 0.61 | 347.1 | 598564 |
| LB033_r14 | 750 | <119.721 | 12.69 | 1.29 | 0.79 | 0.6 | 2519 | 1.59 | 16.5 | 92.7 | 10.8 | 296.4 | 7.83 | 0.6 | 475 | 1.77 | 97.5 | 11.79 | 7.60 | 5.12 | 196.0 | 6.4 | 0.83 | 307.9 | 595063 |
| LB033_r15 | 815 | <123.711 | 6.30 | 0.76 | 0.49 | 0.3 | 2340 | 1.00 | 12.6 | 85.7 | 30.6 | 271.0 | 3.89 | 0.9 | 1198 | 0.92 | 99.8 | 18.87 | 2.95 | 3.81 | 118.3 | 3.6 | 1.40 | 243.3 | 594334 |
| LB033_r16 | 9543 | <116.809 | 9.84 | 1.13 | 0.83 | 0.7 | 2040 | 1.33 | 12.4 | 104.1 | 14.4 | 290.7 | 5.98 | 0.5 | 21087 | 1.60 | 111.3 | 18.87 | 2.40 | 4.58 | 122.1 | 5.0 | 0.81 | 249.2 | 559123 |
| LB033_r17 | 1100 | <120.817 | 7.26 | 1.01 | 0.65 | 0.4 | 2245 | 1.05 | 16.5 | 86.7 | 10.3 | 351.1 | 4.39 | 0.2 | 3172 | 1.01 | 108.6 | 21.12 | 1.23 | 4.59 | 176.9 | 4.1 | 1.10 | 325.1 | 591378 |
| LB033_r18 | 454 | <119.790 | 8.28 | 1.35 | 0.73 | 0.6 | 1966 | 1.49 | 14.0 | 89.2 | <1.647 | 196.0 | 5.25 | 0.2 | 587 | 1.27 | 122.2 | 9.03 | 1.62 | 2.89 | 215.1 | 5.2 | 0.62 | 302.8 | 595765 |
| LB033_r19 | 2552 | 337 | 67.22 | 9.00 | 5.27 | 1.3 | 10771 | 12.13 | 6.5 | 104.3 | 105.2 | 271.6 | 47.47 | 8.3 | 6261 | 10.24 | 830.2 | 21.05 | 45.04 | 17.81 | 167.3 | 45.9 | 3.92 | 103.7 | 578360 |
| LB033_r2 | 3944 | 293 | 34.71 | 3.36 | 2.10 | 2.3 | 7686 | 4.55 | 7.9 | 121.2 | 344.0 | 265.2 | 22.38 | 10.3 | 8670 | 5.58 | 180.7 | 27.91 | 24.61 | 21.25 | 330.8 | 15.3 | 2.23 | 147.4 | 576324 |
| LB033_r20 | 21214 | 409 | 36.77 | 4.35 | 2.89 | 0.7 | 212394 | 5.78 | 4.4 | 171.0 | | | | | | | | | | | | | | | |

Appendix C: Eastern Sunda arc rutile trace element chemistry (LA-ICP-MS)

| Analysis ID | Al | Ca | Ce | Dy | Er | Eu | Fe | Gd | Hf | Mg | Mn | Nb | Nd | Pb | Si | Sm | Sn | Ta | Th | U | W | Y | Yb | Zr | Ti |
|-------------|-------|----------|--------|--------|--------|--------|--------|--------|--------|---------|--------|--------|--------|-------|----------|--------|-------|-------|-------|-------|---------|--------|--------|--------|--------|
| LB033_14 | 22.18 | 139 | 32.47 | 5.60 | 5.60 | 6.04 | 14.4 | 14.4 | 14.4 | 14.4 | 26.0 | 218.1 | 20.80 | 1.1 | 6394 | 5.77 | 95.9 | 10.00 | 1.86 | 5.93 | 129.3 | 24.5 | 3.07 | 32.73 | 586413 |
| LB033_15 | 47.88 | 123 | 12.78 | 1.83 | 1.83 | 6.520 | 2.48 | 3.0 | 11.18 | 72.8 | 325.5 | 7.56 | 1.0 | 4154 | 2.19 | 145.9 | 13.18 | 6.80 | 6.57 | 206.0 | 7.4 | 0.87 | 247.2 | 582495 | |
| LB033_16 | 6.14 | <140.467 | 8.08 | 0.77 | 0.43 | 0.4 | 1876 | 1.11 | 14.7 | 87.6 | 16.2 | 340.9 | 5.11 | 0.5 | 784 | 1.51 | 80.6 | 16.28 | 6.21 | 5.11 | 143.7 | 3.2 | 0.54 | 296.4 | 595348 |
| LB033_17 | 3782 | 367 | 14.07 | 1.63 | 1.63 | 1.633 | 13.4 | 138.1 | 16.4 | 289.6 | 8.77 | 0.9 | 5734 | 2.03 | 162.6 | 16.55 | 4.90 | 8.01 | 15.17 | 6.2 | 0.83 | 273.5 | 585250 | | |
| LB033_18 | 4949 | 143 | 28.39 | 2.64 | 1.20 | 1.3 | 1681 | 3.35 | 14.5 | 97.0 | 12.5 | 215.7 | 18.66 | 0.9 | 10201 | 4.19 | 81.1 | 11.81 | 8.09 | 3.52 | 127.0 | 10.0 | 1.26 | 261.1 | 578504 |
| LB033_19 | 1603 | <128.806 | 14.15 | 1.89 | 0.97 | 0.7 | 1886 | 2.42 | 12.3 | 90.8 | 28.1 | 316.7 | 9.12 | 1.1 | 581 | 2.36 | 47.22 | 43.66 | 13.43 | 7.58 | 245.5 | 6.9 | 0.81 | 168.9 | 594218 |
| LB041_1 | 3433 | 309 | 0.78 | 0.26 | 0.22 | 0.0 | 7727 | 16.1 | 192.2 | 9.5 | 464.3 | 0.68 | 0.6 | 10256 | 0.12 | 148.7 | 39.46 | 2.50 | 10.16 | 358.0 | 1.8 | 0.32 | 275.5 | 574832 | |
| LB041_10 | 104 | <107.106 | 0.20 | 0.03 | 0.02 | 0.0 | 7887 | 0.04 | 21.6 | 83.4 | 3.2 | 523.0 | 0.11 | 0.1 | <212.688 | <0.005 | 143.3 | 31.15 | 2.05 | 7.81 | 549.7 | 0.1 | 0.03 | 327.5 | 591775 |
| LB041_11 | 798 | <124.961 | 2.70 | 0.27 | 0.11 | 8506 | 0.13 | 25.3 | 246.1 | 10.2 | 248.2 | 1.10 | 4.4 | 2134 | 0.16 | 313.8 | 27.41 | 1.19 | 10.95 | 223.6 | 1.3 | 0.15 | 206.5 | 588048 | |
| LB041_12 | 6738 | <154.362 | 1.36 | 0.16 | 0.13 | 11206 | 0.14 | 27.5 | 3493.1 | 365.9 | 482.6 | 0.67 | 3.1 | 11922 | 0.07 | 86.9 | 27.80 | 3.24 | 26.70 | 500.3 | 1.1 | 0.28 | 422.6 | 562763 | |
| LB041_13 | 8584 | 208 | 4.96 | 0.63 | 0.46 | 0.4 | 22887 | 0.71 | 12.3 | 8152.8 | 909.3 | 444.3 | 2.83 | 4.1 | 11645 | 0.58 | 162.5 | 40.78 | 10.34 | 22.81 | 771.7 | 3.8 | 0.50 | 176.8 | 546678 |
| LB041_14 | 13395 | 191 | 4.05 | 0.47 | 0.42 | 0.2 | 17660 | 0.49 | 8.5 | 7720.7 | 991.4 | 578.0 | 1.78 | 8.5 | 18377 | 0.41 | 122.1 | 25.34 | 15.15 | 22.11 | 1450.4 | 2.7 | 0.70 | 127.9 | 536537 |
| LB041_15 | 15752 | 43094 | 66.93 | 8.81 | 4.55 | 6.0 | 22287 | 14.23 | 8.7 | 14922.4 | 2030.3 | 524.4 | 56.37 | 7.3 | 23627 | 15.37 | 126.7 | 43.76 | 13.18 | 7.44 | 530.8 | 47.1 | 3.16 | 142.8 | 480200 |
| LB041_2 | 5334 | 526 | 3.58 | 0.75 | 0.38 | 0.7 | 12704 | 0.39 | 8.1 | 4718.5 | 527.3 | 191.6 | 2.26 | 6.7 | 7888 | 0.35 | 148.0 | 13.53 | 16.19 | 27.33 | 1384.3 | 2.3 | 0.59 | 121.0 | 566371 |
| LB041_3 | 87 | 542 | 0.50 | 0.24 | <0.005 | 8691 | <0.021 | 24.5 | 85.4 | <5.590 | 548.9 | 0.41 | 0.0 | 989 | <0.018 | 187.9 | 38.24 | 5.51 | 7.25 | 326.9 | 0.3 | 0.05 | 309.5 | 589555 | |
| LB041_4 | 139 | <308.332 | 0.56 | <0.009 | 0.02 | 0.0 | 7222 | <0.017 | 7.3 | 150.1 | 54.3 | 201.2 | 0.30 | 1.8 | 1333 | <0.014 | 133.2 | 12.79 | 11.88 | 23.42 | 1298.7 | 0.4 | 0.06 | 124.4 | 590320 |
| LB041_5 | 73 | <179.436 | 0.43 | 0.02 | 0.01 | 7951 | 0.03 | 13.9 | 86.2 | 4.8 | 528.9 | 0.09 | 0.1 | 455 | <0.008 | 187.1 | 19.15 | 0.97 | 9.76 | 630.1 | 0.1 | <0.005 | 277.6 | 591128 | |
| LB041_6 | 2218 | <137.491 | 3.14 | 0.64 | 0.41 | 0.1 | 6950 | 0.45 | 14.2 | 319.2 | 26.0 | 486.1 | 1.95 | 0.9 | 4995 | 0.37 | 119.3 | 31.46 | 7.58 | 11.08 | 422.2 | 3.9 | 0.54 | 244.1 | 583668 |
| LB041_7 | 306 | <156.999 | 1.44 | 0.71 | 0.79 | 0.1 | 20942 | 0.83 | 10.0 | 145.0 | 94.1 | 308.3 | 0.80 | 0.4 | 867 | 0.31 | 93.6 | 16.05 | 4.97 | 15.24 | 301.0 | 7.2 | 1.11 | 135.6 | 580804 |
| LB041_8 | 255 | <112.026 | 2.22 | 0.01 | 0.04 | 0.0 | 14215 | 0.03 | 89.0 | 87.0 | 10.0 | 4151.1 | 1.06 | 0.6 | <222.308 | 0.03 | 717.8 | 83.95 | 0.79 | 41.12 | 16552.0 | 0.2 | 0.03 | 691.8 | 588622 |
| LB041_9 | 590 | <233.838 | 2.18 | 0.28 | 0.18 | 0.1 | 6773 | 0.24 | 14.9 | 86.0 | 10.0 | 602.1 | 1.09 | 0.7 | 2616 | 0.31 | 113.4 | 21.74 | 14.58 | 2.88 | 52.0 | 50.0 | 10.17 | 41.02 | 561857 |
| LB045_1 | 11448 | 914 | 27.67 | 10.37 | 8.17 | 1.4 | 3946 | 7.27 | 22.8 | 749.5 | 49.6 | 310.5 | 18.47 | 10.2 | 14915 | 5.63 | 15.1 | 21.74 | 14.58 | 2.88 | 52.0 | 50.0 | 10.17 | 41.02 | 561857 |
| LB045_10 | 8537 | 683 | 66.03 | 21.95 | 17.73 | 3.2 | 3533 | 14.36 | 23.0 | 172.9 | 82.2 | 177.4 | 37.62 | 10.3 | 9812 | 10.45 | 13.3 | 8.11 | 11.40 | 4.96 | 39.3 | 101.5 | 21.64 | 565.2 | 572656 |
| LB045_11 | 887 | 1768 | 7.57 | 10.00 | 6.95 | 2.1 | 1616 | 6.57 | 20.8 | 105.2 | 22.7 | 102.8 | 8.03 | 3.3 | 2688 | 4.22 | 4.1 | 5.86 | 0.98 | 1.10 | 8.6 | 52.9 | 7.76 | 466.4 | 591472 |
| LB045_12 | 141 | 304 | 4.71 | 9.72 | 6.08 | 1.1 | 2835 | 21.3 | 184.6 | 14.8 | 92.9 | 5.16 | 2.0 | 770 | 3.29 | 3.7 | 5.49 | 0.31 | 1.44 | 2.1 | 47.9 | 6.39 | 452.6 | 595022 | |
| LB045_13 | 2686 | 1330 | 180.30 | 48.07 | 24.89 | 7.2 | 3255 | 52.47 | 21.3 | 185.9 | 109.4 | 248.6 | 154.66 | 10.9 | 6129 | 53.23 | 10.8 | 10.94 | 13.98 | 2.76 | 23.3 | 190.4 | 25.73 | 469.2 | 583355 |
| LB045_14 | 3103 | 1287 | 110.93 | 77.82 | 56.80 | 8.0 | 5945 | 40.68 | 25.0 | 301.8 | 149.4 | 313.1 | 70.83 | 28.3 | 5634 | 21.80 | 28.3 | 23.46 | 41.47 | 8.35 | 51.8 | 401.2 | 66.89 | 470.8 | 581095 |
| LB045_15 | 3727 | 749 | 62.21 | 27.51 | 21.22 | 3.0 | 2867 | 20.46 | 24.4 | 348.7 | 78.3 | 327.8 | 46.04 | 5.1 | 5010 | 14.56 | 36.2 | 20.19 | 22.02 | 5.11 | 97.9 | 137.7 | 22.83 | 534.1 | 584325 |
| LB045_16 | 52 | <378.794 | 0.37 | 0.11 | 0.02 | 0.0 | 2639 | <0.020 | 20.4 | 86.3 | <5.377 | 191.2 | 0.31 | 0.2 | 871 | 0.06 | 7.2 | 7.69 | 0.04 | 0.15 | 1.8 | 0.8 | 0.08 | 482.4 | 595308 |
| LB045_17 | 103 | 658 | 9.86 | 3.27 | 1.02 | 0.1 | 3259 | 3.95 | 24.9 | 114.4 | 3.7 | 107.6 | 9.57 | 0.5 | 717 | 3.05 | 5.7 | 5.44 | 0.18 | 0.77 | 5.0 | 14.7 | 0.52 | 617.6 | 594469 |
| LB045_18 | 2071 | 451 | 64.21 | 20.24 | 14.27 | 2.1 | 2914 | 15.95 | 23.1 | 152.8 | 76.0 | 193.6 | 49.49 | 4.5 | 3505 | 14.92 | 31.5 | 9.27 | 8.82 | 3.37 | 65.8 | 93.9 | 14.94 | 578.4 | 588715 |
| LB045_19 | 5933 | 1763 | 80.90 | 54.56 | 42.05 | 9.0 | 3399 | 33.05 | 49.3 | 2462.9 | 277.5 | 220.3 | 68.74 | 72.4 | 9121 | 24.14 | 6.4 | 22.03 | 80.95 | 17.53 | 44.8 | 223.2 | 57.04 | 67.66 | 572759 |
| LB045_3 | 401 | 1025 | 27.64 | 25.16 | 15.15 | 3.3 | 2582 | 18.10 | 26.7 | 123.1 | 49.0 | 130.4 | 29.21 | 6.9 | 2172 | 14.31 | 5.5 | 5.71 | 1.82 | 1.78 | 5.3 | 110.5 | 16.16 | 595.5 | 592270 |
| LB045_4 | 8462 | 716 | 20.55 | 10.95 | 9.41 | 1.5 | 2195 | 6.90 | 25.4 | 383.9 | 53.4 | 95.9 | 16.77 | 12.7 | 12420 | 5.24 | 7.2 | 5.00 | 3.54 | 3.56 | 7.6 | 67.4 | 13.50 | 634.7 | 570380 |
| LB045_5 | 1132 | 873 | 87.45 | 23.52 | 15.62 | 3.9 | 4053 | 20.96 | 20.5 | 185.4 | 111.0 | 137.9 | 66.28 | 7.4 | 4049 | 19.39 | 28.1 | 5.86 | 3.70 | 2.45 | 19.6 | 108.3 | 18.39 | 449.8 | 587831 |
| LB045_6 | 88 | 318 | 3.68 | 1.47 | 0.99 | 0.3 | 1755 | 1.51 | 18.7 | 93.0 | 12.8 | 113.1 | 2.53 | 0.8 | 874 | 0.95 | 6.7 | 5.48 | 0.23 | 0.83 | 6.0 | 8.0 | 1.05 | 463.8 | 595893 |
| LB045_7 | 416 | 219 | 51.70 | 11.29 | 7.75 | 2.0 | 2222 | 9.85 | 23.2 | 119.5 | 28.5 | 133.0 | 34.08 | 1.4 | 1324 | 11.28 | 6.1 | 5.90 | 2.33 | 1.41 | 6.0 | 52.8 | 8.81 | 521.5 | 594431 |
| LB045_8 | 43 | <282.385 | 4.79 | 1.47 | 0.59 | 0.3 | 2920 | 1.26 | 25.5 | 97.4 | 8.6 | 110.2 | 3.89 | 0.5 | 1831 | 1.08 | 30.5 | 5.66 | 0.25 | 1.24 | 7.6 | 4.7 | 1.35 | 519.1 | 594010 |
| LB045_9 | 16065 | 958 | 107.57 | 30.71 | 21.64 | 4.0 | 2748 | 23.29 | 16.6 | 285.0 | 107.9 | 230.0 | 71.47 | 16.6 | 17089 | 19.15 | 21.0 | 9.24 | 15.00 | 5.87 | 52.3 | 124.5 | 25.90 | 378.2 | 555031 |
| ELF-03_1 | 66 | 158 | 0.49 | 0.07 | 0.01 | 0.0 | 5863 | 0.07 | 2.7 | 132.3 | 6.8 | 182.3 | 0.19 | 0.6 | 262 | 0.06 | 161.4 | 12.81 | 1.67 | 9.10 | 419.3 | 0.2 | 0.03 | 59.8 | 593694 |
| ELF-03_10 | 35 | <318.117 | 0.18 | 0.01 | 0.03 | 0.0 | 5124 | 0.02 | 2.0 | 100.2 | <4.484 | 362.7 | 0.02 | 9.6 | <617.722 | 0.03 | 273.0 | 21.62 | 0.04 | 2.27 | 785.3 | 0.2 | 0.04 | 42.9 | 594074 |
| ELF-03_12 | 111 | 154 | 1.72 | 0.17 | 0.11 | 0.0 | 4429 | 0.12 | 6.3 | 93.7 | 14.7 | 314.1 | 0.73 | 0.7 | 920 | 0.18 | 307.4 | 22.71 | 5.86 | 8.61 | 633.7 | 0.8 | 0.15 | 80.9 | 593307 |
| ELF-03_13 | 156 | 406 | 0.93 | 0.13 | 0.14 | 0.0 | 4645 | 0.17 | 1.8 | 149.9 | 8.9 | 199.6 | 0.54 | 3.5 | 769 | 0.10 | 81.5 | 8.18 | 2.36 | 8.17 | 217.7 | 0.8 | 0.14 | 53.8 | 593675 |
| ELF-03_14 | 3625 | 2667 | 2.48 | 0.65 | 0.59 | 0.1 | 8918 | 0.76 | 2.4 | 3517.6 | 37.6 | 249.9 | 1.53 | 3.7 | 5300 | 0.38 | 143.7 | 14.68 | 4.63 | 11.11 | 570.1 | 3.7 | 0.21 | 43.9 | 575139 |
| ELF-03_15 | 29 | <132.896 | 0.20 | 0.07 | 0.02 | 0.0 | 3759 | 0.09 | 2.6 | 91.0 | <1.968 | 47.3 | 0.05 | 2.7 | 348 | 0.02 | 214.3 | 2.98 | 0.45 | 12.86 | 146.7 | 0.3 | 0.04 | 70.2 | 595487 |
| ELF-03_16 | 62 | <131.968 | 0.56 | 0.04 | 0.01 | 0.0 | 5719 | 0.03 | 1.9 | 87.6 | <1.962 | 198.8 | 0.32 | 0.1 | <284.259 | 0.09 | 247.3 | 18.31 | 0.54 | 4.79 | 1110.5 | 0.2 | 0.02 | 26.0 | 593537 |
| ELF-03_17 | 46 | <132.659 | 0.36 | 0.02 | 0.02 | <0.002 | 5504 | 0.01 | 1.8 | 113.2 | 3.6 | 81.8 | 0.21 | 0.2 | <267.039 | <0.006 | 159.0 | 6.39 | 0.92 | 16.15 | 49.2 | 0.2 | 0.05 | 66.1 | 594632 |
| ELF-03_18 | 385 | 1484 | 1.31 | 0.13 | 0.10 | 0.0 | 4461 | 0.12 | 5.3 | 126.7 | 45.6 | 328.1 | 0.70 | 1.7 | 1230 | 0.17 | 273.8 | 22.98 | 5.59 | 13.30 | 688.6 | 0.6 | 0.11 | 92.1 | 591377 |
| ELF-03_2 | 8245 | 286 | 9.33 | 0.80 | 0.58 | 0.3 | 13646 | 1.11 | 3.5 | 9303.6 | 100.1 | 352.0 | 4.82 | 7. | | | | | | | | | | | |

Appendix C: Eastern Sunda arc rutile trace element chemistry (LA-ICP-MS)

| Analysis ID | Al | Ca | Ce | Dy | Er | Eu | Fe | Gd | Hf | Mg | Mn | Nb | Nd | Pb | Si | Sm | Sn | Ta | Th | U | W | Y | Yb | Zr | Ti |
|-------------|-------|----------|--------|-------|-------|--------|-------|--------|------|---------|--------|--------|-------|-------|----------|--------|-------|--------|-------|-------|---------|-------|-------|-------|--------|
| ELF-03_r3 | 104 | 456 | 1.54 | 0.26 | 0.19 | 0.0 | 3809 | 0.39 | 5.7 | 124.4 | 6.2 | 193.5 | 1.02 | 0.3 | 1237 | 0.14 | 228.8 | 21.93 | 9.53 | 13.02 | 1997.0 | 1.2 | 0.22 | 104.0 | 592219 |
| ELF-03_r4 | 304 | <121.414 | 1.82 | 0.18 | 0.22 | 0.0 | 5192 | 0.11 | 0.6 | 169.3 | 80.9 | 55.0 | 1.31 | 2.4 | 527 | 0.28 | 33.0 | 4.72 | 2.16 | 2.92 | 8.8 | 1.0 | 0.44 | 10.7 | 593987 |
| ELF-03_r5 | 548 | <155.770 | 2.46 | 0.27 | 0.24 | 0.1 | 4740 | 0.21 | 4.2 | 587.8 | 16.0 | 384.3 | 1.28 | 2.2 | 1751 | 0.40 | 76.5 | 17.53 | 3.78 | 5.97 | 96.2 | 1.4 | 0.26 | 96.4 | 591656 |
| ELF-03_r6 | 993 | <152.263 | 5.19 | 0.53 | 0.27 | 0.2 | 827.7 | 0.32 | 8.27 | 68.7 | 68.7 | 3.51 | 4.0 | 1464 | 0.83 | 108.7 | 26.72 | 7.77 | 17.44 | 17.44 | 660.1 | 1.8 | 0.26 | 71.5 | 591529 |
| ELF-03_r7 | 31 | <130.475 | 0.16 | 0.01 | 0.01 | <0.002 | 4890 | 0.01 | 1.1 | 87.2 | 24.9 | 145.7 | 0.03 | 0.6 | <244.163 | 0.02 | 308.7 | 6.54 | 0.16 | 3.33 | 337.1 | 0.1 | 0.01 | 20.1 | 594791 |
| ELF-03_r8 | 94 | <116.247 | 0.10 | 0.01 | 0.03 | <0.002 | 5575 | 0.01 | 4.0 | 106.2 | 7.2 | 151.0 | 0.02 | 0.2 | <218.101 | <0.005 | 233.0 | 10.27 | 3.95 | 7.43 | 250.1 | 0.1 | 0.04 | 84.4 | 594244 |
| ELF-03_r9 | 38 | <287.498 | 0.38 | 0.03 | 0.04 | 0.0 | 5711 | <0.015 | 4.1 | 87.4 | <4.053 | 374.9 | 0.18 | 1.1 | 698 | 0.02 | 275.4 | 11.51 | 0.60 | 10.99 | 971.3 | 0.2 | 0.01 | 97.6 | 592551 |
| GBF-04_r2 | 1350 | 976 | 52.27 | 9.85 | 5.04 | 4.1 | 2905 | 12.08 | 3.1 | 208.3 | 92.1 | 89.1 | 55.93 | 2.8 | 3827 | 13.78 | 277.0 | 2.64 | 1.95 | 10.21 | 1046.7 | 38.1 | 4.52 | 25.8 | 588313 |
| GBF-04_r3 | 6541 | 4629 | 108.06 | 20.10 | 11.26 | 3.4 | 8183 | 22.98 | 4.6 | 1397.8 | 213.3 | 89.7 | 92.59 | 51.7 | 17966 | 20.77 | 86.7 | 5.11 | 9.85 | 23.87 | 786.3 | 94.3 | 8.74 | 42.1 | 556016 |
| GBF-04_r4 | 6714 | 10477 | 30.17 | 8.95 | 6.34 | 1.3 | 8373 | 9.10 | 3.3 | 222.2 | 106.0 | 210.9 | 29.35 | 14.1 | 19453 | 8.04 | 332.7 | 8.51 | 5.41 | 7.98 | 1696.8 | 48.0 | 6.50 | 22.1 | 549376 |
| GBF-04_r5 | 3875 | 8037 | 80.21 | 17.07 | 10.79 | 6.2 | 4195 | 20.96 | 1.2 | 161.3 | 28.3 | 36.5 | 80.36 | 26.6 | 10594 | 20.33 | 398.5 | 1.02 | 1.24 | 5.39 | 865.6 | 84.3 | 11.84 | 13.0 | 569839 |
| GBF-04_r6 | 14599 | 909 | 26.48 | 13.84 | 13.13 | 1.7 | 6067 | 10.29 | 6.6 | 1572.6 | 232.0 | 34.8 | 22.16 | 5.5 | 18255 | 7.01 | 54.4 | 1.34 | 2.52 | 4.11 | 220.3 | 72.7 | 13.14 | 59.3 | 551789 |
| GBF-04_r7 | 5697 | 14755 | 20.70 | 40.43 | 31.59 | 3.0 | 3989 | 29.87 | 1.8 | 118.7 | 6.9 | 79.6 | 28.90 | 6.5 | 13697 | 14.60 | 322.6 | 4.75 | 2.86 | 6.88 | 163.2 | 278.5 | 35.94 | 28.9 | 568940 |
| GBF-04_r8 | 28 | <135.352 | 0.17 | 0.04 | 0.01 | 0.0 | 5938 | 0.02 | 10.3 | 83.8 | <1.870 | 85.4 | 0.16 | 0.0 | 346 | 0.04 | 128.9 | 5.92 | 0.89 | 16.62 | 1709.6 | 0.2 | 0.01 | 119.1 | 592621 |
| GBF-04_r9 | 491 | 970 | 10.21 | 1.57 | 0.64 | 0.3 | 4629 | 1.80 | 2.3 | 206.5 | 22.7 | 201.1 | 9.81 | 17.4 | 1459 | 2.24 | 152.2 | 21.56 | 1.31 | 9.75 | 1085.4 | 4.8 | 0.66 | 37.7 | 591102 |
| SPF-05_r2 | 1164 | <391.841 | 13.88 | 2.25 | 0.90 | 0.4 | 15640 | 1.88 | 5.1 | 1680.1 | 325.2 | 227.5 | 9.76 | 2.8 | 2482 | 2.42 | 33.3 | 14.67 | 23.85 | 6.58 | 85.0 | 7.5 | 1.23 | 38.6 | 580478 |
| SPF-05_r3 | 29299 | 77143 | 31.41 | 20.70 | 14.87 | 4.0 | 18180 | 16.05 | 0.9 | 15826.9 | 458.4 | 217.3 | 33.98 | 12.9 | 82700 | 12.78 | 24.2 | 8.74 | 16.28 | 5.40 | 81.5 | 152.1 | 15.26 | 16.6 | 364794 |
| SPF-05_r4 | 28851 | 1063 | 14.83 | 1.83 | 0.81 | 0.3 | 41989 | 2.85 | 1.1 | 25159.9 | 181.1 | 156.2 | 13.79 | 2.9 | 40934 | 3.06 | 61.9 | 11.75 | 3.69 | 5.93 | 71.2 | 5.6 | 1.25 | 13.4 | 454197 |
| SPF-05_r5 | 14215 | 51829 | 73.67 | 8.22 | 4.59 | 2.9 | 13104 | 11.15 | 0.8 | 11601.7 | 331.2 | 193.2 | 52.59 | 12.6 | 44045 | 10.54 | 113.7 | 9.71 | 9.16 | 11.96 | 848.2 | 37.8 | 3.88 | 13.0 | 460329 |
| SPF-05_r6 | 4055 | 34785 | 12.12 | 2.27 | 1.62 | 1.3 | 27836 | 2.98 | 2.4 | 312.6 | 113.8 | 302.3 | 10.12 | 42.8 | 27042 | 2.10 | 158.1 | 11.33 | 8.16 | 18.84 | 2428.1 | 13.7 | 1.71 | 47.7 | 506675 |
| NEF-02_r1 | 69 | <136.973 | 0.78 | 0.08 | 0.04 | 0.0 | 7694 | 0.11 | 11.1 | 109.8 | 43.7 | 285.0 | 6.81 | 21.5 | 2866 | 0.36 | 72.6 | 23.96 | 2.51 | 19.17 | 1983.8 | 0.4 | 0.16 | 207.8 | 586568 |
| NEF-02_r10 | 964 | <135.478 | 1.63 | 0.28 | 0.26 | 0.0 | 10193 | 0.18 | 8.4 | 119.5 | 494.0 | 331.8 | 0.87 | 2.3 | <261.982 | 0.25 | 108.8 | 15.98 | 3.29 | 19.17 | 1983.8 | 1.1 | 0.41 | 123.2 | 587884 |
| NEF-02_r11 | 187 | <109.922 | 0.73 | 0.15 | 0.12 | 0.1 | 4016 | 0.07 | 2.9 | 102.4 | 35.4 | 130.7 | 0.27 | 19.0 | 482 | 0.08 | 103.5 | 5.02 | 2.06 | 13.16 | 182.8 | 0.8 | 0.20 | 64.8 | 594865 |
| NEF-02_r12 | 1238 | <129.681 | 5.56 | 0.48 | 0.29 | 0.1 | 6409 | 0.48 | 7.2 | 759.0 | 317.1 | 205.1 | 2.45 | 28.4 | 1189 | 0.38 | 105.3 | 8.16 | 10.29 | 19.65 | 893.1 | 1.8 | 0.27 | 169.6 | 589332 |
| NEF-02_r13 | 536 | 2314 | 13.81 | 1.19 | 0.60 | 1.2 | 4884 | 1.46 | 11.1 | 109.8 | 43.7 | 285.0 | 6.81 | 21.5 | 2866 | 0.36 | 72.6 | 23.96 | 2.51 | 19.17 | 1983.8 | 0.4 | 0.16 | 207.8 | 586568 |
| NEF-02_r14 | 2712 | 418 | 6.45 | 1.22 | 0.95 | 0.2 | 9602 | 0.73 | 8.6 | 1940.7 | 370.5 | 285.8 | 3.05 | 7.5 | 4076 | 0.15 | 186.9 | 11.43 | 2.69 | 25.34 | 1639.2 | 6.2 | 0.89 | 213.4 | 579220 |
| NEF-02_r15 | 219 | <128.626 | 7.46 | 0.10 | 0.13 | 0.0 | 5713 | 0.12 | 9.0 | 102.3 | 105.9 | 333.8 | 0.52 | 2.7 | <251.196 | 0.15 | 86.3 | 12.14 | 2.74 | 15.91 | 2175.1 | 0.7 | 0.11 | 138.6 | 592365 |
| NEF-02_r16 | 16488 | 370 | 7.49 | 1.11 | 0.84 | 0.2 | 4670 | 0.68 | 2.3 | 717.7 | 123.5 | 160.6 | 3.51 | 190.0 | 1801 | 0.58 | 64.6 | 22.01 | 7.92 | 12.79 | 150.5 | 4.4 | 0.74 | 54.6 | 551221 |
| NEF-02_r17 | 1155 | 1104 | 89.97 | 13.53 | 7.14 | 3.2 | 13183 | 13.40 | 5.8 | 172.5 | 1206.2 | 340.0 | 56.00 | 4.7 | 761 | 14.27 | 74.3 | 14.03 | 21.23 | 19.81 | 242.7 | 55.9 | 5.45 | 91.5 | 594026 |
| NEF-02_r18 | 83 | 7348 | 1.06 | 0.13 | 0.07 | 0.0 | 4175 | 0.11 | 1.1 | 101.7 | 172.7 | 199.6 | 0.45 | 13.1 | 848 | 0.17 | 107.1 | 5.41 | 1.09 | 8.28 | 1133.1 | 0.9 | 0.09 | 14.0 | 587395 |
| NEF-02_r19 | 33 | <246.143 | 0.40 | 0.15 | 0.04 | 0.0 | 4598 | 0.10 | 6.5 | 96.8 | 26.5 | 174.9 | 0.26 | 5.9 | <505.346 | 0.10 | 45.3 | 7.72 | 0.18 | 5.15 | 220.0 | 0.4 | 0.08 | 60.0 | 595221 |
| NEF-02_r4 | 44 | 16457 | 18.87 | 4.50 | 2.78 | 1.3 | 4448 | 4.34 | 31.7 | 96.5 | 420.1 | 466.7 | 13.65 | 6.4 | 703 | 4.19 | 73.7 | 25.39 | 4.57 | 23.95 | 1893.9 | 25.5 | 3.71 | 516.9 | 578310 |
| NEF-02_r6 | 119 | <158.334 | 11.40 | 1.85 | 0.95 | 0.3 | 5011 | 2.51 | 9.0 | 112.1 | 181.2 | 362.6 | 8.52 | 1.0 | 711 | 2.10 | 114.6 | 11.70 | 3.35 | 27.81 | 1891.1 | 9.1 | 0.82 | 139.8 | 592177 |
| NEF-02_r7 | 44 | <142.803 | 1.57 | 0.12 | 0.10 | 0.1 | 5048 | 0.05 | 10.1 | 87.4 | 47.0 | 327.6 | 0.84 | 0.6 | 512 | 0.09 | 77.4 | 14.09 | 3.69 | 14.05 | 321.1 | 1.0 | 0.16 | 273.9 | 593784 |
| NEF-02_r8 | 49 | <189.826 | 3.75 | 0.41 | 0.24 | 0.1 | 3779 | 0.33 | 9.3 | 95.6 | 56.1 | 245.3 | 1.71 | 1.8 | 438 | 0.38 | 72.7 | 7.46 | 3.27 | 12.72 | 466.7 | 1.9 | 0.37 | 151.5 | 594902 |
| NEF-02_r9 | 414 | <173.390 | 1.31 | 0.11 | 0.03 | 0.0 | 7270 | 0.26 | 2.1 | 596.5 | 134.6 | 355.6 | 0.73 | 1.9 | 1196 | 0.11 | 124.2 | 19.82 | 1.25 | 5.61 | 686.8 | 0.5 | 0.01 | 35.3 | 590066 |
| ELF-01_r1 | 109 | <135.671 | 60.99 | 2.45 | 0.96 | 0.8 | 7765 | 4.87 | 2.0 | 97.7 | 4.8 | 189.2 | 41.58 | 1.2 | 1177 | 7.80 | 78.5 | 11.01 | 2.90 | 2.71 | 105.5 | 7.1 | 0.95 | 22.1 | 590277 |
| ELF-01_r10 | 158 | <111.791 | 0.60 | 0.11 | 0.10 | 0.0 | 11831 | 0.12 | 8.1 | 119.5 | 139.7 | 1165.2 | 0.33 | 0.2 | <200.712 | 0.09 | 46.0 | 119.54 | 4.83 | 14.08 | 2424.7 | 0.6 | 0.12 | 108.6 | 586060 |
| ELF-01_r12 | 84 | <129.024 | 0.14 | 0.02 | 0.00 | 0.0 | 6187 | <0.004 | 7.9 | 112.8 | 19.7 | 203.4 | 0.14 | 0.3 | 303 | 0.07 | 28.2 | 10.20 | 2.67 | 4.03 | 173.3 | 0.2 | 0.09 | 127.9 | 592332 |
| ELF-01_r13 | 1642 | 289 | 14.93 | 0.89 | 0.31 | 0.2 | 10746 | 1.51 | 4.6 | 1769.1 | 33.2 | 275.4 | 9.81 | 0.6 | 2985 | 2.18 | 167.6 | 26.05 | 10.35 | 20.56 | 4097.6 | 2.6 | 0.26 | 67.2 | 578391 |
| ELF-01_r14 | 206 | <116.458 | 0.28 | 0.06 | 0.07 | 0.0 | 12977 | 0.03 | 6.3 | 85.9 | 43.3 | 339.0 | 0.14 | 0.6 | <208.848 | 0.05 | 98.8 | 33.75 | 0.69 | 17.89 | 12618.1 | 0.3 | 0.06 | 85.4 | 576477 |
| ELF-01_r15 | 184 | 145 | 0.17 | 0.02 | 0.01 | <0.001 | 10107 | <0.004 | 7.0 | 86.0 | 14.8 | 114.0 | 0.08 | 0.2 | <206.221 | 0.00 | 59.1 | 7.36 | 3.50 | 22.11 | 6766.5 | 0.1 | 0.01 | 101.0 | 585117 |
| ELF-01_r16 | 307 | <126.565 | 1.52 | 1.34 | 0.56 | 0.4 | 7194 | 1.44 | 3.9 | 327.5 | <1.752 | 217.9 | 0.36 | 0.5 | 484 | 1.34 | 140.0 | 28.41 | 1.57 | 17.01 | 34.2 | 4.0 | 0.44 | 70.5 | 590387 |
| ELF-01_r17 | 145 | <325.797 | 0.09 | 0.02 | 0.02 | <0.003 | 15652 | <0.009 | 9.4 | 78.0 | 21.8 | 188.0 | 0.13 | 0.2 | 1001 | <0.011 | 122.6 | 13.40 | 0.94 | 28.56 | 21221.6 | 0.1 | 0.06 | 151.2 | 587545 |
| ELF-01_r18 | 164 | <140.842 | 0.23 | 0.06 | 0.03 | 0.0 | 9666 | 0.02 | 6.5 | 86.8 | 3.2 | 868.3 | 0.25 | 0.1 | <252.236 | 0.04 | 70.5 | 40.53 | 1.38 | 14.96 | 7664.3 | 0.2 | 0.05 | 80.3 | 582317 |
| ELF-01_r19 | 2088 | 331 | 16.67 | 0.91 | 0.52 | 0.3 | 7513 | 1.30 | 5.5 | 367.1 | 16.9 | 405.2 | 11.68 | 1.2 | 3619 | 1.98 | 113.5 | 64.15 | 7.40 | 18.78 | 1356.7 | 3.8 | 0.61 | 116.3 | 583145 |
| ELF-01_r2 | 94 | 229 | 38.15 | 2.40 | 0.88 | 0.4 | 7340 | 4.29 | 2.9 | 74.1 | 226.0 | 31.93 | 0.5 | 930 | 6.87 | 137.1 | 13.60 | 5.96 | 1.69 | 51.1 | 13.60 | 5.96 | 1.69 | 51.1 | 590654 |
| ELF-01_r20 | 147 | 1115 | 7.22 | 1.34 | 0.72 | 0.2 | 7468 | 1.32 | 6.6 | 99.3 | 4.0 | 384.1 | 6.73 | 0.4 | 952 | 1.14 | 64.8 | 28.94 | 7.10 | 26.13 | 1791.4 | 6.1 | 0.81 | 101.2 | |

Appendix C: Eastern Sunda arc rutile trace element chemistry (LA-ICP-MS)

| Analysis ID | Al | Ca | Ce | Dy | Er | Eu | Fe | Gd | Hf | Mg | Mn | Nb | Nd | Pb | Si | Sm | Sn | Ta | Th | U | W | Y | Yb | Zr | Ti |
|-------------|-------|----------|--------|--------|--------|--------|-------|--------|------|--------|--------|-------|--------|--------|----------|--------|-------|--------|-------|-------|---------|------|--------|-------|--------|
| ELF-01_121 | 704 | <156.770 | 0.29 | 0.05 | 0.02 | 0.0 | 18533 | 0.02 | 3.1 | 103.7 | 10.7 | 151.9 | 0.22 | 0.0 | <280.389 | 0.02 | 74.2 | 16.38 | 1.23 | 14.05 | 28188.0 | 0.2 | 0.05 | 44.2 | 561013 |
| ELF-01_122 | 199 | 112 | 17.29 | 1.69 | 1.10 | 0.4 | 8281 | 1.82 | 9.0 | 106.5 | 28.4 | 916.9 | 13.81 | 0.6 | 1558 | 2.44 | 116.1 | 96.04 | 7.91 | 18.48 | 32059.9 | 7.4 | 1.43 | 96.4 | 586500 |
| ELF-01_123 | 81 | <180.073 | 0.83 | 0.08 | 0.10 | 0.0 | 8673 | 0.11 | 6.7 | 93.0 | 5.5 | 320.3 | 0.57 | 0.2 | 1175 | 0.15 | 99.2 | 12.55 | 0.91 | 16.47 | 2585.8 | 0.3 | 0.04 | 77.9 | 587319 |
| ELF-01_124 | 853 | 4145 | 7.09 | 0.68 | 0.36 | 0.1 | 8979 | 1.16 | 6.2 | 102.8 | 41.4 | 376.0 | 1.19 | 0.4 | 3760 | 1.19 | 108.1 | 27.93 | 5.66 | 3.42 | 3291.8 | 2.8 | 0.39 | 70.3 | 579570 |
| ELF-01_125 | 572 | 222 | 49.50 | 6.70 | 6.08 | 1.2 | 8630 | 6.92 | 7.8 | 122.8 | 14.2 | 488.0 | 30.79 | 1.4 | 1385 | 6.70 | 120.8 | 29.64 | 15.11 | 6.69 | 1635.8 | 44.6 | 7.36 | 52.5 | 587366 |
| ELF-01_126 | 152 | 126 | 34.59 | 1.96 | 0.70 | 0.5 | 7074 | 3.29 | 4.0 | 89.7 | 11.1 | 220.7 | 27.97 | 0.3 | 927 | 5.23 | 86.3 | 10.15 | 1.70 | 1.69 | 239.1 | 6.0 | 0.75 | 60.5 | 591461 |
| ELF-01_127 | 190 | 122 | 26.62 | 2.42 | 1.38 | 0.6 | 8392 | 4.12 | 5.6 | 110.3 | 23.4 | 724.5 | 24.72 | 0.8 | 1035 | 5.00 | 89.6 | 57.61 | 10.11 | 15.26 | 1063.6 | 11.4 | 1.59 | 44.7 | 588924 |
| ELF-01_128 | 98 | <111.194 | 1.42 | 0.29 | 0.18 | 0.1 | 7449 | 0.35 | 1.3 | 87.2 | 1.7 | 501.0 | 1.08 | 0.0 | 683 | 0.32 | 129.4 | 21.49 | 0.40 | 7.27 | 367.2 | 1.3 | 0.22 | 15.3 | 590866 |
| ELF-01_129 | 639 | 276 | 2.80 | 0.55 | 0.41 | 0.1 | 8631 | 0.46 | 7.9 | 134.3 | 29.9 | 468.1 | 1.79 | 1.5 | 1637 | 0.37 | 130.1 | 31.81 | 1.50 | 12.49 | 1838.9 | 3.7 | 0.53 | 85.7 | 586824 |
| ELF-01_13 | 87 | <226.126 | 34.50 | 0.78 | 0.18 | 0.3 | 6941 | 2.51 | 4.0 | 78.1 | <3.271 | 405.6 | 25.58 | 0.0 | 1032 | 4.17 | 141.4 | 26.19 | 3.80 | 1.77 | 342.9 | 2.7 | 0.31 | 39.7 | 590940 |
| ELF-01_130 | 363 | 185 | 32.45 | 1.86 | 0.63 | 0.5 | 8924 | 2.84 | 9.2 | 323.0 | 13.9 | 601.2 | 20.08 | 0.6 | 913 | 3.87 | 46.7 | 56.88 | 6.78 | 4.21 | 6394.2 | 5.3 | 0.46 | 103.9 | 582412 |
| ELF-01_14 | 803 | <117.405 | 2.11 | 0.43 | 0.32 | 0.1 | 9942 | 0.41 | 4.1 | 317.5 | 35.3 | 323.5 | 1.37 | 1.9 | 1876 | 0.23 | 64.7 | 21.88 | 5.56 | 17.22 | 5484.2 | 1.9 | 0.27 | 56.2 | 582921 |
| ELF-01_15 | 1697 | 266 | 2.05 | 0.22 | 0.30 | 0.0 | 8186 | 0.43 | 7.3 | 136.0 | 11.7 | 359.2 | 1.40 | 2.2 | 7018 | 0.29 | 51.4 | 27.19 | 5.67 | 18.24 | 3166.0 | 1.5 | 0.17 | 56.9 | 578052 |
| ELF-01_16 | 325 | 194 | 1.30 | 0.22 | 0.15 | 0.0 | 13412 | 0.15 | 4.9 | 110.3 | 280.4 | 554.6 | 0.85 | 1.9 | 774 | 0.30 | 55.8 | 46.06 | 15.03 | 27.43 | 4784.6 | 1.0 | 0.32 | 49.2 | 582273 |
| ELF-01_17 | 288 | 321 | 12.18 | 4.77 | 5.18 | 0.7 | 7936 | 3.91 | 7.1 | 112.3 | 56.6 | 657.0 | 8.11 | 1.5 | 1235 | 2.57 | 81.9 | 43.45 | 21.21 | 9.95 | 2873.3 | 33.4 | 7.42 | 85.6 | 587363 |
| ELF-01_18 | 263 | 159 | 6.27 | 0.87 | 0.57 | 0.2 | 11960 | 0.95 | 12.0 | 125.1 | 4.9 | 478.3 | 5.59 | 1.2 | 609 | 1.47 | 231.0 | 29.00 | 2.17 | 3.34 | 12320.9 | 3.2 | 0.60 | 51.6 | 578195 |
| ELF-01_19 | 91 | <148.308 | 0.17 | 0.03 | 0.03 | 0.0 | 10631 | <0.005 | 7.1 | 116.9 | 165.1 | 170.2 | 0.02 | 0.1 | 363 | 0.04 | 75.1 | 14.68 | 4.02 | 16.48 | 5035.9 | 0.2 | 0.05 | 118.9 | 584956 |
| ELF-02_11 | 1332 | <118.573 | 2.50 | 0.49 | 0.36 | 0.1 | 9780 | 0.39 | 4.8 | 200.9 | 18.1 | 237.9 | 1.54 | 0.7 | 2630 | 0.50 | 142.4 | 26.76 | 4.36 | 32.18 | 7093.2 | 2.2 | 0.62 | 52.2 | 579236 |
| ELF-02_110 | 232 | <108.769 | 0.14 | 0.03 | 0.01 | 0.0 | 9617 | 0.15 | 5.9 | 89.3 | 37.3 | 141.4 | 0.12 | 0.4 | 490 | 0.01 | 116.7 | 4.62 | 0.63 | 16.13 | 14469.4 | 0.1 | 0.03 | 107.1 | 576795 |
| ELF-02_111 | 196 | <139.376 | 0.13 | 0.00 | 0.02 | 0.0 | 9318 | 0.01 | 15.8 | 94.9 | 22.2 | 452.6 | 0.08 | 0.2 | 416 | 0.02 | 53.5 | 24.09 | 2.10 | 15.86 | 4115.5 | 0.1 | 0.02 | 23.7 | 584432 |
| ELF-02_112 | 228 | <112.921 | 0.05 | <0.002 | <0.002 | 0.0 | 10469 | <0.004 | 3.7 | 84.5 | <1.570 | 372.2 | 0.01 | <0.005 | 296 | 0.03 | 100.3 | 22.67 | 1.69 | 47.25 | 11346.0 | 0.1 | <0.002 | 68.6 | 580127 |
| ELF-02_114 | 344 | <115.177 | 0.31 | 0.06 | 0.03 | <0.001 | 7369 | 0.03 | 3.4 | 85.4 | 3.5 | 328.6 | 0.06 | 0.4 | 85.4 | 0.29 | 104.3 | 43.16 | 0.03 | 27.86 | 4334.0 | 0.2 | 0.01 | 49.6 | 587179 |
| ELF-02_115 | 126 | <113.826 | 1.22 | 0.39 | 0.17 | 0.0 | 7215 | 0.36 | 8.4 | 83.3 | 3.1 | 359.8 | 1.02 | 0.2 | <205.781 | 0.33 | 58.2 | 72.35 | 1.12 | 6.18 | 1403.1 | 1.8 | 0.20 | 106.1 | 591012 |
| ELF-02_116 | 212 | <139.143 | 1.97 | 0.39 | 0.43 | 0.0 | 6900 | 0.09 | 7.1 | 84.3 | <1.933 | 310.9 | 0.69 | 0.3 | 316 | 0.09 | 113.6 | 17.80 | 4.01 | 15.80 | 7260.0 | 2.0 | 0.38 | 105.0 | 581120 |
| ELF-02_117 | 14544 | <124.701 | 1.31 | 0.26 | 0.16 | 0.0 | 12717 | 0.14 | 9.2 | 209.9 | 48.4 | 522.6 | 0.83 | 0.3 | 16384 | 0.11 | 133.7 | 45.64 | 1.09 | 31.97 | 14371.3 | 0.8 | 0.20 | 160.4 | 535801 |
| ELF-02_118 | 399 | <113.943 | 0.06 | 0.02 | 0.01 | 0.0 | 13254 | 0.01 | 11.8 | 89.0 | 13.1 | 115.9 | 0.04 | 0.2 | <205.890 | 0.01 | 153.8 | 5.43 | 1.35 | 13.37 | 23146.8 | 0.1 | 0.01 | 216.9 | 588151 |
| ELF-02_119 | 145 | 25848 | 12.01 | 1.72 | 0.85 | 0.4 | 7826 | 2.76 | 11.4 | 118.5 | 14.8 | 799.1 | 10.43 | 0.5 | <254.500 | 3.07 | 227.6 | 100.96 | 2.37 | 18.05 | 6316.5 | 7.6 | 0.61 | 101.6 | 583488 |
| ELF-02_12 | 156 | <236.632 | 15.34 | 0.58 | 0.22 | 0.3 | 6258 | 1.37 | 6.8 | 82.1 | 9.7 | 423.0 | 10.20 | 0.4 | 2286 | 2.33 | 244.2 | 16.13 | 20.46 | 9.01 | 4352.0 | 2.1 | 0.12 | 90.9 | 583938 |
| ELF-02_120 | 179 | <114.490 | 0.00 | 0.01 | <0.002 | <0.001 | 7637 | 0.03 | 8.1 | 84.2 | <1.594 | 328.8 | <0.003 | <0.005 | <206.808 | 0.00 | 94.3 | 28.78 | 0.00 | 29.83 | 4415.1 | 0.0 | <0.002 | 140.3 | 587666 |
| ELF-02_121 | 153 | <114.703 | <0.001 | 0.01 | 0.01 | <0.001 | 7664 | <0.004 | 3.5 | 86.5 | <1.595 | 209.7 | <0.003 | <0.005 | <207.151 | 0.00 | 96.4 | 21.08 | 0.01 | 47.54 | 3351.4 | 0.0 | <0.002 | 54.6 | 588171 |
| ELF-02_122 | 868 | 390 | 0.62 | 0.18 | 0.08 | 0.0 | 11229 | 0.08 | 4.0 | 175.8 | 8.7 | 412.9 | 0.38 | 1.0 | 646 | 0.10 | 107.4 | 46.33 | 3.37 | 35.93 | 13742.2 | 0.4 | 0.12 | 70.9 | 575704 |
| ELF-02_123 | 185 | <223.692 | 0.04 | <0.004 | <0.003 | <0.002 | 5188 | <0.006 | 5.0 | 75.8 | 11.3 | 113.4 | <0.006 | 0.2 | 1475 | 0.01 | 337.1 | 6.67 | 0.01 | 3.25 | 1894.9 | 0.0 | <0.005 | 57.6 | 588640 |
| ELF-02_124 | 1416 | <446.911 | 0.72 | 0.10 | 0.13 | 0.0 | 14130 | <0.012 | 1.3 | 149.9 | 19.2 | 166.0 | 0.22 | 1.0 | 3104 | 0.25 | 371.2 | 3.67 | 2.03 | 5.31 | 49561.0 | 0.5 | 0.26 | 24.8 | 530924 |
| ELF-02_125 | 255 | <115.621 | 0.33 | 0.02 | 0.05 | 0.0 | 7357 | 0.07 | 10.9 | 89.0 | 9.5 | 454.7 | 0.05 | 0.2 | <208.731 | 0.02 | 92.7 | 15.97 | 1.72 | 9.07 | 8401.0 | 0.3 | 0.04 | 134.0 | 583230 |
| ELF-02_126 | 986 | <106.722 | 0.38 | 0.05 | 0.03 | 0.0 | 13078 | 0.10 | 7.7 | 757.5 | 5.6 | 454.0 | 0.34 | 0.2 | 1295 | 0.05 | 109.6 | 57.15 | 1.14 | 33.48 | 18972.5 | 0.2 | 0.04 | 97.4 | 569034 |
| ELF-02_127 | 207 | <109.523 | 0.41 | 0.06 | 0.05 | 0.0 | 5278 | 0.04 | 4.2 | 90.3 | 155.4 | 98.3 | 0.16 | 2.0 | <197.643 | 0.08 | 345.0 | 6.76 | 0.10 | 4.41 | 3908.2 | 0.4 | 0.02 | 51.6 | 586958 |
| ELF-02_128 | 471 | 156 | 0.08 | 0.01 | 0.01 | 0.0 | 16205 | 0.01 | 10.4 | 218.7 | 3.4 | 641.1 | 0.07 | 0.1 | 451 | <0.004 | 100.9 | 48.53 | 1.17 | 28.85 | 27857.2 | 0.1 | 0.01 | 174.0 | 561702 |
| ELF-02_129 | 370 | <112.630 | 1.36 | 0.24 | 0.07 | 0.1 | 4142 | 0.31 | 1.2 | 234.0 | 1.7 | 127.7 | 1.12 | 0.4 | 210 | 0.40 | 285.1 | 10.82 | 0.27 | 10.12 | 44.7 | 0.8 | 0.11 | 27.4 | 592305 |
| ELF-02_13 | 336 | <111.217 | 0.09 | 0.03 | 0.01 | <0.001 | 13974 | 0.02 | 6.3 | 92.8 | 37.9 | 81.9 | 0.06 | 0.3 | 1439 | 0.00 | 140.0 | 5.53 | 3.39 | 20.77 | 25405.0 | 0.2 | 0.04 | 120.7 | 563773 |
| ELF-02_130 | 212 | 275 | 0.20 | 0.04 | 0.02 | 0.0 | 9339 | 0.03 | 6.6 | 86.4 | <1.553 | 332.8 | 0.14 | 0.3 | 1102 | 0.07 | 127.7 | 34.04 | 0.11 | 42.12 | 7719.6 | 0.2 | 0.01 | 154.8 | 582085 |
| ELF-02_131 | 182 | <112.698 | 0.01 | 0.01 | 0.00 | <0.001 | 6774 | <0.004 | 7.7 | 86.3 | 3.3 | 117.1 | <0.003 | 0.0 | 1206 | <0.003 | 57.8 | 4.67 | 0.05 | 9.46 | 1890.1 | 0.0 | 0.01 | 140.9 | 588236 |
| ELF-02_132 | 245 | 145 | 0.04 | 0.02 | 0.00 | 0.0 | 11978 | 0.03 | 6.5 | 91.1 | 2.3 | 470.7 | 0.03 | 0.2 | 774 | 0.03 | 119.5 | 40.85 | 0.13 | 36.19 | 15079.6 | 0.1 | 0.04 | 113.2 | 575043 |
| ELF-02_15 | 2249 | 184 | 1.85 | 0.38 | 0.31 | 0.1 | 8375 | 0.48 | 6.1 | 1785.5 | 45.1 | 222.6 | 1.35 | 2.6 | 5187 | 0.27 | 139.0 | 9.24 | 1.46 | 16.07 | 8281.1 | 1.5 | 0.26 | 121.3 | 572361 |
| ELF-02_16 | 12494 | 113 | 0.35 | 0.04 | 0.07 | 0.0 | 5435 | 0.06 | 3.4 | 454.7 | 5.2 | 176.2 | 0.22 | 0.3 | 15337 | 0.01 | 81.4 | 15.64 | 0.33 | 12.47 | 4443.0 | 0.3 | 0.05 | 49.7 | 554417 |
| ELF-02_17 | 1884 | <111.895 | 4.80 | 0.99 | 0.32 | 0.3 | 4635 | 0.95 | 4.3 | 1015.7 | 6.3 | 186.6 | 3.85 | 0.8 | 3679 | 1.12 | 126.8 | 15.27 | 0.65 | 6.64 | 765.0 | 2.5 | 0.35 | 85.7 | 584280 |
| ELF-02_18 | 2583 | <228.677 | 5.00 | 0.45 | 0.22 | 0.0 | 9220 | 0.60 | 2.6 | 2938.8 | 21.0 | 419.5 | 4.36 | 0.6 | 3701 | 1.42 | 193.6 | 16.38 | 0.41 | 14.72 | 11891.7 | 1.8 | 0.16 | 50.2 | 569566 |
| ELF-02_18 | 293 | <111.527 | 0.01 | 0.02 | <0.002 | 0.0 | 14432 | <0.004 | 5.2 | 87.5 | 2.1 | 558.0 | <0.003 | 0.0 | 806 | 0.00 | 117.4 | 43.76 | 0.51 | 33.74 | 22883.7 | 0.0 | 0.02 | 70.2 | 565889 |
| ELF-02_19 | 114 | <111.919 | 0.04 | <0.002 | 0.04 | <0.001 | 9000 | <0.004 | 2.1 | 85.1 | <1.557 | 264.7 | 0.03 | 0 | | | | | | | | | | | |

Appendix C: Eastern Sunda arc rutile trace element chemistry (LA-ICP-MS)

| Analysis ID | Al | Ca | Ce | Dy | Er | Eu | Fe | Gd | Hf | Mg | Mn | Nb | Nd | Pb | Si | Sm | Sn | Ta | Th | U | W | Y | Yb | Zr | Ti |
|-------------|-------|----------|-------|--------|--------|--------|-------|--------|-------|--------|--------|--------|--------|------|----------|--------|-------|-------|-------|-------|--------|------|--------|--------|--------|
| LB005_r10 | 70 | 924 | 1.29 | 0.22 | 0.06 | 0.0 | 7135 | 0.22 | 23.0 | 229.6 | 1095.3 | 396.6 | 0.65 | 0.4 | 849 | 0.22 | 30.5 | 17.06 | 0.89 | 7.10 | 17.2 | 0.9 | 0.20 | 124.0 | 588087 |
| LB005_r12 | 97 | <234.120 | 0.42 | 0.11 | 0.05 | <0.002 | 2739 | 0.06 | 9.2 | 194.5 | 4.8 | 279.8 | 0.33 | 0.5 | 1838 | 0.06 | 35.7 | 13.91 | 0.21 | 0.54 | 11.1 | 0.3 | 0.05 | 247.9 | 591881 |
| LB005_r3 | 14 | <295.761 | 0.61 | 0.03 | <0.004 | 0.0 | 3432 | 0.16 | 22.4 | 80.7 | 264.6 | 325.8 | 0.45 | 0.1 | 727 | 0.06 | 27.3 | 20.51 | 0.14 | 0.92 | 15.8 | 0.3 | 0.06 | 442.3 | 592892 |
| LB005_r4 | 22 | <247.182 | 0.09 | 0.04 | 0.02 | <0.002 | 2761 | 0.02 | 12.0 | 76.9 | <3.563 | 265.5 | 0.07 | 0.2 | 552 | 0.02 | 32.8 | 22.18 | 0.10 | 0.71 | 10.8 | 0.1 | 0.01 | 98.9 | 593665 |
| LB005_r5 | 25 | <230.926 | 0.04 | 0.02 | <0.003 | <0.002 | 4052 | <0.006 | 9.9 | 77.8 | 5.2 | 385.9 | <0.006 | 0.1 | 583 | <0.008 | 63.5 | 14.80 | 0.04 | 5.40 | 69.4 | 0.1 | <0.005 | 138.7 | 592939 |
| LB005_r6 | 1151 | 1007 | 1.89 | 0.49 | 0.80 | 0.0 | 3302 | 0.16 | 21.1 | 2243.0 | 96.7 | 367.8 | 0.75 | 0.7 | 3426 | 0.22 | 32.5 | 18.35 | 0.73 | 2.23 | 16.7 | 3.7 | 1.20 | 196.1 | 585554 |
| LB005_r8 | 150 | 1590 | 6.59 | 0.64 | 0.08 | 0.2 | 2320 | 0.68 | 4.4 | 121.2 | 7.5 | 319.8 | 4.77 | 0.4 | 960 | 0.94 | 53.0 | 15.33 | 0.36 | 1.02 | 24.4 | 2.2 | 0.46 | 74.6 | 590788 |
| LB005_r9 | 133 | <245.172 | 0.57 | 0.04 | 0.05 | 0.0 | 2729 | 0.04 | 10.2 | 128.1 | <3.518 | 370.3 | 0.28 | 1.5 | 10515 | 0.11 | 46.5 | 16.31 | 0.08 | 1.76 | 38.8 | 0.2 | 0.04 | 40.9 | 590927 |
| NAF-01_r1 | 20 | <234.252 | 0.91 | 0.16 | 0.09 | 0.0 | 3942 | 0.06 | 3.3 | 78.3 | 30.1 | 154.0 | 0.50 | 0.6 | 1140 | 0.11 | 302.5 | 12.95 | 1.49 | 20.67 | 563.3 | 0.9 | 0.15 | 33.0 | 592057 |
| NAF-01_r10 | 33 | <297.779 | 0.08 | 0.02 | 0.03 | <0.003 | 3660 | 0.04 | 143.0 | 79.1 | 13.3 | 928.0 | <0.008 | 0.1 | <561.683 | <0.010 | 86.8 | 82.51 | 0.20 | 33.88 | 248.1 | 0.2 | 0.10 | 300.10 | 587566 |
| NAF-01_r11 | 243 | 4823 | 3.28 | 0.66 | 0.60 | 0.2 | 6010 | 0.73 | 1.0 | 93.3 | 697.2 | 98.9 | 1.56 | 17.8 | 3821 | 0.46 | 190.2 | 9.52 | 5.59 | 24.42 | 2042.7 | 5.3 | 1.53 | 14.0 | 582038 |
| NAF-01_r12 | 24 | <305.525 | 1.19 | 0.19 | 0.08 | 0.0 | 4396 | 0.09 | 2.9 | 79.8 | 19.5 | 101.0 | 0.30 | 2.0 | <575.194 | 0.09 | 438.8 | 6.90 | 3.48 | 25.72 | 647.9 | 0.5 | 0.11 | 33.0 | 593357 |
| NAF-01_r2 | 45 | <249.553 | 0.72 | 0.03 | 0.05 | <0.002 | 4500 | 0.08 | 2.2 | 78.7 | 84.4 | 70.5 | 0.27 | 3.7 | 690 | 0.02 | 689.1 | 4.48 | 2.51 | 32.77 | 549.2 | 0.3 | 0.04 | 21.5 | 592896 |
| NAF-01_r3 | 45 | 335 | 4.43 | 0.35 | 0.28 | 0.1 | 4767 | 0.44 | 1.9 | 77.6 | 95.4 | 123.3 | 2.70 | 3.4 | 995 | 0.69 | 154.8 | 12.20 | 1.70 | 10.80 | 1813.9 | 2.4 | 0.40 | 20.7 | 591295 |
| NAF-01_r4 | 25 | 251 | 3.58 | 0.36 | 0.19 | 0.0 | 4882 | 0.37 | 2.1 | 87.6 | 112.6 | 143.4 | 1.77 | 3.3 | 749 | 0.57 | 278.7 | 14.95 | 3.13 | 16.29 | 2028.0 | 1.4 | 0.23 | 21.2 | 591235 |
| NAF-01_r5 | 33 | <251.315 | 0.28 | 0.09 | 0.06 | <0.002 | 4860 | 0.02 | 11.4 | 78.2 | 28.2 | 527.5 | 0.22 | 0.4 | <475.772 | <0.008 | 248.2 | 34.64 | 0.14 | 16.15 | 573.5 | 0.5 | 0.03 | 14.17 | 592803 |
| NAF-01_r6 | 191 | 1622 | 13.36 | 1.64 | 1.16 | 0.2 | 4615 | 1.57 | 8.8 | 78.8 | 41.5 | 675.9 | 7.31 | 1.8 | 1255 | 1.36 | 99.0 | 81.50 | 7.96 | 16.58 | 3033.8 | 9.8 | 1.38 | 77.8 | 597684 |
| NAF-01_r7 | 79 | 125 | 0.67 | 0.06 | 0.05 | 0.0 | 6119 | 0.12 | 6.8 | 106.6 | 10.9 | 423.0 | 0.48 | 1.2 | 253 | 0.15 | 554.0 | 20.98 | 1.20 | 60.43 | 5502.1 | 0.3 | 0.06 | 74.7 | 587674 |
| NAF-01_r8 | 491 | 5649 | 2.52 | 0.70 | 0.66 | 0.1 | 6064 | 0.56 | 4.3 | 91.1 | 184.7 | 421.0 | 1.24 | 3.5 | 3720 | 0.38 | 213.3 | 20.41 | 2.84 | 21.25 | 1905.9 | 5.6 | 1.01 | 37.4 | 581114 |
| NAF-01_r9 | 420 | 751 | 27.48 | 5.86 | 4.75 | 1.1 | 3813 | 4.33 | 8.5 | 149.9 | 75.7 | 1054.1 | 17.29 | 2.5 | 1269 | 4.45 | 158.6 | 67.77 | 3.50 | 15.91 | 685.9 | 26.7 | 8.70 | 51.3 | 592174 |
| NAF-02_r1 | 66 | <107.430 | 0.30 | 0.07 | 0.05 | 0.0 | 4975 | 0.07 | 3.3 | 93.1 | 15.5 | 685.6 | 0.18 | 2.5 | 1259 | 0.06 | 342.4 | 44.70 | 0.56 | 29.74 | 65.3 | 0.4 | 0.03 | 74.4 | 592124 |
| NAF-02_r10 | 1041 | <134.832 | 0.09 | 0.05 | <0.002 | 0.0 | 5988 | 0.06 | 5.7 | 1051.9 | 32.4 | 911.3 | 0.11 | 0.6 | 1736 | 0.01 | 292.8 | 30.21 | 0.40 | 26.91 | 140.9 | 0.0 | 0.02 | 126.0 | 588900 |
| NAF-02_r11 | 68 | <226.083 | 0.03 | <0.004 | <0.003 | 0.0 | 8714 | <0.006 | 9.6 | 97.6 | 160.4 | 721.5 | 0.06 | 1.7 | <420.904 | <0.007 | 529.3 | 20.28 | 0.24 | 53.75 | 270.9 | 0.0 | 0.01 | 200.2 | 590024 |
| NAF-02_r12 | 156 | 189 | 8.55 | 1.77 | 1.51 | 0.3 | 4798 | 1.08 | 3.3 | 149.8 | 11.6 | 346.1 | 6.15 | 8.7 | 405 | 1.45 | 749.8 | 27.58 | 2.32 | 40.82 | 34.4 | 9.8 | 1.40 | 46.1 | 593165 |
| NAF-02_r13 | 50 | <106.786 | 0.03 | <0.002 | <0.001 | <0.001 | 4584 | 0.01 | 0.4 | 88.6 | <1505 | 310.4 | 0.03 | 1.7 | 360 | 0.00 | 110.2 | 9.52 | 0.04 | 6.90 | 64.5 | 0.0 | 0.01 | 7.9 | 594237 |
| NAF-02_r14 | 807 | <118.136 | 0.10 | 0.02 | <0.002 | 0.0 | 5749 | <0.005 | 7.1 | 758.3 | 22.6 | 1153.9 | 0.09 | 4.3 | 1711 | <0.004 | 785.7 | 85.06 | 0.25 | 24.49 | 90.6 | 0.1 | 0.02 | 78.1 | 588731 |
| NAF-02_r15 | 89 | <112.336 | 0.01 | <0.002 | <0.001 | <0.001 | 4681 | <0.004 | 3.3 | 86.4 | <11598 | 206.1 | <0.004 | 0.3 | 386 | <0.004 | 299.6 | 10.82 | 0.03 | 10.12 | 26.8 | 0.0 | <0.002 | 71.4 | 593982 |
| NAF-02_r16 | 40 | <114.059 | 0.18 | 0.02 | 0.02 | 0.0 | 6429 | 0.02 | 9.2 | 91.4 | 37.3 | 776.4 | 0.08 | 1.7 | 213 | 0.06 | 294.5 | 74.50 | 0.82 | 16.02 | 31.2 | 0.2 | 0.02 | 12.8 | 592357 |
| NAF-02_r17 | 83 | 175 | 0.35 | 0.08 | 0.05 | 0.0 | 4982 | 0.10 | 8.9 | 103.6 | 17.8 | 514.2 | 0.21 | 6.7 | 5038 | 0.06 | 421.9 | 47.30 | 1.74 | 27.00 | 21.2 | 0.3 | 0.06 | 116.9 | 587231 |
| NAF-02_r18 | 64 | <125.580 | 0.12 | 0.01 | 0.00 | <0.001 | 5479 | <0.005 | 5.1 | 87.8 | 19.0 | 661.6 | 0.05 | 0.5 | 347 | <0.004 | 795.8 | 48.48 | 0.80 | 33.94 | 96.2 | 0.1 | <0.002 | 92.9 | 592579 |
| NAF-02_r19 | 42 | <111.950 | 0.07 | 0.01 | <0.002 | 0.0 | 6481 | <0.004 | 5.4 | 86.2 | 4.2 | 517.8 | 0.02 | 0.3 | 243 | 0.01 | 669.4 | 39.43 | 0.41 | 26.29 | 29.2 | 0.1 | <0.002 | 70.8 | 592187 |
| NAF-02_r2 | 48 | <113.851 | 0.09 | <0.002 | <0.002 | <0.001 | 4443 | 0.02 | 0.7 | 85.9 | 3.0 | 107.4 | 0.06 | 0.3 | 830 | 0.02 | 67.0 | 7.46 | 0.13 | 5.71 | 0.7 | 0.0 | 0.01 | 17.4 | 589812 |
| NAF-02_r20 | 60 | <133.577 | 0.07 | 0.03 | 0.03 | <0.001 | 5360 | 0.01 | 6.9 | 88.3 | 3.9 | 1110.0 | 0.02 | 7.9 | 308 | 0.01 | 743.1 | 75.01 | 0.23 | 22.12 | 98.7 | 0.1 | <0.003 | 81.3 | 592371 |
| NAF-02_r21 | 49 | <111.808 | 0.13 | 0.01 | 0.03 | 0.0 | 5673 | <0.005 | 4.9 | 89.6 | 13.2 | 562.8 | 0.04 | 10.5 | 315 | <0.004 | 590.6 | 68.15 | 0.51 | 20.25 | 31.2 | 0.1 | 0.01 | 74.9 | 592758 |
| NAF-02_r3 | 79 | <111.280 | 0.07 | 0.02 | 0.01 | 0.0 | 7176 | 0.00 | 4.8 | 130.1 | 98.2 | 1016.9 | 0.05 | 1.3 | 604 | 0.03 | 425.4 | 53.14 | 0.25 | 20.59 | 39.9 | 0.1 | 0.00 | 81.4 | 590852 |
| NAF-02_r4 | 36 | 121 | 0.00 | <0.002 | 0.21 | <0.001 | 4677 | <0.004 | 2.7 | 85.2 | <11639 | 225.5 | 0.02 | 1.0 | 687 | 0.00 | 324.0 | 19.99 | 0.02 | 11.43 | 18.4 | 0.0 | <0.002 | 58.3 | 593598 |
| NAF-02_r5 | 17149 | 314 | 4.08 | 1.12 | 0.41 | 0.2 | 17898 | 0.93 | 1.5 | 3304.2 | 116.5 | 231.8 | 3.09 | 42.7 | 20196 | 0.83 | 83.2 | 16.97 | 2.57 | 7.36 | 18.5 | 4.9 | 0.44 | 39.9 | 535702 |
| NAF-02_r6 | 183 | <131.315 | 0.48 | 0.14 | 0.07 | 0.0 | 5030 | 0.14 | 3.8 | 132.7 | <1821 | 1773.5 | 0.27 | 15.3 | 863 | 0.10 | 401.5 | 73.39 | 1.35 | 19.23 | 88.2 | 0.7 | 0.06 | 63.0 | 591269 |
| NAF-02_r7 | 42 | <230.117 | 0.57 | 0.03 | 0.03 | 0.0 | 17424 | 0.10 | 0.6 | 80.0 | 30.5 | 181.4 | 0.25 | 0.4 | <429.173 | 0.03 | 43.6 | 17.65 | 1.07 | 4.10 | 1.5 | 0.2 | 0.04 | 17.3 | 584583 |
| NAF-02_r8 | 57 | <306.355 | 0.40 | 0.08 | <0.004 | <0.003 | 4055 | 0.09 | 0.5 | 82.9 | <4.284 | 195.8 | 0.39 | 1.1 | <570.937 | 0.14 | 43.7 | 10.22 | 0.36 | 3.78 | 0.7 | 0.1 | <0.006 | 8.8 | 594722 |
| NAF-02_r9 | 52 | <117.521 | 0.02 | <0.002 | <0.002 | 0.0 | 5009 | <0.004 | 2.6 | 87.1 | 37.7 | 274.3 | <0.004 | 5.5 | <208.285 | 0.04 | 402.6 | 74.62 | 0.09 | 19.99 | 12.2 | 0.1 | 0.01 | 51.2 | 593959 |
| NAF-03_r1 | 214 | <126.274 | 1.53 | 0.25 | 0.12 | 0.0 | 3201 | 0.12 | 6.1 | 160.7 | 31.5 | 301.1 | 0.96 | 2.1 | 1015 | 0.16 | 239.3 | 22.69 | 5.28 | 39.46 | 2364.0 | 0.7 | 0.16 | 125.1 | 590186 |
| NAF-03_r10 | 22 | <126.102 | 0.16 | 0.04 | 0.01 | <0.001 | 2300 | 0.03 | 10.5 | 91.9 | 4.5 | 212.5 | 0.05 | 0.3 | 1565 | 0.01 | 209.3 | 10.35 | 3.49 | 16.64 | 1858.8 | 0.2 | 0.08 | 233.7 | 590935 |
| NAF-03_r11 | 5767 | 317 | 5.10 | 1.96 | 1.23 | 0.9 | 10050 | 1.59 | 18.0 | 4783.6 | 165.4 | 249.4 | 3.97 | 2.8 | 10421 | 1.44 | 148.2 | 9.53 | 3.58 | 27.23 | 1579.3 | 8.8 | 1.62 | 323.6 | 592110 |
| NAF-03_r12 | 21 | <227.505 | 2.68 | 0.69 | 0.74 | 0.2 | 7842 | 0.89 | 16.5 | 108.3 | 51.9 | 155.3 | 2.47 | 1.5 | 965 | 0.77 | 85.8 | 11.24 | 8.28 | 12.86 | 65.1 | 4.0 | 0.73 | 345.0 | 587582 |
| NAF-03_r13 | 613 | <329.257 | 0.29 | 0.09 | 0.21 | 0.0 | 6971 | 0.05 | 23.2 | 465.1 | 28.1 | 207.6 | 0.25 | 0.7 | 1523 | 0.05 | 114.0 | 14.26 | 1.48 | 38.93 | 207.6 | 1.0 | 0.17 | 450.3 | 583652 |
| NAF-03_r14 | 50 | <234.716 | 0.02 | <0.004 | <0.003 | <0.002 | 3643 | 0.03 | 18.0 | 76.3 | <3.326 | 653.3 | 0.02 | 0.1 | 1312 | <0.008 | 156.0 | 39.15 | 0.03 | 45.28 | 3889.6 | 0.0 | <0.005 | 323.5 | 586904 |
| NAF-03_r15 | 2417 | 914 | 96.48 | 56.85 | 43.26 | 8.0 | 8775 | 43.41 | 4.1 | 897.3 | 205.4 | 155.6 | 93.69 | 26.1 | 4850 | 28.56 | 190.7 | 9.43 | 15.77 | 7.29 | 603.3 | 334. | | | |

Appendix C: Eastern Sunda arc rutile trace element chemistry (LA-ICP-MS)

| Analysis ID | Al | Ca | Ce | Dy | Er | Eu | Fe | Gd | Hf | Mg | Mn | Nb | Nd | Pb | Pb | Si | Sm | Sn | Ta | Th | U | W | Y | Yb | Zr | Ti |
|-------------|-------|----------|-------|--------|--------|--------|------|--------|-------|--------|--------|--------|--------|------|----------|--------|-------|--------|-------|-------|--------|-------|--------|---------|--------|----|
| NAF-03_4 | 546 | <263.872 | 3.50 | 0.84 | 0.96 | 0.1 | 3977 | 0.52 | 17.2 | 562.4 | 77.8 | 317.3 | 2.05 | 0.5 | 2049 | 0.46 | 102.6 | 20.69 | 3.76 | 6.08 | 19.6 | 7.0 | 2.46 | 385.3 | 568512 | |
| NAF-03_5 | 56 | <117.484 | 0.17 | 0.05 | 0.03 | 0.0 | 4314 | 0.05 | 26.7 | 108.4 | 51.4 | 188.2 | 0.16 | 2.0 | 363 | 0.03 | 132.7 | 6.13 | 0.80 | 35.65 | 326.2 | 0.2 | 0.10 | 590.5 | 591411 | |
| NAF-03_6 | 249 | <136.551 | 0.11 | 0.04 | 0.01 | 0.0 | 4982 | 0.02 | 28.7 | 179.3 | 9.7 | 173.6 | 0.05 | 1.1 | 646 | 0.01 | 180.1 | 10.41 | 0.98 | 41.50 | 1109.4 | 0.2 | 0.08 | 688.7 | 568980 | |
| NAF-03_7 | 14 | <244.507 | 0.08 | 0.01 | 0.02 | <0.002 | 1179 | 0.02 | 10.8 | 77.4 | 10.1 | 42.1 | 0.01 | 1.1 | 721 | <0.008 | 249.1 | 2.02 | 3.19 | 28.34 | 2094.4 | 0.1 | 0.02 | 258.4 | 590608 | |
| NAF-03_8 | 2176 | 319 | 3.14 | 0.76 | 0.24 | 0.1 | 5388 | 0.54 | 16.7 | 496.8 | 24.4 | 33.7 | 1.36 | 1.1 | 5441 | 0.39 | 97.2 | 2.06 | 2.94 | 11.22 | 148.3 | 3.0 | 0.32 | 372.1 | 581394 | |
| NAF-03_9 | 47 | <307.636 | 0.48 | 0.05 | <0.004 | 0.0 | 3641 | 0.14 | 6.5 | 79.8 | 8.4 | 324.9 | 0.44 | 0.1 | <576.602 | <0.010 | 109.6 | 18.00 | 2.86 | 46.21 | 1388.9 | 0.3 | 0.02 | 230.8 | 592334 | |
| SLG-01_1 | 63 | <112.901 | 6.44 | 1.07 | 0.53 | 0.1 | 4778 | 0.95 | 16.6 | 92.9 | 206.4 | 861.5 | 3.24 | 14.4 | 693 | 0.91 | 73.7 | 22.08 | 6.32 | 38.24 | 226.2 | 4.0 | 0.60 | 535.6 | 592050 | |
| SLG-01_10 | 7647 | <233.284 | 5.53 | 0.95 | 0.67 | 0.3 | 8713 | 0.93 | 16.6 | 847.1 | 205.1 | 848.7 | 2.66 | 9.8 | 11670 | 0.75 | 282.6 | 25.15 | 4.42 | 41.96 | 532.6 | 4.7 | 0.78 | 377.9 | 565594 | |
| SLG-01_11 | 166 | <145.921 | 0.44 | 0.30 | 0.27 | 0.0 | 4817 | 0.11 | 9.4 | 97.2 | 34.1 | 698.3 | 0.26 | 2.1 | 397 | 0.08 | 259.3 | 36.05 | 1.09 | 19.90 | 469.3 | 1.6 | 0.38 | 166.2 | 592341 | |
| SLG-01_13 | 8993 | 313 | 10.42 | 6.33 | 5.05 | 0.9 | 8384 | 3.64 | 18.4 | 157.57 | 142.2 | 911.3 | 5.10 | 20.4 | 11987 | 1.82 | 50.4 | 34.37 | 14.39 | 31.91 | 139.8 | 44.3 | 5.18 | 419.0 | 563312 | |
| SLG-01_14 | 3650 | <112.781 | 0.18 | 0.13 | 0.09 | 0.0 | 6285 | 0.05 | 29.1 | 270.5 | 2.9 | 1051.5 | 0.14 | 1.6 | 5874 | 0.08 | 142.5 | 28.37 | 1.64 | 46.02 | 85.7 | 0.6 | 0.08 | 359.3 | 582397 | |
| SLG-01_15 | 618 | 274 | 12.04 | 1.92 | 1.32 | 0.3 | 7641 | 1.50 | 11.6 | 288.2 | 80.1 | 1970.9 | 4.84 | 15.2 | 965 | 1.19 | 135.2 | 81.64 | 3.99 | 24.30 | 348.5 | 8.6 | 1.19 | 281.9 | 587997 | |
| SLG-01_16 | 286 | <232.764 | 0.48 | 0.41 | 0.19 | 0.0 | 7855 | 0.34 | 6.8 | 101.0 | 70.7 | 1226.0 | 0.40 | 5.6 | 1700 | 0.18 | 378.0 | 74.89 | 0.98 | 15.87 | 526.0 | 3.0 | 0.37 | 97.2 | 588404 | |
| SLG-01_17 | 52 | <126.377 | 1.65 | 6.06 | 10.98 | 0.2 | 5516 | 1.61 | 157.2 | 85.4 | 320.9 | 980.5 | 0.60 | 15.7 | 1987 | 0.32 | 228.1 | 39.85 | 7.85 | 56.03 | 449.2 | 73.4 | 21.63 | 7606.7 | 565354 | |
| SLG-01_18 | 992 | <276.922 | 9.09 | 2.99 | 1.90 | 0.4 | 5877 | 1.58 | 18.9 | 116.7 | 53.7 | 1416.5 | 4.85 | 7.7 | 2085 | 1.28 | 95.1 | 84.82 | 17.43 | 38.10 | 165.6 | 10.4 | 2.24 | 382.3 | 587738 | |
| SLG-01_19 | 494 | 135 | 7.45 | 1.28 | 0.67 | 0.2 | 7004 | 0.90 | 16.6 | 144.7 | 188.4 | 1048.3 | 3.61 | 13.8 | 2193 | 0.73 | 109.5 | 34.09 | 2.44 | 25.39 | 250.2 | 4.5 | 0.64 | 415.7 | 588220 | |
| SLG-01_20 | 248 | 250 | 2.29 | 22.50 | 19.04 | 0.9 | 7679 | 9.57 | 19.0 | 109.7 | 167.1 | 1847.4 | 2.12 | 8.2 | 743 | 2.56 | 189.0 | 67.13 | 8.55 | 85.07 | 461.0 | 175.4 | 19.03 | 453.1 | 588374 | |
| SLG-01_21 | 561 | <119.398 | 3.89 | 1.01 | 0.88 | 0.2 | 8946 | 0.62 | 18.8 | 169.5 | 161.9 | 1481.2 | 1.97 | 8.6 | 1165 | 0.55 | 126.0 | 40.78 | 4.32 | 29.92 | 273.3 | 5.8 | 1.27 | 417.8 | 587371 | |
| SLG-01_23 | 775 | 18327 | 39.71 | 13.75 | 14.19 | 3.1 | 7058 | 10.54 | 281.2 | 114.4 | 82.7 | 1350.8 | 32.36 | 54.3 | 9748 | 9.65 | 214.8 | 80.18 | 16.17 | 38.18 | 521.8 | 102.7 | 28.23 | 15554.3 | 548826 | |
| SLG-01_4 | 425 | <104.749 | 0.85 | 0.49 | 0.37 | 0.1 | 7267 | 0.34 | 6.8 | 112.4 | 28.3 | 2358.2 | 0.65 | 3.9 | 1144 | 0.18 | 247.1 | 123.47 | 0.90 | 12.29 | 382.9 | 1.3 | 0.34 | 115.1 | 579482 | |
| SLG-01_5 | 1466 | <131.783 | 0.85 | 0.30 | 0.29 | 0.1 | 9298 | 0.15 | 9.8 | 144.2 | 16.1 | 7405.9 | 0.27 | 1.3 | 2444 | 0.01 | 308.0 | 434.43 | 0.00 | 10.29 | 248.7 | 3.9 | 0.64 | 445.0 | 533312 | |
| SLG-01_6 | 20264 | <139.330 | 3.26 | 0.74 | 0.71 | 0.1 | 5488 | 0.50 | 19.0 | 901.2 | 76.5 | 2420.4 | 1.54 | 5.9 | 26370 | 0.35 | 113.8 | 157.23 | 4.30 | 40.63 | 248.7 | 3.9 | 0.64 | 445.0 | 533312 | |
| SLG-01_7 | 59 | <108.047 | 0.13 | 0.03 | 0.03 | 0.0 | 5459 | 0.03 | 18.9 | 99.3 | 111.0 | 1785.5 | 0.06 | 3.5 | <196.426 | 0.02 | 252.9 | 92.08 | 0.45 | 29.59 | 896.8 | 0.2 | 0.02 | 278.6 | 590872 | |
| SLG-01_8 | 594 | 1327 | 26.96 | 2.59 | 1.52 | 0.8 | 5867 | 2.54 | 15.2 | 234.1 | 77.2 | 1534.9 | 16.82 | 9.8 | 1510 | 3.03 | 168.2 | 40.74 | 22.70 | 42.42 | 253.6 | 12.5 | 1.26 | 378.2 | 587612 | |
| SPF-06_10 | 321 | <136.682 | 3.91 | 1.09 | 0.83 | 0.1 | 8978 | 0.53 | 11.6 | 136.3 | 106.0 | 1451.0 | 1.72 | 8.0 | 933 | 0.34 | 220.4 | 60.10 | 4.87 | 25.99 | 399.9 | 4.7 | 1.08 | 195.5 | 588189 | |
| SPF-06_11 | 123 | <116.463 | 0.13 | 0.01 | 0.00 | 0.0 | 7430 | 0.02 | 7.0 | 93.5 | 0.9 | 45.8 | 0.07 | 0.6 | 285 | <0.004 | 79.6 | 3.13 | 2.04 | 74.73 | 2995.7 | 0.1 | 0.03 | 122.4 | 588574 | |
| SPF-06_12 | 95 | <136.020 | 0.06 | 0.01 | 0.02 | 0.0 | 5159 | 0.01 | 8.5 | 110.6 | <1.857 | 173.6 | 0.01 | 0.0 | <238.399 | <0.004 | 234.5 | 6.01 | 0.39 | 19.46 | 1683.9 | 0.1 | 0.02 | 179.6 | 591755 | |
| SPF-06_13 | 631 | <137.868 | 4.31 | 0.22 | 0.13 | 0.2 | 5375 | 0.14 | 25.4 | 150.0 | 23.8 | 481.2 | 1.75 | 1.6 | 1103 | 0.38 | 120.2 | 35.59 | 3.40 | 97.05 | 2556.7 | 0.9 | 0.09 | 394.8 | 587682 | |
| SPF-06_14 | 588 | <120.468 | 1.11 | 0.24 | 0.12 | 0.0 | 5586 | 0.26 | 26.9 | 742.4 | 56.3 | 1133.5 | 0.72 | 1.3 | 827 | 0.16 | 138.3 | 27.78 | 3.41 | 63.85 | 416.9 | 0.8 | 0.13 | 388.1 | 589223 | |
| SPF-06_15 | 105 | <122.026 | 0.04 | 0.00 | 0.02 | 0.0 | 1966 | 0.01 | 1.5 | 88.8 | 2.5 | 49.4 | 0.02 | 0.1 | 1248 | 0.01 | 145.4 | 1.27 | 0.30 | 8.89 | 3065.6 | 0.1 | 0.00 | 24.7 | 589366 | |
| SPF-06_16 | 203 | <118.981 | 2.71 | 0.13 | 0.05 | 0.0 | 4455 | 0.14 | 24.0 | 180.4 | 70.9 | 239.5 | 1.41 | 2.1 | 1078 | 0.18 | 94.7 | 11.73 | 6.18 | 34.16 | 1063.8 | 0.6 | 0.06 | 475.7 | 590143 | |
| SPF-06_17 | 86 | <136.187 | 0.36 | 0.02 | 0.03 | 0.0 | 7840 | 0.01 | 8.5 | 105.9 | 4.2 | 124.8 | 0.11 | 0.0 | 652 | 0.01 | 104.2 | 10.14 | 0.67 | 52.75 | 3885.8 | 0.1 | 0.01 | 188.2 | 586812 | |
| SPF-06_18 | 199 | <114.739 | 0.01 | <0.002 | <0.002 | <0.001 | 3080 | <0.004 | 1.3 | 85.7 | <1.559 | 37.1 | 0.01 | 0.0 | 1333 | 0.03 | 117.2 | 2.40 | 0.60 | 4.67 | 198.3 | 0.0 | 0.01 | 26.0 | 591036 | |
| SPF-06_19 | 129 | <122.035 | 0.29 | 0.02 | 0.02 | 0.0 | 6299 | <0.004 | 12.4 | 88.9 | 2.2 | 202.2 | 0.12 | 0.4 | 598 | 0.03 | 97.3 | 15.82 | 0.92 | 57.81 | 2573.0 | 0.1 | 0.01 | 216.3 | 589298 | |
| SPF-06_20 | 178 | <122.865 | 0.02 | <0.002 | <0.002 | <0.001 | 3864 | <0.004 | 9.8 | 93.0 | <1.683 | 31.4 | <0.004 | 1.4 | 667 | 0.01 | 120.1 | 1.76 | 0.00 | 43.53 | 1918.3 | 0.1 | 0.03 | 272.6 | 589255 | |
| SPF-06_21 | 57 | <137.648 | 1.94 | 0.11 | 0.02 | 0.0 | 7009 | 0.09 | 21.5 | 90.3 | 10.0 | 180.8 | 1.13 | 0.2 | 570 | 0.16 | 93.7 | 10.71 | 3.87 | 69.28 | 2241.5 | 0.3 | 0.03 | 378.2 | 590347 | |
| SPF-06_22 | 83 | <115.934 | 0.01 | <0.002 | <0.002 | <0.001 | 5817 | <0.004 | 5.3 | 120.0 | <1.571 | 160.9 | <0.004 | 0.0 | 478 | <0.003 | 258.1 | 4.46 | 0.09 | 11.17 | 1875.4 | 0.0 | <0.002 | 131.0 | 589569 | |
| SPF-06_23 | 349 | <120.733 | 0.33 | 0.08 | 0.04 | 0.0 | 4137 | 0.06 | 2.5 | 154.5 | 26.5 | 137.6 | 0.18 | 0.9 | 459 | 0.02 | 139.5 | 9.32 | 2.87 | 20.61 | 4389.8 | 0.3 | 0.06 | 47.8 | 588284 | |
| SPF-06_24 | 180 | <114.092 | 1.50 | 0.14 | 0.09 | 0.0 | 5946 | 0.21 | 9.0 | 224.4 | 19.6 | 625.5 | 0.88 | 0.8 | 1355 | 0.21 | 82.4 | 71.30 | 1.30 | 57.46 | 1725.4 | 0.7 | 0.06 | 130.0 | 589012 | |
| SPF-06_25 | 149 | <119.161 | 0.88 | 0.05 | 0.02 | 0.0 | 6590 | 0.03 | 28.2 | 88.9 | 14.5 | 673.3 | 0.45 | 0.5 | <206.512 | 0.12 | 140.8 | 35.22 | 2.66 | 93.60 | 3963.8 | 0.2 | 0.03 | 380.5 | 587142 | |
| SPF-06_26 | 92 | 150 | 0.02 | 0.10 | 0.11 | <0.001 | 3038 | 0.04 | 2.7 | 96.3 | 151.6 | 101.6 | 0.03 | 8.8 | <241.144 | 0.01 | 98.2 | 6.09 | 0.77 | 27.43 | 1311.2 | 0.7 | 0.39 | 51.9 | 590246 | |
| SPF-06_27 | 7976 | 882 | 7.57 | 0.86 | 0.32 | 0.3 | 5993 | 0.95 | 7.1 | 1283.4 | 35.5 | 349.6 | 4.47 | 4.9 | 14759 | 1.26 | 75.5 | 8.97 | 2.61 | 49.19 | 2278.7 | 1.8 | 0.22 | 125.3 | 561303 | |
| SPF-06_28 | 44 | <116.734 | 1.34 | 0.11 | 0.0 | 0.0 | 4708 | 0.18 | 6.1 | 92.9 | <1.579 | 61.3 | 0.73 | 0.7 | <202.059 | 0.21 | 232.5 | 8.29 | 1.15 | 17.98 | 319.0 | 0.7 | 0.13 | 134.5 | 594356 | |
| SPF-06_29 | 79 | <120.866 | 1.51 | 0.02 | 0.01 | 0.0 | 8101 | 0.04 | 28.4 | 105.5 | 66.8 | 266.0 | 0.73 | 1.6 | <209.149 | 0.05 | 95.6 | 8.67 | 1.08 | 75.65 | 2005.4 | 0.1 | 0.01 | 481.4 | 589395 | |
| SPF-06_30 | 113 | <121.992 | 0.65 | 0.05 | 0.03 | 0.0 | 7492 | 0.04 | 14.7 | 92.6 | 87.4 | 710.4 | 0.24 | 2.5 | <211.052 | 0.02 | 87.4 | 59.55 | 1.01 | 72.90 | 5673.2 | 0.2 | 0.04 | 228.1 | 585376 | |
| SPF-06_31 | 188 | <115.948 | 1.13 | 0.16 | 0.11 | 0.0 | 4032 | 0.24 | 7.1 | 112.8 | 1.6 | 174.0 | 0.80 | 0.1 | 973 | 0.21 | 125.3 | 11.71 | 1.07 | 29.76 | 108.5 | 0.6 | 0.07 | 111.3 | 596564 | |
| SPF-06_32 | 127 | <126.196 | 12.13 | 0.59 | 0.28 | 0.1 | 4788 | 1.17 | 16.2 | 135.0 | 71.9 | 267.2 | 7.40 | 2.2 | 486 | 1.37 | 107.9 | 18.44 | 10.65 | 34.12 | 394.4 | 2.1 | 0.23 | 251.2 | 592861 | |
| SPF-06_33 | 59 | <142.260 | 3.04 | 0.15 | 0.06 | 0.0 | 7199 | 0.24 | 21.9 | 90.5 | 13.5 | 280.7 | 1 | | | | | | | | | | | | | |

Appendix C: Eastern Sunda arc rutile trace element chemistry (LA-ICP-MS)

| Analysis ID | Al | Ca | Ce | Dy | Er | Eu | Fe | Gd | Hf | Mg | Mn | Nb | Nd | Pb | Pb | Si | Sm | Sn | Ta | Th | U | W | Y | Yb | Zr | Ti |
|--------------|-------|----------|--------|--------|--------|--------|--------|--------|------|-------|---------|-------|-------|-------|----------|--------|-------|-------|-------|-------|--------|-------|--------|--------|--------|----|
| SFP-06_r6 | 59 | <122.955 | 0.09 | 0.01 | <0.002 | <0.001 | 6452 | <0.004 | 4.0 | 85.1 | <1.685 | 114.8 | 0.03 | 0.5 | 274 | 0.00 | 157.8 | 21.25 | 0.30 | 67.49 | 1846.6 | 0.1 | 0.01 | 68.3 | 590772 | |
| SFP-06_r7 | 101 | <116.224 | 2.94 | 0.24 | 0.13 | 0.00 | 8106 | 0.29 | 16.9 | 121.0 | 45.2 | 225.1 | 2.03 | 0.7 | 213 | 0.44 | 113.0 | 9.21 | 3.52 | 24.81 | 408.7 | 1.1 | 0.15 | 258.9 | 591325 | |
| SFP-06_r8 | 96 | <122.429 | 0.06 | <0.002 | <0.001 | 11888 | <0.004 | 20.4 | 92.5 | 26.8 | 26.8 | 132.9 | 0.05 | 0.6 | 222 | 0.00 | 79.2 | 12.05 | 0.30 | 48.60 | 2088.1 | 0.0 | 0.01 | 385.0 | 585526 | |
| SFP-06_r9 | 89 | <125.413 | 8.43 | 0.23 | 0.19 | 0.1 | 6065 | 0.48 | 24.0 | 93.4 | 17.6 | 591.4 | 4.18 | 0.5 | <220.342 | 0.61 | 88.7 | 32.42 | 7.16 | 62.54 | 2540.7 | 1.3 | 0.17 | 341.0 | 589237 | |
| UGO12184_r1 | 3845 | <271.015 | 3.82 | 0.46 | 0.22 | 0.1 | 768 | 0.59 | 5.1 | 81.0 | 17.8 | 321.8 | 2.35 | 41.9 | 3716 | 0.67 | 714.7 | 16.11 | 7.52 | 2.24 | 979.5 | 1.7 | 0.07 | 79.0 | 586728 | |
| UGO12184_r10 | 2861 | 177 | 81.95 | 15.50 | 8.63 | 2.2 | 798 | 15.56 | 2.9 | 82.1 | 17.0 | 108.9 | 59.17 | 17.3 | 1182 | 14.85 | 232.7 | 2.45 | 5.04 | 4.37 | 370.1 | 65.3 | 7.53 | 35.0 | 592288 | |
| UGO12184_r11 | 3475 | <238.554 | 6.04 | 0.52 | 0.28 | 0.3 | 663 | 0.60 | 3.7 | 76.5 | 5.3 | 252.1 | 3.30 | 7.7 | 1014 | 0.74 | 675.6 | 21.74 | 8.59 | 2.61 | 1362.5 | 2.6 | 0.30 | 46.5 | 590627 | |
| UGO12184_r12 | 8912 | <294.391 | 3.61 | 0.43 | 0.22 | 0.0 | 435 | 0.41 | 3.6 | 75.5 | <45.573 | 368.1 | 2.48 | 21.7 | 16342 | 0.41 | 412.6 | 14.01 | 9.41 | 1.37 | 136.9 | 1.5 | 0.12 | 35.1 | 565061 | |
| UGO12184_r13 | 3610 | <231.115 | 41.78 | 7.15 | 3.79 | 1.7 | 361 | 7.91 | 3.0 | 74.7 | 25.8 | 319.5 | 27.37 | 4.8 | 17340 | 7.15 | 34.1 | 6.98 | 5.92 | 7.46 | 56.8 | 27.9 | 3.56 | 33.2 | 586638 | |
| UGO12184_r14 | 5122 | 576 | 107.93 | 13.13 | 7.25 | 4.0 | 953 | 15.20 | 2.2 | 485.2 | 116.7 | 157.8 | 71.31 | 34.1 | 2198 | 17.87 | 133.3 | 3.07 | 11.44 | 6.41 | 121.1 | 53.7 | 5.78 | 26.7 | 585630 | |
| UGO12184_r15 | 5901 | <239.225 | 28.99 | 5.01 | 2.63 | 1.0 | 781 | 4.44 | 2.1 | 81.8 | 17.2 | 333.8 | 15.62 | 4.8 | 1882 | 3.69 | 435.4 | 13.22 | 4.94 | 2.89 | 858.3 | 25.5 | 2.04 | 25.1 | 587197 | |
| UGO12184_r16 | 1054 | <281.634 | 3.32 | 0.79 | 0.41 | 1.1 | 793 | 0.88 | 8.4 | 87.8 | 6.5 | 321.2 | 2.74 | 1.4 | 630 | 0.69 | 186.6 | 9.37 | 3.65 | 1.16 | 150.3 | 4.7 | 0.46 | 135.5 | 595068 | |
| UGO12184_r17 | 2886 | <208.333 | 1.31 | 0.30 | 0.10 | 0.0 | 1302 | 0.28 | 3.3 | 79.2 | 5.3 | 281.0 | 0.87 | 4.5 | 1585 | 0.10 | 104.7 | 6.35 | 1.75 | 0.68 | 82.2 | 1.1 | 0.11 | 55.3 | 591502 | |
| UGO12184_r18 | 4655 | <200.824 | 50.94 | 8.39 | 4.61 | 1.4 | 521 | 8.34 | 3.2 | 77.2 | 28.1 | 212.5 | 30.99 | 31.7 | 2043 | 7.45 | 208.1 | 9.13 | 13.60 | 5.47 | 329.1 | 37.5 | 4.28 | 43.5 | 589202 | |
| UGO12184_r19 | 4933 | 143 | 85.56 | 10.50 | 6.35 | 1.7 | 632 | 11.01 | 5.6 | 86.0 | 36.2 | 265.5 | 42.73 | 42.8 | 1011 | 10.38 | 402.1 | 12.70 | 11.99 | 10.58 | 432.1 | 52.9 | 5.56 | 72.9 | 589665 | |
| UGO12184_r2 | 4558 | 455 | 109.62 | 19.65 | 11.34 | 3.4 | 856 | 20.89 | 9.3 | 82.8 | 27.2 | 206.4 | 82.57 | 6.1 | 2800 | 19.24 | 501.3 | 9.35 | 27.02 | 6.81 | 244.6 | 77.9 | 10.21 | 139.7 | 585153 | |
| UGO12184_r20 | 12007 | <235.072 | 28.51 | 4.31 | 2.48 | 1.2 | 352 | 4.67 | 1.1 | 80.8 | 13.1 | 295.1 | 17.26 | 25.8 | 15976 | 4.69 | 64.7 | 12.23 | 6.22 | 4.54 | 59.7 | 19.9 | 2.53 | 17.1 | 562251 | |
| UGO12184_r21 | 2675 | <250.118 | 1.29 | 0.24 | 0.21 | 0.0 | 786 | 0.33 | 2.3 | 92.2 | 22.9 | 273.3 | 1.05 | 9.8 | 962 | 0.33 | 448.9 | 10.29 | 3.38 | 3.50 | 248.9 | 1.2 | 0.10 | 22.9 | 592413 | |
| UGO12184_r22 | 7252 | 414 | 25.34 | 4.52 | 2.19 | 0.8 | 631 | 4.76 | 10.2 | 82.2 | 10.6 | 229.8 | 18.83 | 141.8 | 919 | 4.31 | 396.2 | 3.03 | 3.69 | 3.66 | 460.5 | 19.6 | 1.77 | 181.2 | 585900 | |
| UGO12184_r24 | 4704 | 995 | 39.21 | 4.07 | 1.72 | 1.6 | 692 | 5.83 | 1.6 | 91.4 | 26.9 | 328.7 | 25.01 | 46.3 | 1035 | 6.73 | 25.7 | 11.76 | 9.02 | 8.33 | 159.2 | 13.1 | 1.54 | 31.8 | 586650 | |
| UGO12184_r25 | 1600 | <128.998 | 0.25 | 0.03 | 0.05 | 0.1 | 720 | 0.17 | 6.1 | 85.1 | 3.2 | 226.1 | 0.40 | 2.4 | 937 | 0.12 | 50.9 | 4.40 | 3.69 | 0.92 | 125.2 | 0.2 | 0.07 | 92.9 | 594277 | |
| UGO12184_r26 | 4633 | 270 | 10.02 | 1.29 | 0.79 | 0.3 | 562 | 1.06 | 17.3 | 84.1 | 6.5 | 337.6 | 5.23 | 56.8 | 639 | 1.14 | 320.2 | 8.29 | 6.08 | 3.14 | 698.7 | 5.7 | 0.76 | 202.4 | 590428 | |
| UGO12184_r27 | 7377 | <112.732 | 28.14 | 3.72 | 2.20 | 0.9 | 323 | 4.46 | 2.2 | 92.3 | 17.7 | 306.4 | 17.16 | 4.6 | 8653 | 4.16 | 43.6 | 13.58 | 4.28 | 8.29 | 66.8 | 16.1 | 2.14 | 33.9 | 576340 | |
| UGO12184_r28 | 3242 | <112.883 | 10.86 | 2.47 | 1.21 | 0.3 | 512 | 2.55 | 6.3 | 86.7 | 5.2 | 357.5 | 11.31 | 8.5 | 1984 | 2.84 | 251.5 | 12.43 | 17.41 | 2.33 | 54.9 | 10.4 | 0.98 | 70.4 | 589954 | |
| UGO12184_r3 | 5148 | <107.326 | 17.45 | 3.09 | 1.95 | 0.7 | 467 | 2.68 | 3.4 | 79.4 | 7.2 | 166.2 | 9.08 | 3.5 | 4289 | 2.45 | 312.1 | 3.28 | 9.61 | 1.76 | 535.0 | 15.5 | 1.81 | 46.5 | 585784 | |
| UGO12184_r4 | 784 | 282 | 15.55 | 2.39 | 1.49 | 0.4 | 1415 | 2.29 | 3.0 | 81.6 | <3.596 | 157.1 | 8.51 | 7.0 | 945 | 2.83 | 307.8 | 4.19 | 2.33 | 4.10 | 248.6 | 10.8 | 1.00 | 45.9 | 594161 | |
| UGO12184_r5 | 4852 | 118 | 40.46 | 5.67 | 2.95 | 1.9 | 519 | 6.74 | 2.4 | 84.0 | 27.8 | 385.4 | 25.21 | 10.7 | 5886 | 6.54 | 51.2 | 18.45 | 16.26 | 7.40 | 69.7 | 23.3 | 3.02 | 41.4 | 582686 | |
| UGO12184_r6 | 10366 | <222.725 | 0.03 | <0.004 | 0.01 | <0.002 | 342 | 0.03 | 9.4 | 70.7 | <3.497 | 73.4 | 0.01 | 4.3 | 1062 | <0.008 | 97.1 | 0.41 | 0.89 | 2.87 | 53.8 | 0.1 | <0.005 | 183.6 | 584466 | |
| UGO12184_r7 | 3055 | 212 | 42.29 | 7.15 | 3.84 | 1.7 | 356 | 7.78 | 15.4 | 87.6 | 55.7 | 434.2 | 30.78 | 6.3 | 3468 | 7.54 | 57.0 | 9.98 | 19.32 | 7.70 | 327.1 | 30.8 | 3.94 | 224.1 | 585613 | |
| UGO12184_r8 | 4661 | 215 | 47.46 | 7.04 | 4.12 | 2.5 | 357 | 8.29 | 1.8 | 82.4 | 24.2 | 357.0 | 30.48 | 7.4 | 2987 | 8.21 | 29.4 | 12.35 | 8.96 | 6.28 | 38.3 | 33.3 | 3.78 | 34.9 | 584876 | |
| UGO12184_r9 | 10078 | <254.626 | 60.21 | 9.43 | 6.33 | 1.9 | 1085 | 8.63 | 11.2 | 75.0 | 32.3 | 562.8 | 31.72 | 73.5 | 2991 | 7.75 | 412.0 | 59.43 | 9.95 | 10.37 | 1641.6 | 46.7 | 6.03 | 102.7 | 579655 | |
| UGO12186_r1 | 2147 | 291 | 23.23 | 2.19 | 1.13 | 0.6 | 3655 | 2.94 | 18.4 | 141.9 | 25.3 | 905.8 | 16.10 | 16.3 | 1907 | 3.40 | 147.4 | 35.99 | 7.88 | 8.09 | 174.9 | 10.7 | 0.71 | 242.9 | 589463 | |
| UGO12186_r10 | 874 | <106.425 | 18.23 | 1.74 | 0.86 | 0.3 | 4408 | 2.58 | 26.4 | 86.7 | 24.4 | 212.0 | 12.29 | 2.1 | 628 | 3.36 | 190.5 | 6.38 | 1.12 | 7.40 | 174.2 | 6.8 | 0.50 | 418.1 | 591475 | |
| UGO12186_r11 | 3315 | <121.251 | 26.82 | 2.27 | 0.95 | 1.3 | 2539 | 3.37 | 19.7 | 88.9 | 8.2 | 352.3 | 17.68 | 8.9 | 1025 | 4.30 | 255.6 | 14.22 | 24.61 | 11.54 | 187.4 | 9.6 | 0.85 | 349.5 | 586440 | |
| UGO12186_r12 | 933 | <186.709 | 3.21 | 0.31 | 0.38 | 0.2 | 2921 | 0.67 | 12.6 | 105.1 | 17.0 | 138.0 | 1.89 | 27.9 | 966 | 0.48 | 180.9 | 11.52 | 3.55 | 5.35 | 225.6 | 2.4 | 0.26 | 117.4 | 591897 | |
| UGO12186_r13 | 1596 | <134.025 | 4.65 | 1.64 | 1.36 | 0.3 | 2927 | 0.54 | 11.5 | 102.7 | 3.5 | 239.7 | 2.36 | 120.5 | 3149 | 0.39 | 135.6 | 8.46 | 3.38 | 5.06 | 607.7 | 9.3 | 1.74 | 266.0 | 588259 | |
| UGO12186_r15 | 235 | <316.597 | 7.58 | 0.91 | 0.39 | 0.2 | 3243 | 0.83 | 22.3 | 83.4 | 14.1 | 292.0 | 3.95 | 4.9 | <624.947 | 0.77 | 129.4 | 10.19 | 2.93 | 4.69 | 109.1 | 3.7 | 0.30 | 397.1 | 593476 | |
| UGO12186_r16 | 582 | <135.127 | 5.16 | 0.45 | 0.23 | 0.2 | 3396 | 0.52 | 25.2 | 80.9 | 4.2 | 296.2 | 2.42 | 0.4 | <254.780 | 0.50 | 161.2 | 14.30 | 1.60 | 5.16 | 99.6 | 1.8 | 0.08 | 402.9 | 592054 | |
| UGO12186_r17 | 3084 | <128.230 | 72.74 | 9.18 | 4.74 | 1.6 | 2445 | 10.38 | 15.1 | 86.7 | 12.3 | 331.0 | 45.55 | 22.8 | 961 | 10.90 | 330.1 | 12.24 | 26.55 | 23.03 | 656.6 | 38.9 | 3.59 | 236.2 | 589914 | |
| UGO12186_r18 | 10428 | <138.242 | 3.09 | 0.15 | 0.13 | 0.1 | 3207 | 0.21 | 17.9 | 88.4 | <1.959 | 286.3 | 1.50 | 16.3 | 15395 | 0.38 | 168.2 | 9.49 | 7.25 | 5.14 | 139.7 | 1.0 | 0.14 | 310.0 | 563267 | |
| UGO12186_r19 | 1957 | 224 | 109.97 | 14.68 | 7.85 | 1.7 | 4127 | 15.62 | 16.6 | 91.7 | 41.2 | 269.3 | 64.08 | 8.1 | 390 | 15.80 | 154.2 | 6.71 | 5.47 | 8.32 | 325.6 | 63.4 | 6.25 | 357.1 | 589453 | |
| UGO12186_r2 | 1265 | <103.653 | 1.02 | 0.24 | 0.17 | 0.1 | 3745 | 0.20 | 12.0 | 85.4 | 19.2 | 178.7 | 0.87 | 7.0 | 1438 | 0.27 | 118.3 | 5.97 | 3.16 | 3.55 | 108.3 | 1.3 | 0.21 | 398.6 | 591244 | |
| UGO12186_r20 | 1726 | <120.438 | 26.80 | 2.29 | 1.02 | 0.8 | 2546 | 3.19 | 13.0 | 94.0 | 15.9 | 397.9 | 19.13 | 17.7 | 1401 | 4.08 | 353.5 | 18.11 | 25.31 | 9.67 | 944.4 | 8.3 | 0.71 | 200.8 | 588773 | |
| UGO12186_r21 | 2755 | 277 | 164.19 | 24.61 | 13.36 | 3.0 | 3458 | 24.22 | 20.2 | 90.7 | 18.8 | 366.7 | 96.45 | 31.0 | 888 | 23.51 | 238.2 | 13.10 | 11.98 | 10.30 | 234.6 | 110.8 | 10.59 | 423.4 | 586550 | |
| UGO12186_r22 | 899 | <112.484 | 32.66 | 5.02 | 2.25 | 1.0 | 4776 | 6.09 | 24.8 | 84.7 | 11.0 | 382.8 | 21.61 | 3.6 | 379 | 5.96 | 160.8 | 7.09 | 2.34 | 6.27 | 164.7 | 20.9 | 1.88 | 382.8 | 592219 | |
| UGO12186_r23 | 2472 | <107.834 | 11.15 | 0.49 | 0.25 | 0.2 | 3824 | 0.65 | 23.6 | 87.2 | 8.2 | 588.3 | 4.53 | 8.9 | 1044 | 0.94 | 141.4 | 31.20 | 3.97 | 4.54 | 91.6 | 1.8 | 0.17 | 348.0 | 589267 | |
| UGO12186_r24 | 1269 | <109.016 | 13.41 | 40.06 | 45.25 | 0.9 | 4492 | 11.41 | 45.0 | 108.2 | 12.6 | 194.7 | 8.45 | 8.9 | 436 | 3.35 | 177.5 | 6.75 | 9.99 | 8.05 | 96.9 | 367.3 | 51.01 | 1072.9 | 591000 | |
| UGO12186_r3 | 629 | <253.094 | 9.28 | 0.86 | 0.27 | 0.3 | 3715 | 1.54 | 26.2 | 86.1 | 33.2 | 526.1 | 5.55 | 39.3 | 1180 | 1.80 | | | | | | | | | | |

Appendix C: Eastern Sunda arc rutile trace element chemistry (LA-ICP-MS)

| Analysis ID | Al | Ca | Ce | Dy | Er | Eu | Fe | Gd | Hf | Mg | Mn | Nb | Nd | Pb | Si | Sm | Sn | Ta | Th | U | W | Y | Yb | Zr | Ti |
|-------------|-------|----------|--------|-------|--------|--------|------|--------|------|-------|--------|--------|-------|-------|----------|--------|-------|-------|-------|-------|--------|------|--------|-------|--------|
| UG012186_14 | 6600 | <260.290 | 29.51 | 3.47 | 1.69 | 0.5 | 3257 | 3.52 | 18.3 | 173.4 | 22.6 | 295.8 | 18.34 | 171.8 | 3879 | 4.97 | 241.0 | 9.21 | 7.00 | 8.30 | 598.1 | 14.8 | 1.64 | 311.8 | 581330 |
| UG012186_15 | 513 | <242.458 | 2.71 | 0.33 | 0.24 | 0.1 | 2962 | 0.17 | 24.4 | 80.6 | 11.2 | 315.5 | 1.55 | 23.6 | 697 | 0.42 | 217.9 | 15.46 | 6.54 | 6.24 | 287.0 | 1.5 | 0.14 | 376.6 | 591678 |
| UG012186_16 | 2810 | <112.687 | 29.39 | 3.92 | 2.26 | 0.8 | 3616 | 4.20 | 21.4 | 88.4 | 10.2 | 432.7 | 19.72 | 52.8 | 1619 | 4.96 | 170.8 | 19.85 | 21.21 | 9.35 | 155.5 | 21.1 | 2.26 | 374.7 | 588610 |
| UG012186_17 | 991 | 220 | 109.88 | 10.71 | 3.43 | 3.3 | 4009 | 16.19 | 21.6 | 87.1 | 82.4 | 448.8 | 76.17 | 6.5 | 1175 | 19.72 | 225.1 | 25.72 | 16.90 | 11.29 | 390.6 | 33.1 | 2.38 | 522.7 | 590525 |
| UG012186_18 | 950 | <124.834 | 7.71 | 0.52 | 0.40 | 0.4 | 4140 | 0.97 | 17.5 | 379.2 | 73.8 | 426.5 | 7.02 | 4.5 | 1123 | 1.59 | 436.5 | 10.43 | 12.82 | 11.93 | 617.8 | 2.3 | 0.23 | 366.6 | 589403 |
| UG012186_19 | 947 | <143.428 | 10.64 | 0.94 | 0.47 | 0.4 | 3542 | 1.22 | 17.6 | 88.8 | 8.7 | 227.6 | 6.42 | 5.7 | 839 | 1.60 | 155.1 | 6.93 | 3.57 | 5.29 | 115.2 | 4.1 | 0.29 | 368.0 | 592538 |
| UG012190_1 | 450 | <129.127 | 0.09 | 0.01 | 0.02 | 0.0 | 5189 | <0.004 | 12.9 | 80.3 | 23.2 | 1941.9 | 0.09 | 1.9 | 974 | 0.01 | 165.7 | 16.07 | 1.22 | 3.23 | 451.4 | 0.1 | 0.01 | 342.8 | 590223 |
| UG012190_10 | 1345 | <149.372 | 1.40 | 0.11 | 0.07 | 0.0 | 8197 | 0.10 | 10.3 | 261.0 | 114.2 | 639.3 | 0.73 | 0.5 | 495 | 0.12 | 180.9 | 29.46 | 4.35 | 4.43 | 579.1 | 0.6 | 0.08 | 236.4 | 588902 |
| UG012190_11 | 127 | <106.682 | 0.07 | 0.02 | <0.001 | 0.0 | 7565 | 0.00 | 13.9 | 86.5 | 102.2 | 1305.2 | 0.05 | 4.4 | 227 | 0.01 | 183.1 | 15.52 | 1.23 | 2.55 | 225.9 | 0.0 | <0.002 | 329.8 | 590275 |
| UG012190_12 | 252 | <107.516 | 0.54 | 0.12 | 0.04 | 0.0 | 5913 | 0.18 | 16.6 | 79.5 | 9.8 | 2035.9 | 0.43 | 0.4 | <208.502 | 0.13 | 322.8 | 35.88 | 0.80 | 3.32 | 694.2 | 0.7 | 0.09 | 437.2 | 590605 |
| UG012190_13 | 621 | <106.583 | 0.32 | 0.14 | 0.05 | 0.0 | 4588 | 0.09 | 8.4 | 86.9 | 138.5 | 1409.6 | 0.35 | 6.4 | <206.544 | 0.11 | 272.5 | 8.12 | 1.85 | 4.77 | 751.2 | 0.3 | 0.07 | 280.9 | 591914 |
| UG012190_14 | 227 | <106.243 | 1.07 | 0.12 | 0.04 | 0.0 | 6197 | 0.10 | 10.0 | 93.9 | 28.6 | 528.1 | 0.43 | 0.7 | 220 | 0.13 | 157.1 | 14.60 | 3.08 | 1.97 | 235.9 | 0.5 | 0.04 | 280.1 | 592546 |
| UG012190_15 | 585 | <107.755 | 0.08 | 0.02 | 0.01 | 0.0 | 6033 | <0.003 | 17.4 | 86.9 | 8.0 | 855.5 | 0.01 | 0.1 | <208.511 | 0.01 | 243.0 | 30.46 | 2.46 | 3.43 | 395.0 | 0.1 | 0.01 | 416.0 | 591690 |
| UG012190_16 | 374 | <106.608 | 0.34 | 0.02 | 0.04 | 0.0 | 4757 | 0.05 | 7.4 | 86.8 | 30.1 | 1357.4 | 0.27 | 1.2 | 1098 | 0.06 | 405.8 | 15.77 | 2.03 | 3.57 | 605.9 | 0.2 | 0.01 | 153.2 | 591112 |
| UG012190_17 | 575 | <106.386 | 0.24 | 0.02 | 0.03 | 0.0 | 5813 | 0.02 | 10.1 | 83.2 | 39.2 | 457.6 | 0.10 | 1.2 | 1253 | 0.05 | 166.8 | 21.99 | 2.20 | 1.54 | 285.0 | 0.2 | 0.01 | 274.5 | 591111 |
| UG012190_18 | 261 | <103.533 | 0.07 | 0.01 | 0.00 | 0.0 | 6249 | 0.02 | 4.2 | 80.8 | 34.0 | 1373.9 | 0.06 | 0.9 | 854 | 0.01 | 143.3 | 3.25 | 3.54 | 2.80 | 258.8 | 0.1 | 0.01 | 131.9 | 589821 |
| UG012190_19 | 253 | <108.604 | 0.08 | 0.04 | 0.03 | <0.001 | 5342 | 0.00 | 9.2 | 80.5 | 30.0 | 869.9 | 0.06 | 1.5 | 749 | 0.01 | 231.1 | 22.15 | 0.86 | 3.16 | 583.8 | 0.2 | 0.04 | 247.9 | 591306 |
| UG012190_2 | 264 | <107.785 | 1.22 | 0.11 | 0.04 | 0.1 | 5982 | 0.20 | 13.4 | 78.1 | 12.9 | 969.0 | 0.66 | 1.2 | 1816 | 0.11 | 172.2 | 28.45 | 6.30 | 3.24 | 348.1 | 0.7 | 0.03 | 327.3 | 589739 |
| UG012190_20 | 611 | <103.265 | 0.08 | 0.01 | <0.001 | 0.0 | 5144 | 0.02 | 18.5 | 83.2 | 3.8 | 576.9 | 0.07 | 2.0 | 903 | <0.003 | 192.4 | 30.72 | 0.60 | 3.37 | 413.2 | 0.1 | 0.01 | 446.8 | 591523 |
| UG012190_21 | 5705 | <128.318 | 0.38 | 0.01 | 0.02 | 0.0 | 4351 | 0.06 | 11.8 | 88.8 | 9.6 | 1118.7 | 0.17 | 10.5 | 6637 | 0.03 | 231.8 | 11.21 | 3.22 | 2.57 | 781.7 | 0.1 | 0.04 | 248.0 | 578292 |
| UG012190_22 | 190 | <107.292 | 0.68 | 0.07 | 0.04 | 0.0 | 6627 | 0.08 | 19.9 | 85.2 | 21.8 | 2891.2 | 0.34 | 0.5 | 439 | 0.06 | 235.7 | 73.35 | 1.92 | 3.46 | 418.9 | 0.6 | 0.05 | 421.4 | 58824 |
| UG012190_23 | 512 | <135.206 | 0.18 | 0.01 | <0.002 | <0.001 | 6847 | 0.04 | 20.8 | 80.9 | 50.8 | 6500.0 | 0.09 | 2.0 | <259.503 | 0.04 | 211.6 | 71.36 | 5.21 | 5.10 | 572.6 | 0.0 | 0.01 | 410.4 | 585530 |
| UG012190_24 | 329 | <108.984 | 0.29 | 0.02 | 0.04 | 0.0 | 4812 | 0.04 | 6.5 | 83.3 | 44.3 | 352.2 | 0.11 | 2.0 | <209.022 | 0.01 | 375.0 | 4.34 | 1.82 | 4.25 | 420.6 | 0.2 | 0.02 | 150.8 | 593553 |
| UG012190_25 | 674 | <108.315 | 0.13 | 0.02 | <0.001 | <0.001 | 3988 | 0.01 | 7.3 | 108.6 | 27.1 | 638.9 | 0.09 | 0.3 | 671 | 0.03 | 192.7 | 35.58 | 2.40 | 1.38 | 145.0 | 0.1 | <0.002 | 175.7 | 592876 |
| UG012190_26 | 616 | <111.016 | 0.05 | 0.00 | 0.00 | 0.00 | 5882 | 0.00 | 7.5 | 93.0 | 33.5 | 1847.9 | 0.02 | 2.6 | <212.641 | <0.004 | 431.9 | 42.48 | 0.73 | 3.75 | 506.5 | 0.1 | 0.01 | 157.3 | 590377 |
| UG012190_27 | 246 | <189.255 | 1.00 | 0.12 | 0.05 | 0.0 | 5627 | 0.18 | 7.3 | 78.5 | 2.9 | 1182.9 | 0.53 | 0.2 | <381.459 | 0.09 | 192.0 | 23.32 | 1.19 | 3.59 | 413.4 | 0.9 | 0.02 | 190.3 | 591941 |
| UG012190_28 | 385 | <134.714 | 0.15 | 0.01 | 0.02 | 0.0 | 6000 | 0.01 | 10.4 | 79.5 | 33.0 | 918.6 | 0.09 | 1.4 | <257.715 | 0.01 | 653.3 | 20.83 | 4.23 | 4.11 | 575.2 | 0.1 | 0.02 | 242.5 | 590998 |
| UG012190_29 | 761 | <117.593 | 0.35 | 0.07 | 0.04 | 0.0 | 4162 | 0.11 | 14.1 | 96.8 | 15.0 | 1160.4 | 0.22 | 2.2 | <224.806 | 0.02 | 210.2 | 30.00 | 4.54 | 2.88 | 359.9 | 0.4 | 0.13 | 369.1 | 592139 |
| UG012190_3 | 255 | <103.797 | 0.02 | 0.00 | <0.001 | 0.0 | 7131 | <0.003 | 15.5 | 79.7 | 15.7 | 616.8 | 0.00 | 0.6 | 656 | 0.00 | 329.7 | 11.10 | 0.29 | 14.04 | 560.6 | 0.0 | <0.002 | 436.5 | 590410 |
| UG012190_30 | 494 | <110.528 | 0.07 | 0.03 | 0.00 | 0.0 | 5461 | <0.003 | 13.8 | 96.8 | 18.8 | 1834.0 | 0.06 | 0.5 | <211.172 | 0.01 | 145.7 | 77.06 | 5.75 | 1.74 | 253.5 | 0.1 | <0.002 | 343.2 | 591550 |
| UG012190_31 | 770 | <114.178 | 0.88 | 0.05 | 0.04 | 0.0 | 4053 | 0.11 | 11.4 | 97.7 | 36.1 | 1735.0 | 0.42 | 1.0 | <218.003 | 0.06 | 312.2 | 23.45 | 3.15 | 4.88 | 895.9 | 0.3 | 0.01 | 263.9 | 591821 |
| UG012190_32 | 154 | <107.838 | 0.07 | 0.01 | 0.01 | <0.001 | 6312 | 0.01 | 7.8 | 80.3 | 32.9 | 1023.6 | 0.06 | 2.5 | <205.775 | 0.00 | 253.9 | 5.50 | 4.29 | 4.68 | 562.9 | 0.1 | <0.002 | 196.3 | 590552 |
| UG012190_4 | 289 | <99.995 | 0.18 | 0.03 | 0.00 | <0.001 | 5930 | 0.02 | 10.7 | 135.8 | 67.9 | 373.1 | 0.05 | 6.2 | 1029 | 0.03 | 307.2 | 7.92 | 2.04 | 6.63 | 994.9 | 0.1 | <0.002 | 267.4 | 590404 |
| UG012190_5 | 171 | <103.943 | 0.17 | 0.03 | 0.01 | 0.0 | 6182 | 0.02 | 9.3 | 86.1 | 4.0 | 953.1 | 0.16 | 0.6 | 456 | 0.00 | 281.5 | 37.56 | 1.21 | 2.39 | 410.9 | 0.2 | 0.02 | 206.8 | 591132 |
| UG012190_6 | 569 | <109.130 | 0.31 | 0.05 | 0.03 | 0.0 | 4964 | 0.03 | 6.8 | 87.7 | 112.3 | 1336.0 | 0.14 | 3.4 | 468 | 0.06 | 249.4 | 8.26 | 2.32 | 4.25 | 418.9 | 0.2 | 0.03 | 158.7 | 591155 |
| UG012190_7 | 531 | <108.114 | 0.41 | 0.04 | 0.00 | 0.0 | 5869 | 0.05 | 10.3 | 82.6 | 119.7 | 1486.1 | 0.12 | 5.4 | 391 | 0.05 | 698.5 | 27.81 | 3.63 | 9.57 | 2593.2 | 0.2 | 0.01 | 208.9 | 588755 |
| UG012190_8 | 354 | <105.833 | 0.04 | 0.01 | <0.001 | <0.001 | 5316 | 0.01 | 9.7 | 80.2 | 24.9 | 1321.8 | 0.00 | 0.7 | 319 | <0.003 | 191.2 | 31.52 | 0.67 | 3.66 | 476.3 | 0.0 | 0.01 | 210.8 | 592000 |
| UG012190_9 | 316 | <103.330 | 1.14 | 0.08 | 0.06 | 0.0 | 6189 | 0.13 | 11.7 | 96.6 | 16.7 | 2752.7 | 0.57 | 1.5 | 562 | 0.15 | 464.1 | 52.32 | 2.61 | 5.42 | 769.7 | 0.7 | 0.05 | 254.0 | 588429 |
| UG012193_1 | 653 | <151.500 | 2.65 | 0.17 | 0.09 | 0.1 | 3839 | 0.24 | 12.2 | 82.7 | <2.142 | 188.0 | 1.53 | 0.8 | 1629 | 0.38 | 87.0 | 5.22 | 0.49 | 3.66 | 158.8 | 0.4 | 0.04 | 271.4 | 589184 |
| UG012193_10 | 514 | <209.343 | 0.97 | 0.07 | 0.05 | 0.0 | 4034 | 0.17 | 19.4 | 86.9 | 21.7 | 204.8 | 0.53 | 2.2 | 1503 | 0.04 | 88.4 | 7.62 | 2.59 | 1.54 | 287.1 | 0.3 | 0.05 | 169.7 | 590568 |
| UG012193_11 | 2830 | <149.240 | 31.67 | 1.37 | 0.42 | 0.5 | 3242 | 2.93 | 18.6 | 91.9 | 6.7 | 168.0 | 19.79 | 1.6 | 7068 | 3.89 | 124.5 | 5.50 | 4.15 | 10.07 | 219.4 | 5.4 | 0.27 | 519.6 | 577430 |
| UG012193_12 | 623 | 179 | 1.23 | 0.15 | 0.09 | 0.1 | 3777 | 0.22 | 12.2 | 90.6 | <1.995 | 209.2 | 0.60 | 65.3 | 1893 | 0.13 | 88.3 | 6.50 | 2.12 | 3.90 | 109.8 | 0.8 | 0.06 | 294.7 | 585757 |
| UG012193_13 | 275 | <155.176 | 3.39 | 0.12 | 0.07 | 0.1 | 3951 | 0.37 | 12.3 | 83.9 | 4.6 | 235.4 | 2.10 | 0.3 | 1163 | 0.38 | 80.2 | 4.17 | 1.56 | 3.63 | 398.8 | 0.3 | 0.01 | 234.6 | 590490 |
| UG012193_14 | 2267 | 161 | 4.77 | 0.20 | 0.09 | 0.1 | 3161 | 0.39 | 12.4 | 85.6 | 4.4 | 227.6 | 2.38 | 0.9 | 4654 | 0.71 | 108.2 | 5.58 | 2.29 | 4.43 | 151.4 | 0.8 | 0.01 | 286.0 | 581952 |
| UG012193_15 | 4088 | 1002 | 14.35 | 0.51 | 0.19 | 0.4 | 4712 | 1.30 | 15.5 | 104.7 | 3.0 | 153.7 | 8.52 | 12.7 | 6146 | 1.98 | 67.4 | 3.94 | 1.24 | 3.40 | 77.1 | 2.2 | 0.12 | 389.2 | 576240 |
| UG012193_16 | 3407 | <234.062 | 8.30 | 0.15 | 0.07 | 0.1 | 4153 | 0.69 | 14.4 | 82.2 | <3.300 | 168.4 | 3.12 | 1.3 | 8171 | 0.61 | 89.7 | 4.86 | 1.96 | 4.14 | 165.6 | 0.7 | 0.05 | 319.6 | 576357 |
| UG012193_17 | 19335 | 285 | 5.85 | 0.25 | 0.10 | 0.2 | 4184 | 0.51 | 14.5 | 110.5 | 58.1 | 216.1 | 3.52 | 3.6 | 37508 | 0.61 | 37.3 | 3.95 | 4.52 | 2.01 | 1242.4 | 0.8 | 0.04 | 279.1 | 522392 |
| UG012193_18 | 942 | 129 | 1.75 | 0.36 | 0.29 | 0.0 | | | | | | | | | | | | | | | | | | | |

Appendix C: Eastern Sunda arc rutile trace element chemistry (LA-ICP-MS)

| Analysis ID | Al | Ca | Ce | Dy | Er | Eu | Fe | Gd | Hf | Mg | Mn | Nb | Nd | Pb | Si | Sm | Sn | Ta | Th | U | W | Y | Yb | Zr | Ti |
|--------------|-------|----------|--------|--------|--------|--------|-------|--------|--------|--------|--------|-------|--------|--------|----------|--------|--------|-------|--------|-------|--------|--------|--------|---------|--------|
| UG012193_r4 | 1794 | 228 | 15.24 | 1.08 | 0.29 | 0.4 | 10067 | 0.85 | 32.7 | 114.2 | 19.8 | 19.2 | 5.76 | 6.0 | 3481 | 1.00 | 44.4 | 5.01 | 2.17 | 7.20 | 96.5 | 4.2 | 0.34 | 1123.5 | 581043 |
| UG012193_r5 | 5009 | <153.127 | 7.40 | 0.20 | 0.08 | 0.1 | 3704 | 0.36 | 12.7 | 84.8 | 4.7 | 209.1 | 2.66 | 1.5 | 9926 | 0.47 | 102.9 | 4.98 | 3.58 | 5.21 | 253.0 | 0.7 | 0.04 | 282.5 | 574250 |
| UG012193_r6 | 6148 | 432 | 5.09 | 0.15 | 0.02 | 0.1 | 2600 | 0.35 | 13.8 | 92.0 | <2.371 | 231.4 | 2.07 | 4.0 | 7666 | 0.58 | 93.1 | 4.87 | 2.21 | 4.19 | 215.8 | 0.5 | 0.05 | 302.7 | 573601 |
| UG012193_r7 | 422 | <132.950 | 5.53 | 2.73 | 2.35 | 0.3 | 4085 | 1.48 | 20.9 | 82.4 | <1.877 | 134.9 | 2.84 | 2.1 | 1647 | 0.78 | 129.2 | 4.85 | 0.75 | 9.20 | 225.3 | 19.8 | 0.28 | 617.2 | 589204 |
| UG012193_r8 | 432 | 199 | 3.09 | 0.28 | 0.16 | 0.2 | 4008 | 0.43 | 14.2 | 96.5 | <2.057 | 183.1 | 2.61 | 2.1 | 1485 | 0.57 | 102.9 | 5.02 | 2.80 | 4.27 | 306.9 | 1.2 | 0.12 | 304.4 | 589204 |
| UG012193_r9 | 6829 | <112.483 | 0.90 | 0.03 | 0.01 | 0.0 | 4254 | 0.05 | 15.4 | 85.4 | 25.1 | 208.2 | 0.43 | 2.9 | 7702 | 0.19 | 28.1 | 6.65 | 2.52 | 0.97 | 892.8 | 0.2 | 0.02 | 211.5 | 575806 |
| UG012195_r1 | 125 | 406 | 0.09 | <0.002 | 0.01 | 0.0 | 1340 | 0.01 | 15.5 | 89.4 | <1.904 | 328.1 | 0.06 | 8.2 | 893 | 0.01 | 4.3 | 9.35 | 0.01 | 0.71 | 51.4 | 0.2 | 0.00 | 248.2 | 595996 |
| UG012195_r10 | 854 | <122.045 | 0.20 | 0.06 | 0.04 | 0.0 | 1241 | 0.03 | 24.5 | 83.1 | <1.724 | 434.5 | 0.17 | 0.2 | 313 | 0.05 | 370.3 | 9.33 | 1.05 | 0.71 | 51.4 | 0.2 | 0.04 | 388.2 | 594679 |
| UG012195_r11 | 1727 | 556 | 74.22 | 9.62 | 7.06 | 2.8 | 536 | 10.24 | 26.0 | 120.1 | 74.8 | 539.2 | 44.45 | 7.5 | 1791 | 9.17 | 97.4 | 23.71 | 35.62 | 5.56 | 2026.3 | 57.1 | 6.58 | 408.3 | 586607 |
| UG012195_r12 | 1799 | <258.274 | 3.46 | 1.25 | 0.73 | 0.2 | 1383 | 1.01 | 66.7 | 99.3 | 50.2 | 426.3 | 3.23 | 14.4 | 2918 | 1.17 | 13.0 | 15.34 | 29.91 | 1.55 | 239.7 | 4.6 | 0.70 | 847.9 | 590658 |
| UG012195_r13 | 2345 | <238.263 | 0.03 | <0.004 | <0.003 | 0.0 | 213 | <0.007 | 11.1 | 75.3 | <3.486 | 316.8 | <0.006 | 0.2 | <466.653 | 0.04 | 100.0 | 19.04 | 1.32 | 0.47 | 31.5 | 0.0 | 0.01 | 157.7 | 594296 |
| UG012195_r14 | 2667 | 162 | 0.29 | 0.15 | 0.03 | 0.0 | 1003 | 0.19 | 18.6 | 83.7 | <2.067 | 392.3 | 0.33 | 18.3 | 2035 | 0.12 | 1158.7 | 11.13 | 20.97 | 2.11 | 245.8 | 0.3 | 0.03 | 261.3 | 588324 |
| UG012195_r15 | 1313 | <255.913 | 0.04 | <0.005 | <0.004 | <0.005 | 223 | 0.06 | 15.4 | 78.4 | <3.751 | 327.0 | 0.14 | 0.0 | <500.679 | 0.02 | 25.7 | 16.54 | 0.47 | 0.10 | 10.2 | 0.0 | <0.006 | 269.7 | 586118 |
| UG012195_r16 | 435 | <598.904 | 0.33 | 0.05 | <0.008 | 0.0 | 2241 | <0.016 | 60.7 | 88.0 | 13.4 | 329.6 | <0.015 | 7.3 | 2157 | <0.021 | 7.7 | 4.74 | 0.05 | 0.48 | 6.3 | 0.2 | <0.013 | 732.6 | 592833 |
| UG012195_r17 | 2100 | <234.342 | 7.27 | 1.26 | 0.82 | 0.2 | 569 | 1.01 | 58.6 | 81.2 | 9.3 | 246.1 | 4.03 | 1.3 | 868 | 1.16 | 76.3 | 4.23 | 2.63 | 1.31 | 92.5 | 5.5 | 0.59 | 892.4 | 592557 |
| UG012195_r18 | 4294 | <247.001 | 0.34 | 0.14 | 0.04 | 0.0 | 624 | 0.05 | 17.0 | 77.5 | 8.6 | 327.0 | 0.32 | 0.6 | 9043 | 0.22 | 7.8 | 11.43 | 0.07 | 0.73 | 11.5 | 0.5 | 0.04 | 239.2 | 581391 |
| UG012195_r19 | 110 | <238.109 | <0.002 | <0.004 | <0.003 | <0.002 | 1142 | 0.01 | 29.6 | 76.7 | 7.0 | 406.1 | <0.006 | <0.017 | <467.339 | 0.03 | 6.1 | 9.52 | <0.001 | 0.90 | 2.3 | 0.0 | <0.005 | 372.1 | 596957 |
| UG012195_r20 | 4243 | <128.991 | 0.49 | 0.05 | 0.03 | 0.0 | 1446 | 0.09 | 16.0 | 86.5 | <1.816 | 415.0 | 0.16 | 7.4 | 6471 | 0.12 | 503.5 | 12.63 | 15.56 | 0.93 | 922.8 | 0.2 | 0.01 | 231.4 | 581222 |
| UG012195_r21 | 2243 | <115.738 | 0.58 | 0.12 | 0.04 | 0.0 | 126 | 0.10 | 25.4 | 83.9 | <1.629 | 518.7 | 0.34 | 0.5 | 309 | 0.15 | 51.0 | 26.35 | 1.47 | 0.31 | 78.8 | 0.5 | 0.06 | 396.3 | 594443 |
| UG012195_r22 | 2757 | 577 | 25.23 | 3.00 | 1.67 | 0.8 | 5123 | 2.63 | 23.2 | 191.7 | 75.7 | 293.5 | 18.01 | 37.1 | 4993 | 3.84 | 30.5 | 8.04 | 18.47 | 12.53 | 119.9 | 13.7 | 1.60 | 406.7 | 580877 |
| UG012195_r23 | 129 | <163.509 | 0.14 | 0.01 | 0.18 | 0.0 | 1100 | 0.05 | 73.9 | 91.6 | <2.301 | 337.4 | 0.12 | 16.0 | 2429 | <0.005 | 2.5 | 13.37 | 0.10 | 0.38 | 15.2 | 1.4 | 0.78 | 2595.3 | 592513 |
| UG012197_r1 | 927 | 691 | 3.21 | 0.07 | <0.004 | 0.2 | 2947 | 0.08 | 5.2 | 80.3 | 41.9 | 302.7 | 1.77 | 35.7 | 2075 | 0.26 | 23.2 | 8.18 | 0.15 | 0.38 | 46.9 | 0.3 | 0.05 | 128.1 | 592152 |
| UG012197_r2 | 345 | 233 | 10.74 | 0.78 | 0.50 | 0.5 | 8473 | 0.82 | 27.5 | 144.8 | 27.2 | 302.5 | 5.12 | 7.4 | 1486 | 1.30 | 240.0 | 6.31 | 2.87 | 1.48 | 20.1 | 3.7 | 0.67 | 486.6 | 588732 |
| UG012197_r3 | 5424 | 238 | 65.12 | 5.31 | 3.66 | 3.2 | 12986 | 5.76 | 3.9 | 2122.8 | 545.7 | 315.3 | 239.95 | 25.9 | 7718 | 5.32 | 315.3 | 10.89 | 13.24 | 1.19 | 222.3 | 28.1 | 3.44 | 74.2 | 589360 |
| UG012197_r4 | 319 | <137.778 | 27.45 | 2.23 | 1.41 | 1.2 | 6209 | 2.19 | 2.6 | 90.7 | 16.6 | 165.6 | 11.45 | 8.4 | 467 | 2.50 | 213.3 | 4.01 | 1.54 | 1.51 | 158.2 | 12.0 | 1.34 | 95.2 | 592651 |
| UG012197_r5 | 116 | <232.956 | 0.24 | 0.01 | 0.05 | 0.0 | 6847 | <0.006 | 32.9 | 76.6 | 13.7 | 509.3 | 0.20 | 0.7 | 2898 | <0.008 | 462.9 | 15.89 | 0.31 | 25.99 | 809.2 | 0.3 | 0.07 | 751.4 | 587453 |
| UG012197_r6 | 550 | <134.388 | 18.66 | 0.14 | 0.68 | 0.7 | 5110 | 1.40 | 5.4 | 87.5 | 36.0 | 653.0 | 7.74 | 5.9 | 976 | 1.63 | 322.8 | 29.63 | 2.03 | 196.0 | 6.2 | 0.83 | 91.2 | 591668 | |
| UG012197_r7 | 439 | <228.087 | 40.92 | 2.67 | 1.78 | 1.5 | 6192 | 3.11 | 30.0 | 85.8 | 39.0 | 264.3 | 16.87 | 19.7 | 1532 | 3.53 | 377.5 | 18.71 | 4.72 | 0.67 | 172.4 | 13.7 | 1.63 | 588.4 | 590327 |
| UG012197_r8 | 121 | <215.442 | 0.17 | <0.004 | 0.00 | 0.0 | 6866 | <0.006 | 25.3 | 75.2 | <3.208 | 863.1 | 0.12 | 0.2 | 889 | <0.007 | 851.5 | 25.74 | 0.33 | 52.24 | 2109.5 | 0.1 | <0.005 | 472.7 | 588266 |
| UG012198_r1 | 21804 | <127.930 | 0.88 | 0.14 | 0.10 | 0.1 | 4415 | 0.12 | 24.9 | 311.4 | 52.6 | 448.2 | 0.52 | 4.2 | 24475 | 0.14 | 161.7 | 23.08 | 6.78 | 9.66 | 418.4 | 0.7 | 0.08 | 337.1 | 536850 |
| UG012198_r10 | 310 | <121.187 | 0.58 | 0.02 | 0.02 | 0.0 | 4300 | 0.17 | 17.8 | 90.0 | 82.7 | 312.2 | 0.23 | 3.4 | 452 | 0.06 | 447.9 | 10.47 | 4.36 | 8.64 | 152.2 | 0.2 | 0.03 | 219.9 | 590643 |
| UG012198_r11 | 609 | <118.810 | 0.70 | 0.31 | 0.30 | 0.1 | 4657 | 0.39 | 21.2 | 114.5 | 51.4 | 358.5 | 0.63 | 2.8 | 852 | 0.24 | 381.6 | 12.92 | 13.20 | 16.78 | 495.5 | 2.4 | 0.28 | 361.0 | 590677 |
| UG012198_r12 | 245 | <105.807 | 0.02 | <0.002 | <0.002 | <0.001 | 4331 | 0.02 | 24.6 | 97.4 | 2.1 | 92.8 | <0.003 | 0.1 | 208 | <0.003 | 500.6 | 8.37 | 0.72 | 24.28 | 343.5 | 0.1 | <0.002 | 670.9 | 592118 |
| UG012198_r13 | 1877 | <143.992 | 0.11 | 0.02 | <0.002 | <0.001 | 5110 | <0.005 | 38.8 | 94.7 | 8.0 | 203.1 | 0.10 | 1.8 | 2480 | 0.01 | 356.0 | 14.17 | 1.14 | 22.43 | 250.5 | 0.1 | 0.01 | 684.5 | 587608 |
| UG012198_r14 | 1713 | <117.671 | 0.10 | 0.00 | 0.03 | <0.001 | 4991 | 0.02 | 14.0 | 118.4 | 19.0 | 397.1 | 0.03 | 1.4 | 1605 | <0.004 | 228.3 | 11.25 | 2.09 | 10.65 | 937.4 | 0.1 | 0.01 | 192.2 | 589313 |
| UG012198_r15 | 473 | 178 | 0.54 | 0.19 | 0.14 | 0.1 | 5491 | 0.20 | 33.4 | 93.7 | 11.0 | 812.1 | 0.49 | 1.9 | 376 | 0.13 | 233.6 | 25.92 | 1.05 | 6.22 | 368.7 | 1.0 | 0.13 | 309.2 | 590669 |
| UG012198_r16 | 729 | <224.479 | 0.05 | 0.02 | 0.00 | 0.0 | 4131 | 0.01 | 17.3 | 95.7 | <3.286 | 226.5 | 0.01 | 1.5 | 446 | 0.03 | 278.7 | 8.00 | 0.34 | 1.39 | 760.2 | 0.1 | <0.005 | 173.8 | 591763 |
| UG012198_r17 | 1347 | <113.216 | 0.22 | 0.01 | <0.002 | 0.0 | 4854 | <0.004 | 40.1 | 95.2 | 16.1 | 412.1 | 0.15 | 4.1 | 712 | <0.004 | 306.8 | 16.38 | 0.15 | 4.80 | 216.5 | 0.1 | 0.01 | 730.7 | 590907 |
| UG012198_r18 | 3214 | 157 | 0.22 | 0.02 | 0.03 | 0.0 | 3519 | 0.06 | 24.8 | 141.6 | 17.9 | 170.9 | 0.14 | 4.2 | 22651 | 0.01 | 311.5 | 8.53 | 2.67 | 30.77 | 450.5 | 0.1 | 0.04 | 466.9 | 599636 |
| UG012198_r19 | 7176 | 205 | 12.37 | 158.99 | 136.05 | 18.3 | 4379 | 78.14 | 1411.5 | 85.9 | <2.481 | 316.8 | 22.45 | 7.7 | 35706 | 24.48 | 328.0 | 14.72 | 29.93 | 28.65 | 257.9 | 1294.0 | 167.60 | 76087.3 | 475820 |
| UG012198_r20 | 1368 | <116.187 | 0.57 | 0.11 | 0.06 | 0.0 | 4379 | 0.04 | 38.8 | 104.8 | 14.4 | 458.6 | 0.33 | 1.5 | 3589 | 0.08 | 132.8 | 13.63 | 4.56 | 8.74 | 279.4 | 0.5 | 0.06 | 387.6 | 587100 |
| UG012198_r21 | 1277 | <112.445 | 0.21 | 0.04 | 0.00 | 0.0 | 5850 | 0.04 | 42.8 | 185.9 | 11.6 | 485.9 | 0.09 | 0.5 | 1232 | 0.01 | 233.8 | 16.98 | 1.23 | 16.82 | 349.7 | 0.1 | 0.03 | 662.1 | 592606 |
| UG012198_r22 | 482 | <114.893 | 1.49 | 0.03 | 0.02 | 0.0 | 5893 | 0.05 | 9.0 | 89.2 | 19.7 | 165.5 | 0.46 | 2.1 | <210.101 | 0.08 | 356.1 | 10.27 | 6.31 | 14.86 | 2440.0 | 0.2 | 0.05 | 134.4 | 589481 |
| UG012198_r23 | 638 | <118.560 | 0.14 | <0.002 | <0.002 | 0.0 | 4626 | <0.004 | 26.6 | 96.0 | 6.4 | 126.3 | 0.35 | 4.0 | 330 | 0.04 | 462.4 | 10.30 | 1.86 | 25.44 | 437.4 | 0.1 | 0.01 | 613.8 | 591624 |
| UG012198_r24 | 412 | <115.081 | 0.38 | 1.56 | 2.18 | 0.1 | 3531 | 0.50 | 51.7 | 100.5 | 10.6 | 453.1 | 0.35 | 2.1 | 238 | 0.19 | 119.7 | 17.74 | 4.11 | 10.97 | 478.1 | 14.0 | 0.02 | 651.3 | 591695 |
| UG012198_r25 | 1266 | <110.966 | 0.19 | <0.002 | 0.03 | 0.0 | 5805 | 0.01 | 45.0 | 132.6 | 66.0 | 376.7 | 0.05 | 7.1 | 981 | 0.01 | 327.1 | 26.08 | 0.89 | 10.96 | 234.4 | 0.2 | 0.03 | 547.4 | 590033 |
| UG012198_r26 | 573 | <107.474 | 0.12 | <0.002 | 0.00 | 0.0 | 5462 | <0.003 | 10.1 | 88.4 | 25.9 | 271.7 | 0.08 | 3.3 | 302 | 0.01 | 277.4 | 13.61 | 0.48 | 6.28 | 1415.9 | 0.1 | 0.01 | 131.1 | 591019 |
| UG012198_r26 | 713 | <132.150 | 3. | | | | | | | | | | | | | | | | | | | | | | |

Appendix C: Eastern Sunda arc rutile trace element chemistry (LA-ICP-MS)

| Analysis ID | Al | Ca | Ce | Dy | Er | Eu | Fe | Gd | Hf | Mg | Mn | Nb | Nd | Pb | Si | Sm | Sn | Ta | Th | U | W | Y | Yb | Zr | Ti |
|-------------|------|----------|--------|--------|--------|--------|------|--------|------|-------|--------|--------|--------|--------|----------|--------|-------|-------|-------|-------|--------|-------|--------|--------|--------|
| UGO12198_27 | 2187 | 529 | 8.93 | 0.23 | 0.37 | 0.0 | 3759 | 0.28 | 20.4 | 961.9 | 7.6 | 156.0 | 1.20 | 48.7 | 9350 | 0.18 | 141.4 | 6.87 | 2.32 | 3.20 | 148.8 | 2.3 | 0.40 | 265.8 | 578014 |
| UGO12198_28 | 1507 | <126.641 | 0.23 | 0.01 | <0.002 | 0.0 | 6841 | <0.004 | 24.4 | 100.5 | 5.0 | 264.0 | 0.06 | 98.8 | 3503 | 0.00 | 491.9 | 10.54 | 2.89 | 10.29 | 1228.4 | 0.1 | 0.02 | 389.0 | 582520 |
| UGO12198_29 | 1281 | <120.404 | 0.44 | 0.04 | 0.03 | <0.001 | 5138 | 0.01 | 7.7 | 91.0 | 5.0 | 173.7 | 0.09 | 1.9 | 2444 | 0.01 | 325.2 | 14.67 | 6.61 | 6.07 | 2075.3 | 0.2 | 0.11 | 130.2 | 586355 |
| UGO12198_3 | 1811 | <113.715 | 0.67 | 0.01 | 0.0 | 4310 | 0.01 | 123.2 | 10.4 | 848.0 | 10.4 | 330.3 | 0.06 | 457.0 | 3303 | 0.06 | 457.0 | 56.11 | 7.66 | 3.85 | 1107.0 | 0.2 | 0.03 | 135.7 | 585979 |
| UGO12198_10 | 3166 | <126.784 | 1.00 | 0.31 | 0.48 | 0.0 | 4048 | 0.24 | 28.1 | 139.6 | 19.2 | 535.6 | 0.38 | 1.4 | 3937 | 0.15 | 184.6 | 26.85 | 6.52 | 9.58 | 376.2 | 2.8 | 1.05 | 367.6 | 583191 |
| UGO12198_14 | 3052 | 106 | 0.40 | 0.18 | 0.22 | 0.0 | 3959 | 0.09 | 16.9 | 206.4 | 12.2 | 277.6 | 0.24 | 31.1 | 4816 | 0.05 | 356.6 | 19.83 | 2.03 | 2.62 | 1409.0 | 1.6 | 0.77 | 287.2 | 582241 |
| UGO12198_15 | 328 | <106.685 | 0.13 | 0.01 | 0.0 | 6167 | 0.01 | 27.0 | 88.9 | 11.4 | 268.2 | 0.03 | 1.5 | 844 | <0.003 | 393.9 | 8.86 | 1.75 | 25.19 | 534.8 | 0.1 | 0.04 | 564.9 | 589864 | |
| UGO12198_16 | 586 | <111.400 | 0.12 | 0.01 | 0.01 | 0.0 | 4489 | <0.004 | 10.7 | 88.2 | 11.5 | 505.3 | 0.04 | 2.9 | 1071 | <0.003 | 578.7 | 20.77 | 4.44 | 4.52 | 1833.9 | 0.1 | 0.04 | 114.9 | 589293 |
| UGO12198_17 | 1486 | <146.979 | 0.35 | 0.10 | 0.15 | 0.0 | 3828 | 0.07 | 27.4 | 133.5 | 17.7 | 315.6 | 0.15 | 2.1 | 2243 | 0.04 | 359.4 | 14.75 | 4.01 | 12.18 | 619.4 | 1.1 | 0.56 | 525.8 | 587458 |
| UGO12198_18 | 960 | 275 | 27.58 | 4.87 | 3.32 | 1.3 | 4948 | 4.70 | 30.0 | 127.0 | 33.2 | 358.9 | 15.87 | 5.1 | 1820 | 4.15 | 525.1 | 14.85 | 17.69 | 11.57 | 2627.6 | 25.3 | 4.41 | 562.4 | 586480 |
| UGO12198_19 | 422 | <111.877 | 0.59 | 0.06 | 0.06 | 0.0 | 6194 | 0.05 | 16.2 | 86.5 | 51.5 | 316.7 | 0.24 | 1.3 | 841 | 0.07 | 337.7 | 20.73 | 3.98 | 13.33 | 2317.9 | 0.4 | 0.08 | 208.2 | 586836 |
| BHF-01 r1 | 112 | <100.078 | 0.02 | <0.002 | <0.002 | <0.001 | 4811 | 0.01 | 10.7 | 79.1 | <1.924 | 340.2 | <0.005 | 0.0 | 409 | <0.005 | 90.7 | 9.58 | 0.22 | 15.28 | 2248.2 | 0.0 | <0.003 | 267.0 | 586871 |
| BHF-01 r4 | 192 | <76.927 | 0.01 | 0.00 | <0.002 | <0.001 | 5163 | 0.00 | 15.1 | 81.2 | 23.5 | 379.9 | <0.004 | 0.5 | 540 | <0.003 | 114.1 | 16.94 | 0.26 | 10.37 | 2419.2 | 0.0 | <0.002 | 333.4 | 586696 |
| BHF-01 r5 | 96 | <77.737 | 0.00 | 0.00 | <0.002 | <0.001 | 4656 | 0.00 | 10.7 | 79.6 | 1.5 | 963.9 | <0.004 | <0.003 | 549 | <0.003 | 97.7 | 36.86 | 0.06 | 9.13 | 1110.4 | 0.1 | <0.002 | 223.2 | 586752 |
| BHF-01 r6 | 112 | <90.679 | 0.01 | 0.00 | 0.00 | <0.001 | 5726 | <0.003 | 16.3 | 79.4 | <1.666 | 371.2 | 0.00 | 0.0 | 418 | 0.01 | 89.3 | 3.62 | 0.13 | 14.17 | 4080.8 | 0.0 | <0.002 | 427.9 | 585217 |
| BHF-01 r8 | 60 | <146.590 | <0.001 | <0.003 | <0.003 | <0.002 | 5905 | 0.03 | 16.0 | 83.7 | <2.649 | 272.5 | <0.006 | 0.1 | 420 | <0.006 | 102.1 | 17.62 | 0.16 | 13.59 | 2568.8 | 0.0 | 0.02 | 395.9 | 586821 |
| BHF-01 r11 | 81 | <84.322 | 0.01 | <0.002 | 0.01 | <0.001 | 5369 | <0.003 | 11.3 | 81.9 | 1.6 | 503.2 | 0.02 | <0.003 | 914 | <0.003 | 85.4 | 14.02 | 0.20 | 11.55 | 1824.7 | 0.1 | 0.01 | 279.6 | 586403 |
| BHF-01 r12 | 58 | 96 | 0.00 | <0.002 | <0.002 | <0.001 | 5508 | <0.003 | 19.6 | 83.9 | <1.469 | 451.7 | <0.004 | <0.003 | 811 | <0.004 | 107.3 | 29.50 | 0.00 | 9.23 | 1627.4 | 0.0 | <0.002 | 452.4 | 587421 |
| BHF-01 r13 | 95 | <86.650 | 0.01 | <0.002 | <0.002 | <0.001 | 4350 | <0.003 | 7.7 | 82.1 | 1.5 | 183.4 | <0.003 | 0.0 | 551 | 0.01 | 118.2 | 4.18 | 0.32 | 7.75 | 938.4 | 0.0 | <0.002 | 167.4 | 586874 |
| BHF-01 r14 | 85 | <134.568 | 0.00 | <0.003 | <0.002 | <0.001 | 4390 | <0.005 | 8.8 | 83.8 | <2.241 | 405.0 | <0.005 | 0.0 | 385 | <0.005 | 97.6 | 17.07 | 0.11 | 12.28 | 2953.2 | 0.1 | <0.003 | 197.6 | 586756 |
| BHF-01 r15 | 104 | <286.517 | <0.003 | <0.006 | <0.005 | <0.003 | 4424 | <0.010 | 13.8 | 105.3 | <4.740 | 1147.8 | <0.011 | <0.011 | <613.870 | <0.012 | 119.2 | 34.29 | 0.14 | 15.67 | 2619.0 | 0.0 | <0.007 | 279.2 | 586871 |
| BHF-01 r16 | 73 | <88.780 | 0.00 | <0.002 | <0.002 | <0.001 | 6954 | <0.003 | 17.9 | 82.4 | <1.463 | 102.4 | <0.004 | <0.003 | 310 | <0.004 | 194.4 | 17.09 | 0.00 | 17.21 | 5948.8 | 0.0 | <0.002 | 365.7 | 584498 |
| BHF-01 r17 | 378 | <120.081 | 0.01 | <0.002 | 0.01 | <0.001 | 8117 | <0.004 | 6.8 | 355.6 | 5.1 | 415.7 | <0.005 | 0.1 | 616 | <0.005 | 191.7 | 17.15 | 0.26 | 8.34 | 3450.7 | 0.0 | 0.01 | 133.6 | 586127 |
| BHF-01 r18 | 173 | <94.652 | 0.00 | <0.002 | 0.01 | <0.001 | 4402 | 0.00 | 7.8 | 83.3 | <1.544 | 386.9 | 0.01 | <0.004 | <198.701 | 0.00 | 103.6 | 28.76 | 0.20 | 6.63 | 1392.3 | 0.0 | <0.002 | 148.1 | 589458 |
| BHF-01 r19 | 245 | <95.209 | 0.00 | <0.002 | <0.002 | <0.001 | 4769 | <0.003 | 13.2 | 83.6 | <1.547 | 223.2 | <0.004 | <0.004 | <200.054 | 0.00 | 104.1 | 6.01 | 0.24 | 12.29 | 3034.4 | 0.0 | <0.002 | 316.7 | 586292 |
| BHF-01 r20 | 123 | <92.966 | <0.001 | <0.002 | <0.002 | <0.001 | 5167 | 0.00 | 14.8 | 82.8 | <1.504 | 329.2 | <0.004 | 0.0 | <194.519 | <0.004 | 80.8 | 16.92 | 0.05 | 13.49 | 2488.1 | 0.0 | <0.002 | 359.1 | 587538 |
| BHF-01 r21 | 182 | <177.687 | 0.05 | <0.004 | <0.003 | <0.002 | 5661 | <0.006 | 8.1 | 90.1 | <2.825 | 174.3 | 0.03 | 0.2 | 902 | <0.007 | 143.7 | 5.56 | 1.61 | 7.16 | 1887.4 | 0.1 | 0.02 | 167.9 | 586894 |
| BHF-01 r22 | 127 | <229.716 | 0.03 | <0.005 | <0.004 | <0.003 | 4681 | <0.008 | 9.9 | 91.0 | 5.1 | 1258.0 | <0.009 | 0.1 | 724 | <0.009 | 133.3 | 18.44 | 1.13 | 10.67 | 1913.1 | 0.1 | 0.03 | 190.2 | 587237 |
| BHF-01 r23 | 93 | <129.392 | 0.00 | <0.003 | 0.01 | <0.001 | 4536 | 0.02 | 6.7 | 84.0 | <2.046 | 123.0 | 0.01 | <0.005 | 640 | <0.005 | 95.6 | 3.39 | 0.21 | 11.05 | 1913.2 | 0.0 | <0.003 | 157.3 | 586086 |
| BHF-01 r24 | 86 | <97.576 | <0.001 | 0.01 | <0.002 | <0.001 | 4979 | <0.003 | 15.4 | 86.0 | <1.539 | 63.1 | <0.004 | <0.004 | 534 | <0.004 | 64.0 | 5.60 | 0.02 | 11.56 | 1190.0 | 0.0 | <0.002 | 503.6 | 586911 |
| BHF-01 r25 | 171 | <94.588 | 0.00 | <0.002 | <0.002 | 0.0 | 5269 | 0.01 | 8.7 | 83.7 | <1.482 | 112.1 | <0.003 | <0.004 | 426 | <0.004 | 85.7 | 8.24 | 0.03 | 10.65 | 1501.8 | 0.0 | 0.01 | 187.9 | 588433 |
| BHF-01 r26 | 58 | <93.891 | <0.001 | <0.002 | <0.002 | 0.0 | 6863 | <0.003 | 13.3 | 83.3 | <1.476 | 49.2 | <0.003 | 0.0 | 319 | <0.004 | 65.6 | 5.31 | 0.04 | 10.73 | 1643.7 | 0.0 | <0.002 | 282.8 | 588218 |
| BHF-01 r27 | 150 | <95.531 | 0.04 | <0.002 | <0.002 | <0.001 | 6706 | 0.01 | 13.9 | 84.7 | <1.498 | 753.4 | 0.05 | 0.0 | 258 | <0.004 | 121.1 | 24.86 | 1.49 | 8.87 | 1656.8 | 0.0 | 0.01 | 268.7 | 588825 |
| BHF-01 r30 | 138 | <100.970 | 0.06 | <0.002 | 0.00 | <0.001 | 5003 | 0.01 | 9.5 | 90.0 | <1.580 | 263.7 | 0.03 | 0.3 | 234 | 0.01 | 198.0 | 18.65 | 1.70 | 7.11 | 2613.3 | 0.1 | <0.003 | 169.0 | 587779 |
| BHF-01 r29 | 170 | <113.138 | <0.001 | <0.002 | 0.00 | <0.001 | 4410 | <0.004 | 8.6 | 84.6 | <1.768 | 149.1 | 0.01 | 0.0 | <227.689 | 0.01 | 96.3 | 2.52 | 0.19 | 10.62 | 1308.6 | 0.0 | <0.003 | 204.7 | 589017 |
| BHF-01 r31 | 160 | <93.798 | <0.001 | <0.002 | <0.002 | <0.001 | 4959 | <0.003 | 7.3 | 85.4 | <1.466 | 131.5 | <0.003 | 0.0 | <188.342 | <0.004 | 128.4 | 4.26 | 0.07 | 6.57 | 1376.6 | 0.0 | <0.002 | 159.9 | 588386 |
| BHF-01 r32 | 132 | <129.682 | 0.52 | 0.07 | 0.09 | 0.0 | 5872 | 0.10 | 19.6 | 111.8 | 2.9 | 1449.6 | 0.20 | 0.5 | 315 | 0.12 | 122.2 | 39.22 | 0.59 | 15.48 | 6549.2 | 0.4 | 0.05 | 327.7 | 581208 |
| BHF-01 r33 | 71 | <96.493 | 0.03 | 0.01 | <0.002 | 0.0 | 6550 | 0.00 | 13.7 | 86.7 | <1.504 | 313.7 | 0.01 | 0.0 | 206 | <0.004 | 89.2 | 16.53 | 0.05 | 12.07 | 1375.7 | 0.1 | 0.02 | 257.4 | 589931 |
| BHF-01 r34 | 45 | <130.224 | 0.03 | 0.01 | 0.01 | <0.001 | 5616 | <0.005 | 8.8 | 86.0 | <2.026 | 228.4 | 0.02 | <0.005 | <260.277 | <0.005 | 144.9 | 10.40 | 0.99 | 9.15 | 1601.1 | 0.0 | 0.02 | 230.9 | 589256 |
| BHF-01 r35 | 118 | <94.898 | <0.001 | <0.002 | <0.002 | <0.001 | 5885 | <0.003 | 6.9 | 84.5 | <1.475 | 51.9 | <0.003 | <0.003 | <188.353 | <0.004 | 69.6 | 2.13 | 0.01 | 9.07 | 1594.6 | 0.0 | <0.002 | 165.4 | 588990 |
| BHF-01 r36 | 293 | <95.752 | 0.00 | <0.002 | <0.002 | <0.001 | 4956 | 0.01 | 16.2 | 84.4 | <1.486 | 220.9 | 0.02 | 0.0 | <190.558 | <0.004 | 99.9 | 5.39 | 0.18 | 16.44 | 4423.1 | 0.1 | <0.002 | 410.6 | 584921 |
| BHF-01 r37 | 60 | <139.445 | 0.08 | <0.003 | <0.002 | 0.0 | 5679 | <0.005 | 12.0 | 90.4 | <2.163 | 462.6 | 0.05 | 0.0 | <277.146 | <0.006 | 113.6 | 15.70 | 0.08 | 6.79 | 978.1 | 0.0 | 0.01 | 152.7 | 590607 |
| BHF-01 r38 | 133 | <124.819 | <0.001 | <0.002 | <0.002 | <0.001 | 5120 | 0.01 | 20.0 | 120.5 | <1.935 | 496.9 | 0.03 | 0.0 | 76.5 | 34.51 | 0.33 | 11.62 | 811.9 | 0.1 | <0.003 | 389.5 | 586841 | | |
| BHF-01 r39 | 131 | <106.220 | 0.00 | <0.002 | <0.002 | <0.001 | 4729 | <0.004 | 9.3 | 84.6 | <1.646 | 737.2 | <0.004 | 0.0 | <210.634 | <0.004 | 145.2 | 26.58 | 0.22 | 10.18 | 2314.5 | 0.0 | <0.003 | 179.2 | 586911 |
| BHF-01 r40 | 108 | <100.814 | 0.06 | <0.002 | 0.01 | 0.0 | 5642 | <0.003 | 11.3 | 84.3 | 2.3 | 318.7 | 0.02 | 0.0 | 1450 | 0.01 | 79.6 | 4.68 | 1.03 | 16.41 | 2195.3 | 0.0 | 0.01 | 354.9 | 587416 |
| BHF-04 r2 | 50 | <129.156 | 1.07 | 0.08 | 0.04 | 0.0 | 3643 | 0.09 | 5.1 | 92.3 | 6.0 | 29.3 | | | | | | | | | | | | | |

Appendix C: Eastern Sunda arc rutile trace element chemistry (LA-ICP-MS)

| Analysis ID | Al | Ca | Ce | Dy | Er | Eu | Fe | Gd | Hf | Mg | Mn | Nb | Nd | Pb | Si | Sm | Sn | Ta | Th | U | W | Y | Yb | Zr | Ti | |
|-------------|------|----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|--------|-------|----------|--------|--------|--------|-------|--------|--------|--------|--------|---------|---------|--------|
| BHF-04 r6 | 89 | <114.271 | 0.08 | 6.07 | 0.01 | 0.02 | <0.001 | 9142 | <0.004 | 16.2 | 83.9 | 1.8 | 11.17 | 0.04 | 0.2 | 332 | <0.005 | 225.1 | 12.46 | 0.28 | 16.69 | 5915.2 | 0.1 | 0.01 | 219.0 | 586252 |
| BHF-04 r8 | 192 | <102.239 | 68.70 | 0.01 | 3.46 | 1.0 | 9385 | 7.59 | 9.5 | 92.9 | 29.8 | 225.9 | 47.48 | 1.1 | 1.1 | 437 | 9.46 | 720.4 | 53.20 | 36.39 | 23.21 | 8157.0 | 28.0 | 3.57 | 72.3 | 582914 |
| BHF-04 r9 | 75 | <121.046 | 17.70 | 1.52 | 0.15 | 0.3 | 4886 | 1.73 | 8.6 | 92.3 | 15.2 | 205.8 | 10.41 | 1.6 | 3.29 | 1.88 | 237.2 | 11.74 | 18.12 | 8.24 | 905.7 | 9.9 | 1.32 | 66.8 | 593327 | |
| BHF-04 r10 | 58 | <133.241 | 9.23 | 0.47 | 0.15 | 0.1 | 6422 | 0.40 | 2.6 | 87.2 | <2.037 | 118.5 | 5.21 | 0.1 | <259.283 | 1.10 | 463.0 | 26.28 | 6.45 | 2.87 | 101.8 | 1.6 | 0.23 | 34.1 | 592756 | |
| BHF-04 r11 | 53 | <166.009 | 0.20 | <0.003 | <0.003 | 0.0 | 5828 | <0.006 | 13.8 | 88.1 | <2.565 | 162.0 | 0.07 | 0.1 | 3.43 | 0.05 | 158.5 | 13.28 | 0.77 | 11.51 | 705.0 | 0.1 | 0.01 | 160.0 | 592913 | |
| BHF-04 r12 | 78 | <122.903 | 3.78 | 0.38 | 0.10 | 0.1 | 11336 | 0.36 | 7.8 | 85.8 | 7.3 | 524.8 | 3.63 | 0.0 | <238.515 | 0.40 | 752.9 | 72.00 | 3.60 | 13.76 | 9723.7 | 1.1 | 0.14 | 87.3 | 581088 | |
| BHF-04 r13 | 115 | <120.020 | 38.13 | 2.82 | 1.34 | 0.5 | 7236 | 3.33 | 4.2 | 88.3 | 4.8 | 54.7 | 25.08 | 0.1 | 4.26 | 5.12 | 542.1 | 3.63 | 21.74 | 19.83 | 2889.7 | 14.1 | 1.23 | 36.3 | 582836 | |
| BHF-04 r14 | 110 | 147 | 34.96 | 2.91 | 1.45 | 0.5 | 8290 | 3.41 | 4.6 | 87.2 | 25.4 | 215.3 | 23.88 | 0.3 | 2.18 | 4.77 | 688.5 | 27.01 | 28.30 | 13.06 | 2006.8 | 13.1 | 1.42 | 62.3 | 588420 | |
| BHF-04 r15 | 202 | 219 | 45.38 | 4.13 | 2.71 | 0.6 | 8716 | 4.87 | 5.1 | 96.0 | 44.1 | 318.4 | 27.72 | 0.8 | 3.43 | 5.49 | 597.6 | 38.24 | 22.37 | 19.44 | 5102.2 | 22.8 | 3.72 | 49.4 | 586151 | |
| BHF-04 r16 | 208 | <113.536 | 58.69 | 5.28 | 3.53 | 0.8 | 8386 | 6.20 | 3.1 | 97.4 | 90.8 | 168.9 | 35.90 | 1.1 | 4.07 | 7.08 | 484.9 | 25.73 | 23.64 | 24.00 | 5963.7 | 27.4 | 3.67 | 34.8 | 586151 | |
| BHF-04 r17 | 42 | <185.536 | 0.15 | <0.004 | 0.01 | <0.002 | 6820 | <0.006 | 5.3 | 80.8 | <2.806 | 233.8 | 0.07 | 0.0 | <357.491 | <0.007 | 110.6 | 39.65 | 0.24 | 3.74 | 32.2 | 0.1 | <0.005 | 47.6 | 592860 | |
| BHF-04 r18 | 78 | <113.046 | 4.69 | 0.32 | 0.17 | 0.1 | 7740 | 0.58 | 10.4 | 108.0 | 12.8 | 277.0 | 2.57 | 1.9 | <217.452 | 0.46 | 195.3 | 62.16 | 3.25 | 9.02 | 1450.9 | 1.6 | 0.17 | 145.7 | 590563 | |
| BHF-04 r19 | 101 | <124.457 | 7.90 | 0.58 | 0.46 | 0.1 | 9252 | 0.58 | 4.3 | 84.7 | 9.2 | 144.3 | 4.71 | 0.2 | <239.014 | 0.95 | 360.3 | 23.23 | 7.98 | 18.32 | 7659.6 | 2.5 | 0.25 | 67.6 | 584719 | |
| BHF-04 r20 | 241 | 250 | 98.82 | 6.97 | 3.98 | 1.1 | 6301 | 8.43 | 2.2 | 96.5 | 67.9 | 72.8 | 60.20 | 0.6 | 1389 | 11.55 | 343.2 | 14.94 | 49.16 | 9.70 | 447.4 | 36.4 | 4.52 | 30.9 | 590014 | |
| BHF-04 r21 | 85 | <115.838 | 0.02 | 0.01 | 0.00 | <0.001 | 7583 | <0.004 | 4.8 | 87.0 | 3.2 | 77.9 | 0.01 | 0.1 | 1595 | 0.03 | 132.7 | 7.88 | 0.11 | 6.43 | 453.1 | 0.1 | 0.00 | 73.1 | 590120 | |
| BHF-04 r22 | 147 | <134.144 | 30.75 | 2.68 | 1.53 | 0.4 | 7470 | 3.33 | 4.5 | 90.6 | 79.6 | 260.4 | 19.79 | 0.8 | 630 | 4.15 | 455.2 | 36.12 | 27.71 | 13.34 | 1925.9 | 13.7 | 1.58 | 57.8 | 589293 | |
| JEM-02 r1 | 842 | 554 | 9.46 | 0.77 | 0.17 | 0.4 | 6800 | 1.28 | 10.6 | 105.7 | 3.7 | 633.6 | 5.16 | 0.6 | 2463 | 1.49 | 416.8 | 34.03 | 2.33 | 73.12 | 5491.1 | 3.0 | 0.21 | 275.9 | 582537 | |
| JEM-02 r1 | 53 | <101.349 | 0.03 | <0.002 | <0.002 | 0.0 | 7053 | <0.003 | 14.6 | 86.4 | <1.500 | 602.2 | 0.02 | 0.0 | 256 | <0.004 | 673.5 | 41.65 | 0.18 | 85.09 | 4736.7 | 0.0 | 0.01 | 338.3 | 586888 | |
| PCT-01 r2 | 167 | <145.971 | 6.64 | 0.77 | 0.32 | 0.0 | 3467 | 0.69 | 97.1 | 199.2 | <2.153 | 4742.8 | 5.16 | 929.5 | 1361 | 0.68 | 136.9 | 208.17 | 1.09 | 31.34 | 94.8 | 2.7 | 0.43 | 1853.8 | 584539 | |
| PCT-01 r4 | 158 | <208.886 | 1.41 | 0.09 | 0.02 | 0.1 | 5237 | 0.22 | 5.9 | 82.5 | <3.068 | 1499.0 | 0.42 | 13.9 | 420 | 0.11 | 97.8 | 153.37 | 4.42 | 12.86 | 34.2 | 0.5 | 0.07 | 137.7 | 592002 | |
| PCT-01 r5 | 189 | <215.302 | 12.21 | 3.05 | 1.25 | 0.4 | 2449 | 4.34 | 7.2 | 150.6 | <3.158 | 201.1 | 10.40 | 0.4 | 489 | 3.34 | 1766.4 | 13.79 | 3.70 | 2.83 | 364.9 | 9.1 | 1.43 | 80.6 | 591944 | |
| PCT-01 r6 | 874 | 517 | 8.03 | 2.17 | 1.06 | 3.0 | 1873 | 1.53 | 24.3 | 109.0 | 197.2 | 711.8 | 4.40 | 67.0 | 2083 | 1.44 | 4.1 | 49.55 | 0.59 | 9.00 | 3689.2 | 6.7 | 1.32 | 468.2 | 5869546 | |
| PCT-01 r7 | 1843 | 641 | 13.44 | 12.34 | 23.10 | 4.1 | 1424 | 3.35 | 792.3 | 163.4 | 209.2 | 372.0 | 6.95 | 81.9 | 13651 | 2.58 | 6.5 | 19.24 | 6.64 | 25.12 | 3799.2 | 145.0 | 50.85 | 40638.9 | 540259 | |
| PCT-01 r8 | 795 | <253.157 | 15.08 | 2.89 | 1.39 | 0.5 | 2051 | 2.52 | 26.1 | 125.9 | 5.2 | 62.1 | 10.15 | 201.6 | 1052 | 2.73 | 229.1 | 2.96 | 3.87 | 0.94 | 1042.1 | 12.4 | 1.00 | 493.4 | 591732 | |
| PCT-02 r1 | 575 | 1121 | 84.94 | 51.10 | 39.41 | 4.6 | 1740 | 27.98 | 27.4 | 94.0 | 168.3 | 312.8 | 60.51 | 101.0 | 1997 | 19.57 | 30.7 | 18.44 | 6.62 | 42.81 | 24.8 | 234.4 | 52.43 | 1098.2 | 591732 | |
| PCT-02 r2 | 935 | 1560 | 118.88 | 56.86 | 38.24 | 7.7 | 3989 | 40.81 | 15.7 | 132.2 | 147.2 | 364.0 | 80.11 | 90.2 | 2645 | 27.90 | 8.9 | 16.26 | 3.31 | 30.75 | 128.3 | 256.2 | 42.10 | 645.4 | 588503 | |
| PCT-02 r3 | 1348 | 1569 | 126.74 | 47.84 | 32.82 | 7.0 | 31946 | 44.52 | 20.4 | 94.8 | 162.0 | 310.8 | 103.16 | 103.7 | 4695 | 32.56 | 14.7 | 14.39 | 4.86 | 23.13 | 99.9 | 291.2 | 37.75 | 771.1 | 563834 | |
| PCT-02 r4 | 3187 | 792 | 107.91 | 38.86 | 25.55 | 6.4 | 3364 | 29.94 | 69.6 | 290.8 | 140.3 | 432.3 | 89.81 | 57.0 | 4895 | 25.53 | 8.2 | 19.76 | 4.56 | 13.48 | 109.7 | 195.3 | 27.75 | 2006.4 | 589416 | |
| PCT-02 r5 | 1441 | 667 | 61.29 | 39.68 | 28.46 | 3.6 | 2099 | 24.60 | 30.9 | 181.8 | 116.4 | 388.8 | 46.91 | 71.6 | 3226 | 17.66 | 12.9 | 20.78 | 1.96 | 20.34 | 51.0 | 198.9 | 29.09 | 963.3 | 589416 | |
| PCT-02 r6 | 1123 | 1137 | 61.48 | 8.36 | 5.83 | 2.5 | 2942 | 6.70 | 30.1 | 200.2 | 123.4 | 415.9 | 29.88 | 69.2 | 2838 | 5.66 | 7.2 | 17.17 | 1.36 | 32.04 | 124.8 | 39.3 | 6.53 | 1167.1 | 588805 | |
| PCT-02 r7 | 630 | 943 | 59.21 | 9.75 | 7.38 | 2.4 | 2612 | 8.21 | 15.4 | 94.6 | 112.3 | 346.9 | 31.07 | 63.3 | 3086 | 6.86 | 9.0 | 15.51 | 0.90 | 62.48 | 115.6 | 54.8 | 8.11 | 648.5 | 590126 | |
| PCT-02 r8 | 758 | 1173 | 145.82 | 41.96 | 39.03 | 3.5 | 2685 | 29.98 | 14.5 | 92.5 | 154.6 | 289.9 | 97.93 | 64.7 | 3560 | 23.57 | 4.5 | 14.61 | 0.11 | 374.35 | 47.3 | 227.4 | 44.86 | 639.9 | 588886 | |
| PCT-02 r9 | 386 | 704 | 62.85 | 21.06 | 17.01 | 2.8 | 2605 | 13.02 | 18.6 | 93.0 | 119.2 | 373.9 | 45.05 | 55.1 | 2265 | 11.44 | 20.2 | 14.54 | 2.21 | 20.37 | 20.7 | 104.5 | 23.83 | 778.3 | 591882 | |
| PCT-02 r10 | 720 | 950 | 123.50 | 12.30 | 9.68 | 3.3 | 3257 | 11.43 | 15.2 | 109.4 | 147.1 | 351.5 | 62.16 | 101.2 | 2907 | 10.61 | 7.3 | 16.14 | 0.89 | 71.48 | 153.3 | 73.0 | 11.08 | 643.6 | 589484 | |
| PCT-02 r11 | 734 | 637 | 68.83 | 32.75 | 19.99 | 3.4 | 2633 | 25.23 | 28.4 | 150.3 | 118.6 | 389.9 | 54.22 | 69.7 | 2614 | 18.82 | 11.6 | 16.30 | 3.79 | 20.58 | 32.3 | 185.6 | 20.48 | 1193.0 | 590474 | |
| PCT-02 r12 | 570 | 2007 | 43.46 | 15.10 | 9.49 | 2.9 | 1765 | 9.30 | 138.0 | 130.2 | 82.5 | 694.2 | 26.76 | 40.6 | 2484 | 8.86 | 6.7 | 30.43 | 1.10 | 18.40 | 48.1 | 59.7 | 9.56 | 3773.8 | 588011 | |
| PCT-02 r13 | 777 | 1081 | 89.17 | 65.24 | 46.39 | 5.3 | 3823 | 50.32 | 19.7 | 98.9 | 140.0 | 352.7 | 76.80 | 66.4 | 2658 | 32.36 | 20.3 | 16.08 | 4.06 | 93.09 | 48.0 | 331.2 | 51.48 | 747.5 | 589155 | |
| PCT-02 r14 | 463 | 918 | 75.58 | 8.00 | 6.43 | 2.8 | 3011 | 7.41 | 18.9 | 110.6 | 76.6 | 338.1 | 34.78 | 33.8 | 1733 | 5.22 | 5.1 | 16.27 | 0.87 | 36.55 | 52.2 | 55.5 | 8.00 | 753.9 | 591932 | |
| PCT-02 r15 | 691 | 570 | 70.37 | 33.34 | 27.53 | 3.4 | 2433 | 20.95 | 21.1 | 109.4 | 95.2 | 400.1 | 51.61 | 59.0 | 2533 | 15.57 | 21.0 | 17.99 | 5.48 | 22.74 | 40.3 | 160.5 | 37.17 | 937.0 | 591143 | |
| PCT-02 r16 | 1100 | 769 | 90.32 | 40.76 | 30.90 | 4.0 | 26662 | 29.55 | 15.9 | 139.4 | 117.3 | 345.3 | 60.53 | 73.1 | 3474 | 19.92 | 9.8 | 15.55 | 3.50 | 29.65 | 122.8 | 226.0 | 32.62 | 640.9 | 592580 | |
| PCT-02 r19 | 489 | 848 | 113.86 | 11.24 | 8.20 | 3.6 | 2425 | 10.64 | 15.8 | 93.5 | 131.7 | 342.7 | 57.25 | 82.7 | 1790 | 9.53 | 6.1 | 16.17 | 0.70 | 52.32 | 71.5 | 72.1 | 9.29 | 650.9 | 592285 | |
| PCT-02 r19 | 604 | 895 | 69.30 | 10.43 | 7.39 | 2.4 | 2907 | 10.58 | 18.1 | 95.7 | 98.2 | 373.0 | 46.30 | 76.8 | 2074 | 9.15 | 14.8 | 16.72 | 2.25 | 17.92 | 101.1 | 64.5 | 8.09 | 765.8 | 591389 | |
| PCT-02 r20 | 833 | 1084 | 115.21 | 37.44 | 27.01 | 5.9 | 2664 | 27.31 | 19.9 | 108.8 | 134.9 | 343.8 | 82.83 | 97.8 | 2534 | 23.38 | 13.9 | 16.73 | 4.40 | 28.54 | 41.6 | 181.3 | 31.79 | 855.3 | 590315 | |
| PCT-02 r21 | 537 | 54143 | 258.82 | 81.38 | 48.91 | 9.4 | 2742 | 79.08 | 18.0 | 145.7 | 352.3 | 318.1 | 227.71 | 56.0 | 1956 | 65.18 | 18.0 | 15.48 | 6.32 | 21.50 | 68.0 | 409.8 | 47.05 | 755.2 | 546269 | |
| PCT-02 r22 | 934 | 1251 | 84.78 | 23.28 | 13.54 | 6.3 | 2439 | 22.11 | 28.2 | 136.8 | 120.0 | 393.5 | 84.86 | 86.2 | 3076 | 24.18 | 5.2 | 17.36 | 0.59 | 11.32 | 30.2 | 98.2 | 15.42 | 976.5 | 589555 | |
| PCT-02 r23 | 2224 | 1062 | 103.17 | 74.25 | 56.36 | 8.8 | 3244 | 42.73 | 37.4 | 1057.9 | 200.0 | 529.5 | 88.40 | 91.5 | 5089 | 35.22 | 13.2 | 20.74 | 2.77 | 19.37 | 36.1 | 353.9 | 72.60 | 1160.4 | 583441 | |
| PCT-02 r24 | 726 | 896 | 106.25 | 18.05 | 13.75 | 4.1 | 3105 | 12.85 | 23.3 | 105.8 | 123.2 | 355.8 | 53.86 | 87.7 | 2349 | 12.66 | 10.7 | 19.16 | 2.54 | 65.91 | 121.3 | 84.3 | 16.44 | 806.9 | 590175 | |
| PCT-02 r25 | 793 | 918 | 93.13 | 12.88 | 10.77 | 3.2 | 3552 | 12.01 | 14.4 | 122.6 | 127.8 | 378.2</ | | | | | | | | | | | | | | |

Appendix C: Eastern Sunda arc rutile trace element chemistry (LA-ICP-MS)

| Analysis ID | Al | Ca | Ce | Dy | Er | Eu | Fe | Gd | Hf | Mg | Mn | Nb | Nd | Ni | Pb | Si | Sm | Sn | Ta | Th | U | W | Y | Yb | Zr | Ti |
|-------------|-------|----------|--------|-------|-------|------|-------|--------|-------|--------|--------|-------|--------|--------|-------|--------|-------|-------|-------|--------|--------|-------|--------|---------|--------|--------|
| PCT-02_129 | 514 | 679 | 47.51 | 23.98 | 17.50 | 2.2 | 3076 | 17.28 | 19.8 | 101.3 | 99.8 | 361.7 | 34.31 | 74.1 | 2562 | 11.36 | 19.8 | 16.05 | 2.94 | 3178 | 40.8 | 137.6 | 19.01 | 881.8 | 590826 | |
| PCT-02_130 | 544 | 962 | 60.06 | 32.89 | 24.51 | 2.8 | 2882 | 24.37 | 15.3 | 91.5 | 107.8 | 349.0 | 45.21 | 78.7 | 2497 | 15.29 | 9.8 | 13.28 | 0.79 | 2979 | 49.2 | 196.1 | 27.97 | 653.4 | 590896 | |
| PCT-02_131 | 1409 | 1231 | 101.76 | 33.62 | 22.43 | 6.3 | 3023 | 31.10 | 48.0 | 253.5 | 169.7 | 394.0 | 79.50 | 78.3 | 4274 | 23.41 | 12.4 | 19.13 | 5.06 | 18.76 | 63.6 | 209.9 | 23.88 | 1525.9 | 566223 | |
| PCT-02_132 | 510 | 731 | 34.81 | 11.48 | 9.25 | 2.0 | 2002 | 11.51 | 21.2 | 92.1 | 107.3 | 328.1 | 27.42 | 50.8 | 1855 | 8.12 | 11.0 | 16.10 | 2.10 | 17.50 | 15.2 | 82.9 | 11.45 | 970.2 | 592641 | |
| PCT-02_133 | 904 | 1475 | 146.04 | 72.22 | 57.78 | 7.9 | 1719 | 45.04 | 21.5 | 94.2 | 208.4 | 305.3 | 109.19 | 121.0 | 3509 | 35.51 | 23.3 | 14.20 | 10.20 | 37.48 | 24.4 | 349.4 | 76.27 | 985.8 | 569963 | |
| PCT-02_134 | 326 | 1342 | 44.93 | 16.22 | 13.31 | 1.7 | 2532 | 10.78 | 27.8 | 108.9 | 44.7 | 593.9 | 32.72 | 25.9 | 1191 | 7.86 | 4.9 | 16.10 | 0.59 | 95.98 | 49.8 | 82.9 | 13.79 | 764.6 | 592676 | |
| PCT-02_136 | 710 | 922 | 66.83 | 7.19 | 4.64 | 2.2 | 3169 | 6.41 | 17.5 | 135.1 | 120.9 | 371.3 | 30.00 | 54.3 | 2372 | 6.20 | 5.8 | 17.09 | 1.72 | 33.17 | 163.5 | 40.3 | 4.52 | 669.6 | 590390 | |
| SINA-02_1 | 8088 | 1506 | 41.13 | 8.37 | 4.18 | 2.3 | 5376 | 7.00 | 11.8 | 391.7 | 619.9 | 611.8 | 25.16 | 68.7 | 14044 | 6.40 | 27.8 | 27.81 | 4.16 | 14.46 | 103.3 | 28.5 | 4.96 | 341.0 | 564208 | |
| SINA-02_11 | 3039 | 1029 | 25.81 | 5.50 | 3.40 | 0.7 | 954 | 3.93 | 11.1 | 161.7 | 467.6 | 617.8 | 14.15 | 21.1 | 9886 | 4.15 | 44.8 | 28.08 | 1.01 | 3.60 | 141.1 | 20.2 | 4.83 | 350.7 | 564754 | |
| SINA-02_14 | 2965 | 1795 | 18.13 | 3.75 | 2.69 | 0.5 | 1192 | 2.15 | 10.3 | 159.2 | 740.3 | 670.1 | 9.14 | 10.2 | 7111 | 24.4 | 28.3 | 28.29 | 0.22 | 1.29 | 39.8 | 15.5 | 4.54 | 317.5 | 562728 | |
| SINA-02_15 | 4387 | 1854 | 28.63 | 7.59 | 5.15 | 1.1 | 786 | 5.52 | 20.6 | 170.8 | 721.6 | 600.4 | 17.48 | 44.8 | 10258 | 5.20 | 24.7 | 31.89 | 3.61 | 15.38 | 63.4 | 26.1 | 8.20 | 528.6 | 576843 | |
| SINA-02_16 | 2189 | 674 | 11.90 | 2.63 | 1.92 | 0.3 | 877 | 1.68 | 10.2 | 127.7 | 371.1 | 615.6 | 6.28 | 17.9 | 3911 | 1.51 | 37.5 | 25.90 | 0.27 | 2.00 | 65.7 | 10.7 | 3.52 | 326.2 | 568754 | |
| SINA-02_17 | 3391 | 2278 | 41.08 | 8.60 | 4.54 | 2.2 | 826 | 6.38 | 9.9 | 155.7 | 700.4 | 683.1 | 23.68 | 63.9 | 9072 | 7.26 | 30.3 | 26.97 | 2.59 | 8.73 | 128.9 | 29.1 | 5.92 | 321.5 | 579004 | |
| SINA-02_19 | 2870 | 1911 | 23.70 | 6.27 | 4.37 | 0.5 | 1005 | 4.04 | 11.0 | 159.0 | 689.4 | 564.6 | 13.97 | 4.2 | 6929 | 4.27 | 45.0 | 29.98 | 0.12 | 1.74 | 184.9 | 23.2 | 7.50 | 339.3 | 562512 | |
| SINA-02_10 | 2547 | 1057 | 27.26 | 5.78 | 3.70 | 0.6 | 978 | 3.79 | 9.9 | 140.8 | 473.4 | 579.5 | 13.87 | 7.9 | 9056 | 3.99 | 31.6 | 25.39 | 0.66 | 2.68 | 97.9 | 21.3 | 5.14 | 329.7 | 566542 | |
| SINA-01_11 | 2549 | 991 | 782.41 | 70.49 | 35.69 | 35.5 | 13040 | 88.52 | 12.4 | 191.2 | 711.5 | 652.3 | 464.87 | 2415.5 | 4523 | 112.70 | 173.6 | 26.13 | 32.20 | 498.36 | 2371.5 | 226.1 | 34.58 | 308.1 | 569887 | |
| SINA-01_12 | 2563 | 266 | 5.53 | 1.19 | 0.46 | 0.5 | 1306 | 1.20 | 10.4 | 238.7 | 398.3 | 617.0 | 3.50 | 41.0 | 4453 | 1.39 | 10.8 | 25.76 | 0.66 | 14.25 | 68.4 | 3.8 | 0.50 | 276.9 | 567883 | |
| SINA-01_13 | 7403 | 3449 | 156.62 | 13.27 | 3.67 | 8.3 | 5333 | 27.32 | 16.5 | 177.5 | 548.3 | 586.2 | 173.75 | 1509.4 | 3407 | 44.37 | 8.7 | 40.74 | 4.87 | 24.60 | 94.7 | 31.2 | 2.45 | 308.5 | 575745 | |
| SINA-01_14 | 1817 | 824 | 19.20 | 3.91 | 1.59 | 2.0 | 833 | 4.44 | 13.9 | 141.1 | 599.0 | 619.6 | 13.68 | 48.3 | 3780 | 4.67 | 7.4 | 42.09 | 2.32 | 40.10 | 79.2 | 14.6 | 1.79 | 290.0 | 569284 | |
| SINA-01_15 | 2731 | 543 | 24.00 | 3.23 | 1.59 | 1.6 | 793 | 3.31 | 6.8 | 182.7 | 500.0 | 581.2 | 13.87 | 331.8 | 4011 | 4.00 | 5.3 | 38.60 | 1.74 | 24.20 | 65.9 | 10.1 | 1.22 | 160.1 | 568163 | |
| SINA-01_16 | 2414 | 362 | 6.24 | 1.52 | 0.53 | 0.7 | 4429 | 1.33 | 12.7 | 181.1 | 409.5 | 388.9 | 4.24 | 428.8 | 4889 | 1.40 | 9.1 | 17.59 | 0.84 | 9.11 | 71.5 | 4.8 | 0.71 | 385.8 | 553492 | |
| SINA-01_18 | 1092 | 889 | 87.17 | 44.71 | 29.93 | 2.5 | 976 | 23.89 | 10.8 | 104.2 | 164.3 | 756.4 | 54.23 | 20.8 | 2151 | 19.65 | 16.7 | 28.79 | 1.02 | 5.68 | 18.2 | 216.8 | 36.12 | 334.1 | 592107 | |
| SINA-01_19 | 812 | 486 | 88.17 | 31.07 | 21.19 | 2.2 | 1246 | 21.84 | 14.1 | 94.9 | 108.1 | 617.4 | 56.23 | 12.4 | 6783 | 18.62 | 8.3 | 28.27 | 6.05 | 7.53 | 59.8 | 155.7 | 21.94 | 427.9 | 568650 | |
| SINA-01_10 | 11864 | 1333 | 133.21 | 91.55 | 69.75 | 4.1 | 1172 | 41.26 | 14.7 | 732.4 | 331.5 | 629.3 | 82.96 | 158.5 | 30982 | 32.42 | 37.4 | 28.44 | 14.53 | 12.45 | 12.45 | 28.6 | 417.7 | 85.09 | 443.8 | 541178 |
| LB043_1 | 11746 | 823 | 11.57 | 3.15 | 3.05 | 0.7 | 7433 | 2.39 | 16.4 | 318.0 | 268.8 | 228.2 | 6.11 | 6.1 | 18411 | 1.70 | 177.1 | 10.10 | 8.24 | 8.62 | 37.5 | 21.3 | 4.53 | 544.0 | 549111 | |
| LB043_11 | 5764 | <150.248 | 5.91 | 0.87 | 0.73 | 0.2 | 9196 | 0.94 | 11.0 | 355.6 | 30.3 | 201.4 | 4.48 | 1.1 | 10830 | 1.03 | 268.2 | 7.30 | 4.74 | 13.74 | 289.4 | 4.5 | 0.58 | 221.3 | 568114 | |
| LB043_12 | 448 | 528 | 17.53 | 1.32 | 1.01 | 0.5 | 7064 | 1.15 | 33.3 | 108.2 | 30.5 | 246.0 | 6.00 | 55.8 | 1002 | 1.38 | 13.3 | 11.32 | 0.35 | 0.76 | 33.1 | 7.6 | 0.91 | 1613.7 | 569439 | |
| LB043_13 | 1252 | 176 | 11.11 | 2.41 | 1.30 | 0.3 | 3744 | 2.46 | 8.1 | 256.4 | 55.3 | 458.8 | 7.78 | 3.0 | 2656 | 1.60 | 335.5 | 24.04 | 5.13 | 7.75 | 35.1 | 11.7 | 1.48 | 171.7 | 584627 | |
| LB043_14 | 3009 | 383 | 19.86 | 15.32 | 7.93 | 2.6 | 6447 | 14.27 | 192.5 | 666.9 | 51.1 | 342.5 | 42.85 | 5.0 | 5577 | 14.08 | 12.3 | 10.06 | 0.19 | 0.02 | 35.5 | 55.0 | 6.37 | 3922.8 | 578868 | |
| LB043_15 | 213 | <321.758 | 10.08 | 1.30 | 1.29 | 0.3 | 7366 | 1.02 | 15.3 | 169.0 | 20.8 | 140.4 | 4.75 | 1.9 | 1116 | 1.03 | 86.6 | 7.41 | 16.67 | 20.04 | 27.8 | 8.8 | 2.48 | 484.8 | 566188 | |
| LB043_16 | 7718 | 652 | 23.80 | 2.90 | 2.03 | 0.6 | 6199 | 3.57 | 8.4 | 1020.9 | 99.8 | 378.1 | 14.10 | 2.6 | 15008 | 2.94 | 211.8 | 21.79 | 4.77 | 3.08 | 203.6 | 10.3 | 1.73 | 98.2 | 562105 | |
| LB043_17 | 1075 | 284 | 10.63 | 2.65 | 1.60 | 0.3 | 4502 | 2.36 | 108.0 | 279.9 | 27.3 | 482.4 | 8.90 | 5.4 | 2202 | 1.80 | 6.2 | 9.31 | 0.15 | 0.02 | 73.3 | 11.6 | 1.60 | 2903.2 | 568245 | |
| LB043_18 | 17048 | <389.641 | 5.10 | 0.39 | 0.23 | 0.1 | 7611 | 0.30 | 17.6 | 486.9 | 17.6 | 451.1 | 1.73 | 3.2 | 23789 | 0.35 | 129.8 | 19.13 | 2.89 | 18.03 | 29.5 | 3.0 | 0.20 | 426.5 | 539776 | |
| LB043_19 | 486 | <327.903 | 0.63 | 0.03 | 0.05 | 0.0 | 5973 | <0.023 | 25.7 | 252.1 | 36.3 | 257.2 | 0.31 | 0.9 | 1533 | 0.05 | 316.5 | 8.98 | 0.43 | 13.81 | 399.1 | 0.4 | <0.013 | 530.2 | 569233 | |
| LB043_2 | 876 | <425.333 | 5.17 | 1.47 | 0.29 | 0.2 | 6484 | 0.91 | 7.1 | 132.9 | <5.338 | 402.2 | 3.35 | 1.6 | 1951 | 0.35 | 91.7 | 12.83 | 2.61 | 6.89 | 63.3 | 3.6 | 0.52 | 115.2 | 587219 | |
| LB043_3 | 194 | <171.938 | 0.39 | 0.37 | 0.24 | 0.0 | 3439 | 0.10 | 16.7 | 88.6 | <2.038 | 81.1 | 0.29 | 0.3 | 503 | 0.12 | 386.5 | 2.55 | 0.34 | 5.63 | 20.6 | 1.5 | 0.17 | 360.3 | 566636 | |
| LB043_4 | 7414 | <169.681 | 36.45 | 8.72 | 6.79 | 1.1 | 3761 | 9.83 | 35.3 | 176.1 | 48.5 | 437.1 | 33.23 | 7.4 | 15269 | 9.48 | 424.5 | 25.40 | 41.33 | 10.75 | 131.9 | 55.8 | 9.36 | 1137.4 | 563343 | |
| LB043_5 | 2190 | 375 | 0.22 | 0.10 | 0.07 | 0.0 | 1931 | 0.10 | 15.2 | 86.6 | 13.5 | 136.9 | 0.17 | 0.5 | 4422 | 0.10 | 489.7 | 5.20 | 0.73 | 12.43 | 30.8 | 0.6 | 0.07 | 379.3 | 578627 | |
| LB043_6 | 5701 | <379.833 | 2.99 | 0.56 | 0.25 | 0.1 | 11980 | 0.59 | 13.4 | 167.4 | 22.5 | 222.0 | 1.63 | 3.3 | 1559 | 0.77 | 529.8 | 7.96 | 3.53 | 7.71 | 1416.4 | 2.2 | 0.27 | 263.0 | 562423 | |
| LB043_7 | 7518 | <157.416 | 0.48 | 0.08 | 0.06 | 0.0 | 7032 | 0.05 | 18.0 | 8734.1 | 43.3 | 47.8 | 0.20 | 3.5 | 15900 | 0.07 | 794.5 | 2.92 | 3.29 | 12.73 | 208.5 | 0.4 | 0.08 | 327.7 | 553372 | |
| LB043_8 | 9104 | 1466 | 30.03 | 8.80 | 7.07 | 1.3 | 2375 | 6.21 | 28.9 | 1604.3 | 96.9 | 189.0 | 16.83 | 57.9 | 14163 | 4.26 | 21.3 | 12.28 | 11.27 | 1.93 | 50.5 | 36.4 | 8.84 | 332.8 | 564828 | |
| LB043_9 | 1749 | 463 | 53.16 | 17.50 | 13.88 | 5.2 | 3530 | 13.23 | 33.2 | 1835.2 | 260.1 | 182.5 | 39.72 | 55.6 | 4277 | 11.55 | 34.1 | 11.78 | 18.64 | 20.31 | 82.1 | 87.8 | 15.64 | 805.7 | 564988 | |
| LB043_10 | 1018 | 1914 | 99.65 | 23.05 | 12.62 | 4.2 | 3079 | 19.42 | 19.6 | 210.3 | 241.8 | 80.4 | 66.91 | 134.3 | 9427 | 21.49 | 8.9 | 5.10 | 1.99 | 1.44 | 17.4 | 85.1 | 17.22 | 485.3 | 579382 | |
| LB043_11 | 209 | <153.604 | 1.92 | 0.22 | 0.12 | 0.0 | 5175 | 0.33 | 37.9 | 106.9 | 3.0 | 164.5 | 1.43 | 0.4 | 1012 | 0.36 | 38.5 | 10.44 | 0.52 | 4.04 | 96.5 | 0.7 | 0.11 | 1190.6 | 590157 | |
| LB043_12 | 608 | 981 | 48.96 | 12.35 | 8.25 | 1.8 | 1665 | 10.22 | 23.3 | 156.0 | 152.7 | 107.9 | 32.25 | 59.1 | 2869 | 10.09 | 11.0 | 5.60 | 0.36 | 1.97 | 77.7 | 46.9 | 11.53 | 546.6 | 590728 | |
| LB043_13 | 1230 | 4037 | 24.34 | 19.07 | 3.9 | 7.19 | 14.95 | 86.2 | 181.7 | 280.2 | 519.3 | 48.72 | 46.8 | 4793 | 13.92 | 23.7 | 12.31 | 32.45 | 9.09 | 61.0 | 102.1 | 25.48 | 1836.2 | 584655 | | |
| LB043_14 | 667 | 992 | 43.76 | 7.00 | 6.17 | 1.4 | 2686 | 5.70 | 15.0 | 226.2 | 81.1 | 170.5 | 24.71 | 53.0 | 4761 | 4.88 | 12.5 | 6.94 | 11.29 | 2.08 | 25.4 | 40.6 | 6.81 | 257.3 | 568402 | |
| LB043_15 | 4626 | 1224 | 80.96 | 17.70 | 15.04 | 4.7 | 3562 | 13.34 | 35.8 | 2050.8 | 259.9 | 184.9 | 46.79 | 132.3 | 9129 | 10.17 | 24.2 | 13.55 | 23.34 | 25.82 | 77.7 | 92.4 | 16.79 | 687.5</ | | |

Appendix C: Eastern Sunda arc rutile trace element chemistry (LA-ICP-MS)

| Analysis ID | Al | Ca | Ce | Dy | Er | Eu | Fe | Gd | Hf | Mg | Mn | Nb | Nd | Pb | Pb | Si | Sm | Sn | Ta | Th | U | W | Y | Yb | Zr | Ti |
|-------------|-------|----------|--------|--------|--------|--------|-------|--------|------|--------|---------|-------|--------|----------|----------|--------|-------|-------|-------|-------|--------|-------|--------|--------|--------|----|
| LB044_3 | 5619 | <159.801 | 4.93 | 0.63 | 0.59 | 0.0 | 8440 | 0.27 | 29.1 | 194.4 | 2.3 | 1617 | 1.38 | 30.1 | 8662 | 0.29 | 37.7 | 11.75 | 1.47 | 1.77 | 132.1 | 2.8 | 0.59 | 97.6 | 571362 | |
| LB044_L_4 | 3192 | 1203 | 95.00 | 21.32 | 17.32 | 1.7 | 21846 | 16.83 | 11.5 | 282.5 | 191.8 | 202.3 | 53.43 | 124.7 | 12880 | 12.74 | 8.8 | 11.27 | 13.03 | 4.99 | 48.6 | 117.1 | 22.10 | 128.8 | 599131 | |
| LB044_5 | 989 | 866 | 43.92 | 10.72 | 7.39 | 1.3 | 2225 | 8.71 | 12.0 | 1217.7 | 115.4 | 197.0 | 35.91 | 913.8 | 6304 | 9.78 | 17.6 | 13.65 | 3.71 | 1.86 | 10.5 | 46.3 | 10.11 | 165.6 | 584567 | |
| LB044_L_6 | 879 | 883 | 64.68 | 22.11 | 18.50 | 6.5 | 1223 | 17.54 | 11.8 | 162.4 | 382.6 | 14.1 | 48.92 | 62.1 | 2908 | 13.42 | 44.6 | 3.13 | 76.68 | 18.35 | 113.8 | 25.80 | 158.9 | 591489 | | |
| LB044_L_7 | 185 | <373.248 | 4.59 | 0.57 | 0.15 | 0.1 | 5502 | 0.66 | 37.1 | 88.7 | <44.700 | 577.4 | 2.12 | 2.2 | 689 | 0.95 | 46.7 | 10.20 | 0.68 | 15.10 | 553.7 | 2.5 | 0.21 | 1337.7 | 569589 | |
| LB044_L_9 | 99 | <315.523 | 0.78 | 0.07 | 0.05 | <0.006 | 5795 | 0.05 | 40.3 | 87.3 | <3.977 | 158.2 | 0.21 | 7.3 | 1052 | <0.023 | 34.7 | 9.46 | 0.24 | 2.23 | 71.4 | 0.4 | <0.013 | 1156.2 | 590098 | |
| NEF-01_L_10 | 254 | 454 | 5.41 | 0.32 | 0.21 | 0.1 | 5195 | 0.49 | 8.2 | 211.1 | 35.6 | 422.3 | 4.49 | 1.1 | 1475 | 1.16 | 144.0 | 26.84 | 3.74 | 29.52 | 282.2 | 1.6 | 0.07 | 112.2 | 590217 | |
| NEF-01_L_11 | 592 | <176.356 | 0.70 | <0.008 | 0.01 | 0.0 | 5880 | 0.06 | 3.8 | 377.2 | 94.5 | 346.9 | 0.38 | 1.6 | 776 | 0.06 | 115.0 | 9.62 | 0.79 | 6.57 | 62.6 | 0.2 | <0.009 | 75.0 | 590805 | |
| NEF-01_L_12 | 1344 | 881 | 16.23 | 1.45 | 0.64 | 0.4 | 5966 | 2.03 | 7.9 | 285.9 | 96.0 | 360.1 | 12.27 | 1.2 | 1853 | 2.86 | 97.7 | 29.00 | 24.02 | 23.86 | 112.7 | 6.0 | 0.46 | 187.7 | 598181 | |
| NEF-01_L_13 | 451 | 321 | 6.58 | 1.23 | 0.61 | 0.2 | 6919 | 1.57 | 1.7 | 182.4 | 14.6 | 182.9 | 5.44 | 1.1 | 1038 | 1.76 | 276.7 | 12.60 | 7.75 | 12.15 | 104.8 | 3.9 | 0.33 | 35.5 | 588994 | |
| NEF-01_L_14 | 1489 | 531 | 7.74 | 2.53 | 1.83 | 0.4 | 6224 | 2.28 | 7.2 | 309.5 | 75.8 | 376.0 | 7.17 | 1.7 | 3826 | 1.80 | 239.4 | 22.33 | 11.95 | 15.86 | 180.3 | 14.9 | 1.93 | 121.8 | 584114 | |
| NEF-01_L_15 | 357 | <168.149 | 23.27 | 1.62 | 0.84 | 0.5 | 8417 | 3.17 | 4.0 | 148.3 | 98.2 | 437.9 | 19.32 | 1.8 | 413 | 4.16 | 115.4 | 33.94 | 23.81 | 14.35 | 138.5 | 8.1 | 0.73 | 69.9 | 589041 | |
| NEF-01_L_16 | 3936 | 778 | 7.60 | 1.11 | 0.27 | 0.2 | 14942 | 1.30 | 3.2 | 2765.0 | 196.4 | 286.0 | 7.46 | 2.5 | 5497 | 1.80 | 102.9 | 17.36 | 15.65 | 12.21 | 79.0 | 2.9 | 0.21 | 66.6 | 570634 | |
| NEF-01_L_17 | 157 | 159 | 5.95 | 1.81 | 0.83 | 0.3 | 7570 | 1.96 | 2.5 | 123.5 | 51.4 | 237.9 | 4.84 | 1.2 | 1037 | 1.86 | 94.9 | 11.08 | 4.01 | 8.26 | 58.3 | 7.5 | 0.82 | 28.7 | 590218 | |
| NEF-01_L_18 | 689 | 275 | 7.10 | 0.69 | 0.35 | 0.2 | 13381 | 1.22 | 3.5 | 285.6 | 123.0 | 241.6 | 6.16 | 3.0 | 1320 | 1.42 | 71.5 | 15.66 | 8.95 | 16.44 | 51.8 | 3.2 | 0.27 | 92.5 | 584307 | |
| NEF-01_L_19 | 2725 | 279 | 9.49 | 1.52 | 0.71 | 0.3 | 11840 | 2.06 | 3.5 | 2262.0 | 98.9 | 177.0 | 8.16 | 1.5 | 13831 | 2.18 | 104.3 | 10.28 | 15.42 | 16.79 | 139.5 | 6.9 | 0.49 | 147.0 | 563733 | |
| NEF-01_L_20 | 1238 | <324.043 | 0.93 | 0.16 | 0.08 | 0.0 | 5753 | 0.29 | 21.1 | 152.2 | <4.089 | 578.8 | 0.51 | 0.2 | 3068 | 1.25 | 103.0 | 55.58 | 1.25 | 7.58 | 1795.9 | 0.6 | 0.10 | 538.3 | 586184 | |
| NEF-01_L_21 | 4231 | 223 | 11.06 | 1.35 | 0.71 | 0.3 | 8834 | 2.06 | 4.1 | 2096.5 | 144.7 | 313.4 | 10.00 | 2.9 | 7180 | 2.10 | 111.6 | 16.71 | 12.59 | 19.47 | 121.2 | 6.0 | 0.45 | 109.6 | 574438 | |
| NEF-01_L_22 | 5094 | <147.354 | 0.74 | 0.15 | 0.10 | 0.0 | 6082 | 0.05 | 8.4 | 514.6 | 13.9 | 294.8 | 0.44 | 0.5 | 7775 | 0.03 | 149.3 | 26.84 | 15.60 | 13.90 | 223.5 | 0.7 | 0.16 | 154.8 | 576920 | |
| NEF-01_L_23 | 385 | 224 | 22.11 | 3.04 | 1.44 | 0.5 | 6725 | 4.15 | 3.1 | 181.6 | 155.8 | 298.1 | 16.38 | 3.1 | 789 | 4.95 | 90.4 | 23.56 | 17.40 | 13.11 | 67.0 | 12.4 | 1.03 | 42.0 | 590132 | |
| NEF-01_L_24 | 78 | <319.414 | 0.88 | 0.13 | 0.09 | 0.0 | 5850 | 0.27 | 12.7 | 99.6 | 11.4 | 561.1 | 0.54 | 0.3 | <585.336 | 0.35 | 251.2 | 25.16 | 2.49 | 14.89 | 473.8 | 0.6 | 0.11 | 262.7 | 592203 | |
| NEF-01_L_3 | 4532 | 1048 | 15.99 | 3.44 | 1.60 | 0.5 | 10471 | 4.03 | 4.9 | 2144.7 | 119.0 | 410.7 | 14.20 | 3.5 | 8751 | 3.70 | 150.3 | 20.72 | 30.83 | 18.69 | 210.2 | 13.7 | 1.45 | 62.2 | 569165 | |
| NEF-01_L_4 | 267 | <166.074 | 0.41 | 0.07 | 0.01 | 0.1 | 5482 | 0.16 | 14.2 | 132.3 | <2.055 | 327.6 | 0.56 | 0.3 | 1016 | 0.28 | 178.2 | 29.79 | 0.13 | 6.05 | 126.0 | 0.7 | 0.10 | 265.3 | 591814 | |
| NEF-01_L_5 | 450 | <138.376 | 0.09 | 0.03 | <0.005 | 0.0 | 5292 | <0.011 | 10.8 | 113.9 | <1.715 | 414.5 | 0.03 | 0.1 | 697 | 0.02 | 202.2 | 26.64 | 0.06 | 7.53 | 156.4 | 0.1 | <0.007 | 256.6 | 592987 | |
| NEF-01_L_6 | 631 | <179.124 | 0.10 | 0.04 | <0.006 | 0.0 | 5530 | <0.015 | 8.3 | 656.4 | 5.3 | 299.0 | 0.04 | 0.4 | 1140 | <0.014 | 184.9 | 30.59 | 0.13 | 10.36 | 147.1 | 0.1 | <0.009 | 186.5 | 590853 | |
| NEF-01_L_7 | 919 | 382 | 12.34 | 1.38 | 0.29 | 0.3 | 7780 | 2.29 | 17.7 | 180.1 | 42.0 | 436.2 | 11.24 | 1.1 | 2767 | 2.70 | 151.1 | 28.82 | 21.83 | 20.00 | 356.0 | 3.6 | 0.21 | 486.6 | 579818 | |
| NEF-01_L_8 | 3349 | <308.449 | 2.89 | 0.75 | 0.39 | 0.0 | 9522 | 0.86 | 4.9 | 1506.2 | 58.2 | 404.4 | 1.77 | 1.1 | 4860 | 0.57 | 163.6 | 27.08 | 5.83 | 14.02 | 354.7 | 2.2 | 0.28 | 95.3 | 578037 | |
| NEF-01_L_9 | 152 | <134.375 | 0.09 | 0.02 | <0.005 | 0.0 | 9492 | 0.03 | 4.3 | 118.2 | 75.2 | 258.4 | <0.010 | 0.2 | 778 | <0.010 | 150.9 | 17.39 | 1.40 | 8.16 | 158.7 | 0.1 | <0.007 | 79.7 | 569388 | |
| NEF-03_L_1 | 28244 | 9642 | 14.14 | 2.45 | 1.07 | 0.6 | 28678 | 2.85 | 2.4 | 9028.7 | 601.7 | 162.4 | 10.81 | 2.8 | 40992 | 2.87 | 45.2 | 6.04 | 8.84 | 4.79 | 19.1 | 8.5 | 1.26 | 36.8 | 474225 | |
| NEF-03_L_2 | 218 | 389 | 52.98 | 12.90 | 6.25 | 1.2 | 2481 | 15.09 | 7.2 | 93.2 | 22.6 | 113.3 | 47.08 | 0.8 | 719 | 13.91 | 109.9 | 5.03 | 19.15 | 7.18 | 44.9 | 48.2 | 5.28 | 164.4 | 589634 | |
| NEF-03_L_11 | 1824 | 362 | 44.61 | 9.40 | 3.78 | 1.8 | 7216 | 14.18 | 11.9 | 1977.4 | 80.6 | 112.6 | 46.60 | 1.0 | 4791 | 15.98 | 98.3 | 5.40 | 13.49 | 5.44 | 32.7 | 28.9 | 3.65 | 205.8 | 581209 | |
| NEF-03_L_12 | 332 | 328 | 10.54 | 3.70 | 1.83 | 0.4 | 2787 | 4.14 | 2.4 | 102.3 | 32.4 | 101.8 | 9.76 | 1.8 | 2740 | 3.29 | 71.8 | 4.74 | 15.29 | 5.96 | 23.4 | 13.4 | 1.76 | 62.5 | 588099 | |
| NEF-03_L_13 | 338 | 908 | 21.35 | 1.62 | 0.66 | 0.3 | 9518 | 2.64 | 2.6 | 228.1 | 81.6 | 119.3 | 15.47 | 1.4 | 1509 | 3.04 | 94.2 | 5.54 | 16.23 | 5.97 | 12.5 | 5.3 | 0.63 | 43.4 | 586260 | |
| NEF-03_L_14 | 2084 | 207 | 12.56 | 2.80 | 1.37 | 0.5 | 9316 | 4.03 | 3.6 | 644.2 | 66.3 | 105.8 | 11.31 | 0.9 | 3365 | 3.36 | 50.7 | 5.41 | 6.40 | 6.49 | 12.1 | 13.2 | 1.28 | 71.8 | 582140 | |
| NEF-03_L_15 | 158 | 682 | 46.79 | 7.60 | 3.74 | 1.1 | 4817 | 10.15 | 4.5 | 94.6 | 31.4 | 104.6 | 41.67 | 0.7 | 889 | 12.13 | 93.5 | 5.29 | 8.67 | 6.27 | 14.3 | 26.0 | 3.24 | 103.2 | 591384 | |
| NEF-03_L_16 | 6047 | 170 | 30.94 | 6.64 | 3.53 | 1.1 | 10972 | 8.84 | 11.9 | 6300.0 | 108.5 | 154.5 | 26.87 | 0.6 | 24761 | 8.69 | 108.6 | 7.42 | 5.73 | 7.50 | 39.2 | 23.7 | 4.33 | 213.4 | 543483 | |
| NEF-03_L_2 | 26886 | 2334 | 147.46 | 21.04 | 8.92 | 3.4 | 7800 | 30.61 | 5.1 | 1842.6 | 108.4 | 87.3 | 128.57 | 3.6 | 35572 | 35.14 | 78.5 | 4.39 | 43.75 | 6.64 | 35.3 | 70.5 | 7.21 | 110.5 | 510314 | |
| NEF-03_L_4 | 124 | <133.376 | 13.22 | 3.92 | 2.07 | 0.6 | 3817 | 4.45 | 10.6 | 88.7 | 8.9 | 110.9 | 11.98 | 0.3 | 1114 | 4.30 | 80.1 | 3.96 | 4.40 | 20.9 | 13.7 | 2.90 | 186.4 | 589902 | | |
| NEF-03_L_5 | 169 | 2478 | 14.78 | 3.14 | 1.58 | 0.4 | 4628 | 3.76 | 0.9 | 95.0 | 110.5 | 97.5 | 11.50 | 0.9 | 649 | 3.40 | 22.0 | 4.04 | 13.12 | 4.38 | 13.7 | 10.1 | 1.73 | 17.4 | 591314 | |
| NEF-03_L_6 | 956 | 20844 | 212.23 | 34.94 | 15.12 | 5.5 | 22693 | 49.27 | 10.6 | 846.5 | 1041.7 | 105.9 | 200.46 | 1.4 | 2726 | 52.24 | 119.3 | 4.81 | 29.19 | 9.82 | 25.1 | 117.5 | 13.04 | 234.3 | 554713 | |
| NEF-03_L_7 | 7893 | 435 | 25.60 | 5.68 | 2.61 | 0.8 | 8646 | 7.71 | 1.6 | 314.3 | 45.8 | 72.2 | 25.38 | 2.9 | 10599 | 7.69 | 50.6 | 3.93 | 8.99 | 6.38 | 20.2 | 17.8 | 2.03 | 35.4 | 565366 | |
| NEF-03_L_8 | 2343 | <123.178 | 11.70 | 0.93 | 0.41 | 0.2 | 7186 | 1.54 | 0.8 | 823.1 | 51.8 | 103.7 | 8.96 | 0.5 | 3781 | 1.99 | 40.6 | 5.16 | 2.81 | 8.36 | 9.7 | 2.8 | 0.47 | 13.6 | 583468 | |
| NEF-03_L_9 | 495 | 196 | 47.06 | 10.13 | 4.23 | 1.5 | 3868 | 13.68 | 7.9 | 213.8 | 26.6 | 92.3 | 47.59 | 0.5 | 1229 | 15.07 | 78.9 | 4.89 | 8.86 | 4.02 | 110.6 | 32.1 | 4.26 | 140.5 | 590507 | |
| SEF-02_L_1 | 151 | <306.305 | 2.18 | 0.19 | 0.13 | 0.0 | 5652 | 0.23 | 2.1 | 321.6 | 228.6 | 209.9 | 0.84 | 11.8 | 854 | 0.26 | 243.7 | 12.25 | 4.52 | 2.95 | 152.1 | 1.0 | 0.17 | 43.6 | 591707 | |
| SEF-02_L_2 | 47 | <303.409 | 2.64 | 0.25 | 0.16 | 0.0 | 5780 | 0.14 | 4.4 | 102.9 | 86.3 | 0.99 | 3.7 | <542.647 | 0.28 | 311.5 | 33.58 | 7.70 | 4.85 | 353.4 | 0.9 | 0.21 | 68.3 | 592327 | | |
| SEF-02_L_3 | 1437 | 17886 | 112.08 | 3.96 | 1.83 | 1.6 | 10396 | 7.09 | 1.9 | 988.1 | 206.4 | 374.1 | 53.51 | 8.1 | 14004 | 9.81 | 243.1 | 19.07 | 53.81 | 24.41 | 1138.6 | 20.5 | 1.57 | 37.7 | 553191 | |
| SINA-04_L_1 | 6243 | 911 | 79.74 | 25.91 | 14.79 | 2.1 | 1121 | 17.44 | 11.5 | 451.0 | 211.7 | 632.1 | 51.50 | 73.5 | 11046 | 17.38 | 33.9 | 25.38 | 5.63 | 25.38 | 64.3 | 86.5 | 16.19 | 364.8 | 574287 | |
| SINA-04_L_2 | 10715 | 790 | 68.04 | 12.11 | 7.44 | 1.0 | 1004 | 7.35 | 7.9 | 504.6 | 143.1 | 377.7 | 31.29 | 69.7 | 16322 | 8.13 | 10.5 | 18.73 | 2.92 | 5.62 | 51.4 | 46.8 | 7.79 | 236.0 | 563278 | |

Appendix C: Eastern Sunda arc rutile trace element chemistry (LA-ICP-MS)

| Analysis ID | Al | Ca | Ce | Dy | Er | Eu | Fe | Gd | Hf | Mg | Mn | Nb | Nd | Pb | Pb | Si | Sm | Sn | Ta | Th | U | W | Y | Yb | Zr | Ti |
|---------------|-------|----------|--------|-------|-------|------|--------|--------|-------|---------|--------|--------|--------|-------|----------|--------|--------|-------|--------|-------|-------|-------|-------|--------|--------|--------|
| SINA-04_T_3 | 3500 | 1052 | 71.74 | 21.39 | 12.53 | 1.9 | 1086 | 14.58 | 24.5 | 245.3 | 188.6 | 603.7 | 44.76 | 59.0 | 36.7 | 15.64 | 8281 | 36.7 | 24.83 | 5.57 | 9.91 | 66.6 | 83.6 | 13.74 | 562.0 | 581077 |
| SINA-04_T_4 | 2164 | 838 | 92.30 | 25.82 | 16.04 | 1.9 | 1135 | 16.31 | 11.3 | 133.6 | 225.6 | 645.6 | 53.19 | 16.9 | 22.4 | 16.85 | 3973 | 22.4 | 28.91 | 2.18 | 6.10 | 50.6 | 102.5 | 14.79 | 333.5 | 588584 |
| SINA-04_T_5 | 1673 | 831 | 82.23 | 19.89 | 11.60 | 1.3 | 1213 | 12.30 | 10.2 | 119.1 | 167.6 | 639.7 | 41.55 | 28.4 | 13.2 | 12.44 | 2728 | 13.2 | 26.68 | 2.21 | 4.04 | 58.1 | 75.3 | 13.74 | 331.8 | 590663 |
| SINA-04_T_6 | 2228 | <359.763 | 96.20 | 10.72 | 6.91 | 1.4 | 774 | 9.30 | 10.2 | 159.7 | 206.3 | 769.0 | 41.81 | 185.8 | 8.53 | 7.2 | 27.13 | 10.3 | 27.13 | 1.03 | 19.14 | 152.3 | 49.7 | 9.57 | 320.9 | 569491 |
| SINA-04_T_7 | 4129 | 916 | 110.28 | 25.59 | 16.43 | 2.6 | 3272 | 18.20 | 15.6 | 224.4 | 273.7 | 611.9 | 48.14 | 127.9 | 5.5 | 30.86 | 8631 | 14.87 | 7.2 | 30.86 | 2.41 | 7.59 | 103.7 | 110.2 | 21.60 | 578307 |
| SINA-04_T_8 | 2486 | 917 | 81.80 | 22.10 | 14.54 | 2.0 | 1230 | 16.03 | 16.9 | 142.6 | 224.0 | 605.9 | 45.37 | 25.2 | 5129 | 14.59 | 5129 | 21.7 | 20.951 | 12.82 | 9.12 | 55.7 | 87.5 | 17.25 | 458.8 | 586338 |
| SINA-05_T_1 | 7982 | 2084 | 50.63 | 14.83 | 9.32 | 4.9 | 2805 | 11.42 | 11.0 | 396.0 | 429.0 | 577.9 | 35.11 | 18.1 | 22799 | 12.56 | 1684 | 28.71 | 27.60 | 28.46 | 16.82 | 66.0 | 68.1 | 9.66 | 321.2 | 555090 |
| SINA-05_T_2 | 11906 | 1644 | 165.07 | 27.80 | 16.23 | 8.0 | 113848 | 26.16 | 8.3 | 694.8 | 249.6 | 791.6 | 107.02 | 951.5 | 20325 | 29.21 | 216.9 | 27.60 | 28.46 | 28.46 | 16.82 | 667.4 | 18.9 | 16.38 | 214.9 | 466209 |
| SINA-05_T_3 | 11119 | 1280 | 141.27 | 42.30 | 28.65 | 10.6 | 21948 | 28.57 | 8.4 | 624.3 | 335.1 | 679.2 | 83.76 | 64.9 | 19039 | 27.54 | 196.2 | 25.13 | 4.78 | 16.35 | 214.4 | 193.3 | 30.87 | 238.2 | 541511 | |
| SING-01_T_1 | 1919 | 24459 | 2.42 | 1.91 | 0.91 | 0.5 | 5899 | 1.70 | 66.2 | 187.5 | 147.5 | 481.7 | 3.50 | 3.7 | 18223 | 1.28 | 157.2 | 30.49 | 1.97 | 20.96 | 291.2 | 9.5 | 0.68 | 1361.3 | 543375 | |
| SING-01_T_2 | 34 | <255.963 | 0.03 | 0.03 | <0.09 | 0.0 | 4089 | <0.020 | 21.7 | 79.9 | <3.891 | 63.5 | 0.08 | 0.1 | <553.382 | <0.021 | 358.1 | 3.50 | 0.04 | 0.04 | 50.01 | 761.9 | 0.1 | 0.14 | 340.0 | 591429 |
| SING-01_T_3 | 5597 | 74471 | 8.13 | 8.08 | 4.79 | 2.8 | 10214 | 7.95 | 31.3 | 471.7 | 344.5 | 241.4 | 16.19 | 7.5 | 62565 | 5.94 | 83.0 | 14.81 | 4.09 | 11.26 | 95.2 | 44.5 | 3.19 | 666.3 | 438343 | |
| SING-02_T_10 | 13198 | 52216 | 58.23 | 12.85 | 7.09 | 9.7 | 1613 | 16.95 | 11.6 | 220.9 | 364.1 | 273.8 | 61.38 | 7.1 | 36527 | 17.00 | 102.5 | 13.38 | 33.11 | 15.06 | 232.8 | 83.4 | 6.48 | 167.1 | 487143 | |
| SING-02_T_11 | 4789 | 14462 | 20.27 | 6.27 | 3.85 | 2.7 | 5789 | 6.14 | 15.9 | 245.0 | 78.6 | 333.3 | 24.07 | 4.6 | 13627 | 7.23 | 113.2 | 20.21 | 18.86 | 17.65 | 206.6 | 38.5 | 4.38 | 372.6 | 556074 | |
| SING-02_T_12 | 1028 | 7.86 | 1.96 | 1.1 | 0.8 | 2.51 | 1.67 | 21.6 | 23.1 | 265.5 | 377.7 | 5.58 | 7.3 | 4092 | 1.92 | 270.0 | 34.38 | 8.56 | 19.94 | 283.4 | 10.4 | 1.38 | 327.2 | 583363 | | |
| SING-02_T_13 | 347 | 709 | 17.08 | 1.57 | 0.59 | 0.5 | 3044 | 2.06 | 9.4 | 115.8 | 82.4 | 1166.2 | 12.45 | 2.1 | 1904 | 3.63 | 101.2 | 62.75 | 15.60 | 10.05 | 739.4 | 7.6 | 0.89 | 120.4 | 588873 | |
| SING-02_T_14 | 7587 | 25107 | 31.00 | 3.47 | 2.09 | 1.7 | 2458 | 4.33 | 12.4 | 206.6 | 110.1 | 505.3 | 20.88 | 2.8 | 18094 | 4.77 | 137.4 | 28.42 | 19.18 | 17.49 | 323.4 | 16.1 | 2.06 | 223.4 | 540191 | |
| SING-02_T_15 | 117 | 131882 | 76.35 | 15.22 | 7.65 | 3.5 | 1683 | 16.22 | 11.2 | 155.3 | 55.6 | 271.7 | 73.34 | 3.6 | 1326 | 14.94 | 119.0 | 15.04 | 16.33 | 15.82 | 167.6 | 79.4 | 6.44 | 250.7 | 481699 | |
| SING-02_T_2 | 5089 | 17107 | 13.28 | 1.87 | 1.05 | 1.2 | 3933 | 1.77 | 11.4 | 407.3 | 113.3 | 280.8 | 7.92 | 2.2 | 14288 | 1.75 | 98.7 | 13.49 | 11.50 | 9.66 | 91.5 | 10.4 | 1.47 | 161.4 | 554289 | |
| SING-02_T_3 | 2141 | 12115 | 18.14 | 3.24 | 1.50 | 1.1 | 2166 | 3.65 | 12.6 | 125.5 | 160.7 | 280.9 | 14.82 | 2.2 | 6654 | 3.65 | 194.7 | 20.64 | 14.67 | 21.68 | 305.2 | 13.8 | 1.46 | 279.0 | 502358 | |
| SING-02_T_4 | 14118 | 31525 | 33.65 | 5.79 | 3.72 | 0.4 | 1835 | 2.20 | 20.6 | 138.1 | 30.8 | 317.1 | 9.29 | 1.5 | 9885 | 2.36 | 102.6 | 10.40 | 10.27 | 14.11 | 141.5 | 5.8 | 0.28 | 323.3 | 566281 | |
| SING-02_T_5 | 3128 | 10819 | 6.27 | 1.44 | 0.44 | 0.7 | 2372 | 5.74 | 14.5 | 392.6 | 143.2 | 344.6 | 25.16 | 9.4 | 37387 | 6.31 | 205.3 | 31.21 | 19.84 | 18.10 | 480.8 | 34.4 | 4.61 | 299.6 | 502358 | |
| SING-02_T_6 | 7143 | 21744 | 17.22 | 3.66 | 2.46 | 0.8 | 1617 | 2.61 | 16.9 | 599.8 | 68.5 | 317.9 | 10.98 | 7.2 | 18829 | 2.81 | 133.6 | 13.36 | 25.30 | 20.71 | 148.2 | 19.5 | 3.20 | 289.5 | 542074 | |
| SING-02_T_7 | 1982 | 2866 | 3.73 | 1.14 | 0.78 | 0.1 | 2712 | 1.02 | 31.8 | 203.8 | 160.0 | 367.1 | 2.91 | 0.7 | 6167 | 0.94 | 102.1 | 19.38 | 7.73 | 11.98 | 174.4 | 7.4 | 1.00 | 455.1 | 580224 | |
| SING-02_T_8 | 9243 | 35631 | 19.73 | 11.71 | 5.44 | 6.8 | 2332 | 14.15 | 4.4 | 585.7 | 153.6 | 321.7 | 26.40 | 1.9 | 25338 | 12.47 | 138.3 | 12.00 | 8.32 | 9.03 | 104.6 | 70.3 | 4.89 | 107.9 | 519616 | |
| SING-02_T_9 | 13707 | 50416 | 8.22 | 1.35 | 1.01 | 0.3 | 1531 | 1.29 | 11.8 | 203.4 | 74.1 | 236.1 | 5.40 | 5.6 | 37772 | 1.09 | 103.1 | 13.82 | 18.61 | 17.10 | 183.4 | 8.2 | 0.86 | 218.4 | 487218 | |
| TR-04_T_1 | 4173 | 22773 | 74.82 | 29.64 | 19.93 | 4.3 | 5691 | 27.14 | 5.1 | 439.8 | 134.8 | 278.4 | 78.19 | 15.0 | 15683 | 21.88 | 79.4 | 13.43 | 74.48 | 8.41 | 230.8 | 158.3 | 22.34 | 111.6 | 548725 | |
| TR-04_T_10 | 21044 | 53269 | 36.85 | 16.33 | 10.72 | 2.5 | 20083 | 14.21 | 6.0 | 11729.4 | 485.0 | 177.3 | 31.47 | 19.0 | 56822 | 11.20 | 59.4 | 8.34 | 10.23 | 7.21 | 140.7 | 88.8 | 10.16 | 228.8 | 429191 | |
| TR-04_T_2 | 8671 | 24709 | 56.20 | 11.90 | 7.94 | 2.2 | 11543 | 10.59 | 10.9 | 4783.1 | 295.8 | 186.1 | 38.35 | 15.0 | 21818 | 9.69 | 114.9 | 7.12 | 39.97 | 8.56 | 167.4 | 63.6 | 9.00 | 298.0 | 525501 | |
| TR-04_T_3 | 1960 | 19291 | 37.28 | 12.54 | 9.49 | 1.9 | 5313 | 10.96 | 187.6 | 163.3 | 96.0 | 217.5 | 44.27 | 7.0 | 7965 | 12.22 | 61.0 | 8.36 | 14.84 | 5.32 | 123.0 | 65.1 | 13.73 | 3712.8 | 562184 | |
| TR-04_T_4 | 547 | 3639 | 14.68 | 6.96 | 5.83 | 0.8 | 5169 | 4.57 | 209.9 | 93.7 | 77.4 | 235.3 | 11.50 | 10.5 | 2608 | 3.92 | 43.6 | 8.74 | 7.41 | 3.15 | 77.6 | 30.6 | 7.30 | 4931.8 | 583386 | |
| TR-04_T_5 | 1830 | 5313 | 11.71 | 2.77 | 1.90 | 0.5 | 9809 | 2.80 | 13.5 | 1385.8 | 392.3 | 181.3 | 6.06 | 9.6 | 5680 | 1.71 | 49.6 | 8.76 | 12.13 | 5.46 | 135.9 | 14.6 | 2.21 | 467.6 | 575190 | |
| TR-04_T_6 | 4908 | 22860 | 41.58 | 8.96 | 5.52 | 1.6 | 5841 | 8.50 | 8.7 | 601.2 | 85.7 | 180.0 | 22.51 | 21.5 | 16281 | 7.12 | 86.7 | 7.84 | 29.70 | 8.35 | 198.3 | 41.8 | 6.56 | 306.4 | 547231 | |
| TR-04_T_7 | 946 | 4825 | 13.71 | 2.47 | 1.41 | 0.3 | 8036 | 2.54 | 7.1 | 170.2 | 312.0 | 165.3 | 7.35 | 7.9 | 2919 | 1.67 | 33.6 | 7.63 | 8.24 | 10.62 | 188.2 | 12.9 | 2.14 | 298.5 | 582947 | |
| TR-04_T_8 | 4003 | 55721 | 115.87 | 33.75 | 21.70 | 4.9 | 4961 | 34.13 | 10.0 | 208.6 | 300.3 | 222.3 | 81.56 | 16.5 | 13388 | 27.33 | 81.9 | 8.42 | 35.16 | 12.99 | 250.8 | 180.6 | 20.42 | 265.5 | 525047 | |
| TR-04_T_9 | 7701 | <289.497 | 36.31 | 22.88 | 18.81 | 2.5 | 10228 | 14.54 | 11.7 | 3711.9 | 232.6 | 208.7 | 26.62 | 13.4 | 26031 | 9.52 | 135.1 | 9.21 | 28.75 | 10.34 | 207.1 | 137.4 | 26.21 | 313.9 | 518395 | |
| TR-05_T_1 | 39 | <289.497 | 3.12 | 0.53 | 0.34 | 0.1 | 6066 | 0.52 | 18.6 | 93.9 | 405.3 | 185.5 | 1.48 | 5.9 | 530 | 0.40 | 18.7 | 6.43 | 2.52 | 4.06 | 91.4 | 48.7 | 7.32 | 840.7 | 548607 | |
| TR-05_T_2 | 12139 | 1186 | 21.41 | 10.96 | 7.05 | 1.5 | 8908 | 5.98 | 16.7 | 1763.6 | 338.5 | 132.2 | 11.96 | 15.1 | 22070 | 2.70 | 61.5 | 6.43 | 2.52 | 4.06 | 91.4 | 48.7 | 7.32 | 840.7 | 548607 | |
| TR-05_T_3 | 5980 | 588 | 3.72 | 4.23 | 3.23 | 0.4 | 10742 | 2.35 | 3.0 | 4214.8 | 215.3 | 214.7 | 2.80 | 3.8 | 7431 | 1.08 | 20.6 | 7.89 | 5.24 | 0.88 | 74.2 | 25.4 | 5.16 | 38.1 | 569414 | |
| TR-05_T_4 | 1488 | 1918 | 61.77 | 32.54 | 25.59 | 4.8 | 9723 | 20.05 | 14.0 | 159.1 | 203.7 | 139.4 | 31.26 | 37.6 | 5753 | 8.79 | 153.5 | 7.42 | 23.09 | 8.17 | 444.3 | 207.5 | 28.51 | 379.3 | 579887 | |
| TR-05_T_5 | 3957 | 378 | 10.01 | 4.51 | 3.71 | 0.6 | 11059 | 2.97 | 1.4 | 417.0 | 88.7 | 311.7 | 6.45 | 7.2 | 6371 | 1.85 | 35.8 | 13.53 | 7.01 | 2.65 | 398.1 | 22.5 | 4.82 | 21.2 | 576290 | |
| UG012183_T_1 | 1790 | <299.992 | 1.30 | 0.09 | 0.05 | 0.0 | 2058 | <0.020 | 7.6 | 88.5 | 37.9 | 433.3 | 0.57 | 2.6 | 1662 | 0.07 | 920.5 | 24.74 | 6.90 | 10.27 | 713.3 | 0.3 | 0.06 | 150.3 | 590304 | |
| UG012183_T_10 | 1801 | <297.352 | 6.34 | 0.45 | 0.35 | 0.2 | 1855 | 0.37 | 14.0 | 109.7 | 79.4 | 631.9 | 2.76 | 8.9 | 1612 | 0.58 | 338.6 | 21.29 | 16.64 | 15.99 | 875.4 | 2.3 | 0.44 | 221.2 | 586332 | |
| UG012183_T_11 | 1060 | <301.614 | 0.17 | 0.03 | 0.02 | 0.0 | 961 | <0.021 | 13.4 | 84.1 | 23.4 | 158.3 | 0.13 | 0.9 | 873 | 0.06 | 1128.5 | 11.44 | 31.30 | 342.7 | 0.2 | 0.06 | 21.6 | 116.1 | 569837 | |
| UG012183_T_12 | 1887 | <283.847 | 16.61 | 3.70 | 2.42 | 0.7 | 1220 | 3.73 | 12.8 | 97.7 | 37.2 | 837.6 | 9.24 | 11.1 | 1215 | 2.26 | 553.4 | 18.42 | 9.71 | 16.15 | 477.1 | 15.5 | 2.20 | 224.0 | 587513 | |
| UG012183_T_13 | 50568 | 497 | 5.66 | 0.98 | 0.18 | 0.2 | 1738 | 0.73 | 15.0 | 89.5 | 8.6 | 346.6 | 2.84 | 2.0 | 2148 | 0.67 | 976.6 | 21.07 | 4.93 | 6.92 | 928.0 | 1.9 | 0.22 | 212.5 | 532551 | |
| UG012183_T_14 | 3536 | <101.019 | 0.84 | 0.08 | 0.18 | 0.1 | 2689 | 0.12 | 22.2 | 142.5 | 29.1 | 226.9 | 0.58 | 8.6 | 3164 | 0.14 | 1582.5 | 10.73 | 5.31 | 9.04 | 911.1 | 0.4 | 0.10 | 399.5 | 582754 | |
| UG012183_T_15 | 1 | | | | | | | | | | | | | | | | | | | | | | | | | |

Appendix C: Eastern Sunda arc rutile trace element chemistry (LA-ICP-MS)

| Analysis ID | Al | Ca | Ce | Dy | Er | Gd | Hf | Mg | Mn | Nb | Nd | Pb | Si | Sm | Sn | Ta | Th | U | W | Y | Yb | Zr | Ti | | |
|---------------|-------|----------|--------|--------|--------|--------|--------|--------|------|--------|--------|--------|--------|------|----------|--------|--------|-------|-------|--------|--------|--------|--------|--------|---------|
| UG012183_L_18 | 1534 | 298 | 0.24 | 0.04 | 0.01 | 0.0 | 2920 | <0.021 | 7.1 | 101.3 | 8.8 | 124.8 | 0.12 | 1.7 | 3859 | 0.13 | 1555.8 | 5.31 | 11.22 | 2.74 | 1359.8 | 0.1 | <0.012 | 121.0 | 594583 |
| UG012183_L_19 | 5255 | <360.750 | 0.19 | 0.19 | 0.14 | 0.0 | 2144 | <0.027 | 17.6 | 191.7 | 100.0 | 166.6 | 0.16 | 7.8 | 6604 | <0.028 | 775.5 | 9.99 | 4.38 | 10.86 | 495.8 | 0.7 | 0.10 | 336.6 | 579247 |
| UG012183_L_2 | 1225 | <281.491 | 108.70 | 14.55 | 8.74 | 2.2 | 1450 | 12.76 | 21.0 | 83.0 | 73.4 | 253.1 | 47.77 | 5.1 | 1876 | 10.19 | 180.9 | 13.25 | 8.33 | 14.39 | 137.7 | 67.9 | 7.87 | 412.3 | 590180 |
| UG012183_L_20 | 1875 | <279.638 | <0.006 | <0.011 | <0.009 | 3201 | <0.021 | 23.2 | 86.8 | <3.913 | 392.9 | <0.020 | 0.0 | 1138 | <0.021 | 1454.1 | 13.83 | 0.06 | 4.45 | 1384.2 | 0.1 | <0.012 | 362.8 | 587241 | |
| UG012183_L_21 | 5115 | <303.134 | 0.03 | <0.012 | <0.010 | <0.006 | 1545 | 0.08 | 18.3 | 180.4 | 10.5 | 84.6 | 0.04 | 1.0 | 5686 | <0.023 | 685.1 | 3.23 | 0.92 | 6.92 | 604.5 | 0.1 | <0.013 | 360.2 | 580255 |
| UG012183_L_22 | 3153 | <287.946 | 1.44 | 0.11 | 0.05 | 0.0 | 1078 | 0.07 | 8.7 | 105.6 | 43.8 | 213.5 | 0.87 | 2.4 | 3631 | 0.17 | 443.8 | 12.02 | 5.81 | 3.97 | 512.4 | 0.5 | 0.11 | 178.7 | 585121 |
| UG012183_L_23 | 6302 | <292.120 | 0.16 | 0.02 | <0.009 | 0.0 | 1791 | 0.04 | 18.7 | 182.3 | 46.5 | 160.0 | 0.09 | 3.2 | 6819 | <0.022 | 976.6 | 6.19 | 6.04 | 20.68 | 400.6 | 0.1 | 0.02 | 364.0 | 577048 |
| UG012183_L_25 | 18410 | <136.453 | 0.17 | 0.03 | 0.02 | 0.0 | 2768 | <0.011 | 26.7 | 599.0 | 103.5 | 181.8 | 0.09 | 7.2 | 21129 | 0.03 | 1441.0 | 8.76 | 13.90 | 8.05 | 656.1 | 0.1 | 0.01 | 505.9 | 5390821 |
| UG012183_L_26 | 1639 | <273.027 | 33.06 | 5.72 | 3.42 | 1.3 | 1308 | 5.70 | 4.5 | 81.8 | 66.9 | 674.2 | 18.68 | 3.3 | 1042 | 5.59 | 125.1 | 17.94 | 26.34 | 12.82 | 579.8 | 25.6 | 2.82 | 91.7 | 590342 |
| UG012183_L_27 | 4855 | <284.479 | 0.17 | <0.012 | 0.02 | 0.0 | 1853 | <0.021 | 22.2 | 141.5 | 86.7 | 456.1 | 0.14 | 4.2 | 4444 | <0.022 | 463.9 | 12.02 | 1.27 | 5.98 | 516.2 | 0.1 | 0.03 | 338.2 | 582047 |
| UG012183_L_28 | 29286 | <350.187 | 2.83 | 0.54 | 0.31 | 0.1 | 1843 | 0.39 | 6.8 | 96.6 | 9.6 | 473.1 | 1.84 | 1.5 | 1529 | 0.23 | 1395.5 | 29.44 | 27.83 | 11.75 | 905.1 | 1.4 | 0.22 | 125.8 | 558843 |
| UG012183_L_3 | 789 | <336.565 | 4.81 | 0.75 | 0.29 | 0.2 | 1582 | 0.74 | 5.8 | 92.2 | 34.5 | 718.9 | 3.26 | 3.0 | 856 | 1.04 | 70.4 | 22.21 | 4.12 | 3.18 | 100.0 | 1.5 | 0.08 | 159.7 | 592890 |
| UG012183_L_30 | 1995 | <120.373 | 0.44 | 0.07 | 0.02 | 0.0 | 1036 | 0.06 | 12.3 | 97.5 | 54.9 | 222.5 | 0.35 | 6.2 | 2873 | 0.09 | 191.2 | 7.89 | 2.81 | 5.17 | 170.7 | 0.4 | 0.04 | 178.2 | 587782 |
| UG012183_L_4 | 1105 | <313.336 | 96.22 | 9.04 | 5.86 | 1.4 | 1590 | 8.96 | 5.3 | 84.4 | 46.0 | 349.1 | 37.41 | 2.9 | <594.170 | 7.59 | 588.3 | 23.56 | 52.75 | 9.75 | 777.0 | 42.7 | 4.62 | 81.9 | 591633 |
| UG012183_L_5 | 10129 | <353.241 | 0.15 | 0.20 | 0.07 | 0.0 | 2054 | 0.10 | 14.1 | 171.8 | 9.2 | 127.6 | 0.13 | 3.4 | 5916 | 0.06 | 1948.0 | 7.26 | 12.30 | 8.42 | 503.0 | 0.5 | 0.18 | 248.8 | 572709 |
| UG012183_L_6 | 1994 | <0.005 | 0.07 | <0.010 | <0.007 | 2785 | <0.024 | 16.5 | 80.4 | 6.1 | 276.0 | <0.023 | 0.6 | 859 | 0.03 | 1189.5 | 16.79 | 0.02 | 3.91 | 1874.5 | 0.1 | 0.01 | 296.0 | 587938 | |
| UG012183_L_8 | 1498 | 202 | 0.22 | <0.005 | <0.004 | <0.003 | 2066 | 0.03 | 8.6 | 99.5 | 20.3 | 69.0 | 0.10 | 1.7 | 1430 | 0.03 | 1129.3 | 7.23 | 0.76 | 4.85 | 1498.1 | 0.1 | <0.006 | 238.0 | 588640 |
| UG012183_L_9 | 1271 | <300.620 | 0.07 | 0.08 | 0.09 | 0.0 | 890 | <0.021 | 14.6 | 87.0 | <4.041 | 94.3 | 0.70 | 16.8 | 1618 | 0.05 | 627.6 | 2.06 | 4.27 | 12.46 | 179.9 | 0.5 | 0.11 | 333.8 | 590372 |
| UG012185_L_1 | 18890 | 1204 | 8.68 | 0.56 | 0.35 | 0.2 | 6459 | 0.71 | 11.6 | 358.7 | 156.4 | 782.5 | 4.26 | 10.9 | 31500 | 0.84 | 708.9 | 21.15 | 16.31 | 16.60 | 1210.5 | 2.3 | 0.21 | 263.9 | 525954 |
| UG012185_L_10 | 1555 | <285.330 | 3.20 | 0.08 | 0.07 | 0.1 | 6961 | 0.20 | 11.1 | 166.7 | 204.5 | 911.0 | 1.10 | 15.6 | 2798 | 0.12 | 1446.5 | 24.20 | 4.37 | 16.27 | 1072.7 | 0.5 | 0.07 | 262.5 | 584772 |
| UG012185_L_11 | 15101 | <329.772 | 16.57 | 1.25 | 0.61 | 0.6 | 6729 | 0.75 | 7.4 | 344.4 | 117.8 | 1719.4 | 5.28 | 19.9 | 20262 | 0.67 | 1334.6 | 31.06 | 11.81 | 11.21 | 1298.4 | 4.2 | 0.80 | 153.6 | 546483 |
| UG012185_L_12 | 19355 | <303.955 | 20.10 | 1.43 | 0.70 | 0.9 | 6346 | 1.50 | 7.7 | 409.4 | 153.4 | 1126.4 | 7.89 | 31.1 | 31429 | 1.32 | 1526.5 | 12.24 | 12.47 | 13.55 | 1285.9 | 5.4 | 1.15 | 172.8 | 527859 |
| UG012185_L_13 | 49688 | 876 | 17.93 | 1.18 | 0.76 | 2.6 | 8103 | 2.52 | 10.1 | 545.9 | 288.5 | 544.5 | 8.63 | 30.3 | 60069 | 2.42 | 906.4 | 12.53 | 25.03 | 18.13 | 1100.2 | 4.0 | 0.76 | 280.5 | 464644 |
| UG012185_L_14 | 14442 | <130.718 | 7.38 | 0.20 | 0.16 | 0.1 | 6496 | 0.21 | 9.8 | 324.5 | 122.0 | 929.8 | 2.33 | 9.6 | 20020 | 0.31 | 1285.4 | 17.96 | 4.38 | 10.00 | 1752.3 | 0.9 | 0.16 | 205.8 | 547808 |
| UG012185_L_15 | 11090 | 650 | 7.27 | 0.57 | 0.37 | 0.2 | 6208 | 0.48 | 10.0 | 339.2 | 189.7 | 422.2 | 2.96 | 19.4 | 17158 | 0.26 | 1083.4 | 8.64 | 7.15 | 10.55 | 1493.6 | 2.5 | 0.74 | 225.1 | 556200 |
| UG012185_L_2 | 28010 | 453 | 4.90 | 0.17 | 0.09 | 0.1 | 5729 | 0.12 | 10.7 | 273.7 | 62.1 | 378.3 | 2.37 | 13.2 | 43436 | 0.40 | 718.1 | 9.22 | 16.77 | 15.30 | 886.9 | 0.6 | 0.09 | 283.9 | 501632 |
| UG012185_L_3 | 13112 | 194 | 10.66 | 0.41 | 0.29 | 0.3 | 6092 | 0.66 | 12.0 | 349.0 | 93.6 | 1322.2 | 4.24 | 12.7 | 20886 | 0.61 | 948.3 | 35.99 | 11.97 | 11.16 | 2071.6 | 2.2 | 0.36 | 225.1 | 549472 |
| UG012185_L_4 | 7569 | <281.874 | 6.27 | 0.31 | 0.11 | 0.2 | 5848 | 0.45 | 11.9 | 185.5 | 139.1 | 1850.8 | 2.85 | 7.4 | 9233 | 0.87 | 1009.4 | 39.39 | 4.64 | 11.94 | 1576.1 | 1.0 | 0.26 | 331.1 | 569463 |
| UG012185_L_5 | 12285 | <280.341 | 20.26 | 1.17 | 0.96 | 0.8 | 7459 | 1.62 | 14.7 | 235.6 | 185.8 | 1148.8 | 8.90 | 21.9 | 21939 | 1.31 | 1029.7 | 18.94 | 9.13 | 13.15 | 993.4 | 6.5 | 1.86 | 427.4 | 547386 |
| UG012185_L_6 | 8553 | 159 | 12.35 | 0.51 | 0.36 | 0.3 | 6459 | 0.65 | 10.7 | 210.3 | 116.6 | 742.6 | 4.43 | 14.2 | 10204 | 0.57 | 1319.0 | 19.91 | 12.40 | 9.03 | 1039.8 | 2.3 | 0.47 | 229.9 | 568120 |
| UG012185_L_7 | 3934 | 199 | 11.06 | 1.05 | 0.71 | 0.5 | 4730 | 0.79 | 9.4 | 156.9 | 75.8 | 485.4 | 4.25 | 15.9 | 5372 | 0.49 | 961.0 | 13.51 | 5.08 | 7.42 | 991.1 | 4.2 | 1.10 | 187.7 | 581344 |
| UG012185_L_8 | 27127 | 678 | 9.45 | 0.65 | 0.26 | 0.4 | 7554 | 1.08 | 13.7 | 346.8 | 95.4 | 687.5 | 4.62 | 12.1 | 37428 | 1.22 | 627.8 | 13.75 | 12.97 | 15.72 | 991.9 | 2.4 | 0.48 | 307.2 | 510412 |
| UG012185_L_9 | 11736 | 703 | 10.54 | 0.44 | 0.27 | 0.1 | 7616 | 0.36 | 15.3 | 193.4 | 31.7 | 486.9 | 3.38 | 4.3 | 19010 | 0.33 | 742.7 | 8.69 | 6.88 | 11.80 | 891.4 | 1.3 | 0.23 | 324.9 | 552284 |
| UG012187_L_1 | 267 | <271.085 | 103.88 | 2.38 | 0.95 | 0.7 | 4073 | 5.24 | 20.5 | 87.1 | 15.4 | 243.9 | 60.25 | 0.6 | 854 | 7.96 | 96.3 | 5.46 | 18.32 | 12.49 | 191.4 | 7.5 | 0.51 | 792.8 | 589905 |
| UG012187_L_10 | 389 | <284.443 | 86.55 | 5.21 | 1.86 | 0.9 | 3590 | 10.43 | 20.2 | 86.8 | 15.4 | 413.0 | 59.53 | 0.9 | <547.762 | 12.65 | 85.5 | 9.98 | 18.70 | 7.53 | 388.9 | 18.0 | 1.65 | 416.6 | 590932 |
| UG012187_L_11 | 2747 | <280.927 | 14.71 | 1.48 | 1.18 | 0.5 | 402 | 1.99 | 8.1 | 95.5 | <3.585 | 281.2 | 8.56 | 0.9 | <501.139 | 1.88 | 278.3 | 11.24 | 2.53 | 1.96 | 178.0 | 7.1 | 0.68 | 90.0 | 590785 |
| UG012187_L_12 | 3520 | <291.180 | 0.07 | <0.012 | <0.009 | <0.006 | 71 | <0.022 | 16.0 | 76.2 | <3.994 | 259.7 | 0.05 | 0.9 | 45525 | <0.022 | 1788.5 | 17.24 | 0.15 | 0.22 | 13.3 | 0.1 | <0.012 | 104.8 | 532346 |
| UG012187_L_13 | 1754 | <258.128 | 11.05 | 1.03 | 0.53 | 0.3 | 3393 | 1.64 | 13.2 | 91.6 | 7.6 | 403.6 | 7.80 | 1.2 | 2503 | 1.71 | 74.4 | 8.61 | 5.36 | 3.97 | 340.8 | 4.9 | 0.53 | 247.4 | 584601 |
| UG012187_L_14 | 1957 | 471 | 84.23 | 6.23 | 2.47 | 1.1 | 2760 | 11.46 | 7.1 | 85.2 | 19.3 | 249.3 | 60.96 | 0.8 | 2916 | 13.64 | 65.0 | 5.42 | 16.54 | 4.97 | 243.6 | 29.8 | 1.68 | 184.1 | 585514 |
| UG012187_L_15 | 5177 | 457 | 10.96 | 1.30 | 0.86 | 0.3 | 3088 | 1.28 | 4.0 | 114.0 | 84.7 | 464.5 | 5.25 | 16.8 | 7212 | 1.89 | 109.9 | 21.14 | 11.05 | 8.57 | 470.5 | 6.7 | 0.60 | 103.3 | 579329 |
| UG012187_L_2 | 1521 | <124.199 | 4.46 | 0.67 | 0.46 | 0.1 | 2948 | 0.63 | 9.9 | 93.5 | 126.5 | 389.6 | 2.46 | 7.9 | 2046 | 0.70 | 127.1 | 11.89 | 7.72 | 5.62 | 456.7 | 3.0 | 0.59 | 173.9 | 590175 |
| UG012187_L_4 | 4143 | <310.983 | 0.19 | <0.013 | 0.02 | <0.006 | 73 | <0.023 | 9.3 | 81.9 | <4.332 | 261.9 | <0.022 | 0.2 | 1501 | <0.024 | 1428.4 | 11.66 | 0.70 | 0.10 | 30.1 | 0.1 | <0.013 | 60.9 | 586343 |
| UG012187_L_5 | 9635 | <256.188 | 6.71 | 0.55 | 0.35 | 0.2 | 1651 | 1.13 | 10.4 | 92.7 | <3.563 | 278.1 | 3.80 | 1.9 | 12876 | 0.76 | 708.6 | 13.13 | 3.59 | 1.39 | 56.3 | 3.3 | 0.27 | 77.2 | 566398 |
| UG012187_L_6 | 16215 | <320.829 | 24.10 | 2.77 | 0.99 | 0.8 | 317 | 2.29 | 4.9 | 103.9 | <4.455 | 275.7 | 12.64 | 2.2 | 30284 | 3.12 | 723.3 | 9.92 | 6.17 | 1.93 | 38.9 | 11.6 | 1.06 | 74.0 | 537681 |
| UG012187_L_7 | 480 | <117.243 | 12.30 | 0.98 | 0.57 | 0.3 | 2816 | 1.06 | 10.1 | 100.6 | 195.0 | 614.6 | 5.50 | 11.0 | 403 | 1.14 | 114.8 | 32.88 | 28.29 | 26.25 | 326.9 | 4.3 | 0.51 | 177.9 | 593010 |
| UG012187_L_8 | 320 | <272.203 | 165.79 | 8.18 | 2.97 | 1.4 | 3321 | 16.41 | 17.4 | 108.7 | 14.1 | 297.9 | 106.66 | 0.4 | <527.913 | 21.27 | 106.6 | 5.59 | 25.08 | 14.38 | 340.0 | 30.3 | 1.95 | 602.9 | 590582 |
| UG012187_L_9 | 491 | 315 | 7.80 | 0.95 | 0.69 | 0.3 | 3442 | 1.28 | 6.3 | 88.1 | 5.0 | 324.3 | 4.67 | 1.3 | <525.711 | 0.95 | 113.0 | | | | | | | | |

Appendix C: Eastern Sunda arc rutile trace element chemistry (LA-ICP-MS)

| Analysis ID | Al | Ca | Ce | Dy | Er | Eu | Fe | Gd | Hf | Mg | Mn | Nb | Nd | Pb | Si | Sm | Sn | Ta | Th | U | W | Y | Yb | Zr | Ti |
|---------------|-------|----------|-------|--------|--------|--------|-------|--------|------|--------|--------|--------|--------|------|----------|--------|--------|-------|-------|-------|---------|------|--------|-------|--------|
| UG012188_r_10 | 316 | 116 | 30.78 | 5.35 | 3.70 | 1.9 | 6272 | 4.17 | 5.8 | 100.1 | 43.5 | 188.3 | 12.62 | 6.1 | 244 | 3.06 | 397.6 | 11.45 | 18.62 | 7.58 | 1187.0 | 30.9 | 4.43 | 63.9 | 588770 |
| UG012188_r_11 | 536 | <315.206 | 0.12 | 0.04 | <0.010 | <0.006 | 6532 | <0.023 | 7.5 | 88.0 | <4.214 | 37.7 | 0.06 | 2.1 | 1531 | <0.023 | 1029.1 | 1.63 | 1.78 | 5.91 | 1642.5 | 0.0 | 0.02 | 180.1 | 585354 |
| UG012188_r_11 | 1027 | <140.409 | 8.46 | 0.72 | 0.36 | 0.6 | 6832 | 0.82 | 6.1 | 90.5 | 64.1 | 206.9 | 4.13 | 8.2 | 898 | 0.88 | 711.6 | 20.39 | 5.17 | 2.93 | 3950.3 | 3.4 | 0.56 | 50.1 | 582728 |
| UG012188_r_12 | 1456 | <108.743 | 0.22 | 0.02 | 0.01 | 0.0 | 9800 | 0.02 | 12.0 | 80.0 | 20.4 | 137.6 | 0.08 | 2.4 | 810 | 0.01 | 1257.2 | 9.22 | 2.31 | 9.25 | 13008.5 | 0.1 | <0.006 | 205.9 | 571961 |
| UG012188_r_13 | 359 | <121.809 | 0.16 | <0.006 | <0.004 | <0.003 | 7360 | 0.03 | 5.7 | 88.1 | 25.6 | 18.8 | 0.02 | 1.3 | <239.725 | <0.010 | 1060.0 | 1.52 | 0.52 | 8.83 | 3058.6 | 0.0 | 0.02 | 135.6 | 583536 |
| UG012188_r_14 | 781 | 354 | 6.85 | 0.94 | 0.65 | 0.7 | 6154 | 1.08 | 11.0 | 97.0 | 27.9 | 114.3 | 3.88 | 3.7 | 365 | 0.86 | 1244.8 | 8.92 | 16.28 | 8.13 | 2529.4 | 5.0 | 0.60 | 168.1 | 583023 |
| UG012188_r_15 | 869 | <118.257 | 0.25 | 0.01 | <0.004 | 0.0 | 6884 | 0.01 | 10.5 | 92.0 | 24.0 | 21.2 | 0.13 | 9.2 | 485 | 0.02 | 1617.5 | 1.94 | 0.80 | 7.18 | 2327.9 | 0.1 | 0.01 | 20.2 | 583434 |
| UG012188_r_16 | 468 | <115.593 | 15.53 | 2.84 | 1.78 | 1.1 | 6601 | 2.47 | 6.9 | 86.4 | 72.8 | 198.3 | 7.62 | 8.5 | 270 | 1.86 | 512.8 | 20.05 | 16.79 | 7.52 | 1037.0 | 14.5 | 1.97 | 86.1 | 588179 |
| UG012188_r_17 | 408 | <133.767 | 0.08 | 0.01 | <0.005 | 0.0 | 6244 | <0.012 | 11.6 | 93.8 | 13.1 | 107.8 | 0.04 | 2.1 | 1902 | 0.02 | 1184.9 | 6.71 | 0.92 | 6.67 | 1748.9 | 0.1 | <0.007 | 215.4 | 582255 |
| UG012188_r_18 | 2040 | <111.255 | 0.72 | 0.05 | 0.43 | 0.0 | 9415 | 0.06 | 4.3 | 89.0 | 78.8 | 91.1 | 0.21 | 6.2 | 1113 | 0.04 | 1217.6 | 4.84 | 2.85 | 14.73 | 7563.5 | 0.2 | 0.07 | 63.6 | 578797 |
| UG012188_r_19 | 567 | 131 | 1.41 | 0.09 | 0.11 | 0.1 | 5924 | 0.08 | 4.8 | 95.1 | 39.1 | 116.0 | 0.40 | 3.8 | 1640 | 0.04 | 1109.9 | 5.92 | 3.94 | 6.79 | 4133.0 | 0.6 | 0.27 | 77.9 | 583224 |
| UG012188_r_20 | 655 | <115.580 | 0.52 | 0.01 | 0.01 | <0.003 | 7170 | <0.010 | 9.2 | 81.3 | 4.8 | 86.2 | 0.04 | 1.3 | 505 | 0.02 | 1077.5 | 2.90 | 0.58 | 5.70 | 1648.2 | 0.0 | 0.02 | 202.3 | 586506 |
| UG012188_r_21 | 265 | <111.518 | 0.16 | 0.01 | <0.004 | 0.0 | 6874 | <0.010 | 5.7 | 82.7 | 21.1 | 8.2 | 0.14 | 5.9 | 1142 | <0.010 | 1337.2 | 1.11 | 1.70 | 10.45 | 3308.1 | 0.0 | 0.01 | 119.3 | 582992 |
| UG012188_r_22 | 264 | <122.582 | 0.55 | 0.06 | 0.02 | 0.1 | 7685 | 0.05 | 11.1 | 86.2 | 106.8 | 106.0 | 0.26 | 4.9 | 5651 | 0.08 | 1091.7 | 6.56 | 1.20 | 6.21 | 6153.7 | 0.4 | 0.05 | 196.9 | 574174 |
| UG012188_r_23 | 4802 | <119.507 | 1.33 | 0.11 | 0.13 | 0.2 | 8665 | 0.20 | 16.5 | 104.8 | 7.2 | 147.6 | 0.64 | 3.0 | 5534 | 0.11 | 703.3 | 11.55 | 3.14 | 2.11 | 228.9 | 0.9 | 0.23 | 274.2 | 577911 |
| UG012188_r_24 | 4008 | <135.490 | 19.56 | 2.01 | 1.17 | 1.3 | 5640 | 1.95 | 3.8 | 110.5 | 50.5 | 365.6 | 9.03 | 7.8 | 5145 | 0.89 | 366.2 | 24.43 | 11.85 | 4.64 | 1006.1 | 11.6 | 1.58 | 50.4 | 576196 |
| UG012188_r_25 | 830 | <115.444 | 0.40 | <0.005 | 0.01 | 0.0 | 6956 | 0.02 | 8.4 | 88.7 | 8.1 | 110.7 | 0.07 | 4.6 | 795 | 0.02 | 874.1 | 7.95 | 0.76 | 7.97 | 5081.5 | 0.1 | <0.006 | 159.7 | 580676 |
| UG012188_r_26 | 366 | <137.784 | 11.50 | 1.03 | 0.69 | 0.7 | 6587 | 1.26 | 10.8 | 86.2 | 3.3 | 163.9 | 6.04 | 0.8 | <263.152 | 0.97 | 794.2 | 9.95 | 7.17 | 5.83 | 4960.2 | 5.9 | 0.73 | 150.4 | 583794 |
| UG012188_r_27 | 830 | <115.444 | 0.40 | <0.005 | 0.01 | 0.0 | 6956 | 0.02 | 8.4 | 88.7 | 8.1 | 110.7 | 0.07 | 4.6 | 795 | 0.02 | 874.1 | 7.95 | 0.76 | 7.97 | 5081.5 | 0.1 | <0.006 | 159.7 | 580676 |
| UG012188_r_28 | 726 | 147 | 0.12 | 0.01 | 0.01 | 0.0 | 8400 | 0.05 | 10.6 | 89.8 | 23.2 | 130.3 | 0.11 | 31.2 | 1069 | 0.06 | 1170.7 | 7.16 | 1.92 | 7.94 | 8302.4 | 0.1 | 0.03 | 195.5 | 578601 |
| UG012188_r_29 | 1152 | <145.580 | 15.02 | 1.59 | 0.99 | 1.1 | 6216 | 1.81 | 8.7 | 98.5 | 50.7 | 197.1 | 7.25 | 7.8 | 1619 | 1.45 | 715.4 | 13.48 | 15.87 | 6.60 | 2223.2 | 8.5 | 1.32 | 97.4 | 582390 |
| UG012188_r_30 | 272 | <125.823 | 21.08 | 3.13 | 2.20 | 1.1 | 7719 | 2.49 | 10.4 | 87.5 | 136.1 | 154.8 | 8.94 | 7.8 | 267 | 1.86 | 977.6 | 16.44 | 9.52 | 7.65 | 1460.9 | 16.6 | 2.28 | 144.8 | 587232 |
| UG012188_r_31 | 341 | <123.431 | 0.09 | <0.006 | 0.01 | 0.0 | 7068 | 0.01 | 9.1 | 84.5 | 3.1 | 59.1 | 0.04 | 0.3 | <232.753 | 0.02 | 1063.7 | 2.64 | 3.46 | 5.29 | 1600.3 | 0.1 | 0.01 | 199.3 | 587317 |
| UG012188_r_32 | 7271 | <135.167 | 24.70 | 2.37 | 1.49 | 1.0 | 5856 | 2.59 | 6.8 | 86.6 | 15.9 | 170.6 | 11.16 | 10.2 | 10746 | 2.48 | 444.4 | 15.63 | 9.92 | 4.82 | 1199.6 | 13.2 | 1.71 | 61.9 | 566206 |
| UG012188_r_33 | 581 | <182.914 | 2.59 | 0.25 | 0.19 | 0.3 | 7623 | 0.38 | 11.2 | 92.8 | 95.7 | 93.2 | 1.80 | 5.3 | <342.894 | 0.43 | 1227.0 | 6.78 | 2.48 | 4.62 | 3133.8 | 1.4 | 0.25 | 207.8 | 584841 |
| UG012188_r_34 | 484 | <122.369 | 0.39 | <0.006 | <0.004 | 0.0 | 7644 | <0.011 | 10.4 | 87.7 | 19.5 | 27.8 | 0.11 | 9.1 | 1178 | 0.02 | 1797.1 | 0.83 | 1.88 | 12.36 | 6579.8 | 0.0 | 0.01 | 230.0 | 577238 |
| UG012188_r_4 | 485 | <130.636 | 0.10 | 0.03 | <0.005 | 0.0 | 8660 | <0.011 | 9.4 | 95.0 | 59.6 | 78.5 | 0.07 | 3.3 | 382 | <0.011 | 898.0 | 5.63 | 0.84 | 11.94 | 8007.9 | 0.1 | <0.007 | 195.9 | 579077 |
| UG012188_r_6 | 261 | <168.370 | 0.22 | <0.008 | 0.02 | 0.0 | 3456 | 0.02 | 4.1 | 96.1 | <2.442 | 50.1 | 0.03 | 2.7 | 505 | 0.11 | 961.9 | 3.88 | 2.70 | 0.71 | 1357.3 | 0.1 | 0.02 | 59.2 | 583201 |
| UG012188_r_7 | 334 | <121.536 | 8.38 | 1.13 | 0.88 | 0.6 | 6018 | 1.09 | 5.3 | 87.5 | 43.4 | 382.9 | 3.20 | 3.3 | <239.644 | 0.89 | 414.1 | 71.21 | 4.85 | 5.72 | 1674.1 | 7.1 | 0.93 | 63.4 | 586124 |
| UG012188_r_8 | 2109 | <123.262 | 0.76 | 0.09 | 0.06 | 0.1 | 7944 | 0.06 | 3.7 | 89.8 | 34.5 | 77.4 | 0.33 | 3.5 | 261 | 0.05 | 983.6 | 5.61 | 2.08 | 9.24 | 2962.0 | 0.4 | 0.12 | 46.8 | 585162 |
| UG012188_r_9 | 363 | <116.437 | 0.06 | 0.01 | 0.01 | 0.0 | 6906 | <0.010 | 10.1 | 83.7 | 5.1 | 88.0 | 0.03 | 0.6 | <229.484 | <0.010 | 1008.4 | 9.60 | 0.58 | 6.98 | 2800.4 | 0.1 | 0.04 | 183.1 | 585613 |
| UG012189_r_1 | 4811 | <131.118 | 0.89 | 0.06 | 0.01 | 0.0 | 12374 | 0.04 | 12.4 | 183.2 | 78.0 | 1042.5 | 0.47 | 7.2 | 441 | 0.11 | 885.5 | 32.64 | 3.52 | 5.23 | 1139.6 | 0.2 | 0.04 | 232.4 | 580089 |
| UG012189_r_10 | 178 | <274.334 | 0.05 | 0.02 | <0.008 | <0.005 | 8466 | <0.020 | 13.8 | 87.3 | 16.9 | 424.4 | 0.03 | 1.4 | 1449 | 0.04 | 483.8 | 7.39 | 0.30 | 3.74 | 434.9 | 0.0 | 0.03 | 354.8 | 588151 |
| UG012189_r_11 | 202 | <134.204 | 0.93 | 0.03 | 0.01 | 0.0 | 7444 | 0.08 | 13.2 | 91.1 | 9.3 | 831.4 | 0.34 | 0.5 | 829 | 0.06 | 663.4 | 30.75 | 2.04 | 5.91 | 573.8 | 0.2 | 0.04 | 344.1 | 589742 |
| UG012189_r_12 | 4593 | <322.658 | 5.11 | 0.22 | 0.08 | 0.2 | 9081 | 0.41 | 20.6 | 2484.5 | 49.4 | 954.1 | 2.16 | 10.2 | 10079 | 0.88 | 471.4 | 24.69 | 2.56 | 6.55 | 1446.6 | 0.5 | 0.03 | 462.2 | 564616 |
| UG012189_r_13 | 3228 | 723 | 1.46 | 0.21 | 0.09 | 0.0 | 6568 | 0.20 | 15.4 | 94.4 | 44.0 | 1477.9 | 0.82 | 1.4 | 2458 | 0.13 | 545.7 | 45.31 | 5.22 | 5.63 | 1745.8 | 0.7 | 0.19 | 307.6 | 580932 |
| UG012189_r_14 | 1994 | <136.824 | 4.80 | 0.54 | 0.32 | 0.4 | 11216 | 0.73 | 13.7 | 219.1 | 114.0 | 796.0 | 3.51 | 36.0 | 4730 | 0.70 | 2110.0 | 11.76 | 6.32 | 9.50 | 2861.7 | 2.3 | 0.47 | 364.6 | 576723 |
| UG012189_r_15 | 539 | <129.814 | 1.20 | 0.07 | 0.05 | 0.0 | 7011 | 0.13 | 17.3 | 89.9 | 11.1 | 1059.7 | 0.75 | 4.1 | 820 | 0.13 | 560.6 | 29.85 | 2.99 | 4.37 | 1425.3 | 0.3 | 0.03 | 296.5 | 589058 |
| UG012189_r_16 | 14535 | 155 | 0.58 | 0.05 | 0.03 | 0.0 | 8729 | 0.08 | 17.7 | 557.0 | 31.3 | 1806.9 | 0.27 | 4.3 | 21028 | 0.03 | 421.3 | 14.19 | 0.63 | 5.18 | 1775.9 | 0.4 | 0.04 | 471.2 | 544023 |
| UG012189_r_17 | 39760 | <333.496 | 0.46 | 0.04 | 0.07 | 0.0 | 7848 | 0.10 | 8.7 | 565.5 | 83.5 | 476.1 | 0.33 | 7.8 | 28209 | 0.04 | 709.5 | 9.60 | 3.99 | 4.21 | 739.7 | 0.3 | 0.10 | 225.1 | 507646 |
| UG012189_r_18 | 41476 | 272 | 0.15 | 0.09 | 0.08 | 0.0 | 14499 | 0.04 | 18.0 | 653.8 | 21.7 | 997.5 | 0.16 | 6.5 | 50799 | 0.04 | 570.3 | 34.18 | 0.98 | 3.25 | 568.1 | 0.5 | 0.45 | 407.4 | 470838 |
| UG012189_r_19 | 4463 | <251.195 | 2.02 | 0.18 | 0.14 | 0.1 | 11081 | 0.13 | 17.3 | 192.9 | 36.4 | 1178.6 | 1.11 | 7.9 | 8445 | 0.17 | 523.8 | 23.83 | 3.61 | 5.22 | 1506.1 | 1.0 | 0.15 | 357.6 | 589263 |
| UG012189_r_20 | 140 | <293.250 | 0.10 | 0.04 | <0.009 | <0.006 | 6253 | <0.021 | 7.0 | 82.2 | 6.3 | 313.1 | <0.020 | 0.1 | 1487 | 0.08 | 385.7 | 2.65 | 0.65 | 4.32 | 262.2 | 0.0 | <0.012 | 239.3 | 589863 |
| UG012189_r_21 | 132 | <341.641 | 0.28 | <0.013 | <0.010 | <0.007 | 6011 | 0.03 | 22.4 | 87.6 | 6.8 | 897.6 | 0.07 | 0.2 | 1078 | 0.03 | 475.2 | 11.83 | 0.45 | 3.82 | 636.0 | 0.1 | 0.07 | 491.6 | 589429 |
| UG012189_r_22 | 243 | <277.805 | 4.71 | 0.30 | 0.19 | 0.1 | 9183 | 0.25 | 21.9 | 101.0 | 35.2 | 1441.2 | 2.18 | 6.7 | 1850 | 0.37 | 566.3 | 20.83 | 2.01 | 5.36 | 753.8 | 1.4 | 0.10 | 498.8 | 585178 |
| UG012189_r_23 | 542 | <187.816 | 0.06 | <0.008 | <0.007 | <0.004 | 6096 | 0.09 | 15.5 | 87.1 | 16.4 | 563.0 | 0.08 | 0.8 | <350.263 | 0.02 | 456.7 | 14.51 | 1.28 | 4.57 | 1438.6 | 0.1 | 0.03 | 371.5 | 589231 |
| UG012189_r_4 | 4945 | 253 | 1.62 | 0.13 | 0.05 | 0.1 | 8654 | 0.12 | 19.2 | 97.0 | 68.8 | 1767.6 | 1.05 | 4.2 | 3326 | 0.19 | 381.8 | 42.05 | 3.04 | 5.39 | 714.6 | 0.4 | 0.0 | | |

Appendix C: Eastern Sunda arc rutile trace element chemistry (LA-ICP-MS)

| Analysis ID | Al | Ca | Ce | Dy | Er | Eu | Fe | Gd | Hf | Mg | Mn | Nb | Nd | Pb | Si | Sm | Sn | Ta | Th | U | W | Y | Yb | Zr | Ti | |
|---------------|-------|----------|--------|--------|--------|--------|-------|--------|------|-------|--------|--------|--------|-------|----------|--------|--------|--------|-------|-------|--------|-------|--------|--------|--------|--------|
| UG012189_I_7 | 21652 | <156.346 | 1.02 | 0.04 | 0.04 | 0.02 | 0.0 | 8641 | 0.05 | 12.0 | 188.8 | 17.0 | 442.4 | 0.68 | 3.4 | 7666 | 0.11 | 406.5 | 6.98 | 1.99 | 4.51 | 52.11 | 0.2 | 0.05 | 348.5 | 562289 |
| UG012189_I_8 | 3439 | <129.909 | 2.16 | 0.07 | 0.07 | 0.0 | 11846 | 0.04 | 11.5 | 166.7 | 73.6 | 403.1 | 0.84 | 1.5 | 8873 | 0.17 | 537.8 | 9.73 | 4.07 | 4.67 | 4.67 | 832.3 | 0.4 | 0.08 | 276.2 | 570548 |
| UG012189_I_9 | 189 | <118.729 | 0.21 | <0.005 | 0.01 | 0.0 | 11181 | 0.02 | 17.4 | 98.0 | 98.2 | 411.6 | 0.11 | 4.8 | 1344 | 0.08 | 460.6 | 13.85 | 4.07 | 3.91 | 4.96 | 486.9 | 0.1 | <0.006 | 435.5 | 566078 |
| UG012191_I_1 | 1726 | 382 | 7.99 | 5.17 | 4.58 | 0.8 | 3680 | 3.16 | 22.8 | 98.5 | 48.1 | 292.4 | 4.56 | 6.9 | 2958 | 1.23 | 140.5 | 7.32 | 7.70 | 7.41 | 310.3 | 28.3 | 4.96 | 479.9 | 568806 | |
| UG012191_I_10 | 1073 | <116.659 | 2.61 | 0.60 | 0.49 | 0.1 | 2414 | 0.35 | 15.9 | 100.3 | 61.2 | 407.6 | 1.15 | 4.1 | 850 | 0.26 | 966.0 | 26.07 | 8.83 | 12.29 | 1707.1 | 3.5 | 0.73 | 211.8 | 568490 | |
| UG012191_I_12 | 1074 | <127.992 | 2.29 | 0.32 | 0.26 | 0.1 | 3348 | 0.15 | 23.1 | 100.7 | 30.9 | 535.5 | 1.08 | 1.3 | 10634 | 0.24 | 232.0 | 40.88 | 6.67 | 11.44 | 403.3 | 1.7 | 0.23 | 329.5 | 578889 | |
| UG012191_I_13 | 1084 | <122.140 | 5.00 | 0.70 | 0.28 | 0.2 | 4215 | 0.82 | 9.9 | 93.6 | 79.8 | 294.8 | 2.51 | 4.2 | 1387 | 0.68 | 1197.4 | 13.02 | 5.25 | 11.26 | 4227.9 | 2.5 | 0.33 | 150.3 | 565356 | |
| UG012191_I_14 | 3393 | <133.222 | 0.98 | 0.11 | 0.22 | 0.1 | 2914 | 0.09 | 26.6 | 311.6 | 53.0 | 69.4 | 0.40 | 12.0 | 13923 | 0.09 | 315.1 | 4.08 | 0.87 | 16.59 | 1067.5 | 1.4 | 0.42 | 457.6 | 571765 | |
| UG012191_I_15 | 309 | <127.297 | 2.53 | 0.19 | 0.11 | 0.1 | 3885 | 0.25 | 11.6 | 95.7 | 87.2 | 349.9 | 0.82 | 4.1 | 500 | 0.26 | 1012.0 | 18.57 | 9.95 | 5.49 | 1439.6 | 0.7 | 0.08 | 154.2 | 590815 | |
| UG012191_I_16 | 4718 | <130.891 | 0.84 | 0.13 | 0.11 | 0.0 | 2803 | 0.16 | 30.9 | 132.7 | 17.7 | 338.9 | 0.36 | 1.3 | 8240 | 0.07 | 342.1 | 14.69 | 0.77 | 6.07 | 253.7 | 0.7 | 0.11 | 566.4 | 578275 | |
| UG012191_I_18 | 317 | <113.887 | <0.002 | 0.01 | <0.005 | <0.003 | 2914 | <0.012 | 25.8 | 85.4 | <1.710 | 120.1 | 0.01 | 0.1 | 517 | <0.011 | 2252.6 | 3.72 | 0.31 | 11.93 | 2106.0 | 0.1 | 0.01 | 453.9 | 569811 | |
| UG012191_I_19 | 756 | 256 | 2.91 | 1.31 | 1.88 | 0.2 | 2747 | 0.57 | 29.1 | 97.7 | 119.8 | 261.7 | 1.19 | 10.8 | 97.2 | 0.44 | 97.2 | 7.75 | 3.51 | 5.08 | 303.5 | 9.7 | 2.34 | 649.7 | 591455 | |
| UG012191_I_20 | 882 | <118.144 | 0.75 | 3.28 | 5.04 | 0.2 | 4590 | 1.12 | 41.9 | 101.9 | 170.9 | 797.0 | 0.52 | 6.6 | 802 | 0.34 | 255.4 | 11.64 | 4.09 | 7.73 | 156.5 | 29.1 | 9.92 | 1024.1 | 590221 | |
| UG012191_I_21 | 784 | <133.301 | 4.68 | 2.28 | 2.33 | 0.3 | 2629 | 1.07 | 23.2 | 94.9 | 22.5 | 533.5 | 2.23 | 2.3 | 1327 | 0.42 | 323.9 | 25.73 | 5.17 | 10.03 | 792.5 | 13.6 | 0.05 | 325.1 | 590851 | |
| UG012191_I_22 | 332 | <142.954 | 0.08 | <0.006 | <0.006 | 0.0 | 2734 | <0.015 | 22.1 | 88.8 | <2.123 | 300.5 | 0.04 | 0.1 | <276.722 | <0.014 | 445.0 | 7.67 | 0.28 | 9.71 | 521.5 | 0.1 | 0.04 | 373.3 | 593097 | |
| UG012191_I_23 | 2229 | <150.423 | 3.12 | 0.62 | 0.40 | 0.2 | 3888 | 0.66 | 13.6 | 87.3 | 182.3 | 622.4 | 1.19 | 10.2 | 532 | 0.39 | 1077.7 | 24.97 | 4.88 | 6.65 | 2471.7 | 2.8 | 0.43 | 169.9 | 568552 | |
| UG012191_I_24 | 232 | <130.417 | 1.31 | 0.15 | 0.14 | 0.0 | 2527 | 0.20 | 13.3 | 87.2 | 30.8 | 378.6 | 0.65 | 2.1 | <250.951 | 0.15 | 270.2 | 33.87 | 0.78 | 9.92 | 266.1 | 1.0 | 0.18 | 199.4 | 593691 | |
| UG012191_I_25 | 14060 | <160.505 | 1.86 | <0.008 | 0.06 | 0.0 | 3903 | 0.03 | 21.7 | 166.6 | 18.5 | 322.1 | 0.49 | 0.9 | 11701 | 0.03 | 277.9 | 8.19 | 1.47 | 6.32 | 309.1 | 0.1 | 0.04 | 368.8 | 563766 | |
| UG012191_I_26 | 16166 | 7418 | 35.28 | 4.56 | 1.56 | 3.1 | 2348 | 7.39 | 13.2 | 90.7 | 33.6 | 515.8 | 27.97 | 250.8 | 3860 | 6.18 | 460.9 | 21.75 | 9.88 | 10.03 | 586.1 | 16.4 | 1.11 | 153.0 | 563631 | |
| UG012191_I_27 | 297 | 150 | 5.34 | 3.34 | 2.54 | 0.7 | 2537 | 1.74 | 12.0 | 93.1 | 51.3 | 294.3 | 2.55 | 3.5 | <241.086 | 1.03 | 100.3 | 8.57 | 2.80 | 2.61 | 58.8 | 16.8 | 2.50 | 255.1 | 593369 | |
| UG012191_I_28 | 1299 | <119.404 | 1.44 | 0.10 | 0.09 | 0.0 | 2822 | 0.04 | 12.3 | 104.3 | 10.3 | 287.4 | 0.42 | 0.6 | 673 | 0.13 | 456.4 | 16.40 | 2.84 | 7.88 | 701.0 | 0.4 | 0.08 | 170.4 | 591344 | |
| UG012191_I_3 | 342 | <274.550 | 0.01 | <0.012 | <0.009 | <0.006 | 3899 | 0.03 | 25.8 | 84.4 | <3.740 | 155.9 | <0.020 | 0.6 | 1159 | <0.022 | 1744.7 | 4.22 | 0.08 | 3.14 | 2556.1 | 0.1 | 0.05 | 331.3 | 586284 | |
| UG012191_I_4 | 1426 | 947 | 5.23 | 2.37 | 2.59 | 0.3 | 3133 | 1.43 | 27.3 | 148.0 | 50.2 | 287.1 | 2.54 | 12.2 | 2423 | 0.82 | 113.9 | 7.01 | 5.68 | 9.50 | 187.3 | 15.7 | 3.77 | 879.2 | 588617 | |
| UG012191_I_4 | 5289 | <128.787 | 2.48 | 3.57 | 5.49 | 0.3 | 2883 | 1.48 | 33.7 | 92.4 | 51.5 | 372.3 | 1.24 | 3.2 | 685 | 0.42 | 230.9 | 9.02 | 4.11 | 9.59 | 91.4 | 32.3 | 9.75 | 953.9 | 568782 | |
| UG012191_I_5 | 891 | <118.855 | 0.01 | <0.006 | <0.005 | <0.003 | 3077 | 0.01 | 9.6 | 373.3 | <1.782 | 34.5 | <0.011 | 0.1 | 1166 | <0.011 | 1208.4 | 0.42 | 0.90 | 3.68 | 1852.0 | 0.0 | <0.007 | 240.9 | 568825 | |
| UG012191_I_6 | 3260 | <149.666 | 1.52 | 0.24 | 0.08 | 0.1 | 4532 | 0.23 | 23.5 | 92.2 | 11.4 | 1016.1 | 0.57 | 0.7 | <295.214 | 0.18 | 289.9 | 30.16 | 1.41 | 7.44 | 990.3 | 0.6 | 0.06 | 359.5 | 589063 | |
| UG012191_I_7 | 2777 | <125.582 | 0.54 | 0.02 | 0.03 | 0.0 | 6181 | <0.013 | 17.7 | 939.5 | 421.2 | 211.3 | 0.13 | 124.8 | 3955 | 0.04 | 560.6 | 10.47 | 4.59 | 5.56 | 503.3 | 0.2 | 0.02 | 299.5 | 562330 | |
| UG012191_I_8 | 350 | <118.888 | 0.27 | 0.04 | 0.02 | 0.0 | 3490 | 0.06 | 28.4 | 87.6 | 106.6 | 280.0 | 0.14 | 4.2 | 719 | 0.03 | 344.5 | 8.14 | 0.95 | 7.58 | 275.8 | 0.1 | <0.007 | 482.4 | 591881 | |
| UG012191_I_9 | 3085 | <124.445 | 1.59 | 0.30 | 0.27 | 0.1 | 4451 | 0.28 | 29.3 | 136.7 | 39.3 | 1846.1 | 0.83 | 6.5 | 3941 | 0.32 | 288.2 | 145.38 | 3.61 | 8.26 | 731.5 | 1.7 | 0.25 | 359.7 | 583563 | |
| UG012192_I_1 | 598 | <131.770 | 0.16 | 0.02 | <0.006 | 0.0 | 3617 | 0.04 | 12.8 | 103.8 | 32.7 | 199.5 | 0.06 | 24.1 | <249.214 | <0.012 | 682.7 | 8.55 | 5.51 | 11.02 | 2580.2 | 0.1 | <0.008 | 287.0 | 587202 | |
| UG012192_I_10 | 607 | <152.457 | 0.26 | 0.02 | 0.04 | <0.004 | 3536 | 0.05 | 14.0 | 140.6 | 13.7 | 236.7 | 0.16 | 89.2 | 491 | <0.014 | 745.3 | 7.26 | 10.36 | 11.04 | 2147.8 | 0.1 | 0.02 | 310.6 | 587611 | |
| UG012192_I_11 | 2582 | <128.991 | 0.17 | <0.007 | 0.01 | 0.0 | 2197 | 0.03 | 24.0 | 91.2 | <1.796 | 184.8 | 0.01 | 64.3 | 2900 | <0.012 | 506.6 | 8.07 | 1.92 | 24.22 | 320.4 | 0.1 | <0.008 | 602.4 | 583654 | |
| UG012192_I_12 | 964 | <141.890 | 0.13 | <0.007 | 0.01 | 0.0 | 1340 | 0.02 | 5.2 | 325.7 | 4.2 | 111.7 | 0.08 | 22.8 | 1217 | <0.013 | 350.6 | 2.45 | 3.51 | 2.80 | 1003.4 | 0.1 | 0.03 | 93.2 | 587939 | |
| UG012192_I_13 | 5875 | 214 | 1.01 | 0.96 | 0.24 | 0.3 | 677 | 0.97 | 5.8 | 90.1 | <2.647 | 276.3 | 1.33 | 109.7 | 8467 | 0.85 | 526.4 | 17.60 | 18.30 | 9.37 | 1244.2 | 1.5 | 0.43 | 114.9 | 572397 | |
| UG012192_I_14 | 3683 | <124.943 | 20.65 | 1.66 | 1.44 | 0.6 | 4696 | 1.41 | 22.6 | 207.7 | 25.7 | 919.6 | 8.41 | 31.0 | 4171 | 1.24 | 704.5 | 41.75 | 30.56 | 20.74 | 928.3 | 9.1 | 1.65 | 341.3 | 579124 | |
| UG012192_I_2 | 903 | 305 | 0.35 | <0.008 | 0.01 | 0.0 | 1639 | 0.02 | 20.5 | 114.1 | 3.3 | 825.0 | 0.19 | 147.5 | 10774 | 0.04 | 579.9 | 41.17 | 5.48 | 18.09 | 366.8 | 0.2 | <0.009 | 416.3 | 574407 | |
| UG012192_I_3 | 4468 | <124.725 | 9.66 | 1.27 | 0.81 | 0.4 | 1975 | 1.42 | 14.8 | 185.6 | 15.9 | 492.7 | 6.07 | 27.0 | 7526 | 1.47 | 193.3 | 30.76 | 7.13 | 12.43 | 507.0 | 6.6 | 0.69 | 281.9 | 576365 | |
| UG012192_I_4 | 967 | <120.965 | 10.79 | 1.51 | 0.68 | 0.4 | 3177 | 1.48 | 11.1 | 112.3 | 29.6 | 1871.8 | 6.92 | 7.3 | 1664 | 1.76 | 373.0 | 68.52 | 9.75 | 16.72 | 1390.1 | 5.8 | 0.96 | 202.0 | 585924 | |
| UG012192_I_6 | 3188 | <133.639 | 7.29 | 1.10 | 0.60 | 0.3 | 2117 | 0.94 | 11.9 | 126.2 | 25.7 | 1880.7 | 3.20 | 111.1 | 1496 | 0.81 | 433.6 | 89.01 | 15.54 | 14.41 | 685.0 | 5.4 | 0.54 | 223.9 | 581388 | |
| UG012192_I_7 | 1315 | <139.543 | 0.03 | 0.01 | <0.006 | 0.0 | 2875 | <0.014 | 22.3 | 836.7 | 12.4 | 1029.7 | 0.03 | 3.5 | 1908 | <0.013 | 728.0 | 23.74 | 0.58 | 21.90 | 735.2 | 0.1 | 0.04 | 420.4 | 583809 | |
| UG012192_I_8 | 709 | <143.683 | 0.26 | 0.01 | <0.006 | <0.003 | 4916 | 0.08 | 21.1 | 217.5 | 174.1 | 277.6 | 0.06 | 8.3 | 551 | 0.02 | 530.6 | 13.84 | 0.66 | 13.77 | 455.5 | 0.1 | <0.009 | 520.9 | 586372 | |
| UG012192_I_9 | 663 | <140.985 | 0.50 | 0.05 | 0.06 | <0.003 | 2869 | 0.03 | 14.5 | 87.7 | <1.964 | 187.1 | 0.21 | 18.7 | 466 | <0.013 | 628.1 | 9.08 | 5.75 | 11.82 | 1782.8 | 0.2 | 0.06 | 353.8 | 586638 | |
| UG012194_I_1 | 1782 | <280.248 | 7.32 | 0.86 | 0.26 | 0.3 | 3829 | 1.15 | 2.9 | 93.7 | 4.5 | 145.2 | 3.74 | 1.0 | 2012 | 1.14 | 92.7 | 6.46 | 3.37 | 1.72 | 40.8 | 2.1 | 0.42 | 44.0 | 590302 | |
| UG012194_I_10 | 2712 | <307.422 | 13.27 | 1.54 | 1.26 | 0.3 | 4177 | 1.29 | 20.9 | 96.5 | 22.7 | 790.5 | 5.20 | 1.3 | 1254 | 1.06 | 201.1 | 38.24 | 4.79 | 34.74 | 1256.5 | 8.3 | 1.17 | 430.4 | 593370 | |
| UG012194_I_11 | 30637 | <355.436 | 7.39 | 1.84 | 1.17 | 0.3 | 1445 | 1.25 | 8.2 | 86.4 | 10.5 | 348.4 | 3.89 | 6.8 | 62810 | 1.04 | 69.1 | 15.71 | 9.76 | 16.74 | 48.3 | 8.2 | 1.30 | 203.3 | 480600 | |
| UG012194_I_12 | 1317 | <286.178 | 0.01 | 0.04 | <0.009 | <0.005 | 5377 | <0.020 | 10.7 | 86.0 | 3.7 | 173.4 | <0.019 | 0.1 | 646 | 0.06 | 202.4 | 9.47 | 0.15 | 37.26 | 2385.2 | 0.0 | 0.03 | 365.9 | 589620 | |
| UG012194_I_13 | 24385 | <347.538 | 47.11 | 6.74 | 4.81 | 1.2 | 2352 | 5.20 | 8.9 | 259.8 | 33.2 | 236.6 | | | | | | | | | | | | | | |

Appendix C: Eastern Sunda arc rutile trace element chemistry (LA-ICP-MS)

| Analysis ID | Al | Ca | Ce | Dy | Er | Eu | Fe | Gd | Hf | Mg | Mn | Nb | Nd | Pb | Pu | Si | Sm | Sn | Ta | Th | U | W | Y | Yb | Zr | Ti |
|---------------|------|----------|--------|-------|------|------|-------|-------|------|-------|--------|--------|-------|------|----------|-------|-------|-------|-------|--------|--------|-------|-------|--------|--------|--------|
| UG012194_L_3 | 3593 | <132.847 | 5.33 | 0.58 | 0.45 | 0.37 | 0.2 | 2746 | 0.65 | 5.7 | 110.9 | 4.0 | 355.0 | 2.72 | 0.9 | 4951 | 0.89 | 176.6 | 16.36 | 7.09 | 3.51 | 238.1 | 2.6 | 0.33 | 80.6 | 584435 |
| UG012194_L_4 | 1155 | 235 | 33.56 | 5.48 | 4.39 | 1.3 | 1837 | 4.81 | 17.6 | 105.2 | 9.6 | 325.4 | 16.65 | 18.0 | 3022 | 4.13 | 127.8 | 16.54 | 12.45 | 9.38 | 196.7 | 30.8 | 4.95 | 405.9 | 590183 | |
| UG012194_L_5 | 2061 | 209 | 8.02 | 1.15 | 0.79 | 0.2 | 2409 | 0.93 | 14.3 | 152.9 | 22.4 | 179.8 | 3.72 | 8.2 | 3686 | 0.81 | 73.1 | 6.01 | 5.24 | 20.16 | 112.5 | 5.3 | 0.88 | 385.1 | 586108 | |
| UG012194_L_6 | 5423 | 177 | 7.07 | 0.69 | 0.57 | 0.3 | 4120 | 0.55 | 21.2 | 104.9 | 13.4 | 1252.7 | 3.12 | 9.6 | 1316 | 0.55 | 222.4 | 46.53 | 4.10 | 35.92 | 1156.8 | 3.9 | 0.45 | 500.9 | 584905 | |
| UG012194_L_7 | 1967 | <297.479 | 9.18 | 0.81 | 0.44 | 0.2 | 4007 | 1.38 | 6.4 | 712.5 | 19.5 | 492.3 | 5.66 | 1.1 | 1884 | 1.07 | 225.0 | 18.50 | 6.13 | 11.90 | 503.7 | 3.7 | 0.33 | 100.2 | 588711 | |
| UG012194_L_8 | 4045 | 1941 | 107.70 | 12.97 | 9.15 | 3.1 | 1118 | 10.76 | 4.6 | 119.2 | 24.2 | 561.5 | 47.01 | 86.4 | 2776 | 11.27 | 320.0 | 33.88 | 39.36 | 20.05 | 183.4 | 67.0 | 9.40 | 63.8 | 584777 | |
| UG012194_L_9 | 3163 | <307.671 | 37.26 | 4.74 | 2.88 | 1.4 | 2275 | 4.17 | 4.8 | 169.6 | 13.0 | 536.5 | 17.23 | 9.3 | 11301 | 3.60 | 154.2 | 22.55 | 12.36 | 12.31 | 195.2 | 21.2 | 2.73 | 73.1 | 576889 | |
| UG012199_L_1 | 1272 | <292.530 | 2.83 | 0.40 | 0.31 | 0.2 | 3427 | 0.44 | 2.5 | 92.0 | 7.8 | 424.8 | 1.96 | 7.0 | 1250 | 0.52 | 159.5 | 18.19 | 2.54 | 1.73 | 77.7 | 1.9 | 0.15 | 38.1 | 575553 | |
| UG012199_L_10 | 828 | <147.615 | 21.36 | 1.03 | 0.54 | 0.5 | 22550 | 1.96 | 8.0 | 87.1 | 9.4 | 342.6 | 14.00 | 7.1 | 714 | 2.36 | 259.1 | 27.31 | 19.64 | 3.35 | 313.1 | 4.3 | 0.52 | 61.3 | 576084 | |
| UG012199_L_11 | 968 | <150.391 | 8.66 | 0.89 | 0.45 | 0.3 | 937 | 0.97 | 9.0 | 87.3 | 8.5 | 761.5 | 5.53 | 3.4 | 14812 | 0.92 | 236.4 | 47.36 | 6.36 | 4.25 | 833.0 | 4.5 | 0.64 | 83.2 | 572525 | |
| UG012199_L_12 | 706 | <353.366 | 15.69 | 0.82 | 0.25 | 0.3 | 915 | 1.61 | 5.7 | 90.6 | 12.0 | 347.8 | 8.90 | 21.5 | 1007 | 1.68 | 207.2 | 25.00 | 30.01 | 5.14 | 270.8 | 2.9 | 0.20 | 56.5 | 591211 | |
| UG012199_L_2 | 570 | <267.878 | 15.71 | 1.64 | 0.93 | 0.4 | 1544 | 2.34 | 3.0 | 82.2 | 19.4 | 267.7 | 10.46 | 4.7 | 927 | 2.33 | 103.7 | 8.13 | 5.85 | 2.53 | 138.6 | 7.8 | 0.98 | 34.9 | 591300 | |
| UG012199_L_3 | 1389 | <282.445 | 8.29 | 0.72 | 0.33 | 0.4 | 6993 | 0.95 | 3.8 | 87.3 | 33.3 | 354.0 | 5.48 | 6.9 | 902 | 1.43 | 274.9 | 8.96 | 10.54 | 5.41 | 413.7 | 3.2 | 0.28 | 49.3 | 584262 | |
| UG012199_L_4 | 1228 | 154 | 12.76 | 0.89 | 0.53 | 0.3 | 1540 | 1.34 | 5.2 | 87.5 | 13.9 | 479.9 | 8.19 | 5.7 | 695 | 1.22 | 168.8 | 13.52 | 5.57 | 3.46 | 163.4 | 5.1 | 0.52 | 52.4 | 590395 | |
| UG012199_L_5 | 761 | <287.825 | 37.96 | 2.90 | 1.31 | 0.5 | 72301 | 4.84 | 6.2 | 92.7 | 18.4 | 660.8 | 27.73 | 7.9 | 1652 | 5.38 | 215.0 | 34.15 | 14.01 | 4.78 | 370.4 | 13.3 | 1.35 | 87.8 | 539648 | |
| UG012199_L_6 | 1102 | <282.250 | 26.55 | 1.40 | 0.70 | 0.3 | 1021 | 2.54 | 4.6 | 98.7 | 23.3 | 535.8 | 16.38 | 3.8 | 537 | 2.97 | 143.3 | 15.83 | 8.61 | 4.86 | 126.4 | 6.6 | 0.59 | 55.4 | 590873 | |
| UG012199_L_8 | 682 | <291.320 | 18.35 | 0.52 | 0.34 | 0.4 | 14265 | 1.41 | 5.8 | 93.0 | 43.6 | 465.1 | 12.07 | 8.3 | 1608 | 1.81 | 201.6 | 23.34 | 11.72 | 4.24 | 229.1 | 2.7 | 0.30 | 71.7 | 580465 | |
| UG012200_L_1 | 309 | <137.462 | 3.23 | 0.30 | 0.19 | 0.1 | 774 | 0.29 | 7.2 | 88.5 | 41.8 | 63.8 | 1.62 | 2.1 | 295 | 0.35 | 694.0 | 11.17 | 6.92 | 5.60 | 1627.1 | 1.6 | 0.30 | 135.7 | 587318 | |
| UG012200_L_10 | 2726 | <132.289 | 2.64 | 0.31 | 0.19 | 0.1 | 2630 | 0.42 | 10.0 | 142.0 | 100.9 | 389.6 | 1.67 | 6.1 | 1337 | 0.54 | 311.7 | 25.87 | 4.73 | 7.99 | 5178.8 | 1.6 | 0.15 | 104.0 | 582528 | |
| UG012200_L_11 | 301 | <131.652 | 0.90 | 0.08 | 0.05 | 0.0 | 878 | 0.04 | 5.6 | 91.0 | 48.6 | 370.5 | 0.41 | 3.0 | 713 | 0.09 | 272.3 | 24.99 | 1.51 | 1.87 | 1252.0 | 0.3 | 0.10 | 64.5 | 589105 | |
| UG012200_L_12 | 314 | <144.777 | 2.63 | 0.27 | 0.19 | 0.1 | 422 | 0.30 | 7.6 | 88.9 | 11.6 | 197.2 | 1.40 | 5.4 | 467 | 0.27 | 474.3 | 20.07 | 5.50 | 4.66 | 933.6 | 1.5 | 0.24 | 114.3 | 582818 | |
| UG012200_L_13 | 593 | <149.088 | 0.81 | 0.11 | 0.10 | 0.0 | 1634 | 0.11 | 26.7 | 83.7 | 402.7 | 0.53 | 1.0 | 434 | 0.15 | 531.2 | 19.64 | 2.28 | 14.05 | 6736.2 | 0.8 | 0.13 | 419.2 | 580383 | | |
| UG012200_L_14 | 476 | 162 | 2.35 | 0.13 | 0.13 | 0.1 | 1058 | 0.28 | 15.7 | 93.8 | 227.2 | 473.2 | 1.31 | 8.5 | 521 | 0.25 | 576.9 | 26.96 | 4.27 | 3.45 | 2822.0 | 0.8 | 0.16 | 170.8 | 586825 | |
| UG012200_L_15 | 1073 | 297 | 3.96 | 0.11 | 0.04 | 0.1 | 876 | 0.36 | 10.4 | 91.0 | 60.8 | 277.9 | 1.52 | 16.3 | 1287 | 0.42 | 684.0 | 18.28 | 13.57 | 7.59 | 3527.4 | 0.3 | 0.06 | 133.8 | 583466 | |
| UG012200_L_16 | 1437 | 406 | 4.46 | 0.27 | 0.22 | 0.2 | 1651 | 0.69 | 11.0 | 122.7 | 34.2 | 525.3 | 2.93 | 13.2 | 1453 | 0.55 | 642.5 | 27.13 | 56.82 | 4.70 | 3564.7 | 1.2 | 0.19 | 108.4 | 582307 | |
| UG012200_L_17 | 366 | <177.512 | 2.90 | 0.34 | 0.17 | 0.1 | 595 | 0.18 | 6.0 | 95.5 | 92.0 | 379.4 | 1.46 | 3.9 | 512 | 0.33 | 331.0 | 29.14 | 3.25 | 3.73 | 762.5 | 1.0 | 0.14 | 69.2 | 589100 | |
| UG012200_L_18 | 237 | <143.491 | 2.77 | 0.24 | 0.18 | 0.2 | 660 | 0.26 | 8.0 | 91.6 | 140.7 | 335.3 | 1.51 | 5.7 | <233.059 | 0.28 | 326.8 | 22.70 | 4.99 | 4.32 | 1158.7 | 1.2 | 0.21 | 141.8 | 588127 | |
| UG012200_L_19 | 384 | <155.564 | 8.96 | 2.01 | 1.58 | 0.2 | 527 | 1.25 | 6.8 | 89.1 | 71.3 | 326.4 | 4.65 | 5.3 | <252.173 | 1.05 | 342.2 | 26.30 | 8.02 | 7.25 | 1157.0 | 10.1 | 1.57 | 96.5 | 587585 | |
| UG012200_L_2 | 828 | 413 | 6.08 | 0.65 | 0.75 | 0.2 | 758 | 0.74 | 5.6 | 107.9 | 37.9 | 511.2 | 3.70 | 26.9 | 4460 | 0.57 | 246.9 | 62.64 | 9.20 | 5.55 | 662.2 | 3.7 | 0.63 | 64.0 | 591836 | |
| UG012200_L_20 | 912 | <163.560 | 3.08 | 0.29 | 0.16 | 0.1 | 606 | 0.48 | 6.4 | 87.9 | 83.0 | 395.0 | 1.89 | 8.1 | 883 | 0.23 | 295.7 | 20.08 | 4.67 | 4.43 | 1277.3 | 1.2 | 0.23 | 91.1 | 587528 | |
| UG012200_L_21 | 647 | <163.718 | 2.74 | 0.24 | 0.13 | 0.1 | 1068 | 0.21 | 5.2 | 96.8 | 18.4 | 395.5 | 1.79 | 8.0 | 792 | 0.43 | 348.9 | 30.74 | 8.59 | 2.73 | 1126.2 | 0.8 | 0.16 | 55.4 | 586537 | |
| UG012200_L_22 | 389 | <145.311 | 1.28 | 0.07 | 0.03 | 0.0 | 949 | 0.07 | 11.2 | 90.2 | 27.4 | 369.1 | 0.62 | 3.1 | <233.995 | 0.15 | 659.3 | 27.22 | 1.74 | 3.77 | 1620.2 | 0.3 | 0.04 | 174.5 | 587665 | |
| UG012200_L_23 | 496 | <177.722 | 1.97 | 0.17 | 0.06 | 0.1 | 787 | 0.20 | 13.0 | 90.6 | 23.2 | 179.5 | 0.95 | 9.7 | 448 | 0.10 | 343.4 | 8.68 | 2.19 | 3.32 | 1941.8 | 0.6 | 0.14 | 153.2 | 587338 | |
| UG012200_L_24 | 699 | <147.861 | 1.40 | 0.37 | 0.18 | 0.0 | 2233 | 0.44 | 18.9 | 94.6 | 86.7 | 394.7 | 1.30 | 12.3 | 1578 | 0.29 | 462.2 | 41.01 | 10.34 | 12.70 | 5579.2 | 1.8 | 0.12 | 237.8 | 582140 | |
| UG012200_L_25 | 759 | <145.735 | 1.41 | 0.30 | 0.15 | 0.1 | 2167 | 0.22 | 27.2 | 88.4 | 15.4 | 499.6 | 0.91 | 2.4 | <233.441 | 0.24 | 489.3 | 51.69 | 2.77 | 13.65 | 4676.2 | 1.4 | 0.46 | 389.4 | 584294 | |
| UG012200_L_26 | 283 | <153.053 | 4.30 | 0.48 | 0.58 | 0.2 | 731 | 0.61 | 6.1 | 97.6 | 83.8 | 252.6 | 2.60 | 3.0 | <244.738 | 0.62 | 422.5 | 15.32 | 7.39 | 6.04 | 1666.9 | 3.2 | 0.59 | 92.6 | 588166 | |
| UG012200_L_27 | 629 | <151.455 | 1.28 | 0.06 | 0.04 | 0.0 | 1103 | 0.12 | 12.9 | 89.8 | 51.7 | 592.3 | 0.60 | 3.7 | <241.730 | 0.21 | 613.3 | 23.52 | 1.85 | 3.60 | 1719.8 | 0.4 | 0.12 | 186.5 | 596684 | |
| UG012200_L_28 | 1932 | <183.743 | 5.76 | 0.39 | 0.32 | 0.1 | 614 | 0.39 | 7.7 | 94.4 | 48.7 | 477.6 | 2.79 | 26.6 | 911 | 0.65 | 421.1 | 39.15 | 5.71 | 4.68 | 1396.0 | 1.7 | 0.31 | 96.2 | 586908 | |
| UG012200_L_29 | 617 | <177.096 | 4.17 | 0.49 | 0.35 | 0.1 | 890 | 0.44 | 6.6 | 110.6 | 61.7 | 195.8 | 1.73 | 15.2 | <281.790 | 0.22 | 395.1 | 10.24 | 4.53 | 4.12 | 1255.4 | 2.3 | 0.43 | 92.4 | 587780 | |
| UG012200_L_3 | 242 | <126.493 | 2.70 | 0.42 | 0.32 | 0.1 | 735 | 0.51 | 7.8 | 98.7 | 35.2 | 623.9 | 1.59 | 3.1 | 557 | 0.32 | 342.9 | 78.73 | 7.82 | 4.07 | 686.2 | 1.6 | 0.27 | 87.1 | 586999 | |
| UG012200_L_30 | 298 | 1178 | 1.35 | 0.14 | 0.12 | 0.1 | 549 | 0.25 | 14.7 | 95.4 | 97.7 | 226.1 | 0.99 | 3.9 | 925 | 0.10 | 465.9 | 12.44 | 2.00 | 4.46 | 1680.7 | 0.7 | 0.15 | 242.8 | 586138 | |
| UG012200_L_4 | 2975 | <143.026 | 0.80 | 0.16 | 0.12 | 0.0 | 4371 | 0.10 | 32.9 | 100.3 | 116.8 | 516.1 | 0.39 | 10.7 | 549 | 0.21 | 278.5 | 15.45 | 2.67 | 23.60 | 6812.8 | 1.2 | 0.23 | 506.6 | 580635 | |
| UG012200_L_5 | 3683 | 237 | 4.36 | 0.29 | 0.11 | 0.1 | 829 | 0.44 | 6.7 | 92.5 | 19.4 | 451.0 | 2.28 | 16.9 | 3908 | 0.60 | 313.4 | 32.88 | 20.06 | 2.69 | 1576.6 | 1.0 | 0.16 | 67.7 | 580550 | |
| UG012200_L_6 | 2061 | 302 | 1.98 | 0.12 | 0.08 | 0.1 | 1374 | 0.17 | 9.2 | 99.2 | 112.5 | 355.1 | 0.66 | 18.3 | 1116 | 0.11 | 368.2 | 24.65 | 4.52 | 4.50 | 3016.5 | 0.6 | 0.06 | 116.5 | 583452 | |
| UG012200_L_7 | 641 | <122.314 | 1.55 | 0.11 | 0.08 | 0.1 | 856 | 0.14 | 9.1 | 94.2 | 104.6 | 204.6 | 0.89 | 3.1 | 1275 | 0.15 | 703.5 | 11.59 | 3.17 | 5.46 | 1294.7 | 0.5 | 0.08 | 151.5 | 584580 | |
| UG012200_L_8 | 435 | <129.102 | 1.77 | 0.64 | 0.93 | 0.1 | 1516 | 0.43 | 21.3 | 91.9 | 77.8 | 452.3 | 1.30 | 2.4 | 1362 | 0.41 | 340.7 | 45.48 | 5.76 | 14.31 | 3859.7 | 5.9 | 1.89 | 559.7 | 582064 | |
| UG012200_L_9 | 1322 | 190 | 7.23 | 0.34 | 0.24 | 0.2 | 730 | 0.57 | 5.7 | 109.1 | 107.7 | 261.5 | 2.91 | 12.0 | 1687 | 0.35 | 357.9 | 12.07 | 5.57 | 2.73 | 780.5 | 2.0 | 0.24 | 71.4 | 586044 | |
| UG012201_L_1 | 1918 | <306.292 | 1.00 | 0.08 | 0.04 | 0.1 | 3417 | 0.25 | 49.7 | 291.1 | <3.884 | 378.4 | 0.72 | 0.8 | 3042 | 0.20 | 19 | | | | | | | | | |

Appendix C: Eastern Sunda arc rutile trace element chemistry (LA-ICP-MS)

| Analysis ID | Al | Ca | Ce | Dy | Er | Eu | Fe | Gd | Hf | Mg | Mn | Nb | Nd | Pb | Si | Sm | Sn | Ta | Th | U | W | Y | Yb | Zr | Ti |
|--------------|-------|----------|--------|--------|--------|--------|------|--------|------|-------|--------|--------|--------|-------|----------|--------|-------|-------|-------|-------|----------|-------|--------|--------|--------|
| UG012201_L_2 | 5594 | <294.769 | 0.38 | 0.08 | 0.05 | 0.0 | 3467 | 0.06 | 36.0 | 272.2 | <3.730 | 387.0 | 0.17 | 0.2 | 10351 | 0.04 | 208.2 | 16.08 | 2.11 | 24.91 | 577.8 | 0.4 | 0.17 | 1017.7 | 571690 |
| UG012201_L_3 | 1849 | <287.841 | 0.04 | <0.011 | 0.02 | <0.005 | 4537 | <0.020 | 23.7 | 101.2 | <3.641 | 324.6 | 0.03 | 0.7 | <503.795 | 0.06 | 122.8 | 15.08 | 1.25 | 34.64 | 5448.4 | 0.1 | <0.012 | 549.5 | 586501 |
| UG012201_L_4 | 2301 | <347.977 | 0.57 | 0.04 | 0.05 | <0.007 | 4005 | <0.025 | 45.3 | 113.8 | <4.396 | 256.8 | 0.70 | 0.2 | <603.273 | 0.07 | 119.4 | 9.87 | 1.66 | 30.47 | 6612.1 | 0.2 | 0.25 | 1221.6 | 584222 |
| UG012201_L_5 | 3387 | <343.186 | 0.08 | <0.013 | <0.010 | <0.007 | 2777 | <0.024 | 29.8 | 118.2 | <4.330 | 345.6 | 0.06 | 0.3 | 3988 | <0.025 | 137.1 | 33.00 | 0.74 | 17.11 | 944.4 | 0.1 | <0.014 | 675.2 | 584334 |
| UG012201_L_6 | 1989 | <294.191 | 20.08 | 2.86 | 1.92 | 0.8 | 2484 | 3.25 | 23.4 | 103.1 | 4.8 | 1149.4 | 13.35 | 1.2 | 659 | 2.63 | 137.1 | 60.00 | 9.78 | 21.29 | 1010.0 | 15.5 | 1.89 | 570.8 | 589482 |
| UG012201_L_7 | 4577 | <330.780 | 0.44 | 0.22 | 0.10 | 0.0 | 1236 | 0.08 | 33.9 | 101.2 | <4.167 | 645.7 | 0.39 | 1.1 | 3426 | <0.023 | 130.7 | 25.63 | 3.75 | 17.50 | 911.2 | 0.5 | 0.15 | 829.2 | 583573 |
| UG012201_L_8 | 2950 | <299.053 | 5.02 | 0.53 | 0.29 | 0.1 | 3496 | 0.46 | 28.1 | 108.4 | <3.762 | 843.8 | 3.03 | 0.3 | 1322 | 0.44 | 106.7 | 75.83 | 7.10 | 23.85 | 2913.7 | 2.4 | 0.15 | 467.3 | 585099 |
| UG012201_L_9 | 2200 | <387.570 | 3.29 | 0.38 | 0.10 | 0.1 | 2105 | 0.31 | 20.1 | 230.1 | <5.002 | 385.4 | 1.95 | 1.3 | 1683 | 0.37 | 130.3 | 10.82 | 2.49 | 13.22 | 1120.2 | 1.7 | 0.02 | 568.4 | 588341 |
| UG012202_L_1 | 3900 | 332 | 5.90 | 0.33 | 0.25 | 0.1 | 631 | 0.26 | 16.2 | 91.1 | 21.7 | 364.9 | 2.68 | 5.1 | 1380 | 0.36 | 398.3 | 16.56 | 9.55 | 6.65 | 2438.1 | 1.8 | 0.52 | 302.7 | 583172 |
| UG012202_L_2 | 474 | <307.757 | 53.65 | 6.76 | 4.37 | 0.9 | 507 | 5.34 | 31.0 | 100.7 | 99.8 | 539.1 | 25.83 | 9.8 | 883 | 5.41 | 342.7 | 19.22 | 5.66 | 16.79 | 3479.4 | 32.3 | 4.26 | 625.6 | 581881 |
| UG012202_L_3 | 1436 | <279.305 | 15.53 | 1.72 | 0.99 | 0.4 | 594 | 1.48 | 33.2 | 136.4 | 22.2 | 349.8 | 7.25 | 9.1 | 2126 | 1.82 | 477.6 | 11.62 | 12.85 | 9.76 | 2797.9 | 7.6 | 1.14 | 461.2 | 578558 |
| UG012202_L_4 | 608 | <329.641 | 5.21 | 0.65 | 0.72 | 0.1 | 398 | 0.48 | 22.2 | 111.2 | 102.8 | 239.6 | 2.52 | 4.3 | 759 | 0.45 | 430.3 | 16.40 | 12.24 | 10.23 | 1918.3 | 3.7 | 0.56 | 383.1 | 580782 |
| BHF-02 r1 | 12 | <159.273 | 0.23 | 0.02 | <0.002 | 0.0 | 6233 | 0.04 | 4.5 | 81.7 | 2.6 | 267.1 | 0.09 | 0.1 | 718 | 0.01 | 116.2 | 7.64 | 0.52 | 8.27 | 400.7 | 0.2 | 0.06 | 80.4 | 591766 |
| BHF-02 r2 | 21 | <277.612 | 0.10 | 0.01 | 0.01 | <0.002 | 7003 | <0.009 | 7.5 | 83.0 | <3.420 | 445.4 | 0.05 | 0.4 | <504.300 | 0.05 | 166.8 | 14.15 | 0.13 | 7.68 | 1119.2 | 0.1 | <0.005 | 164.8 | 591092 |
| BHF-02 r3 | 13 | <294.270 | 0.15 | 0.03 | <0.004 | 0.0 | 6564 | <0.009 | 5.6 | 79.9 | <3.573 | 265.7 | 0.05 | 0.0 | 688 | <0.007 | 123.4 | 17.36 | 0.46 | 11.09 | 114.0 | 0.1 | 0.03 | 110.5 | 592112 |
| BHF-02 r4 | 11 | <288.497 | 2.81 | 0.14 | 0.20 | 0.1 | 6183 | 0.28 | 4.1 | 83.1 | <3.464 | 256.8 | 1.56 | 0.1 | 661 | 0.35 | 145.9 | 7.60 | 0.70 | 7.47 | 142.3 | 0.9 | 0.11 | 80.7 | 592476 |
| BHF-03 r1 | 2957 | 344 | 28.85 | 10.79 | 11.44 | 0.2 | 3940 | 5.15 | 25.0 | 169.0 | 61.2 | 399.8 | 11.84 | 81.0 | 4346 | 2.75 | 28.1 | 24.97 | 2.91 | 7.51 | 98.6 | 53.8 | 16.02 | 823.4 | 585246 |
| BHF-03 r11 | 660 | <309.166 | 1.27 | 0.22 | 0.14 | 0.0 | 3010 | 0.20 | 4.9 | 107.7 | 8.9 | 578.3 | 0.82 | 16.7 | 1716 | 0.17 | 18.3 | 33.07 | 1.49 | 2.27 | 102.6 | 1.0 | 0.24 | 99.9 | 592641 |
| BHF-03 r12 | 328 | <321.572 | 14.93 | 0.91 | 0.49 | 0.5 | 8909 | 1.49 | 3.5 | 303.0 | 49.1 | 79.2 | 6.74 | 3.4 | 1750 | 1.22 | 250.7 | 7.46 | 3.24 | 14.99 | 528.9 | 6.5 | 0.64 | 44.0 | 586722 |
| BHF-03 r13 | 250 | <326.143 | 6.21 | 1.06 | 0.49 | 0.2 | 9863 | 1.04 | 4.6 | 105.3 | 10.9 | 341.1 | 5.54 | 1.1 | 108.0 | 1.11 | 108.0 | 50.24 | 1.14 | 6.62 | 263.5 | 3.9 | 0.54 | 96.9 | 586875 |
| BHF-03 r14 | 118 | <326.550 | 2.09 | 0.43 | 0.46 | 0.1 | 3322 | 0.17 | 1.3 | 92.1 | 10.1 | 811.0 | 1.62 | 3.6 | 647 | 0.29 | 4.6 | 50.24 | 0.17 | 0.57 | 9.2 | 3.0 | 0.80 | 34.9 | 594696 |
| BHF-03 r2 | 28 | <134.989 | 0.39 | 0.08 | 0.07 | 0.0 | 5688 | 0.09 | 6.3 | 83.4 | 4.5 | 220.4 | 0.27 | 0.3 | 304 | 0.05 | 214.6 | 26.38 | 0.08 | 9.63 | 640.8 | 0.5 | 0.05 | 98.3 | 592789 |
| BHF-03 r5 | 87 | <534.191 | 1.61 | 0.29 | 0.02 | 0.0 | 6329 | 0.12 | 6.3 | 97.1 | 58.6 | 249.7 | 0.65 | 0.7 | 1355 | 0.33 | 180.9 | 9.80 | 0.23 | 19.31 | 316.0 | 0.4 | <0.008 | 130.4 | 591034 |
| BHF-03 r5 | 192 | <314.309 | 1.84 | 0.64 | 0.63 | 0.1 | 3313 | 0.39 | 7.6 | 83.5 | 11.0 | 473.9 | 1.07 | 29.1 | 1461 | 0.20 | 47.7 | 29.54 | 1.29 | 7.33 | 104.5 | 2.6 | 0.85 | 180.1 | 593316 |
| BHF-03 r6 | 781 | <316.657 | 7.80 | 2.57 | 2.48 | 0.2 | 4234 | 1.51 | 3.2 | 422.4 | 38.1 | 654.2 | 6.16 | 49.4 | 2228 | 1.26 | 10.4 | 39.31 | 7.81 | 5.26 | 32.9 | 12.8 | 4.22 | 72.9 | 590810 |
| BHF-03 r7 | 10562 | 203995 | 154.95 | 38.87 | 25.65 | 3.2 | 4733 | 33.70 | 3.4 | 278.6 | 331.0 | 297.5 | 113.07 | 163.7 | 29170 | 32.10 | 18.3 | 22.43 | 26.47 | 7.03 | 24.2 | 203.8 | 25.39 | 73.6 | 373324 |
| BHF-03 r8 | 38 | <296.536 | 0.43 | 0.07 | 0.02 | 0.0 | 6150 | 0.09 | 4.0 | 85.9 | 12.1 | 176.4 | 0.32 | 0.2 | 1374 | 0.04 | 122.3 | 9.73 | 1.15 | 21.22 | 974.9 | 0.3 | 0.08 | 81.9 | 590895 |
| BHF-03 r9 | 1086 | 1429 | 18.94 | 2.45 | 2.42 | 0.9 | 2797 | 2.12 | 4.0 | 281.5 | 125.4 | 620.5 | 7.40 | 94.9 | 4674 | 1.94 | 12.4 | 18.36 | 1.54 | 1.98 | 512.6 | 18.2 | 2.34 | 94.8 | 586911 |
| BGF-01 r1 | 639 | 165 | 17.23 | 2.76 | 2.00 | 0.4 | 2724 | 2.57 | 5.0 | 107.8 | 39.6 | 74.1 | 10.51 | 2.1 | 565 | 2.25 | 249.4 | 5.05 | 2.23 | 25.95 | 5075.1 | 13.5 | 2.06 | 53.5 | 588767 |
| BGF-01 r10 | 1143 | 221 | 52.11 | 11.60 | 9.46 | 1.8 | 1172 | 7.02 | 34.2 | 128.9 | 46.5 | 400.5 | 26.08 | 2.4 | 1901 | 5.45 | 245.3 | 53.14 | 7.40 | 13.60 | 2179.9 | 69.4 | 11.61 | 231.1 | 580293 |
| BGF-01 r11 | 1144 | 182 | 46.82 | 8.37 | 7.12 | 1.2 | 2002 | 5.35 | 7.9 | 121.2 | 59.3 | 187.3 | 24.25 | 3.0 | 2140 | 4.60 | 227.7 | 15.66 | 2.98 | 13.29 | 3538.4 | 48.8 | 8.37 | 55.2 | 586041 |
| BGF-01 r12 | 2043 | 166 | 3.74 | 0.34 | 0.34 | 0.1 | 1578 | 0.35 | 9.1 | 155.9 | 58.0 | 233.4 | 1.83 | 2.8 | 2954 | 0.29 | 262.6 | 17.12 | 2.83 | 9.56 | 2857.7 | 2.0 | 0.52 | 50.8 | 580851 |
| BGF-01 r13 | 415 | <142.914 | 19.01 | 3.15 | 2.91 | 0.6 | 1947 | 2.58 | 6.6 | 89.7 | 9.3 | 153.3 | 9.94 | 0.8 | 809 | 1.88 | 245.9 | 7.52 | 8.13 | 15.79 | 3045.1 | 17.9 | 3.70 | 61.1 | 590668 |
| BGF-01 r14 | 8318 | <142.175 | 0.07 | 0.02 | 0.01 | 0.0 | 1111 | <0.003 | 2.4 | 255.8 | <1.587 | 17.0 | 0.05 | 0.6 | 12167 | 0.01 | 456.6 | 1.00 | 1.93 | 15.65 | 1452.5 | 0.1 | 0.02 | 15.7 | 562644 |
| BGF-01 r15 | 502 | <145.585 | 17.18 | 1.57 | 1.13 | 0.4 | 1527 | 1.54 | 6.0 | 150.4 | 20.8 | 193.3 | 9.96 | 1.4 | 935 | 1.74 | 174.0 | 12.15 | 2.33 | 15.52 | 2311.7 | 8.2 | 1.27 | 53.1 | 592023 |
| BGF-01 r16 | 175 | <143.542 | 35.66 | 5.96 | 4.69 | 1.1 | 1447 | 4.85 | 5.7 | 95.1 | 16.8 | 145.5 | 17.81 | 1.8 | 521 | 3.87 | 197.8 | 8.33 | 5.83 | 21.06 | 2705.7 | 33.4 | 5.12 | 49.3 | 585399 |
| BGF-01 r17 | 242 | <160.800 | 22.45 | 2.48 | 2.11 | 0.7 | 1191 | 2.37 | 9.4 | 99.1 | 10.2 | 227.1 | 10.60 | 0.6 | 621 | 2.34 | 179.7 | 19.28 | 3.29 | 26.97 | 2744.2 | 14.6 | 2.15 | 70.1 | 588732 |
| BGF-01 r18 | 116 | 157 | 0.91 | 0.09 | 0.08 | 0.0 | 442 | 0.06 | 3.6 | 87.9 | 5.3 | 56.0 | 0.42 | 0.3 | 246 | 0.05 | 108.2 | 7.58 | 0.19 | 3.92 | 405.7 | 0.4 | 0.11 | 23.6 | 589814 |
| BGF-01 r19 | 94 | <134.476 | 5.06 | 0.35 | 0.27 | 0.1 | 1215 | 0.28 | 8.8 | 84.7 | 10.1 | 130.1 | 18.20 | 1.2 | 542 | 2.72 | 267.9 | 20.27 | 2.60 | 8.42 | 2819.7 | 27.2 | 4.78 | 44.0 | 584309 |
| BGF-01 r2 | 73 | 159 | 27.55 | 4.77 | 3.86 | 0.9 | 1257 | 3.01 | 6.6 | 97.7 | 25.1 | 182.0 | 14.18 | 1.2 | 542 | 2.72 | 267.9 | 20.27 | 2.60 | 8.42 | 2819.7 | 27.2 | 4.78 | 44.0 | 584309 |
| BGF-01 r21 | 298 | <132.927 | 23.84 | 3.20 | 2.44 | 0.6 | 1225 | 2.34 | 8.6 | 109.7 | 23.1 | 173.6 | 11.59 | 1.7 | 1011 | 2.29 | 208.7 | 15.15 | 4.01 | 25.28 | 2526.8 | 16.2 | 3.02 | 61.0 | 586940 |
| BGF-01 r22 | 542 | 185 | 56.76 | 11.40 | 9.55 | 1.6 | 1956 | 7.20 | 9.2 | 104.4 | 49.8 | 173.0 | 29.84 | 2.8 | 873 | 5.98 | 237.1 | 15.39 | 4.15 | 11.54 | 3737.5 | 67.2 | 11.84 | 62.6 | 587787 |
| BGF-01 r23 | 437 | <134.140 | 7.59 | 0.68 | 0.54 | 0.2 | 1625 | 0.66 | 6.6 | 96.5 | 37.6 | 211.8 | 4.05 | 2.2 | 1496 | 0.68 | 223.4 | 15.60 | 2.28 | 12.86 | 4020.4 | 3.9 | 0.59 | 44.5 | 587388 |
| BGF-01 r24 | 137 | <140.103 | 15.04 | 2.06 | 1.36 | 0.4 | 1199 | 1.40 | 8.8 | 93.2 | 13.1 | 209.0 | 7.44 | 0.6 | 457 | 1.51 | 238.5 | 17.95 | 2.39 | 18.72 | 4392.0 | 9.9 | 2.05 | 63.9 | 585094 |
| BGF-01 r25 | 439 | 217 | 40.18 | 5.48 | 3.78 | 1.2 | 989 | 5.16 | 4.4 | 102.8 | 20.2 | 126.6 | 21.91 | 1.5 | 834 | 4.70 | 243.0 | 11.58 | 3.71 | 19.66 | 4444.6 | 26.6 | 4.09 | 40.3 | 587174 |
| BGF-01 r26 | 72 | <137.189 | 15.49 | 2.14 | 1.64 | 0.5 | 762 | 1.51 | 9.4 | 86.4 | 5.5 | 164.4 | 6.94 | 0.6 | 736 | 1.46 | 163.4 | 12.95 | 3.06 | 15.80 | 1872.3 | 10.8 | 2.17 | 63.5 | 583988 |
| BGF-01 r27 | 540 | <133.815 | 12.34 | 2.31 | 1.90 | 0.3 | 2311 | 1.90 | 7.8 | 93.0 | 16.8 | 174.2 | 17.42 | 1.5 | 11.8 | 1.62 | 165.6 | 14.46 | 2.70 | 11.98 | 3438.5 | 11.8 | 2.13 | 57.0 | 590987 |
| BGF-01 r27 | 256 | 216 | 1.75 | 0.14 | 0.13 | 0.1 | 1814 | 0.15 | 7.6 | 143.9 | 59.1 | 90.8 | 0.88 | 2.7 | 412 | 0.16 | 311.9 | 8.09 | 1.51 | 22.97 | 5758.0</ | | | | |

Appendix C: Eastern Sunda arc rutile trace element chemistry (LA-ICP-MS)

| Analysis ID | Al | Ca | Ce | Dy | Er | Eu | Fe | Gd | Hf | Mg | Mn | Nb | Nd | Pb | Pb | Si | Sm | Sn | Ta | Th | U | W | Y | Yb | Zr | Ti |
|-------------|-------|----------|-------|-------|--------|--------|-------|--------|------|--------|--------|-------|--------|--------|----------|--------|-------|-------|-------|-------|--------|---------|--------|--------|--------|--------|
| GBF-01-r3 | 710 | <141.840 | 0.13 | 0.01 | <0.002 | <0.001 | 2638 | 0.01 | 22.9 | 93.1 | 2.3 | 561.2 | 0.04 | 0.2 | 0.2 | 575 | 0.01 | 976.4 | 11.65 | 0.14 | 14.92 | 19085.9 | 0.0 | <0.002 | 92.1 | 567632 |
| GBF-01-r30 | 1014 | <146.760 | 1.96 | 0.38 | 0.28 | 0.1 | 1620 | 0.16 | 10.9 | 107.4 | 12.4 | 220.4 | 1.22 | 0.4 | 0.4 | 1055 | 0.12 | 315.5 | 10.28 | 0.52 | 3.88 | 4078.2 | 0.0 | 0.37 | 82.1 | 586957 |
| GBF-01-r31 | 762 | <141.377 | 9.31 | 1.51 | 1.43 | 0.3 | 2728 | 1.09 | 8.2 | 95.7 | 33.9 | 84.1 | 5.04 | 1.1 | 2.80 | 0.85 | 298.0 | 6.13 | 1.09 | 17.04 | 6490.6 | 8.1 | 1.57 | 70.0 | 587486 | |
| GBF-01-r4 | 383 | <155.533 | 4.62 | 0.74 | 0.54 | 0.2 | 1625 | 0.59 | 5.7 | 117.2 | 5.3 | 141.1 | 2.11 | 0.6 | 1157.2 | 0.48 | 167.2 | 5.20 | 1.82 | 17.41 | 2639.6 | 2.9 | 0.68 | 50.7 | 578946 | |
| GBF-01-r5 | 394 | <146.712 | 17.61 | 3.23 | 2.65 | 0.4 | 2004 | 2.27 | 6.7 | 98.4 | 22.4 | 139.2 | 9.12 | 1.2 | <233.333 | 2.24 | 190.0 | 8.75 | 3.54 | 18.27 | 3216.3 | 17.8 | 3.30 | 67.4 | 591796 | |
| GBF-01-r6 | 1708 | <150.498 | 0.15 | 0.02 | 0.02 | 0.0 | 2143 | <0.004 | 8.5 | 174.8 | 51.0 | 105.2 | 0.06 | 2.1 | 1608 | 0.01 | 517.0 | 6.66 | 2.12 | 24.72 | 7431.4 | 0.1 | 0.01 | 65.5 | 579071 | |
| GBF-01-r7 | 955 | 220 | 11.71 | 1.40 | 0.97 | 0.3 | 1317 | 1.06 | 7.6 | 109.0 | 24.0 | 173.0 | 5.83 | 1.8 | 2090 | 1.10 | 176.0 | 17.54 | 1.78 | 15.02 | 3012.2 | 6.3 | 1.28 | 58.4 | 584362 | |
| GBF-01-r8 | 1109 | 167 | 32.73 | 4.42 | 3.24 | 0.9 | 1850 | 3.17 | 7.8 | 145.7 | 57.2 | 236.8 | 17.00 | 1.7 | 1883 | 3.40 | 194.2 | 24.10 | 2.64 | 19.40 | 3469.6 | 23.2 | 3.87 | 69.5 | 585888 | |
| GBF-01-r9 | 462 | <139.186 | 13.79 | 2.66 | 1.93 | 0.3 | 2211 | 1.92 | 6.1 | 97.3 | 30.0 | 212.8 | 8.63 | 1.6 | 670 | 1.88 | 164.4 | 17.52 | 4.43 | 14.30 | 3395.8 | 12.8 | 1.88 | 57.9 | 590198 | |
| GBF-03-r1 | 197 | <160.247 | 1.11 | 1.02 | 0.77 | 0.1 | 13751 | 0.74 | 3.3 | 172.5 | 34.8 | 145.4 | 1.11 | 2.2 | 263 | 0.49 | 228.8 | 4.83 | 0.57 | 12.39 | 2990.0 | 5.3 | 0.92 | 53.6 | 583782 | |
| GBF-03-r10 | 421 | 299 | 23.90 | 4.55 | 1.97 | 1.1 | 3553 | 5.01 | 3.1 | 109.0 | 61.9 | 74.0 | 21.84 | 4.9 | 810 | 4.97 | 176.3 | 2.95 | 2.16 | 12.50 | 228.5 | 17.6 | 1.93 | 25.0 | 590912 | |
| GBF-03-r11 | 3137 | 243 | 2.46 | 0.58 | 0.19 | 0.1 | 5780 | 0.46 | 8.6 | 488.8 | 25.8 | 154.6 | 2.25 | 530.4 | 4339 | 0.55 | 152.2 | 7.54 | 1.32 | 22.83 | 1909.8 | 1.2 | 0.27 | 96.6 | 581386 | |
| GBF-03-r12 | 1114 | <151.664 | 1.66 | 0.28 | 0.12 | 0.1 | 6167 | 0.35 | 8.8 | 319.1 | 23.2 | 80.2 | 1.34 | 72.4 | 2426 | 0.37 | 169.2 | 6.01 | 1.03 | 12.73 | 1148.5 | 0.8 | 0.13 | 89.8 | 586862 | |
| GBF-03-r13 | 586 | <161.428 | 1.27 | 0.39 | 0.23 | 0.1 | 11555 | 0.21 | 9.7 | 115.8 | 25.6 | 89.9 | 1.07 | 10.8 | 1194 | 0.37 | 147.4 | 4.41 | 1.06 | 19.46 | 3264.3 | 2.0 | 0.30 | 135.4 | 584392 | |
| GBF-03-r14 | 619 | 270 | 13.48 | 1.10 | 0.50 | 0.6 | 6827 | 1.26 | 8.9 | 123.0 | 30.9 | 119.3 | 11.03 | 42.4 | 1115 | 2.37 | 466.4 | 1.87 | 0.71 | 13.66 | 5069.8 | 3.2 | 0.50 | 47.5 | 585750 | |
| GBF-03-r15 | 3750 | <180.076 | 1.15 | 0.25 | 0.16 | 0.1 | 7504 | 0.21 | 3.9 | 4560.9 | 26.2 | 87.8 | 1.05 | 58.1 | 4448 | 0.43 | 103.8 | 2.77 | 0.31 | 19.88 | 507.3 | 1.1 | 0.07 | 62.1 | 577409 | |
| GBF-03-r16 | 182 | <143.855 | 15.92 | 5.75 | 3.94 | 1.0 | 14016 | 5.36 | 3.7 | 131.8 | 55.9 | 84.1 | 15.75 | 4.3 | <227.983 | 4.13 | 178.3 | 3.07 | 0.74 | 20.19 | 3070.8 | 28.9 | 3.84 | 58.8 | 584404 | |
| GBF-03-r17 | 142 | 444 | 0.34 | 0.11 | 0.09 | 0.0 | 9377 | 0.11 | 6.0 | 150.0 | 10.0 | 48.0 | 0.28 | 33.0 | <232.183 | 0.16 | 305.9 | 1.57 | 0.08 | 34.96 | 3919.3 | 0.6 | 0.14 | 72.9 | 587212 | |
| GBF-03-r19 | 62 | <202.009 | 1.87 | 0.25 | 0.19 | 0.1 | 12619 | 0.42 | 6.9 | 87.7 | 42.1 | 82.4 | 1.60 | 426.9 | <318.729 | 0.44 | 134.1 | 1.86 | 1.03 | 19.43 | 1684.9 | 1.6 | 0.15 | 97.2 | 585951 | |
| GBF-03-r20 | 9914 | 399 | 12.36 | 2.40 | 1.42 | 0.5 | 17219 | 2.87 | 8.4 | 157.5 | 257.3 | 86.2 | 11.87 | 533.7 | 13042 | 3.26 | 196.7 | 2.89 | 1.12 | 13.63 | 1496.0 | 10.5 | 1.42 | 80.5 | 553022 | |
| GBF-03-r21 | 188 | <156.910 | 0.85 | 0.10 | 0.06 | 0.0 | 5691 | 0.02 | 6.2 | 232.8 | 26.0 | 139.1 | 0.66 | 8.0 | 503 | 0.15 | 218.5 | 6.26 | 0.79 | 21.30 | 2462.7 | 0.6 | 0.10 | 80.5 | 589026 | |
| GBF-03-r23 | 17629 | 1154 | 16.38 | 2.30 | 1.19 | 0.5 | 5937 | 2.80 | 5.0 | 355.3 | 81.1 | 56.6 | 16.12 | 14.4 | 28923 | 3.16 | 119.7 | 2.76 | 1.28 | 10.01 | 366.4 | 8.7 | 1.27 | 49.2 | 535035 | |
| GBF-03-r3 | 5382 | <168.846 | 4.49 | 0.62 | 0.39 | 0.1 | 7204 | 0.86 | 5.4 | 181.2 | 16.0 | 73.2 | 4.21 | 2.5 | 7633 | 1.12 | 226.5 | 4.66 | 0.78 | 10.84 | 1901.4 | 2.0 | 0.39 | 55.8 | 574589 | |
| GBF-03-r6 | 9028 | 41 | 37.29 | 13.75 | 8.13 | 1.9 | 3738 | 11.64 | 6.1 | 889.2 | 47.3 | 107.0 | 40.24 | 1964.3 | 13314 | 10.56 | 215.2 | 4.56 | 1.23 | 13.72 | 494.8 | 64.4 | 8.54 | 66.1 | 558485 | |
| GBF-03-r6 | 1486 | 260 | 7.39 | 1.76 | 1.07 | 0.3 | 5222 | 1.07 | 4.3 | 1534.8 | 40.1 | 26.6 | 7.35 | 54.1 | 2830 | 1.87 | 69.4 | 1.43 | 1.23 | 8.76 | 231.6 | 6.3 | 1.35 | 45.9 | 585004 | |
| GBF-03-r7 | 898 | <173.284 | 9.87 | 2.68 | 1.30 | 0.6 | 6226 | 2.56 | 6.3 | 185.6 | 68.3 | 165.2 | 7.97 | 67.8 | 2277 | 2.80 | 124.5 | 6.03 | 0.92 | 23.24 | 4462.3 | 10.6 | 1.46 | 67.8 | 585638 | |
| GBF-03-r9 | 1445 | 197 | 2.87 | 0.73 | 0.43 | 0.2 | 5564 | 0.64 | 6.9 | 500.0 | 53.9 | 116.8 | 2.04 | 132.4 | 3243 | 0.65 | 139.0 | 4.97 | 1.02 | 29.42 | 1342.3 | 2.8 | 0.39 | 92.3 | 585862 | |
| JEM-01-r1 | 199 | <191.113 | 0.75 | 0.07 | 0.06 | 0.0 | 5799 | 0.16 | 10.5 | 87.1 | 7.4 | 237.8 | 0.41 | 1.1 | <297.391 | 0.10 | 229.6 | 10.77 | 0.26 | 21.72 | 1695.3 | 0.4 | 0.05 | 288.7 | 592011 | |
| JEM-01-r10 | 346 | <151.529 | 0.48 | 0.12 | 0.04 | 0.0 | 5857 | 0.07 | 7.9 | 101.5 | 9.1 | 215.9 | 0.26 | 1.6 | 663 | 0.08 | 323.6 | 13.75 | 0.72 | 28.98 | 3369.4 | 0.3 | 0.03 | 233.7 | 589690 | |
| JEM-01-r11 | 98 | <358.067 | 0.02 | 0.02 | <0.004 | <0.002 | 4489 | <0.010 | 2.5 | 86.4 | <3.891 | 176.0 | <0.006 | 0.1 | <589.416 | 0.03 | 160.0 | 8.84 | 0.01 | 16.25 | 237.3 | 0.0 | <0.005 | 82.1 | 584016 | |
| JEM-01-r12 | 111 | <341.551 | 0.40 | 0.05 | 0.04 | 0.0 | 6065 | 0.09 | 8.7 | 85.7 | <3.703 | 166.1 | 0.23 | 0.6 | <560.987 | 0.03 | 266.1 | 11.19 | 0.47 | 19.14 | 511.7 | 0.2 | 0.07 | 270.3 | 592601 | |
| JEM-01-r13 | 252 | 197 | 0.22 | 0.10 | 0.03 | 0.0 | 5312 | 0.15 | 12.6 | 110.2 | 7.0 | 125.7 | 0.22 | 1.1 | 466 | 0.14 | 313.8 | 8.59 | 0.10 | 15.97 | 487.3 | 0.3 | 0.03 | 384.2 | 592662 | |
| JEM-01-r14 | 116 | <184.929 | 0.92 | 0.13 | 0.13 | 0.1 | 5060 | 0.06 | 8.0 | 93.4 | 4.5 | 270.1 | 0.60 | 0.8 | <285.214 | 0.10 | 101.2 | 10.75 | 0.27 | 7.11 | 136.3 | 0.4 | 0.12 | 115.6 | 584322 | |
| JEM-01-r15 | 111 | <208.718 | 0.28 | 0.05 | 0.05 | 0.0 | 5149 | 0.06 | 5.3 | 84.1 | 8.3 | 208.1 | 0.11 | 0.6 | 367 | 0.06 | 322.3 | 16.72 | 0.14 | 22.38 | 2368.6 | 0.2 | 0.05 | 157.6 | 591769 | |
| JEM-01-r16 | 140 | 406 | 0.36 | 0.05 | 0.03 | 0.0 | 5338 | 0.28 | 9.3 | 89.6 | 16.0 | 170.8 | 0.20 | 0.9 | 1050 | <0.005 | 235.2 | 9.86 | 0.59 | 16.24 | 435.5 | 0.2 | 0.01 | 272.6 | 592014 | |
| JEM-01-r17 | 436 | <143.327 | 0.16 | 0.01 | 0.01 | 0.0 | 5340 | 0.03 | 10.3 | 93.6 | 15.4 | 52.0 | 0.04 | 1.2 | 1151 | <0.005 | 273.0 | 4.25 | 0.31 | 17.20 | 277.4 | 0.1 | <0.003 | 338.7 | 592060 | |
| JEM-01-r19 | 118 | <325.838 | 0.30 | 0.06 | 0.02 | 0.0 | 5417 | 0.05 | 10.2 | 86.1 | 25.0 | 109.6 | 0.22 | 1.9 | <533.918 | <0.007 | 282.8 | 6.41 | 0.07 | 21.69 | 496.0 | 0.2 | 0.04 | 278.1 | 593269 | |
| JEM-01-r20 | 335 | 243 | 0.51 | 0.08 | 0.04 | 0.0 | 6767 | 0.05 | 10.7 | 111.6 | 11.5 | 156.5 | 0.42 | 1.8 | 908 | 0.01 | 273.0 | 9.14 | 0.45 | 36.19 | 5520.3 | 0.2 | 0.01 | 253.9 | 587007 | |
| JEM-01-r21 | 96 | <336.341 | 0.15 | 0.01 | 0.05 | <0.002 | 5163 | 0.05 | 5.8 | 82.9 | 11.5 | 323.0 | 0.10 | 0.9 | <550.008 | <0.007 | 308.0 | 18.57 | 0.44 | 32.17 | 1962.0 | 0.1 | <0.005 | 125.0 | 591743 | |
| JEM-01-r21 | 120 | <172.008 | 0.87 | 0.10 | 0.11 | 0.0 | 5619 | 0.05 | 9.3 | 85.3 | 15.3 | 205.2 | 0.31 | 0.6 | <264.581 | 0.07 | 166.2 | 14.18 | 0.94 | 24.80 | 1796.6 | 0.5 | 0.03 | 240.3 | 592391 | |
| JEM-01-r22 | 395 | 754 | 0.78 | 0.32 | 0.20 | 0.1 | 5805 | 0.40 | 9.0 | 105.8 | 17.7 | 259.2 | 0.85 | 0.9 | 1403 | 0.42 | 189.5 | 18.32 | 0.52 | 18.09 | 3604.6 | 1.1 | 0.16 | 161.2 | 587992 | |
| JEM-01-r23 | 148 | 216 | 0.11 | 0.05 | 0.02 | 0.0 | 8491 | 0.08 | 11.2 | 87.8 | 43.3 | 146.8 | 0.09 | 3.3 | 1313 | 0.08 | 273.4 | 15.18 | 0.06 | 15.89 | 831.0 | 0.1 | 0.02 | 323.0 | 589109 | |
| JEM-01-r24 | 111 | <152.917 | 0.70 | 0.21 | 0.09 | 0.0 | 5274 | 0.16 | 5.8 | 88.8 | 11.7 | 96.7 | 0.34 | 1.6 | 1054 | 0.07 | 277.4 | 5.49 | 0.62 | 17.97 | 701.4 | 0.8 | 0.13 | 154.2 | 592308 | |
| JEM-01-r25 | 1545 | <158.544 | 0.36 | 0.08 | 0.05 | 0.0 | 5833 | 0.04 | 15.6 | 117.7 | 5.2 | 307.8 | 0.16 | 0.7 | 2882 | 0.02 | 202.2 | 17.81 | 0.43 | 26.88 | 2413.7 | 0.2 | 0.09 | 417.1 | 586183 | |
| JEM-01-r26 | 256 | <175.297 | 0.80 | 0.08 | 0.02 | 0.0 | 5425 | 0.03 | 9.6 | 100.4 | 4.8 | 322.3 | 0.61 | 0.8 | 4262 | 0.07 | 304.6 | 16.89 | 0.42 | 23.84 | 1997.0 | 0.4 | 0.04 | 207.3 | 586283 | |
| JEM-01-r27 | 137 | <162.260 | 0.26 | 0.01 | 0.02 | 0.0 | 7120 | 0.01 | 8.0 | 84.9 | 16.9 | 196.3 | 0.09 | 1.4 | <250.174 | 0.01 | 257.4 | 10.17 | 0.64 | 30.20 | 7901.1 | 0.1 | 0.01 | 227.2 | 585984 | |
| JEM-01-r28 | 446 | <242.297 | 0.46 | 0.29 | 0.32 | 0.0 | 5909 | 0.13 | 10.9 | 124.0 | 45.3 | 103.8 | 0.32 | 2.1 | 1045 | 0.02 | 414.5 | 9.81 | 0.43 | 32.87 | 2054.3 | 2.8 | 0.81 | 290.6 | 590183 | |
| JEM-01-r3 | 21006 | 297 | 1.81 | 0.96 | 0.53 | 0.2 | 13302 | 0.68 | 15.9 | 6775.3 | 70.1 | 392.3 | 1.34 | 3.1 | 23142 | 0.88 | 274.1 | 15.10 | 0.36 | 27.08 | 2458.4 | 4.5 | 0. | | | |

Appendix C: Eastern Sunda arc rutile trace element chemistry (LA-ICP-MS)

| Analysis ID | Al | Ca | Ce | Dy | Er | Gd | Hf | Mg | Mn | Nb | Nd | Pb | Si | Sm | Sn | Ta | Th | U | W | Y | Yb | Zr | Ti | | |
|-------------|-------|----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|----------|----------|----------|--------|-------|--------|--------|-------|---------|--------|--------|--------|--------|
| JEM-0114 | 104 | <398.596 | 0.06 | 0.09 | <0.004 | 0.05 | 10.1 | 81.8 | 11.0 | 175.6 | 0.09 | 0.3 | <680.705 | <0.009 | 266.3 | 12.68 | 0.25 | 22.88 | 461.2 | 0.1 | 0.03 | 289.5 | 593177 | | |
| JEM-0115 | 93 | <327.402 | 6.71 | 1.91 | 0.89 | 2.12 | 13.3 | 83.3 | <3.565 | 536.3 | 5.14 | 0.9 | <540.067 | 1.69 | 147.4 | 22.49 | 0.70 | 3.23 | 57.4 | 6.1 | 0.72 | 179.7 | 593566 | | |
| JEM-0116 | 128 | <170.218 | 0.40 | 0.05 | 0.05 | 0.05 | 6.9 | 90.6 | 38.1 | 123.4 | 0.15 | 2.7 | <283.971 | 0.04 | 268.6 | 8.41 | 0.56 | 26.79 | 3222.1 | 0.2 | 0.11 | 168.6 | 591089 | | |
| JEM-0117 | 126 | <191.964 | 0.30 | 0.04 | 0.03 | <0.004 | 10.0 | 99.7 | 5.1 | 244.1 | 0.08 | 1.8 | 434 | 0.07 | 243.4 | 14.08 | 0.65 | 32.38 | 3755.3 | 0.2 | 0.01 | 234.8 | 589650 | | |
| JEM-0118 | 1016 | <157.994 | 0.04 | 0.00 | 0.01 | 0.02 | 16.3 | 830.0 | 2.8 | 532.8 | 0.01 | 0.3 | 1665 | <0.004 | 358.9 | 8.79 | 0.04 | 26.94 | 2484.5 | 0.0 | <0.003 | 386.0 | 585727 | | |
| JEM-0119 | 188 | <153.750 | 0.59 | 0.07 | 0.04 | 0.07 | 7.3 | 96.7 | 8.9 | 110.5 | 0.25 | 1.1 | 465 | 0.07 | 185.3 | 6.57 | 0.43 | 22.52 | 2051.4 | 0.2 | 0.04 | 170.8 | 592050 | | |
| JEM-0111 | 1230 | 14027 | 15.55 | 2.77 | 1.15 | 0.7 | 1441 | 3.52 | 19.7 | 100.3 | 16.90 | 12.18 | 156.1 | 3.78 | 16.5 | 11.54 | 0.19 | 4.09 | 584.6 | 9.5 | 0.89 | 752.7 | 577893 | | |
| JEM-0110 | 689 | 3760 | 30.02 | 1.25 | 0.42 | 0.6 | 1152 | 1.53 | 22.0 | 83.7 | 87.2 | 166.5 | 13.86 | 68.7 | 46.25 | 3.38 | 4.6 | 9.77 | 0.15 | 1.35 | 68.6 | 738.5 | 587315 | | |
| JEM-0111 | 194 | 810 | 2.58 | 0.12 | 0.05 | 0.19 | 20.9 | 99.5 | 15.9 | 184.3 | 1.36 | 3.3 | 1217 | 0.27 | 8.0 | 8.75 | 0.03 | 0.36 | 171.5 | 3.9 | 0.41 | 732.4 | 590327 | | |
| JEM-0112 | 122 | <159.929 | 0.86 | 0.05 | 0.05 | 0.10 | 24.7 | 89.3 | 19.6 | 181.3 | 0.35 | 2.9 | 277 | 0.07 | 8.6 | 7.40 | 0.04 | 0.60 | 186.2 | 0.3 | 0.05 | 845.3 | 596148 | | |
| JEM-0113 | 547 | 1480 | 21.87 | 2.03 | 0.89 | 0.7 | 1388 | 1.82 | 22.3 | 104.8 | 126.0 | 177.5 | 10.06 | 16.14 | 2.23 | 8.5 | 10.79 | 0.48 | 3.99 | 191.4 | 5.7 | 0.76 | 847.2 | 592763 | |
| JEM-0114 | 318 | <327.553 | 0.74 | 0.63 | 0.37 | 0.1 | 2153 | 0.21 | 22.6 | 91.0 | 44.9 | 219.3 | 0.48 | 55.5 | 1259 | 0.27 | 8.6 | 7.28 | <0.001 | 3.35 | 734.7 | 1.9 | 0.37 | 759.7 | 593791 |
| JEM-0115 | 148 | 4735 | 13.40 | 0.84 | 0.38 | 0.3 | 2488 | 1.49 | 30.0 | 103.4 | 78.5 | 270.2 | 8.64 | 12.4 | 512 | 1.59 | 8.0 | 8.37 | 0.16 | 1.09 | 261.7 | 4.1 | 0.22 | 1073.7 | 590941 |
| JEM-0116 | 602 | 13945 | 2.94 | 0.31 | 0.10 | 0.1 | 5127 | 0.10 | 22.1 | 87.8 | 41.9 | 154.5 | 1.33 | 7.6 | 12649 | 0.17 | 11.2 | 7.10 | 0.02 | 2.11 | 308.9 | 0.9 | 0.20 | 783.9 | 565535 |
| JEM-0117 | 236 | 1862 | 13.59 | 0.22 | 0.02 | 0.2 | 1245 | 0.23 | 21.8 | 84.6 | 44.6 | 205.8 | 7.47 | 32.3 | 2348 | 0.76 | 5.4 | 10.03 | 0.04 | 0.35 | 41.6 | 0.5 | 0.06 | 759.1 | 592392 |
| JEM-0118 | 361 | 19450 | 13.96 | 0.99 | 0.39 | 0.3 | 13524 | 1.29 | 22.3 | 94.5 | 57.9 | 174.2 | 8.68 | 3.5 | 11458 | 1.80 | 2.2 | 8.99 | 0.12 | 0.20 | 32.4 | 4.6 | 0.36 | 782.7 | 586020 |
| JEM-0119 | 344 | 865 | 6.52 | 0.64 | 0.15 | 0.3 | 1693 | 0.76 | 19.5 | 106.5 | 44.2 | 201.6 | 3.66 | 51.3 | 623 | 1.01 | 7.2 | 9.22 | 0.02 | 1.15 | 251.4 | 2.0 | 0.17 | 682.1 | 594805 |
| JEM-0114 | 51 | <415.339 | 0.07 | <0.004 | 0.02 | <0.003 | 2.391 | 0.04 | 15.0 | 79.3 | <4.478 | 293.1 | <0.007 | 1.4 | <677.894 | 7.16 | 4.4 | 7.61 | 191.2 | 30.0 | <0.006 | 511.9 | 595778 | | |
| JEM-0116 | 488 | 365 | 6.77 | 0.87 | 0.33 | 1.3 | 1842 | 6.76 | 24.8 | 546.5 | 171.1 | 174.9 | 34.03 | 39.2 | 16910 | 1.33 | 11.7 | 9.68 | 0.01 | 2.40 | 380.9 | 2.7 | 0.27 | 784.8 | 594511 |
| JEM-0117 | 1237 | 11010 | 12.75 | 0.20 | 0.10 | 0.2 | 1210 | 0.29 | 19.4 | 86.7 | 45.9 | 281.1 | 86.11 | 0.69 | 11.4 | 8.77 | 0.03 | 1.12 | 47.6 | 1.0 | 0.05 | 713.8 | 575530 | | |
| JEM-0118 | 1100 | 4929 | 7.26 | 4.31 | 3.55 | 0.2 | 1930 | 2.92 | 161.7 | 52.2 | 205.1 | 4.18 | 36.8 | 3776 | 1.38 | 5.5 | 8.49 | 0.20 | 1.29 | 420.8 | 27.0 | 3.41 | 976.4 | 585722 | |
| JEM-0119 | 112 | <402.549 | 0.02 | <0.004 | <0.004 | 1.475 | <0.011 | 29.1 | 83.9 | 12.9 | 180.8 | 0.04 | 0.1 | <685.533 | <0.009 | 22.4 | 8.31 | <0.002 | 1.63 | 42.6 | 0.0 | <0.006 | 1025.3 | 596127 | |
| LB00211 | 79 | <150.107 | 0.48 | 0.06 | 0.01 | 0.0 | 3133 | 0.04 | 1.0 | 87.5 | 27.8 | 67.0 | 0.18 | 4.4 | 770 | 0.06 | 7.6 | 4.15 | 0.06 | 0.75 | 8.9 | 0.2 | 0.02 | 7.7 | 595484 |
| LB00210 | 89 | <162.059 | 0.74 | 0.09 | 0.07 | 0.0 | 6763 | 0.01 | 34.7 | 154.8 | 37.0 | 617.9 | 0.5 | 296 | 0.04 | 130.9 | 73.70 | 1.66 | 13.12 | 371.3 | 0.5 | 0.07 | 293.1 | 588896 | |
| LB00211 | 53 | <163.307 | 18.87 | 3.30 | 2.36 | 0.6 | 5428 | 3.19 | 32.4 | 83.9 | 2.6 | 709.8 | 13.95 | 6.1 | <281.269 | 3.42 | 114.4 | 88.51 | 6.62 | 11.25 | 51.1 | 17.1 | 3.03 | 266.5 | 589068 |
| LB00212 | 61 | <342.814 | <0.002 | 0.01 | 0.01 | <0.002 | 6882 | <0.009 | 21.0 | 79.7 | <3.592 | 973.2 | 0.02 | <0.009 | <544.265 | <0.008 | 167.7 | 9.26 | 0.00 | 38.62 | 2639.8 | 0.0 | <0.005 | 232.2 | 589659 |
| LB00213 | 3198 | 220 | 16.26 | 3.09 | 2.70 | 0.9 | 6280 | 2.00 | 1.4 | 788.0 | 63.4 | 131.8 | 5.82 | 2.2 | 6614 | 0.99 | 207.6 | 6.98 | 3.64 | 8.29 | 246.6 | 16.9 | 2.57 | 25.3 | 580274 |
| LB00214 | 65 | <150.477 | 0.28 | 0.02 | 0.01 | 0.0 | 3223 | 0.04 | 0.7 | 82.7 | 10.9 | 41.1 | 0.17 | 2.7 | <241.201 | 0.04 | 7.1 | 2.50 | 0.01 | 0.98 | 11.6 | 0.2 | 0.02 | 4.9 | 596159 |
| LB00215 | 264 | <138.955 | 0.28 | 0.02 | 0.03 | 0.0 | 5576 | 0.01 | 45.1 | 107.8 | 18.6 | 4084.0 | 0.12 | 1.8 | 837 | 0.02 | 97.8 | 25.20 | 0.55 | 39.16 | 2541.4 | 0.2 | 0.10 | 1061.9 | 585036 |
| LB00216 | 192 | <150.013 | 0.07 | 0.03 | 0.02 | 0.0 | 8827 | 0.01 | 15.6 | 93.7 | <1.676 | 1786.7 | 0.06 | 0.1 | <240.812 | 0.01 | 270.4 | 7.37 | 0.03 | 58.31 | 7245.2 | 0.1 | 0.03 | 276.9 | 584149 |
| LB00217 | 126 | <150.408 | 0.00 | 0.01 | <0.002 | 0.0 | 8507 | <0.003 | 22.0 | 84.3 | <1.680 | 2185.1 | <0.004 | 0.1 | <241.607 | <0.005 | 445.9 | 26.66 | 0.01 | 85.78 | 6731.5 | 0.0 | 0.00 | 361.3 | 584267 |
| LB00218 | 343 | 511 | 31.48 | 3.99 | 2.78 | 3.5 | 7130 | 4.70 | 4.5 | 89.5 | 136.9 | 357.1 | 12.86 | 28.8 | 1337 | 3.28 | 5.5 | 19.94 | 2.06 | 1.32 | 19.8 | 29.3 | 2.63 | 43.9 | 590391 |
| LB00219 | 2128 | 2647 | 64.23 | 6.10 | 4.26 | 6.5 | 6191 | 6.71 | 5.3 | 185.0 | 368.5 | 351.5 | 291.9 | 228.7 | 6007 | 6.57 | 15.6 | 27.04 | 1.99 | 3.09 | 52.4 | 46.4 | 5.18 | 58.0 | 580632 |
| LB00220 | 130 | <142.096 | 2.00 | 0.30 | 0.22 | 0.1 | 3475 | 0.18 | 0.9 | 88.1 | 36.5 | 97.2 | 0.75 | 11.7 | 954 | 0.17 | 15.5 | 4.93 | 0.07 | 1.08 | 13.4 | 1.5 | 0.32 | 7.0 | 594764 |
| LB00221 | 987 | 1194 | 23.05 | 2.61 | 2.45 | 1.4 | 4955 | 2.12 | 1.1 | 121.3 | 133.3 | 282.6 | 9.92 | 93.3 | 2793 | 1.96 | 4.0 | 9.45 | 1.98 | 1.62 | 19.8 | 16.0 | 3.10 | 8.3 | 589089 |
| LB00222 | 165 | <154.589 | 0.00 | <0.003 | <0.002 | <0.001 | 10299 | 0.03 | 7.5 | 87.7 | 5.4 | 251.5 | <0.004 | 0.0 | 663 | 0.03 | 205.7 | 1.16 | 0.00 | 38.91 | 11314.7 | 0.0 | <0.003 | 81.1 | 580728 |
| LB00223 | 315 | 309 | 3.68 | 0.20 | 0.13 | 0.3 | 3814 | 0.17 | 1.1 | 104.5 | 113.8 | 68.1 | 1.57 | 21.2 | 1363 | 0.41 | 4.8 | 1.33 | 0.48 | 1.36 | 12.7 | 1.0 | 0.17 | 10.8 | 583673 |
| LB00224 | 101 | <146.556 | 0.05 | 0.02 | 0.01 | 0.0 | 6625 | <0.003 | 40.8 | 84.8 | 2.4 | 5446.5 | 0.04 | 0.2 | 494 | 0.02 | 70.6 | 27.84 | 1.47 | 30.97 | 1931.2 | 0.1 | 0.06 | 1007.7 | 585240 |
| LB00225 | 40 | <158.731 | 0.94 | 0.17 | 0.12 | 0.0 | 4764 | 0.07 | 4.9 | 86.7 | 2.5 | 699.0 | 0.34 | 0.2 | <252.467 | 0.11 | 257.5 | 26.11 | 0.49 | 9.51 | 237.0 | 0.8 | 0.16 | 71.9 | 593189 |
| LB00226 | 925 | <155.209 | 4.10 | 0.76 | 0.53 | 0.1 | 4429 | 0.56 | 9.6 | 198.7 | 12.2 | 42.6 | 2.91 | 1.8 | 2825 | 0.74 | 133.1 | 0.44 | 1.78 | 17.82 | 230.2 | 4.3 | 0.68 | 175.7 | 586891 |
| LB00227 | 2513 | 1711 | 21.39 | 1.04 | 0.55 | 1.2 | 4215 | 1.29 | 0.7 | 123.1 | 120.5 | 113.9 | 102.8 | 82.8 | 2.22 | 4.2 | 3.62 | 1.71 | 1.85 | 10.9 | 5.6 | 0.60 | 5.1 | 584885 | |
| LB00228 | 1938 | <364.002 | 4.63 | 0.70 | 0.50 | 0.1 | 4323 | 0.63 | 5.7 | 256.4 | 39.8 | 198.4 | 3.00 | 13.9 | 3430 | 0.90 | 28.8 | 8.10 | 1.23 | 0.78 | 58.3 | 4.1 | 0.78 | 98.5 | 587970 |
| LB00229 | 10330 | 852 | 3.19 | 0.90 | 0.67 | 0.1 | 7984 | 0.73 | 12.2 | 1379.5 | 203.9 | 596.3 | 1.86 | 30.8 | 18734 | 0.80 | 40.1 | 39.94 | 3.96 | 1.38 | 644.6 | 4.3 | 0.67 | 172.0 | 553662 |
| LB00230 | 116 | <380.548 | 0.21 | 0.26 | 0.22 | 0.1 | 5045 | 0.16 | 8.1 | 79.7 | <3.967 | 442.1 | 0.0 | <601.544 | 0.33 | 22.8 | 21.69 | 0.81 | 1.23 | 40.9 | 1.6 | 0.24 | 133.5 | 593886 | |
| LB00231 | 4118 | 1389 | 143.92 | 17.50 | 17.67 | 2.5 | 86104 | 12.12 | 8.9 | 344.6 | 381.1 | 389.0 | 118.4 | 7315 | 9.14 | 25.0 | 23.69 | 19.10 | 2.33 | 95.9 | 101.1 | 16.32 | 154.7 | 515054 | |
| LB00232 | 319 | <352.583 | 6.47 | 2.45 | 1.39 | 8.9 | 82.8 | 26.3 | 564.6 | 4.05 | 21.0 | 1188 | 1.25 | 19.3 | 1888 | 1.25 | 19.3 | 45.06 | 0.57 | 10.12 | 10.2 | 1.50 | 144.2 | 592823 | |
| LB00233 | 9634 | 2382 | 70.05 | 14.90 | 14.41 | 10.13 | 609.8 | 251.8 | 397.0 | 69.8 | 35.91 | 69.8 | 16506 | 8.38 | 34.0 | 24.53 | 20.11 | 1.77 | 110.6 | 82.2 | 12.75 | 192.1 | 537663 | | |

*All elements are in ppm.

Appendix C: Eastern Sunda arc rutile trace element chemistry (LA-ICP-MS)

| Analysis ID | Al | Ca | Ce | Dy | Er | Eu | Fe | Gd | Hf | Mg | Mn | Nb | Nd | Pb | Si | Sm | Sn | Ta | Th | U | W | Y | Yb | Zr | Ti |
|-------------|-------|----------|-------|--------|--------|--------|--------|-------|--------|---------|---------|--------|-------|-------|----------|--------|-------|-------|-------|-------|-------|--------|--------|--------|--------|
| LB018r7 | 6540 | 1469 | 49.48 | 13.10 | 11.03 | 1.8 | 12868 | 9.71 | 17.7 | 3912.5 | 506.8 | 342.0 | 22.45 | 357.3 | 10976 | 7.22 | 27.1 | 22.88 | 5.72 | 5.35 | 93.2 | 71.5 | 11.55 | 369.5 | 560143 |
| LB018r8 | 13978 | 7312 | 17.91 | 2.67 | 2.03 | 0.5 | 7699 | 2.16 | 10.8 | 673.3 | 331.6 | 161.8 | 10.25 | 25.3 | 20933 | 2.67 | 3.5 | 40.42 | 1.29 | 0.24 | 42.0 | 13.9 | 1.84 | 197.2 | 542952 |
| LB018r9 | 4417 | 1125 | 20.49 | 5.10 | 4.73 | 0.7 | 4348 | 4.03 | 13.8 | 330.9 | 71.7 | 616.4 | 10.34 | 80.7 | 9578 | 3.07 | 12.2 | 39.90 | 5.21 | 0.94 | 78.4 | 29.3 | 4.98 | 242.6 | 575981 |
| LB022r1 | 743 | <434.391 | 31.58 | 4.07 | 3.06 | 0.9 | 28530 | 4.55 | 10.8 | 173.3 | 12587.1 | 148.8 | 20.71 | 11.4 | 3555 | 4.27 | 289.4 | 8.52 | 8.59 | 13.25 | 451.2 | 18.6 | 2.31 | 313.5 | 556582 |
| LB022r10 | 146 | <158.412 | 5.06 | 0.57 | 0.46 | 0.3 | 27327 | 0.74 | 20.4 | 108.8 | 175.5 | 143.7 | 3.79 | 1.9 | 598 | 0.93 | 114.4 | 6.00 | 2.37 | 4.89 | 73.9 | 3.8 | 0.35 | 684.2 | 572168 |
| LB022r2 | 85 | <170.564 | 0.40 | 0.06 | 0.09 | 0.0 | 9395 | 0.11 | 21.2 | 88.8 | 14.6 | 187.1 | 0.40 | 0.1 | 554 | 0.05 | 195.4 | 9.78 | 1.71 | 15.93 | 20266 | 0.4 | 0.12 | 556.6 | 583153 |
| LB022r3 | 387 | <153.260 | 1.76 | 0.35 | 0.24 | 0.1 | 6996 | 0.25 | 38.1 | 143.3 | 45.0 | 256.0 | 1.12 | 1.2 | 831 | 0.18 | 162.7 | 7.38 | 12.98 | 20.36 | 237.7 | 1.5 | 0.30 | 1182.1 | 588279 |
| LB022r6 | 73 | <350.034 | 0.38 | 0.02 | <0.004 | 0.0 | 6368 | 0.06 | 14.2 | 81.2 | 4.1 | 228.9 | 0.06 | 0.1 | 1326 | 0.07 | 167.9 | 10.05 | 0.89 | 7.44 | 190.8 | 0.1 | 0.02 | 423.0 | 588412 |
| LB022r7 | 97 | <344.675 | 0.01 | <0.004 | <0.002 | 7600 | <0.008 | 5.5 | 78.2 | 4.4 | 325.1 | <0.006 | 0.1 | 1110 | <0.008 | 179.9 | 24.38 | 0.43 | 20.03 | 423.4 | 0.1 | <0.005 | 72.9 | 590315 | |
| LB022r8 | 117 | <335.745 | 1.20 | 0.35 | 0.33 | 0.1 | 7739 | 0.31 | 39.6 | 88.1 | 24.1 | 98.4 | 0.76 | 1.2 | 666 | 0.22 | 206.7 | 5.31 | 1.69 | 8.49 | 332.5 | 2.1 | 0.49 | 1244.6 | 588830 |
| LB022r9 | 97 | <331.532 | 0.41 | 0.09 | 0.07 | 0.0 | 13159 | 0.16 | 11.8 | 87.2 | 39.2 | 191.1 | 0.50 | 0.5 | <511.383 | 0.07 | 263.8 | 11.03 | 3.17 | 11.96 | 331.1 | 0.7 | 0.15 | 296.7 | 579339 |
| LB028r1 | 86 | 6378 | 66.71 | 3.75 | 2.16 | 0.5 | 3330 | 4.78 | 10.0 | 98.1 | 48.8 | 585.5 | 32.33 | 17.4 | 674 | 5.70 | 22.6 | 14.49 | 2.39 | 2.22 | 68.9 | 19.0 | 1.78 | 168.0 | 589384 |
| LB028r10 | 1011 | 583 | 9.56 | 2.92 | 3.05 | 0.3 | 4286 | 2.00 | 15.6 | 190.8 | 290.5 | 450.2 | 5.58 | 380.9 | 3394 | 2.12 | 43.1 | 28.84 | 1.50 | 2.25 | 114.4 | 19.6 | 4.63 | 404.4 | 588008 |
| LB028r2 | 546 | 1696 | 11.07 | 2.70 | 2.11 | 0.5 | 5645 | 1.82 | 9.0 | 117.7 | 71.9 | 571.0 | 6.08 | 54.0 | 2880 | 1.83 | 27.7 | 26.24 | 3.63 | 3.70 | 85.8 | 11.1 | 2.34 | 159.9 | 587865 |
| LB028r3 | 627 | 932 | 32.12 | 5.65 | 3.90 | 1.0 | 4230 | 4.08 | 13.6 | 97.7 | 311.2 | 633.3 | 16.94 | 340.8 | 2067 | 4.83 | 12.4 | 22.98 | 6.68 | 2.23 | 164.8 | 22.3 | 5.21 | 147.9 | 590094 |
| LB028r4 | 166 | <334.152 | 7.04 | 1.52 | 1.20 | 0.2 | 2970 | 0.98 | 9.3 | 89.1 | 53.9 | 589.6 | 3.53 | 30.8 | 1666 | 1.06 | 25.3 | 26.33 | 1.11 | 2.78 | 64.1 | 7.8 | 1.51 | 153.3 | 583510 |
| LB028r5 | 10598 | 2782 | 17.40 | 6.30 | 4.51 | 1.1 | 11793 | 4.56 | 12.5 | 4783.3 | 750.3 | 433.9 | 10.61 | 359.3 | 22892 | 3.34 | 17.3 | 19.92 | 21.94 | 5.79 | 161.4 | 26.7 | 5.92 | 219.2 | 539715 |
| LB028r6 | 15474 | 3114 | 15.60 | 4.79 | 3.47 | 1.0 | 15482 | 3.50 | 17.2 | 729.5 | 170.0 | 392.2 | 10.33 | 161.1 | 45674 | 3.56 | 55.8 | 17.74 | 11.17 | 3.30 | 200.6 | 22.8 | 3.79 | 264.2 | 506468 |
| LB028r8 | 1775 | 758 | 5.97 | 2.86 | 1.67 | 0.4 | 14488 | 1.56 | 8.0 | 281.2 | 53.3 | 929.5 | 3.81 | 94.9 | 4490 | 1.07 | 35.6 | 48.22 | 1.52 | 2.17 | 100.5 | 9.5 | 1.48 | 184.5 | 577976 |
| LB028r9 | 9824 | 2790 | 8.47 | 3.69 | 3.51 | 0.6 | 10259 | 3.40 | 37.1 | 1785.4 | 364.4 | 628.0 | 6.71 | 235.6 | 27045 | 2.33 | 15.1 | 36.32 | 7.10 | 2.52 | 210.3 | 19.2 | 3.47 | 865.4 | 539193 |
| LB029r1 | 2193 | 4272 | 50.23 | 39.62 | 32.04 | 4.5 | 12304 | 19.39 | 74.5 | 897.5 | 107.3 | 778.7 | 33.13 | 333.0 | 6873 | 13.24 | 31.6 | 49.31 | 14.09 | 29.61 | 211.6 | 146.8 | 35.30 | 1098.7 | 570516 |
| LB029r10 | 16742 | 1156 | 48.70 | 52.39 | 39.72 | 5.5 | 24007 | 24.94 | 68.3 | 4945.1 | 350.9 | 277.3 | 39.77 | 326.5 | 27892 | 19.88 | 29.7 | 10.25 | 6.94 | 11.26 | 165.1 | 179.5 | 45.59 | 1055.8 | 517148 |
| LB029r2 | 2740 | 2990 | 44.04 | 27.55 | 20.87 | 4.0 | 18285 | 16.88 | 59.3 | 140.2 | 88.3 | 688.2 | 27.49 | 309.4 | 5453 | 11.29 | 64.2 | 44.01 | 13.17 | 44.67 | 197.2 | 98.1 | 21.76 | 1048.4 | 568941 |
| LB029r3 | 603 | 672 | 19.86 | 13.04 | 10.90 | 1.5 | 15130 | 5.77 | 60.2 | 97.0 | 27.1 | 991.9 | 12.09 | 151.7 | 2363 | 5.21 | 86.2 | 54.86 | 16.05 | 38.81 | 229.9 | 48.9 | 13.52 | 876.9 | 580037 |
| LB029r5 | 1285 | <389.004 | 26.01 | 15.01 | 11.30 | 2.1 | 14208 | 6.81 | 62.7 | 372.6 | 70.3 | 534.4 | 14.57 | 219.2 | 2901 | 6.08 | 27.4 | 16.82 | 6.33 | 35.19 | 123.8 | 53.9 | 13.21 | 960.3 | 579803 |
| LB029r6 | 1792 | 1583 | 68.17 | 41.17 | 30.33 | 6.2 | 8807 | 20.89 | 110.8 | 233.6 | 120.3 | 588.1 | 42.43 | 532.8 | 5285 | 18.58 | 15.3 | 30.03 | 14.26 | 17.40 | 132.0 | 145.4 | 38.16 | 1725.0 | 576410 |
| LB029r7 | 128 | <388.052 | 12.51 | 0.03 | 0.03 | 0.0 | 1105 | 0.09 | 6.1 | 82.3 | 116.9 | 635.6 | 1.11 | 14.9 | 775 | 0.06 | 2.2 | 23.24 | 0.20 | 0.09 | 86.2 | 0.2 | 0.05 | 109.0 | 586252 |
| LB029r8 | 1169 | 601 | 44.51 | 31.24 | 25.67 | 3.8 | 12113 | 14.16 | 70.6 | 172.4 | 54.3 | 742.8 | 30.87 | 282.1 | 2993 | 11.99 | 49.8 | 38.19 | 14.69 | 32.54 | 182.9 | 112.4 | 30.75 | 1187.8 | 580623 |
| LB029r9 | 6104 | 1263 | 36.81 | 23.02 | 18.15 | 3.8 | 19886 | 11.90 | 56.4 | 3604.9 | 306.4 | 664.0 | 26.09 | 198.7 | 9792 | 11.03 | 28.4 | 37.81 | 8.74 | 20.72 | 166.0 | 88.2 | 21.11 | 913.5 | 557015 |
| LB036r1 | 552 | <215.077 | 1.00 | 0.71 | 0.69 | 0.1 | 11794 | 0.45 | 8.9 | 113.2 | 15.1 | 583.4 | 0.25 | 4.1 | 2097 | 0.16 | 72.7 | 52.29 | 5.23 | 12.88 | 120.5 | 4.4 | 0.37 | 176.7 | 584543 |
| LB036r10 | 2327 | <152.962 | 2.95 | 0.49 | 0.29 | 0.1 | 93496 | 0.59 | 13.5 | 158.7 | 199.2 | 701.5 | 2.01 | 1.2 | 4461 | 0.67 | 104.0 | 59.32 | 1.62 | 8.55 | 79.8 | 2.8 | 0.28 | 305.6 | 517254 |
| LB036r11 | 724 | <338.727 | 1.22 | 0.05 | 0.03 | 0.1 | 6708 | 0.11 | 4.0 | 283.2 | 19.5 | 711.9 | 0.69 | 1.1 | 1804 | 0.16 | 129.2 | 33.64 | 0.27 | 11.63 | 21.7 | 0.4 | 0.03 | 106.4 | 589439 |
| LB036r12 | 294 | <168.188 | 0.07 | <0.003 | <0.002 | 17659 | <0.003 | 11.2 | 95.5 | 23.2 | 459.0 | 0.05 | 0.3 | 909 | 0.01 | 99.7 | 23.70 | 0.55 | 10.00 | 135.6 | 0.0 | <0.003 | 272.1 | 581190 | |
| LB036r13 | 170 | <149.142 | 0.19 | 0.00 | 0.01 | <0.001 | 32217 | 0.01 | 9.5 | 99.2 | 108.7 | 236.0 | 0.09 | 2.3 | 582 | 0.02 | 122.5 | 6.72 | 1.38 | 13.66 | 132.4 | 0.1 | 0.02 | 253.4 | 572534 |
| LB036r14 | 3068 | <349.457 | 0.16 | <0.004 | <0.002 | 6787 | <0.008 | 16.0 | 2261.1 | 86.7 | 162.9 | 0.20 | 0.5 | 5517 | 0.08 | 129.6 | 7.49 | 0.22 | 7.01 | 36.5 | 0.2 | 0.01 | 391.1 | 573058 | |
| LB036r15 | 10778 | 384 | 0.27 | 0.31 | 0.20 | 0.0 | 10524 | 0.11 | 19.0 | 1779.1 | 59.6 | 268.0 | 0.17 | 1.4 | 17347 | 0.08 | 143.3 | 19.97 | 1.64 | 21.96 | 108.3 | 1.0 | 0.37 | 354.3 | 549736 |
| LB036r16 | 16096 | <369.198 | 2.65 | 0.65 | 0.43 | 0.2 | 30052 | 0.51 | 10.3 | 10876.7 | 2208.0 | 546.2 | 1.60 | 7.4 | 18223 | 0.43 | 100.4 | 40.85 | 4.29 | 12.42 | 92.6 | 2.8 | 0.69 | 213.0 | 520855 |
| LB036r17 | 3190 | <346.821 | 2.20 | 0.40 | 0.26 | 0.1 | 9614 | 0.42 | 18.4 | 2675.4 | 161.6 | 140.7 | 1.67 | 6.6 | 5842 | 0.58 | 77.7 | 4.79 | 3.79 | 15.43 | 151.4 | 1.9 | 0.26 | 332.9 | 574029 |
| LB036r18 | 5203 | 393 | 0.43 | 0.35 | 0.14 | 0.1 | 10525 | 0.28 | 17.3 | 3719.4 | 142.3 | 142.1 | 0.36 | 4.2 | 8775 | 0.09 | 105.2 | 8.48 | 1.99 | 22.08 | 90.3 | 1.5 | 0.22 | 347.4 | 564098 |
| LB036r3 | 2688 | <327.714 | 1.08 | 0.09 | 0.06 | 0.1 | 6314 | 0.17 | 5.2 | 811.1 | 44.5 | 836.6 | 0.48 | 4.2 | 5599 | 0.07 | 154.4 | 39.51 | 1.52 | 16.45 | 74.7 | 0.4 | 0.05 | 103.7 | 581983 |
| LB036r14 | 13507 | 321 | 8.74 | 3.66 | 3.54 | 0.8 | 23251 | 1.94 | 10.9 | 6135.1 | 943.3 | 551.3 | 5.60 | 7.9 | 13322 | 1.34 | 102.0 | 53.08 | 41.83 | 16.82 | 70.1 | 22.0 | 6.28 | 243.8 | 537378 |
| LB036r5 | 1950 | <161.286 | 0.05 | 0.02 | 0.01 | <0.001 | 7190 | 0.04 | 28.2 | 722.4 | 38.5 | 177.2 | 0.09 | 0.5 | 3507 | <0.005 | 188.4 | 12.77 | 1.08 | 49.55 | 129.0 | 0.1 | 0.02 | 696.3 | 584385 |
| LB036r6 | 153 | <335.156 | 0.28 | 0.04 | 0.02 | 0.0 | 6603 | 0.04 | 5.4 | 85.9 | 4.0 | 606.8 | 0.24 | 0.2 | <510.749 | 0.02 | 68.1 | 51.57 | 0.70 | 6.96 | 77.0 | 0.1 | 0.02 | 136.0 | 591752 |
| LB036r7 | 118 | <332.213 | 1.67 | 0.05 | 0.05 | 0.1 | 5880 | 0.18 | 10.2 | 116.1 | 4.2 | 816.4 | 1.19 | 0.6 | <506.618 | 0.17 | 55.0 | 64.95 | 1.90 | 3.79 | 53.5 | 0.3 | 0.01 | 224.0 | 597192 |
| LB036r8 | 101 | <345.718 | 0.25 | <0.004 | 0.01 | 0.0 | 7475 | 0.05 | 23.4 | 83.5 | <3.453 | 715.9 | 0.26 | 0.9 | <527.609 | <0.008 | 111.7 | 43.04 | 0.40 | 12.51 | 48.6 | 0.1 | <0.005 | 448.6 | 591218 |
| LB036r9 | 317 | <148.258 | 0.14 | 0.01 | 0.0 | 0.0 | 10082 | 0.01 | 4.6 | 121.3 | 9.3 | 67.5 | 0.03 | 1.7 | 1397 | <0.004 | 118.2 | 3.34 | 0.25 | 9.80 | 80.5 | 0.1 | <0.003 | 140.0 | 588534 |

*All elements are in ppm.

Appendix C: Eastern Sunda arc titanite trace element chemistry (EMPA)

| Analysis ID | Si | Ca | Ti | Na | Mg | Al | V | Cr | Mn | Fe | Sr | Y | Zr | F | O |
|---------------|--------|--------|--------|--------|--------|-------|-------|--------|-------|-------|--------|--------|--------|--------|--------|
| LB014_322_H11 | 14.262 | 20.039 | 22.937 | 0.017 | 0.009 | 0.211 | 0.011 | <0.005 | 0.157 | 0.901 | <0.005 | 0.117 | 0.151 | 0.107 | 40.239 |
| LB014_322_H10 | 14.143 | 20.058 | 22.610 | 0.010 | 0.004 | 0.277 | 0.023 | <0.005 | 0.124 | 1.062 | <0.005 | 0.150 | 0.108 | 0.081 | 39.997 |
| LB014_322_H11 | 14.283 | 20.317 | 22.962 | 0.008 | 0.004 | 0.296 | 0.028 | <0.005 | 0.105 | 0.838 | <0.005 | 0.024 | 0.025 | 0.128 | 40.300 |
| LB014_322_H12 | 14.181 | 19.929 | 22.415 | 0.012 | 0.007 | 0.279 | 0.019 | <0.005 | 0.180 | 1.076 | <0.005 | 0.118 | 0.308 | 0.213 | 39.880 |
| LB014_322_H13 | 14.295 | 20.192 | 23.028 | 0.011 | 0.004 | 0.187 | 0.036 | <0.005 | 0.148 | 0.794 | <0.005 | 0.058 | 0.146 | 0.163 | 40.256 |
| LB014_322_H14 | 14.105 | 19.614 | 21.335 | <0.007 | <0.002 | 0.377 | 0.103 | <0.005 | 0.074 | 1.643 | <0.005 | 0.083 | 0.123 | 0.310 | 39.171 |
| LB014_322_H15 | 14.238 | 19.969 | 22.171 | 0.010 | 0.007 | 0.277 | 0.047 | <0.005 | 0.162 | 1.153 | <0.005 | 0.028 | 0.331 | 0.206 | 39.748 |
| LB014_322_H16 | 14.491 | 20.688 | 20.249 | 0.009 | <0.002 | 1.194 | 0.056 | <0.005 | 0.024 | 2.308 | <0.005 | <0.006 | <0.006 | <0.026 | 40.059 |
| LB014_322_H17 | 14.320 | 20.170 | 22.652 | 0.017 | 0.004 | 0.241 | 0.014 | <0.005 | 0.136 | 0.983 | <0.005 | 0.064 | 0.310 | 0.106 | 40.201 |
| LB014_322_H18 | 14.226 | 20.159 | 22.515 | <0.006 | 0.004 | 0.293 | 0.047 | <0.005 | 0.130 | 1.162 | <0.005 | 0.019 | 0.066 | 0.208 | 39.910 |
| LB014_322_H19 | 14.047 | 19.623 | 22.211 | <0.007 | 0.006 | 0.316 | 0.042 | <0.005 | 0.128 | 0.983 | <0.005 | 0.187 | 0.044 | 0.127 | 39.534 |
| LB014_322_H20 | 14.342 | 20.236 | 22.660 | 0.010 | 0.005 | 0.283 | 0.024 | <0.005 | 0.128 | 1.108 | <0.005 | 0.011 | 0.062 | 0.182 | 40.148 |
| LB014_322_H21 | 14.179 | 19.762 | 22.222 | 0.021 | 0.010 | 0.312 | 0.034 | <0.005 | 0.166 | 1.237 | <0.006 | 0.154 | 0.081 | 0.176 | 39.736 |
| LB014_322_H22 | 13.573 | 20.186 | 22.338 | 0.011 | 0.004 | 0.276 | 0.027 | <0.005 | 0.146 | 1.383 | <0.005 | 0.055 | 0.252 | 0.119 | 39.258 |
| LB014_322_H23 | 14.257 | 20.179 | 22.961 | 0.009 | 0.005 | 0.248 | 0.014 | <0.005 | 0.141 | 0.838 | <0.005 | 0.060 | 0.085 | 0.170 | 40.181 |
| LB014_322_H24 | 14.350 | 20.109 | 22.906 | 0.018 | 0.008 | 0.205 | 0.033 | <0.005 | 0.163 | 0.834 | <0.005 | 0.051 | 0.234 | 0.180 | 40.254 |
| LB014_322_H25 | 14.407 | 20.231 | 22.726 | 0.025 | 0.008 | 0.269 | 0.027 | <0.005 | 0.169 | 1.070 | <0.005 | <0.006 | 0.018 | 0.097 | 40.274 |
| LB014_322_H26 | 14.221 | 20.038 | 22.753 | 0.013 | 0.005 | 0.279 | 0.046 | <0.005 | 0.136 | 0.814 | <0.005 | 0.081 | 0.057 | 0.177 | 40.069 |
| LB014_322_H27 | 14.288 | 20.203 | 22.900 | 0.014 | 0.006 | 0.230 | 0.037 | <0.005 | 0.142 | 0.897 | <0.005 | 0.020 | 0.177 | 0.174 | 40.158 |
| LB014_322_H28 | 14.147 | 19.747 | 22.284 | 0.020 | 0.006 | 0.293 | 0.075 | <0.005 | 0.134 | 1.291 | <0.006 | 0.233 | 0.123 | 0.162 | 39.801 |
| LB014_322_H29 | 14.345 | 20.690 | 21.764 | <0.006 | <0.002 | 0.804 | 0.036 | <0.005 | 0.006 | 1.062 | <0.005 | <0.006 | <0.006 | <0.026 | 40.185 |
| LB014_322_H30 | 14.413 | 20.528 | 21.343 | 0.008 | <0.002 | 0.791 | 0.109 | <0.005 | 0.028 | 1.396 | <0.005 | 0.022 | <0.006 | <0.026 | 40.085 |
| LB025_323_H11 | 15.267 | 20.637 | 14.233 | 0.011 | 0.083 | 5.197 | 0.115 | <0.005 | 0.040 | 0.927 | <0.005 | 0.008 | 0.034 | 3.379 | 38.761 |
| LB025_323_H12 | 15.101 | 20.765 | 13.890 | <0.006 | 0.033 | 5.508 | 0.129 | <0.005 | 0.007 | 0.988 | <0.005 | 0.009 | 0.018 | 3.848 | 38.447 |
| LB025_323_H13 | 15.207 | 20.319 | 15.011 | 0.007 | 0.069 | 4.690 | 0.053 | <0.005 | 0.015 | 1.187 | <0.005 | 0.014 | 0.033 | 2.976 | 38.830 |
| LB025_323_H14 | 15.073 | 20.766 | 13.882 | 0.013 | 0.034 | 5.497 | 0.093 | <0.004 | 0.014 | 0.883 | <0.005 | 0.008 | 0.012 | 3.937 | 38.305 |
| LB025_323_H15 | 15.465 | 20.288 | 14.562 | 0.019 | 0.022 | 4.795 | 0.075 | <0.004 | 0.017 | 0.857 | 0.007 | <0.006 | 0.011 | 3.248 | 38.676 |
| LB025_323_H16 | 15.095 | 20.726 | 15.154 | 0.032 | 0.074 | 4.434 | 0.112 | <0.004 | 0.073 | 1.134 | <0.005 | <0.006 | 0.033 | 3.077 | 38.724 |
| LB025_323_H17 | 13.513 | 18.976 | 23.856 | 0.010 | 0.008 | 0.539 | 0.103 | <0.004 | 0.027 | 1.604 | <0.005 | <0.006 | 0.035 | 0.243 | 39.907 |
| LB025_323_H18 | 15.287 | 20.331 | 14.573 | 0.009 | 0.044 | 5.282 | 0.118 | <0.004 | 0.016 | 0.899 | <0.005 | 0.017 | 0.013 | 3.440 | 38.880 |
| LB037_329_H11 | 14.249 | 20.222 | 21.933 | 0.008 | 0.007 | 0.410 | 0.043 | <0.005 | 0.112 | 1.813 | <0.005 | 0.039 | 0.126 | 0.130 | 39.930 |
| LB037_329_H10 | 14.235 | 20.410 | 22.767 | 0.012 | 0.005 | 0.256 | 0.035 | <0.005 | 0.099 | 0.948 | <0.005 | 0.058 | 0.123 | 0.151 | 40.184 |
| LB037_329_H11 | 14.346 | 20.411 | 22.244 | <0.006 | 0.003 | 0.391 | 0.050 | <0.005 | 0.085 | 1.329 | 0.008 | 0.018 | 0.100 | 0.310 | 39.962 |
| LB037_329_H12 | 14.076 | 20.499 | 22.979 | <0.006 | <0.002 | 0.381 | 0.040 | <0.005 | 0.088 | 0.689 | <0.005 | <0.006 | 0.018 | 0.069 | 40.434 |
| LB037_329_H13 | 14.289 | 19.690 | 22.687 | 0.011 | 0.005 | 0.216 | 0.041 | <0.005 | 0.150 | 0.956 | <0.005 | 0.225 | 0.108 | 0.090 | 39.830 |
| LB037_329_H14 | 14.289 | 20.269 | 22.825 | 0.008 | 0.003 | 0.262 | 0.050 | <0.005 | 0.147 | 0.959 | <0.005 | <0.006 | 0.079 | 0.258 | 40.125 |
| LB037_329_H15 | 14.245 | 20.087 | 22.378 | <0.006 | 0.004 | 0.324 | 0.050 | <0.005 | 0.121 | 1.216 | <0.005 | 0.035 | 0.133 | 0.173 | 39.954 |
| LB037_329_H16 | 14.230 | 20.152 | 22.541 | 0.008 | 0.008 | 0.278 | 0.047 | <0.005 | 0.153 | 1.296 | <0.005 | 0.009 | 0.053 | 0.213 | 39.962 |
| LB037_329_H17 | 14.295 | 20.598 | 22.785 | 0.010 | 0.005 | 0.297 | 0.054 | <0.005 | 0.107 | 1.058 | <0.005 | <0.006 | 0.063 | 0.214 | 40.300 |
| LB037_329_H18 | 14.075 | 20.146 | 22.706 | <0.006 | 0.006 | 0.227 | 0.037 | <0.005 | 0.161 | 0.946 | <0.005 | 0.041 | 0.177 | 0.177 | 39.824 |
| LB037_329_H19 | 13.803 | 20.050 | 22.704 | <0.006 | <0.002 | 0.230 | 0.056 | <0.005 | 0.101 | 1.011 | <0.006 | 0.078 | 0.151 | 0.188 | 39.510 |
| LB037_329_H20 | 14.230 | 20.120 | 22.556 | 0.008 | 0.004 | 0.274 | 0.047 | <0.005 | 0.145 | 1.001 | <0.005 | 0.039 | 0.174 | 0.261 | 39.900 |
| LB037_329_H21 | 14.258 | 20.169 | 22.865 | 0.008 | 0.004 | 0.260 | 0.045 | <0.005 | 0.121 | 0.929 | <0.005 | 0.076 | 0.158 | 0.158 | 39.387 |
| LB037_329_H22 | 14.237 | 20.267 | 22.401 | 0.017 | 0.007 | 0.314 | 0.057 | <0.005 | 0.160 | 1.333 | <0.006 | 0.070 | 0.256 | 0.134 | 40.089 |
| LB037_329_H23 | 14.248 | 20.230 | 22.143 | 0.008 | 0.006 | 0.338 | 0.056 | <0.005 | 0.130 | 1.431 | <0.005 | <0.006 | 0.017 | 0.161 | 39.845 |
| LB037_329_H24 | 14.248 | 20.230 | 22.471 | <0.006 | 0.006 | 0.336 | 0.037 | <0.005 | 0.111 | 1.141 | <0.005 | 0.062 | 0.097 | 0.201 | 40.004 |

*all elements are in wt. % (EMPA).

Appendix C: Eastern Sunda arc titanite trace element chemistry (EMPA)

| Analysis ID | Si | Ca | Ti | Na | Mg | Al | V | Cr | Mn | Fe | Sr | Y | Zr | F | O |
|-----------------|--------|--------|--------|--------|--------|-------|-------|--------|--------|-------|--------|--------|--------|-------|--------|
| LB037_329_ih24 | 14.200 | 20.073 | 22.952 | 0.008 | 0.004 | 0.170 | 0.048 | <0.005 | 0.121 | 0.790 | <0.005 | 0.159 | 0.090 | 0.157 | 40.051 |
| LB037_329_ih25 | 14.184 | 19.702 | 22.885 | 0.014 | 0.004 | 0.198 | 0.044 | <0.005 | 0.170 | 0.797 | <0.006 | 0.055 | 0.076 | 0.125 | 39.862 |
| LB037_329_ih26 | 14.300 | 20.302 | 22.609 | <0.006 | <0.002 | 0.368 | 0.049 | <0.005 | 0.081 | 0.960 | <0.006 | 0.030 | 0.010 | 0.097 | 40.133 |
| LB037_329_ih27 | 13.547 | 20.312 | 22.788 | 0.007 | 0.007 | 0.307 | 0.053 | <0.005 | 0.133 | 1.058 | <0.005 | <0.006 | 0.101 | 0.155 | 39.395 |
| LB037_329_ih28 | 14.228 | 20.373 | 23.020 | 0.013 | 0.007 | 0.216 | 0.028 | <0.005 | 0.138 | 0.799 | <0.005 | 0.080 | 0.091 | 0.204 | 40.225 |
| LB037_329_ih3 | 14.245 | 20.139 | 23.102 | 0.011 | 0.007 | 0.192 | 0.052 | <0.005 | 0.159 | 0.765 | <0.005 | 0.099 | 0.137 | 0.145 | 40.237 |
| LB037_329_ih30 | 13.551 | 20.205 | 22.278 | 0.008 | 0.006 | 0.336 | 0.057 | <0.005 | 0.128 | 1.151 | 0.014 | 0.043 | 0.091 | 0.199 | 39.074 |
| LB037_329_ih31 | 13.570 | 20.373 | 22.888 | 0.009 | 0.003 | 0.291 | 0.034 | <0.005 | 0.107 | 0.788 | <0.005 | 0.022 | 0.009 | 0.119 | 39.389 |
| LB037_329_ih32 | 14.298 | 20.392 | 22.872 | <0.007 | 0.003 | 0.232 | 0.056 | 0.005 | 0.096 | 0.918 | <0.005 | 0.026 | 0.202 | 0.269 | 40.233 |
| LB037_329_ih33 | 14.106 | 19.844 | 22.349 | <0.007 | <0.002 | 0.257 | 0.086 | <0.005 | 0.084 | 1.075 | <0.005 | 0.186 | 0.177 | 0.191 | 39.635 |
| LB037_329_ih34 | 13.034 | 20.155 | 22.568 | <0.007 | <0.002 | 0.245 | 0.052 | <0.005 | 0.095 | 1.022 | <0.005 | 0.086 | 0.177 | 0.231 | 38.583 |
| LB037_329_ih35 | 13.189 | 19.760 | 22.809 | 0.019 | 0.005 | 0.223 | 0.047 | <0.005 | 0.131 | 0.941 | <0.006 | 0.285 | 0.129 | 0.143 | 38.860 |
| LB037_329_ih36 | 14.226 | 20.042 | 22.432 | <0.006 | 0.003 | 0.302 | 0.062 | <0.005 | 0.096 | 1.186 | <0.006 | 0.188 | 0.155 | 0.211 | 39.968 |
| LB037_329_ih37 | 13.521 | 19.935 | 22.849 | 0.010 | 0.004 | 0.224 | 0.049 | <0.005 | 0.119 | 0.873 | <0.005 | 0.116 | 0.189 | 0.183 | 39.245 |
| LB037_329_ih38 | 14.194 | 20.054 | 22.661 | 0.011 | 0.005 | 0.285 | 0.041 | <0.005 | 0.123 | 0.903 | <0.006 | 0.059 | 0.105 | 0.119 | 39.953 |
| LB037_329_ih39 | 14.259 | 20.140 | 22.675 | <0.006 | <0.002 | 0.241 | 0.055 | <0.005 | 0.087 | 0.909 | <0.005 | 0.052 | 0.135 | 0.185 | 40.005 |
| LB037_329_ih4 | 14.230 | 20.109 | 22.612 | <0.006 | <0.002 | 0.402 | 0.086 | <0.005 | 0.104 | 0.831 | <0.005 | 0.167 | 0.036 | 0.220 | 40.039 |
| LB037_329_ih40 | 14.201 | 19.985 | 22.545 | 0.016 | 0.003 | 0.234 | 0.085 | <0.005 | 0.119 | 1.050 | <0.005 | 0.043 | 0.222 | 0.219 | 39.818 |
| LB037_329_ih41 | | | | | | | | | | | | | | | |
| LB037_329_ih45 | 14.269 | 20.398 | 22.493 | 0.007 | <0.002 | 0.565 | 0.083 | <0.005 | 0.055 | 0.731 | <0.006 | 0.059 | 0.010 | 0.149 | 40.206 |
| LB037_329_ih6 | 14.275 | 20.373 | 22.888 | <0.006 | <0.002 | 0.313 | 0.040 | <0.005 | 0.093 | 0.576 | <0.005 | 0.011 | 0.016 | 0.125 | 40.142 |
| LB037_329_ih7 | 14.330 | 20.402 | 22.589 | 0.007 | 0.004 | 0.320 | 0.046 | <0.005 | 0.105 | 1.148 | <0.005 | <0.006 | 0.034 | 0.134 | 40.191 |
| LB037_329_ih8 | 14.283 | 20.244 | 22.859 | 0.013 | 0.003 | 0.288 | 0.049 | <0.005 | 0.089 | 0.827 | <0.005 | 0.030 | 0.024 | 0.182 | 40.148 |
| LB037_329_ih9 | 14.494 | 20.919 | 19.054 | <0.006 | 0.004 | 2.433 | 0.052 | <0.005 | 0.017 | 1.167 | <0.005 | <0.006 | <0.006 | 1.279 | 39.589 |
| LB042_331_ih1 | | | | | | | | | | | | | | | |
| LB042_331_ih2 | | | | | | | | | | | | | | | |
| ELF-03_333_ih1 | 14.740 | 20.828 | 17.903 | 0.010 | 0.010 | 3.503 | 0.097 | <0.004 | <0.005 | 0.221 | <0.005 | <0.006 | <0.006 | 2.495 | 39.253 |
| ELF-03_333_ih2 | 14.461 | 20.708 | 19.987 | <0.006 | 0.003 | 1.684 | 0.040 | <0.005 | <0.005 | 1.450 | <0.005 | <0.006 | <0.006 | 1.434 | 39.427 |
| ELF-03_333_ih3 | 14.619 | 20.837 | 18.152 | 0.009 | 0.018 | 3.275 | 0.062 | <0.005 | 0.008 | 0.339 | <0.006 | <0.006 | <0.006 | 2.320 | 39.208 |
| ELF-03_333_ih4 | | | | | | | | | | | | | | | |
| ELF-03_333_ih5 | | | | | | | | | | | | | | | |
| ELF-03_333_ih6 | | | | | | | | | | | | | | | |
| ELF-03_333_ih7 | | | | | | | | | | | | | | | |
| ELF-03_333_ih8 | | | | | | | | | | | | | | | |
| SPF-05_336_ih1 | 14.492 | 20.579 | 20.477 | <0.006 | 0.005 | 1.688 | 0.077 | <0.005 | 0.018 | 0.456 | <0.006 | 0.087 | <0.006 | 0.853 | 39.793 |
| SPF-05_336_ih10 | | | | | | | | | | | | | | | |
| SPF-05_336_ih2 | 14.432 | 20.824 | 21.222 | 0.007 | 0.002 | 1.420 | 0.083 | <0.005 | 0.019 | 0.543 | <0.005 | 0.013 | <0.006 | 0.510 | 40.204 |
| SPF-05_336_ih3 | 14.490 | 20.671 | 20.733 | <0.006 | <0.002 | 1.634 | 0.061 | <0.005 | 0.021 | 0.592 | <0.005 | 0.065 | <0.006 | 0.873 | 39.968 |
| SPF-05_336_ih4 | 14.366 | 20.365 | 21.974 | <0.006 | <0.002 | 1.056 | 0.063 | <0.005 | 0.011 | 0.367 | <0.005 | 0.162 | <0.006 | 0.458 | 40.144 |
| SPF-05_336_ih5 | 14.271 | 20.185 | 21.569 | <0.007 | <0.002 | 1.032 | 0.095 | <0.005 | 0.021 | 0.622 | <0.005 | 0.116 | <0.006 | 0.333 | 39.868 |
| SPF-05_336_ih6 | 13.856 | 19.708 | 20.393 | 0.007 | 0.003 | 1.689 | 0.083 | <0.005 | 0.023 | 0.581 | <0.005 | 1.057 | <0.006 | 0.547 | 39.178 |
| SPF-05_336_ih7 | | | | | | | | | | | | | | | |
| SPF-05_336_ih8 | | | | | | | | | | | | | | | |
| SPF-05_336_ih9 | | | | | | | | | | | | | | | |
| NEF-02_337_ih1 | | | | | | | | | | | | | | | |
| NEF-02_337_ih2 | | | | | | | | | | | | | | | |
| NEF-02_337_ih3 | | | | | | | | | | | | | | | |
| NEF-02_337_ih4 | | | | | | | | | | | | | | | |
| NEF-02_337_ih5 | | | | | | | | | | | | | | | |

*all elements are in wt. % (EMPA).

Appendix C: Eastern Sunda arc titanite trace element chemistry (EMPA)

| Analysis ID | Si | Ca | Ti | Na | Mg | Al | V | Cr | Mn | Fe | Sr | Y | Zr | F | O |
|-------------|--------|--------|--------|--------|--------|-------|-------|--------|--------|-------|--------|--------|--------|-------|--------|
| ELF-01_it1 | 14.489 | 20.903 | 19.775 | <0.007 | 0.003 | 2.316 | 0.096 | <0.005 | 0.008 | 0.375 | <0.005 | <0.006 | <0.006 | 1.425 | 39.686 |
| ELF-01_it10 | 14.424 | 21.050 | 18.391 | <0.007 | 0.044 | 3.167 | 0.088 | <0.004 | 0.007 | 0.314 | <0.005 | <0.006 | <0.006 | 2.371 | 39.116 |
| ELF-01_it11 | 14.493 | 20.948 | 18.877 | <0.007 | 0.006 | 2.865 | 0.088 | <0.005 | 0.012 | 0.397 | <0.005 | <0.006 | <0.006 | 1.888 | 39.411 |
| ELF-01_it12 | 14.667 | 20.797 | 19.988 | <0.007 | 0.060 | 2.302 | 0.117 | <0.004 | <0.005 | 0.306 | <0.005 | 0.008 | <0.006 | 1.435 | 40.001 |
| ELF-01_it13 | 14.383 | 20.774 | 20.142 | <0.007 | 0.009 | 2.000 | 0.200 | <0.005 | 0.013 | 0.477 | <0.005 | <0.006 | 0.007 | 1.414 | 39.569 |
| ELF-01_it14 | | | | | | | | | | | | | | | |
| ELF-01_it15 | | | | | | | | | | | | | | | |
| ELF-01_it16 | | | | | | | | | | | | | | | |
| ELF-01_it2 | 14.411 | 20.759 | 20.418 | <0.007 | <0.002 | 1.931 | 0.111 | <0.005 | <0.005 | 0.390 | <0.005 | <0.006 | <0.006 | 1.128 | 39.757 |
| ELF-01_it3 | 14.472 | 20.711 | 20.476 | <0.007 | 0.007 | 1.950 | 0.104 | <0.005 | 0.012 | 0.404 | <0.005 | 0.008 | <0.006 | 1.201 | 39.843 |
| ELF-01_it4 | 14.351 | 20.389 | 19.192 | <0.007 | 0.028 | 2.697 | 0.058 | <0.005 | 0.007 | 0.589 | <0.005 | 0.324 | <0.006 | 1.621 | 39.359 |
| ELF-01_it5 | 12.815 | 19.503 | 18.721 | <0.007 | 0.283 | 2.475 | 0.196 | <0.005 | 0.020 | 0.826 | 0.011 | 0.013 | <0.006 | 1.213 | 37.113 |
| ELF-01_it6 | 13.141 | 20.774 | 18.524 | <0.007 | <0.002 | 2.982 | 0.134 | <0.005 | 0.011 | 0.352 | <0.005 | 0.010 | <0.006 | 1.987 | 37.634 |
| ELF-01_it7 | 14.503 | 20.873 | 19.809 | <0.007 | 0.008 | 2.147 | 0.125 | <0.005 | <0.005 | 0.567 | <0.005 | <0.006 | 0.011 | 1.396 | 39.650 |
| ELF-01_it8 | 13.980 | 19.687 | 18.603 | <0.007 | 0.036 | 3.339 | 0.123 | <0.004 | 0.010 | 0.762 | 0.011 | 0.508 | <0.006 | 2.125 | 38.812 |
| ELF-01_it9 | 14.798 | 20.635 | 18.547 | 0.021 | 0.025 | 2.718 | 0.090 | 0.005 | 0.020 | 0.794 | <0.005 | <0.006 | <0.006 | 1.606 | 39.536 |
| LEB026_it1 | 13.115 | 20.738 | 20.596 | <0.007 | <0.002 | 1.787 | 0.102 | <0.004 | <0.005 | 0.738 | <0.005 | <0.006 | <0.006 | 0.629 | 38.578 |
| LEB026_it2 | 14.444 | 20.764 | 20.307 | <0.007 | <0.002 | 2.014 | 0.066 | <0.005 | 0.011 | 0.618 | <0.005 | <0.006 | <0.006 | 0.506 | 40.119 |
| LEB026_it3 | 13.560 | 20.286 | 21.973 | <0.007 | 0.005 | 0.464 | 0.117 | <0.005 | 0.053 | 1.347 | 0.013 | 0.057 | 0.159 | 0.220 | 39.106 |
| LEB026_it4 | 13.922 | 19.562 | 22.279 | <0.007 | 0.033 | 1.327 | 0.219 | <0.005 | 0.009 | 0.616 | <0.005 | 0.040 | 0.018 | 0.232 | 39.970 |
| LEB026_it5 | 14.216 | 20.278 | 21.671 | <0.007 | 0.007 | 0.554 | 0.137 | <0.005 | 0.044 | 1.553 | 0.007 | <0.006 | 0.362 | 0.059 | 39.920 |
| LEB026_it6 | | | | | | | | | | | | | | | |
| LEB026_it7 | | | | | | | | | | | | | | | |
| NAF-01_it1 | 13.784 | 20.545 | 21.756 | <0.007 | <0.002 | 1.007 | 0.070 | <0.005 | 0.051 | 0.786 | 0.006 | <0.006 | 0.015 | 0.287 | 39.500 |
| NAF-01_it10 | 14.502 | 20.793 | 19.887 | <0.007 | 0.010 | 2.141 | 0.089 | <0.005 | <0.005 | 0.722 | <0.005 | <0.006 | <0.006 | 1.201 | 39.778 |
| NAF-01_it11 | 14.551 | 20.687 | 19.870 | <0.007 | 0.097 | 2.024 | 0.147 | <0.005 | 0.015 | 0.757 | <0.005 | <0.006 | <0.006 | 0.994 | 39.855 |
| NAF-01_it12 | 14.606 | 20.852 | 18.431 | <0.007 | 0.026 | 2.905 | 0.153 | <0.004 | <0.005 | 0.813 | <0.005 | <0.006 | <0.006 | 1.682 | 39.499 |
| NAF-01_it13 | 14.247 | 20.580 | 20.300 | <0.007 | <0.002 | 1.573 | 0.150 | <0.005 | 0.027 | 1.056 | <0.005 | 0.117 | <0.006 | 0.484 | 39.640 |
| NAF-01_it14 | 14.220 | 20.246 | 21.141 | <0.007 | <0.002 | 1.118 | 0.151 | <0.005 | 0.046 | 1.144 | <0.005 | 0.213 | <0.006 | 0.079 | 39.891 |
| NAF-01_it15 | 14.414 | 20.676 | 21.517 | <0.007 | <0.002 | 1.199 | 0.176 | 0.007 | 0.009 | 0.622 | <0.005 | 0.011 | <0.006 | 0.315 | 40.272 |
| NAF-01_it16 | 14.309 | 20.728 | 21.269 | <0.007 | <0.002 | 1.318 | 0.186 | 0.016 | 0.014 | 0.735 | 0.011 | 0.009 | <0.006 | 0.351 | 40.128 |
| NAF-01_it17 | 14.635 | 21.039 | 18.014 | <0.007 | 0.004 | 3.206 | 0.093 | <0.005 | <0.005 | 0.857 | <0.005 | <0.007 | <0.006 | 1.774 | 39.523 |
| NAF-01_it18 | 14.449 | 20.850 | 19.875 | <0.007 | 0.003 | 2.113 | 0.151 | <0.005 | 0.007 | 0.997 | <0.005 | <0.006 | <0.006 | 0.776 | 39.973 |
| NAF-01_it19 | 13.449 | 20.626 | 20.562 | 0.010 | 0.003 | 1.624 | 0.172 | <0.005 | 0.013 | 0.900 | <0.005 | <0.006 | <0.006 | 0.561 | 38.860 |
| NAF-01_it2 | 14.468 | 20.734 | 20.186 | <0.007 | <0.002 | 1.722 | 0.320 | <0.005 | 0.026 | 0.726 | <0.005 | <0.007 | <0.006 | 0.826 | 39.816 |
| NAF-01_it20 | 14.407 | 20.518 | 20.705 | <0.007 | 0.003 | 1.477 | 0.051 | <0.005 | 0.066 | 1.067 | <0.006 | 0.057 | <0.006 | 0.315 | 40.002 |
| NAF-01_it21 | 14.501 | 20.790 | 19.598 | <0.007 | 0.011 | 2.236 | 0.166 | <0.005 | 0.005 | 0.813 | <0.006 | <0.007 | <0.006 | 1.281 | 39.690 |
| NAF-01_it22 | 14.469 | 20.796 | 19.566 | <0.007 | 0.005 | 1.998 | 0.344 | <0.005 | 0.020 | 1.211 | <0.005 | <0.007 | <0.006 | 0.758 | 39.843 |
| NAF-01_it23 | 13.698 | 18.902 | 20.915 | <0.007 | 0.233 | 1.066 | 0.326 | <0.005 | 0.022 | 0.872 | 0.006 | 1.483 | <0.006 | 0.074 | 39.144 |
| NAF-01_it24 | 14.506 | 20.738 | 19.939 | <0.007 | <0.002 | 1.856 | 0.019 | <0.005 | 0.013 | 1.230 | 0.007 | <0.006 | <0.006 | 0.341 | 39.994 |
| NAF-01_it25 | 14.468 | 20.793 | 19.662 | <0.007 | 0.005 | 2.116 | 0.305 | 0.009 | 0.007 | 0.824 | <0.005 | <0.007 | <0.006 | 1.344 | 39.635 |
| NAF-01_it26 | 14.536 | 20.634 | 19.568 | <0.007 | 0.005 | 2.059 | 0.147 | 0.007 | 0.012 | 1.040 | <0.005 | <0.006 | <0.006 | 1.061 | 39.663 |
| NAF-01_it27 | 14.431 | 20.783 | 20.568 | <0.007 | <0.002 | 1.881 | 0.035 | <0.005 | 0.007 | 0.636 | <0.005 | <0.006 | <0.006 | 1.117 | 39.900 |
| NAF-01_it28 | 14.428 | 20.679 | 19.514 | <0.007 | 0.043 | 2.021 | 0.270 | 0.006 | 0.007 | 1.011 | <0.006 | <0.007 | 0.012 | 1.325 | 39.440 |
| NAF-01_it29 | 14.391 | 20.523 | 21.658 | <0.007 | 0.023 | 1.120 | 0.181 | 0.013 | 0.024 | 0.499 | <0.005 | 0.032 | <0.006 | 0.327 | 40.197 |
| NAF-01_it3 | 14.360 | 19.258 | 20.311 | <0.007 | 0.453 | 1.303 | 0.490 | 0.011 | 0.039 | 1.304 | <0.005 | 0.263 | <0.006 | 0.170 | 39.725 |
| NAF-01_it30 | 14.378 | 20.667 | 21.212 | <0.007 | <0.002 | 1.280 | 0.011 | <0.005 | 0.018 | 0.922 | <0.005 | <0.006 | <0.006 | 0.302 | 40.096 |
| NAF-01_it31 | 14.354 | 20.767 | 21.247 | <0.007 | <0.002 | 1.230 | 0.312 | 0.035 | 0.027 | 0.534 | <0.005 | <0.006 | <0.006 | 0.616 | 40.005 |
| NAF-01_it32 | 14.443 | 20.803 | 20.174 | <0.007 | <0.002 | 2.101 | 0.108 | <0.005 | 0.006 | 0.613 | <0.005 | <0.006 | <0.006 | 0.911 | 39.954 |
| NAF-01_it33 | 14.457 | 20.848 | 18.970 | <0.007 | 0.003 | 2.454 | 0.140 | <0.004 | <0.005 | 1.049 | 0.007 | <0.006 | <0.006 | 1.355 | 39.459 |

*all elements are in wt. % (EMPA).

Appendix C: Eastern Sunda arc titanite trace element chemistry (EMPA)

| Analysis ID | Si | Ca | Ti | Na | Mg | Al | V | Cr | Mn | Fe | Sr | Y | Zr | F | O |
|--------------|--------|--------|--------|--------|--------|-------|-------|--------|--------|-------|--------|--------|--------|--------|--------|
| NAF-01_it34 | 13.010 | 19.865 | 23.103 | <0.007 | <0.002 | 0.303 | 0.035 | <0.005 | 0.048 | 0.472 | <0.006 | 0.232 | 0.009 | 0.058 | 38.783 |
| NAF-01_it4 | 14.505 | 21.019 | 18.643 | <0.007 | <0.002 | 2.963 | 0.104 | <0.005 | <0.005 | 0.460 | <0.005 | <0.006 | <0.006 | 1.800 | 39.453 |
| NAF-01_it5 | 14.402 | 20.689 | 20.062 | <0.007 | 0.011 | 1.852 | 0.364 | 0.022 | 0.028 | 0.760 | 0.007 | <0.006 | 0.010 | 0.766 | 39.815 |
| NAF-01_it6 | 13.494 | 20.044 | 22.730 | <0.008 | <0.002 | 0.495 | 0.034 | <0.005 | 0.096 | 0.621 | <0.005 | 0.114 | 0.011 | 0.050 | 39.321 |
| NAF-01_it7 | 14.508 | 20.739 | 19.570 | <0.007 | 0.017 | 2.214 | 0.205 | 0.009 | <0.005 | 0.938 | <0.005 | <0.007 | 0.010 | 1.295 | 39.697 |
| NAF-01_it8 | 13.629 | 20.734 | 20.443 | <0.007 | 0.005 | 1.727 | 0.206 | <0.005 | 0.010 | 0.719 | <0.005 | <0.006 | <0.006 | 0.815 | 38.974 |
| NAF-01_it9 | 14.313 | 20.421 | 22.888 | <0.007 | <0.002 | 0.427 | 0.024 | <0.005 | 0.069 | 0.738 | 0.007 | 0.066 | 0.025 | <0.028 | 40.428 |
| SLG-02_it1 | 13.661 | 20.492 | 22.434 | <0.007 | <0.002 | 0.711 | 0.056 | <0.005 | 0.014 | 0.549 | <0.005 | 0.007 | 0.030 | <0.028 | 39.570 |
| SLG-02_it10 | 14.482 | 20.657 | 20.716 | <0.007 | 0.014 | 1.525 | 0.055 | 0.006 | 0.013 | 1.220 | <0.005 | <0.006 | <0.006 | 0.160 | 40.273 |
| SLG-02_it11 | 14.316 | 20.625 | 20.891 | <0.007 | <0.002 | 1.040 | 0.031 | <0.005 | 0.014 | 1.661 | <0.006 | <0.007 | 0.010 | 0.101 | 39.876 |
| SLG-02_it12 | 14.429 | 20.663 | 21.374 | <0.007 | <0.002 | 1.235 | 0.127 | 0.032 | 0.014 | 0.877 | 0.007 | <0.006 | 0.013 | 0.150 | 40.347 |
| SLG-02_it13 | 14.445 | 20.697 | 21.860 | <0.007 | <0.002 | 1.020 | 0.061 | <0.005 | 0.009 | 1.025 | <0.005 | <0.006 | 0.013 | 0.072 | 40.537 |
| SLG-02_it14 | 14.355 | 20.610 | 22.089 | <0.007 | <0.002 | 0.726 | 0.088 | <0.005 | 0.008 | 0.985 | <0.005 | <0.006 | <0.006 | <0.026 | 40.311 |
| SLG-02_it15 | | | | | | | | | | | | | | | |
| SLG-02_it16 | | | | | | | | | | | | | | | |
| SLG-02_it17 | | | | | | | | | | | | | | | |
| SLG-02_it18 | 13.547 | 20.488 | 21.493 | <0.007 | <0.002 | 1.011 | 0.102 | <0.005 | 0.018 | 1.011 | <0.005 | <0.006 | 0.007 | 0.027 | 39.212 |
| SLG-02_it2 | 14.352 | 20.641 | 21.203 | <0.007 | <0.002 | 1.177 | 0.113 | <0.005 | 0.025 | 1.130 | <0.005 | 0.013 | <0.006 | 0.051 | 40.192 |
| SLG-02_it3 | 14.357 | 20.493 | 21.171 | <0.007 | <0.002 | 1.188 | 0.218 | <0.005 | 0.033 | 1.043 | <0.005 | 0.036 | 0.008 | 0.054 | 40.150 |
| SLG-02_it4 | 14.351 | 20.703 | 21.982 | <0.007 | <0.002 | 0.897 | 0.136 | <0.005 | 0.020 | 0.741 | 0.009 | 0.025 | 0.008 | 0.080 | 40.369 |
| SLG-02_it5 | 14.624 | 20.286 | 21.214 | <0.007 | 0.041 | 1.307 | 0.154 | <0.005 | 0.011 | 0.602 | <0.005 | <0.006 | 0.013 | 0.282 | 40.259 |
| SLG-02_it7 | 14.359 | 20.550 | 22.403 | <0.007 | <0.002 | 0.672 | 0.023 | <0.004 | 0.015 | 0.708 | <0.005 | 0.013 | <0.006 | <0.025 | 40.364 |
| SLG-02_it8 | 14.280 | 20.621 | 21.102 | <0.007 | 0.003 | 1.344 | 0.087 | 0.005 | 0.022 | 0.916 | <0.005 | <0.006 | 0.012 | 0.043 | 40.095 |
| SLG-02_it9 | 14.320 | 20.612 | 21.647 | <0.007 | <0.002 | 0.959 | 0.113 | <0.005 | 0.028 | 0.966 | <0.005 | 0.014 | 0.020 | 0.042 | 40.203 |
| SING-01_it_1 | 14.371 | 20.400 | 21.328 | <0.007 | 0.006 | 0.824 | 0.139 | <0.005 | 0.017 | 0.824 | <0.005 | 0.034 | 0.007 | 0.555 | 39.911 |
| SING-01_it_2 | 14.358 | 20.692 | 20.724 | <0.007 | 0.015 | 1.427 | 0.233 | <0.005 | 0.030 | 1.072 | <0.005 | <0.007 | <0.006 | 1.025 | 39.743 |
| SING-01_it_3 | 14.322 | 17.096 | 18.709 | <0.007 | 1.252 | 1.591 | 0.090 | <0.005 | 0.049 | 3.035 | <0.005 | 0.068 | 0.016 | 0.209 | 38.795 |
| SING-01_it_4 | 14.515 | 20.594 | 21.818 | <0.007 | <0.002 | 1.091 | 0.096 | <0.005 | 0.011 | 0.643 | <0.005 | <0.006 | <0.006 | 0.426 | 40.361 |
| SING-02_it_1 | 14.794 | 21.211 | 12.920 | <0.007 | 0.028 | 6.422 | 0.156 | <0.004 | 0.074 | 0.188 | <0.005 | <0.006 | <0.006 | 4.831 | 37.809 |
| SING-02_it_2 | 15.022 | 20.898 | 15.576 | 0.021 | 0.030 | 4.696 | 0.186 | <0.005 | 0.028 | 0.136 | <0.005 | 0.071 | <0.006 | 3.430 | 38.799 |
| SING-02_it_3 | 14.831 | 21.396 | 14.233 | <0.007 | 0.010 | 5.709 | 0.111 | <0.004 | 0.025 | 0.136 | <0.005 | 0.062 | <0.006 | 4.294 | 38.346 |
| SING-02_it_4 | 15.022 | 21.146 | 14.323 | 0.016 | 0.030 | 5.473 | 0.182 | 0.019 | 0.024 | 0.143 | 0.008 | 0.076 | <0.006 | 4.084 | 38.475 |
| SING-02_it_5 | 15.031 | 21.245 | 11.938 | <0.007 | 0.019 | 6.964 | 0.145 | <0.004 | 0.006 | 0.077 | <0.005 | <0.006 | <0.006 | 5.085 | 37.744 |
| SING-02_it_6 | 15.005 | 19.704 | 13.177 | 0.010 | 0.243 | 6.293 | 0.162 | <0.004 | 0.108 | 0.252 | <0.005 | 0.146 | <0.006 | 4.502 | 37.864 |
| SING-02_it_7 | 14.828 | 21.207 | 13.320 | <0.007 | 0.052 | 6.108 | 0.187 | <0.005 | 0.140 | 0.139 | <0.005 | 0.023 | <0.006 | 4.520 | 38.010 |
| SING-02_it_8 | | | | | | | | | | | | | | | |
| SING-02_it_9 | | | | | | | | | | | | | | | |
| SLG-03_it_1 | 14.250 | 20.554 | 21.180 | <0.007 | 0.054 | 0.928 | 0.204 | 0.010 | 0.048 | 1.415 | <0.005 | 0.014 | 0.023 | 0.248 | 39.888 |
| SLG-03_it_10 | | | | | | | | | | | | | | | |
| SLG-03_it_11 | | | | | | | | | | | | | | | |
| SLG-03_it_12 | | | | | | | | | | | | | | | |
| SLG-03_it_2 | 14.112 | 20.073 | 21.079 | <0.007 | 0.017 | 0.990 | 0.186 | <0.005 | 0.058 | 2.127 | <0.005 | 0.011 | <0.006 | 0.280 | 39.674 |
| SLG-03_it_3 | 14.202 | 20.370 | 21.510 | <0.007 | 0.009 | 0.854 | 0.132 | 0.011 | 0.043 | 1.215 | <0.005 | <0.006 | 0.044 | 0.199 | 39.810 |
| SLG-03_it_4 | 14.400 | 20.625 | 22.764 | <0.007 | <0.002 | 0.581 | 0.107 | <0.005 | 0.021 | 0.513 | <0.006 | <0.006 | 0.027 | <0.026 | 40.579 |
| SLG-03_it_5 | 14.196 | 20.190 | 21.851 | 0.012 | 0.006 | 0.862 | 0.156 | <0.005 | 0.034 | 0.744 | <0.005 | 0.307 | 0.050 | 0.120 | 40.061 |
| SLG-03_it_6 | 14.366 | 19.080 | 19.129 | 0.017 | 0.275 | 1.833 | 0.259 | 0.006 | 0.100 | 2.279 | <0.006 | <0.006 | 0.012 | 0.421 | 39.225 |
| SLG-03_it_7 | 14.515 | 20.581 | 21.775 | <0.007 | 0.052 | 1.037 | 0.196 | <0.005 | 0.019 | 0.711 | <0.005 | 0.025 | 0.022 | 0.151 | 40.516 |
| SLG-03_it_8 | 14.376 | 20.033 | 20.231 | 0.009 | 0.107 | 1.366 | 0.247 | <0.005 | 0.076 | 1.892 | <0.005 | <0.006 | 0.011 | 0.408 | 39.698 |
| SLG-03_it_9 | 14.472 | 20.598 | 22.639 | 0.011 | 0.008 | 0.635 | 0.143 | <0.005 | 0.014 | 0.524 | <0.005 | <0.006 | 0.022 | 0.048 | 40.621 |

*all elements are in wt. % (EMPA).

Appendix C: Eastern Sunda arc titanite trace element chemistry (EMPA)

| Analysis ID | Si | Ca | Ti | Na | Mg | Al | V | Cr | Mn | Fe | Sr | Y | Zr | F | O |
|-------------|--------|--------|--------|--------|--------|-------|-------|--------|--------|-------|--------|--------|--------|-------|--------|
| BHF-02_017 | 14.211 | 20.067 | 21.259 | <0.007 | 0.010 | 0.999 | 0.091 | <0.005 | 0.209 | 2.029 | <0.005 | <0.007 | <0.006 | 0.453 | 39.797 |
| BHF-02_018 | 14.491 | 20.483 | 20.546 | <0.007 | 0.009 | 1.831 | 0.073 | <0.005 | 0.079 | 0.671 | <0.005 | <0.007 | <0.006 | 1.345 | 39.778 |
| BHF-02_019 | 14.527 | 20.491 | 21.759 | <0.007 | <0.002 | 0.885 | 0.062 | <0.005 | 0.069 | 1.086 | <0.005 | <0.007 | <0.006 | 0.292 | 40.297 |
| BHF-02_020 | 13.566 | 19.527 | 20.582 | <0.007 | 0.013 | 1.294 | 0.056 | <0.005 | 0.058 | 3.772 | <0.006 | <0.007 | <0.006 | 0.737 | 38.982 |
| BHF-02_021 | 14.512 | 20.486 | 20.884 | <0.007 | 0.004 | 1.549 | 0.085 | <0.005 | 0.045 | 0.718 | 0.007 | <0.006 | <0.006 | 0.658 | 39.947 |
| BHF-02_022 | 14.571 | 20.524 | 20.170 | <0.007 | 0.017 | 1.839 | 0.083 | <0.005 | 0.077 | 0.911 | <0.005 | 0.016 | 0.010 | 1.119 | 39.792 |
| BHF-02_023 | 14.526 | 20.626 | 21.440 | <0.007 | <0.002 | 1.158 | 0.107 | <0.005 | 0.037 | 0.756 | <0.005 | 0.054 | <0.006 | 0.441 | 40.252 |
| BHF-02_024 | 14.595 | 20.514 | 21.838 | 0.010 | 0.008 | 1.002 | 0.091 | <0.005 | 0.038 | 0.719 | 0.010 | <0.006 | <0.006 | 0.412 | 40.407 |
| BHF-02_025 | 14.435 | 20.532 | 21.527 | <0.007 | <0.002 | 1.382 | 0.076 | <0.005 | 0.040 | 0.716 | <0.005 | <0.006 | <0.006 | 0.850 | 40.159 |
| BHF-02_026 | 14.459 | 20.456 | 22.206 | <0.007 | 0.017 | 0.758 | 0.047 | <0.005 | 0.056 | 0.744 | <0.006 | <0.007 | <0.006 | 0.449 | 40.241 |
| BHF-02_027 | 14.433 | 20.475 | 21.718 | <0.007 | 0.004 | 1.084 | 0.062 | <0.005 | 0.030 | 0.830 | <0.005 | <0.007 | <0.006 | 0.562 | 40.146 |
| BHF-02_028 | 14.374 | 20.441 | 21.165 | <0.007 | 0.006 | 0.984 | 0.148 | 0.005 | 0.102 | 1.589 | <0.005 | <0.006 | <0.006 | 0.444 | 39.936 |
| BHF-02_029 | 14.421 | 20.500 | 20.852 | <0.007 | 0.006 | 1.501 | 0.062 | <0.005 | 0.039 | 1.211 | <0.005 | <0.007 | <0.006 | 0.900 | 39.896 |
| BHF-02_030 | 14.476 | 20.476 | 21.138 | <0.007 | 0.006 | 1.395 | 0.116 | <0.005 | 0.035 | 0.769 | <0.005 | <0.006 | <0.006 | 0.897 | 39.953 |
| BHF-02_031 | 14.427 | 20.517 | 22.400 | <0.007 | <0.002 | 0.726 | 0.023 | <0.005 | 0.028 | 0.415 | <0.005 | <0.006 | 0.009 | 0.399 | 40.221 |
| JER-01_011 | 11.968 | 16.758 | 25.490 | 0.015 | 0.029 | 2.559 | 0.216 | 0.010 | 0.022 | 0.400 | <0.005 | 0.208 | 0.028 | 1.409 | 39.374 |
| JER-01_012 | 14.167 | 19.797 | 21.868 | <0.007 | 0.052 | 1.920 | 0.052 | <0.005 | 0.020 | 0.190 | <0.006 | <0.007 | 0.042 | 0.305 | 40.383 |
| JER-01_013 | 14.567 | 20.238 | 20.219 | <0.007 | <0.002 | 1.922 | 0.089 | 0.010 | 0.014 | 0.203 | 0.011 | 0.008 | 0.020 | 0.842 | 39.652 |
| JER-01_014 | 13.792 | 21.778 | 19.103 | 0.010 | 0.008 | 2.127 | 0.090 | <0.005 | 0.017 | 0.207 | 0.007 | 0.024 | 0.024 | 1.232 | 38.667 |
| JER-01_015 | 14.714 | 20.658 | 20.356 | <0.007 | <0.002 | 2.135 | 0.078 | 0.012 | 0.016 | 0.220 | <0.005 | <0.006 | 0.024 | 0.973 | 40.223 |
| JER-01_016 | 14.515 | 20.869 | 19.872 | <0.007 | 0.044 | 2.261 | 0.072 | 0.010 | 0.015 | 0.274 | <0.005 | <0.006 | 0.022 | 1.066 | 39.870 |
| JER-01_017 | 14.600 | 20.278 | 20.490 | <0.007 | 0.022 | 2.256 | 0.118 | 0.007 | 0.011 | 0.418 | <0.005 | <0.006 | 0.018 | 0.719 | 40.329 |
| JER-01_018 | 14.232 | 19.665 | 20.850 | 0.009 | 0.254 | 2.567 | 0.130 | 0.006 | 0.020 | 0.543 | 0.011 | 0.020 | 0.028 | 1.179 | 40.194 |
| JER-01_019 | 14.686 | 20.617 | 20.500 | <0.007 | 0.003 | 2.291 | 0.042 | <0.005 | 0.012 | 0.222 | <0.005 | 0.025 | 0.031 | 1.065 | 40.358 |
| JER-01_020 | 14.544 | 20.057 | 20.494 | 0.009 | <0.002 | 1.699 | 0.062 | 0.019 | 0.017 | 0.181 | <0.005 | <0.007 | 0.032 | 0.711 | 39.591 |
| JER-01_021 | 14.494 | 20.188 | 21.053 | 0.009 | <0.002 | 1.740 | 0.058 | 0.007 | 0.010 | 0.197 | <0.005 | <0.006 | 0.022 | 0.779 | 39.961 |
| JER-01_022 | 12.363 | 17.217 | 26.304 | <0.007 | <0.002 | 2.115 | 0.140 | 0.008 | 0.015 | 0.231 | <0.005 | 0.011 | 0.030 | 1.197 | 40.072 |
| JER-01_023 | 11.018 | 15.638 | 28.441 | <0.007 | 0.063 | 2.323 | 0.174 | <0.005 | 0.021 | 0.367 | 0.013 | 0.007 | 0.022 | 0.654 | 39.840 |
| JER-01_024 | 14.634 | 20.733 | 20.156 | <0.007 | 0.018 | 2.245 | 0.062 | 0.009 | 0.013 | 0.243 | <0.005 | <0.006 | 0.023 | 0.985 | 40.128 |
| JER-01_025 | 14.713 | 20.793 | 19.972 | <0.007 | 0.003 | 2.440 | 0.051 | <0.005 | 0.010 | 0.224 | <0.005 | <0.007 | 0.009 | 1.218 | 40.162 |
| JER-01_026 | 14.534 | 20.412 | 19.937 | <0.007 | 0.005 | 2.482 | 0.062 | <0.005 | 0.015 | 0.267 | 0.007 | <0.006 | 0.027 | 1.258 | 39.832 |
| JER-01_027 | 14.712 | 20.481 | 20.712 | <0.007 | <0.002 | 1.902 | 0.071 | <0.005 | 0.016 | 0.171 | <0.005 | 0.009 | 0.026 | 0.827 | 40.226 |
| LB018_011 | 14.307 | 20.558 | 18.872 | <0.007 | <0.002 | 0.139 | 0.059 | <0.004 | 0.009 | 0.045 | <0.004 | 0.011 | 0.007 | 0.106 | 37.236 |
| LB018_012 | 14.651 | 20.756 | 18.879 | <0.007 | 0.005 | 3.034 | 0.035 | <0.005 | 0.022 | 0.334 | <0.005 | <0.006 | 0.008 | 2.472 | 39.377 |
| LB018_013 | | | | | | | | | | | | | | | |
| LB018_014 | | | | | | | | | | | | | | | |
| LB018_015 | | | | | | | | | | | | | | | |
| LB022_011 | 14.488 | 20.111 | 19.582 | 0.022 | 0.004 | 1.318 | 0.289 | <0.005 | <0.005 | 1.816 | <0.005 | 0.115 | 0.302 | 0.698 | 39.438 |
| LB022_012 | | | | | | | | | | | | | | | |
| LB029_011 | 14.622 | 20.345 | 19.824 | 0.017 | 0.013 | 1.355 | 0.116 | <0.005 | 0.071 | 1.896 | 0.012 | 0.014 | 0.034 | 0.707 | 39.612 |
| LB029_012 | 13.787 | 19.157 | 18.939 | <0.007 | 0.005 | 1.312 | 0.193 | <0.005 | 0.030 | 1.718 | <0.005 | 0.286 | 0.033 | 0.823 | 37.614 |
| LB036_011 | 14.275 | 19.923 | 22.419 | <0.007 | 0.007 | 0.292 | 0.052 | <0.005 | 0.134 | 1.140 | <0.005 | 0.044 | 0.233 | 0.222 | 39.921 |
| LB036_012 | 14.143 | 19.576 | 22.637 | 0.013 | 0.020 | 0.304 | 0.054 | <0.005 | 0.144 | 0.847 | <0.006 | 0.299 | 0.101 | 0.137 | 39.822 |

***all elements are in wt. % (EMPA).**

Appendix C: Eastern Sunda arc titanite trace element chemistry (LA-ICP-MS)

| Analysis ID | Al | Ca | Ce | Dy | Er | Eu | Gd | Hf | Ho | La | Lu | Mn | Nb | Nd |
|----------------|----------|-----------|---------|--------|--------|--------|--------|--------|--------|---------|-------|---------|---------|---------|
| LB014_322_II1 | 2739.90 | 207261.64 | 1778.49 | 218.19 | 133.12 | 54.27 | 239.89 | 98.02 | 43.74 | 606.35 | 15.24 | 1390.94 | 502.90 | 1090.62 |
| LB014_322_II10 | 2759.56 | 207348.36 | 2967.04 | 352.07 | 205.58 | 81.27 | 404.85 | 46.99 | 70.23 | 1058.07 | 21.83 | 1125.79 | 407.96 | 1773.17 |
| LB014_322_II11 | 3622.00 | 200480.86 | 6443.14 | 806.13 | 448.01 | 202.87 | 925.36 | 29.63 | 155.53 | 1530.99 | 44.91 | 1293.11 | 937.29 | 4431.35 |
| LB014_322_II12 | 3407.73 | 207096.23 | 3014.09 | 405.17 | 232.38 | 104.76 | 447.50 | 77.68 | 80.16 | 1470.07 | 25.21 | 1470.07 | 791.84 | 2012.25 |
| LB014_322_II13 | 2302.82 | 202589.73 | 2534.86 | 301.12 | 184.35 | 88.54 | 310.49 | 78.61 | 59.85 | 875.16 | 21.74 | 1520.37 | 680.08 | 1449.10 |
| LB014_322_II14 | 3016.96 | 202588.41 | 5235.02 | 529.47 | 284.71 | 118.54 | 648.41 | 64.51 | 100.07 | 1686.76 | 25.38 | 1439.56 | 1459.00 | 3184.92 |
| LB014_322_II15 | 2617.85 | 206137.34 | 3745.43 | 267.47 | 160.83 | 130.21 | 329.20 | 42.87 | 54.02 | 1181.31 | 20.75 | 1514.38 | 446.51 | 1983.89 |
| LB014_322_II16 | 11163.02 | 210456.63 | 193.75 | 7.75 | 5.17 | 44.69 | 10.19 | 2.26 | 1.64 | 167.33 | 1.52 | 510.08 | 43.89 | 56.70 |
| LB014_322_II17 | 3554.34 | 207346.58 | 1650.25 | 225.76 | 136.43 | 66.65 | 235.63 | 103.50 | 45.29 | 581.09 | 18.27 | 1237.72 | 183.38 | 992.36 |
| LB014_322_II18 | 3048.86 | 210186.89 | 2098.65 | 303.66 | 170.09 | 86.08 | 319.54 | 32.77 | 58.51 | 594.85 | 19.74 | 1385.06 | 297.70 | 1451.03 |
| LB014_322_II2 | 6776.88 | 204529.19 | 5081.64 | 486.34 | 287.31 | 194.51 | 595.43 | 50.62 | 96.99 | 1200.98 | 32.95 | 986.23 | 477.43 | 3156.66 |
| LB014_322_II20 | 3041.96 | 211091.81 | 1527.23 | 229.72 | 133.38 | 60.01 | 249.90 | 25.60 | 45.24 | 431.58 | 14.36 | 1360.84 | 176.75 | 1087.28 |
| LB014_322_II21 | 3080.13 | 200519.53 | 7514.32 | 747.85 | 451.46 | 75.62 | 830.77 | 179.67 | 149.50 | 2001.06 | 53.16 | 1738.46 | 3213.37 | 4386.97 |
| LB014_322_II22 | 2784.80 | 212287.47 | 233.24 | 28.72 | 23.80 | 12.75 | 26.17 | 66.10 | 6.29 | 98.20 | 6.24 | 1524.54 | 317.14 | 114.62 |
| LB014_322_II23 | 2977.45 | 206250.32 | 4118.72 | 432.63 | 237.97 | 91.89 | 517.43 | 85.47 | 82.60 | 1361.49 | 21.87 | 1285.16 | 490.70 | 2501.84 |
| LB014_322_II3 | 2918.31 | 208400.94 | 1937.11 | 189.30 | 114.25 | 63.36 | 212.16 | 70.77 | 38.29 | 718.84 | 14.71 | 1298.52 | 332.24 | 1047.85 |
| LB014_322_II4 | 3001.02 | 210011.55 | 242.93 | 21.01 | 14.40 | 4.56 | 23.77 | 10.25 | 4.48 | 105.08 | 2.39 | 1567.83 | 18.36 | 117.63 |
| LB014_322_II5 | 3059.49 | 206912.95 | 2885.09 | 280.06 | 167.55 | 98.46 | 331.86 | 41.35 | 56.19 | 898.89 | 19.42 | 1462.33 | 389.52 | 1671.56 |
| LB014_322_II6 | 2469.22 | 210794.23 | 1036.75 | 135.06 | 85.02 | 42.23 | 144.61 | 38.13 | 27.83 | 416.06 | 12.72 | 1426.27 | 151.53 | 604.70 |
| LB014_322_II7 | 3144.85 | 206079.60 | 3000.43 | 289.69 | 174.64 | 84.53 | 327.03 | 106.36 | 57.75 | 1117.23 | 19.56 | 1401.59 | 667.10 | 1575.51 |
| LB014_322_II8 | 14001.39 | 215341.07 | 41.97 | 0.53 | 0.38 | 9.27 | 0.64 | 1.76 | 0.09 | 136.21 | 0.14 | 136.21 | 94.10 | 5.42 |
| LB014_322_II9 | 9396.91 | 213510.95 | 655.79 | 18.78 | 13.04 | 85.30 | 24.19 | 1.48 | 4.03 | 352.52 | 4.08 | 397.63 | 202.26 | 191.24 |
| LB025_323_II1 | 60354.07 | 212394.45 | 52.12 | 26.43 | 14.79 | 10.31 | 19.71 | 18.39 | 4.84 | 10.08 | 2.14 | 390.38 | 60.56 | 58.80 |
| LB025_323_II10 | 52986.92 | 229145.09 | 65.47 | 26.47 | 14.67 | 8.46 | 29.12 | 19.77 | 5.29 | 17.83 | 1.56 | 414.91 | 83.49 | 74.45 |
| LB025_323_II11 | 54353.77 | 219439.19 | 57.21 | 16.00 | 9.65 | 8.35 | 16.09 | 10.33 | 3.08 | 10.22 | 1.31 | 417.84 | 99.05 | 54.79 |
| LB025_323_II12 | 26440.04 | 166925.76 | 23.98 | 14.98 | 8.25 | 6.02 | 15.20 | 16.49 | 2.98 | 3.36 | 1.24 | 2935.88 | 80.47 | 38.60 |
| LB025_323_II2 | 57197.03 | 216969.54 | 31.00 | 30.46 | 17.85 | 8.85 | 22.68 | 15.76 | 5.71 | 6.91 | 2.33 | 227.59 | 84.42 | 43.03 |
| LB025_323_II3 | 82057.14 | 168032.72 | 7.35 | 25.23 | 14.75 | 4.27 | 14.75 | 9.13 | 5.34 | 1.65 | 2.54 | 1473.41 | 10.80 | 10.80 |
| LB025_323_II4 | 57098.78 | 220446.36 | 99.15 | 30.56 | 22.71 | 6.44 | 22.52 | 6.43 | 6.65 | 28.90 | 3.94 | 183.86 | 108.90 | 62.42 |
| LB025_323_II5 | 53842.21 | 217939.60 | 51.48 | 24.27 | 13.19 | 7.71 | 20.44 | 8.15 | 4.58 | 11.53 | 1.55 | 206.49 | 100.00 | 52.60 |
| LB025_323_II6 | 73469.60 | 212102.12 | 21.48 | 2.83 | 1.47 | 2.31 | 3.41 | 12.43 | 0.51 | 9.61 | 0.24 | 1679.07 | 59.82 | 12.35 |
| LB025_323_II7 | 9791.89 | 197382.95 | 22.87 | 19.96 | 10.71 | 4.35 | 22.28 | 13.53 | 3.22 | 7.84 | 0.96 | 2781.84 | 90.59 | 28.62 |
| LB025_323_II8 | 56410.47 | 222649.57 | 31.02 | 33.91 | 22.70 | 8.84 | 21.13 | 4.76 | 6.74 | 7.02 | 3.37 | 176.09 | 81.06 | 39.22 |
| LB025_323_II9 | 32901.31 | 215279.50 | 96.67 | 32.72 | 20.82 | 9.12 | 34.08 | 8.31 | 6.92 | 15.89 | 2.96 | 569.32 | 95.67 | 103.17 |
| LB037_329_II1 | 3616.75 | 211863.35 | 403.42 | 19.76 | 13.98 | 16.28 | 21.04 | 11.48 | 4.20 | 265.38 | 2.79 | 1359.95 | 126.15 | 140.74 |
| LB037_329_II10 | 2074.57 | 208316.83 | 1381.67 | 504.64 | 291.10 | 83.27 | 473.95 | 58.10 | 100.93 | 404.05 | 24.29 | 1267.88 | 853.86 | 1220.32 |
| LB037_329_II11 | 3824.79 | 210053.51 | 994.02 | 164.59 | 101.20 | 34.90 | 177.24 | 34.28 | 33.46 | 383.78 | 12.15 | 1106.19 | 261.94 | 624.83 |
| LB037_329_II12 | 4163.16 | 213321.95 | 384.02 | 35.84 | 21.44 | 13.36 | 40.75 | 6.59 | 7.31 | 208.95 | 3.33 | 884.07 | 146.78 | 194.11 |
| LB037_329_II13 | 2788.04 | 202586.70 | 3384.95 | 836.12 | 510.15 | 171.99 | 828.12 | 66.88 | 169.71 | 857.19 | 53.77 | 1424.04 | 788.94 | 2699.10 |
| LB037_329_II14 | 2406.99 | 209714.86 | 950.04 | 292.02 | 172.44 | 54.41 | 271.51 | 30.94 | 58.23 | 307.01 | 17.84 | 1513.10 | 316.76 | 757.24 |
| LB037_329_II15 | 3580.15 | 211489.78 | 967.70 | 54.85 | 35.42 | 38.21 | 59.34 | 15.86 | 11.24 | 511.11 | 4.63 | 1234.08 | 613.43 | 344.46 |
| LB037_329_II16 | 2597.31 | 210395.47 | 910.79 | 281.04 | 162.29 | 80.38 | 274.98 | 43.95 | 56.07 | 278.94 | 15.81 | 1444.96 | 162.13 | 774.08 |
| LB037_329_II17 | 3193.90 | 211970.26 | 282.88 | 59.31 | 45.02 | 31.98 | 51.07 | 55.50 | 13.65 | 115.93 | 7.65 | 1167.96 | 209.24 | 164.36 |
| LB037_329_II18 | 2248.15 | 210061.19 | 798.20 | 122.87 | 73.38 | 66.47 | 137.11 | 38.62 | 25.26 | 274.12 | 9.00 | 1488.23 | 204.99 | 513.30 |
| LB037_329_II19 | 2271.13 | 210602.10 | 1399.45 | 246.14 | 149.39 | 68.47 | 244.86 | 46.76 | 33.49 | 533.96 | 16.07 | 1003.82 | 66.07 | 897.09 |
| LB037_329_II2 | 2292.98 | 209685.36 | 1419.71 | 161.28 | 100.89 | 74.42 | 175.96 | 57.92 | 33.49 | 513.05 | 15.88 | 1319.65 | 175.34 | 764.23 |
| LB037_329_II20 | 2833.37 | 209338.62 | 1844.25 | 497.98 | 266.62 | 86.40 | 551.88 | 58.53 | 96.57 | 556.45 | 23.38 | 1156.98 | 334.15 | 1552.69 |
| LB037_329_II21 | 3145.14 | 210467.39 | 360.78 | 107.64 | 69.04 | 23.61 | 102.91 | 179.66 | 22.89 | 124.86 | 9.07 | 1536.98 | 109.26 | 287.03 |
| LB037_329_II22 | 2607.91 | 212142.91 | 582.75 | 36.82 | 21.91 | 26.89 | 44.70 | 24.32 | 7.32 | 249.08 | 3.20 | 1445.75 | 378.85 | 268.04 |
| LB037_329_II23 | 3725.53 | 209991.82 | 1108.79 | 351.71 | 219.14 | 72.06 | 317.01 | 55.85 | 72.53 | 363.21 | 23.85 | 1180.47 | 188.05 | 853.62 |

*all elements are in ppm.

Appendix C: Eastern Sunda arc titanite trace element chemistry (LA-ICP-MS)

| Analysis ID | Al | Ca | Ce | Dy | Er | Eu | Gd | Hf | Ho | La | Lu | Mn | Nb | Nd |
|-----------------|----------|-----------|---------|---------|---------|--------|---------|--------|--------|--------|--------|---------|--------|---------|
| LB037_329_iH24 | 2830.14 | 209450.60 | 860.91 | 217.55 | 132.43 | 66.18 | 210.30 | 41.49 | 44.56 | 272.51 | 14.87 | 1353.36 | 177.38 | 644.26 |
| LB037_329_iH25 | 1711.99 | 209829.57 | 662.48 | 161.77 | 95.28 | 36.21 | 162.10 | 36.79 | 32.51 | 239.48 | 10.30 | 1192.86 | 136.37 | 489.78 |
| LB037_329_iH26 | 2416.29 | 209097.31 | 2282.41 | 286.85 | 177.66 | 97.62 | 308.62 | 59.50 | 59.05 | 742.44 | 22.65 | 1876.37 | 379.90 | 1301.80 |
| LB037_329_iH27 | 3867.52 | 212218.44 | 281.92 | 105.89 | 67.02 | 19.98 | 88.06 | 4.78 | 22.13 | 113.86 | 10.54 | 788.77 | 32.95 | 199.73 |
| LB037_329_iH28 | 3284.42 | 212979.99 | 354.88 | 90.10 | 60.05 | 26.21 | 81.69 | 39.44 | 19.13 | 125.07 | 9.83 | 1374.97 | 141.47 | 245.59 |
| LB037_329_iH29 | 3341.54 | 208585.42 | 3104.21 | 864.13 | 479.82 | 103.06 | 867.50 | 60.71 | 170.04 | 809.05 | 42.39 | 1243.74 | 515.83 | 2655.78 |
| LB037_329_iH3 | 3413.45 | 210575.63 | 1086.54 | 142.14 | 142.14 | 66.72 | 210.91 | 37.70 | 47.03 | 395.26 | 19.13 | 1238.06 | 171.16 | 705.29 |
| LB037_329_iH30 | 3405.42 | 213296.91 | 267.40 | 36.15 | 21.09 | 11.37 | 38.46 | 15.38 | 7.25 | 117.24 | 2.50 | 1172.63 | 82.17 | 146.62 |
| LB037_329_iH31 | 2749.53 | 210586.98 | 1098.57 | 53.12 | 34.89 | 47.14 | 59.51 | 15.12 | 11.03 | 462.51 | 6.71 | 1254.93 | 232.79 | 391.39 |
| LB037_329_iH32 | 2753.46 | 210049.14 | 418.84 | 19.36 | 10.79 | 9.19 | 32.80 | 12.18 | 3.88 | 219.43 | 1.11 | 1536.10 | 211.16 | 197.75 |
| LB037_329_iH33 | 3613.03 | 210022.02 | 1233.37 | 357.46 | 216.80 | 80.14 | 350.12 | 71.19 | 72.94 | 383.53 | 22.64 | 1053.81 | 97.33 | 1012.97 |
| LB037_329_iH34 | 2945.01 | 207788.23 | 1667.56 | 321.53 | 181.50 | 73.78 | 345.23 | 61.94 | 64.46 | 609.77 | 17.72 | 1198.75 | 184.41 | 1152.12 |
| LB037_329_iH35 | 2772.44 | 208943.39 | 1367.70 | 403.72 | 245.06 | 59.02 | 395.72 | 69.36 | 81.49 | 425.92 | 25.74 | 1332.49 | 498.38 | 1096.27 |
| LB037_329_iH36 | 3030.87 | 208796.29 | 1629.39 | 436.77 | 264.15 | 86.65 | 406.04 | 50.79 | 87.46 | 472.98 | 25.48 | 1100.77 | 286.11 | 1296.75 |
| LB037_329_iH37 | 3351.80 | 212521.12 | 228.26 | 44.14 | 31.89 | 21.16 | 41.34 | 62.76 | 9.61 | 109.56 | 5.43 | 1226.58 | 25.95 | 140.72 |
| LB037_329_iH38 | 2653.38 | 212377.91 | 1186.99 | 89.79 | 56.28 | 47.57 | 109.88 | 12.33 | 18.52 | 475.99 | 7.40 | 1255.01 | 127.30 | 570.62 |
| LB037_329_iH39 | 3311.51 | 209433.29 | 591.16 | 202.97 | 142.59 | 66.78 | 173.52 | 153.27 | 43.81 | 172.89 | 22.00 | 1313.54 | 353.34 | 473.57 |
| LB037_329_iH4 | 3489.92 | 212454.45 | 917.17 | 225.31 | 148.36 | 51.16 | 195.43 | 14.27 | 47.68 | 293.22 | 21.24 | 1042.97 | 117.44 | 561.72 |
| LB037_329_iH40 | 3118.87 | 208762.23 | 1461.55 | 167.72 | 110.77 | 57.33 | 165.11 | 60.23 | 35.27 | 610.28 | 15.22 | 1328.62 | 525.12 | 729.35 |
| LB037_329_iH41 | 8015.44 | 214608.42 | 1368.05 | 390.73 | 247.60 | 76.21 | 357.82 | 63.36 | 82.87 | 431.04 | 25.94 | 1358.46 | 180.90 | 1031.80 |
| LB037_329_iH5 | 2348.05 | 211663.42 | 278.67 | 96.96 | 70.76 | 33.83 | 80.37 | 23.99 | 21.49 | 99.42 | 8.16 | 569.30 | 136.78 | 171.40 |
| LB037_329_iH6 | 2989.36 | 212663.70 | 54.53 | 21.12 | 14.22 | 3.67 | 19.91 | 12.25 | 4.37 | 21.79 | 3.15 | 1069.26 | 0.51 | 45.27 |
| LB037_329_iH7 | 2559.78 | 209702.93 | 1077.70 | 302.30 | 173.65 | 56.07 | 298.42 | 20.83 | 59.15 | 329.86 | 16.57 | 1067.15 | 263.40 | 848.49 |
| LB037_329_iH8 | 2737.89 | 217911.65 | 15.35 | 1.29 | 1.20 | 2.89 | 1.14 | 1.05 | 0.34 | 17.78 | 0.30 | 223.98 | 78.78 | 4.03 |
| LB042_331_iH1 | 18747.02 | 214294.71 | 223.11 | 33.76 | 23.05 | 8.56 | 34.91 | 14.98 | 7.20 | 84.04 | 4.07 | 129.29 | 77.51 | 127.44 |
| LB042_331_iH2 | 7699.06 | 214731.47 | 299.20 | 62.87 | 40.56 | 14.57 | 58.54 | 26.31 | 13.51 | 96.71 | 6.42 | 620.91 | 78.75 | 206.32 |
| ELF-03_333_iH1 | 36594.83 | 212951.67 | 0.12 | 0.03 | 0.08 | 0.02 | 0.10 | 0.93 | 0.98 | 6.88 | 0.47 | 94.26 | 66.34 | 17.61 |
| ELF-03_333_iH2 | 16366.05 | 217625.00 | 43.12 | 9.17 | 4.75 | 7.00 | 12.18 | 0.72 | 1.77 | 5.00 | 0.92 | 10.33 | 15.09 | 0.05 |
| ELF-03_333_iH3 | 34593.84 | 220796.29 | 4.23 | 3.18 | 2.12 | 1.08 | 2.52 | 2.74 | 0.76 | 1.54 | 0.51 | 254.78 | 26.09 | 3.56 |
| ELF-03_333_iH4 | 27488.46 | 203501.24 | 68.53 | 41.73 | 40.67 | 9.29 | 21.91 | 0.61 | 11.60 | 14.76 | 7.90 | 66.46 | 87.35 | 42.62 |
| ELF-03_333_iH5 | 31277.23 | 215483.04 | 24.95 | 40.50 | 32.74 | 7.00 | 26.21 | 0.81 | 9.45 | 4.61 | 6.45 | 591.44 | 80.16 | 28.85 |
| ELF-03_333_iH6 | 34871.27 | 188562.08 | 26.83 | 3.39 | 2.90 | 1.85 | 2.45 | 0.66 | 0.81 | 9.44 | 0.70 | 61.33 | 60.18 | 7.79 |
| ELF-03_333_iH7 | 41330.77 | 220433.99 | 26.83 | 3.39 | 2.90 | 1.85 | 2.45 | 0.66 | 0.81 | 9.44 | 0.70 | 61.33 | 60.18 | 7.79 |
| ELF-03_333_iH8 | 46501.52 | 222078.31 | 87.39 | 21.73 | 28.37 | 7.84 | 14.40 | 0.33 | 6.58 | 14.14 | 7.54 | 72.88 | 64.02 | 65.11 |
| SPF-05_336_iH1 | 17768.29 | 211653.05 | 856.42 | 478.72 | 329.15 | 47.74 | 424.38 | 1.22 | 108.30 | 69.77 | 42.15 | 266.95 | 74.98 | 1316.44 |
| SPF-05_336_iH10 | 23113.39 | 211837.25 | 418.15 | 159.40 | 103.83 | 21.99 | 122.94 | 11.49 | 32.66 | 92.71 | 16.50 | 672.85 | 129.97 | 298.51 |
| SPF-05_336_iH2 | 10333.96 | 217783.93 | 190.42 | 57.79 | 34.68 | 11.43 | 55.67 | 6.40 | 12.19 | 37.60 | 4.10 | 121.31 | 41.32 | 172.00 |
| SPF-05_336_iH3 | 16368.05 | 216964.08 | 624.27 | 104.29 | 63.59 | 18.97 | 134.27 | 0.91 | 21.79 | 89.43 | 11.89 | 239.48 | 48.21 | 590.34 |
| SPF-05_336_iH4 | 15549.16 | 212337.59 | 782.66 | 1014.10 | 723.54 | 49.45 | 736.84 | 2.05 | 229.31 | 75.18 | 101.64 | 150.83 | 63.33 | 1279.45 |
| SPF-05_336_iH5 | 12243.59 | 212427.59 | 1883.12 | 239.61 | 171.91 | 34.21 | 256.58 | 4.60 | 53.13 | 523.03 | 33.83 | 482.55 | 72.14 | 1263.82 |
| SPF-05_336_iH6 | 14820.80 | 207389.64 | 472.51 | 1635.22 | 1073.75 | 115.31 | 1228.83 | 0.57 | 356.89 | 22.42 | 99.40 | 217.05 | 36.71 | 1981.73 |
| SPF-05_336_iH7 | 23410.08 | 114384.32 | 28.00 | 10.52 | 7.80 | 2.25 | 8.06 | 0.35 | 2.16 | 8.06 | 1.54 | 358.00 | 102.67 | 18.56 |
| SPF-05_336_iH8 | 15600.71 | 205700.09 | 624.35 | 524.41 | 420.72 | 35.55 | 376.34 | 1.93 | 123.33 | 92.80 | 76.60 | 375.38 | 72.77 | 569.86 |
| SPF-05_336_iH9 | 32376.07 | 183639.60 | 42.88 | 47.45 | 29.83 | 7.05 | 39.35 | 2.11 | 10.37 | 8.48 | 1.12 | 95.80 | 79.06 | 58.99 |
| NEF-02_337_iH1 | 30592.16 | 214975.99 | 384.53 | 131.76 | 64.04 | 135.56 | 202.38 | 0.41 | 24.73 | 31.62 | 7.34 | 422.93 | 155.41 | 827.20 |
| NEF-02_337_iH2 | 28038.92 | 213614.15 | 283.05 | 97.69 | 69.16 | 37.55 | 93.26 | 19.56 | 22.01 | 62.66 | 10.34 | 521.85 | 106.83 | 215.28 |
| NEF-02_337_iH3 | 25360.91 | 208950.12 | 417.62 | 248.14 | 158.55 | 40.48 | 213.76 | 17.38 | 51.74 | 75.21 | 22.49 | 297.90 | 89.68 | 438.47 |
| NEF-02_337_iH4 | 34782.91 | 216593.07 | 330.84 | 170.05 | 111.08 | 25.85 | 145.88 | 0.82 | 37.00 | 40.45 | 12.21 | 155.63 | 98.31 | 394.85 |
| NEF-02_337_iH5 | 24838.44 | 212611.61 | 192.76 | 116.96 | 86.56 | 12.04 | 85.56 | 53.02 | 24.93 | 37.36 | 17.49 | 129.10 | 196.84 | 166.56 |

*all elements are in ppm.

Appendix C: Eastern Sunda arc titanite trace element chemistry (LA-ICP-MS)

| Analysis ID | Al | Ca | Ce | Dy | Er | Eu | Gd | Hf | Ho | La | Lu | Mn | Nb | Nd | |
|--------------|----------|-----------|--------|---------|---------|-------|---------|---------|--------|--------|--------|--------|--------|--------|---------|
| ELF-01_iit1 | 27021.86 | 217240.49 | 76.95 | 16.65 | 14.96 | 15.88 | 12.89 | 12.89 | 7.73 | 4.01 | 20.25 | 3.31 | 163.70 | 119.46 | 44.71 |
| ELF-01_iit10 | 45378.36 | 216184.47 | 27.48 | 7.39 | 5.02 | 6.13 | 6.31 | 6.31 | 2.62 | 1.45 | 12.70 | 1.03 | 411.14 | 113.45 | 15.22 |
| ELF-01_iit11 | 27806.11 | 216906.87 | 25.02 | 4.66 | 4.31 | 3.96 | 5.97 | 5.97 | 1.40 | 1.15 | 5.70 | 1.09 | 85.28 | 91.41 | 18.68 |
| ELF-01_iit12 | 25417.62 | 219475.33 | 26.35 | 29.80 | 22.68 | 18.26 | 22.19 | 22.19 | 0.61 | 6.82 | 5.37 | 3.13 | 76.88 | 124.36 | 40.30 |
| ELF-01_iit13 | 27080.38 | 214723.06 | 32.51 | 66.68 | 51.87 | 9.12 | 38.14 | 38.14 | 0.96 | 15.20 | 6.38 | 9.09 | 137.77 | 68.06 | 40.31 |
| ELF-01_iit14 | 31782.66 | 211325.11 | 68.86 | 31.73 | 28.39 | 5.93 | 23.15 | 23.15 | 4.63 | 7.70 | 15.41 | 6.40 | 83.95 | 113.94 | 50.35 |
| ELF-01_iit15 | 42939.20 | 186632.39 | 426.04 | 74.88 | 45.86 | 29.32 | 83.36 | 83.36 | 1.33 | 15.16 | 83.59 | 7.12 | 517.10 | 68.83 | 332.43 |
| ELF-01_iit16 | 28107.02 | 142312.09 | 191.26 | 74.35 | 62.69 | 20.26 | 56.46 | 56.46 | 1.89 | 17.74 | 51.80 | 15.58 | 202.15 | 104.65 | 111.72 |
| ELF-01_iit2 | 24917.16 | 218988.83 | 15.70 | 5.77 | 4.51 | 2.87 | 8.73 | 8.73 | 1.38 | 1.27 | 2.98 | 0.94 | 70.13 | 59.43 | 24.01 |
| ELF-01_iit3 | 24987.93 | 218142.75 | 137.69 | 11.54 | 9.07 | 13.30 | 13.09 | 13.09 | 0.48 | 2.66 | 38.46 | 1.75 | 99.49 | 49.69 | 75.36 |
| ELF-01_iit4 | 30730.70 | 206450.72 | 66.70 | 641.12 | 544.09 | 21.56 | 349.43 | 349.43 | 3.59 | 164.20 | 23.33 | 100.64 | 83.11 | 78.42 | 52.54 |
| ELF-01_iit5 | 26977.16 | 214919.97 | 20.73 | 39.18 | 34.36 | 5.16 | 21.43 | 21.43 | 0.67 | 9.92 | 4.80 | 5.53 | 130.42 | 110.49 | 18.81 |
| ELF-01_iit6 | 29415.26 | 219818.20 | 39.22 | 31.69 | 24.33 | 9.67 | 16.83 | 16.83 | 0.62 | 7.26 | 10.18 | 4.88 | 125.16 | 109.36 | 22.42 |
| ELF-01_iit7 | 32149.32 | 218428.87 | 79.47 | 66.74 | 50.00 | 14.18 | 45.63 | 45.63 | 1.01 | 15.30 | 14.66 | 9.39 | 71.75 | 68.15 | 71.46 |
| ELF-01_iit8 | 36257.28 | 201968.98 | 691.45 | 999.58 | 642.48 | 69.88 | 772.62 | 772.62 | 4.17 | 208.19 | 80.12 | 79.68 | 113.95 | 79.52 | 1166.03 |
| ELF-01_iit9 | 33303.38 | 217981.60 | 16.07 | 3.91 | 3.29 | 2.55 | 2.51 | 2.51 | 2.77 | 0.87 | 8.28 | 0.97 | 144.59 | 84.41 | 7.38 |
| LB026_iit1 | 21653.78 | 215681.51 | 60.93 | 16.03 | 12.39 | 6.01 | 15.17 | 15.17 | 1.20 | 3.54 | 18.18 | 2.19 | 60.58 | 70.23 | 40.47 |
| LB026_iit2 | 22577.93 | 217318.19 | 66.02 | 6.95 | 5.42 | 5.02 | 7.29 | 7.29 | 2.96 | 1.54 | 21.38 | 1.45 | 63.65 | 202.37 | 30.35 |
| LB026_iit3 | 5443.59 | 210411.24 | 672.95 | 115.53 | 83.13 | 44.40 | 94.74 | 94.74 | 52.45 | 25.82 | 293.85 | 12.53 | 561.73 | 221.93 | 352.76 |
| LB026_iit4 | 13375.65 | 144396.95 | 166.82 | 31.63 | 16.48 | 8.80 | 36.36 | 36.36 | 2.82 | 5.71 | 36.63 | 1.61 | 300.60 | 128.02 | 135.45 |
| LB026_iit5 | 5756.98 | 212749.79 | 313.44 | 12.26 | 7.08 | 20.62 | 11.97 | 11.97 | 49.64 | 2.40 | 136.83 | 1.05 | 449.40 | 270.56 | 112.45 |
| LB026_iit6 | 18911.03 | 139904.82 | 80.53 | 59.01 | 35.05 | 4.36 | 64.00 | 64.00 | 6.48 | 11.93 | 13.66 | 3.68 | 205.96 | 332.94 | 138.59 |
| LB026_iit7 | 13770.64 | 151430.46 | 216.16 | 63.16 | 41.60 | 11.53 | 64.60 | 64.60 | 5.82 | 13.72 | 50.06 | 5.21 | 209.65 | 256.64 | 175.13 |
| NAF-01_iit1 | 7544.19 | 213151.81 | 97.30 | 15.85 | 10.65 | 7.32 | 17.22 | 17.22 | 7.97 | 3.41 | 23.70 | 1.57 | 425.70 | 34.32 | 66.53 |
| NAF-01_iit10 | 22953.36 | 220133.73 | 0.24 | 2.25 | 1.55 | 0.26 | 2.02 | 2.02 | 6.11 | 0.49 | 0.02 | 0.15 | 27.04 | 372.13 | 1.71 |
| NAF-01_iit11 | 17836.38 | 217582.14 | 20.87 | 5.66 | 3.27 | 4.52 | 6.04 | 6.04 | 0.83 | 1.16 | 3.20 | 0.45 | 123.71 | 206.09 | 20.37 |
| NAF-01_iit12 | 26009.38 | 216591.12 | 3.51 | 1.74 | 0.86 | 0.95 | 2.17 | 2.17 | 1.42 | 0.40 | 0.45 | 0.15 | 46.52 | 271.08 | 5.40 |
| NAF-01_iit13 | 17161.84 | 211613.50 | 25.50 | 413.99 | 394.87 | 8.53 | 176.94 | 12.05 | 105.95 | 3.05 | 66.65 | 220.46 | 119.81 | 64.55 | 941.21 |
| NAF-01_iit14 | 11438.23 | 211367.41 | 630.41 | 365.25 | 245.39 | 53.17 | 371.94 | 371.94 | 1.03 | 79.46 | 76.87 | 33.77 | 340.53 | 36.06 | 941.21 |
| NAF-01_iit15 | 19055.12 | 216759.61 | 26.35 | 26.54 | 23.42 | 12.24 | 18.86 | 18.86 | 1.99 | 6.40 | 4.21 | 4.06 | 227.16 | 132.73 | 34.64 |
| NAF-01_iit16 | 18311.40 | 216308.53 | 16.60 | 18.25 | 13.10 | 5.01 | 17.39 | 17.39 | 0.37 | 4.02 | 2.47 | 3.04 | 210.46 | 60.94 | 26.25 |
| NAF-01_iit17 | 33931.61 | 219720.54 | 0.03 | 0.03 | 0.01 | 0.18 | 0.01 | 0.01 | 0.73 | 0.03 | 0.01 | 0.00 | 10.50 | 396.47 | 0.05 |
| NAF-01_iit18 | 19515.59 | 217441.60 | 1.48 | 2.56 | 1.56 | 1.00 | 2.80 | 2.80 | 1.58 | 0.59 | 0.20 | 0.24 | 84.71 | 89.36 | 3.63 |
| NAF-01_iit19 | 21510.89 | 216110.54 | 1.04 | 3.85 | 2.26 | 0.54 | 3.58 | 3.58 | 0.52 | 0.77 | 0.09 | 0.20 | 98.63 | 54.37 | 2.69 |
| NAF-01_iit2 | 20458.96 | 216283.98 | 29.73 | 16.75 | 10.45 | 7.43 | 14.73 | 14.73 | 2.94 | 3.34 | 4.83 | 1.58 | 207.02 | 408.46 | 37.07 |
| NAF-01_iit20 | 12414.60 | 213635.45 | 142.92 | 89.83 | 50.18 | 19.03 | 74.97 | 74.97 | 2.56 | 16.18 | 18.98 | 6.65 | 445.79 | 58.92 | 195.41 |
| NAF-01_iit21 | 26476.77 | 217510.05 | 0.14 | 0.56 | 0.41 | 0.21 | 0.38 | 0.38 | 1.66 | 0.12 | 0.01 | 0.08 | 13.78 | 210.04 | 0.25 |
| NAF-01_iit22 | 21670.34 | 214447.34 | 5.28 | 3.76 | 2.89 | 3.78 | 2.74 | 2.74 | 0.40 | 0.90 | 0.96 | 0.39 | 246.83 | 200.70 | 6.07 |
| NAF-01_iit23 | 12393.51 | 197866.81 | 43.22 | 3101.99 | 2207.57 | 77.29 | 1482.84 | 1482.84 | 21.97 | 710.38 | 4.29 | 248.31 | 262.82 | 66.08 | 191.58 |
| NAF-01_iit24 | 21299.20 | 211687.77 | 5.38 | 0.78 | 0.67 | 0.88 | 1.14 | 1.14 | 0.13 | 0.18 | 0.90 | 0.19 | 195.16 | 4.41 | 4.67 |
| NAF-01_iit25 | 18913.76 | 213994.77 | 28.29 | 3.46 | 1.74 | 6.11 | 4.90 | 4.90 | 1.82 | 0.78 | 5.46 | 0.23 | 182.37 | 158.90 | 20.81 |
| NAF-01_iit26 | 19397.06 | 217186.16 | 10.76 | 3.43 | 3.19 | 0.54 | 4.04 | 4.04 | 15.62 | 1.11 | 1.28 | 0.98 | 123.09 | 456.96 | 13.06 |
| NAF-01_iit27 | 17683.81 | 214287.83 | 0.43 | 0.21 | <0.007 | 1.23 | 0.40 | 0.40 | 0.03 | 0.02 | 0.08 | 0.02 | 141.80 | 37.20 | 0.43 |
| NAF-01_iit28 | 22742.10 | 218494.44 | 9.95 | 13.42 | 8.14 | 2.24 | 13.06 | 5.51 | 2.83 | 1.50 | 6.01 | 0.75 | 231.38 | 19.25 | 18.81 |
| NAF-01_iit29 | 11182.89 | 215912.99 | 37.96 | 81.92 | 47.33 | 16.34 | 77.88 | 4.55 | 16.40 | 4.21 | 240.60 | 6.01 | 240.60 | 102.57 | 94.47 |
| NAF-01_iit3 | 14297.83 | 205014.58 | 79.20 | 361.62 | 307.49 | 27.97 | 226.23 | 8.51 | 88.17 | 8.99 | 61.80 | 61.80 | 275.72 | 84.08 | 174.76 |
| NAF-01_iit30 | 16206.93 | 216560.01 | 4.48 | 0.18 | 0.11 | 0.60 | 0.20 | 0.20 | 0.10 | 0.03 | 1.80 | 0.03 | 224.72 | 44.18 | 1.63 |
| NAF-01_iit31 | 19702.76 | 207434.89 | 37.45 | 12.76 | 8.38 | 7.68 | 13.95 | 13.95 | 4.30 | 2.60 | 5.32 | 1.65 | 330.41 | 61.59 | 37.54 |
| NAF-01_iit32 | 20246.60 | 217687.67 | 7.47 | 1.43 | 1.21 | 3.26 | 1.69 | 1.69 | 1.61 | 0.33 | 1.40 | 0.18 | 89.24 | 109.80 | 5.86 |
| NAF-01_iit33 | 24274.38 | 220087.01 | 0.27 | 0.29 | 0.20 | 0.76 | 0.23 | 0.23 | 3.96 | 0.12 | 0.12 | 0.03 | 20.27 | 655.99 | 0.15 |

*all elements are in ppm.

Appendix C: Eastern Sunda arc titanite trace element chemistry (LA-ICP-MS)

| Analysis ID | Al | Ca | Ce | Dy | Er | Eu | Gd | Hf | Ho | La | Lu | Mn | Nb | Nd |
|-------------|----------|-----------|---------|---------|---------|--------|---------|-------|--------|--------|--------|---------|---------|---------|
| NAF-01_004 | 3980.86 | 213350.31 | 2832.44 | 550.12 | 318.26 | 128.67 | 525.83 | 4.62 | 107.31 | 583.24 | 39.24 | 520.22 | 113.43 | 2059.71 |
| NAF-01_004 | 34035.09 | 221366.92 | 0.12 | 1.68 | 1.06 | 0.52 | 1.18 | 1.84 | 0.37 | 0.02 | 0.09 | 6.20 | 485.38 | 0.74 |
| NAF-01_005 | 20084.94 | 215625.24 | 8.77 | 2.43 | 1.36 | 5.38 | 2.68 | 1.36 | 0.47 | 0.75 | 0.30 | 301.41 | 46.08 | 13.01 |
| NAF-01_006 | 8160.66 | 209608.32 | 1961.93 | 162.41 | 86.66 | 58.12 | 204.51 | 1.49 | 30.43 | 608.97 | 10.98 | 1082.32 | 174.05 | 1067.32 |
| NAF-01_007 | 24139.28 | 218873.38 | 2.19 | 1.53 | 0.95 | 0.84 | 1.69 | 3.12 | 0.22 | 0.41 | 0.15 | 74.63 | 204.84 | 2.52 |
| NAF-01_008 | 14827.91 | 214348.36 | 4.03 | 4.38 | 2.76 | 1.74 | 4.10 | 3.26 | 0.91 | 0.63 | 0.35 | 76.66 | 138.71 | 7.23 |
| NAF-01_009 | 4646.79 | 212215.02 | 410.57 | 89.78 | 60.38 | 24.99 | 81.44 | 32.30 | 18.73 | 195.99 | 11.16 | 731.57 | 12.45 | 229.38 |
| SLG-02_001 | 12308.46 | 211898.63 | 54.67 | 21.55 | 13.65 | 3.97 | 29.11 | 5.17 | 4.30 | 6.22 | 1.70 | 150.21 | 170.71 | 81.14 |
| SLG-02_010 | 15082.82 | 207613.83 | 29.43 | 1.14 | 0.83 | 2.09 | 2.37 | 2.97 | 0.20 | 8.13 | 0.21 | 235.34 | 339.83 | 13.08 |
| SLG-02_011 | 11589.59 | 218187.71 | 30.57 | 1.86 | 1.26 | 0.98 | 3.11 | 2.32 | 0.49 | 13.38 | 0.21 | 143.41 | 96.76 | 17.27 |
| SLG-02_012 | 17359.71 | 210671.45 | 15.49 | 5.76 | 4.95 | 3.08 | 6.45 | 7.65 | 1.41 | 1.94 | 1.47 | 141.86 | 173.96 | 23.80 |
| SLG-02_013 | 15281.87 | 215797.55 | 13.94 | 5.68 | 4.06 | 3.19 | 6.28 | 8.53 | 1.14 | 2.16 | 0.37 | 225.31 | 177.42 | 17.56 |
| SLG-02_014 | 7673.56 | 217511.79 | 0.93 | 3.28 | 3.51 | 1.33 | 2.72 | 2.77 | 0.91 | 0.18 | 0.49 | 126.98 | 13.98 | 1.70 |
| SLG-02_015 | 11973.58 | 213290.67 | 1.76 | 1.78 | 0.97 | 1.30 | 2.80 | 0.74 | 0.35 | 0.15 | 0.21 | 57.79 | 117.07 | 3.48 |
| SLG-02_016 | 11568.06 | 211556.27 | 8.40 | 42.53 | 29.51 | 6.99 | 27.14 | 13.44 | 9.62 | 1.25 | 3.79 | 217.51 | 164.71 | 16.80 |
| SLG-02_017 | 11315.86 | 210816.43 | 1.19 | 3.07 | 2.70 | 0.80 | 2.23 | 4.59 | 0.78 | 0.22 | 0.72 | 202.13 | 48.22 | 3.38 |
| SLG-02_018 | 14609.85 | 208722.92 | 129.29 | 452.31 | 298.89 | 29.84 | 305.32 | 4.96 | 99.78 | 16.86 | 28.26 | 622.75 | 191.48 | 272.81 |
| SLG-02_019 | 25600.14 | 195375.24 | 24.96 | 16.73 | 8.67 | 3.31 | 19.57 | 2.84 | 3.44 | 2.85 | 0.92 | 169.58 | 71.18 | 51.11 |
| SLG-02_020 | 12640.06 | 217548.09 | 86.62 | 48.55 | 26.74 | 5.76 | 77.27 | 4.52 | 9.71 | 6.93 | 3.17 | 293.09 | 255.88 | 189.67 |
| SLG-02_021 | 11264.41 | 209708.12 | 54.70 | 29.26 | 16.47 | 5.25 | 40.59 | 7.14 | 5.56 | 4.68 | 2.14 | 165.66 | 94.32 | 109.74 |
| SLG-02_022 | 10392.72 | 218281.95 | 218.83 | 54.59 | 30.04 | 25.52 | 86.68 | 7.00 | 10.91 | 24.92 | 4.28 | 203.54 | 82.78 | 320.87 |
| SLG-02_023 | 11360.50 | 215210.52 | 4.59 | 12.55 | 8.79 | 3.19 | 9.45 | 3.57 | 2.75 | 0.60 | 1.46 | 278.50 | 145.33 | 10.37 |
| SLG-02_024 | 9663.42 | 212296.33 | 337.27 | 141.19 | 76.99 | 38.07 | 174.89 | 12.13 | 26.41 | 39.35 | 10.05 | 282.65 | 1021.45 | 546.53 |
| SLG-02_025 | 8673.87 | 217422.74 | 24.98 | 18.12 | 10.18 | 2.59 | 31.00 | 8.46 | 3.74 | 2.08 | 0.82 | 152.73 | 328.95 | 59.78 |
| SLG-02_026 | 10943.00 | 213615.88 | 268.88 | 74.43 | 42.57 | 26.95 | 102.51 | 7.70 | 14.98 | 30.78 | 5.50 | 251.96 | 389.74 | 389.74 |
| SEF-01_001 | 15799.26 | 216311.21 | 60.21 | 28.37 | 19.58 | 7.32 | 30.93 | 6.36 | 5.70 | 7.98 | 5.44 | 220.62 | 168.09 | 89.00 |
| SEF-01_002 | 11444.94 | 214137.35 | 60.70 | 115.12 | 67.85 | 29.80 | 113.32 | 13.18 | 22.90 | 6.35 | 12.79 | 343.12 | 114.10 | 161.31 |
| SEF-01_003 | 16026.43 | 208405.86 | 12.11 | 3.57 | 3.57 | 2.50 | 3.48 | 5.14 | 0.77 | 1.81 | 0.38 | 401.03 | 106.35 | 12.38 |
| SEF-01_004 | 11630.00 | 207962.61 | 141.00 | 467.31 | 268.67 | 71.83 | 406.26 | 19.99 | 93.03 | 13.30 | 34.86 | 266.99 | 234.08 | 432.06 |
| SEF-01_005 | 19363.46 | 219369.35 | 25.87 | 11.73 | 5.86 | 4.19 | 14.08 | 5.80 | 2.18 | 3.22 | 1.00 | 1796.34 | 172.83 | 38.29 |
| SEF-01_006 | 7775.51 | 197274.98 | 1714.09 | 2451.95 | 1463.31 | 252.21 | 2001.27 | 5.11 | 486.13 | 236.31 | 150.20 | 600.30 | 878.52 | 3077.43 |
| SEF-02_001 | 16744.76 | 208946.09 | 7.53 | 0.91 | 0.66 | 1.13 | 1.32 | 1.60 | 0.19 | 0.99 | 0.20 | 120.75 | 41.70 | 6.00 |
| SEF-02_002 | 14271.08 | 209926.59 | 22.33 | 1.26 | 0.86 | 3.35 | 1.57 | 0.23 | 0.25 | 5.10 | 0.16 | 106.96 | 32.71 | 10.35 |
| SEF-02_003 | 12184.62 | 211840.05 | 6.10 | 3.75 | 2.23 | 3.62 | 3.83 | 8.93 | 0.79 | 0.91 | 0.47 | 87.12 | 105.77 | 8.59 |
| SEF-02_004 | 19089.07 | 202615.03 | 14.01 | 1.66 | 1.09 | 2.21 | 1.43 | 6.15 | 0.41 | 4.84 | 0.26 | 173.41 | 69.41 | 6.63 |
| SEF-02_005 | 13996.47 | 212963.60 | 187.23 | 82.27 | 54.46 | 41.96 | 94.89 | 1.96 | 16.66 | 26.90 | 12.28 | 377.18 | 103.37 | 260.37 |
| SEF-02_006 | 37443.64 | 182323.71 | 0.68 | 0.04 | 0.16 | 0.58 | 0.26 | 0.03 | 0.03 | 0.11 | 0.06 | 126.65 | 8.37 | 0.78 |
| SEF-02_007 | 16011.43 | 211415.43 | 4.70 | 4.71 | 4.23 | 2.91 | 2.94 | 2.88 | 1.12 | 0.79 | 1.06 | 95.59 | 51.55 | 6.12 |
| SEF-02_008 | 11431.86 | 212250.51 | 4.29 | 0.79 | 0.49 | 2.10 | 1.54 | 2.95 | 0.15 | 0.57 | 0.06 | 54.28 | 73.48 | 5.42 |
| SEF-02_009 | 16177.72 | 210711.10 | 10.84 | 1.45 | 1.12 | 1.62 | 1.36 | 2.53 | 0.31 | 1.41 | 0.29 | 113.27 | 68.08 | 8.60 |
| SEF-02_010 | 12290.24 | 209022.73 | 146.52 | 24.17 | 17.43 | 18.86 | 34.68 | 5.21 | 5.21 | 20.36 | 4.03 | 136.69 | 84.40 | 151.99 |
| SEF-02_011 | 18167.97 | 210598.60 | 71.71 | 12.45 | 8.86 | 10.20 | 12.10 | 5.76 | 2.87 | 15.68 | 1.74 | 140.32 | 107.75 | 49.78 |
| SEF-02_012 | 11140.63 | 208004.34 | 320.05 | 158.19 | 95.19 | 64.16 | 194.54 | 0.28 | 31.28 | 39.84 | 14.78 | 192.82 | 20.01 | 515.06 |
| SEF-04_001 | 18952.57 | 211356.67 | 158.05 | 90.93 | 59.75 | 23.41 | 107.68 | 2.46 | 19.51 | 15.73 | 10.54 | 308.25 | 53.94 | 278.54 |
| SEF-04_002 | 9402.10 | 207392.99 | 114.82 | 66.02 | 39.14 | 25.97 | 75.63 | 7.61 | 13.85 | 11.79 | 5.08 | 145.12 | 161.05 | 205.92 |
| SEF-04_003 | 17279.52 | 214076.09 | 10.65 | 10.23 | 5.98 | 3.60 | 10.15 | 2.50 | 2.21 | 0.84 | 0.78 | 131.51 | 48.66 | 24.25 |
| SEF-04_004 | 19574.04 | 213036.43 | 6.43 | 0.75 | 0.25 | 0.34 | 1.14 | 1.14 | 0.19 | 2.45 | 0.05 | 131.45 | 62.38 | 3.94 |
| SEF-04_005 | 15987.30 | 211358.05 | 33.86 | 6.48 | 4.84 | 4.39 | 9.31 | 1.85 | 1.49 | 3.81 | 1.37 | 278.43 | 29.03 | 42.83 |
| SEF-04_006 | 19387.44 | 215319.34 | 0.42 | 0.39 | 0.29 | 0.15 | <0.045 | 1.43 | 0.05 | 0.10 | 0.07 | 175.93 | 119.87 | 0.93 |

*all elements are in ppm.

Appendix C: Eastern Sunda arc titanite trace element chemistry (LA-ICP-MS)

| Analysis ID | Al | Ca | Ce | Dy | Er | Eu | Gd | Hf | Ho | La | Lu | Mn | Nb | Nd |
|---------------|----------|-----------|--------|--------|--------|--------|--------|-------|--------|--------|-------|---------|---------|---------|
| SEF-04_III_7 | 19162.95 | 196583.51 | 337.04 | 65.29 | 37.92 | 30.41 | 86.23 | 9.49 | 12.89 | 50.07 | 6.12 | 595.21 | 114.46 | 389.01 |
| SINA-01_III_1 | 14555.26 | 210146.96 | 783.89 | 704.81 | 442.24 | 266.23 | 664.91 | 31.70 | 142.57 | 105.06 | 67.90 | 433.99 | 173.56 | 1296.25 |
| SINA-01_III_2 | 46635.60 | 144325.02 | 308.74 | 272.40 | 157.71 | 95.91 | 285.80 | 12.32 | 55.37 | 36.99 | 21.58 | 213.90 | 75.51 | 551.88 |
| SING-01_III_1 | 17720.60 | 206695.50 | 128.35 | 68.65 | 33.19 | 17.87 | 84.90 | 7.10 | 12.46 | 18.44 | 2.50 | 180.81 | 66.66 | 214.56 |
| SING-01_III_2 | 17287.97 | 213869.94 | 4.45 | 10.64 | 5.13 | 8.11 | 10.41 | 2.22 | 1.81 | 0.41 | 0.68 | 179.97 | 32.59 | 17.40 |
| SING-01_III_3 | 14418.53 | 194702.08 | 595.34 | 102.62 | 53.70 | 27.08 | 132.50 | 4.50 | 19.23 | 137.81 | 5.26 | 351.02 | 34.02 | 547.70 |
| SING-01_III_4 | 9356.72 | 213421.79 | 2.74 | 8.93 | 4.59 | 2.71 | 9.32 | 6.26 | 1.49 | 0.24 | 0.27 | 68.41 | 65.58 | 10.22 |
| SING-02_III_1 | 70797.38 | 219991.80 | 13.65 | 19.14 | 14.42 | 4.00 | 17.35 | 3.79 | 4.34 | 1.61 | 0.97 | 988.38 | 47.87 | 32.24 |
| SING-02_III_2 | 57129.98 | 202769.62 | 102.13 | 111.17 | 77.46 | 25.37 | 80.77 | 4.52 | 23.39 | 15.76 | 16.29 | 274.27 | 4.99 | 165.70 |
| SING-02_III_3 | 66611.20 | 214028.33 | 30.58 | 264.04 | 239.55 | 19.81 | 121.37 | 1.73 | 67.16 | 3.81 | 42.72 | 476.90 | 34.78 | 75.67 |
| SING-02_III_4 | 58724.61 | 219305.61 | 78.01 | 112.00 | 71.05 | 28.66 | 93.52 | 2.54 | 22.81 | 10.92 | 13.97 | 294.88 | 21.22 | 158.80 |
| SING-02_III_5 | 80031.47 | 203435.42 | 21.08 | 14.17 | 10.11 | 8.63 | 11.53 | 0.76 | 3.34 | 4.09 | 1.85 | 87.89 | 64.15 | 30.64 |
| SING-02_III_6 | 60051.48 | 190043.59 | 65.35 | 86.98 | 76.76 | 12.98 | 60.25 | 5.30 | 21.44 | 10.32 | 12.93 | 1108.56 | 109.26 | 79.59 |
| SING-02_III_7 | 66737.69 | 221203.16 | 59.49 | 50.20 | 41.10 | 12.23 | 35.43 | 2.45 | 12.05 | 9.38 | 8.21 | 687.05 | 43.21 | 63.62 |
| SING-02_III_8 | 64528.65 | 218638.77 | 117.58 | 47.39 | 37.07 | 14.36 | 37.96 | 3.40 | 11.07 | 22.13 | 7.33 | 636.16 | 62.87 | 116.75 |
| SING-02_III_9 | 61836.62 | 194299.27 | 63.77 | 113.06 | 92.36 | 22.95 | 77.15 | 7.35 | 25.72 | 8.85 | 20.36 | 266.84 | 3.95 | 120.27 |
| SLG-03_III_1 | 9562.47 | 211770.18 | 109.53 | 20.35 | 14.34 | 6.09 | 27.53 | 7.03 | 3.88 | 19.07 | 3.00 | 380.77 | 120.69 | 117.01 |
| SLG-03_III_10 | 15554.47 | 183058.17 | 62.20 | 32.05 | 22.35 | 9.74 | 28.37 | 8.93 | 6.81 | 9.90 | 2.79 | 1357.74 | 85.33 | 74.79 |
| SLG-03_III_11 | 18912.11 | 201731.90 | 1.87 | 12.88 | 9.46 | 0.63 | 5.29 | 11.87 | 2.76 | 0.85 | 1.05 | 3636.16 | 97.46 | 2.24 |
| SLG-03_III_12 | 15212.40 | 197479.66 | 31.67 | 25.40 | 15.33 | 14.64 | 20.21 | 12.02 | 4.87 | 5.05 | 1.99 | 689.08 | 80.72 | 57.00 |
| SLG-03_III_2 | 13804.80 | 200307.67 | 4.40 | 47.56 | 47.56 | 2.54 | 16.88 | 8.73 | 12.20 | 0.74 | 5.38 | 1088.70 | 117.10 | 6.37 |
| SLG-03_III_3 | 9270.80 | 213369.71 | 89.48 | 13.86 | 10.29 | 6.42 | 18.10 | 15.47 | 3.06 | 16.64 | 2.38 | 368.05 | 134.61 | 84.21 |
| SLG-03_III_4 | 9760.86 | 210459.80 | 140.72 | 54.43 | 35.74 | 31.10 | 65.29 | 6.00 | 11.01 | 21.61 | 5.99 | 350.70 | 101.33 | 188.08 |
| SLG-03_III_5 | 9652.59 | 210133.89 | 214.09 | 638.68 | 329.72 | 84.64 | 616.89 | 19.26 | 117.65 | 27.18 | 34.05 | 414.89 | 1205.24 | 570.46 |
| SLG-03_III_6 | 18687.99 | 197938.16 | 1.05 | 9.34 | 10.06 | 0.80 | 2.62 | 20.82 | 2.73 | 0.31 | 2.27 | 1280.33 | 89.03 | 1.02 |
| SLG-03_III_7 | 11373.47 | 208373.50 | 4.61 | 35.47 | 16.19 | 3.72 | 26.19 | 4.98 | 6.68 | 1.49 | 1.10 | 241.85 | 84.24 | 8.93 |
| SLG-03_III_8 | 14422.58 | 205999.92 | 4.58 | 11.00 | 8.90 | 0.72 | 4.33 | 7.87 | 2.60 | 1.00 | 1.38 | 1366.05 | 77.04 | 4.44 |
| SLG-03_III_9 | 8934.44 | 203057.04 | 19.77 | 10.34 | 6.95 | 11.71 | 12.72 | 4.48 | 2.27 | 2.48 | 0.87 | 326.49 | 77.85 | 34.03 |
| TR-02_III_1 | 8793.39 | 147434.78 | 11.79 | 0.80 | 0.74 | 1.00 | 1.78 | 1.89 | 0.16 | 5.79 | 0.11 | 1102.90 | 144.01 | 4.34 |
| TR-02_III_2 | 7957.80 | 146011.43 | 19.08 | 3.44 | 2.17 | 5.39 | 3.85 | 2.02 | 0.75 | 11.21 | 0.29 | 1426.57 | 179.50 | 10.07 |
| TR-02_III_3 | 24098.53 | 150434.32 | 20.79 | 5.69 | 4.06 | 6.17 | 4.32 | 2.02 | 1.15 | 7.00 | 0.72 | 544.57 | 154.66 | 14.24 |
| TR-02_III_4 | 34315.62 | 203759.47 | 6.85 | 18.64 | 14.34 | 2.10 | 13.73 | 18.18 | 4.58 | 0.96 | 1.81 | 150.43 | 247.44 | 15.17 |
| TR-02_III_5 | 13306.02 | 144861.24 | 59.77 | 6.61 | 4.05 | 10.68 | 6.86 | 3.03 | 1.45 | 38.08 | 0.49 | 336.50 | 166.54 | 28.59 |
| TR-02_III_6 | 12539.56 | 124539.89 | 6.94 | 1.07 | 0.94 | 3.03 | 0.97 | 1.62 | 0.26 | 4.18 | 0.16 | 418.55 | 140.65 | 2.60 |
| TR-04_III_1 | 14896.56 | 212286.67 | 4.20 | 89.33 | 73.17 | 10.58 | 47.80 | 1.82 | 21.83 | 0.29 | 10.39 | 138.86 | 31.50 | 16.73 |
| TR-04_III_2 | 16213.97 | 212111.21 | 13.87 | 208.78 | 159.11 | 21.10 | 124.39 | 4.88 | 48.59 | 1.16 | 23.19 | 202.00 | 103.15 | 51.09 |
| TR-04_III_3 | 44340.62 | 206181.59 | 166.47 | 118.67 | 104.17 | 12.88 | 106.74 | 2.15 | 28.08 | 17.25 | 22.39 | 135.82 | 106.11 | 289.03 |
| BHF-02_III_1 | 17433.72 | 207587.62 | 388.05 | 43.00 | 35.25 | 68.96 | 37.78 | 2.29 | 9.92 | 67.09 | 6.74 | 868.81 | 183.75 | 210.53 |
| BHF-02_III_11 | 10019.06 | 219396.78 | 3.27 | 7.75 | 5.92 | 0.22 | 5.52 | 3.36 | 1.89 | 0.37 | 1.47 | 645.80 | 199.16 | 8.69 |
| BHF-02_III_12 | 13594.52 | 206152.49 | 43.00 | 6.90 | 4.73 | 5.38 | 6.21 | 2.32 | 1.44 | 8.73 | 1.19 | 565.02 | 233.92 | 29.26 |
| BHF-02_III_13 | 14471.65 | 214958.44 | 3.45 | 0.75 | 0.68 | 0.66 | 0.51 | 0.52 | 0.22 | 0.76 | 0.14 | 383.23 | 67.98 | 3.42 |
| BHF-02_III_14 | 24931.25 | 182920.98 | 160.59 | 22.05 | 17.79 | 14.77 | 18.78 | 3.78 | 5.17 | 34.81 | 4.23 | 2089.98 | 160.23 | 100.89 |
| BHF-02_III_15 | 10642.15 | 209764.55 | 18.90 | 46.38 | 33.26 | 9.32 | 42.29 | 5.20 | 10.31 | 1.79 | 7.57 | 436.99 | 140.84 | 50.73 |
| BHF-02_III_16 | 11586.04 | 207122.45 | 1.28 | 1.80 | 1.13 | 1.36 | 0.75 | 4.10 | 0.38 | 0.21 | 0.53 | 608.30 | 232.30 | 2.32 |
| BHF-02_III_17 | 11602.19 | 213015.43 | 0.31 | 3.15 | 3.19 | 1.06 | 1.64 | 1.09 | 0.92 | 0.04 | 1.33 | 287.66 | 107.63 | 0.81 |
| BHF-02_III_18 | 16931.87 | 205936.94 | 148.56 | 6.72 | 4.60 | 12.86 | 7.91 | 2.53 | 1.43 | 48.41 | 1.00 | 65.15 | 195.19 | 70.58 |
| BHF-02_III_19 | 9911.92 | 219354.79 | 1.00 | 4.06 | 3.02 | 0.74 | 2.46 | 1.76 | 0.87 | 0.07 | 0.59 | 534.94 | 147.42 | 2.74 |
| BHF-02_III_20 | 13667.16 | 212706.72 | 1.92 | 2.14 | 1.36 | 0.63 | 2.25 | 3.64 | 0.42 | 0.18 | 0.22 | 306.17 | 200.99 | 3.84 |
| BHF-02_III_21 | 9367.82 | 207403.99 | 15.78 | 19.26 | 13.33 | 2.68 | 12.63 | 2.96 | 4.15 | 1.80 | 3.05 | 1381.11 | 247.11 | 26.75 |
| BHF-02_III_22 | 17528.65 | 211817.09 | 3.56 | 0.54 | 0.41 | 0.76 | 0.45 | 0.58 | 0.17 | 1.39 | 0.13 | 313.79 | 106.45 | 2.67 |

*all elements are in ppm.

Appendix C: Eastern Sunda arc titanite trace element chemistry (LA-ICP-MS)

| Analysis ID | Al | Ca | Ce | Dy | Er | Eu | Gd | Hf | Ho | La | Lu | Mn | Nb | Nd |
|-------------|-----------|-----------|---------|--------|--------|--------|--------|-------|--------|--------|-------|----------|---------|---------|
| BHF-02_II7 | 9431.50 | 210597.29 | 1.59 | 1.32 | 1.00 | 0.28 | 1.08 | 3.94 | 0.33 | 0.23 | 0.39 | 1048.42 | 254.26 | 1.66 |
| BHF-02_II8 | 17234.63 | 208957.43 | 39.45 | 20.38 | 15.07 | 6.15 | 15.10 | 1.80 | 4.21 | 8.31 | 3.31 | 608.68 | 273.94 | 43.57 |
| BHF-02_II9 | 10777.76 | 211769.63 | 9.37 | 0.64 | 0.55 | 6.98 | 1.21 | 7.63 | 0.10 | 3.15 | 0.20 | 326.67 | 369.80 | 6.02 |
| JER-01_II1 | 23260.93 | 171863.65 | 19.31 | 439.94 | 307.93 | 8.99 | 145.49 | 13.03 | 96.75 | 5.57 | 33.40 | 194.19 | 96.82 | 44.97 |
| JER-01_II10 | 22779.31 | 202494.24 | 30.61 | 10.65 | 8.66 | 2.12 | 7.62 | 12.33 | 2.59 | 12.30 | 1.16 | 228.17 | 117.10 | 21.11 |
| JER-01_II11 | 34297.13 | 197689.50 | 4.33 | 9.78 | 5.53 | 6.11 | 10.28 | 7.88 | 1.84 | 0.39 | 0.73 | 292.23 | 47.19 | 13.25 |
| JER-01_II12 | 19127.56 | 210846.22 | 7.71 | 11.62 | 8.15 | 5.34 | 9.19 | 13.38 | 2.58 | 1.17 | 1.07 | 140.17 | 92.48 | 15.89 |
| JER-01_II13 | 20331.02 | 213064.01 | 8.40 | 11.43 | 7.59 | 8.05 | 9.89 | 11.22 | 2.42 | 1.11 | 1.04 | 292.08 | 53.57 | 14.38 |
| JER-01_II14 | 20473.25 | 220682.81 | 19.74 | 15.57 | 10.69 | 6.46 | 12.57 | 11.16 | 3.48 | 5.86 | 1.38 | 192.37 | 57.18 | 22.35 |
| JER-01_II15 | 22235.61 | 209993.10 | 11.70 | 13.05 | 9.08 | 3.23 | 9.74 | 11.74 | 2.84 | 2.84 | 1.00 | 173.89 | 126.20 | 16.38 |
| JER-01_II16 | 25123.07 | 183217.66 | 7.58 | 17.88 | 14.60 | 3.84 | 12.89 | 9.81 | 4.09 | 1.90 | 2.53 | 302.14 | 99.36 | 13.68 |
| JER-01_II17 | 24838.11 | 204383.99 | 12.06 | 47.97 | 54.48 | 3.00 | 14.45 | 11.02 | 14.74 | 3.02 | 6.09 | 139.53 | 79.27 | 16.36 |
| JER-01_II18 | 20721.65 | 182145.07 | 13.62 | 9.58 | 7.19 | 2.00 | 8.42 | 8.88 | 2.10 | 4.21 | 0.93 | 154.54 | 94.41 | 13.75 |
| JER-01_II2 | 19942.08 | 210722.65 | 5.09 | 14.91 | 9.56 | 7.30 | 12.65 | 13.56 | 3.12 | 0.47 | 1.45 | 139.79 | 67.78 | 13.24 |
| JER-01_II5 | 18756.16 | 209657.10 | 7.25 | 12.78 | 8.59 | 5.81 | 11.28 | 9.81 | 2.58 | 0.56 | 1.32 | 128.23 | 67.78 | 17.49 |
| JER-01_II3 | 21451.21 | 217827.32 | 43.44 | 11.50 | 7.40 | 4.56 | 11.36 | 13.62 | 2.36 | 1.98 | 1.03 | 185.78 | 69.38 | 18.89 |
| JER-01_II4 | 21897.01 | 192370.99 | 22.36 | 36.15 | 30.23 | 5.58 | 30.57 | 8.88 | 9.40 | 5.97 | 5.24 | 114.53 | 87.65 | 37.54 |
| JER-01_II6 | 24074.40 | 191287.45 | 7.25 | 15.05 | 10.74 | 2.86 | 10.21 | 13.99 | 3.42 | 16.66 | 1.30 | 201.31 | 140.06 | 26.84 |
| JER-01_II7 | 22056.76 | 213018.60 | 4.75 | 7.52 | 5.49 | 5.06 | 5.48 | 5.30 | 1.58 | 0.41 | 0.68 | 121.06 | 48.64 | 9.01 |
| JER-01_II8 | 23678.20 | 217256.98 | 5.12 | 9.91 | 8.82 | 3.33 | 4.58 | 9.76 | 2.42 | 0.77 | 1.27 | 160.93 | 82.50 | 8.18 |
| JER-01_II9 | 19353.53 | 215163.43 | 4.73 | 14.77 | 10.25 | 5.17 | 11.27 | 10.87 | 3.40 | 0.47 | 1.99 | 132.94 | 68.86 | 14.15 |
| LB018_II1 | 38916.08 | 210316.66 | 77.66 | 111.67 | 72.20 | 13.15 | 74.97 | 10.86 | 23.53 | 9.85 | 8.61 | 356.77 | 146.76 | 135.16 |
| LB018_II2 | 32312.93 | 215166.57 | 3.35 | 14.22 | 8.59 | 4.34 | 10.89 | 2.49 | 3.07 | 0.33 | 1.25 | 345.13 | 82.84 | 12.76 |
| LB018_II3 | 52047.62 | 154989.28 | 7.64 | 13.77 | 9.60 | 11.01 | 7.44 | 6.41 | 3.22 | 2.44 | 1.20 | 160.171 | 92.50 | 11.25 |
| LB018_II4 | 45604.94 | 218804.84 | 159.90 | 513.47 | 304.65 | 27.94 | 315.25 | 10.10 | 108.19 | 18.26 | 31.18 | 411.34 | 109.56 | 356.32 |
| LB018_II5 | 24676.56 | 160136.86 | 31.83 | 33.48 | 25.14 | 4.71 | 24.53 | 9.89 | 7.11 | 10.84 | 3.54 | 15668.48 | 191.69 | 39.62 |
| LB022_II1 | 13849.56 | 217974.11 | 1471.04 | 143.51 | 80.20 | 55.30 | 133.63 | 85.29 | 29.41 | 257.40 | 6.62 | 23.00 | 1103.55 | 766.18 |
| LB022_II2 | 167023.73 | 1767.65 | 2.11 | 0.36 | 0.25 | 0.20 | 0.43 | 0.32 | 0.10 | 0.88 | 0.08 | 8025.97 | 0.06 | 1.27 |
| LB029_II1 | 15665.59 | 211356.99 | 222.21 | 19.02 | 11.64 | 15.37 | 19.73 | 7.65 | 3.65 | 145.81 | 2.54 | 443.00 | 211.11 | 89.60 |
| LB029_II2 | 15313.82 | 213986.78 | 629.20 | 410.31 | 252.76 | 24.55 | 329.97 | 6.45 | 82.82 | 145.04 | 40.69 | 224.86 | 250.57 | 702.80 |
| LB036_II1 | 5524.77 | 205858.00 | 1464.72 | 219.41 | 119.88 | 71.51 | 225.46 | 62.45 | 43.35 | 522.55 | 14.41 | 1038.47 | 189.60 | 886.70 |
| LB036_II2 | 3265.37 | 203954.37 | 2155.06 | 608.50 | 342.98 | 126.16 | 577.90 | 54.92 | 120.70 | 553.79 | 36.45 | 1313.66 | 472.73 | 1865.41 |

***all elements are in ppm.**

Appendix C: Eastern Sunda arc titanite trace element chemistry (LA-ICP-MS)

| Analysis ID | Pb | Pr | Si | Sm | Ta | Tb | Th | Tm | U | Y | Yb | Zr | Fe | Ti |
|---------------|--------|---------|-----------|---------|--------|--------|--------|-------|-------|---------|--------|----------|-----------|------------|
| LB014_322_H1 | 0.39 | 246.99 | 135405.22 | 251.30 | 18.79 | 35.72 | 83.06 | 18.45 | 21.52 | 1234.50 | 116.61 | 2005.39 | 10583.06 | 233041.09 |
| LB014_322_H10 | 0.24 | 395.39 | 135376.72 | 412.07 | 9.56 | 58.92 | 119.03 | 28.06 | 17.99 | 1952.86 | 177.59 | 1227.45 | 10322.31 | 231367.92 |
| LB014_322_H11 | 0.21 | 984.36 | 135348.73 | 1028.43 | 23.16 | 135.75 | 223.58 | 60.78 | 46.28 | 4307.94 | 381.89 | 513.48 | 11286.06 | 226873.10 |
| LB014_322_H12 | 0.56 | 438.81 | 134795.18 | 478.05 | 38.95 | 88.04 | 228.15 | 32.42 | 37.19 | 2248.18 | 193.58 | 11352.56 | 229460.03 | 232509.15 |
| LB014_322_H13 | 0.44 | 335.05 | 136806.32 | 325.94 | 36.50 | 48.77 | 157.56 | 26.32 | 28.35 | 1760.00 | 175.35 | 1602.47 | 9200.83 | 232509.15 |
| LB014_322_H14 | 2.84 | 718.28 | 135989.77 | 714.65 | 76.75 | 91.68 | 277.38 | 37.22 | 51.57 | 2865.70 | 223.51 | 1394.50 | 12511.41 | 226500.46 |
| LB014_322_H15 | 0.22 | 484.38 | 137362.00 | 384.25 | 20.77 | 46.23 | 132.60 | 22.79 | 45.71 | 1508.92 | 148.40 | 706.24 | 8205.95 | 231350.65 |
| LB014_322_H16 | 368.06 | 16.51 | 139912.39 | 9.74 | 1.98 | 1.29 | 2.06 | 0.78 | 2.74 | 67.14 | 7.04 | 29.45 | 21290.55 | 213107.66 |
| LB014_322_H17 | 2.14 | 225.42 | 135589.01 | 239.61 | 16.46 | 36.29 | 78.21 | 19.72 | 12.48 | 1280.05 | 132.32 | 2442.00 | 10378.69 | 232150.39 |
| LB014_322_H18 | 0.22 | 321.58 | 134632.55 | 356.11 | 9.43 | 49.35 | 97.97 | 23.03 | 19.70 | 1625.30 | 157.07 | 651.38 | 11164.40 | 2300995.53 |
| LB014_322_H19 | 7.16 | 731.27 | 135760.93 | 654.93 | 12.98 | 85.75 | 130.96 | 39.14 | 39.92 | 2861.44 | 251.21 | 979.96 | 11896.18 | 232725.04 |
| LB014_322_H20 | 0.27 | 236.10 | 132882.28 | 263.03 | 7.22 | 37.90 | 58.54 | 17.85 | 11.73 | 1187.23 | 113.46 | 656.73 | 11672.01 | 233878.78 |
| LB014_322_H21 | 0.79 | 1042.19 | 132089.55 | 929.36 | 129.58 | 124.75 | 398.76 | 64.79 | 47.54 | 4483.40 | 418.85 | 5136.97 | 15138.50 | 221324.62 |
| LB014_322_H22 | 0.58 | 27.90 | 134425.56 | 25.22 | 6.36 | 4.15 | 15.17 | 4.28 | 10.71 | 777.18 | 36.29 | 3219.44 | 10927.18 | 232680.73 |
| LB014_322_H23 | 0.26 | 553.86 | 133482.27 | 548.42 | 25.37 | 73.18 | 113.34 | 31.15 | 33.72 | 2407.34 | 187.42 | 1834.40 | 11513.29 | 230548.47 |
| LB014_322_H24 | 0.19 | 245.35 | 135840.56 | 228.15 | 11.41 | 31.30 | 83.03 | 16.27 | 24.70 | 1093.10 | 105.29 | 1483.15 | 10694.62 | 231830.43 |
| LB014_322_H25 | 0.16 | 28.21 | 135658.12 | 24.87 | 0.72 | 3.42 | 5.78 | 2.23 | 1.76 | 136.53 | 14.11 | 426.49 | 11084.04 | 235223.99 |
| LB014_322_H26 | 0.21 | 386.79 | 136421.95 | 358.82 | 6.46 | 47.83 | 99.60 | 22.61 | 38.92 | 1581.47 | 143.87 | 1229.77 | 9651.66 | 23054.92 |
| LB014_322_H27 | 0.20 | 136.39 | 134845.06 | 141.46 | 3.79 | 21.74 | 58.64 | 12.39 | 20.31 | 803.64 | 86.23 | 1478.91 | 8929.19 | 234837.12 |
| LB014_322_H28 | 0.62 | 375.46 | 134691.53 | 341.20 | 26.82 | 48.60 | 178.95 | 24.24 | 43.92 | 1649.05 | 153.42 | 2387.15 | 11720.54 | 230819.38 |
| LB014_322_H29 | 2.60 | 2.13 | 137145.65 | 0.74 | 2.44 | 0.07 | 0.68 | 0.06 | 0.45 | 5.33 | 0.57 | 15.80 | 20586.80 | 210890.39 |
| LB014_322_H30 | 107.82 | 58.46 | 136039.46 | 25.98 | 3.23 | 3.05 | 1.25 | 2.14 | 18.49 | 193.74 | 18.15 | 36.94 | 17032.99 | 220259.46 |
| LB025_323_H1 | 21.97 | 10.70 | 154140.68 | 18.34 | 3.40 | 3.70 | 4.30 | 2.50 | 2.54 | 126.43 | 19.12 | 387.44 | 12931.52 | 144284.17 |
| LB025_323_H10 | 23.85 | 11.97 | 150687.85 | 24.57 | 5.41 | 4.66 | 2.77 | 1.92 | 2.42 | 160.88 | 11.82 | 455.94 | 11342.04 | 144077.12 |
| LB025_323_H11 | 27.63 | 10.14 | 153147.27 | 16.77 | 9.91 | 9.91 | 8.66 | 1.39 | 6.96 | 95.81 | 8.74 | 115.36 | 12545.12 | 146946.28 |
| LB025_323_H12 | 21.54 | 6.87 | 151575.32 | 17.72 | 5.63 | 4.25 | 4.04 | 2.91 | 2.76 | 149.62 | 21.12 | 213.25 | 12742.92 | 147709.53 |
| LB025_323_H13 | 17.77 | 1.69 | 165107.58 | 8.13 | 6.79 | 3.48 | 5.90 | 2.89 | 0.95 | 143.37 | 21.39 | 127.00 | 49923.48 | 113761.13 |
| LB025_323_H14 | 35.46 | 13.70 | 147375.31 | 19.53 | 13.72 | 4.00 | 14.31 | 3.95 | 9.13 | 154.12 | 29.02 | 103.43 | 9995.27 | 151960.22 |
| LB025_323_H15 | 43.66 | 9.77 | 151153.88 | 17.91 | 9.00 | 3.65 | 10.06 | 1.71 | 5.11 | 123.81 | 11.82 | 196.22 | 8815.48 | 154294.79 |
| LB025_323_H16 | 21.65 | 2.33 | 154817.58 | 2.65 | 3.99 | 0.85 | 0.20 | 0.22 | 0.88 | 22.84 | 1.02 | 155.50 | 40265.18 | 107144.93 |
| LB025_323_H17 | 7.25 | 4.18 | 127443.43 | 14.73 | 5.03 | 4.04 | 0.07 | 1.02 | 0.61 | 102.30 | 7.79 | 388.38 | 17619.63 | 242875.59 |
| LB025_323_H18 | 23.94 | 6.51 | 147903.66 | 20.09 | 6.59 | 4.85 | 10.34 | 3.68 | 2.05 | 167.68 | 31.92 | 84.98 | 10163.24 | 150661.38 |
| LB025_323_H19 | 8.56 | 17.95 | 143166.62 | 30.29 | 5.80 | 5.41 | 2.67 | 2.86 | 7.22 | 196.09 | 19.78 | 91.96 | 16510.93 | 184200.25 |
| LB037_329_H1 | 0.41 | 38.45 | 136560.75 | 22.51 | 7.66 | 3.26 | 6.66 | 2.10 | 48.94 | 120.17 | 15.74 | 482.91 | 16837.74 | 227122.96 |
| LB037_329_H10 | 0.26 | 230.12 | 135202.30 | 384.37 | 36.70 | 78.73 | 235.58 | 37.68 | 28.63 | 2679.69 | 215.94 | 1057.71 | 9030.79 | 233340.79 |
| LB037_329_H11 | 1.14 | 134.57 | 135980.51 | 155.27 | 15.89 | 25.75 | 66.46 | 13.73 | 15.90 | 968.39 | 89.63 | 919.24 | 11986.93 | 230552.77 |
| LB037_329_H12 | 0.07 | 44.51 | 135183.39 | 37.69 | 1.82 | 5.75 | 20.75 | 2.86 | 15.99 | 208.84 | 21.50 | 250.26 | 6344.41 | 235595.28 |
| LB037_329_H13 | 0.34 | 533.94 | 134988.10 | 762.99 | 32.26 | 135.07 | 437.67 | 69.25 | 52.52 | 4707.30 | 445.48 | 1372.58 | 10792.60 | 230055.79 |
| LB037_329_H14 | 0.45 | 148.69 | 133539.97 | 231.25 | 8.23 | 45.98 | 100.04 | 23.56 | 35.21 | 1583.15 | 141.72 | 889.57 | 8745.50 | 236875.09 |
| LB037_329_H15 | 0.18 | 96.03 | 137588.71 | 58.64 | 6.13 | 8.81 | 39.58 | 4.80 | 50.18 | 304.65 | 33.29 | 722.39 | 13911.34 | 226874.84 |
| LB037_329_H16 | 0.23 | 148.89 | 134520.00 | 234.02 | 8.40 | 44.36 | 39.58 | 21.32 | 7.35 | 1487.20 | 128.70 | 1308.86 | 10694.77 | 233349.69 |
| LB037_329_H17 | 0.22 | 36.73 | 134789.84 | 43.65 | 4.98 | 8.82 | 17.20 | 7.13 | 12.02 | 372.47 | 50.75 | 1947.49 | 9861.24 | 233889.34 |
| LB037_329_H18 | 0.24 | 111.12 | 135345.65 | 124.77 | 5.22 | 20.14 | 36.83 | 9.88 | 16.36 | 748.92 | 62.34 | 1165.79 | 9240.19 | 235443.08 |
| LB037_329_H19 | 0.15 | 191.48 | 135164.38 | 220.30 | 1.60 | 38.83 | 60.76 | 19.88 | 19.54 | 1370.94 | 127.16 | 1936.61 | 9883.21 | 232763.81 |
| LB037_329_H20 | 0.18 | 180.14 | 138878.07 | 165.98 | 2.27 | 26.33 | 49.98 | 14.20 | 41.24 | 959.89 | 100.94 | 1401.83 | 8802.96 | 234134.03 |
| LB037_329_H21 | 0.62 | 294.14 | 132501.96 | 459.42 | 6.03 | 84.44 | 98.70 | 33.37 | 20.75 | 2927.15 | 109.92 | 1539.80 | 10087.42 | 233560.18 |
| LB037_329_H22 | 0.26 | 55.64 | 135501.00 | 83.60 | 12.22 | 16.92 | 48.39 | 9.73 | 6.27 | 637.11 | 64.08 | 4406.47 | 13570.31 | 228639.59 |
| LB037_329_H23 | 0.21 | 68.21 | 135599.93 | 48.15 | 11.19 | 6.14 | 9.88 | 2.98 | 21.84 | 209.84 | 20.30 | 538.00 | 11168.52 | 232959.85 |
| LB037_329_H24 | 0.22 | 168.46 | 134763.56 | 258.17 | 13.77 | 53.46 | 90.25 | 29.99 | 15.17 | 1913.16 | 188.98 | 1408.34 | 13008.42 | 230404.69 |

*all elements are in ppm.

Appendix C: Eastern Sunda arc titanite trace element chemistry (LA-ICP-MS)

| Analysis ID | Pb | Pr | Si | Sm | Ta | Tb | Th | Tm | U | Y | Yb | Zr | Fe | Ti |
|----------------|--------|--------|-----------|--------|-------|--------|--------|--------|--------|---------|----------|--------|---------|-----------|
| LB037_329_H24 | 0.44 | 130.67 | 135490.26 | 178.02 | 10.24 | 34.60 | 33.89 | 33.89 | 17.89 | 7.75 | 1201.40 | 113.93 | 1197.71 | 10318.94 |
| LB037_329_H25 | 0.36 | 97.74 | 136407.30 | 135.14 | 3.29 | 25.64 | 42.07 | 42.07 | 12.31 | 7.80 | 920.14 | 77.67 | 886.80 | 8567.69 |
| LB037_329_H26 | 0.30 | 296.35 | 133954.60 | 290.35 | 9.74 | 45.67 | 225.80 | 225.80 | 25.05 | 70.09 | 1674.08 | 167.49 | 1790.93 | 11863.69 |
| LB037_329_H27 | 0.03 | 39.36 | 135768.13 | 67.07 | 0.09 | 15.22 | 8.53 | 8.53 | 9.56 | 2.00 | 606.25 | 66.84 | 9487.79 | 233609.52 |
| LB037_329_H28 | 0.10 | 50.68 | 136216.30 | 69.26 | 0.86 | 13.84 | 14.90 | 14.90 | 8.88 | 17.23 | 508.02 | 62.47 | 894.18 | 10211.06 |
| LB037_329_H29 | 0.29 | 505.61 | 132235.50 | 779.20 | 31.30 | 140.60 | 155.35 | 155.35 | 62.75 | 27.82 | 4411.60 | 361.68 | 1242.06 | 10493.53 |
| LB037_329_H3 | 0.26 | 148.66 | 135813.00 | 188.01 | 7.62 | 34.90 | 68.28 | 68.28 | 20.33 | 30.99 | 1279.96 | 137.83 | 1070.80 | 231124.89 |
| LB037_329_H30 | 0.19 | 32.96 | 135547.47 | 35.25 | 5.83 | 5.70 | 7.85 | 7.85 | 2.79 | 4.91 | 214.85 | 17.96 | 478.48 | 231717.23 |
| LB037_329_H31 | 0.60 | 110.88 | 136357.47 | 62.08 | 0.51 | 8.54 | 20.86 | 20.86 | 4.95 | 27.36 | 302.58 | 38.42 | 7745.15 | 235391.01 |
| LB037_329_H32 | 0.50 | 46.37 | 134261.96 | 33.42 | 5.37 | 3.74 | 6.62 | 6.62 | 1.19 | 5.44 | 128.95 | 7.28 | 590.56 | 232975.43 |
| LB037_329_H33 | 0.81 | 195.31 | 135435.61 | 292.91 | 4.33 | 56.71 | 89.19 | 89.19 | 28.32 | 21.21 | 1980.79 | 173.43 | 1657.72 | 12819.62 |
| LB037_329_H34 | 0.30 | 235.82 | 135701.43 | 293.82 | 5.98 | 52.23 | 100.77 | 100.77 | 32.41 | 32.07 | 1853.08 | 140.20 | 1679.83 | 231197.32 |
| LB037_329_H35 | 0.30 | 210.39 | 134758.16 | 323.24 | 26.25 | 62.96 | 206.30 | 206.30 | 32.83 | 22.47 | 2352.47 | 204.70 | 1363.52 | 10408.41 |
| LB037_329_H36 | 0.22 | 256.41 | 134432.84 | 361.87 | 12.94 | 67.81 | 155.03 | 155.03 | 35.11 | 21.68 | 2323.60 | 217.14 | 1455.62 | 231468.07 |
| LB037_329_H37 | 0.58 | 29.74 | 137051.87 | 35.98 | 0.85 | 6.71 | 20.16 | 20.16 | 4.76 | 5.96 | 277.17 | 33.44 | 2468.78 | 13232.98 |
| LB037_329_H38 | 0.12 | 138.66 | 133636.70 | 108.78 | 0.80 | 15.29 | 31.60 | 31.60 | 7.33 | 85.13 | 512.26 | 48.37 | 685.32 | 235896.98 |
| LB037_329_H39 | 0.61 | 94.63 | 135670.75 | 144.54 | 13.91 | 30.32 | 54.08 | 54.08 | 20.96 | 12.17 | 1157.15 | 149.00 | 5492.93 | 11020.42 |
| LB037_329_H4 | 0.11 | 124.56 | 135560.71 | 154.61 | 1.04 | 34.10 | 66.50 | 66.50 | 21.17 | 13.44 | 1319.14 | 145.29 | 265.01 | 10247.26 |
| LB037_329_H40 | 0.25 | 174.21 | 134769.48 | 160.96 | 7.37 | 26.25 | 97.78 | 97.78 | 16.29 | 115.48 | 958.93 | 110.36 | 2387.05 | 230996.09 |
| LB037_329_H41 | 0.21 | 206.51 | 133474.60 | 296.90 | 9.74 | 60.84 | 95.12 | 95.12 | 34.19 | 26.21 | 2231.80 | 208.58 | 1336.55 | 233725.17 |
| LB037_329_H5 | 0.18 | 22.69 | 137650.55 | 80.12 | 3.00 | 18.37 | 34.09 | 34.09 | 9.40 | 13.17 | 678.43 | 59.76 | 98.33 | 244887.48 |
| LB037_329_H6 | 0.10 | 42.10 | 133415.10 | 63.92 | 8.23 | 14.91 | 30.72 | 30.72 | 10.85 | 17.96 | 577.22 | 82.71 | 490.50 | 6039.48 |
| LB037_329_H7 | 0.11 | 8.50 | 138373.62 | 14.99 | 0.01 | 3.26 | 1.11 | 1.11 | 0.26 | 0.20 | 122.24 | 16.51 | 454.77 | 228857.55 |
| LB037_329_H8 | 0.29 | 168.73 | 135632.17 | 251.32 | 10.16 | 48.43 | 119.56 | 119.56 | 23.27 | 12.77 | 1638.17 | 138.51 | 421.09 | 234632.70 |
| LB037_329_H9 | 6.35 | 1.09 | 141452.38 | 1.03 | 1.89 | 0.20 | 0.68 | 0.68 | 0.18 | 1.30 | 10.16 | 1.51 | 11.34 | 194846.06 |
| LB042_331_H1 | 13.04 | 27.66 | 145972.16 | 34.64 | 5.79 | 5.34 | 7.10 | 7.10 | 3.36 | 4.16 | 206.50 | 23.97 | 308.87 | 201523.26 |
| LB042_331_H2 | 2.67 | 43.92 | 136210.88 | 56.52 | 2.26 | 9.75 | 17.58 | 17.58 | 5.99 | 12.29 | 355.82 | 42.59 | 665.69 | 226881.36 |
| ELF-03_333_H1 | 17.32 | 4.09 | 144802.00 | 2.94 | 4.82 | 0.69 | 0.32 | 0.32 | 0.43 | 0.96 | 29.12 | 2.79 | 6325.62 | 189266.65 |
| ELF-03_333_H2 | 0.16 | 0.01 | 139044.47 | 0.01 | 0.83 | 0.00 | 0.04 | 0.04 | 0.02 | 0.08 | 0.32 | 0.04 | 4.84 | 214027.04 |
| ELF-03_333_H3 | 108.80 | 9.03 | 140644.99 | 11.43 | 4.64 | 1.41 | 8.47 | 8.47 | 0.72 | 3.35 | 87.20 | 5.09 | 18.10 | 192002.65 |
| ELF-03_333_H4 | 29.91 | 0.59 | 139694.39 | 1.63 | 1.26 | 0.48 | 0.28 | 0.28 | 0.34 | 0.39 | 25.71 | 3.22 | 20.71 | 15121.24 |
| ELF-03_333_H5 | 365.48 | 8.99 | 132109.80 | 14.02 | 5.37 | 5.62 | 7.87 | 7.87 | 6.25 | 13.91 | 301.56 | 51.04 | 13.66 | 208190.44 |
| ELF-03_333_H6 | 5.38 | 4.78 | 135109.06 | 11.85 | 4.96 | 5.60 | 7.09 | 7.09 | 5.22 | 4.20 | 282.52 | 38.78 | 21.06 | 23669.88 |
| ELF-03_333_H7 | 6.66 | 2.75 | 141389.84 | 1.95 | 4.18 | 0.40 | 0.58 | 0.58 | 0.46 | 0.40 | 27.57 | 3.41 | 13.99 | 181432.86 |
| ELF-03_333_H8 | 13.17 | 14.44 | 142774.36 | 11.93 | 4.30 | 2.67 | 5.96 | 5.96 | 4.79 | 3.66 | 173.90 | 39.71 | 8.95 | 172333.63 |
| SPF-05_336_H1 | 4.42 | 229.75 | 138471.57 | 336.26 | 3.67 | 71.37 | 40.09 | 40.09 | 6.89 | 3149.33 | 301.02 | 301.02 | 8.70 | 6385.12 |
| SPF-05_336_H10 | 3.57 | 66.57 | 143060.72 | 94.44 | 2.84 | 23.46 | 39.96 | 39.96 | 15.49 | 73.49 | 903.22 | 114.63 | 155.93 | 202645.63 |
| SPF-05_336_H2 | 0.89 | 31.32 | 134857.87 | 48.88 | 2.15 | 9.40 | 0.09 | 0.09 | 0.15 | 0.15 | 354.21 | 30.56 | 105.39 | 225973.09 |
| SPF-05_336_H3 | 0.84 | 113.82 | 138795.71 | 153.06 | 4.51 | 18.87 | 8.85 | 8.85 | 9.44 | 3.65 | 666.94 | 68.89 | 8.17 | 214989.58 |
| SPF-05_336_H4 | 1.60 | 203.47 | 132786.03 | 498.60 | 2.96 | 143.36 | 64.60 | 64.60 | 102.63 | 8.93 | 6526.73 | 713.94 | 15.56 | 5359.55 |
| SPF-05_336_H5 | 24.83 | 272.69 | 140939.84 | 266.61 | 6.01 | 36.96 | 43.54 | 43.54 | 24.87 | 43.16 | 1646.96 | 185.56 | 53.35 | 9380.78 |
| SPF-05_336_H6 | 0.73 | 226.96 | 137589.65 | 848.51 | 2.35 | 238.91 | 15.42 | 15.42 | 133.99 | 1.17 | 11060.31 | 816.29 | 3.34 | 5905.48 |
| SPF-05_336_H7 | 19.02 | 4.00 | 88915.00 | 4.73 | 8.40 | 1.61 | 5.08 | 5.08 | 1.11 | 6.23 | 88.09 | 8.16 | 3.53 | 12205.87 |
| SPF-05_336_H8 | 3.41 | 109.61 | 142501.03 | 189.92 | 5.06 | 70.59 | 9.09 | 9.09 | 20.14 | 4155.35 | 423.34 | 15.85 | 9957.86 | 212439.74 |
| SPF-05_336_H9 | 3.62 | 9.57 | 171507.56 | 27.47 | 0.99 | 7.14 | 10.30 | 10.30 | 3.41 | 40.71 | 280.03 | 14.82 | 52.51 | 8113.03 |
| NEF-02_337_H1 | 127.82 | 121.73 | 146207.10 | 204.21 | 11.36 | 24.86 | 9.32 | 9.32 | 7.74 | 1.52 | 1245.70 | 51.87 | 4.94 | 3890.27 |
| NEF-02_337_H2 | 100.17 | 40.71 | 146453.60 | 71.34 | 7.09 | 15.46 | 4.14 | 4.14 | 9.06 | 1.56 | 619.18 | 62.75 | 341.77 | 192934.40 |
| NEF-02_337_H3 | 33.19 | 79.15 | 156327.82 | 161.03 | 1.76 | 35.73 | 2.47 | 2.47 | 22.83 | 5.51 | 1414.42 | 157.94 | 259.53 | 188746.19 |
| NEF-02_337_H4 | 10.21 | 71.43 | 147675.44 | 106.99 | 3.62 | 25.45 | 8.95 | 8.95 | 14.23 | 3.32 | 1229.40 | 88.94 | 6.37 | 177016.35 |
| NEF-02_337_H5 | 35.73 | 31.15 | 150374.94 | 68.94 | 6.44 | 16.95 | 4.17 | 4.17 | 15.54 | 14.18 | 622.47 | 127.44 | 691.72 | 194600.28 |

*all elements are in ppm.

Appendix C: Eastern Sunda arc titanite trace element chemistry (LA-ICP-MS)

| Analysis ID | Pb | Pr | Si | Sm | Ta | Tb | Th | Tm | U | Y | Yb | Zr | Fe | Ti | |
|--------------|-------|----|--------|-----------|--------|-------|--------|-------|--------|--------|----------|---------|---------|----------|-----------|
| ELF-01_iit1 | 1.59 | | 10.23 | 143477.75 | 9.22 | 6.66 | 2.36 | 16.45 | 2.32 | 16.13 | 196.28 | 20.10 | 30.85 | 3713.57 | 199164.63 |
| ELF-01_iit10 | 10.76 | | 3.46 | 148998.58 | 4.02 | 8.75 | 0.82 | 4.06 | 0.94 | 8.30 | 54.07 | 5.94 | 35.35 | 11100.26 | 166474.18 |
| ELF-01_iit11 | 1.69 | | 3.74 | 142704.54 | 4.26 | 7.72 | 0.64 | 4.86 | 0.53 | 6.97 | 37.91 | 5.81 | 20.20 | 3747.99 | 199824.28 |
| ELF-01_iit12 | 6.24 | | 6.49 | 139717.33 | 17.10 | 5.75 | 4.16 | 2.62 | 3.61 | 12.40 | 211.33 | 25.64 | 7.68 | 4018.74 | 203748.60 |
| ELF-01_iit13 | 6.21 | | 6.57 | 142991.21 | 20.26 | 3.30 | 8.35 | 6.31 | 8.37 | 11.85 | 430.16 | 62.15 | 12.88 | 7722.40 | 198526.50 |
| ELF-01_iit14 | 4.04 | | 10.32 | 130212.21 | 12.82 | 9.75 | 4.22 | 1.11 | 4.18 | 3.87 | 273.29 | 33.34 | 70.40 | 5738.02 | 214094.58 |
| ELF-01_iit15 | 2.65 | | 70.08 | 147282.45 | 69.05 | 1.30 | 11.95 | 0.87 | 6.71 | 7.11 | 572.20 | 50.31 | 21.16 | 37025.83 | 174811.74 |
| ELF-01_iit16 | 2.44 | | 25.82 | 109894.27 | 29.24 | 9.02 | 9.48 | 37.15 | 9.35 | 22.55 | 716.47 | 78.46 | 19.48 | 12040.51 | 298747.01 |
| ELF-01_iit2 | 0.77 | | 3.58 | 140816.50 | 7.86 | 5.15 | 0.95 | 11.82 | 0.59 | 2.17 | 41.68 | 4.22 | 14.40 | 4233.31 | 203515.88 |
| ELF-01_iit3 | 2.22 | | 18.29 | 143217.57 | 14.21 | 1.22 | 1.80 | 2.84 | 1.02 | 5.20 | 94.60 | 9.44 | 9.32 | 4519.19 | 200541.23 |
| ELF-01_iit4 | 3.01 | | 8.29 | 130868.26 | 96.63 | 3.51 | 78.62 | 24.90 | 86.38 | 16.33 | 4823.63 | 688.26 | 38.47 | 5772.23 | 213283.17 |
| ELF-01_iit5 | 3.23 | | 3.23 | 148502.07 | 11.03 | 2.58 | 5.05 | 4.13 | 8.20 | 8.20 | 293.34 | 39.76 | 10.17 | 6229.61 | 196595.65 |
| ELF-01_iit6 | 0.17 | | 5.41 | 137017.51 | 8.85 | 2.58 | 4.03 | 4.09 | 3.51 | 7.83 | 245.19 | 29.57 | 11.57 | 3933.87 | 202426.90 |
| ELF-01_iit7 | 4.38 | | 14.40 | 144379.37 | 25.02 | 1.99 | 8.86 | 4.16 | 7.92 | 7.70 | 478.91 | 59.22 | 12.80 | 6649.62 | 188672.23 |
| ELF-01_iit8 | 9.57 | | 182.33 | 142609.73 | 499.55 | 4.32 | 144.41 | 10.51 | 91.06 | 9.77 | 6463.24 | 636.55 | 32.38 | 5712.53 | 192184.25 |
| ELF-01_iit9 | 6.02 | | 1.82 | 145862.52 | 2.14 | 8.36 | 0.63 | 3.58 | 0.50 | 4.58 | 37.60 | 4.74 | 41.60 | 6435.88 | 186535.58 |
| LB026_iit1 | 4.41 | | 8.79 | 143748.26 | 10.25 | 2.73 | 2.37 | 3.65 | 1.72 | 4.64 | 132.89 | 12.77 | 22.56 | 7459.98 | 203329.75 |
| LB026_iit2 | 1.40 | | 7.76 | 143456.54 | 5.68 | 5.51 | 1.00 | 0.66 | 0.85 | 1.35 | 70.25 | 6.63 | 27.33 | 9278.49 | 200012.90 |
| LB026_iit3 | 0.27 | | 82.98 | 137781.89 | 84.70 | 5.58 | 15.96 | 86.54 | 12.06 | 59.19 | 726.21 | 86.41 | 1828.18 | 12918.55 | 229823.73 |
| LB026_iit4 | 1.51 | | 26.36 | 103768.38 | 33.18 | 6.82 | 5.27 | 11.61 | 1.96 | 17.25 | 161.23 | 12.19 | 45.00 | 10532.89 | 321039.35 |
| LB026_iit5 | 0.07 | | 35.21 | 135457.03 | 17.11 | 12.83 | 1.84 | 17.82 | 1.27 | 20.03 | 64.00 | 7.92 | 3421.96 | 15372.36 | 224928.86 |
| LB026_iit6 | 6.80 | | 21.23 | 92733.43 | 51.71 | 10.52 | 9.49 | 9.83 | 4.16 | 5.18 | 360.44 | 29.20 | 90.31 | 5819.76 | 335088.96 |
| LB026_iit7 | 4.59 | | 34.83 | 105522.86 | 51.63 | 13.51 | 9.47 | 25.73 | 5.99 | 17.80 | 364.69 | 36.73 | 82.38 | 7374.29 | 314452.60 |
| NAF-01_iit1 | 0.21 | | 14.54 | 138730.37 | 15.05 | 3.62 | 2.77 | 11.76 | 1.54 | 5.74 | 99.42 | 10.73 | 189.27 | 5723.48 | 228947.69 |
| NAF-01_iit10 | 1.51 | | 0.14 | 136798.65 | 1.26 | 32.97 | 0.34 | 0.25 | 32.97 | 1.95 | 13.91 | 1.39 | 134.22 | 7511.79 | 207050.58 |
| NAF-01_iit11 | 8.19 | | 3.88 | 137928.09 | 5.52 | 22.37 | 0.91 | 0.17 | 0.45 | 0.68 | 33.11 | 3.15 | 7.75 | 5119.27 | 215494.11 |
| NAF-01_iit12 | 2.47 | | 0.84 | 143130.76 | 2.41 | 23.00 | 0.28 | 0.21 | 0.18 | 2.10 | 11.18 | 1.22 | 17.87 | 8319.24 | 198577.40 |
| NAF-01_iit13 | 4.23 | | 7.86 | 140657.15 | 57.48 | 12.03 | 46.12 | 13.03 | 12.03 | 53.21 | 3192.56 | 491.91 | 170.77 | 8838.75 | 211050.05 |
| NAF-01_iit14 | 0.04 | | 155.09 | 139461.49 | 331.44 | 0.67 | 57.34 | 47.27 | 36.46 | 50.31 | 2324.05 | 254.11 | 33.41 | 10532.58 | 217517.29 |
| NAF-01_iit15 | 5.40 | | 5.69 | 138881.90 | 14.33 | 17.88 | 2.09 | 3.61 | 3.61 | 11.77 | 192.18 | 28.09 | 23.32 | 8576.99 | 209387.46 |
| NAF-01_iit16 | 2.74 | | 3.92 | 141845.99 | 13.59 | 10.59 | 2.56 | 2.71 | 2.24 | 33.09 | 119.84 | 17.87 | 7.56 | 7008.19 | 209481.52 |
| NAF-01_iit17 | 0.34 | | 0.01 | 142582.29 | 0.01 | 27.38 | 0.01 | 0.00 | 0.01 | 0.03 | 0.35 | 0.03 | 15.97 | 7696.61 | 187523.47 |
| NAF-01_iit18 | 1.62 | | 0.51 | 140246.01 | 1.97 | 11.31 | 0.43 | 0.21 | 0.21 | 0.07 | 17.44 | 1.42 | 29.27 | 9206.80 | 207769.95 |
| NAF-01_iit19 | 0.70 | | 0.37 | 140682.02 | 2.11 | 8.31 | 0.55 | 0.09 | 0.32 | 0.01 | 22.31 | 1.73 | 10.30 | 8956.75 | 206294.43 |
| NAF-01_iit2 | 25.29 | | 6.52 | 141461.68 | 13.40 | 36.31 | 2.44 | 1.18 | 1.62 | 14.91 | 101.50 | 12.11 | 31.99 | 7763.34 | 204856.31 |
| NAF-01_iit20 | 8.81 | | 33.29 | 136390.08 | 61.92 | 2.76 | 10.67 | 29.47 | 7.44 | 55.39 | 466.75 | 51.65 | 88.20 | 8556.89 | 223229.56 |
| NAF-01_iit21 | 0.15 | | 0.05 | 139769.73 | 0.23 | 21.11 | 0.09 | 0.07 | 0.04 | 0.25 | 3.47 | 0.40 | 30.04 | 7232.51 | 201928.17 |
| NAF-01_iit22 | 17.33 | | 1.04 | 145176.38 | 2.72 | 25.34 | 0.58 | 1.29 | 0.47 | 3.11 | 26.09 | 3.22 | 7.54 | 10951.30 | 199921.33 |
| NAF-01_iit23 | 0.53 | | 16.87 | 135700.42 | 368.75 | 4.38 | 383.19 | 2.89 | 324.90 | 21.53 | 20404.87 | 2166.84 | 528.54 | 8661.11 | 214666.10 |
| NAF-01_iit24 | 6.33 | | 1.02 | 144118.26 | 1.33 | 0.32 | 0.13 | 1.14 | 0.08 | 2.84 | 6.52 | 0.69 | 0.96 | 10550.16 | 204594.10 |
| NAF-01_iit25 | 27.67 | | 4.38 | 141353.58 | 4.63 | 24.66 | 0.62 | 1.36 | 0.31 | 1.85 | 21.94 | 1.82 | 30.30 | 4882.21 | 213027.29 |
| NAF-01_iit26 | 5.39 | | 2.32 | 139609.66 | 4.42 | 31.47 | 0.65 | 4.27 | 0.55 | 21.09 | 31.13 | 5.87 | 322.64 | 9240.82 | 208245.48 |
| NAF-01_iit27 | 0.75 | | 0.10 | 142703.49 | 0.75 | 9.51 | 0.07 | 0.49 | 0.02 | 24.79 | 1.45 | 0.14 | 2.32 | 10366.43 | 208491.80 |
| NAF-01_iit28 | 6.88 | | 2.47 | 142782.86 | 8.74 | 24.21 | 1.99 | 0.89 | 0.89 | 2.02 | 77.97 | 6.33 | 84.84 | 8882.22 | 199852.80 |
| NAF-01_iit29 | 1.79 | | 11.55 | 136930.01 | 51.37 | 8.01 | 12.60 | 15.61 | 6.24 | 39.79 | 509.73 | 43.74 | 86.25 | 5528.20 | 224647.14 |
| NAF-01_iit3 | 1.69 | | 22.84 | 146423.11 | 107.53 | 5.70 | 44.12 | 9.84 | 47.52 | 399.39 | 2629.99 | 369.78 | 195.90 | 7996.76 | 213250.44 |
| NAF-01_iit30 | 10.50 | | 0.46 | 137535.64 | 0.24 | 3.33 | 0.05 | 0.53 | 0.02 | 1.48 | 1.45 | 0.14 | 1.68 | 11724.54 | 213755.43 |
| NAF-01_iit31 | 10.45 | | 7.32 | 145110.94 | 11.64 | 4.44 | 1.93 | 6.67 | 1.20 | 9.18 | 81.96 | 9.50 | 49.53 | 11048.77 | 207943.67 |
| NAF-01_iit32 | 1.80 | | 1.17 | 138317.22 | 1.15 | 14.53 | 0.20 | 1.54 | 0.12 | 0.67 | 9.11 | 1.22 | 35.44 | 8887.15 | 210984.86 |
| NAF-01_iit33 | 1.77 | | 0.08 | 137153.54 | 0.11 | 56.73 | 0.04 | 0.06 | 0.04 | 1.56 | 2.16 | 0.21 | 58.87 | 14554.14 | 199531.31 |

*all elements are in ppm.

Appendix C: Eastern Sunda arc titanite trace element chemistry (LA-ICP-MS)

| Analysis ID | Pb | Pr | Si | Sm | Ta | Tb | Th | Tm | U | Y | Yb | Zr | Fe | Ti |
|--------------|-------|--------|------------|---------|-------|--------|--------|--------|--------|----------|---------|--------|----------|-----------|
| NAF-01_iit34 | 0.38 | 439.32 | 1320.45.17 | 554.73 | 6.19 | 87.08 | 131.71 | 44.03 | 44.35 | 2879.97 | 311.03 | 97.95 | 5163.50 | 233745.76 |
| NAF-01_iit4 | 0.40 | 0.06 | 141412.53 | 0.37 | 32.99 | 0.22 | 0.05 | 0.15 | 0.06 | 9.30 | 0.73 | 30.75 | 5917.32 | 188795.95 |
| NAF-01_iit5 | 20.34 | 2.45 | 144163.13 | 2.37 | 2.48 | 0.40 | 3.55 | 0.16 | 1.42 | 15.36 | 1.58 | 29.20 | 6514.17 | 205391.71 |
| NAF-01_iit6 | 5.17 | 257.87 | 134925.38 | 219.88 | 15.89 | 26.67 | 40.94 | 11.51 | 62.19 | 903.45 | 78.03 | 39.18 | 11530.28 | 227290.41 |
| NAF-01_iit7 | 2.76 | 0.48 | 139235.91 | 1.13 | 21.48 | 0.21 | 0.56 | 0.14 | 2.54 | 8.14 | 0.86 | 82.29 | 11113.19 | 201023.14 |
| NAF-01_iit8 | 0.08 | 1.10 | 140544.98 | 2.90 | 7.87 | 0.66 | 0.28 | 0.35 | 0.03 | 27.87 | 2.85 | 89.32 | 7553.88 | 216463.44 |
| NAF-01_iit9 | 0.13 | 50.59 | 132683.40 | 67.94 | 13.37 | 126.35 | 126.35 | 9.12 | 73.69 | 543.05 | 71.70 | 450.58 | 6968.65 | 238171.29 |
| SLG-02_iit1 | 2.85 | 13.41 | 139178.85 | 25.30 | 7.51 | 3.67 | 13.18 | 1.65 | 4.86 | 134.65 | 11.77 | 186.10 | 9764.98 | 220891.38 |
| SLG-02_iit10 | 9.55 | 3.51 | 141368.28 | 2.16 | 24.53 | 0.25 | 6.98 | 0.16 | 1.63 | 8.64 | 1.01 | 86.05 | 12211.45 | 216846.64 |
| SLG-02_iit11 | 5.32 | 4.01 | 137030.68 | 3.40 | 10.92 | 0.32 | 2.60 | 0.14 | 1.17 | 13.23 | 1.09 | 88.91 | 13621.72 | 216692.71 |
| SLG-02_iit12 | 1.16 | 4.00 | 143109.56 | 6.01 | 9.01 | 0.84 | 17.01 | 0.71 | 3.57 | 47.73 | 6.94 | 180.01 | 8151.68 | 212708.26 |
| SLG-02_iit13 | 10.42 | 2.87 | 141437.31 | 5.99 | 17.31 | 0.70 | 18.86 | 0.67 | 6.66 | 38.10 | 3.42 | 219.85 | 11896.68 | 209837.39 |
| SLG-02_iit14 | 0.49 | 0.28 | 136785.25 | 1.16 | 0.47 | 0.42 | 0.07 | 0.46 | 0.03 | 27.58 | 3.69 | 130.34 | 9242.54 | 225480.55 |
| SLG-02_iit15 | 0.07 | 0.43 | 140579.34 | 1.92 | 7.77 | 0.28 | 0.38 | 0.16 | 0.04 | 10.83 | 1.00 | 11.98 | 8610.22 | 219846.94 |
| SLG-02_iit16 | 0.82 | 2.50 | 138907.40 | 13.81 | 11.69 | 5.75 | 5.62 | 4.61 | 10.04 | 296.05 | 29.51 | 379.40 | 8686.74 | 223015.25 |
| SLG-02_iit17 | 0.84 | 0.38 | 142103.06 | 1.55 | 1.95 | 0.41 | 1.61 | 0.50 | 0.23 | 24.09 | 4.18 | 148.19 | 8034.58 | 220879.51 |
| SLG-02_iit18 | 3.30 | 36.22 | 143105.56 | 169.83 | 11.76 | 61.87 | 37.86 | 39.63 | 69.72 | 2825.69 | 240.19 | 149.54 | 13282.77 | 209517.75 |
| SLG-02_iit19 | 0.39 | 7.06 | 156938.12 | 21.54 | 7.29 | 2.62 | 11.03 | 1.15 | 1.59 | 95.22 | 7.69 | 85.81 | 9272.54 | 197664.92 |
| SLG-02_iit3 | 0.81 | 26.78 | 138393.31 | 66.37 | 13.03 | 8.87 | 34.96 | 3.07 | 4.57 | 299.80 | 19.78 | 155.79 | 11031.57 | 215430.87 |
| SLG-02_iit4 | 0.13 | 16.14 | 141976.03 | 36.23 | 7.52 | 4.84 | 15.69 | 2.07 | 3.77 | 173.31 | 15.42 | 272.68 | 9090.38 | 220849.99 |
| SLG-02_iit5 | 0.13 | 55.74 | 135968.33 | 93.68 | 5.69 | 10.35 | 65.69 | 4.31 | 22.48 | 335.57 | 29.62 | 185.48 | 7364.71 | 223125.30 |
| SLG-02_iit6 | 0.59 | 1.45 | 135315.42 | 5.34 | 7.14 | 1.66 | 10.85 | 1.14 | 3.01 | 85.26 | 11.66 | 120.88 | 9838.24 | 224542.30 |
| SLG-02_iit7 | 0.11 | 86.59 | 141015.40 | 170.41 | 40.32 | 23.57 | 158.94 | 10.59 | 22.50 | 845.37 | 71.87 | 401.41 | 8316.94 | 218928.65 |
| SLG-02_iit8 | 0.03 | 8.28 | 133070.65 | 24.51 | 11.63 | 4.23 | 2.61 | 1.04 | 0.26 | 117.60 | 6.22 | 351.63 | 6303.99 | 230777.12 |
| SLG-02_iit9 | 0.23 | 67.33 | 137649.66 | 114.06 | 10.59 | 13.60 | 70.52 | 5.32 | 14.47 | 450.35 | 37.39 | 261.73 | 8037.26 | 223262.90 |
| SEF-01_iit1 | 0.66 | 13.63 | 143039.64 | 23.74 | 10.04 | 3.86 | 11.33 | 3.25 | 49.65 | 201.61 | 24.63 | 183.15 | 5917.73 | 211888.07 |
| SEF-01_iit2 | 0.84 | 19.09 | 142627.01 | 79.35 | 15.87 | 18.26 | 205.40 | 8.94 | 45.55 | 732.22 | 71.20 | 222.84 | 7515.47 | 216296.06 |
| SEF-01_iit3 | 4.05 | 2.49 | 147573.11 | 4.25 | 7.12 | 0.61 | 4.44 | 0.44 | 5.85 | 25.97 | 3.21 | 176.28 | 14077.40 | 205731.41 |
| SEF-01_iit4 | 0.36 | 50.35 | 145532.18 | 266.57 | 13.44 | 70.25 | 52.51 | 36.41 | 40.94 | 2801.09 | 241.45 | 309.38 | 7052.66 | 215041.52 |
| SEF-01_iit5 | 0.34 | 6.43 | 145057.37 | 11.63 | 10.50 | 1.83 | 5.90 | 0.93 | 4.24 | 69.95 | 6.56 | 168.58 | 15435.57 | 204846.07 |
| SEF-01_iit6 | 0.24 | 451.44 | 140007.25 | 1488.75 | 6.21 | 362.49 | 117.60 | 201.01 | 128.04 | 13490.77 | 1222.30 | 151.82 | 7593.59 | 217167.87 |
| SEF-02_iit1 | 0.29 | 1.34 | 149832.57 | 1.41 | 4.27 | 0.10 | 0.44 | 0.15 | 0.08 | 6.02 | 0.72 | 74.49 | 8178.60 | 207547.53 |
| SEF-02_iit10 | 0.57 | 2.42 | 148547.05 | 1.33 | 2.85 | 0.19 | 4.11 | 0.10 | 0.65 | 7.57 | 1.04 | 12.12 | 7407.33 | 210790.88 |
| SEF-02_iit11 | 0.43 | 1.55 | 145708.97 | 2.88 | 3.10 | 0.58 | 16.69 | 0.37 | 6.70 | 21.12 | 2.49 | 430.87 | 6250.19 | 215673.41 |
| SEF-02_iit12 | 6.40 | 1.57 | 155863.15 | 1.13 | 2.70 | 0.27 | 4.94 | 0.20 | 1.06 | 10.65 | 1.64 | 263.85 | 8367.32 | 201083.75 |
| SEF-02_iit13 | 1.26 | 43.09 | 142532.67 | 88.81 | 7.26 | 12.99 | 64.81 | 8.53 | 27.77 | 489.13 | 67.46 | 74.00 | 11542.04 | 211668.62 |
| SEF-02_iit3 | 0.64 | 0.12 | 146470.14 | 0.25 | 0.79 | 0.02 | 0.26 | 0.01 | 0.07 | 1.11 | 0.23 | 2.13 | 7047.56 | 200185.91 |
| SEF-02_iit4 | 3.29 | 1.78 | 178491.40 | 0.65 | 4.91 | 0.10 | 1.45 | 0.12 | 1.49 | 4.44 | 0.82 | 1.11 | 7737.52 | 169023.04 |
| SEF-02_iit5 | 0.18 | 0.88 | 143554.16 | 1.12 | 1.58 | 0.16 | 0.49 | 0.09 | <0.004 | 32.42 | 4.69 | 76.74 | 5714.37 | 213215.50 |
| SEF-02_iit6 | 1.04 | 2.02 | 148288.55 | 1.60 | 4.35 | 0.22 | 3.64 | 0.15 | 1.11 | 10.58 | 0.36 | 186.80 | 6375.34 | 219145.61 |
| SEF-02_iit7 | 0.59 | 29.12 | 148618.86 | 36.50 | 2.91 | 4.41 | 47.11 | 2.42 | 25.29 | 166.40 | 19.04 | 244.99 | 7330.63 | 208302.44 |
| SEF-02_iit8 | 2.80 | 10.99 | 147644.85 | 11.14 | 4.01 | 1.93 | 16.89 | 1.29 | 2.74 | 88.67 | 9.96 | 199.82 | 4875.69 | 205867.26 |
| SEF-02_iit9 | 0.30 | 79.43 | 146416.63 | 181.31 | 0.50 | 27.04 | 18.20 | 11.83 | 3.02 | 896.96 | 88.25 | 11.77 | 8879.63 | 217125.76 |
| SEF-04_iit1 | 13.94 | 44.69 | 145181.06 | 101.70 | 4.17 | 15.31 | 11.57 | 8.67 | 10.14 | 605.67 | 59.58 | 54.10 | 9421.14 | 205703.99 |
| SEF-04_iit2 | 32.57 | 31.92 | 146537.57 | 68.70 | 6.37 | 11.31 | 1.67 | 5.26 | 3.59 | 390.15 | 34.84 | 196.56 | 5958.83 | 221035.29 |
| SEF-04_iit3 | 0.98 | 3.19 | 144241.91 | 9.07 | 3.34 | 1.80 | 0.77 | 0.88 | 0.06 | 58.63 | 5.48 | 104.59 | 5633.30 | 210619.29 |
| SEF-04_iit4 | 3.23 | 0.95 | 145636.33 | 0.89 | 5.26 | 0.15 | 0.91 | 0.05 | 0.17 | 4.27 | 0.24 | 9.87 | 9961.75 | 203820.36 |
| SEF-04_iit5 | 2.48 | 7.73 | 148205.34 | 9.55 | 2.22 | 1.17 | 14.46 | 0.69 | 1.41 | 44.99 | 5.67 | 65.37 | 7982.24 | 207387.89 |
| SEF-04_iit6 | 5.60 | 0.08 | 143196.62 | <0.054 | 12.00 | <0.008 | 0.34 | <0.008 | 0.08 | 2.18 | 0.58 | 37.25 | 13105.56 | 202819.21 |

*all elements are in ppm.

Appendix C: Eastern Sunda arc titanite trace element chemistry (LA-ICP-MS)

| Analysis ID | Pb | Pr | Si | Sm | Ta | Tb | Th | Tm | U | Y | Yb | Zr | Fe | Ti |
|---------------|-------|--------|-----------|------------|-------|--------|--------|--------|-------|----------|---------|--------|--------|-----------|
| SEF-04_itl_7 | 10.45 | | 71.72 | 1499.48.34 | 95.12 | 6.23 | 11.41 | 49.88 | 5.13 | 12.16 | 412.46 | 34.78 | 312.74 | 20463.68 |
| SINA-01_itl_1 | 1.37 | 201.20 | 141299.85 | 548.25 | 11.40 | 107.99 | 125.59 | 125.59 | 60.99 | 88.11 | 4041.53 | 447.84 | 293.27 | 211068.04 |
| SINA-01_itl_2 | 2.72 | | 207568.96 | 226.20 | 5.62 | 43.54 | 38.94 | 38.94 | 21.47 | 18.65 | 1478.17 | 140.16 | 141.62 | 151472.58 |
| SING-01_itl_1 | 4.86 | | 148313.26 | 76.96 | 2.87 | 11.79 | 21.86 | 21.86 | 14.62 | 14.62 | 363.07 | 22.17 | 188.19 | 205458.56 |
| SING-01_itl_2 | 0.32 | | 144928.60 | 10.26 | 0.42 | 1.66 | 1.62 | 1.62 | 0.72 | 3.31 | 52.14 | 4.05 | 37.92 | 207393.56 |
| SING-01_itl_3 | 0.45 | 108.82 | 148529.02 | 135.46 | 0.58 | 17.48 | 40.63 | 40.63 | 6.61 | 10.49 | 511.77 | 40.86 | 155.01 | 209826.46 |
| SING-01_itl_4 | 0.27 | 1.11 | 142538.15 | 5.80 | 2.38 | 1.37 | 0.09 | 0.09 | 0.58 | 0.13 | 49.33 | 3.59 | 99.35 | 6396.88 |
| SING-02_itl_1 | 6.17 | 4.31 | 156742.89 | 11.39 | 2.68 | 2.80 | 23.57 | 23.57 | 2.36 | 4.32 | 125.71 | 16.79 | 71.37 | 3598.60 |
| SING-02_itl_2 | 23.42 | 26.88 | 169228.31 | 60.51 | 0.21 | 15.09 | 7.14 | 12.82 | 12.82 | 9.69 | 751.72 | 99.28 | 110.86 | 144824.74 |
| SING-02_itl_3 | 2.30 | 9.25 | 160079.58 | 50.09 | 1.48 | 30.01 | 4.97 | 38.06 | 30.01 | 22.76.34 | 278.07 | 278.07 | 23.79 | 134803.50 |
| SING-02_itl_4 | 8.15 | 22.88 | 158549.52 | 71.53 | 0.74 | 16.27 | 11.00 | 11.00 | 11.03 | 5.75 | 988.92 | 84.96 | 46.12 | 146878.63 |
| SING-02_itl_5 | 7.08 | 5.11 | 172347.43 | 9.66 | 2.89 | 2.02 | 5.68 | 5.68 | 2.84 | 2.84 | 92.59 | 11.09 | 15.88 | 115128.22 |
| SING-02_itl_6 | 6.79 | 13.81 | 140145.75 | 32.70 | 13.21 | 10.85 | 12.96 | 12.96 | 10.89 | 3.62 | 1056.02 | 79.91 | 61.30 | 3329.55 |
| SING-02_itl_7 | 2.07 | 11.60 | 155630.97 | 22.22 | 2.55 | 6.64 | 7.87 | 7.87 | 6.72 | 2.18 | 408.12 | 50.40 | 46.95 | 1584.96 |
| SING-02_itl_8 | 6.12 | 21.36 | 155072.90 | 31.73 | 3.25 | 17.24 | 6.64 | 17.24 | 6.22 | 8.57 | 312.00 | 45.94 | 65.59 | 141873.64 |
| SING-02_itl_9 | 17.96 | 17.22 | 178313.27 | 51.94 | 0.17 | 15.24 | 5.47 | 5.47 | 14.78 | 5.09 | 879.56 | 122.82 | 189.93 | 134823.27 |
| SLG-03_itl_1 | 0.19 | 21.19 | 146977.61 | 30.11 | 9.67 | 3.69 | 48.91 | 48.91 | 2.37 | 15.07 | 118.96 | 17.82 | 253.71 | 11407.19 |
| SLG-03_itl_10 | 1.20 | 13.36 | 179255.50 | 23.02 | 5.29 | 5.02 | 13.95 | 13.95 | 3.10 | 8.97 | 187.18 | 21.69 | 254.18 | 169579.30 |
| SLG-03_itl_11 | 11.62 | 0.51 | 148710.67 | 1.99 | 4.75 | 1.59 | 6.64 | 6.64 | 1.32 | 3.02 | 71.30 | 8.94 | 161.72 | 194030.20 |
| SLG-03_itl_12 | 1.82 | 8.43 | 161796.69 | 20.07 | 6.24 | 5.20 | 9.64 | 9.64 | 2.05 | 5.73 | 133.93 | 13.47 | 416.08 | 20547.42 |
| SLG-03_itl_2 | 6.15 | 1.01 | 146066.82 | 4.94 | 6.24 | 5.20 | 6.71 | 6.71 | 6.30 | 9.86 | 355.69 | 39.45 | 80.88 | 25948.47 |
| SLG-03_itl_3 | 0.49 | 16.51 | 146182.07 | 21.21 | 8.00 | 2.45 | 28.15 | 28.15 | 1.76 | 13.36 | 87.89 | 13.58 | 544.86 | 10541.76 |
| SLG-03_itl_4 | 0.20 | 32.40 | 147670.37 | 60.40 | 3.44 | 9.62 | 29.02 | 29.02 | 5.59 | 16.83 | 304.75 | 40.06 | 149.30 | 213889.12 |
| SLG-03_itl_5 | 0.44 | 67.87 | 144009.24 | 404.95 | 69.64 | 110.57 | 78.42 | 78.42 | 46.87 | 172.83 | 2991.26 | 302.13 | 531.58 | 213340.48 |
| SLG-03_itl_6 | 3.72 | 0.21 | 149582.49 | 0.94 | 3.62 | 0.82 | 4.17 | 4.17 | 1.81 | 5.47 | 80.16 | 14.85 | 307.27 | 26077.55 |
| SLG-03_itl_7 | 1.17 | 0.99 | 154823.68 | 9.66 | 3.23 | 5.39 | 1.44 | 1.44 | 1.74 | 2.53 | 171.72 | 10.64 | 144.52 | 205080.90 |
| SLG-03_itl_8 | 12.39 | 0.86 | 147696.06 | 2.73 | 2.31 | 1.23 | 3.40 | 3.40 | 1.30 | 3.89 | 77.18 | 10.03 | 82.86 | 23141.81 |
| SLG-03_itl_9 | 0.63 | 4.96 | 154694.55 | 12.29 | 2.65 | 1.66 | 1.66 | 1.66 | 0.96 | 0.63 | 57.36 | 6.27 | 169.82 | 12406.27 |
| TR-02_itl_1 | 19.10 | 1.22 | 104674.11 | 1.07 | 8.80 | 0.18 | 2.29 | 2.29 | 0.05 | 0.97 | 5.62 | 1.13 | 41.22 | 17153.40 |
| TR-02_itl_2 | 35.73 | 2.42 | 103475.48 | 3.32 | 25.81 | 0.56 | 2.39 | 2.39 | 0.31 | 0.95 | 20.65 | 1.66 | 47.78 | 16233.42 |
| TR-02_itl_3 | 17.50 | 2.98 | 116990.73 | 3.23 | 11.34 | 0.80 | 3.10 | 3.10 | 0.82 | 3.76 | 43.46 | 4.71 | 50.81 | 26299.45 |
| TR-02_itl_4 | 11.21 | 2.03 | 153835.16 | 9.12 | 11.49 | 2.95 | 4.51 | 4.51 | 2.26 | 1.83 | 105.68 | 14.74 | 262.05 | 14156.74 |
| TR-02_itl_5 | 28.05 | 0.78 | 109342.89 | 5.05 | 8.67 | 0.90 | 0.89 | 0.89 | 0.48 | 1.95 | 54.68 | 3.45 | 67.82 | 313553.77 |
| TR-04_itl_1 | 0.97 | 1.64 | 141995.41 | 20.49 | 2.18 | 11.12 | 0.50 | 0.50 | 10.42 | 0.13 | 636.33 | 71.22 | 47.28 | 216506.33 |
| TR-04_itl_2 | 0.77 | 5.41 | 144270.78 | 51.52 | 7.15 | 26.42 | 29.26 | 29.26 | 23.60 | 5.47 | 1408.17 | 158.69 | 149.64 | 211786.63 |
| TR-04_itl_3 | 31.28 | 45.98 | 156842.24 | 86.54 | 6.37 | 16.72 | 20.53 | 20.53 | 18.51 | 23.36 | 855.47 | 156.52 | 52.47 | 165568.98 |
| BHF-02_itl1 | 10.13 | 53.84 | 135024.80 | 37.97 | 11.09 | 6.39 | 3.86 | 3.86 | 5.88 | 4.64 | 320.11 | 43.48 | 29.16 | 222287.76 |
| BHF-02_itl2 | 0.46 | 1.05 | 140829.04 | 3.57 | 17.10 | 0.98 | 1.48 | 1.48 | 1.27 | 1.12 | 51.10 | 8.93 | 31.95 | 215784.46 |
| BHF-02_itl11 | 2.55 | 6.98 | 132714.46 | 5.59 | 10.22 | 0.95 | 0.85 | 0.85 | 1.04 | 1.12 | 45.80 | 6.07 | 35.98 | 212436.41 |
| BHF-02_itl12 | 1.39 | 0.81 | 131477.87 | 0.73 | 2.88 | 0.11 | 1.54 | 1.54 | 0.15 | 0.90 | 6.76 | 0.78 | 868.43 | 227055.54 |
| BHF-02_itl13 | 8.81 | 23.42 | 134992.52 | 18.85 | 9.27 | 3.19 | 3.62 | 3.62 | 3.20 | 0.97 | 167.27 | 25.25 | 58.25 | 35738.16 |
| BHF-02_itl14 | 0.66 | 5.99 | 137125.88 | 29.30 | 16.67 | 7.43 | 1.39 | 1.39 | 5.43 | 1.82 | 306.54 | 41.94 | 65.65 | 11042.24 |
| BHF-02_itl15 | 4.02 | 0.34 | 141026.24 | 0.95 | 14.12 | 0.23 | 0.80 | 0.80 | 0.72 | 0.72 | 11.71 | 2.28 | 43.99 | 12380.20 |
| BHF-02_itl16 | 1.00 | 0.11 | 137354.95 | 0.70 | 8.07 | 0.36 | 0.10 | 0.10 | 0.59 | 0.95 | 29.76 | 5.72 | 16.30 | 9696.81 |
| BHF-02_itl2 | 3.45 | 17.84 | 136764.74 | 9.74 | 14.99 | 1.04 | 0.84 | 0.84 | 0.72 | 1.15 | 53.01 | 5.77 | 24.17 | 27201.04 |
| BHF-02_itl3 | 0.63 | 0.31 | 142172.14 | 2.03 | 8.25 | 0.52 | 0.42 | 0.42 | 0.69 | 0.23 | 28.40 | 5.27 | 19.17 | 12473.75 |
| BHF-02_itl4 | 4.97 | 0.59 | 140811.42 | 1.61 | 13.45 | 0.30 | 0.70 | 0.70 | 0.26 | 0.25 | 12.11 | 1.20 | 56.98 | 10514.84 |
| BHF-02_itl5 | 0.87 | 4.02 | 139962.51 | 11.14 | 14.31 | 2.50 | 2.71 | 2.71 | 2.68 | 1.40 | 118.20 | 19.13 | 28.76 | 16476.82 |
| BHF-02_itl6 | 2.63 | 0.43 | 139932.67 | 0.56 | 3.19 | 0.10 | 1.25 | 1.25 | 0.12 | 0.41 | 5.15 | 0.91 | 2.07 | 13685.65 |

*all elements are in ppm.

Appendix C: Eastern Sunda arc titanite trace element chemistry (LA-ICP-MS)

| Analysis ID | Pb | Pr | Si | Sm | Ta | Tb | Th | Tm | U | Y | Yb | Zr | Fe | Ti |
|--------------|--------|--------|-----------|--------|-------|-------|--------|-------|-------|---------|--------|---------|-----------|------------|
| BHF-02_iit7 | 1.14 | 0.26 | 138237.91 | 0.61 | 15.77 | 0.21 | 0.08 | 0.21 | 0.91 | 10.01 | 2.41 | 35.35 | 15573.96 | 221708.43 |
| BHF-02_iit8 | 1.41 | 7.59 | 140527.30 | 13.28 | 11.00 | 3.00 | 1.28 | 2.83 | 1.32 | 127.91 | 21.53 | 19.64 | 15017.15 | 211857.24 |
| BHF-02_iit9 | 1.02 | 1.47 | 135286.31 | 0.92 | 25.30 | 0.11 | 0.25 | 0.10 | 0.57 | 6.25 | 0.59 | 96.02 | 9592.82 | 227986.77 |
| JER-01_iit1 | 8.72 | 5.22 | 115580.09 | 51.78 | 4.85 | 49.62 | 3.80 | 46.83 | 7.49 | 2541.34 | 317.20 | 425.98 | 3228.30 | 274563.97 |
| JER-01_iit10 | 13.03 | 4.64 | 127178.76 | 5.68 | 11.21 | 1.47 | 19.93 | 1.12 | 3.41 | 57.25 | 7.58 | 328.75 | 2017.48 | 243893.38 |
| JER-01_iit11 | 6.24 | 1.50 | 152054.30 | 7.18 | 0.58 | 1.53 | 0.99 | 0.77 | 2.09 | 61.90 | 5.39 | 207.68 | 4668.86 | 195612.05 |
| JER-01_iit12 | 7.49 | 2.17 | 143576.31 | 7.61 | 2.46 | 1.76 | 1.24 | 1.12 | 1.88 | 83.42 | 7.90 | 1895.27 | 347.10 | 214698.89 |
| JER-01_iit13 | 8.11 | 2.22 | 142819.54 | 6.46 | 2.13 | 1.71 | 1.47 | 1.15 | 2.48 | 78.84 | 7.20 | 282.31 | 2880.40 | 211651.08 |
| JER-01_iit14 | 7.52 | 3.94 | 140981.54 | 7.95 | 2.44 | 2.24 | 1.52 | 1.51 | 2.23 | 96.07 | 11.10 | 280.65 | 3301.75 | 207174.61 |
| JER-01_iit15 | 12.12 | 2.76 | 142699.74 | 6.86 | 7.48 | 1.83 | 9.99 | 1.16 | 5.04 | 65.05 | 7.54 | 228.59 | 4136.12 | 211324.63 |
| JER-01_iit16 | 7.11 | 1.86 | 124137.73 | 8.76 | 4.66 | 2.59 | 1.94 | 2.21 | 3.01 | 134.70 | 15.16 | 315.02 | 7706.49 | 251359.84 |
| JER-01_iit17 | 9.42 | 2.72 | 134549.92 | 7.57 | 3.36 | 4.18 | 0.78 | 7.62 | 2.87 | 337.65 | 45.79 | 336.30 | 2591.05 | 224406.12 |
| JER-01_iit18 | 7.70 | 2.44 | 123030.26 | 4.39 | 4.70 | 1.33 | 2.99 | 1.01 | 3.36 | 71.40 | 6.10 | 266.27 | 3414.91 | 262199.88 |
| JER-01_iit2 | 7.26 | 1.68 | 143814.33 | 8.23 | 1.83 | 2.12 | 2.71 | 1.39 | 2.44 | 112.44 | 10.00 | 335.17 | 1908.62 | 213567.42 |
| JER-01_iit3 | 7.36 | 2.51 | 140612.71 | 8.81 | 1.39 | 1.95 | 1.70 | 1.23 | 2.11 | 78.99 | 8.94 | 244.41 | 2083.20 | 219878.38 |
| JER-01_iit4 | 8.20 | 5.31 | 124804.82 | 18.49 | 4.34 | 5.31 | 1.65 | 4.69 | 3.64 | 271.49 | 31.72 | 268.15 | 2200.43 | 250477.96 |
| JER-01_iit5 | 10.64 | 6.19 | 128592.96 | 6.89 | 10.29 | 1.87 | 14.02 | 1.60 | 4.97 | 80.81 | 9.75 | 297.41 | 3180.18 | 242319.37 |
| JER-01_iit6 | 10.33 | 2.52 | 139640.01 | 8.55 | 2.09 | 1.75 | 2.47 | 1.16 | 1.75 | 71.61 | 7.17 | 363.85 | 4053.88 | 209566.86 |
| JER-01_iit7 | 5.57 | 1.33 | 142374.80 | 4.40 | 0.89 | 1.06 | 0.68 | 0.74 | 2.13 | 48.54 | 5.47 | 167.11 | 2024.93 | 211255.59 |
| JER-01_iit8 | 11.03 | 1.45 | 140421.94 | 3.73 | 3.63 | 0.81 | 0.99 | 3.63 | 2.15 | 62.34 | 8.98 | 312.25 | 2525.22 | 207777.90 |
| JER-01_iit9 | 8.91 | 1.71 | 138035.36 | 8.14 | 1.26 | 1.92 | 0.88 | 1.72 | 1.94 | 110.77 | 12.76 | 281.77 | 1883.27 | 217989.12 |
| LB018_iit1 | 2.83 | 19.45 | 150353.21 | 54.69 | 8.84 | 14.19 | 61.78 | 11.23 | 7.45 | 601.29 | 71.26 | 217.98 | 6201.49 | 179752.87 |
| LB018_iit2 | 4.73 | 1.25 | 141569.37 | 8.28 | 4.88 | 1.89 | 0.57 | 1.34 | 0.27 | 89.78 | 8.05 | 48.98 | 4607.93 | 196725.58 |
| LB018_iit3 | 32.11 | 1.58 | 149024.88 | 4.50 | 4.00 | 1.22 | 3.64 | 1.78 | 1.96 | 80.80 | 10.40 | 174.12 | 48547.84 | 180283.07 |
| LB018_iit4 | 9.16 | 49.03 | 139849.17 | 195.94 | 8.27 | 67.04 | 5.57 | 45.19 | 1.69 | 2560.79 | 255.16 | 159.31 | 7849.16 | 174630.88 |
| LB018_iit5 | 140.92 | 7.33 | 107272.16 | 15.33 | 18.56 | 5.42 | 35.10 | 3.93 | 7.00 | 229.17 | 21.75 | 184.25 | 34085.96 | 260280.62 |
| LB022_iit1 | 48.65 | 198.78 | 138067.38 | 135.02 | 59.37 | 20.05 | 110.81 | 13.13 | 56.71 | 732.02 | 74.78 | 2882.72 | 12863.13 | 209979.65 |
| LB022_iit2 | 12.44 | 0.35 | 207568.61 | 0.55 | 0.01 | 0.06 | 0.07 | 0.02 | 0.01 | 2.86 | 0.04 | 4.32 | 175955.50 | 665.30 |
| LB029_iit1 | 32.86 | 23.54 | 139751.18 | 18.00 | 24.79 | 2.68 | 48.73 | 1.88 | 6.79 | 139.12 | 14.56 | 103.77 | 16031.34 | 211353.02 |
| LB029_iit2 | 4.16 | 121.57 | 138798.57 | 262.64 | 4.39 | 56.85 | 2.83 | 41.97 | 12.47 | 2275.70 | 284.72 | 123.64 | 16758.65 | 207067.46 |
| LB036_iit1 | 2.17 | 197.86 | 140524.96 | 206.48 | 8.04 | 34.46 | 76.38 | 17.60 | 34.47 | 1228.31 | 112.99 | 1347.01 | 10239.86 | 2216368.40 |
| LB036_iit2 | 0.72 | 361.79 | 136459.56 | 521.49 | 23.99 | 89.85 | 142.39 | 51.27 | 26.99 | 3256.91 | 304.06 | 1367.10 | 9658.86 | 231637.27 |

***all elements are in ppm.**

Appendix D: Eastern Sunda arc zircon Lu-Hf data

| Hf_analysis | Zircon_analysis | Age (Ma) | Spot_size (um) | Lu176/Hf177 | 2SE | Yb176/Hf177 | 2SE | Hf176/Hf177 | 2SE | StdCorr Hf176/Hf177 | 2SE | eHF (CHUR) |
|-------------|-----------------|----------|----------------|-------------|---------|-------------|---------|-------------|---------|---------------------|---------|------------|
| BHF-02_6 | BHF-02_12 | 3.63 | 35 | 0.00113 | 0.00000 | 0.04443 | 0.00069 | 0.28320 | 0.00016 | 0.28320 | 0.00016 | 17.8 |
| BHF-02_7 | BHF-02_13 | 3.63 | 35 | 0.00314 | 0.00001 | 0.11571 | 0.00277 | 0.28309 | 0.00015 | 0.28317 | 0.00015 | 13.8 |
| BHF-02_1 | BHF-02_2 | 3.63 | 35 | 0.00318 | 0.00006 | 0.10650 | 0.00071 | 0.28318 | 0.00017 | 0.28326 | 0.00017 | 16.9 |
| BHF-02_9 | BHF-02_25 | 3.63 | 35 | 0.00143 | 0.00001 | 0.05194 | 0.00037 | 0.28311 | 0.00014 | 0.28320 | 0.00014 | 10.5 |
| BHF-02_4 | BHF-02_9 | 3.63 | 35 | 0.00136 | 0.00002 | 0.05384 | 0.00032 | 0.28299 | 0.00023 | 0.28308 | 0.00023 | 14.3 |
| BHF-04_1 | BHF-04_1 | 3.75 | 50 | 0.00137 | 0.00001 | 0.03803 | 0.00013 | 0.28313 | 0.00005 | 0.28314 | 0.00005 | 12.4 |
| BHF-04_7 | BHF-04_14 | 3.75 | 50 | 0.00256 | 0.00003 | 0.07922 | 0.00112 | 0.28312 | 0.00005 | 0.28322 | 0.00005 | 15.5 |
| BHF-04_8 | BHF-04_15 | 3.75 | 50 | 0.00034 | 0.00000 | 0.00959 | 0.00011 | 0.28312 | 0.00004 | 0.28322 | 0.00004 | 15.3 |
| BHF-04_11 | BHF-04_19 | 3.75 | 50 | 0.00147 | 0.00001 | 0.04135 | 0.00009 | 0.28318 | 0.00004 | 0.28318 | 0.00004 | 14.1 |
| BHF-04_10 | BHF-04_2 | 3.75 | 50 | 0.00101 | 0.00002 | 0.02877 | 0.00043 | 0.28311 | 0.00005 | 0.28315 | 0.00005 | 13.1 |
| BHF-04_9 | BHF-04_20 | 3.75 | 50 | 0.00128 | 0.00001 | 0.03713 | 0.00033 | 0.28311 | 0.00004 | 0.28321 | 0.00004 | 15.0 |
| BHF-04_12 | BHF-04_22 | 3.75 | 50 | 0.00105 | 0.00000 | 0.02953 | 0.00008 | 0.28314 | 0.00005 | 0.28315 | 0.00005 | 12.8 |
| BHF-04_13 | BHF-04_24 | 3.75 | 50 | 0.00270 | 0.00002 | 0.08231 | 0.00075 | 0.28313 | 0.00005 | 0.28314 | 0.00005 | 12.5 |
| BHF-04_14 | BHF-04_26 | 3.75 | 50 | 0.00140 | 0.00001 | 0.03980 | 0.00032 | 0.28314 | 0.00004 | 0.28309 | 0.00005 | 10.9 |
| BHF-04_3 | BHF-04_3 | 3.75 | 50 | 0.00128 | 0.00001 | 0.03688 | 0.00038 | 0.28310 | 0.00005 | 0.28315 | 0.00005 | 13.0 |
| BHF-04_15 | BHF-04_31 | 3.75 | 50 | 0.00230 | 0.00001 | 0.07132 | 0.00025 | 0.28311 | 0.00005 | 0.28312 | 0.00005 | 11.8 |
| BHF-04_16 | BHF-04_32 | 3.75 | 50 | 0.00116 | 0.00003 | 0.03356 | 0.00082 | 0.28310 | 0.00005 | 0.28310 | 0.00005 | 11.1 |
| BHF-04_17 | BHF-04_35 | 3.75 | 50 | 0.00091 | 0.00001 | 0.02716 | 0.00039 | 0.28313 | 0.00004 | 0.28316 | 0.00004 | 13.2 |
| BHF-04_18 | BHF-04_39 | 3.75 | 50 | 0.00101 | 0.00002 | 0.03032 | 0.00057 | 0.28314 | 0.00005 | 0.28317 | 0.00005 | 13.5 |
| BHF-04_19 | BHF-04_40 | 3.75 | 50 | 0.00157 | 0.00002 | 0.04578 | 0.00041 | 0.28310 | 0.00005 | 0.28314 | 0.00005 | 12.4 |
| BHF-04_4 | BHF-04_5 | 3.75 | 50 | 0.00144 | 0.00002 | 0.04382 | 0.00068 | 0.28311 | 0.00006 | 0.28319 | 0.00006 | 14.4 |
| BHF-04_5 | BHF-04_6 | 3.75 | 50 | 0.00114 | 0.00002 | 0.03192 | 0.00037 | 0.28311 | 0.00005 | 0.28320 | 0.00005 | 14.6 |
| BHF-04_6 | BHF-04_6 | 3.75 | 50 | 0.00262 | 0.00002 | 0.08017 | 0.00077 | 0.28315 | 0.00006 | 0.28324 | 0.00006 | 16.0 |
| ELF-01_1 | ELF-01_1 | 2.637 | 35 | 0.00038 | 0.00000 | 0.01065 | 0.00008 | 0.28312 | 0.00012 | 0.28320 | 0.00012 | 14.7 |
| ELF-01_2 | ELF-01_10 | 2.637 | 35 | 0.00523 | 0.00004 | 0.15667 | 0.00170 | 0.28315 | 0.00006 | 0.28324 | 0.00006 | 16.0 |
| ELF-01_3 | ELF-01_11 | 2.637 | 35 | 0.00082 | 0.00001 | 0.01914 | 0.00017 | 0.28312 | 0.00005 | 0.28320 | 0.00005 | 13.6 |
| ELF-01_4 | ELF-01_15 | 2.637 | 35 | 0.00165 | 0.00004 | 0.03710 | 0.00069 | 0.28308 | 0.00006 | 0.28317 | 0.00006 | 14.5 |
| ELF-01_5 | ELF-01_16 | 2.637 | 35 | 0.00590 | 0.00003 | 0.13464 | 0.00057 | 0.28330 | 0.00033 | 0.28338 | 0.00033 | 20.9 |
| ELF-01_6 | ELF-01_17 | 2.637 | 35 | 0.00669 | 0.00005 | 0.22797 | 0.00124 | 0.28314 | 0.00007 | 0.28322 | 0.00007 | 15.3 |
| ELF-01_7 | ELF-01_18 | 2.637 | 35 | 0.00058 | 0.00000 | 0.01636 | 0.00015 | 0.28311 | 0.00004 | 0.28319 | 0.00004 | 14.4 |
| ELF-01_8 | ELF-01_28 | 2.637 | 35 | 0.00115 | 0.00002 | 0.03054 | 0.00094 | 0.28310 | 0.00005 | 0.28318 | 0.00005 | 13.9 |
| ELF-01_9 | ELF-01_35 | 2.637 | 35 | 0.00106 | 0.00001 | 0.02854 | 0.00041 | 0.28308 | 0.00007 | 0.28316 | 0.00007 | 13.3 |
| ELF-02_3 | ELF-02_12 | 2.745 | 35 | 0.00134 | 0.00000 | 0.03566 | 0.00038 | 0.28315 | 0.00005 | 0.28324 | 0.00005 | 16.0 |
| ELF-02_4 | ELF-02_14 | 2.745 | 35 | 0.00076 | 0.00005 | 0.01928 | 0.00102 | 0.28302 | 0.00013 | 0.28311 | 0.00013 | 11.6 |
| ELF-02_5 | ELF-02_19 | 2.745 | 35 | 0.00199 | 0.00003 | 0.05651 | 0.00034 | 0.28312 | 0.00005 | 0.28321 | 0.00005 | 15.1 |
| ELF-02_6 | ELF-02_21 | 2.745 | 35 | 0.00161 | 0.00003 | 0.04146 | 0.00040 | 0.28319 | 0.00006 | 0.28327 | 0.00006 | 17.3 |
| ELF-02_9 | ELF-02_26 | 2.745 | 35 | 0.00316 | 0.00002 | 0.08294 | 0.00047 | 0.28311 | 0.00007 | 0.28319 | 0.00007 | 14.5 |
| ELF-02_8 | ELF-02_27 | 2.745 | 35 | 0.00271 | 0.00001 | 0.06820 | 0.00027 | 0.28323 | 0.00010 | 0.28332 | 0.00010 | 18.8 |
| ELF-02_10 | ELF-02_29 | 2.745 | 35 | 0.00113 | 0.00002 | 0.03257 | 0.00080 | 0.28317 | 0.00004 | 0.28326 | 0.00004 | 16.7 |
| ELF-02_11 | ELF-02_30 | 2.745 | 35 | 0.00168 | 0.00001 | 0.04650 | 0.00053 | 0.28316 | 0.00004 | 0.28324 | 0.00004 | 16.2 |
| ELF-02_1 | ELF-02_8 | 2.745 | 35 | 0.00160 | 0.00001 | 0.04542 | 0.00017 | 0.28316 | 0.00004 | 0.28325 | 0.00004 | 16.4 |
| ELF-02_2 | ELF-02_9 | 2.745 | 35 | 0.00154 | 0.00005 | 0.04469 | 0.00137 | 0.28306 | 0.00005 | 0.28315 | 0.00005 | 13.0 |
| ELF-03_3 | ELF-03_16 | 2.64 | 35 | 0.00279 | 0.00004 | 0.07512 | 0.00078 | 0.28314 | 0.00006 | 0.28317 | 0.00006 | 13.6 |
| ELF-03_4 | ELF-03_17 | 2.64 | 35 | 0.00102 | 0.00001 | 0.02981 | 0.00029 | 0.28315 | 0.00004 | 0.28319 | 0.00004 | 14.2 |
| ELF-03_5 | ELF-03_19 | 2.64 | 35 | 0.00062 | 0.00001 | 0.01468 | 0.00019 | 0.28307 | 0.00009 | 0.28311 | 0.00009 | 11.3 |
| ELF-03_6 | ELF-03_23 | 2.64 | 35 | 0.00111 | 0.00000 | 0.03294 | 0.00030 | 0.28314 | 0.00004 | 0.28317 | 0.00004 | 13.7 |
| ELF-03_1 | ELF-03_7 | 2.64 | 35 | 0.00362 | 0.00004 | 0.08425 | 0.00104 | 0.28314 | 0.00010 | 0.28317 | 0.00010 | 13.7 |
| ELF-03_2 | ELF-03_8 | 2.64 | 35 | 0.00195 | 0.00004 | 0.04548 | 0.00048 | 0.28314 | 0.00006 | 0.28317 | 0.00006 | 13.6 |

Appendix D: Eastern Sunda arc zircon Lu-Hf data

| Hf analysis | Zircon analysis | Age (Ma) | Spot_size (um) | Lu176/Hf177 | 2SE | Yb176/Hf177 | 2SE | Hf176/Hf177 | 2SE | StdCorr_Hf176/Hf177 | 2SE | εHF (CHUR) |
|-------------|-----------------|----------|----------------|-------------|---------|-------------|---------|-------------|---------|---------------------|---------|------------|
| NAF-01_7 | NAF-01_16 | 5.55 | 35 | 0.00085 | 0.00001 | 0.03022 | 0.00022 | 0.28314 | 0.00012 | 0.28324 | 0.00012 | 16.0 |
| NAF-01_4 | NAF-01_24 | 5.55 | 35 | 0.00126 | 0.00003 | 0.04819 | 0.00080 | 0.28312 | 0.00014 | 0.28322 | 0.00014 | 15.4 |
| NAF-01_1 | NAF-01_26 | 5.55 | 35 | 0.00066 | 0.00000 | 0.02222 | 0.00018 | 0.28310 | 0.00011 | 0.28317 | 0.00011 | 13.5 |
| NAF-01_8 | NAF-01_8 | 5.55 | 35 | 0.00105 | 0.00000 | 0.03798 | 0.00020 | 0.28326 | 0.00012 | 0.28336 | 0.00012 | 20.3 |
| NEF-02_1 | NEF-02_1 | 5.05 | 35 | 0.00076 | 0.00000 | 0.02212 | 0.00015 | 0.28309 | 0.00005 | 0.28317 | 0.00005 | 13.7 |
| NEF-02_6 | NEF-02_11 | 5.05 | 35 | 0.00183 | 0.00005 | 0.04356 | 0.00093 | 0.28307 | 0.00008 | 0.28315 | 0.00008 | 12.8 |
| NEF-02_7 | NEF-02_15 | 5.05 | 35 | 0.00097 | 0.00002 | 0.02327 | 0.00083 | 0.28314 | 0.00012 | 0.28322 | 0.00012 | 15.3 |
| NEF-02_8 | NEF-02_18 | 5.05 | 35 | 0.00193 | 0.00001 | 0.05570 | 0.00018 | 0.28310 | 0.00006 | 0.28318 | 0.00006 | 14.0 |
| NEF-02_9 | NEF-02_19 | 5.05 | 35 | 0.00091 | 0.00001 | 0.02444 | 0.00022 | 0.28314 | 0.00005 | 0.28322 | 0.00005 | 15.2 |
| NEF-02_10 | NEF-02_22 | 5.05 | 35 | 0.00083 | 0.00001 | 0.02247 | 0.00039 | 0.28313 | 0.00009 | 0.28320 | 0.00009 | 14.8 |
| NEF-02_11 | NEF-02_23 | 5.05 | 35 | 0.00163 | 0.00003 | 0.04611 | 0.00039 | 0.28314 | 0.00007 | 0.28322 | 0.00007 | 15.4 |
| NEF-02_12 | NEF-02_24 | 5.05 | 35 | 0.00151 | 0.00001 | 0.04273 | 0.00025 | 0.28312 | 0.00006 | 0.28320 | 0.00006 | 14.6 |
| NEF-02_13 | NEF-02_29 | 5.05 | 35 | 0.00114 | 0.00001 | 0.03377 | 0.00025 | 0.28299 | 0.00014 | 0.28307 | 0.00014 | 10.0 |
| NEF-02_2 | NEF-02_3 | 5.05 | 35 | 0.00178 | 0.00004 | 0.04100 | 0.00060 | 0.28307 | 0.00009 | 0.28315 | 0.00009 | 17.0 |
| NEF-02_14 | NEF-02_30 | 5.05 | 35 | 0.00198 | 0.00003 | 0.06101 | 0.00122 | 0.28319 | 0.00006 | 0.28326 | 0.00006 | 13.0 |
| NEF-02_15 | NEF-02_32 | 5.05 | 35 | 0.00169 | 0.00001 | 0.04794 | 0.00009 | 0.28312 | 0.00006 | 0.28320 | 0.00006 | 14.7 |
| NEF-02_16 | NEF-02_33 | 5.05 | 35 | 0.00085 | 0.00001 | 0.02509 | 0.00038 | 0.28313 | 0.00006 | 0.28321 | 0.00006 | 15.0 |
| NEF-02_17 | NEF-02_34 | 5.05 | 35 | 0.00107 | 0.00000 | 0.03116 | 0.00015 | 0.28309 | 0.00006 | 0.28317 | 0.00006 | 13.7 |
| NEF-02_18 | NEF-02_36 | 5.05 | 35 | 0.00096 | 0.00001 | 0.02716 | 0.00022 | 0.28314 | 0.00006 | 0.28322 | 0.00006 | 15.4 |
| NEF-02_19 | NEF-02_37 | 5.05 | 35 | 0.00177 | 0.00001 | 0.04711 | 0.00027 | 0.28309 | 0.00007 | 0.28317 | 0.00007 | 13.7 |
| NEF-02_3 | NEF-02_4 | 5.05 | 35 | 0.00131 | 0.00003 | 0.03867 | 0.00078 | 0.28310 | 0.00005 | 0.28318 | 0.00005 | 13.9 |
| NEF-02_4 | NEF-02_5 | 5.05 | 35 | 0.00163 | 0.00003 | 0.04743 | 0.00079 | 0.28306 | 0.00006 | 0.28314 | 0.00006 | 12.5 |
| NEF-02_5 | NEF-02_8 | 5.05 | 35 | 0.00078 | 0.00001 | 0.02249 | 0.00023 | 0.28312 | 0.00005 | 0.28320 | 0.00005 | 14.8 |
| ELF-02_7 | | 2.745 | 35 | 0.00336 | 0.00003 | 0.07984 | 0.00066 | 0.28317 | 0.00012 | 0.28326 | 0.00012 | |
| NAF-01_11 | | 5.55 | 35 | 0.00191 | 0.00003 | 0.06924 | 0.00104 | 0.28321 | 0.00011 | 0.28331 | 0.00011 | |
| NAF-01_3 | | 5.55 | 35 | 0.00093 | 0.00001 | 0.03447 | 0.00014 | 0.28313 | 0.00011 | 0.28323 | 0.00011 | |
| NAF-01_5 | | 5.55 | 35 | 0.00093 | 0.00001 | 0.03116 | 0.00013 | 0.28307 | 0.00011 | 0.28317 | 0.00011 | |
| TR-02_3 | | 14.8 | 35 | 0.00124 | 0.00002 | 0.03916 | 0.00068 | 0.28318 | 0.00011 | 0.28318 | 0.00011 | |
| TR-02_8 | | 14.8 | 35 | 0.00096 | 0.00002 | 0.03036 | 0.00095 | 0.28312 | 0.00011 | 0.28322 | 0.00011 | |
| SPF-05_7 | SPF-05_1 | 2.95 | 35 | 0.00085 | 0.00001 | 0.01945 | 0.00015 | 0.28314 | 0.00014 | 0.28317 | 0.00014 | 13.7 |
| SPF-05_3 | SPF-05_10 | 2.95 | 35 | 0.00199 | 0.00003 | 0.06576 | 0.00159 | 0.28316 | 0.00005 | 0.28320 | 0.00005 | 14.8 |
| SPF-05_6 | SPF-05_15 | 2.95 | 35 | 0.00116 | 0.00000 | 0.03535 | 0.00060 | 0.28315 | 0.00006 | 0.28319 | 0.00006 | 14.2 |
| SPF-05_1 | SPF-05_5 | 2.95 | 35 | 0.00226 | 0.00002 | 0.07641 | 0.00034 | 0.28317 | 0.00004 | 0.28321 | 0.00004 | 15.1 |
| SPF-05_2 | SPF-05_8 | 2.95 | 35 | 0.00130 | 0.00000 | 0.04057 | 0.00047 | 0.28317 | 0.00004 | 0.28321 | 0.00004 | 15.0 |
| SPF-05_4 | SPF-05_9 | 2.95 | 35 | 0.00052 | 0.00000 | 0.01653 | 0.00019 | 0.28315 | 0.00004 | 0.28319 | 0.00004 | 14.2 |
| SPF-05_5 | SPF-05_9 | 2.95 | 35 | 0.00077 | 0.00000 | 0.02557 | 0.00005 | 0.28314 | 0.00004 | 0.28318 | 0.00004 | 13.8 |
| JEM-02_1 | JEM-02_1 | 6.94 | 35 | 0.00208 | 0.00003 | 0.06571 | 0.00134 | 0.28310 | 0.00011 | 0.28318 | 0.00011 | 13.8 |
| JEM-02_9 | JEM-02_10 | 6.94 | 35 | 0.00228 | 0.00002 | 0.07170 | 0.00036 | 0.28313 | 0.00013 | 0.28320 | 0.00013 | 14.8 |
| JEM-02_10 | JEM-02_11 | 6.94 | 35 | 0.00236 | 0.00002 | 0.07134 | 0.00062 | 0.28313 | 0.00013 | 0.28320 | 0.00013 | 14.7 |
| JEM-02_11 | JEM-02_12 | 6.94 | 35 | 0.00212 | 0.00002 | 0.06809 | 0.00054 | 0.28322 | 0.00016 | 0.28329 | 0.00016 | 18.0 |
| JEM-02_12 | JEM-02_13 | 6.94 | 35 | 0.00160 | 0.00004 | 0.04700 | 0.00071 | 0.28311 | 0.00010 | 0.28318 | 0.00010 | 14.0 |
| JEM-02_13 | JEM-02_14 | 6.94 | 35 | 0.00146 | 0.00001 | 0.04340 | 0.00021 | 0.28312 | 0.00014 | 0.28320 | 0.00014 | 14.6 |
| JEM-02_14 | JEM-02_15 | 6.94 | 35 | 0.00157 | 0.00002 | 0.04614 | 0.00084 | 0.28312 | 0.00013 | 0.28320 | 0.00013 | 15.2 |
| JEM-02_2 | JEM-02_2 | 6.94 | 35 | 0.00138 | 0.00003 | 0.04425 | 0.00093 | 0.28314 | 0.00013 | 0.28322 | 0.00013 | 14.6 |
| JEM-02_3 | JEM-02_3 | 6.94 | 35 | 0.00118 | 0.00003 | 0.03724 | 0.00127 | 0.28318 | 0.00013 | 0.28325 | 0.00013 | 16.5 |
| JEM-02_4 | JEM-02_5 | 6.94 | 35 | 0.00068 | 0.00003 | 0.02075 | 0.00109 | 0.28319 | 0.00011 | 0.28327 | 0.00011 | 17.0 |
| JEM-02_5 | JEM-02_5 | 6.94 | 35 | 0.00184 | 0.00003 | 0.05794 | 0.00107 | 0.28307 | 0.00012 | 0.28315 | 0.00012 | 12.8 |
| JEM-02_6 | JEM-02_6 | 6.94 | 35 | 0.00149 | 0.00001 | 0.04357 | 0.00077 | 0.28312 | 0.00011 | 0.28319 | 0.00011 | 14.3 |
| JEM-02_7 | JEM-02_7 | 6.94 | 35 | 0.00148 | 0.00001 | 0.03770 | 0.00056 | 0.28312 | 0.00018 | 0.28312 | 0.00018 | 12.0 |
| JEM-02_9 | JEM-02_9 | 14.52 | 35 | 0.00069 | 0.00001 | 0.02453 | 0.00024 | 0.28309 | 0.00017 | 0.28316 | 0.00017 | 13.3 |

Appendix D: Eastern Sunda arc zircon Lu-Hf data

| Hf_analysis | Zircon_analysis | Age (Ma) | Spot_size (um) | Lu176/Hf177 | 2SE | Yb176/Hf177 | 2SE | Hf176/Hf177 | 2SE | StdCorr Hf176/Hf177 | 2SE | eHf (CHUR) |
|-------------|-----------------|----------|----------------|-------------|---------|-------------|---------|-------------|---------|---------------------|---------|------------|
| JER-01_6 | JER-01_10 | 14.52 | 35 | 0.00083 | 0.00002 | 0.03011 | 0.00096 | 0.28326 | 0.00015 | 0.28332 | 0.00015 | 19.0 |
| JER-01_7 | JER-01_11 | 14.52 | 35 | 0.00113 | 0.00001 | 0.04291 | 0.00039 | 0.28314 | 0.00022 | 0.28321 | 0.00022 | 15.1 |
| JER-01_8 | JER-01_13 | 14.52 | 35 | 0.00075 | 0.00001 | 0.02462 | 0.00047 | 0.28324 | 0.00014 | 0.28330 | 0.00014 | 18.4 |
| JER-01_9 | JER-01_18 | 14.52 | 35 | 0.00124 | 0.00001 | 0.04081 | 0.00115 | 0.28316 | 0.00017 | 0.28323 | 0.00017 | 15.6 |
| JER-01_10 | JER-01_19 | 14.52 | 35 | 0.00096 | 0.00002 | 0.02815 | 0.00019 | 0.28320 | 0.00015 | 0.28326 | 0.00015 | 16.9 |
| JER-01_11 | JER-01_20 | 14.52 | 35 | 0.00160 | 0.00001 | 0.05468 | 0.00096 | 0.28312 | 0.00014 | 0.28319 | 0.00014 | 14.3 |
| JER-01_12 | JER-01_21 | 14.52 | 35 | 0.00129 | 0.00004 | 0.03802 | 0.00064 | 0.28312 | 0.00013 | 0.28319 | 0.00013 | 14.3 |
| JER-01_2 | JER-01_4 | 14.52 | 35 | 0.00139 | 0.00001 | 0.04980 | 0.00042 | 0.28311 | 0.00017 | 0.28317 | 0.00017 | 13.7 |
| JER-01_3 | JER-01_5 | 14.52 | 35 | 0.00105 | 0.00002 | 0.02861 | 0.00112 | 0.28310 | 0.00013 | 0.28317 | 0.00013 | 13.5 |
| JER-01_4 | JER-01_7 | 14.52 | 35 | 0.00069 | 0.00001 | 0.02509 | 0.00036 | 0.28326 | 0.00026 | 0.28332 | 0.00026 | 19.0 |
| JER-01_5 | JER-01_9 | 14.52 | 35 | 0.00214 | 0.00001 | 0.07901 | 0.00045 | 0.28325 | 0.00018 | 0.28331 | 0.00018 | 18.7 |
| JEM-02_8 | | 6.94 | 35 | 0.00192 | 0.00002 | 0.05811 | 0.00104 | 0.28328 | 0.00012 | 0.28335 | 0.00012 | |
| SINA-04_11 | | 24.72 | 35 | 0.00188 | 0.00000 | 0.06806 | 0.00028 | 0.28308 | 0.00011 | 0.28315 | 0.00011 | |
| SINA-04_12 | | 24.72 | 35 | 0.00199 | 0.00001 | 0.07255 | 0.00067 | 0.28314 | 0.00011 | 0.28321 | 0.00011 | |
| SINA-04_13 | | 24.72 | 35 | 0.00181 | 0.00002 | 0.06220 | 0.00085 | 0.28321 | 0.00012 | 0.28328 | 0.00012 | |
| SINA-04_14 | | 24.72 | 35 | 0.00207 | 0.00003 | 0.07436 | 0.00089 | 0.28312 | 0.00011 | 0.28319 | 0.00011 | |
| SINA-04_15 | | 24.72 | 35 | 0.00269 | 0.00008 | 0.10714 | 0.00531 | 0.28318 | 0.00021 | 0.28325 | 0.00021 | |
| TR-02_3 | | 14.8 | 35 | 0.00124 | 0.00002 | 0.03916 | 0.00068 | 0.28307 | 0.00011 | 0.28318 | 0.00011 | |
| TR-02_8 | | 14.8 | 35 | 0.00096 | 0.00002 | 0.03036 | 0.00095 | 0.28312 | 0.00011 | 0.28322 | 0.00011 | |
| UG012184_11 | | 4.5 | 35 | 0.00122 | 0.00000 | 0.03018 | 0.00016 | 0.28308 | 0.00014 | 0.28316 | 0.00014 | |
| UG012184_6 | | 4.5 | 35 | 0.00228 | 0.00001 | 0.05725 | 0.00034 | 0.28300 | 0.00010 | 0.28308 | 0.00010 | |
| UG012188_4 | | 6.12 | 35 | 0.00277 | 0.00006 | 0.07447 | 0.00127 | 0.28306 | 0.00009 | 0.28313 | 0.00009 | |
| PCT-01_5 | PCT-01_15 | 27.92 | 50 | 0.00250 | 0.00005 | 0.07820 | 0.00121 | 0.28314 | 0.00004 | 0.28317 | 0.00004 | 13.5 |
| PCT-01_6 | PCT-01_17 | 27.92 | 50 | 0.00251 | 0.00000 | 0.07979 | 0.00027 | 0.28315 | 0.00005 | 0.28317 | 0.00005 | 13.7 |
| PCT-01_1 | PCT-01_2 | 27.92 | 50 | 0.00264 | 0.00001 | 0.08554 | 0.00055 | 0.28316 | 0.00005 | 0.28327 | 0.00005 | 17.0 |
| PCT-01_7 | PCT-01_20 | 27.92 | 50 | 0.00243 | 0.00002 | 0.07613 | 0.00040 | 0.28317 | 0.00006 | 0.28320 | 0.00006 | 14.5 |
| PCT-01_8 | PCT-01_21 | 27.92 | 50 | 0.00370 | 0.00007 | 0.10613 | 0.00149 | 0.28319 | 0.00007 | 0.28321 | 0.00007 | 15.0 |
| PCT-01_9 | PCT-01_23 | 27.92 | 50 | 0.00321 | 0.00004 | 0.09377 | 0.00101 | 0.28312 | 0.00007 | 0.28314 | 0.00007 | 12.6 |
| PCT-01_10 | PCT-01_25 | 27.92 | 50 | 0.00266 | 0.00004 | 0.08767 | 0.00151 | 0.28314 | 0.00008 | 0.28324 | 0.00008 | 15.9 |
| PCT-01_11 | PCT-01_26 | 27.92 | 50 | 0.00312 | 0.00003 | 0.10080 | 0.00112 | 0.28319 | 0.00004 | 0.28328 | 0.00004 | 17.5 |
| PCT-01_12 | PCT-01_36 | 27.92 | 50 | 0.00307 | 0.00007 | 0.10213 | 0.00269 | 0.28308 | 0.00010 | 0.28315 | 0.00010 | 13.0 |
| PCT-01_2 | PCT-01_4 | 27.92 | 50 | 0.00327 | 0.00002 | 0.10444 | 0.00070 | 0.28314 | 0.00005 | 0.28321 | 0.00005 | 15.0 |
| PCT-01_4 | PCT-01_5 | 27.92 | 50 | 0.00272 | 0.00002 | 0.08327 | 0.00028 | 0.28311 | 0.00005 | 0.28314 | 0.00005 | 12.4 |
| PCT-01_3 | PCT-01_6 | 27.92 | 50 | 0.00202 | 0.00005 | 0.06500 | 0.00168 | 0.28312 | 0.00005 | 0.28318 | 0.00005 | 13.8 |
| SINA-01_1 | SINA-01_1 | 24.43 | 35 | 0.00201 | 0.00001 | 0.08297 | 0.00026 | 0.28306 | 0.00015 | 0.28312 | 0.00015 | 12.0 |
| SINA-01_5 | SINA-01_10 | 24.43 | 35 | 0.00244 | 0.00004 | 0.07072 | 0.00129 | 0.28301 | 0.00059 | 0.28308 | 0.00059 | 10.4 |
| SINA-01_6 | SINA-01_12 | 24.43 | 35 | 0.00164 | 0.00001 | 0.06488 | 0.00069 | 0.28313 | 0.00014 | 0.28319 | 0.00014 | 14.4 |
| SINA-01_7 | SINA-01_14 | 24.43 | 35 | 0.00224 | 0.00003 | 0.09135 | 0.00061 | 0.28311 | 0.00015 | 0.28317 | 0.00015 | 13.7 |
| SINA-01_2 | SINA-01_2 | 24.43 | 35 | 0.00222 | 0.00001 | 0.09112 | 0.00051 | 0.28317 | 0.00015 | 0.28324 | 0.00015 | 16.0 |
| SINA-01_9 | SINA-01_22 | 24.43 | 35 | 0.00302 | 0.00005 | 0.09939 | 0.00175 | 0.28323 | 0.00030 | 0.28330 | 0.00030 | 18.1 |
| SINA-01_10 | SINA-01_27 | 24.43 | 35 | 0.00689 | 0.00018 | 0.25105 | 0.00510 | 0.28299 | 0.00016 | 0.28306 | 0.00016 | 9.7 |
| SINA-01_11 | SINA-01_29 | 24.43 | 35 | 0.00207 | 0.00003 | 0.06316 | 0.00041 | 0.28314 | 0.00014 | 0.28320 | 0.00014 | 14.8 |
| SINA-01_12 | SINA-01_32 | 24.43 | 35 | 0.00200 | 0.00001 | 0.08160 | 0.00081 | 0.28313 | 0.00013 | 0.28320 | 0.00013 | 14.6 |
| SINA-01_13 | SINA-01_34 | 24.43 | 35 | 0.00122 | 0.00000 | 0.05008 | 0.00035 | 0.28320 | 0.00014 | 0.28327 | 0.00014 | 17.0 |
| SINA-01_3 | SINA-01_8 | 24.43 | 35 | 0.00222 | 0.00008 | 0.06904 | 0.00490 | 0.28323 | 0.00016 | 0.28330 | 0.00016 | 18.1 |
| SINA-01_4 | SINA-01_9 | 24.43 | 35 | 0.00240 | 0.00003 | 0.10101 | 0.00120 | 0.28318 | 0.00016 | 0.28325 | 0.00016 | 16.4 |
| SINA-02_1 | SINA-02_1 | 24.54 | 50 | 0.00157 | 0.00000 | 0.05865 | 0.00036 | 0.28315 | 0.00006 | 0.28318 | 0.00006 | 13.9 |
| SINA-02_2 | SINA-02_2 | 24.54 | 50 | 0.00191 | 0.00002 | 0.07095 | 0.00057 | 0.28317 | 0.00005 | 0.28320 | 0.00005 | 14.6 |
| SINA-02_4 | SINA-02_21 | 24.54 | 50 | 0.00166 | 0.00001 | 0.05869 | 0.00105 | 0.28313 | 0.00005 | 0.28317 | 0.00005 | 13.6 |
| SINA-02_5 | SINA-02_22 | 24.54 | 50 | 0.00164 | 0.00001 | 0.06326 | 0.00066 | 0.28315 | 0.00005 | 0.28319 | 0.00005 | 14.3 |

Appendix D: Eastern Sunda arc zircon Lu-Hf data

| Hf_analysis | Zircon_analysis | Age (Ma) | Spot_size (um) | Lu176/Hf177 | 2SE | Yb176/Hf177 | 2SE | Hf176/Hf177 | 2SE | StdCorr Hf176/Hf177 | 2SE | eHf (CHUR) |
|-------------|-----------------|----------|----------------|-------------|---------|-------------|---------|-------------|---------|---------------------|---------|------------|
| SINA-02_6 | SINA-02_25 | 24.54 | 50 | 0.00230 | 0.00002 | 0.07867 | 0.00050 | 0.28317 | 0.00006 | 0.28322 | 0.00006 | 15.3 |
| SINA-02_7 | SINA-02_32 | 24.54 | 50 | 0.00249 | 0.00002 | 0.09575 | 0.00032 | 0.28315 | 0.00005 | 0.28319 | 0.00005 | 14.2 |
| SINA-02_8 | SINA-02_34 | 24.54 | 50 | 0.00199 | 0.00001 | 0.08437 | 0.00152 | 0.28324 | 0.00008 | 0.28327 | 0.00008 | 17.2 |
| SINA-02_3 | SINA-02_8 | 24.54 | 50 | 0.00245 | 0.00003 | 0.08924 | 0.00100 | 0.28324 | 0.00010 | 0.28327 | 0.00010 | 17.2 |
| SINA-04_3 | SINA-04_14 | 24.72 | 35 | 0.00299 | 0.00006 | 0.08412 | 0.00118 | 0.28315 | 0.00013 | 0.28322 | 0.00013 | 15.2 |
| SINA-04_4 | SINA-04_22 | 24.72 | 35 | 0.00183 | 0.00002 | 0.06398 | 0.00070 | 0.28313 | 0.00011 | 0.28320 | 0.00011 | 14.6 |
| SINA-04_5 | SINA-04_26 | 24.72 | 35 | 0.00163 | 0.00001 | 0.05568 | 0.00047 | 0.28309 | 0.00012 | 0.28316 | 0.00012 | 13.3 |
| SINA-04_6 | SINA-04_27 | 24.72 | 35 | 0.00214 | 0.00003 | 0.07573 | 0.00078 | 0.28307 | 0.00016 | 0.28314 | 0.00016 | 12.4 |
| SINA-04_1 | SINA-04_3 | 24.72 | 50 | 0.00258 | 0.00002 | 0.08975 | 0.00077 | 0.28313 | 0.00008 | 0.28316 | 0.00008 | 13.1 |
| SINA-04_7 | SINA-04_35 | 24.72 | 35 | 0.00240 | 0.00003 | 0.08874 | 0.00066 | 0.28315 | 0.00011 | 0.28322 | 0.00011 | 15.2 |
| SINA-04_10 | SINA-04_36 | 24.72 | 35 | 0.00247 | 0.00003 | 0.09262 | 0.00185 | 0.28316 | 0.00012 | 0.28323 | 0.00012 | 15.8 |
| SINA-04_9 | SINA-04_37 | 24.72 | 35 | 0.00206 | 0.00002 | 0.06311 | 0.00055 | 0.28317 | 0.00014 | 0.28324 | 0.00014 | 16.1 |
| SINA-04_8 | SINA-04_38 | 24.72 | 35 | 0.00221 | 0.00001 | 0.06605 | 0.00079 | 0.28314 | 0.00021 | 0.28321 | 0.00021 | 14.9 |
| SINA-04_2 | SINA-04_4 | 24.72 | 50 | 0.00271 | 0.00001 | 0.09310 | 0.00013 | 0.28316 | 0.00005 | 0.28318 | 0.00005 | 13.9 |
| SINA-05_7 | SINA-05_10 | 24.77 | 35 | 0.00183 | 0.00002 | 0.07041 | 0.00098 | 0.28309 | 0.00011 | 0.28319 | 0.00011 | 14.4 |
| SINA-05_5 | SINA-05_12 | 24.77 | 35 | 0.00274 | 0.00002 | 0.11244 | 0.00125 | 0.28304 | 0.00015 | 0.28312 | 0.00015 | 11.7 |
| SINA-05_6 | SINA-05_13 | 24.77 | 35 | 0.00190 | 0.00001 | 0.06931 | 0.00077 | 0.28318 | 0.00012 | 0.28327 | 0.00012 | 17.2 |
| SINA-05_10 | SINA-05_2 | 24.77 | 35 | 0.00231 | 0.00004 | 0.07992 | 0.00220 | 0.28315 | 0.00024 | 0.28326 | 0.00024 | 16.6 |
| SINA-05_3 | SINA-05_22 | 24.77 | 35 | 0.00180 | 0.00002 | 0.06438 | 0.00105 | 0.28308 | 0.00011 | 0.28316 | 0.00011 | 13.2 |
| SINA-05_8 | SINA-05_4 | 24.77 | 35 | 0.00186 | 0.00001 | 0.06844 | 0.00072 | 0.28309 | 0.00013 | 0.28319 | 0.00013 | 14.3 |
| SINA-05_1 | SINA-05_41 | 24.77 | 35 | 0.00304 | 0.00002 | 0.11689 | 0.00152 | 0.28320 | 0.00013 | 0.28328 | 0.00013 | 17.4 |
| SING-02_1 | SING-02_1 | 14.64 | 50 | 0.00108 | 0.00000 | 0.03225 | 0.00037 | 0.28309 | 0.00004 | 0.28316 | 0.00004 | 13.1 |
| SING-02_6 | SING-02_11 | 14.64 | 50 | 0.00159 | 0.00004 | 0.04934 | 0.00152 | 0.28314 | 0.00006 | 0.28319 | 0.00006 | 14.3 |
| SING-02_7 | SING-02_12 | 14.64 | 35 | 0.00157 | 0.00001 | 0.05471 | 0.00027 | 0.28314 | 0.00015 | 0.28320 | 0.00015 | 14.7 |
| SING-02_8 | SING-02_18 | 14.64 | 35 | 0.00123 | 0.00003 | 0.04461 | 0.00154 | 0.28318 | 0.00015 | 0.28325 | 0.00015 | 16.4 |
| SING-02_9 | SING-02_19 | 14.64 | 35 | 0.00228 | 0.00002 | 0.07976 | 0.00300 | 0.28316 | 0.00017 | 0.28323 | 0.00017 | 15.6 |
| SING-02_2 | SING-02_2 | 14.64 | 50 | 0.00106 | 0.00001 | 0.03165 | 0.00052 | 0.28312 | 0.00006 | 0.28318 | 0.00006 | 13.8 |
| SING-02_10 | SING-02_27 | 14.64 | 35 | 0.00072 | 0.00000 | 0.02412 | 0.00040 | 0.28313 | 0.00016 | 0.28319 | 0.00016 | 14.4 |
| SING-02_11 | SING-02_28 | 14.64 | 50 | 0.00091 | 0.00001 | 0.02838 | 0.00066 | 0.28315 | 0.00006 | 0.28321 | 0.00006 | 15.1 |
| SING-02_3 | SING-02_5 | 14.64 | 35 | 0.00100 | 0.00002 | 0.02399 | 0.00058 | 0.28306 | 0.00014 | 0.28313 | 0.00014 | 12.0 |
| SING-02_4 | SING-02_8 | 14.64 | 50 | 0.00080 | 0.00001 | 0.02330 | 0.00050 | 0.28313 | 0.00006 | 0.28318 | 0.00006 | 14.0 |
| SING-02_5 | SING-02_9 | 14.64 | 35 | 0.00082 | 0.00001 | 0.02611 | 0.00050 | 0.28316 | 0.00012 | 0.28322 | 0.00012 | 15.5 |
| TR-02_1 | TR-02_1 | 14.8 | 50 | 0.00064 | 0.00000 | 0.01921 | 0.00019 | 0.28303 | 0.00005 | 0.28311 | 0.00005 | 11.5 |
| TR-02_10 | TR-02_10 | 14.8 | 35 | 0.00114 | 0.00003 | 0.03584 | 0.00120 | 0.28314 | 0.00010 | 0.28325 | 0.00010 | 16.4 |
| TR-02_11 | TR-02_11 | 14.8 | 50 | 0.00072 | 0.00001 | 0.02166 | 0.00041 | 0.28315 | 0.00006 | 0.28325 | 0.00006 | 16.6 |
| TR-02_12 | TR-02_14 | 14.8 | 35 | 0.00209 | 0.00003 | 0.06754 | 0.00159 | 0.28317 | 0.00012 | 0.28328 | 0.00012 | 17.4 |
| TR-02_13 | TR-02_15 | 14.8 | 35 | 0.00236 | 0.00004 | 0.07757 | 0.00096 | 0.28312 | 0.00015 | 0.28323 | 0.00015 | 15.6 |
| TR-02_14 | TR-02_16 | 14.8 | 50 | 0.00103 | 0.00001 | 0.03089 | 0.00036 | 0.28315 | 0.00005 | 0.28324 | 0.00005 | 16.1 |
| TR-02_15 | TR-02_17 | 14.8 | 35 | 0.00038 | 0.00001 | 0.01162 | 0.00024 | 0.28309 | 0.00009 | 0.28319 | 0.00009 | 14.3 |
| TR-02_2 | TR-02_2 | 14.8 | 35 | 0.00111 | 0.00001 | 0.03496 | 0.00017 | 0.28321 | 0.00012 | 0.28332 | 0.00012 | 18.7 |
| TR-02_16 | TR-02_22 | 14.8 | 35 | 0.00102 | 0.00001 | 0.03131 | 0.00061 | 0.28323 | 0.00012 | 0.28333 | 0.00012 | 19.1 |
| TR-02_6 | TR-02_5 | 14.8 | 35 | 0.00104 | 0.00001 | 0.03246 | 0.00043 | 0.28313 | 0.00012 | 0.28324 | 0.00012 | 16.0 |
| TR-02_9 | TR-02_8 | 14.8 | 35 | 0.00106 | 0.00001 | 0.03169 | 0.00019 | 0.28312 | 0.00013 | 0.28323 | 0.00013 | 15.7 |
| UG012184_1 | UG012184_1 | 4.5 | 35 | 0.00192 | 0.00003 | 0.05865 | 0.00133 | 0.28313 | 0.00006 | 0.28321 | 0.00006 | 14.9 |
| UG012184_4 | UG012184_10 | 4.5 | 35 | 0.00347 | 0.00001 | 0.06973 | 0.00051 | 0.28311 | 0.00016 | 0.28319 | 0.00016 | 14.3 |
| UG012184_5 | UG012184_11 | 4.5 | 35 | 0.00090 | 0.00001 | 0.02405 | 0.00012 | 0.28290 | 0.00012 | 0.28299 | 0.00012 | 7.1 |
| UG012184_7 | UG012184_13 | 4.5 | 35 | 0.00191 | 0.00003 | 0.04672 | 0.00068 | 0.28309 | 0.00025 | 0.28317 | 0.00025 | 13.6 |
| UG012184_8 | UG012184_14 | 4.5 | 35 | 0.00109 | 0.00002 | 0.03374 | 0.00089 | 0.28310 | 0.00005 | 0.28318 | 0.00005 | 14.1 |
| UG012184_9 | UG012184_15 | 4.5 | 35 | 0.00222 | 0.00002 | 0.05910 | 0.00032 | 0.28306 | 0.00006 | 0.28315 | 0.00006 | 12.7 |
| UG012184_10 | UG012184_16 | 4.5 | 35 | 0.00226 | 0.00009 | 0.06030 | 0.00229 | 0.28303 | 0.00016 | 0.28311 | 0.00016 | 11.6 |

Appendix D: Eastern Sunda arc zircon Lu-Hf data

| Hf_analysis | Zircon_analysis | Age (Ma) | Spot_size (um) | Lu176/Hf177 | 2SE | Yb176/Hf177 | 2SE | Hf176/Hf177 | 2SE | StdCorr_Hf176/Hf177 | 2SE | eHF (CHUR) |
|-------------|-----------------|----------|----------------|-------------|---------|-------------|---------|-------------|---------|---------------------|---------|------------|
| UG012184_12 | UG012184_17 | 4.5 | 35 | 0.00159 | 0.00002 | 0.05099 | 0.00066 | 0.28309 | 0.00005 | 0.28317 | 0.00005 | 13.7 |
| UG012184_2 | UG012184_2 | 4.5 | 35 | 0.00091 | 0.00004 | 0.02814 | 0.00125 | 0.28312 | 0.00006 | 0.28321 | 0.00006 | 14.9 |
| UG012184_13 | UG012184_20 | 4.5 | 35 | 0.00126 | 0.00001 | 0.03862 | 0.00042 | 0.28311 | 0.00007 | 0.28319 | 0.00007 | 14.3 |
| UG012184_14 | UG012184_22 | 4.5 | 35 | 0.00058 | 0.00000 | 0.01532 | 0.00007 | 0.28308 | 0.00007 | 0.28316 | 0.00007 | 13.3 |
| UG012184_15 | UG012184_23 | 4.5 | 35 | 0.00045 | 0.00001 | 0.01365 | 0.00035 | 0.28310 | 0.00005 | 0.28318 | 0.00005 | 14.0 |
| UG012184_3 | UG012184_9 | 4.5 | 35 | 0.00038 | 0.00000 | 0.00844 | 0.00016 | 0.28293 | 0.00016 | 0.28301 | 0.00016 | 7.9 |
| UG012185_5 | UG012185_14 | 4.34 | 35 | 0.00132 | 0.00001 | 0.04847 | 0.00072 | 0.28312 | 0.00014 | 0.28320 | 0.00014 | 14.7 |
| UG012185_7 | UG012185_24 | 4.34 | 35 | 0.00085 | 0.00000 | 0.03098 | 0.00018 | 0.28316 | 0.00016 | 0.28324 | 0.00016 | 16.2 |
| UG012185_9 | UG012185_25 | 4.34 | 35 | 0.00112 | 0.00000 | 0.04153 | 0.00026 | 0.28319 | 0.00014 | 0.28328 | 0.00014 | 17.4 |
| UG012185_8 | UG012185_26 | 4.34 | 50 | 0.00154 | 0.00001 | 0.05367 | 0.00018 | 0.28312 | 0.00006 | 0.28323 | 0.00006 | 15.9 |
| UG012185_1 | UG012185_3 | 4.34 | 50 | 0.00087 | 0.00001 | 0.02984 | 0.00038 | 0.28312 | 0.00006 | 0.28323 | 0.00006 | 15.6 |
| UG012185_2 | UG012185_6 | 4.34 | 35 | 0.00135 | 0.00001 | 0.05161 | 0.00027 | 0.28319 | 0.00015 | 0.28319 | 0.00015 | 14.4 |
| UG012185_4 | UG012185_7 | 4.34 | 35 | 0.00209 | 0.00002 | 0.07903 | 0.00049 | 0.28311 | 0.00015 | 0.28319 | 0.00015 | 14.4 |
| UG012190_1 | UG012190_11 | 4.48 | 35 | 0.00117 | 0.00002 | 0.03837 | 0.00039 | 0.28307 | 0.00004 | 0.28315 | 0.00004 | 12.8 |
| UG012190_2 | UG012190_14 | 4.48 | 35 | 0.00100 | 0.00001 | 0.02643 | 0.00039 | 0.28304 | 0.00005 | 0.28312 | 0.00005 | 11.9 |
| UG012190_3 | UG012190_15 | 4.48 | 35 | 0.00054 | 0.00000 | 0.01650 | 0.00027 | 0.28308 | 0.00005 | 0.28316 | 0.00005 | 13.3 |
| UG012190_4 | UG012190_16 | 4.48 | 35 | 0.00110 | 0.00001 | 0.03509 | 0.00055 | 0.28316 | 0.00005 | 0.28324 | 0.00005 | 16.1 |
| UG012190_5 | UG012190_17 | 4.48 | 35 | 0.00093 | 0.00001 | 0.02910 | 0.00021 | 0.28310 | 0.00005 | 0.28318 | 0.00005 | 14.0 |
| UG012190_6 | UG012190_19 | 4.48 | 35 | 0.00072 | 0.00000 | 0.01789 | 0.00016 | 0.28308 | 0.00006 | 0.28316 | 0.00006 | 13.4 |
| UG012190_7 | UG012190_23 | 4.48 | 35 | 0.00128 | 0.00004 | 0.04255 | 0.00097 | 0.28318 | 0.00005 | 0.28318 | 0.00005 | 13.9 |
| UG012190_8 | UG012190_25 | 4.48 | 35 | 0.00098 | 0.00003 | 0.03230 | 0.00112 | 0.28309 | 0.00005 | 0.28317 | 0.00005 | 13.6 |
| UG012190_9 | UG012190_27 | 4.48 | 35 | 0.00186 | 0.00001 | 0.05312 | 0.00063 | 0.28314 | 0.00009 | 0.28322 | 0.00009 | 15.5 |
| UG012190_11 | UG012190_28 | 4.48 | 35 | 0.00091 | 0.00001 | 0.03014 | 0.00038 | 0.28310 | 0.00005 | 0.28318 | 0.00005 | 13.9 |
| UG012190_12 | UG012190_30 | 4.48 | 35 | 0.00067 | 0.00001 | 0.02100 | 0.00016 | 0.28307 | 0.00005 | 0.28315 | 0.00005 | 13.0 |
| UG012190_13 | UG012190_31 | 4.48 | 35 | 0.00064 | 0.00000 | 0.02007 | 0.00010 | 0.28308 | 0.00005 | 0.28316 | 0.00005 | 13.3 |
| UG012191_3 | UG012191_10 | 5.94 | 35 | 0.00296 | 0.00001 | 0.10564 | 0.00145 | 0.28315 | 0.00019 | 0.28325 | 0.00019 | 16.4 |
| UG012191_6 | UG012191_17 | 5.94 | 35 | 0.00143 | 0.00001 | 0.03731 | 0.00043 | 0.28303 | 0.00023 | 0.28313 | 0.00023 | 12.1 |
| UG012191_7 | UG012191_18 | 5.94 | 35 | 0.00218 | 0.00009 | 0.07887 | 0.00345 | 0.28316 | 0.00012 | 0.28325 | 0.00012 | 16.6 |
| UG012191_8 | UG012191_20 | 5.94 | 35 | 0.00349 | 0.00002 | 0.11876 | 0.00213 | 0.28331 | 0.00023 | 0.28342 | 0.00023 | 22.4 |
| UG012191_9 | UG012191_21 | 5.94 | 35 | 0.00224 | 0.00002 | 0.07427 | 0.00082 | 0.28309 | 0.00013 | 0.28320 | 0.00013 | 14.8 |
| UG012191_11 | UG012191_26 | 5.94 | 35 | 0.00209 | 0.00004 | 0.06824 | 0.00179 | 0.28313 | 0.00013 | 0.28321 | 0.00013 | 14.9 |
| UG012191_12 | UG012191_27 | 5.94 | 35 | 0.00145 | 0.00000 | 0.04935 | 0.00047 | 0.28307 | 0.00014 | 0.28317 | 0.00014 | 13.5 |
| UG012191_13 | UG012191_29 | 5.94 | 35 | 0.00101 | 0.00001 | 0.03063 | 0.00062 | 0.28319 | 0.00011 | 0.28326 | 0.00011 | 16.8 |
| UG012191_15 | UG012191_33 | 5.94 | 50 | 0.00118 | 0.00001 | 0.03823 | 0.00024 | 0.28313 | 0.00007 | 0.28319 | 0.00007 | 14.4 |
| UG012195_6 | UG012195_12 | 4.53 | 35 | 0.00148 | 0.00001 | 0.04797 | 0.00009 | 0.28311 | 0.00006 | 0.28319 | 0.00006 | 14.2 |
| UG012195_7 | UG012195_14 | 4.53 | 35 | 0.00085 | 0.00000 | 0.02778 | 0.00035 | 0.28315 | 0.00006 | 0.28322 | 0.00006 | 15.5 |
| UG012195_8 | UG012195_17 | 4.53 | 35 | 0.00178 | 0.00002 | 0.04288 | 0.00035 | 0.28318 | 0.00018 | 0.28326 | 0.00018 | 16.8 |
| UG012195_9 | UG012195_19 | 4.53 | 35 | 0.00091 | 0.00001 | 0.02820 | 0.00052 | 0.28308 | 0.00007 | 0.28315 | 0.00007 | 13.1 |
| UG012195_10 | UG012195_24 | 4.53 | 35 | 0.00073 | 0.00001 | 0.01739 | 0.00027 | 0.28311 | 0.00007 | 0.28319 | 0.00007 | 14.2 |
| UG012195_11 | UG012195_26 | 4.53 | 35 | 0.00070 | 0.00002 | 0.02261 | 0.00087 | 0.28317 | 0.00005 | 0.28325 | 0.00005 | 16.4 |
| UG012195_12 | UG012195_26 | 4.53 | 35 | 0.00227 | 0.00013 | 0.08305 | 0.00511 | 0.28310 | 0.00006 | 0.28318 | 0.00006 | 14.0 |
| UG012195_2 | UG012195_3 | 4.53 | 35 | 0.00102 | 0.00002 | 0.02793 | 0.00034 | 0.28297 | 0.00016 | 0.28305 | 0.00016 | 9.3 |
| UG012195_1 | UG012195_4 | 4.53 | 35 | 0.00078 | 0.00001 | 0.02039 | 0.00024 | 0.28282 | 0.00020 | 0.28290 | 0.00020 | 4.1 |
| UG012195_3 | UG012195_5 | 4.53 | 35 | 0.00135 | 0.00002 | 0.03769 | 0.00065 | 0.28282 | 0.00006 | 0.28290 | 0.00006 | 4.0 |
| UG012195_4 | UG012195_6 | 4.53 | 35 | 0.00043 | 0.00001 | 0.01360 | 0.00021 | 0.28313 | 0.00005 | 0.28320 | 0.00005 | 14.8 |
| UG012195_5 | UG012195_9 | 4.53 | 35 | 0.00210 | 0.00008 | 0.05344 | 0.00215 | 0.28316 | 0.00016 | 0.28324 | 0.00016 | 16.2 |
| UG012198_1 | UG012198_1 | 6.12 | 35 | 0.00250 | 0.00004 | 0.06405 | 0.00041 | 0.28315 | 0.00009 | 0.28322 | 0.00009 | 15.4 |
| UG012198_5 | UG012198_11 | 6.12 | 35 | 0.00176 | 0.00002 | 0.05393 | 0.00044 | 0.28313 | 0.00007 | 0.28320 | 0.00007 | 14.8 |
| UG012198_6 | UG012198_16 | 6.12 | 35 | 0.00521 | 0.00006 | 0.13762 | 0.00135 | 0.28300 | 0.00023 | 0.28307 | 0.00023 | 10.0 |
| UG012198_7 | UG012198_17 | 6.12 | 35 | 0.00138 | 0.00000 | 0.03218 | 0.00047 | 0.28309 | 0.00008 | 0.28316 | 0.00008 | 13.2 |

Appendix D: Eastern Sunda arc zircon Lu-Hf data

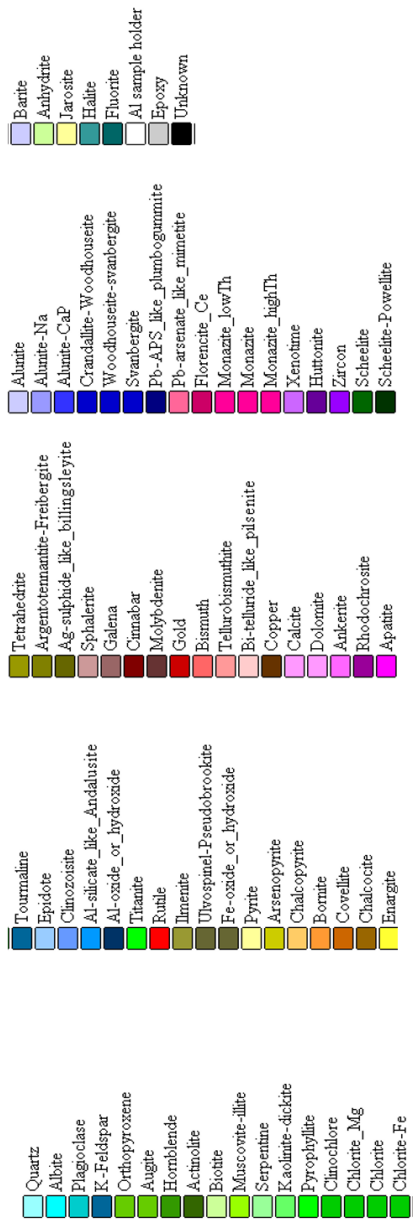
| Hf_analysis | Zircon_analysis | Age (Ma) | Spot_size (um) | Lu176/Hf177 | 2SE | Yb176/Hf177 | 2SE | Hf176/Hf177 | 2SE | StdCorr Hf176/Hf177 | 2SE | eHf (CHUR) |
|-------------|-----------------|----------|----------------|-------------|---------|-------------|---------|-------------|---------|---------------------|---------|------------|
| LB024_13 | LB024_22 | 7.06 | 35 | 0.00124 | 0.00000 | 0.03709 | 0.00040 | 0.28320 | 0.00015 | 0.28327 | 0.00015 | 17.3 |
| LB024_14 | LB024_23 | 7.06 | 35 | 0.00109 | 0.00003 | 0.03238 | 0.00108 | 0.28324 | 0.00013 | 0.28331 | 0.00013 | 18.7 |
| LB024_17 | LB024_24 | 7.06 | 35 | 0.00060 | 0.00000 | 0.01731 | 0.00016 | 0.28316 | 0.00011 | 0.28324 | 0.00011 | 16.1 |
| LB024_16 | LB024_25 | 7.06 | 35 | 0.00737 | 0.00019 | 0.22079 | 0.00654 | 0.28339 | 0.00015 | 0.28339 | 0.00015 | 21.2 |
| LB024_15 | LB024_26 | 7.06 | 35 | 0.00142 | 0.00001 | 0.04320 | 0.00049 | 0.28321 | 0.00013 | 0.28329 | 0.00013 | 17.7 |
| LB024_18 | LB024_27 | 7.06 | 35 | 0.00119 | 0.00001 | 0.03606 | 0.00013 | 0.28321 | 0.00012 | 0.28329 | 0.00012 | 17.7 |
| LB024_19 | LB024_28 | 7.06 | 35 | 0.00059 | 0.00001 | 0.01640 | 0.00018 | 0.28309 | 0.00016 | 0.28317 | 0.00016 | 13.5 |
| LB024_20 | LB024_29 | 7.06 | 35 | 0.00131 | 0.00001 | 0.03819 | 0.00021 | 0.28319 | 0.00013 | 0.28327 | 0.00013 | 17.1 |
| LB024_21 | LB024_35 | 7.06 | 35 | 0.00226 | 0.00002 | 0.06909 | 0.00028 | 0.28329 | 0.00014 | 0.28337 | 0.00014 | 20.6 |
| LB024_22 | LB024_36 | 7.06 | 35 | 0.00087 | 0.00000 | 0.02514 | 0.00030 | 0.28309 | 0.00012 | 0.28317 | 0.00012 | 13.7 |
| LB024_23 | LB024_37 | 7.06 | 35 | 0.00065 | 0.00001 | 0.01793 | 0.00054 | 0.28317 | 0.00013 | 0.28325 | 0.00013 | 16.3 |
| LB024_2 | LB024_4 | 7.06 | 35 | 0.00163 | 0.00004 | 0.05162 | 0.00113 | 0.28316 | 0.00014 | 0.28324 | 0.00014 | 16.1 |
| LB024_3 | LB024_5 | 7.06 | 35 | 0.00183 | 0.00001 | 0.05473 | 0.00033 | 0.28315 | 0.00015 | 0.28323 | 0.00015 | 15.8 |
| LB024_4 | LB024_8 | 7.06 | 35 | 0.00173 | 0.00002 | 0.04862 | 0.00016 | 0.28315 | 0.00011 | 0.28323 | 0.00011 | 15.6 |
| LB025_1 | LB025_1 | 8.23 | 35 | 0.00106 | 0.00001 | 0.03128 | 0.00040 | 0.28312 | 0.00005 | 0.28319 | 0.00005 | 14.3 |
| LB025_3 | LB025_14 | 8.23 | 35 | 0.00102 | 0.00001 | 0.03182 | 0.00010 | 0.28315 | 0.00004 | 0.28323 | 0.00004 | 15.6 |
| LB025_4 | LB025_17 | 8.23 | 35 | 0.00113 | 0.00001 | 0.02613 | 0.00036 | 0.28307 | 0.00006 | 0.28315 | 0.00006 | 12.8 |
| LB025_5 | LB025_29 | 8.23 | 35 | 0.00115 | 0.00002 | 0.03257 | 0.00037 | 0.28316 | 0.00005 | 0.28324 | 0.00005 | 16.1 |
| LB025_6 | LB025_30 | 8.23 | 35 | 0.00138 | 0.00002 | 0.04211 | 0.00066 | 0.28311 | 0.00005 | 0.28319 | 0.00005 | 14.3 |
| LB025_10 | LB025_39 | 8.23 | 35 | 0.00116 | 0.00002 | 0.03209 | 0.00089 | 0.28309 | 0.00005 | 0.28328 | 0.00005 | 17.4 |
| LB025_11 | LB025_42 | 8.23 | 35 | 0.00104 | 0.00003 | 0.03204 | 0.00073 | 0.28309 | 0.00005 | 0.28318 | 0.00005 | 13.9 |
| LB026_1 | LB026_1 | 7.99 | 35 | 0.00091 | 0.00001 | 0.02899 | 0.00025 | 0.28316 | 0.00012 | 0.28326 | 0.00012 | 16.9 |
| LB026_3 | LB026_4 | 7.99 | 50 | 0.00072 | 0.00001 | 0.02252 | 0.00015 | 0.28314 | 0.00009 | 0.28325 | 0.00009 | 16.3 |
| LB026_6 | LB026_9 | 7.99 | 35 | 0.00103 | 0.00000 | 0.03397 | 0.00015 | 0.28315 | 0.00013 | 0.28326 | 0.00013 | 16.8 |
| LB028_4 | LB028_10 | 7.56 | 35 | 0.00136 | 0.00001 | 0.04111 | 0.00024 | 0.28315 | 0.00012 | 0.28322 | 0.00012 | 15.4 |
| LB028_5 | LB028_13 | 7.56 | 35 | 0.00182 | 0.00003 | 0.06142 | 0.00138 | 0.28322 | 0.00012 | 0.28329 | 0.00012 | 17.9 |
| LB028_6 | LB028_14 | 7.56 | 35 | 0.00320 | 0.00011 | 0.10319 | 0.00361 | 0.28310 | 0.00014 | 0.28317 | 0.00014 | 13.7 |
| LB028_7 | LB028_24 | 7.56 | 35 | 0.00125 | 0.00002 | 0.03645 | 0.00039 | 0.28315 | 0.00011 | 0.28323 | 0.00011 | 15.6 |
| LB028_8 | LB028_25 | 7.56 | 35 | 0.00153 | 0.00007 | 0.04582 | 0.00187 | 0.28310 | 0.00010 | 0.28317 | 0.00010 | 13.8 |
| LB028_9 | LB028_26 | 7.56 | 35 | 0.00220 | 0.00001 | 0.06245 | 0.00069 | 0.28311 | 0.00010 | 0.28318 | 0.00010 | 14.1 |
| LB028_10 | LB028_27 | 7.56 | 35 | 0.00141 | 0.00003 | 0.04036 | 0.00092 | 0.28314 | 0.00011 | 0.28322 | 0.00011 | 15.4 |
| LB028_12 | LB028_30 | 7.56 | 35 | 0.00185 | 0.00018 | 0.05652 | 0.00556 | 0.28302 | 0.00010 | 0.28309 | 0.00010 | 10.8 |
| LB028_13 | LB028_31 | 7.56 | 35 | 0.00140 | 0.00003 | 0.04060 | 0.00078 | 0.28312 | 0.00012 | 0.28320 | 0.00012 | 14.6 |
| LB028_1 | LB028_6 | 7.56 | 35 | 0.00202 | 0.00003 | 0.06026 | 0.00079 | 0.28309 | 0.00012 | 0.28317 | 0.00012 | 13.5 |
| LB028_2 | LB028_7 | 7.56 | 35 | 0.00130 | 0.00001 | 0.03773 | 0.00019 | 0.28316 | 0.00011 | 0.28324 | 0.00011 | 16.0 |
| LB028_3 | LB028_8 | 7.56 | 35 | 0.00156 | 0.00001 | 0.04619 | 0.00043 | 0.28318 | 0.00011 | 0.28326 | 0.00011 | 16.6 |
| LB029_1 | LB029_1 | 7.28 | 50 | 0.00132 | 0.00002 | 0.04128 | 0.00110 | 0.28317 | 0.00006 | 0.28328 | 0.00006 | 17.4 |
| LB029_6 | LB029_11 | 7.28 | 50 | 0.00174 | 0.00000 | 0.05530 | 0.00034 | 0.28314 | 0.00008 | 0.28319 | 0.00008 | 14.1 |
| LB029_7 | LB029_14 | 7.28 | 35 | 0.00329 | 0.00007 | 0.09880 | 0.00094 | 0.28317 | 0.00018 | 0.28325 | 0.00018 | 16.5 |
| LB029_10 | LB029_15 | 7.28 | 35 | 0.00209 | 0.00001 | 0.07210 | 0.00067 | 0.28319 | 0.00016 | 0.28327 | 0.00016 | 17.2 |
| LB029_9 | LB029_16 | 7.28 | 35 | 0.00113 | 0.00002 | 0.03834 | 0.00065 | 0.28323 | 0.00012 | 0.28331 | 0.00012 | 18.4 |
| LB029_13 | LB029_22 | 7.28 | 35 | 0.00121 | 0.00000 | 0.03941 | 0.00042 | 0.28321 | 0.00014 | 0.28329 | 0.00014 | 17.9 |
| LB029_14 | LB029_25 | 7.28 | 35 | 0.00401 | 0.00028 | 0.15631 | 0.01246 | 0.28324 | 0.00015 | 0.28332 | 0.00015 | 18.8 |
| LB029_16 | LB029_26 | 7.28 | 35 | 0.00118 | 0.00001 | 0.03887 | 0.00066 | 0.28305 | 0.00011 | 0.28313 | 0.00011 | 12.1 |
| LB029_17 | LB029_28 | 7.28 | 35 | 0.00130 | 0.00000 | 0.04281 | 0.00028 | 0.28316 | 0.00012 | 0.28323 | 0.00012 | 15.9 |
| LB029_18 | LB029_30 | 7.28 | 35 | 0.00204 | 0.00011 | 0.07078 | 0.00371 | 0.28308 | 0.00012 | 0.28316 | 0.00012 | 13.1 |
| LB029_19 | LB029_37 | 7.28 | 50 | 0.00138 | 0.00006 | 0.04557 | 0.00229 | 0.28321 | 0.00007 | 0.28325 | 0.00007 | 16.3 |
| LB029_20 | LB029_38 | 7.28 | 35 | 0.00196 | 0.00002 | 0.06076 | 0.00179 | 0.28320 | 0.00014 | 0.28328 | 0.00014 | 17.4 |
| LB029_3 | LB029_5 | 7.28 | 35 | 0.00164 | 0.00001 | 0.05362 | 0.00057 | 0.28317 | 0.00012 | 0.28326 | 0.00012 | 16.7 |
| LB029_4 | LB029_7 | 7.28 | 35 | 0.00140 | 0.00003 | 0.04518 | 0.00064 | 0.28310 | 0.00012 | 0.28319 | 0.00012 | 14.4 |

Appendix D: Eastern Sunda arc zircon Lu-Hf data

| Hf_analysis | Zircon_analysis | Age (Ma) | Spot_size (um) | Lu176/Hf177 | 2SE | Yb176/Hf177 | 2SE | Hf176/Hf177 | 2SE | StdCorr Hf176/Hf177 | 2SE | eHf (CHUR) |
|-------------|-----------------|----------|----------------|-------------|---------|-------------|---------|-------------|---------|---------------------|---------|------------|
| LB029_5 | LB029_8 | 7.28 | 35 | 0.00125 | 0.00002 | 0.04172 | 0.00092 | 0.28316 | 0.00012 | 0.28325 | 0.00012 | 16.5 |
| LB036_1 | LB036_1 | 7 | 35 | 0.00106 | 0.00002 | 0.03484 | 0.00034 | 0.28308 | 0.00010 | 0.28317 | 0.00010 | 13.5 |
| LB036_7 | LB036_10 | 7 | 35 | 0.00097 | 0.00001 | 0.02571 | 0.00021 | 0.28313 | 0.00010 | 0.28321 | 0.00010 | 14.9 |
| LB036_3 | LB036_5 | 7 | 35 | 0.00159 | 0.00001 | 0.05362 | 0.00067 | 0.28333 | 0.00014 | 0.28342 | 0.00014 | 22.6 |
| LB036_4 | LB036_6 | 7 | 35 | 0.00202 | 0.00009 | 0.07055 | 0.00275 | 0.28315 | 0.00014 | 0.28324 | 0.00014 | 16.0 |
| LB036_5 | LB036_7 | 7 | 50 | 0.00104 | 0.00000 | 0.03394 | 0.00016 | 0.28309 | 0.00008 | 0.28314 | 0.00008 | 12.6 |
| LB036_6 | LB036_9 | 7 | 35 | 0.00105 | 0.00005 | 0.03406 | 0.00135 | 0.28316 | 0.00012 | 0.28325 | 0.00012 | 16.5 |
| LB041_2 | LB041_17 | 6.71 | 35 | 0.00115 | 0.00001 | 0.03430 | 0.00012 | 0.28312 | 0.00005 | 0.28319 | 0.00005 | 14.4 |
| LB041_3 | LB041_19 | 6.71 | 35 | 0.00092 | 0.00001 | 0.02870 | 0.00017 | 0.28312 | 0.00005 | 0.28319 | 0.00005 | 14.3 |
| LB041_4 | LB041_24 | 6.71 | 35 | 0.00129 | 0.00001 | 0.03468 | 0.00051 | 0.28311 | 0.00007 | 0.28318 | 0.00007 | 14.0 |
| LB041_5 | LB041_29 | 6.71 | 35 | 0.00102 | 0.00001 | 0.02802 | 0.00040 | 0.28314 | 0.00006 | 0.28321 | 0.00006 | 14.9 |
| LB041_6 | LB041_32 | 6.71 | 35 | 0.00139 | 0.00005 | 0.04401 | 0.00175 | 0.28318 | 0.00005 | 0.28325 | 0.00005 | 16.3 |
| LB041_7 | LB041_33 | 6.71 | 35 | 0.00208 | 0.00002 | 0.06167 | 0.00120 | 0.28313 | 0.00006 | 0.28319 | 0.00006 | 14.3 |
| LB042_7 | LB042_10 | 7.2 | 35 | 0.00089 | 0.00001 | 0.02315 | 0.00037 | 0.28315 | 0.00023 | 0.28319 | 0.00023 | 14.3 |
| LB042_8 | LB042_16 | 7.2 | 35 | 0.00185 | 0.00003 | 0.04863 | 0.00089 | 0.28316 | 0.00007 | 0.28320 | 0.00007 | 14.6 |
| LB042_9 | LB042_22 | 7.2 | 35 | 0.00150 | 0.00002 | 0.04291 | 0.00017 | 0.28309 | 0.00006 | 0.28313 | 0.00006 | 12.1 |
| LB042_1 | LB042_3 | 7.2 | 35 | 0.00137 | 0.00001 | 0.04150 | 0.00035 | 0.28315 | 0.00008 | 0.28318 | 0.00008 | 14.1 |
| LB042_3 | LB042_7 | 7.2 | 35 | 0.00128 | 0.00002 | 0.03440 | 0.00126 | 0.28317 | 0.00007 | 0.28320 | 0.00007 | 14.7 |
| LB042_4 | LB042_8 | 7.2 | 35 | 0.00178 | 0.00008 | 0.04833 | 0.00278 | 0.28316 | 0.00009 | 0.28319 | 0.00009 | 14.4 |
| LB042_5 | LB042_9 | 7.2 | 35 | 0.00160 | 0.00000 | 0.03909 | 0.00058 | 0.28314 | 0.00009 | 0.28318 | 0.00009 | 13.8 |

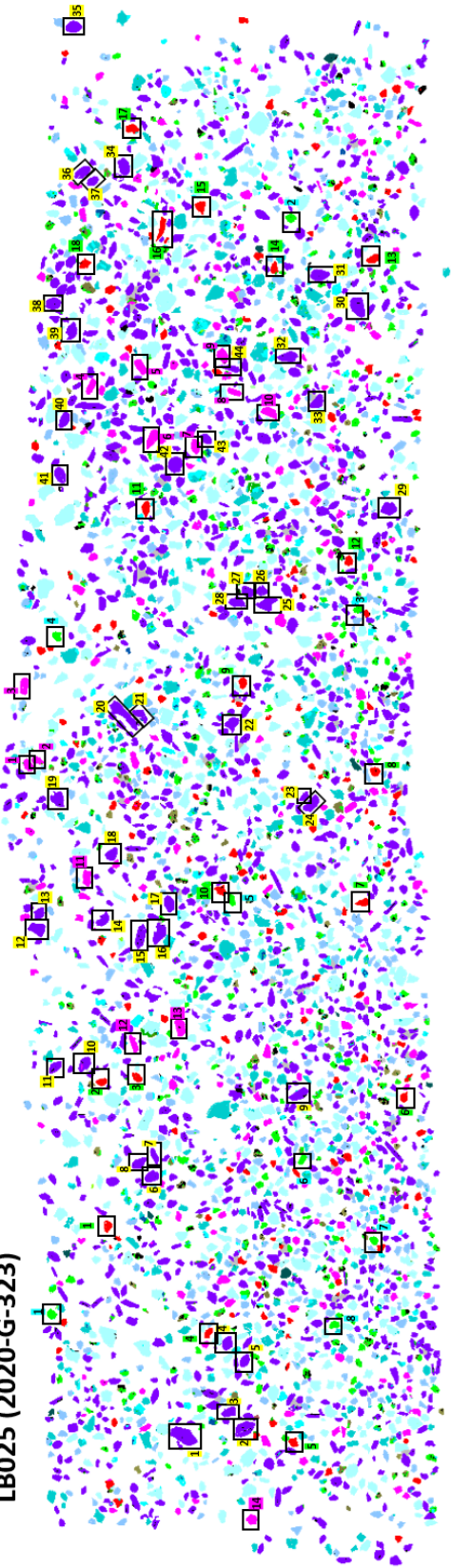
Appendix E: AMICS Maps

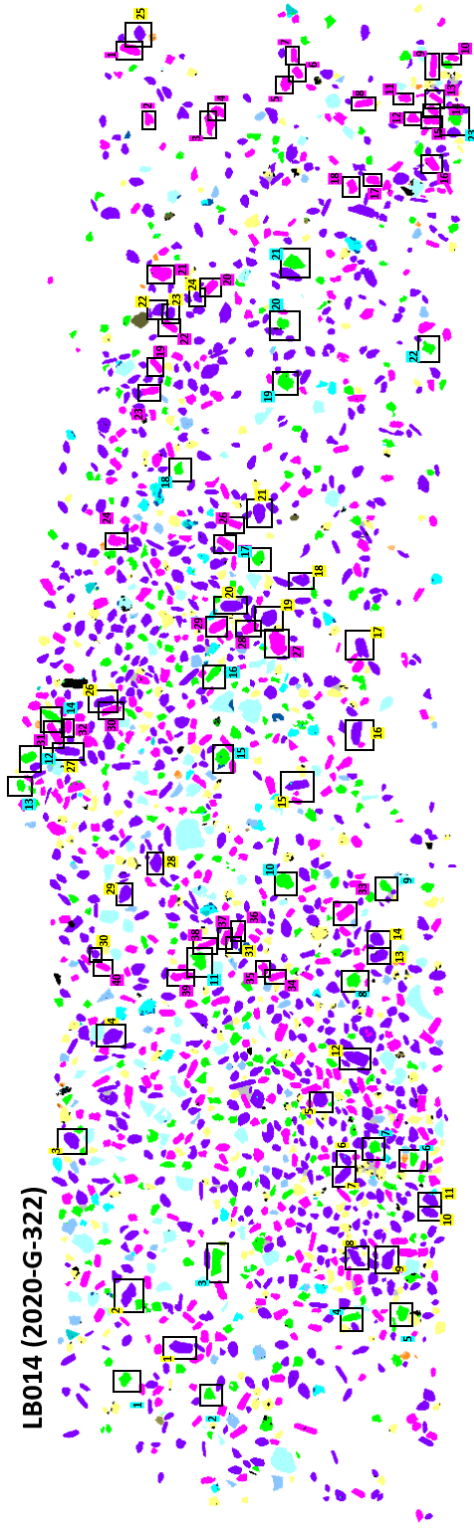
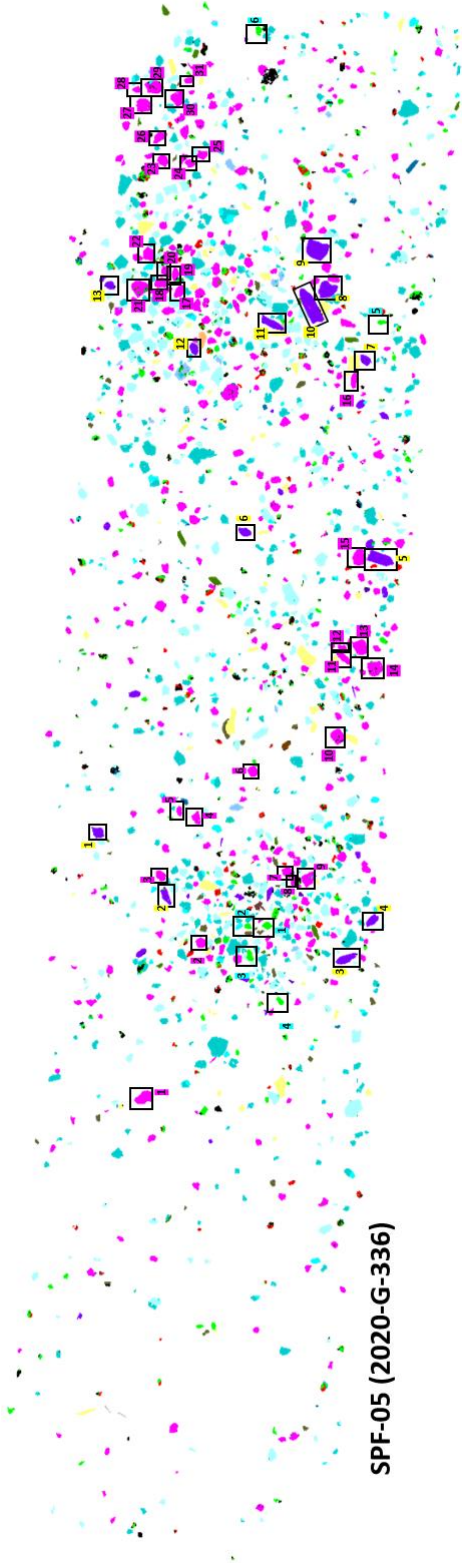
Legend:



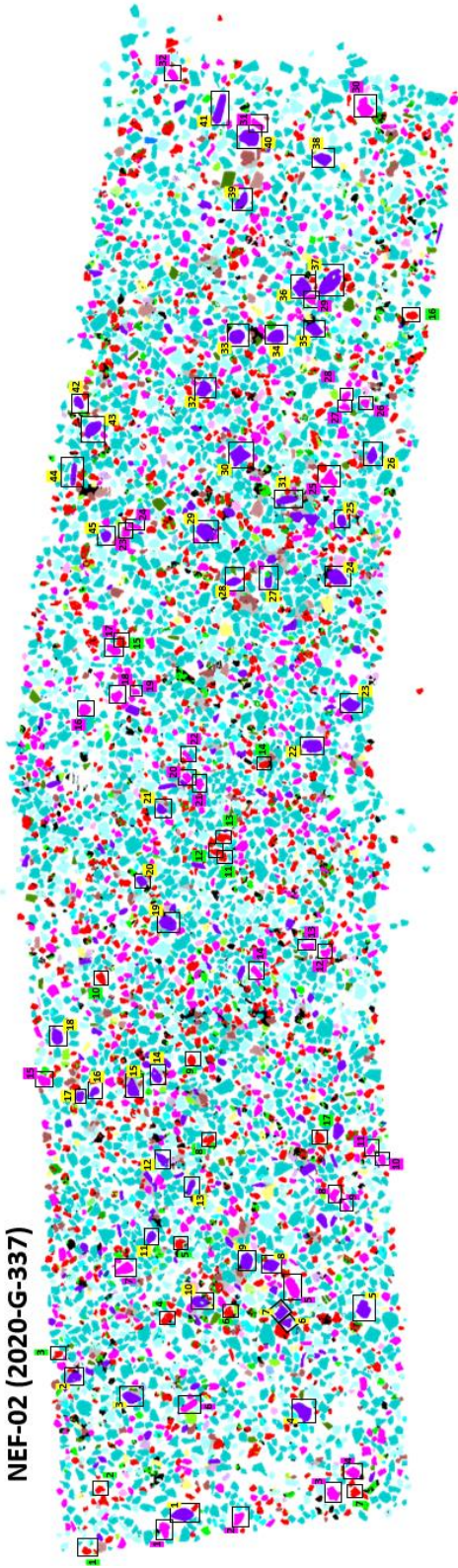
AMICS maps are approximately 10 mm in length. Yellow labels correspond to zircon grains, green to rutile, pink to apatite, and blue to titanite grains analyzed.

LB025 (2020-G-323)

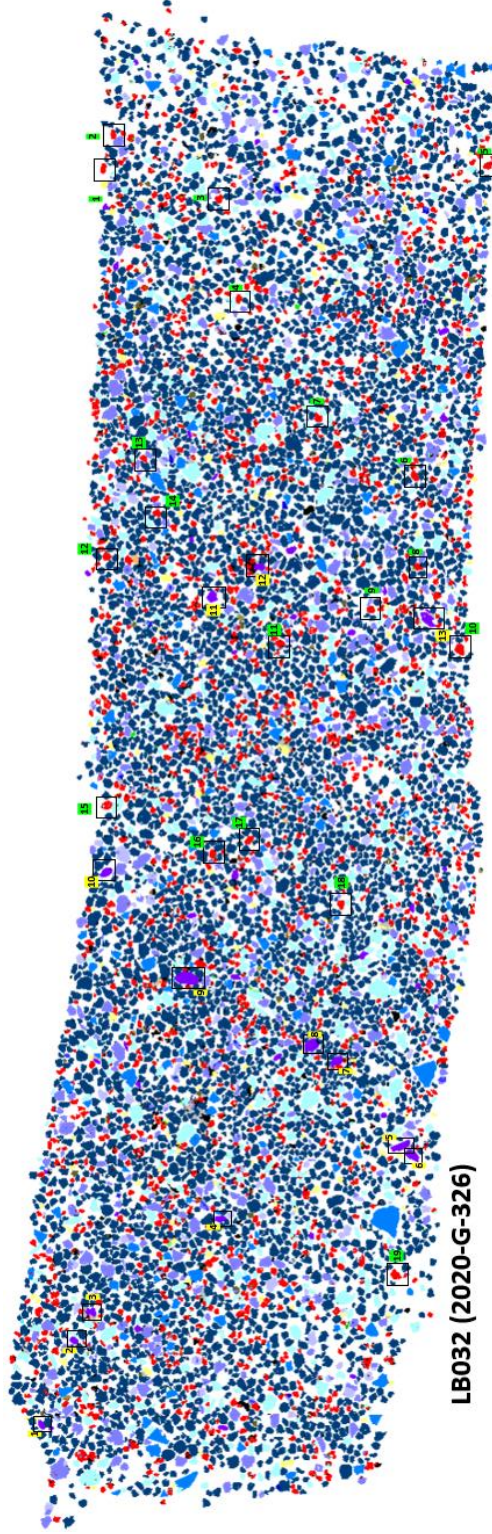


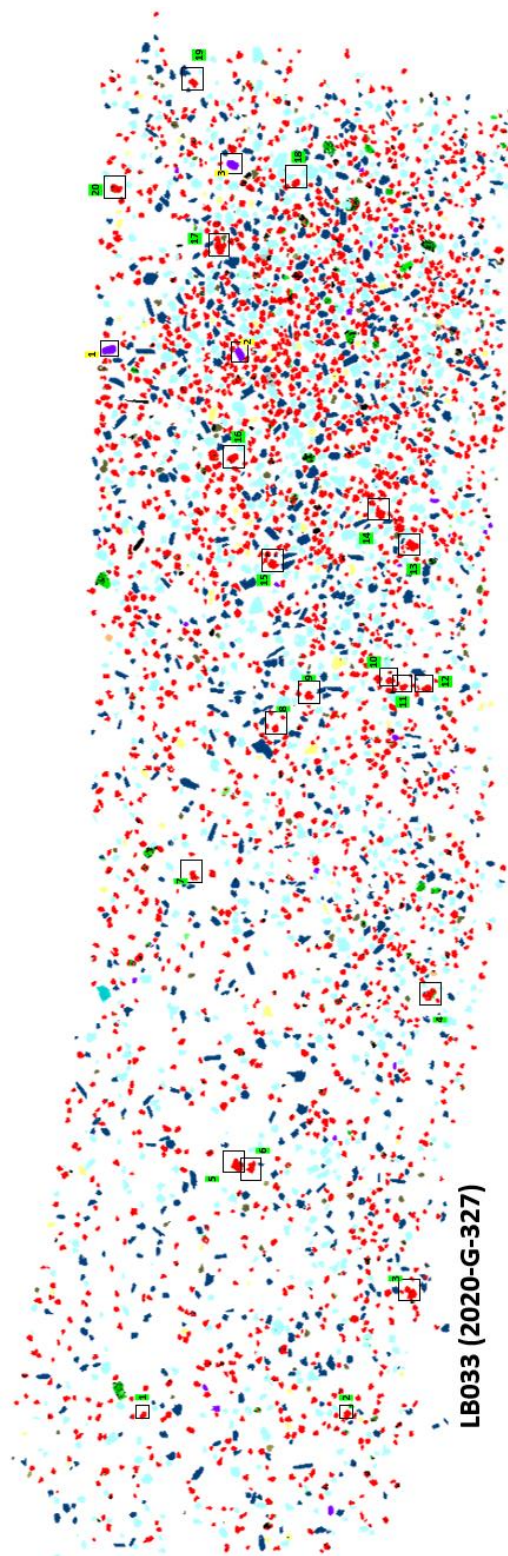
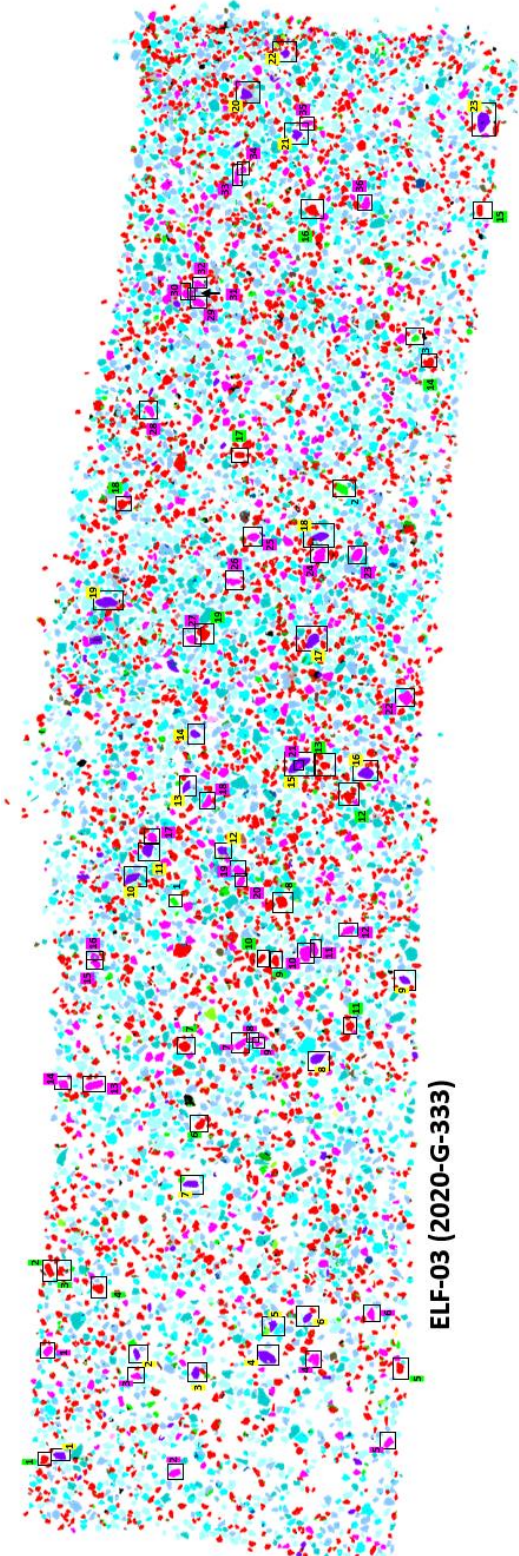


NEF-02 (2020-G-337)

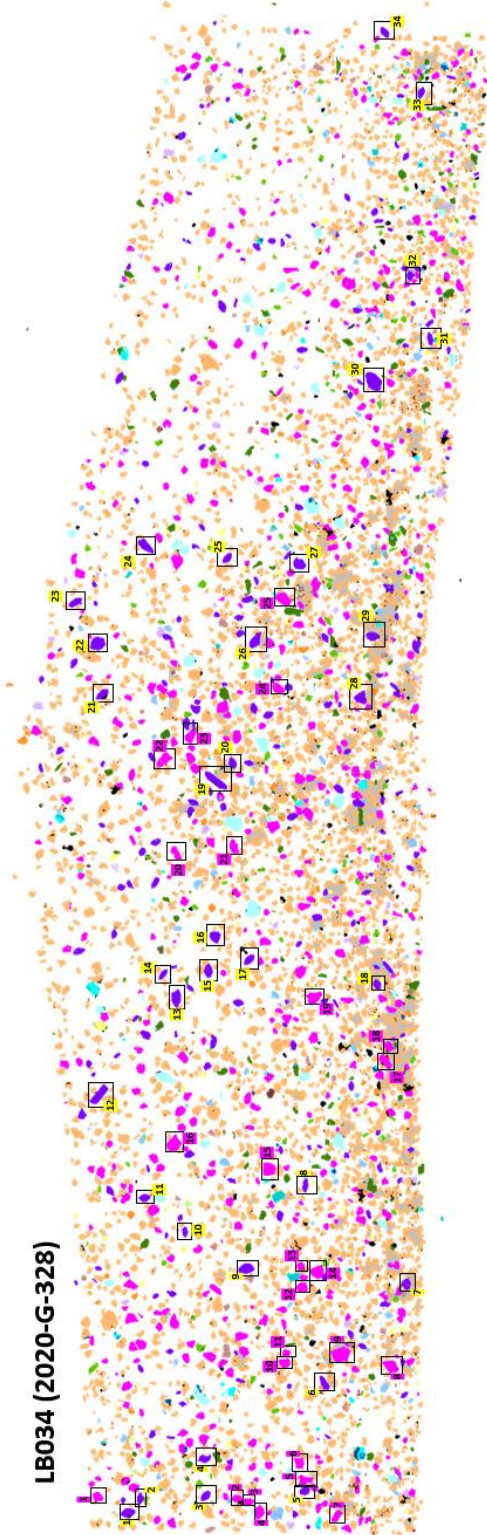


LB032 (2020-G-326)

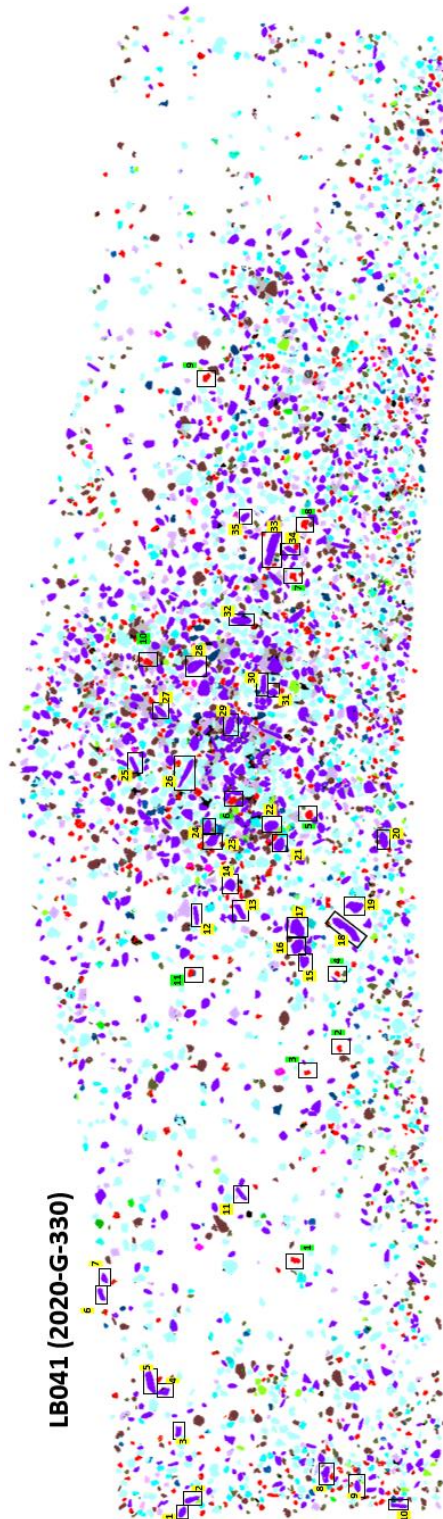




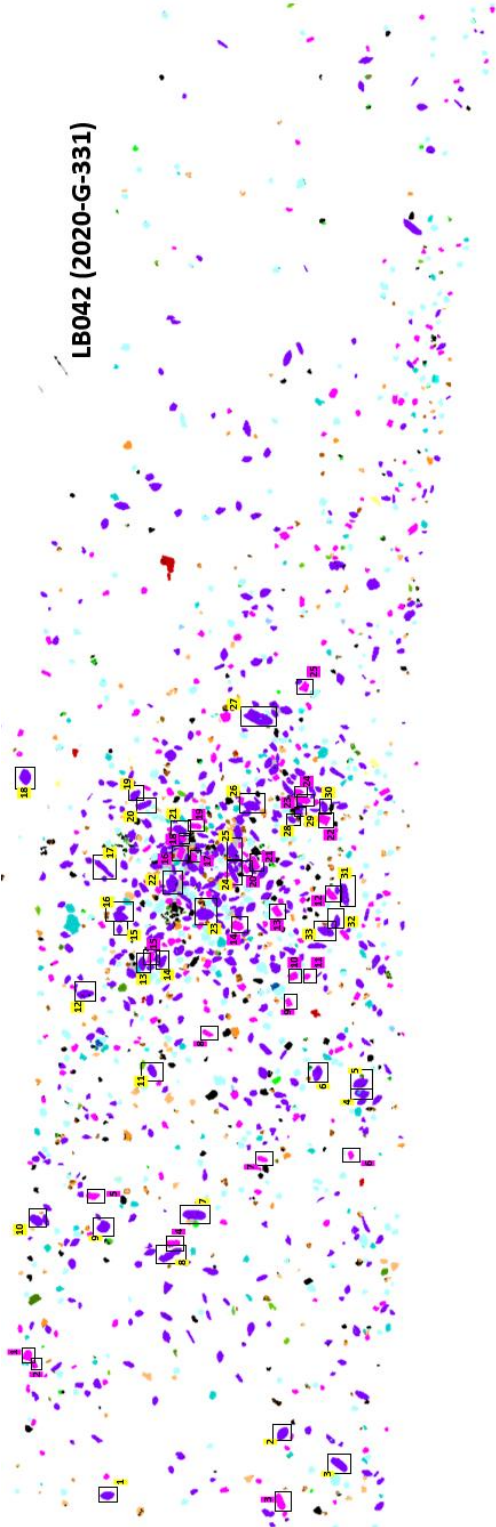
LB034 (2020-G-328)



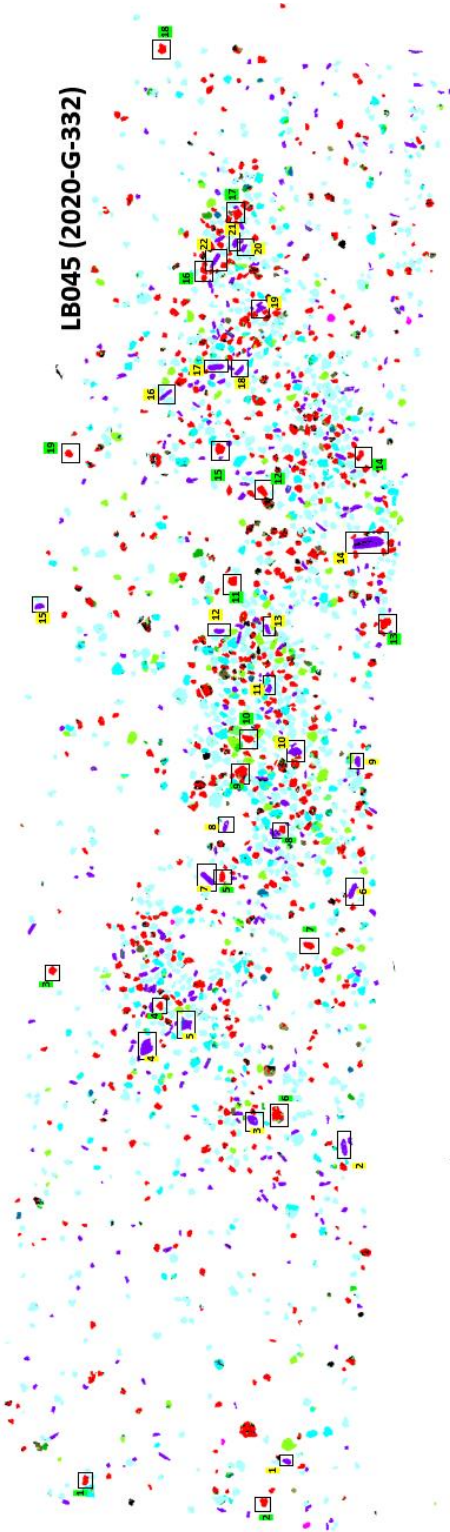
LB041 (2020-G-330)



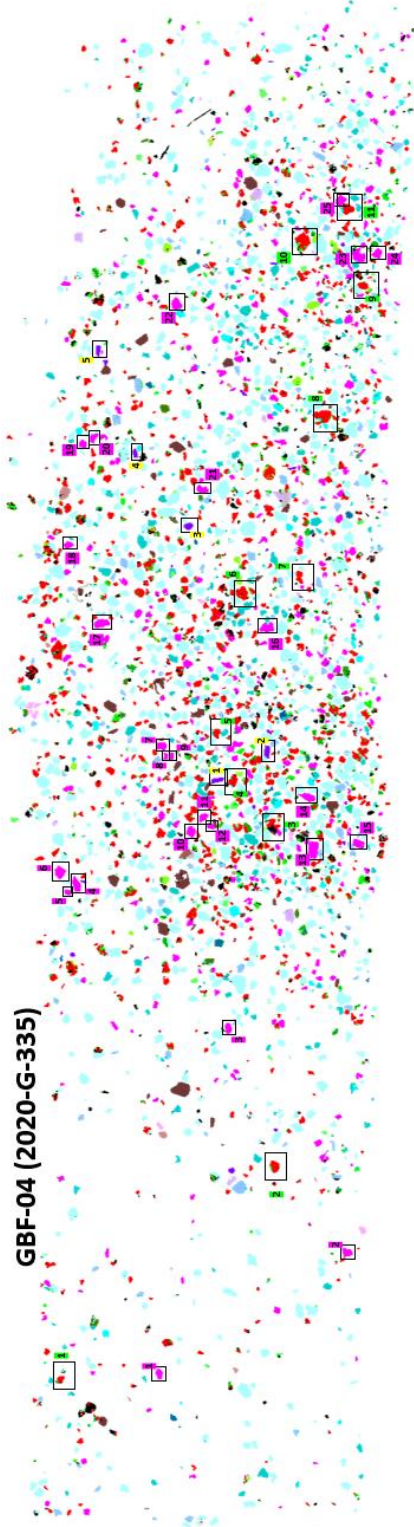
LB042 (2020-G-331)



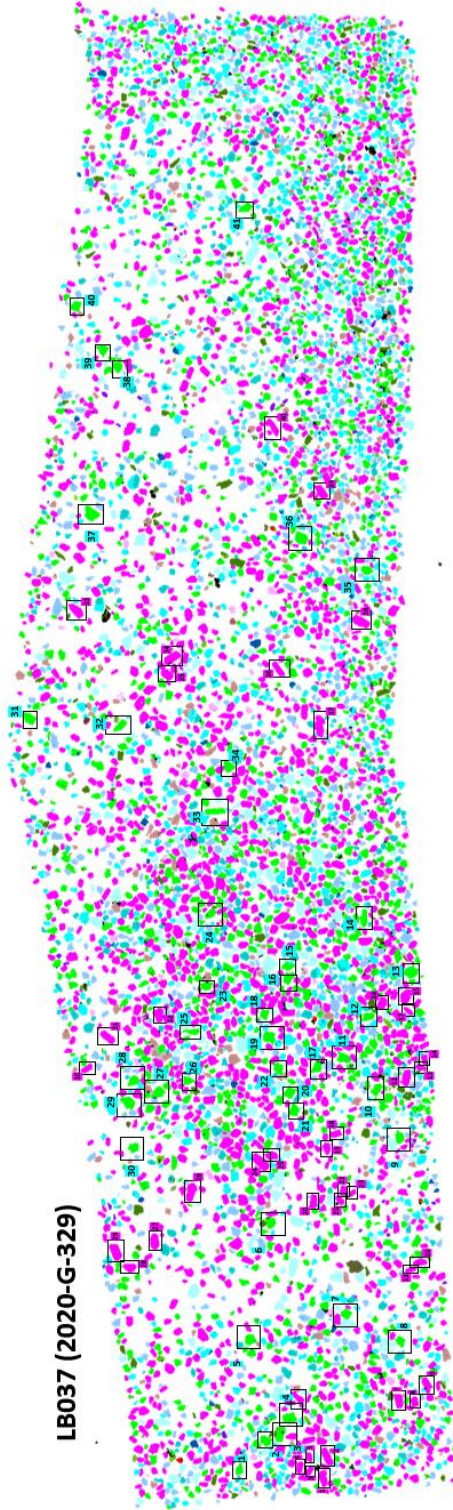
LB045 (2020-G-332)

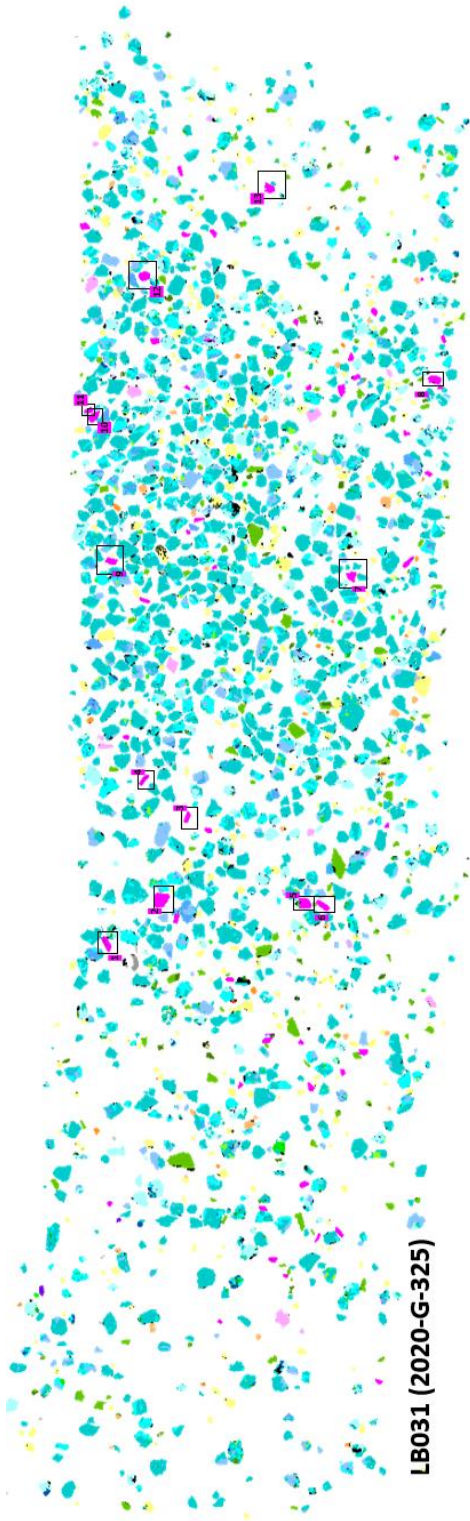


GBF-04 (2020-G-335)

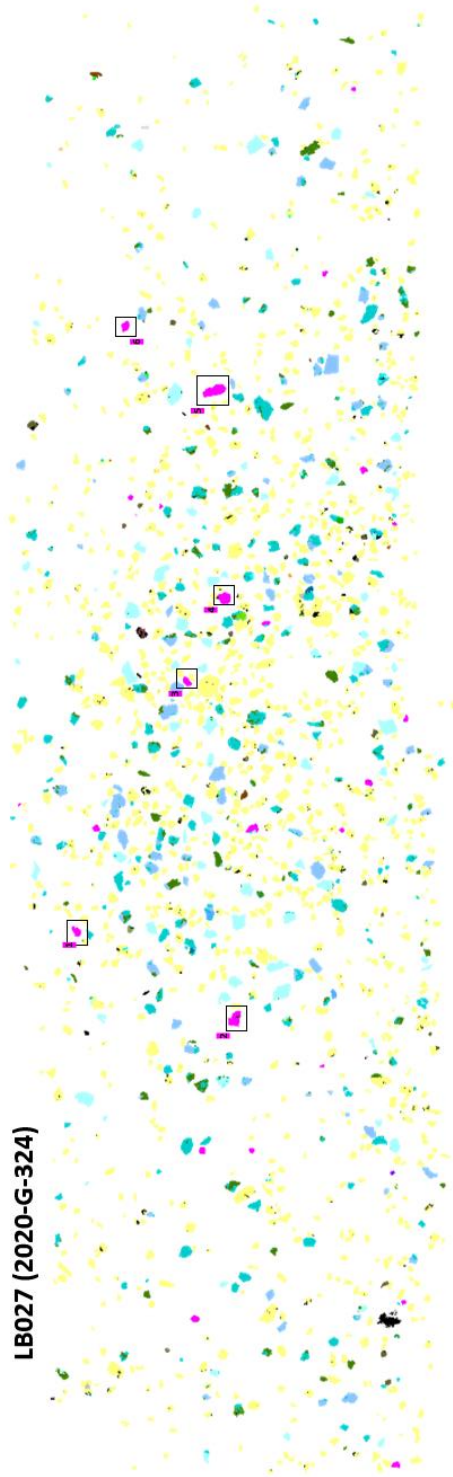


LB037 (2020-G-329)



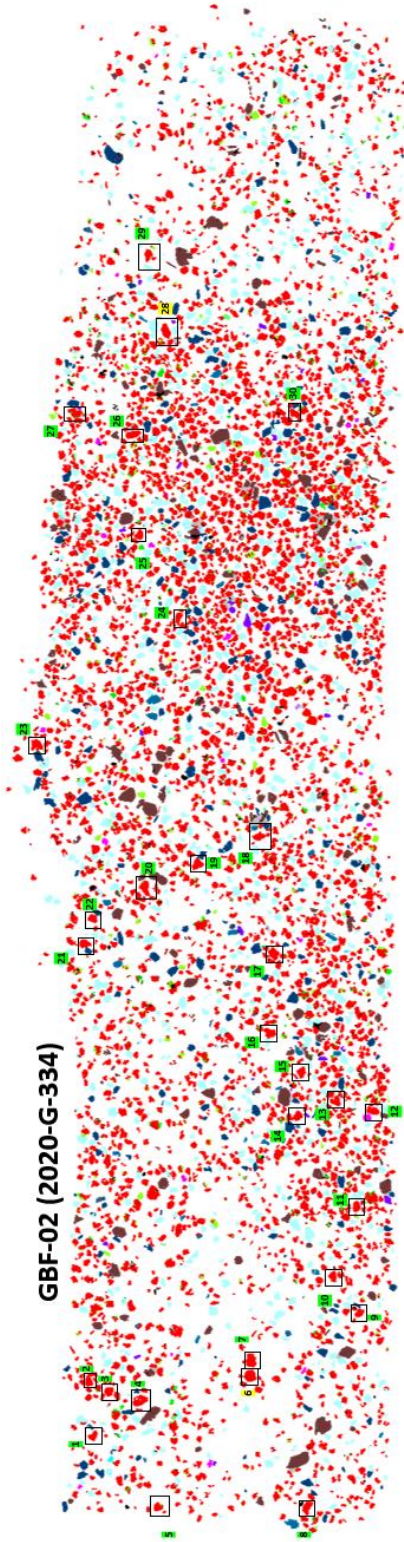


LB031 (2020-G-325)

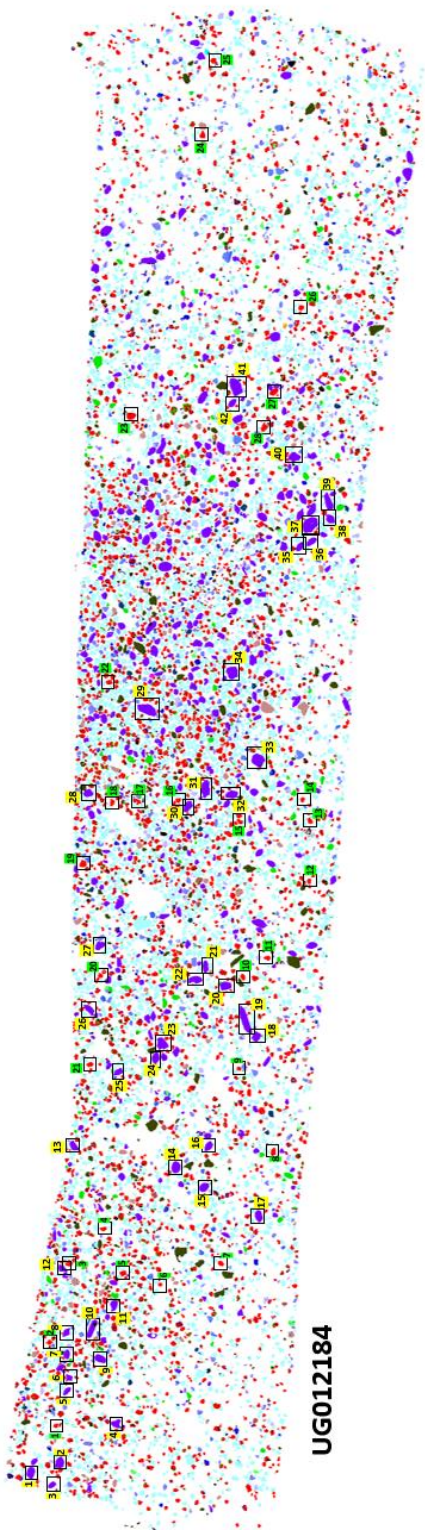


LB027 (2020-G-324)

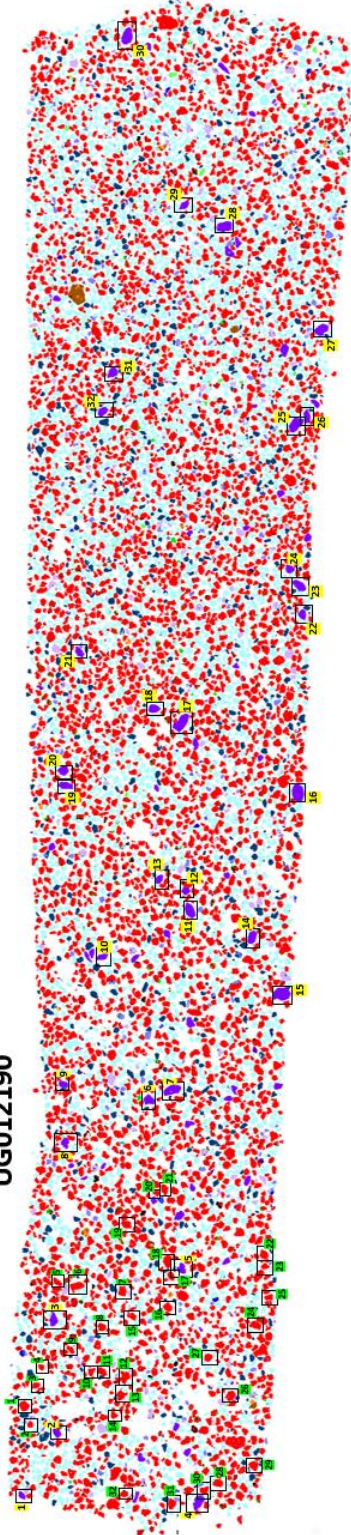
GBF-02 (2020-G-334)



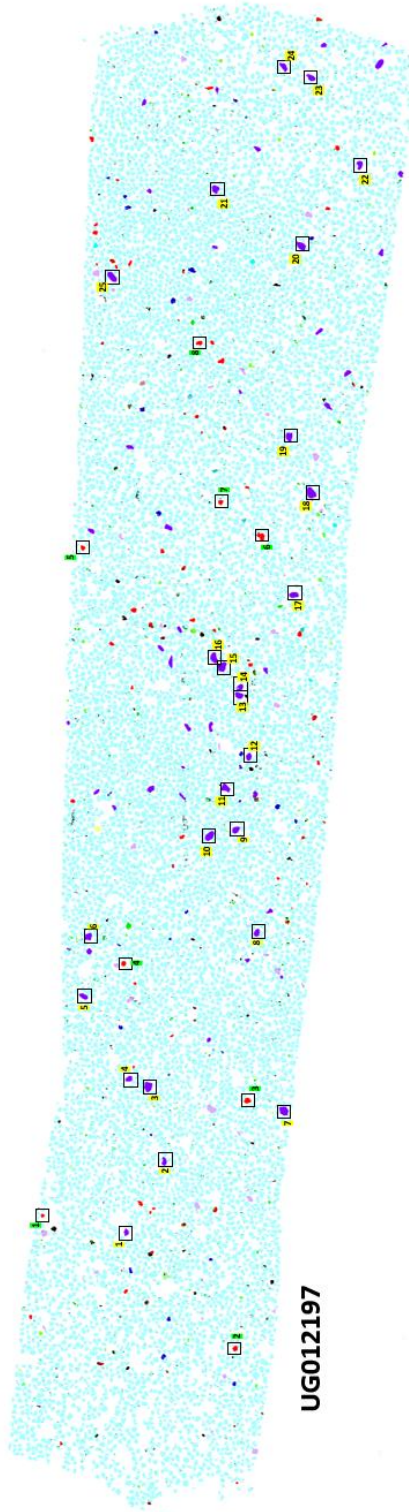
UG012184

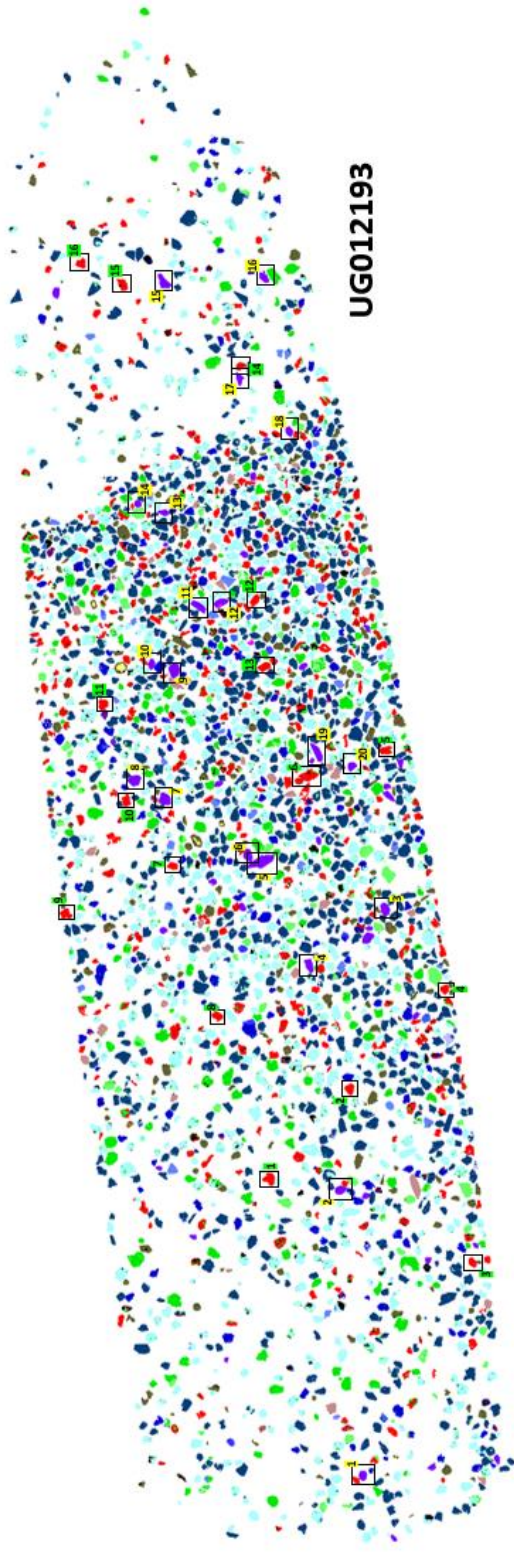
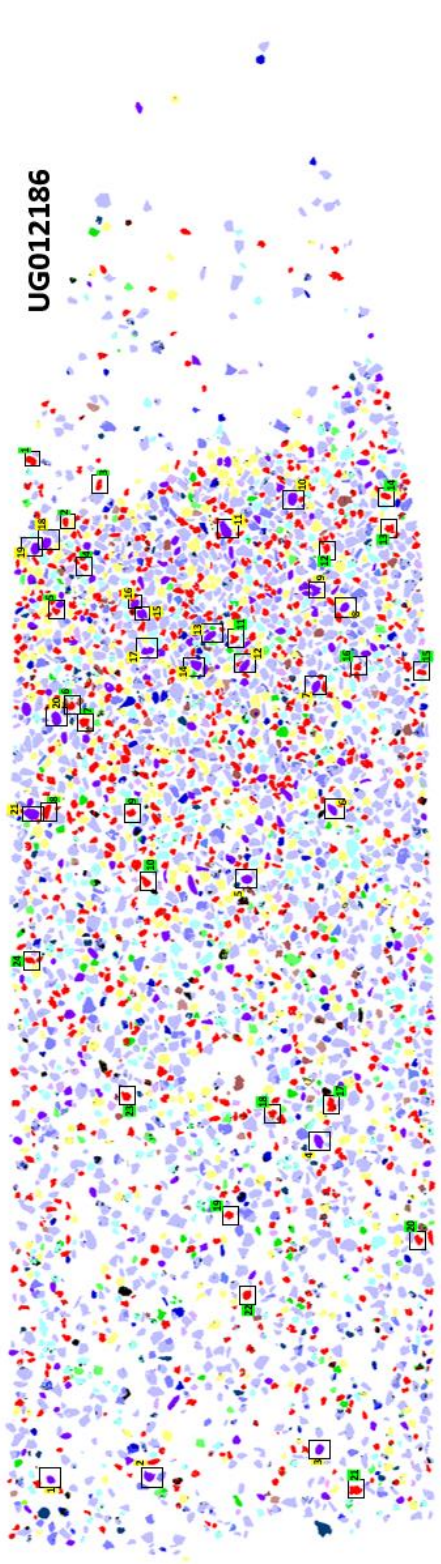


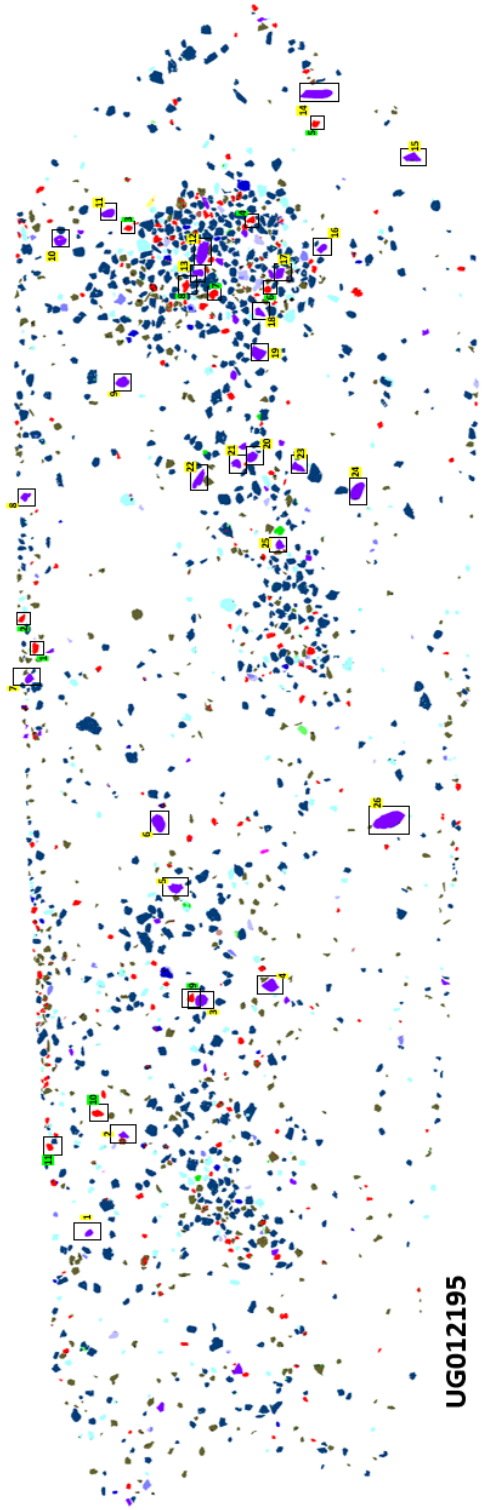
UG012190

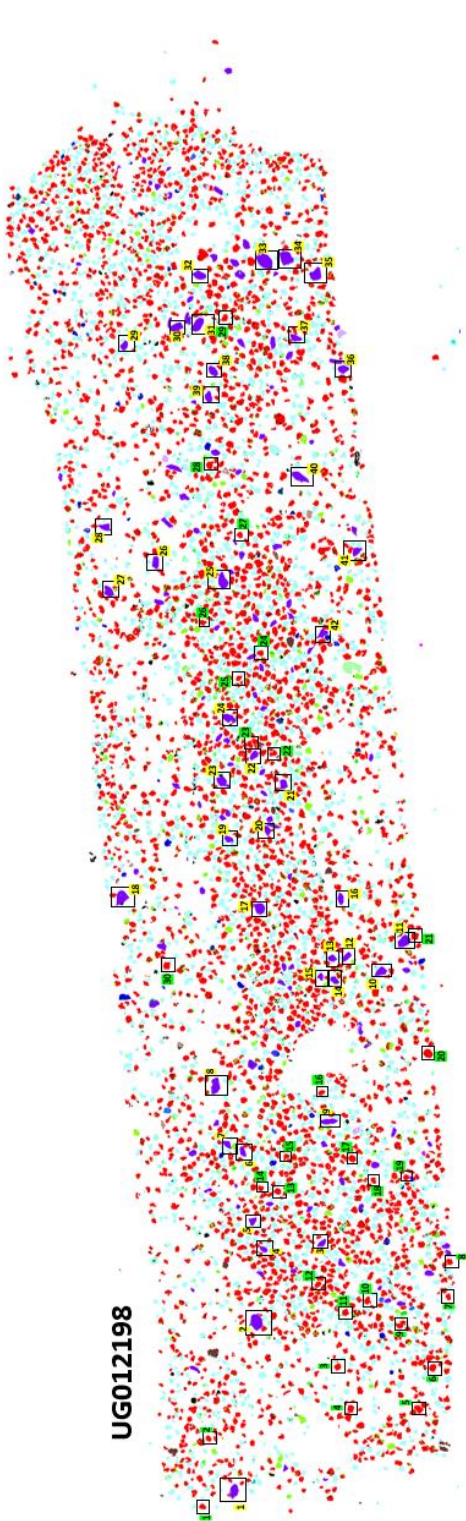


UG012197

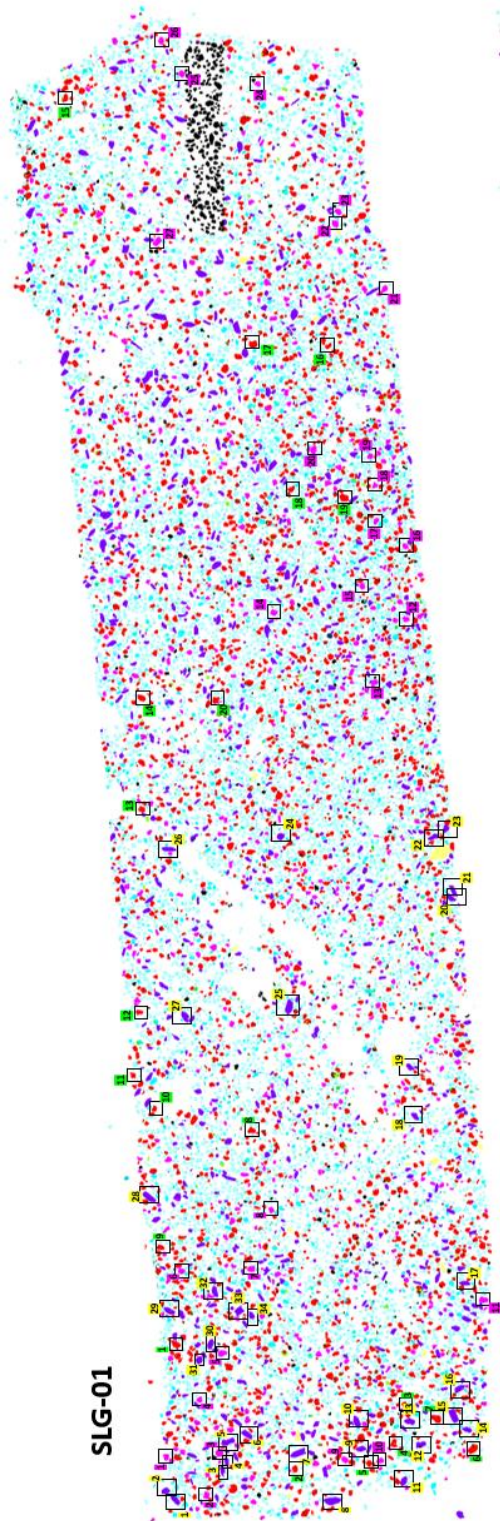




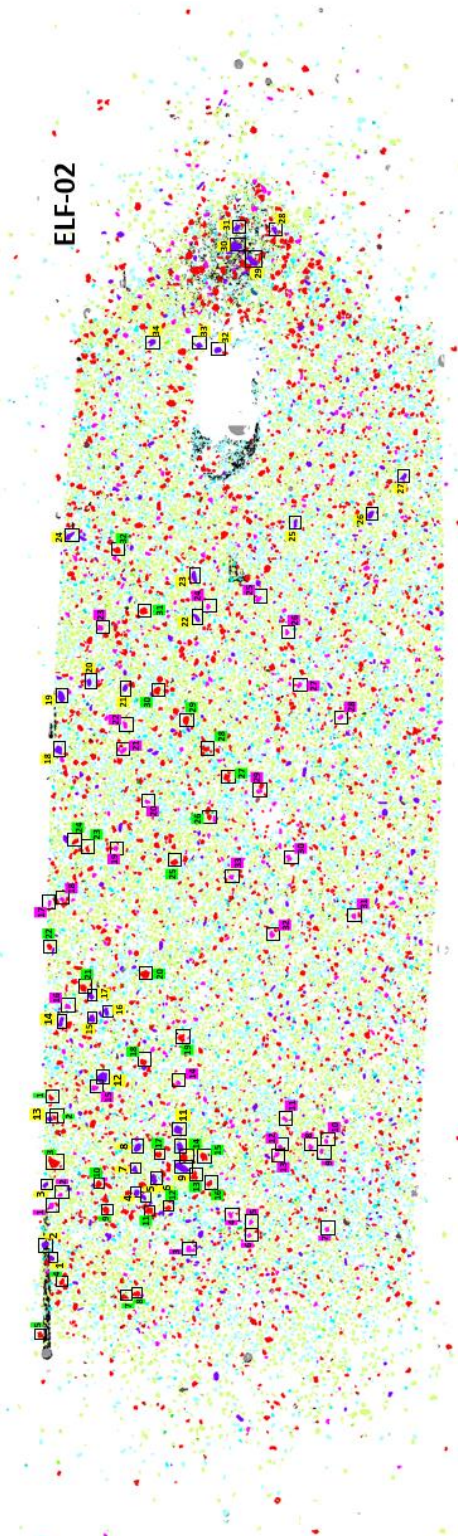
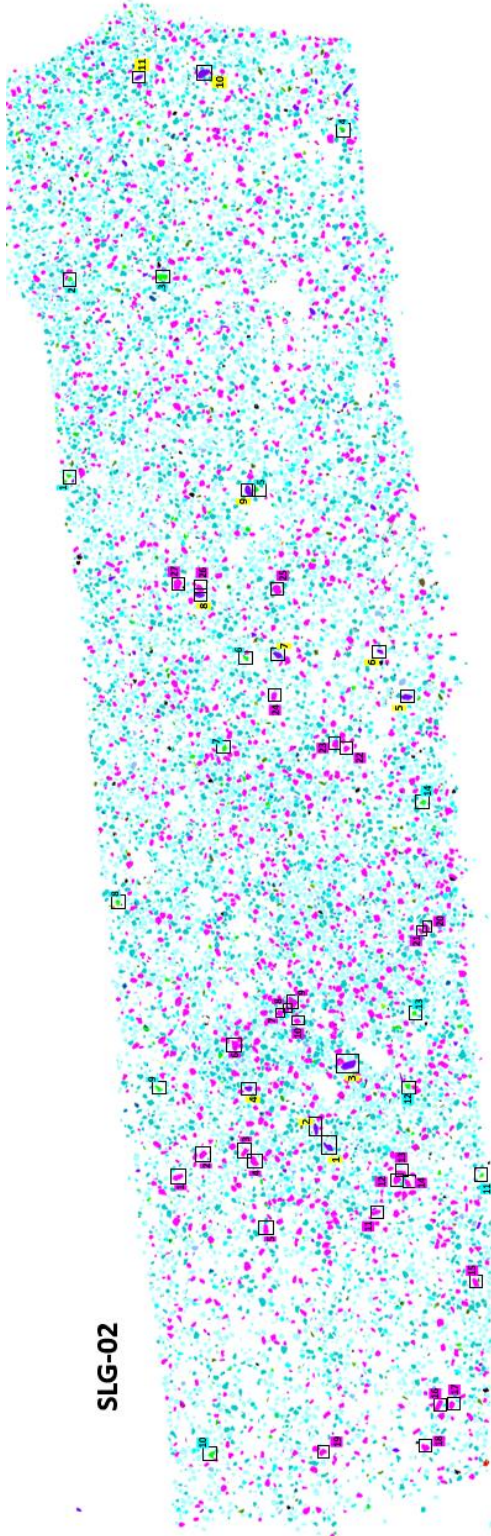




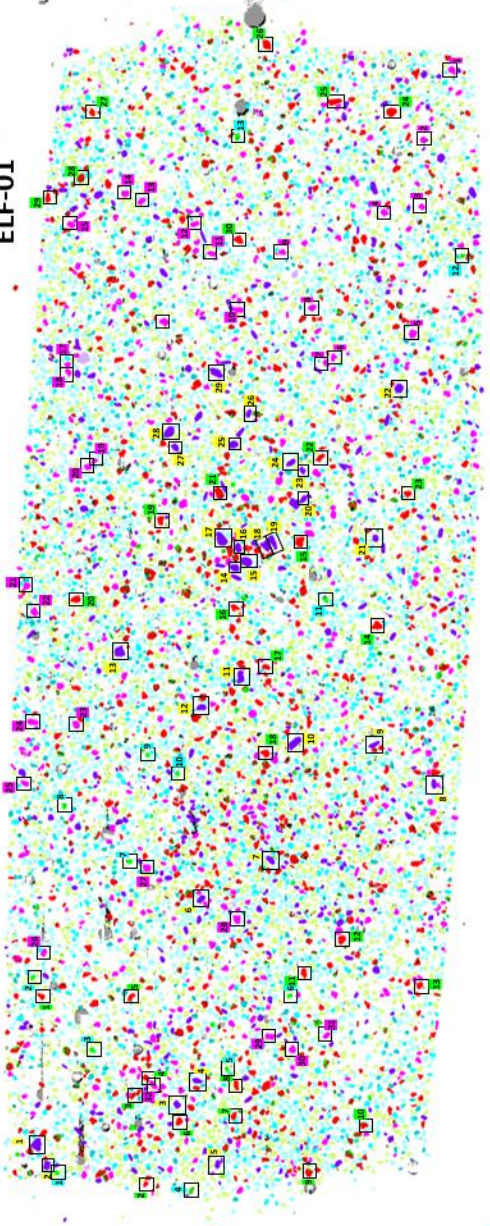
UG012198



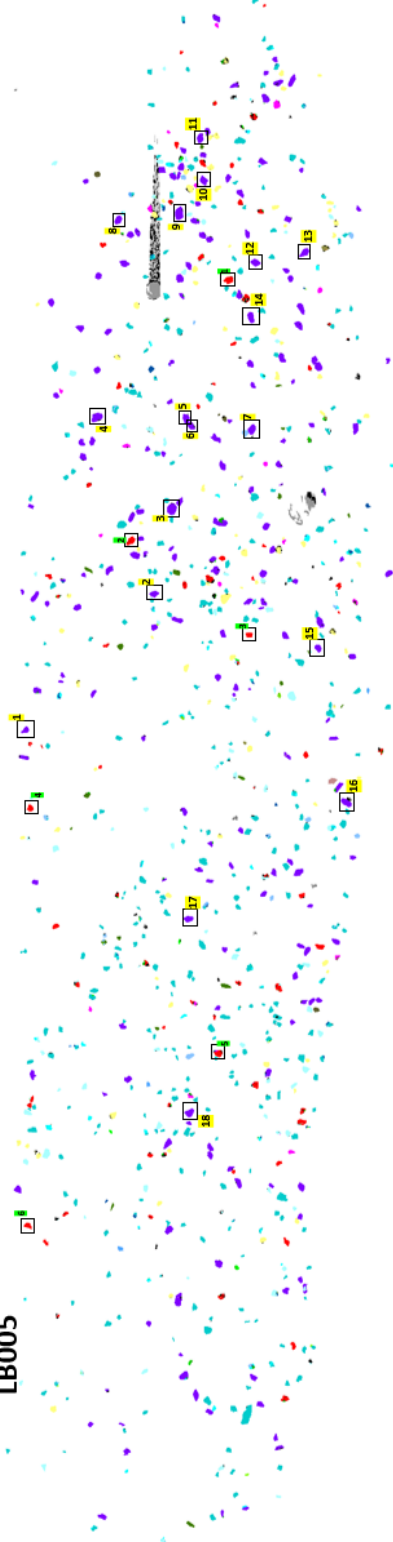
SLG-01



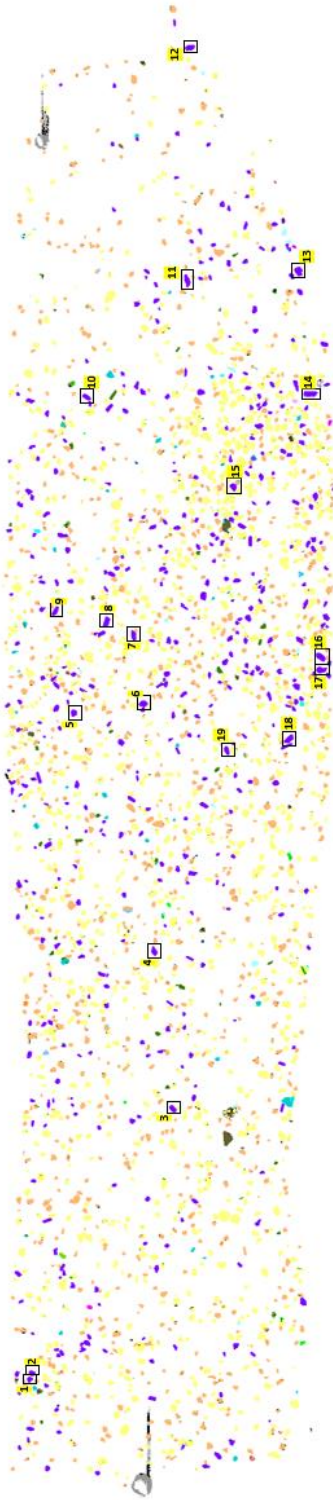
ELF-01



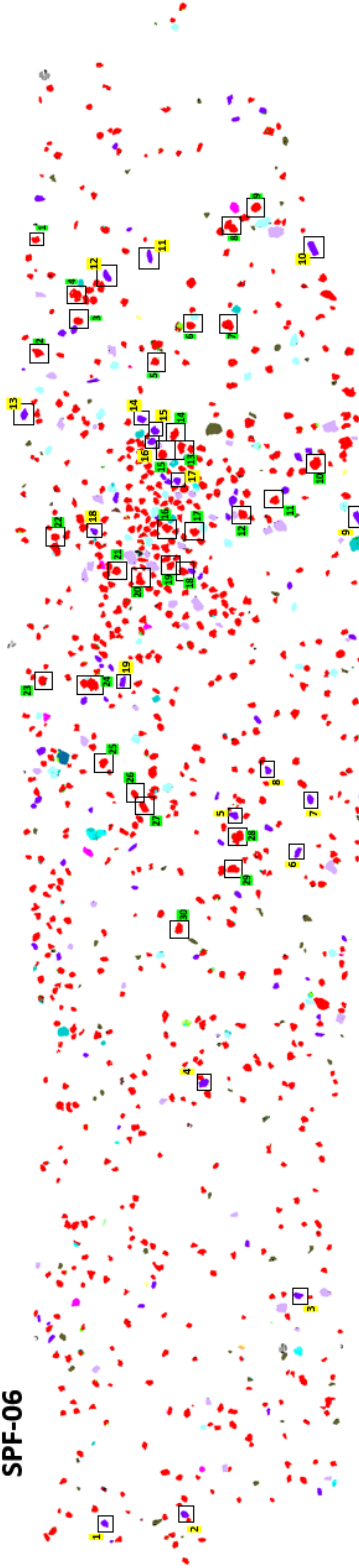
LB005

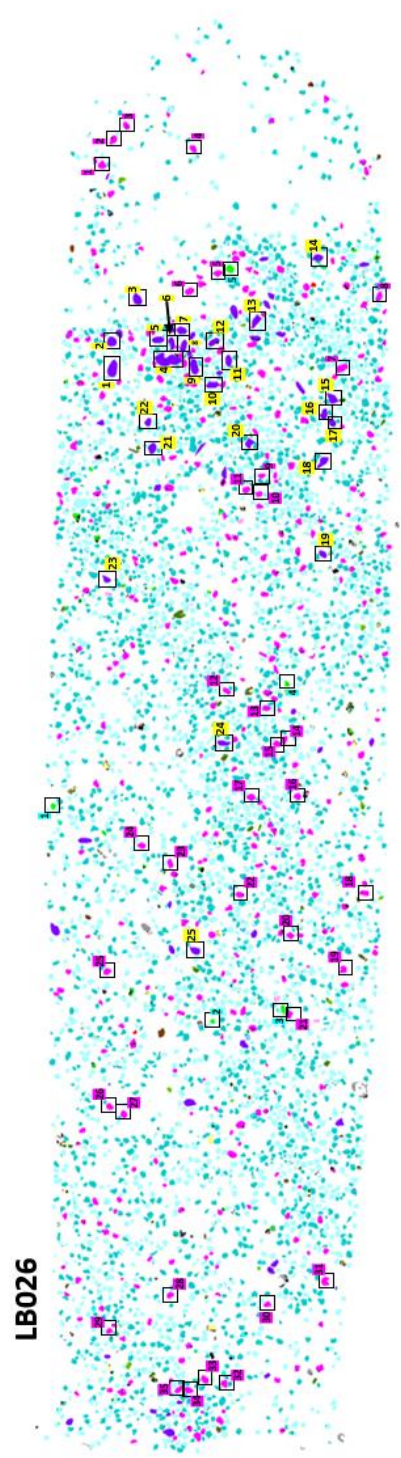
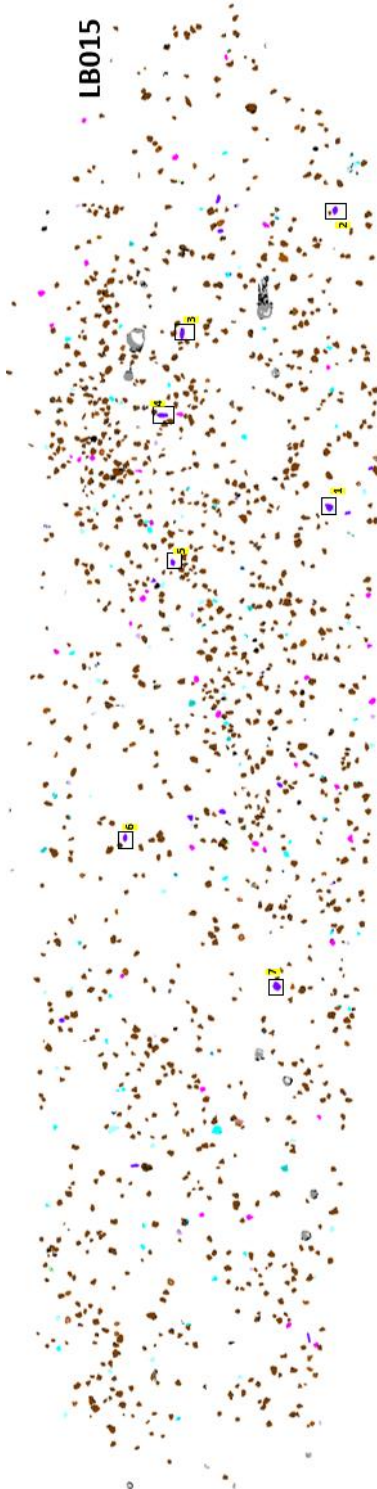


SPF-03

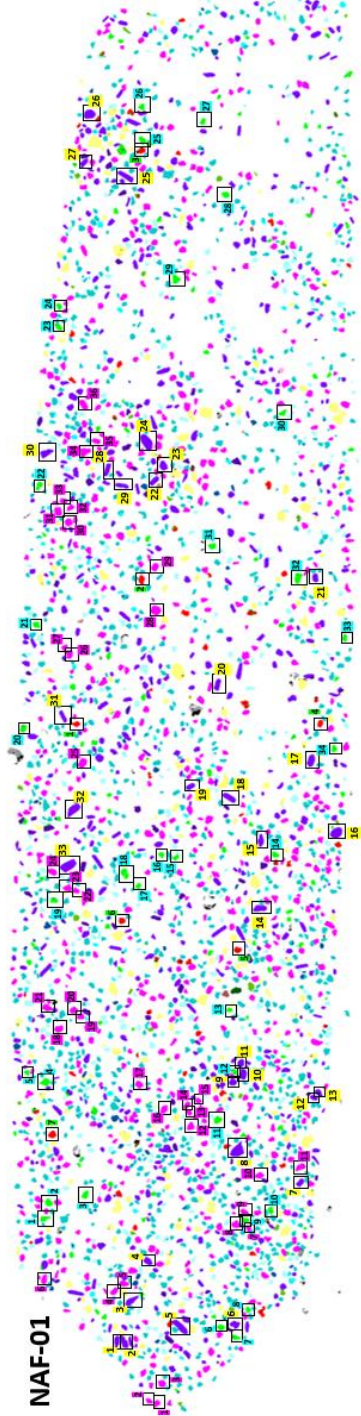


SPF-06



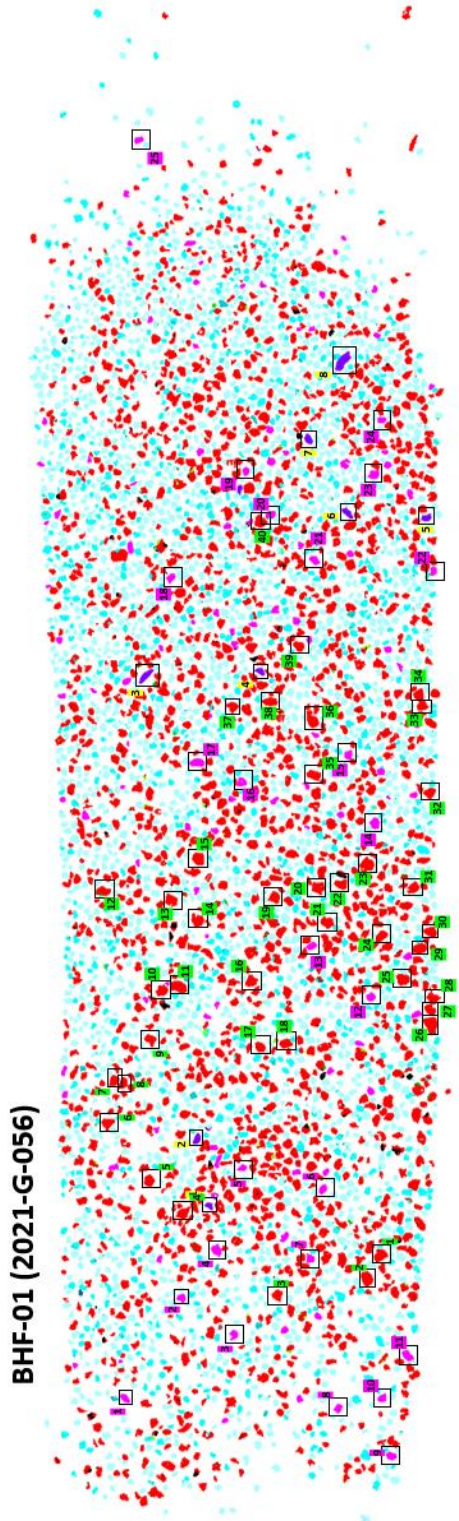
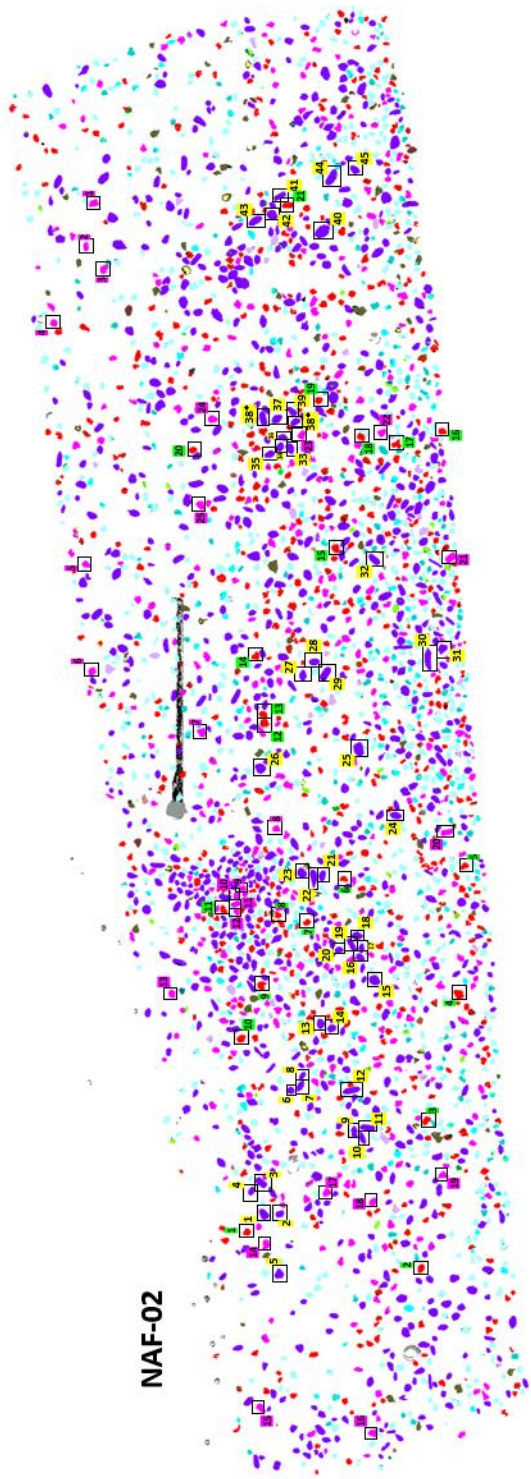


NAF-01

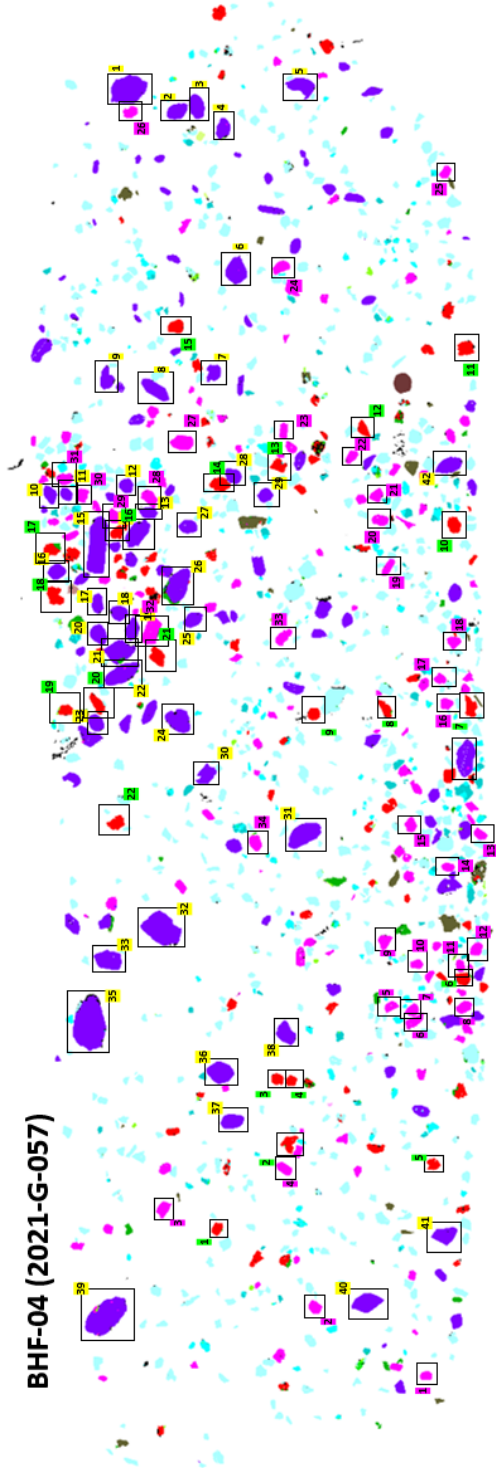


NAF-03

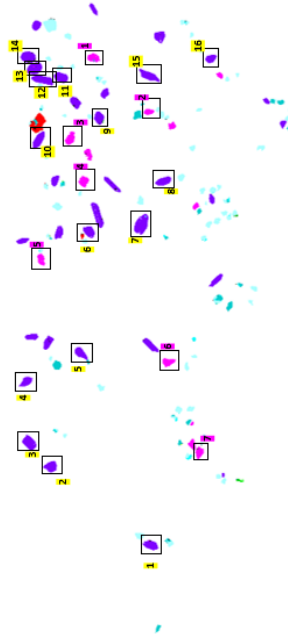




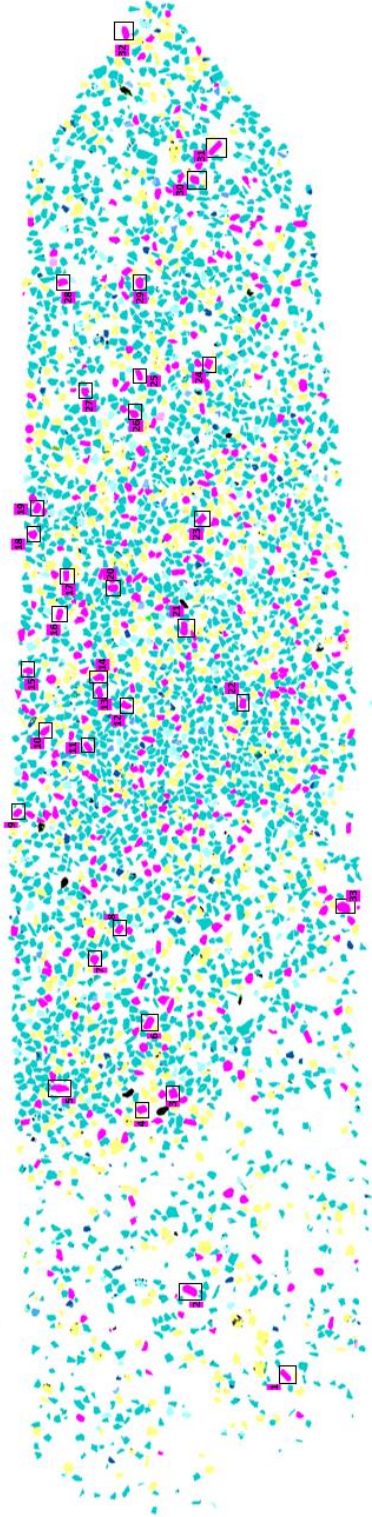
BHF-04 (2021-G-057)



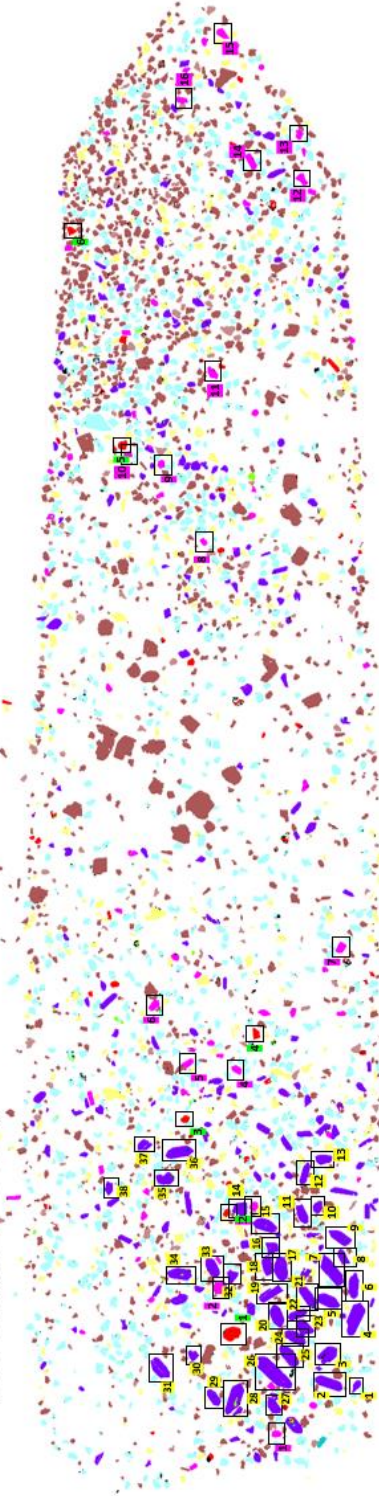
JEM-02 (2021-G-058)



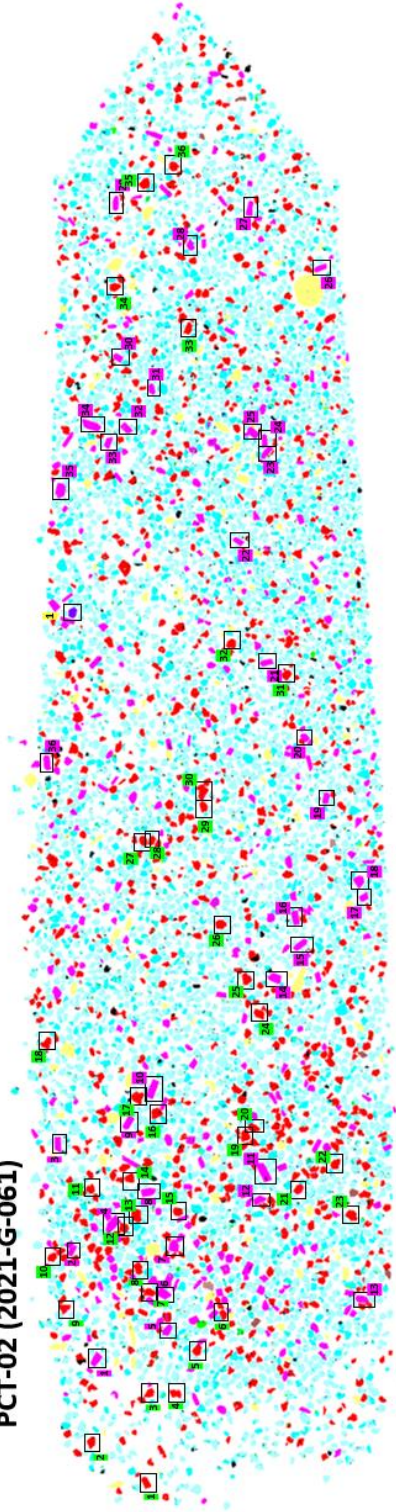
MLG-01 (2021-G-059)



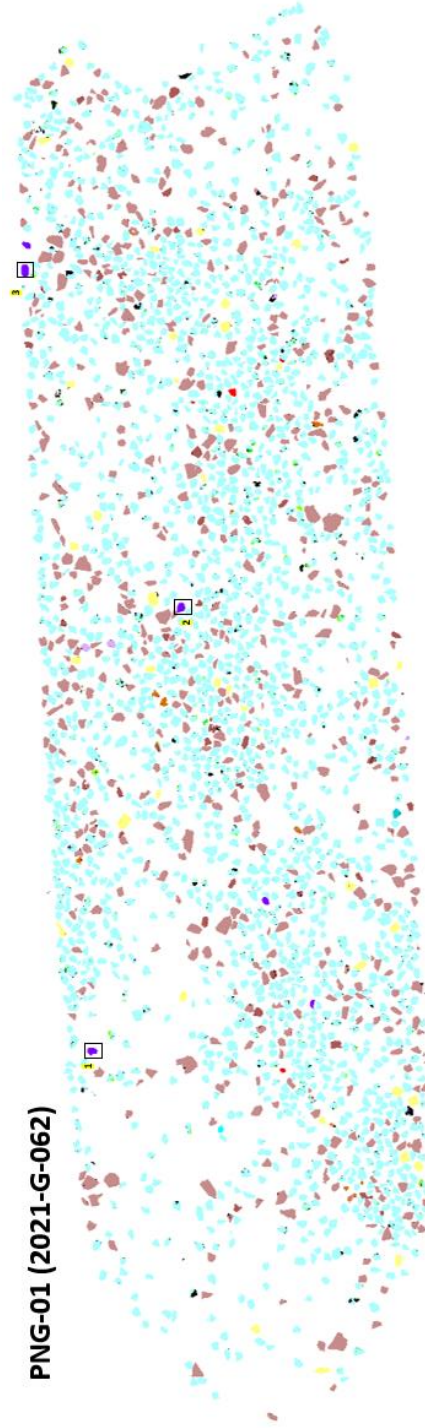
PCT-01 (2021-G-060)



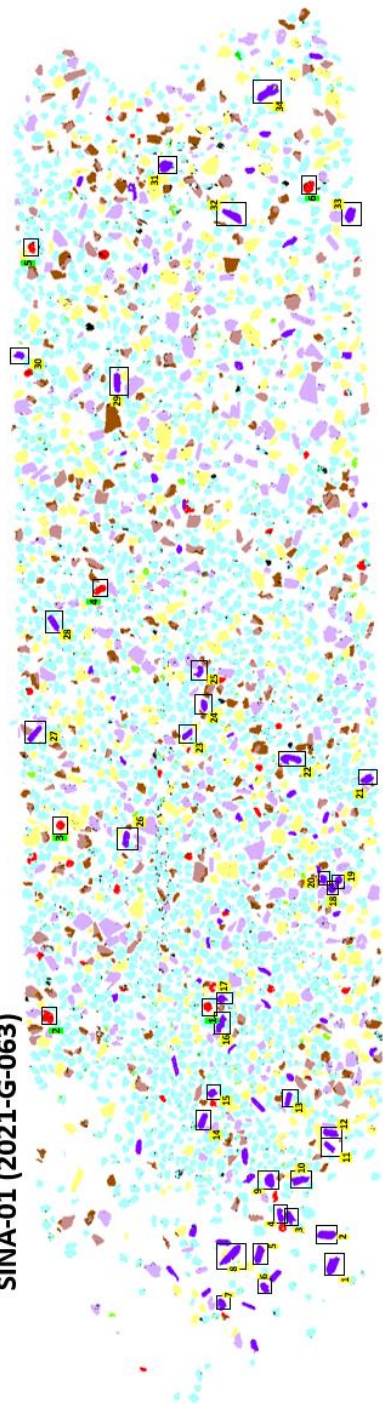
PCT-02 (2021-G-061)



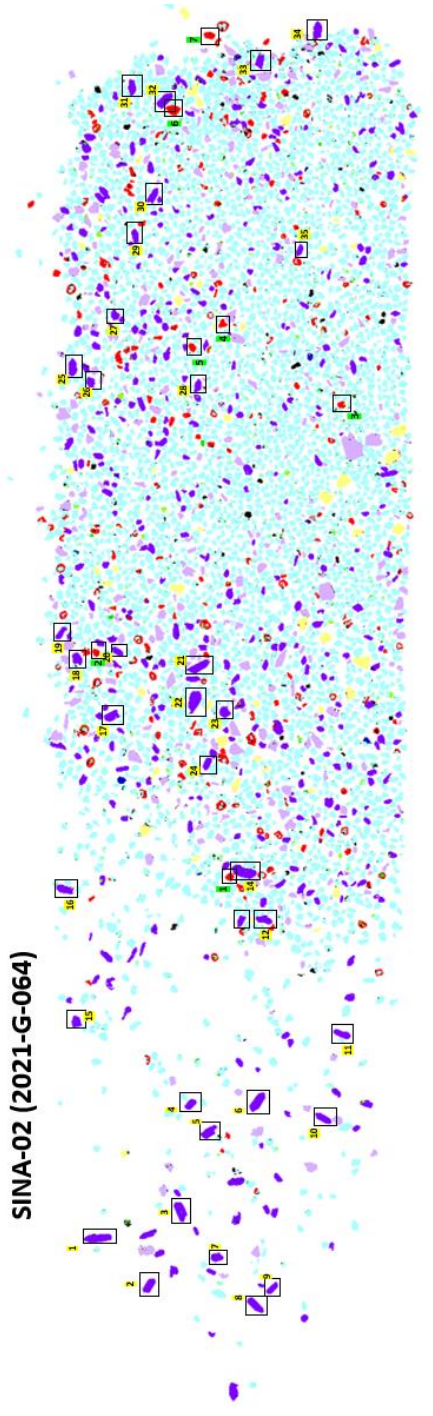
PNG-01 (2021-G-062)



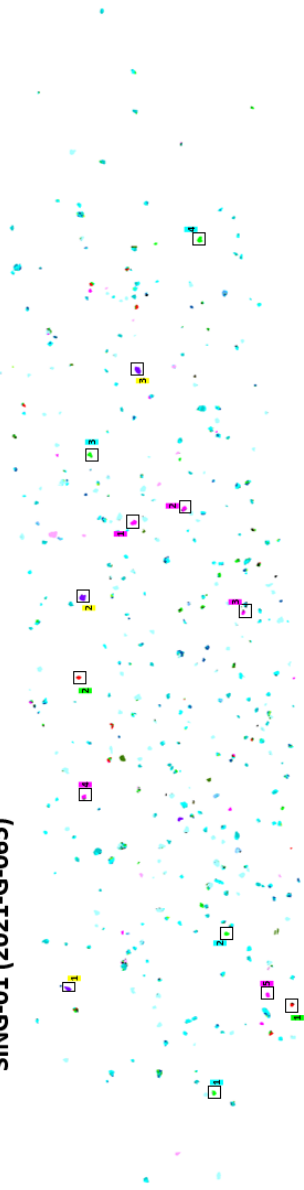
SINA-01 (2021-G-063)



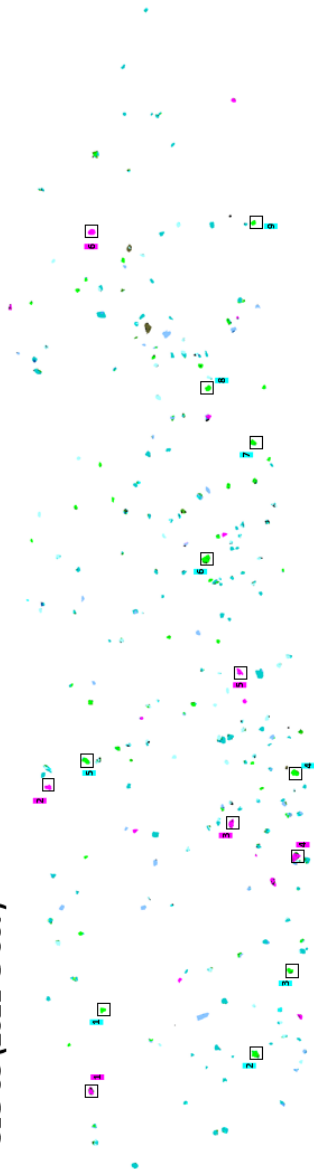
SINA-02 (2021-G-064)



SING-01 (2021-G-065)



SLG-03 (2021-G-067)



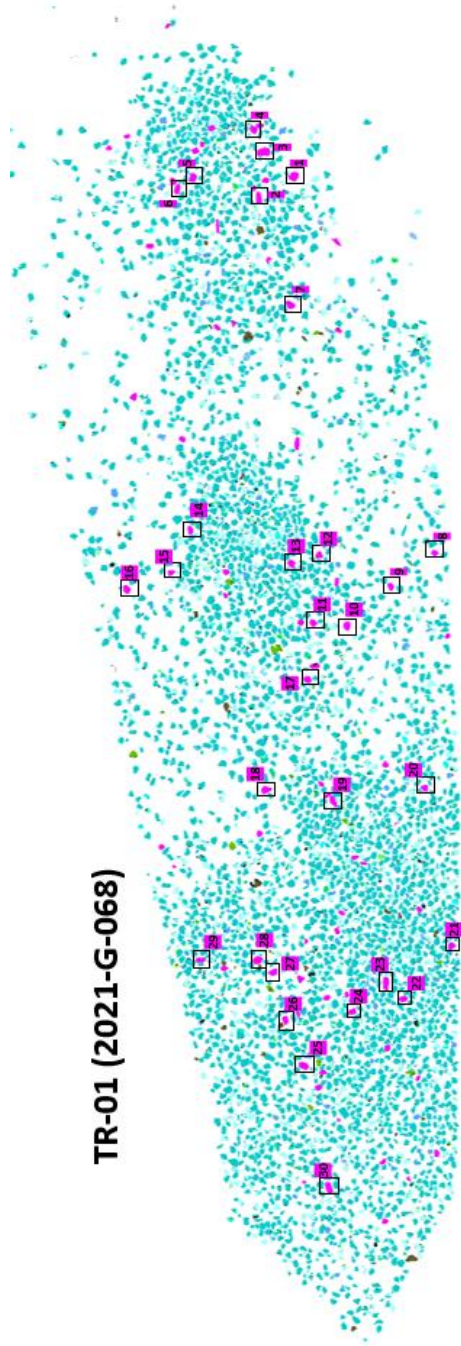
TR-03 (2021-G-069)



SING-02 (2021-G-066)



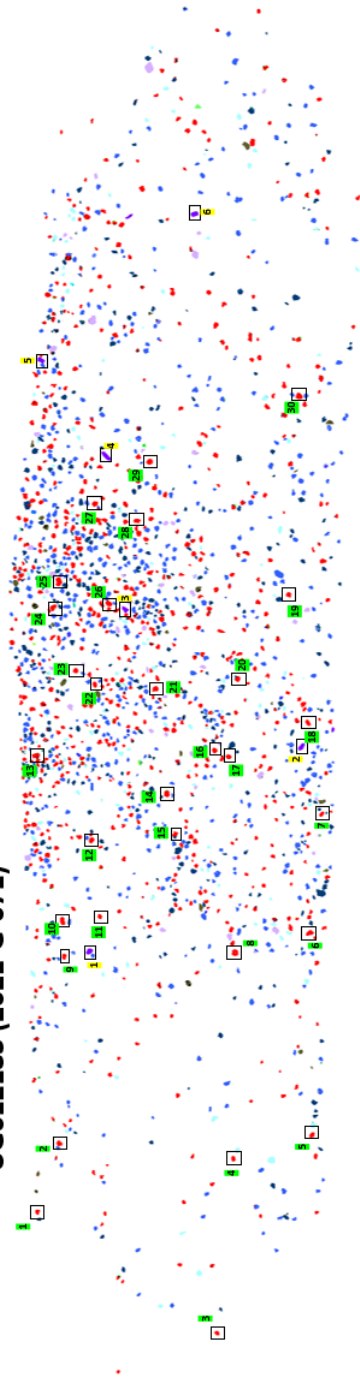
TR-01 (2021-G-068)



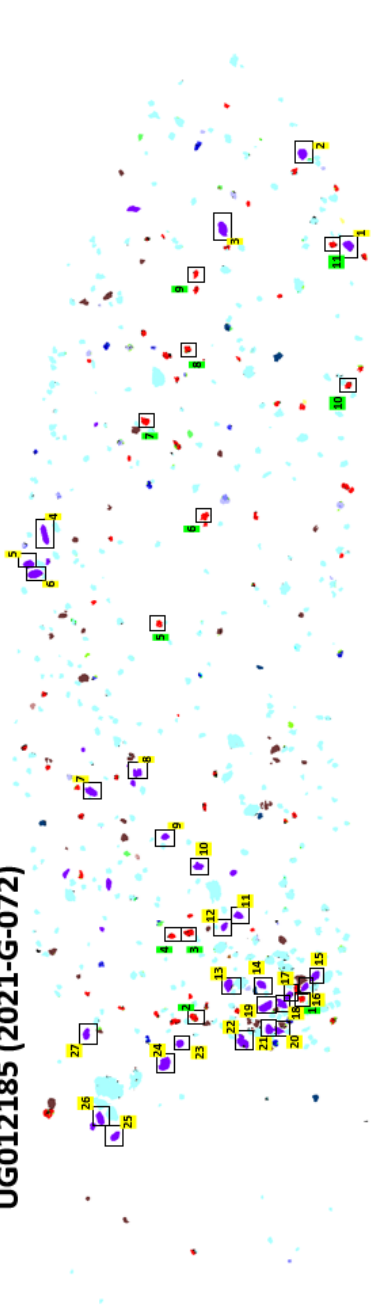
TR-05 (2021-G-070)



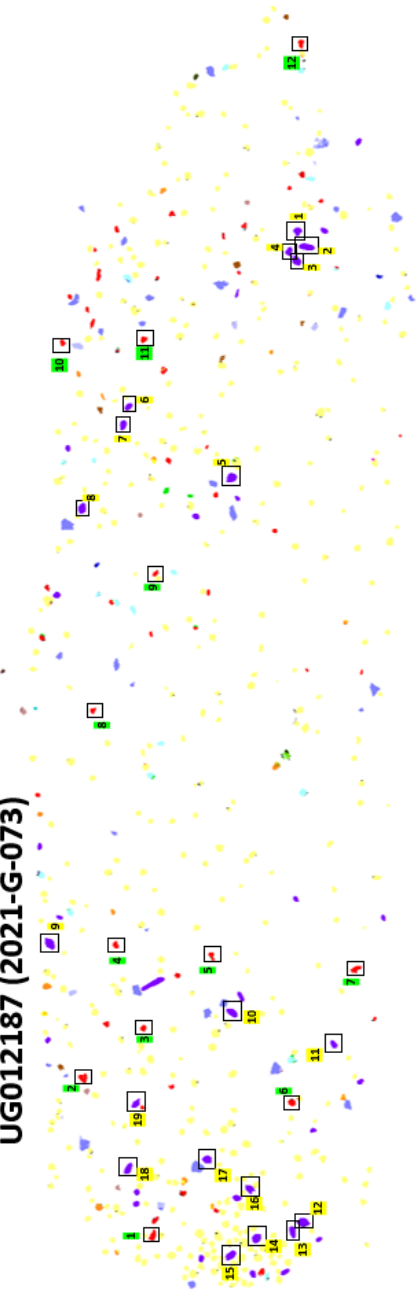
UG012183 (2021-G-071)



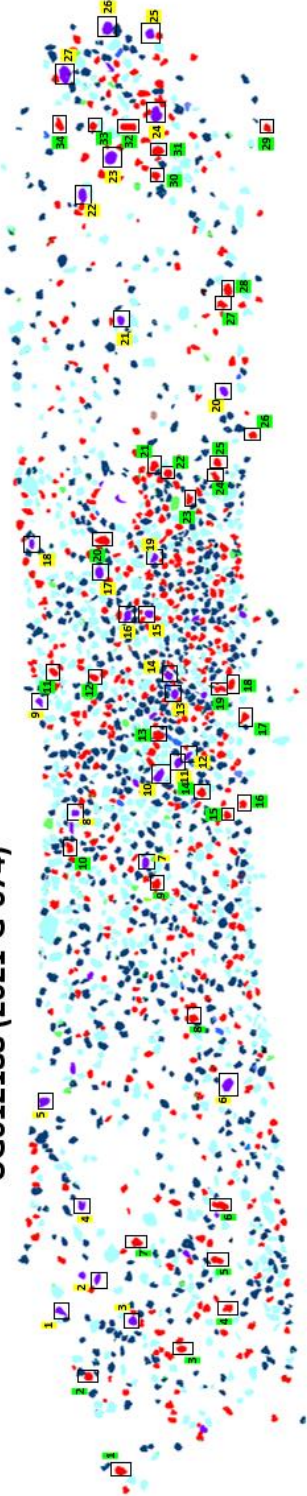
UG012185 (2021-G-072)



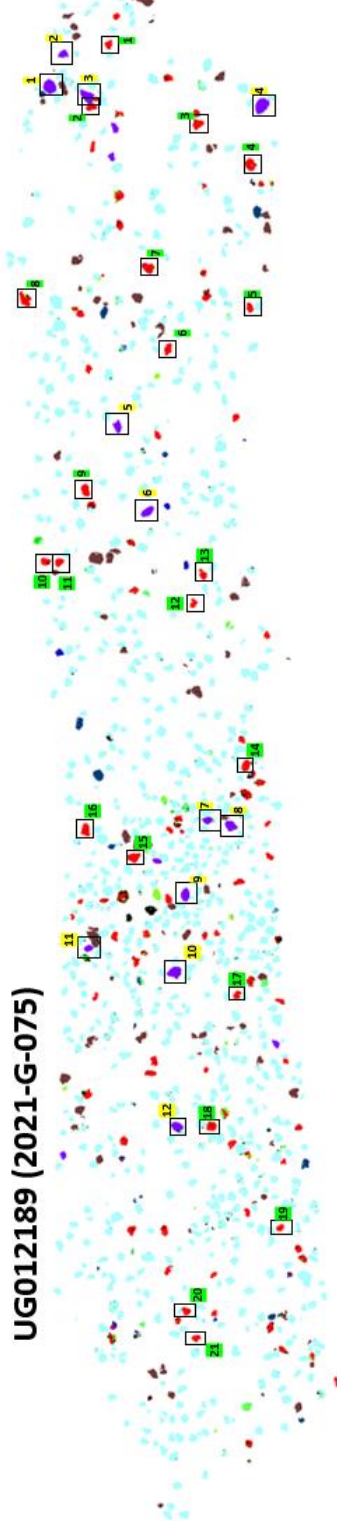
UG012187 (2021-G-073)



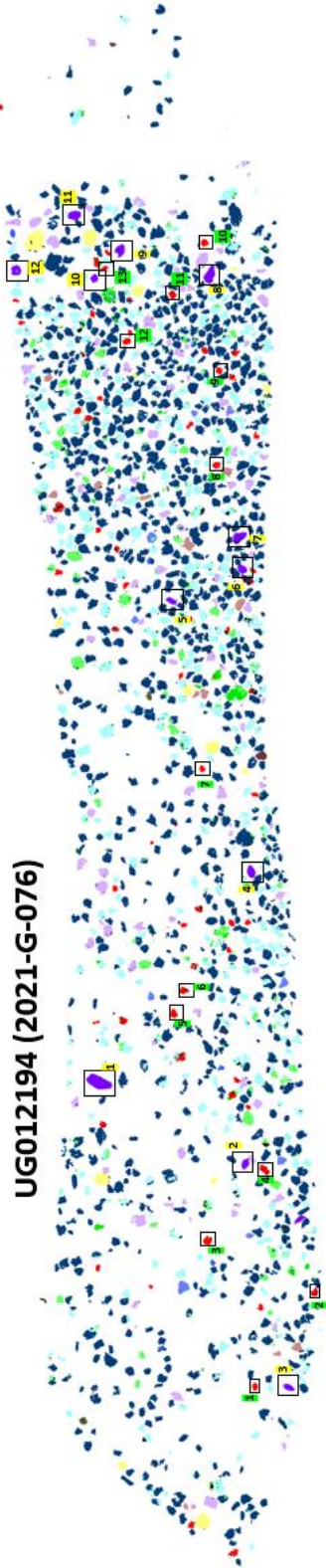
UG012188 (2021-G-074)



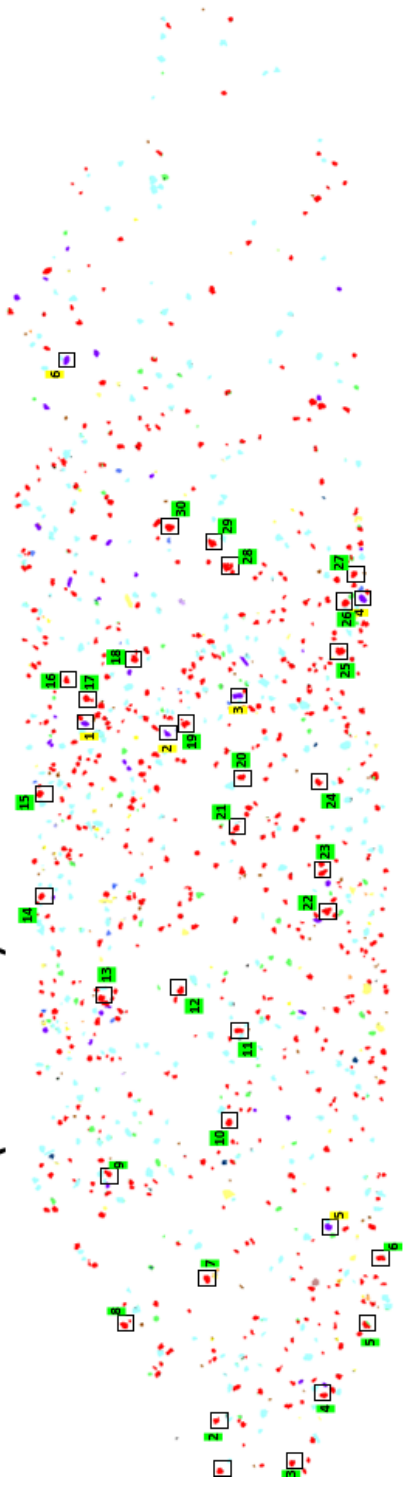
UG012189 (2021-G-075)



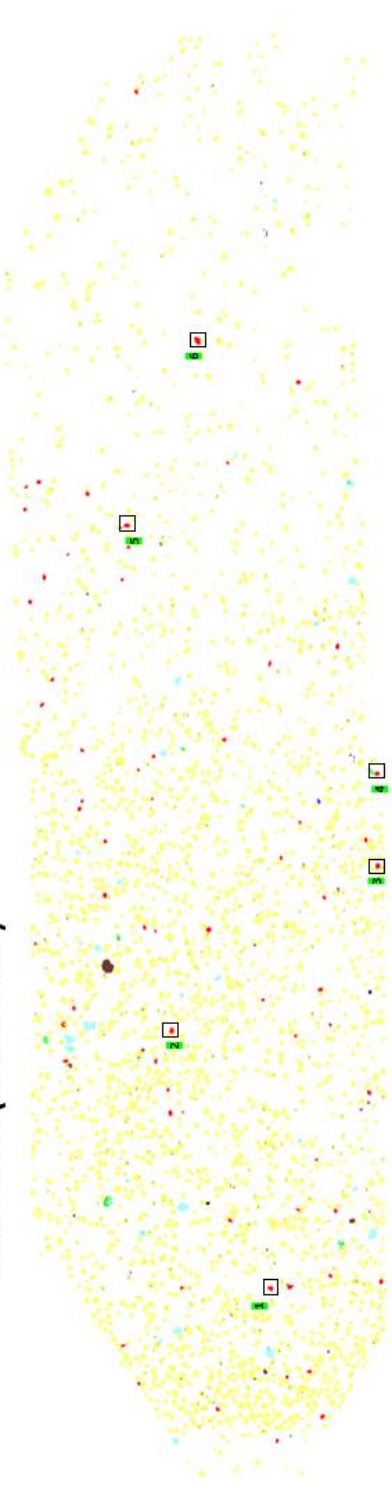
UG012194 (2021-G-076)



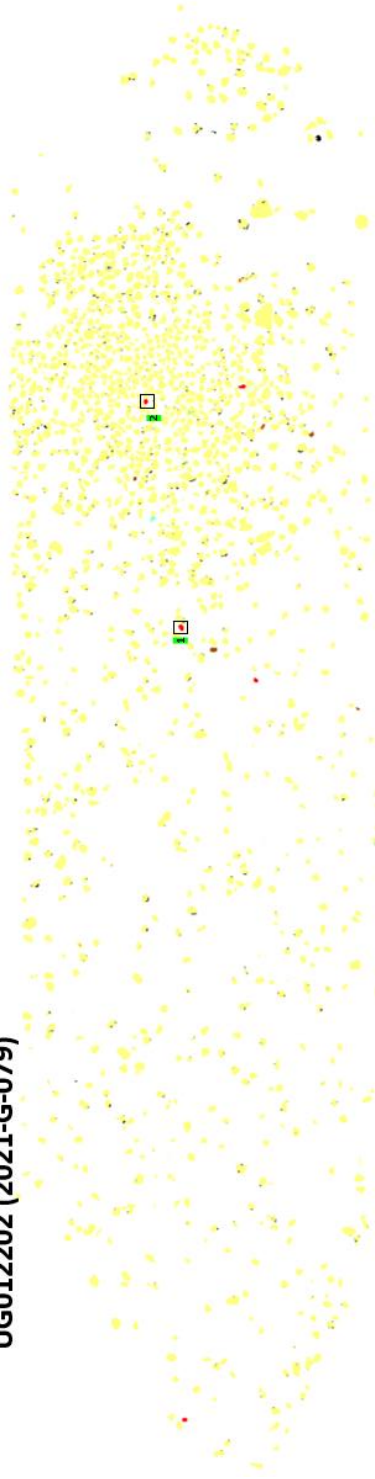
UG012200 (2021-G-077)



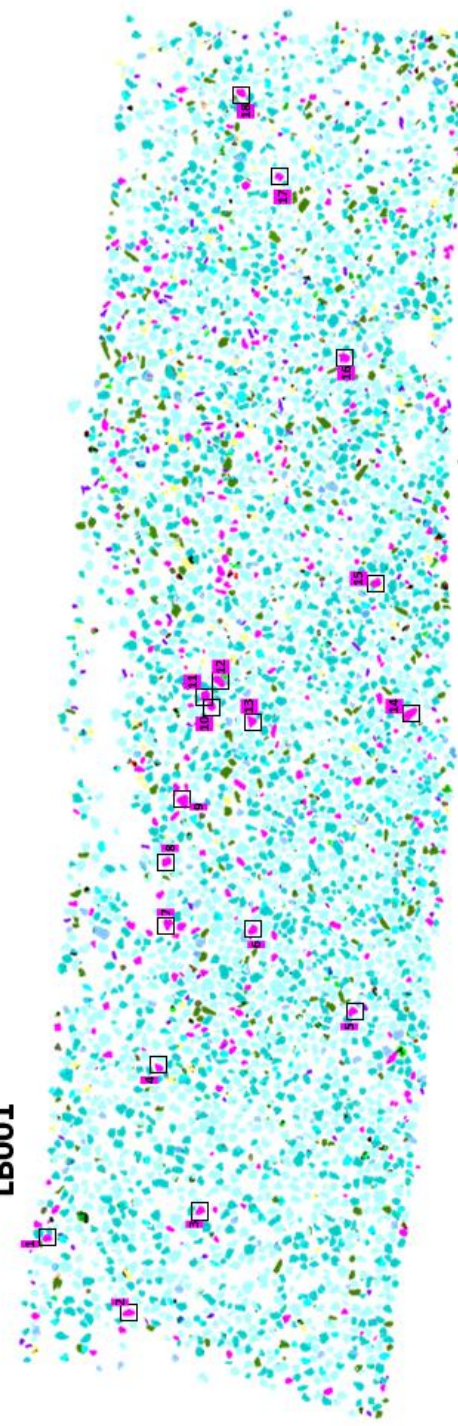
UG012201 (2021-G-078)



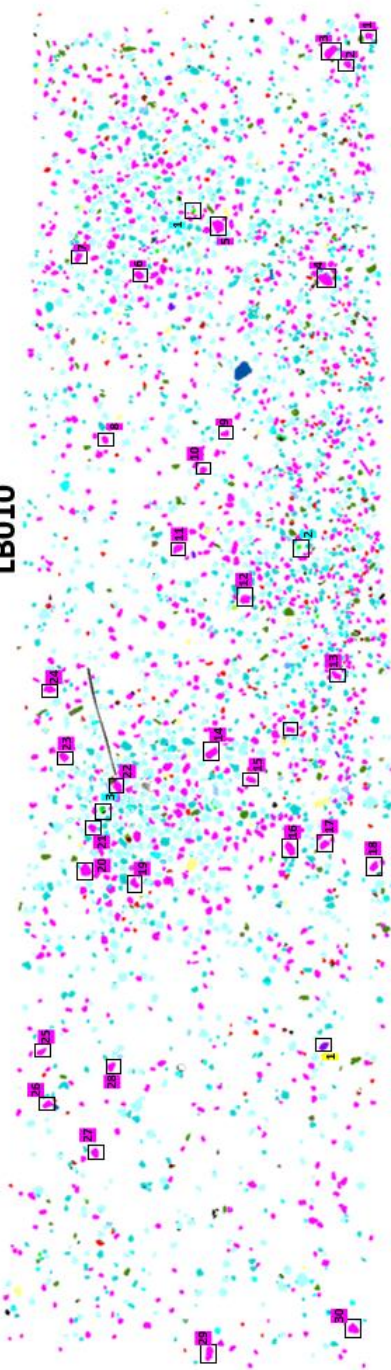
UG012202 (2021-G-079)



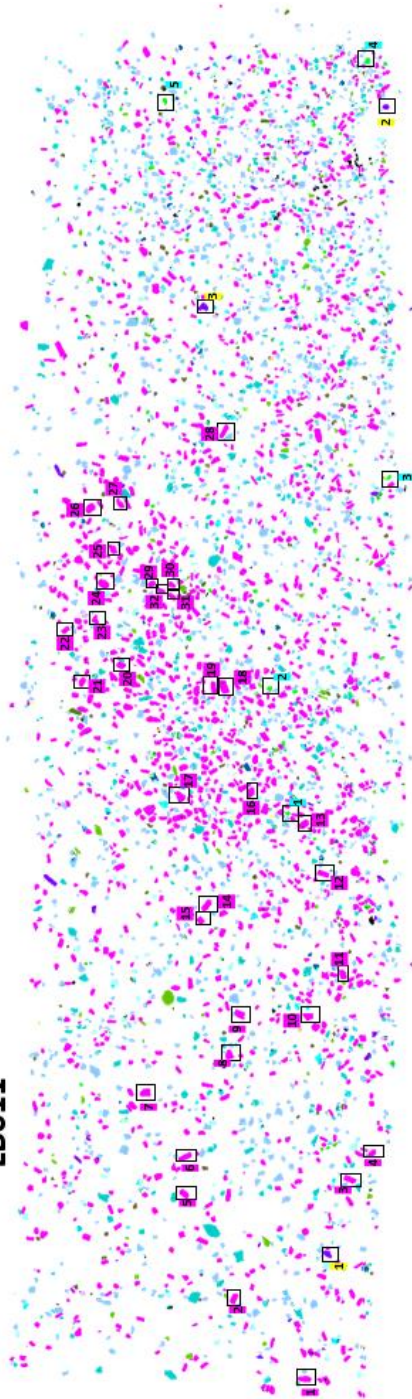
LB001



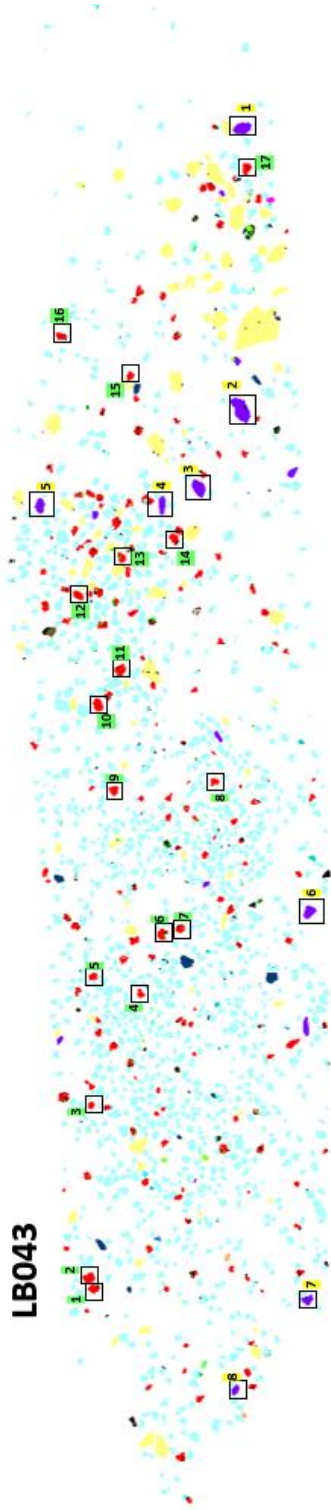
LB010



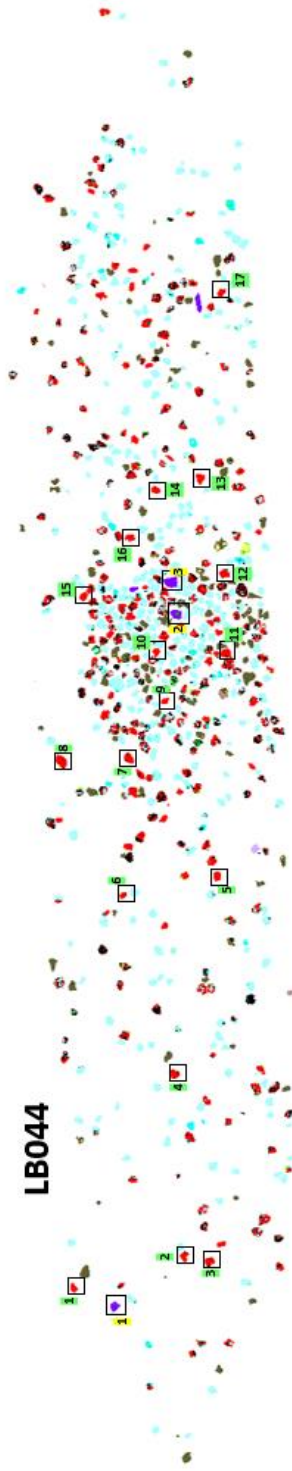
LB011



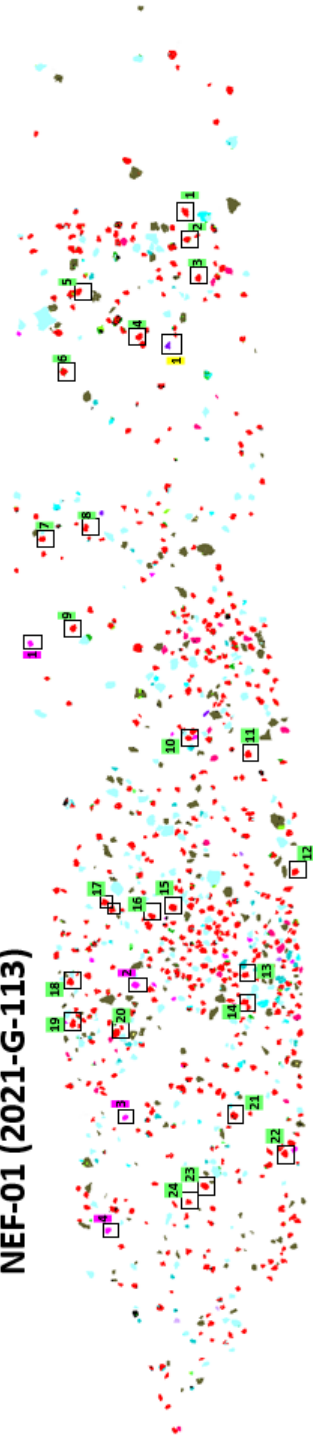
LB043



LB044



NEF-01 (2021-G-113)



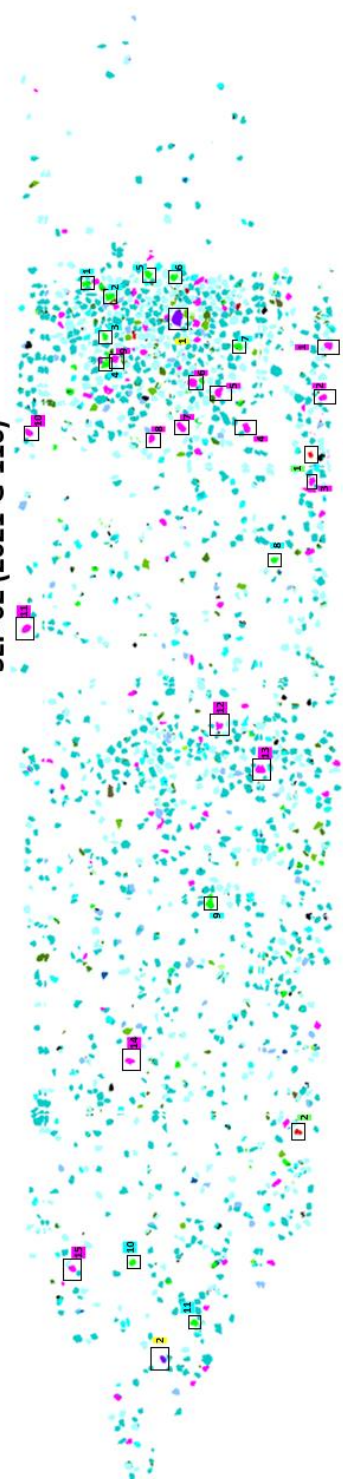
NEF-03 (2021-G-114)



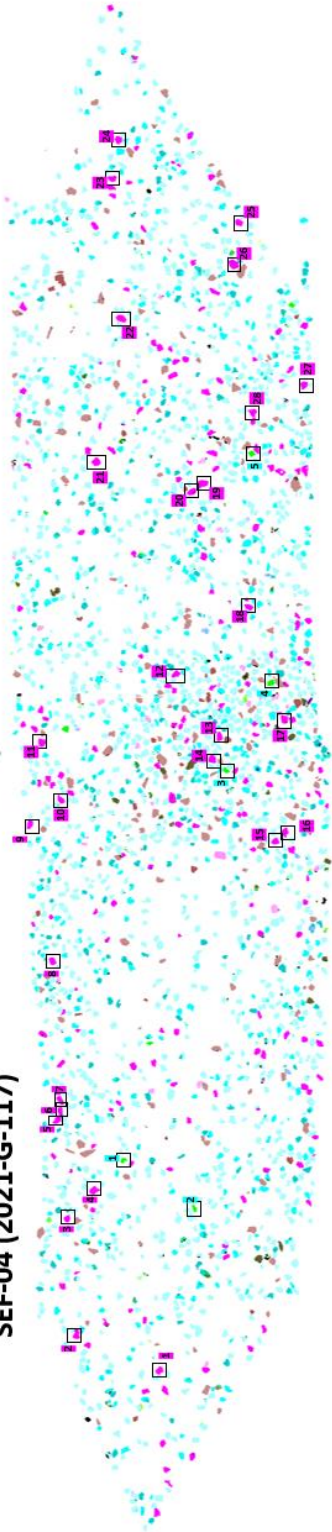
SEF-01 (2021-G-115)



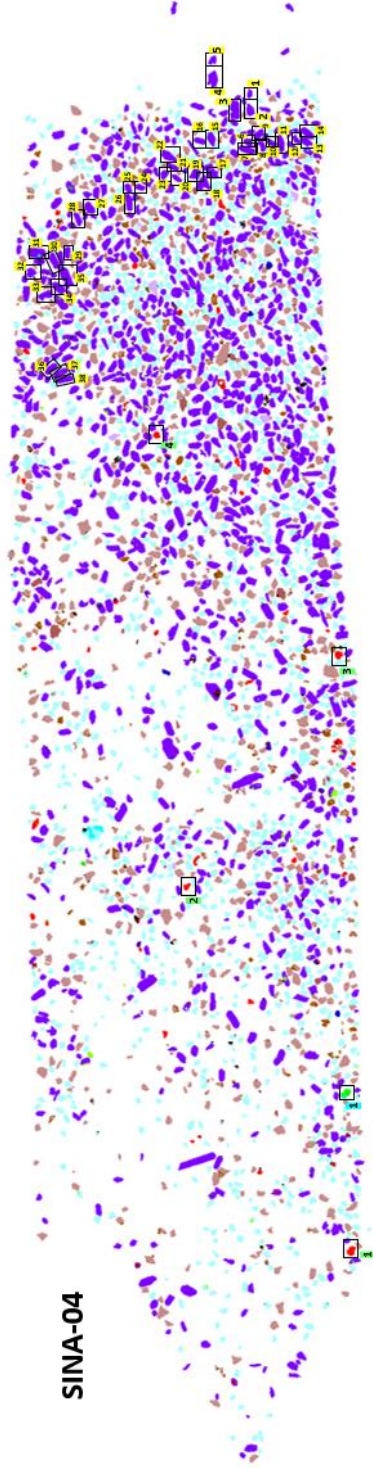
SEF-02 (2021-G-116)



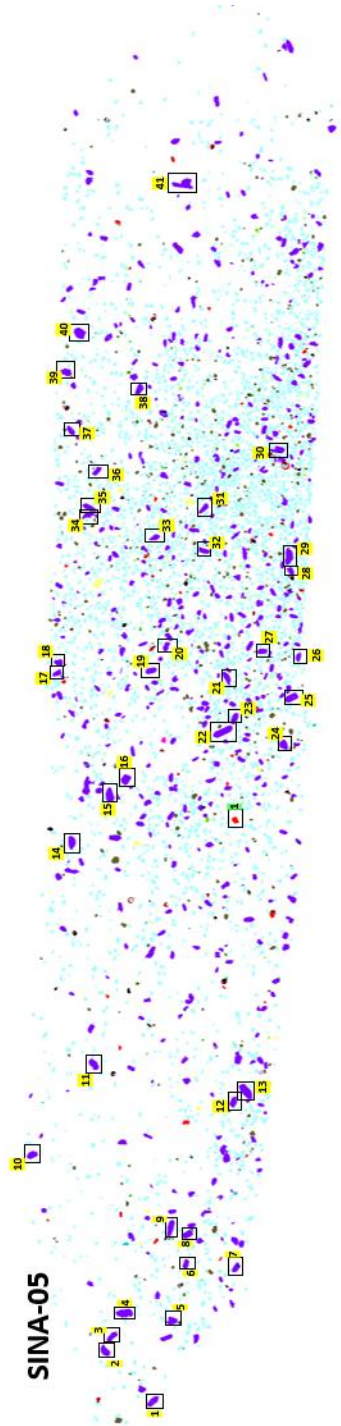
SEF-04 (2021-G-117)



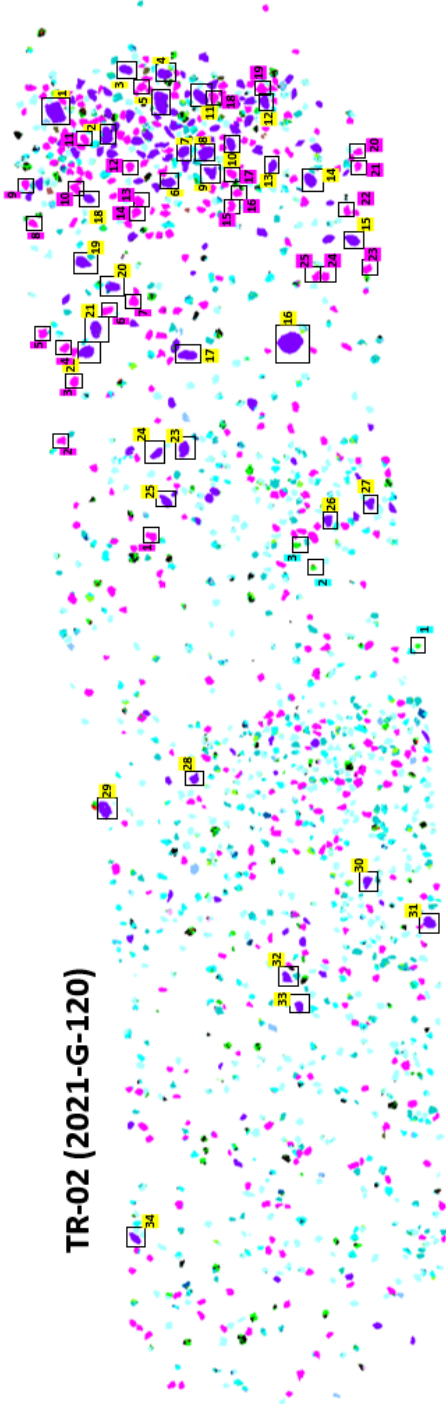
SINA-04



SINA-05



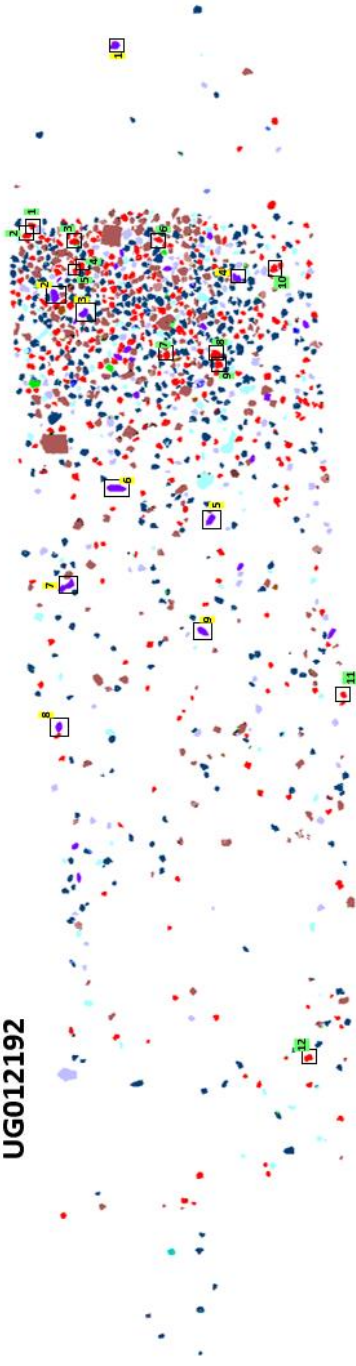
TR-02 (2021-G-120)



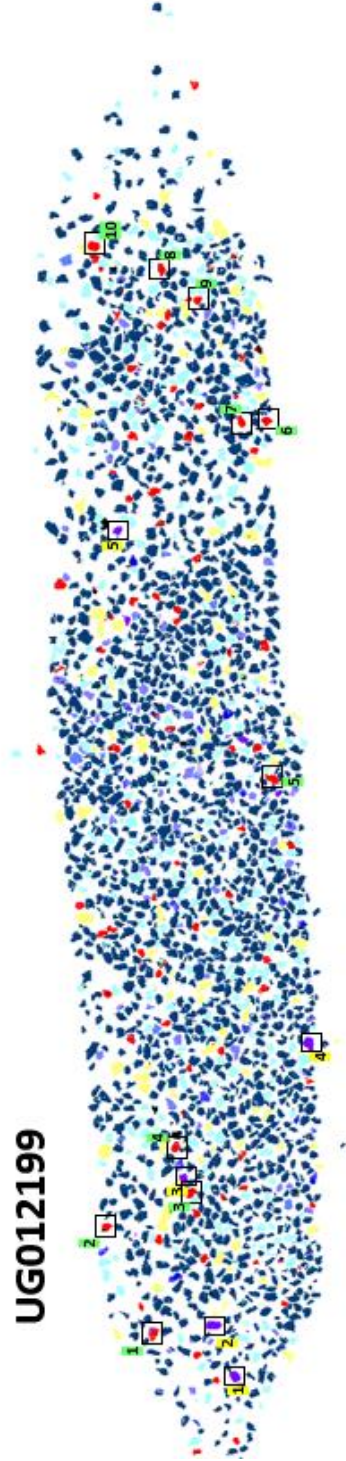
TR-04 (2021-G-121)



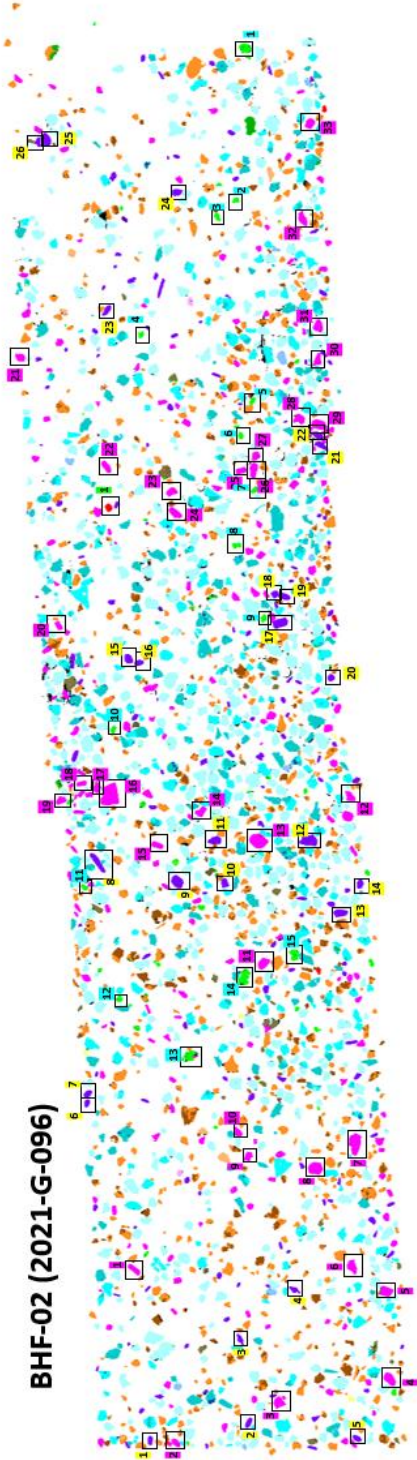
UG012192



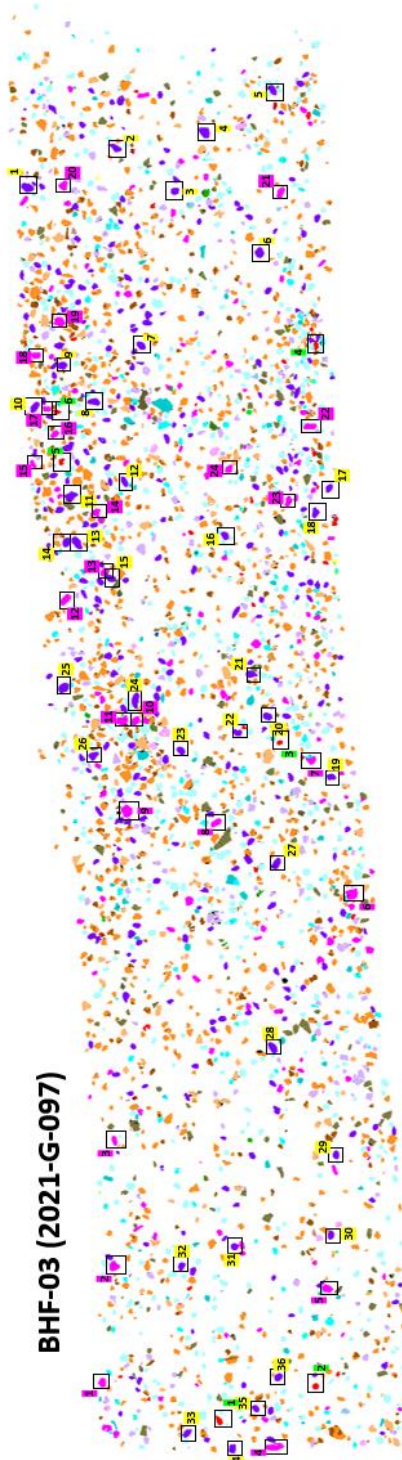
UG012199

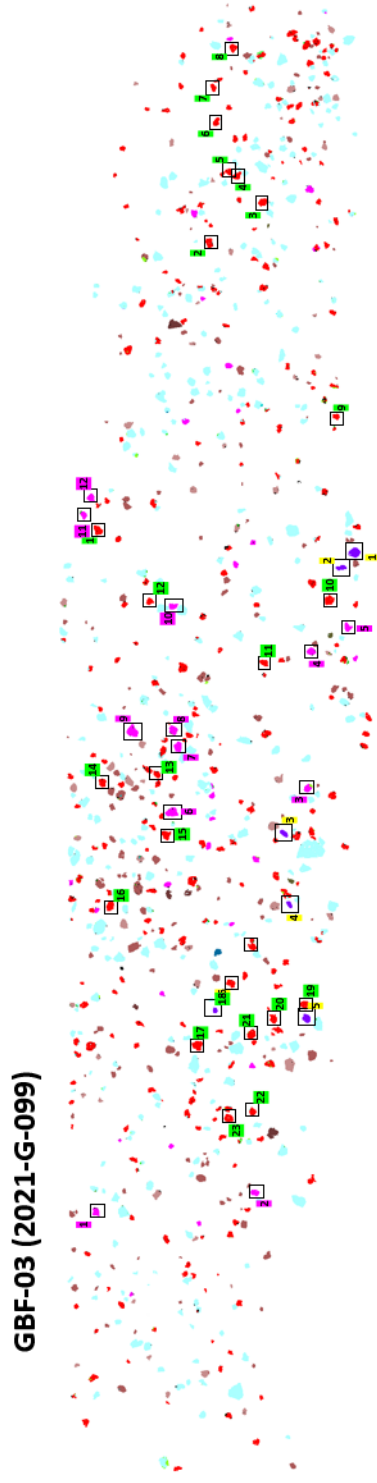
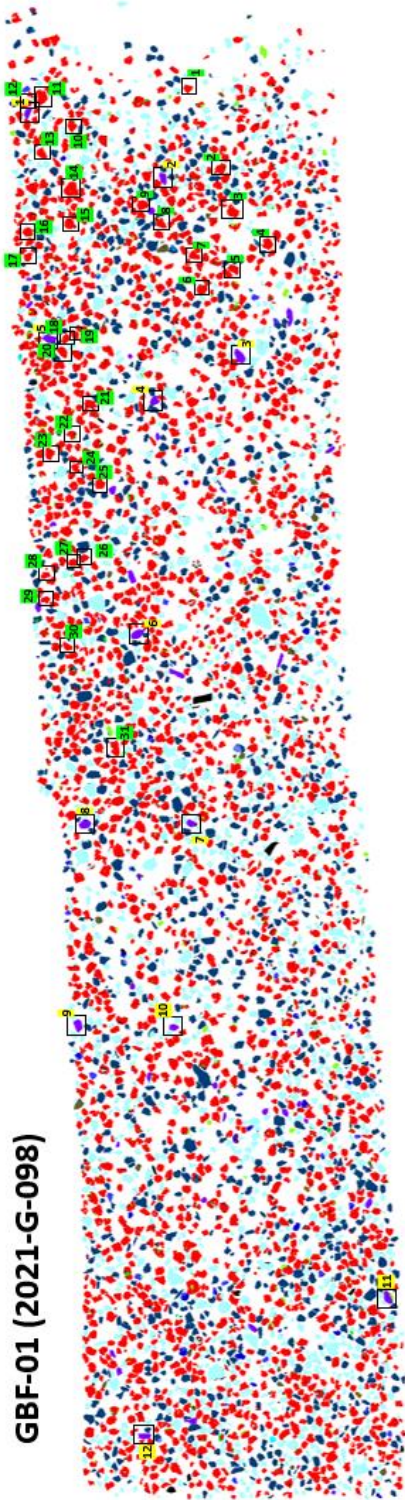


BHF-02 (2021-G-096)

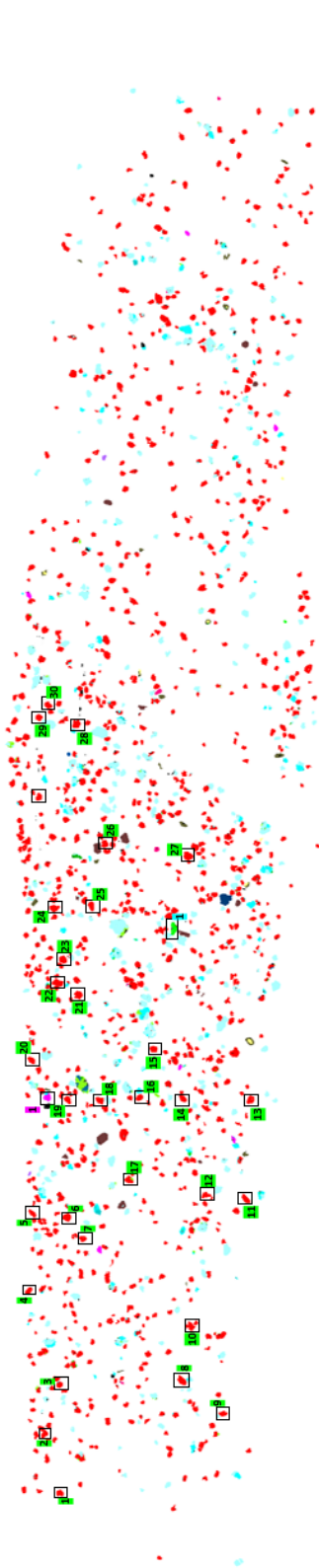


BHF-03 (2021-G-097)

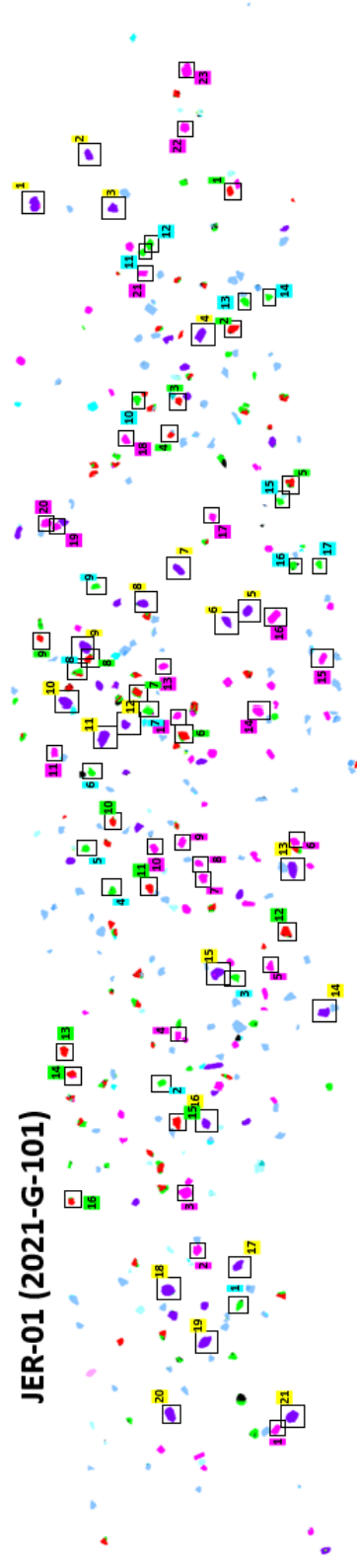




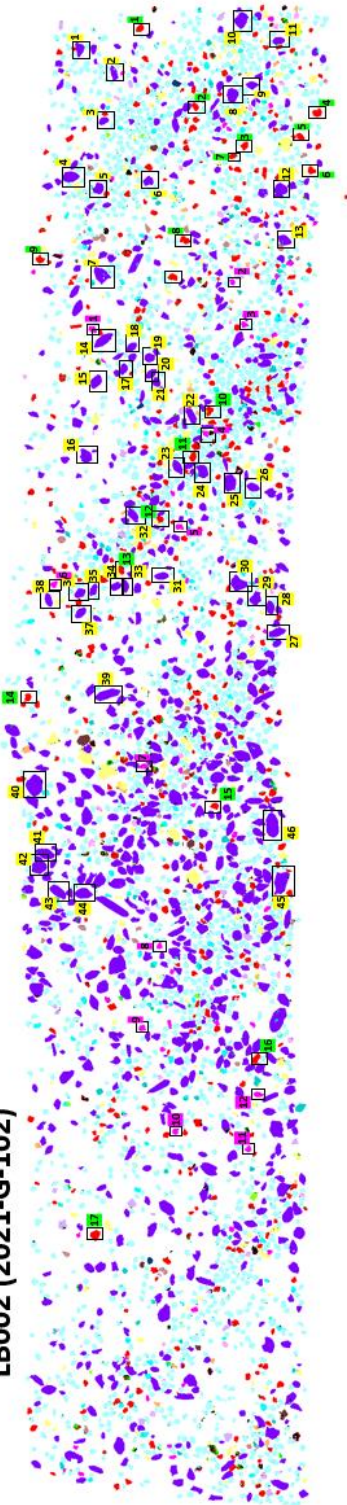
JEM-01 (2021-G-100)



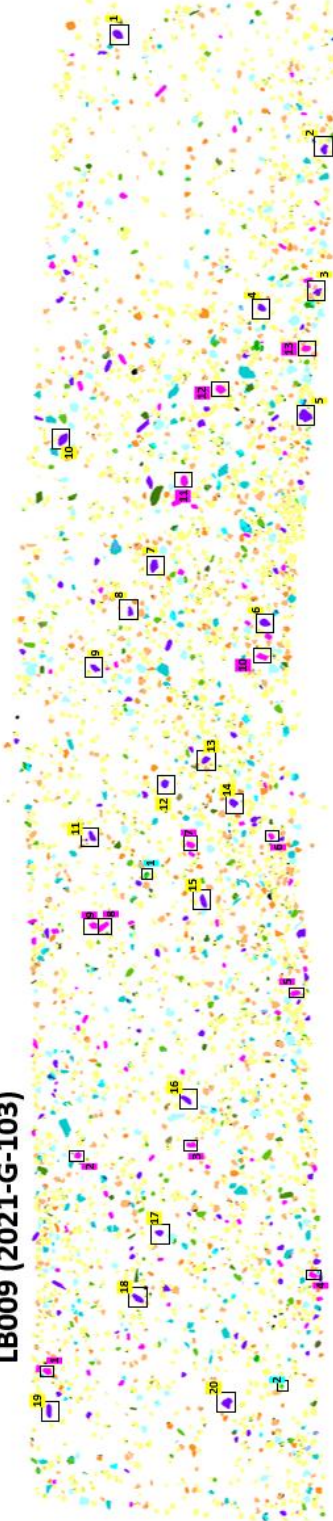
JER-01 (2021-G-101)



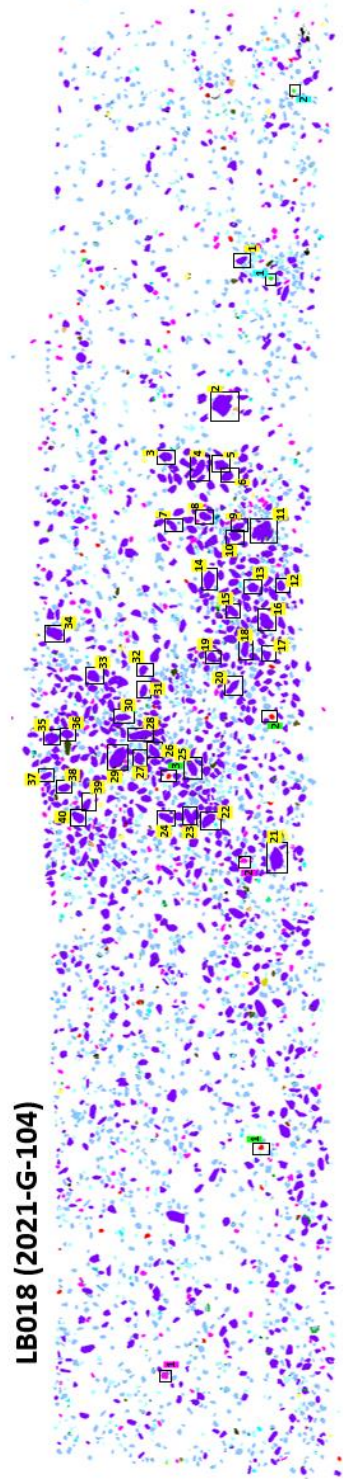
LB002 (2021-G-102)



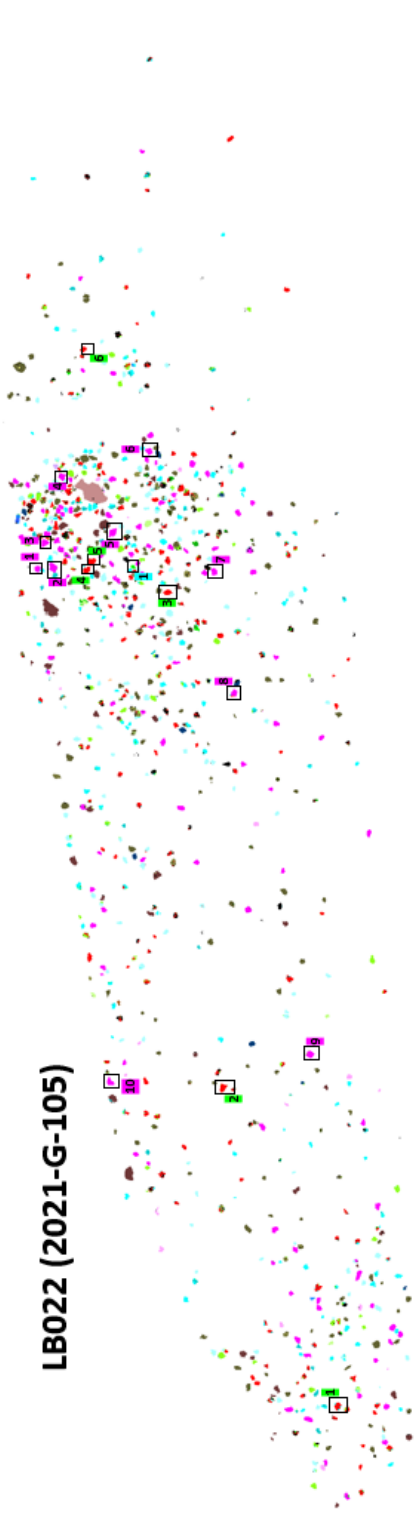
LB009 (2021-G-103)



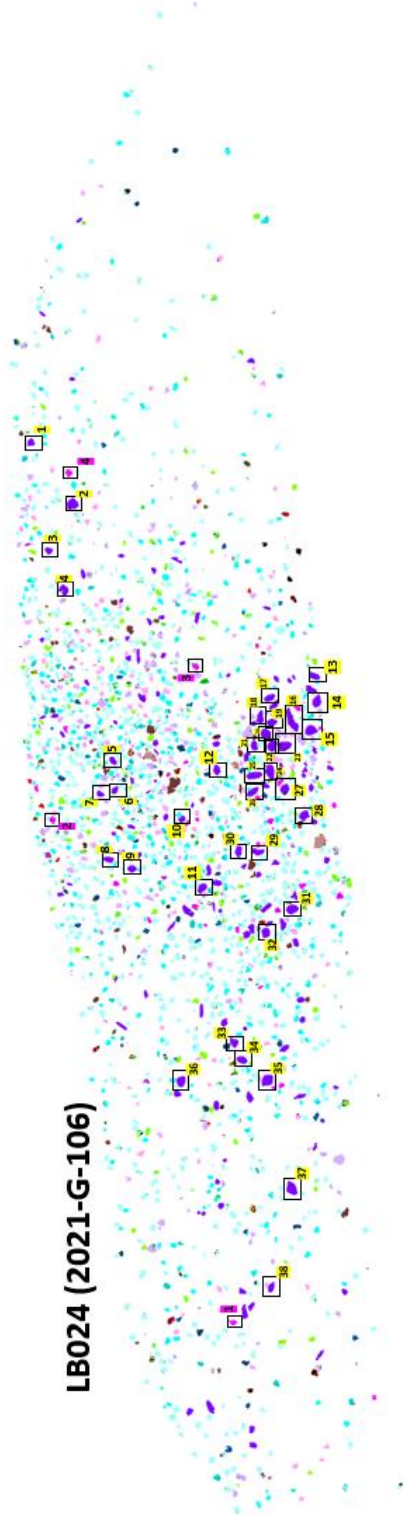
LB018 (2021-G-104)



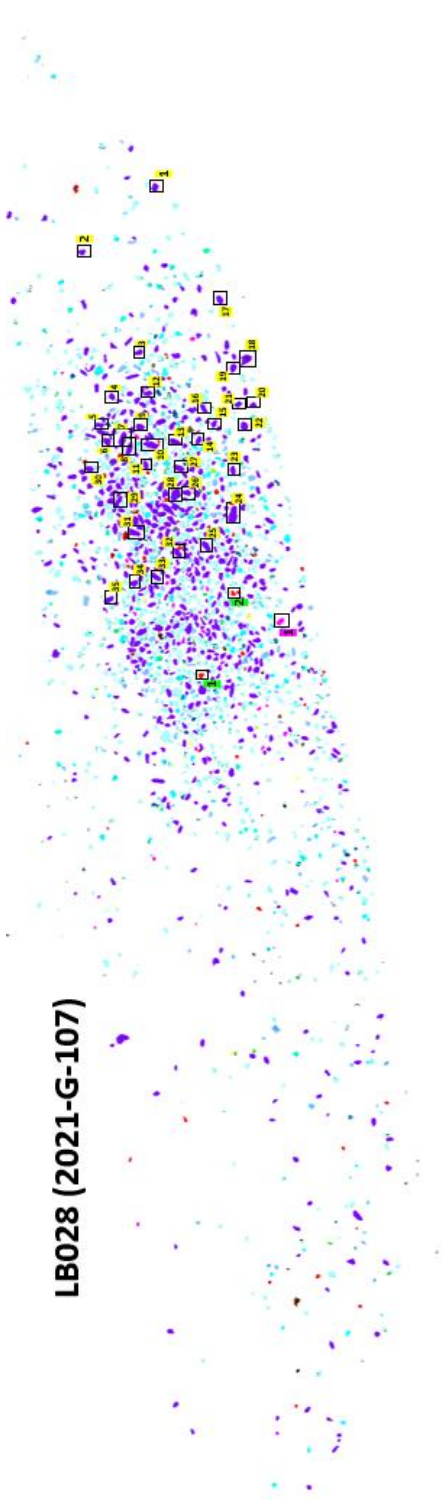
LB022 (2021-G-105)



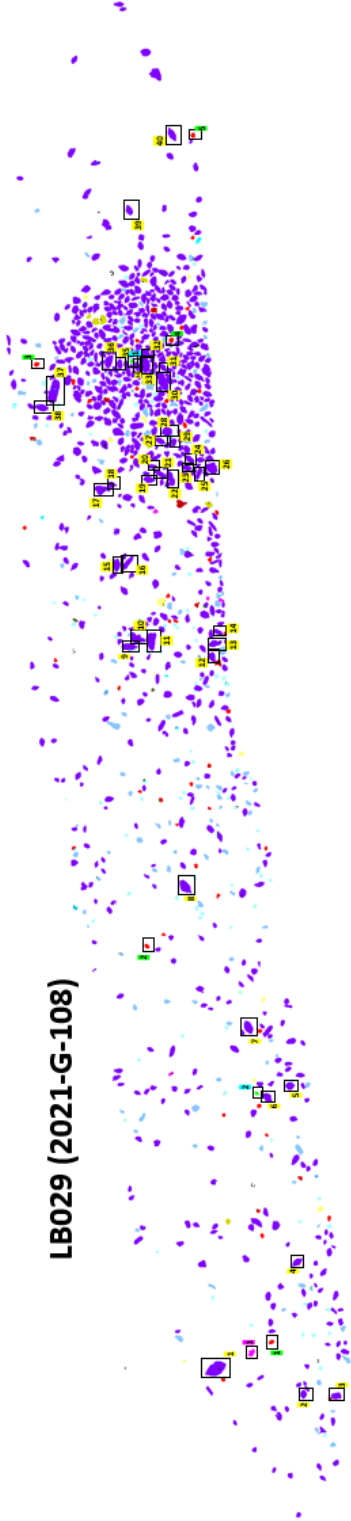
LB024 (2021-G-106)

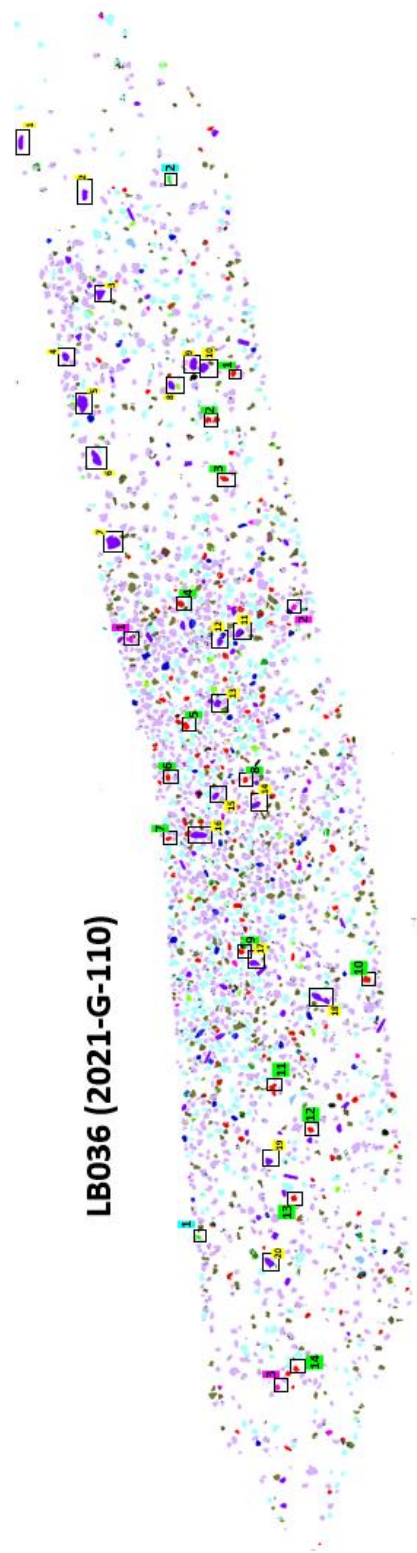
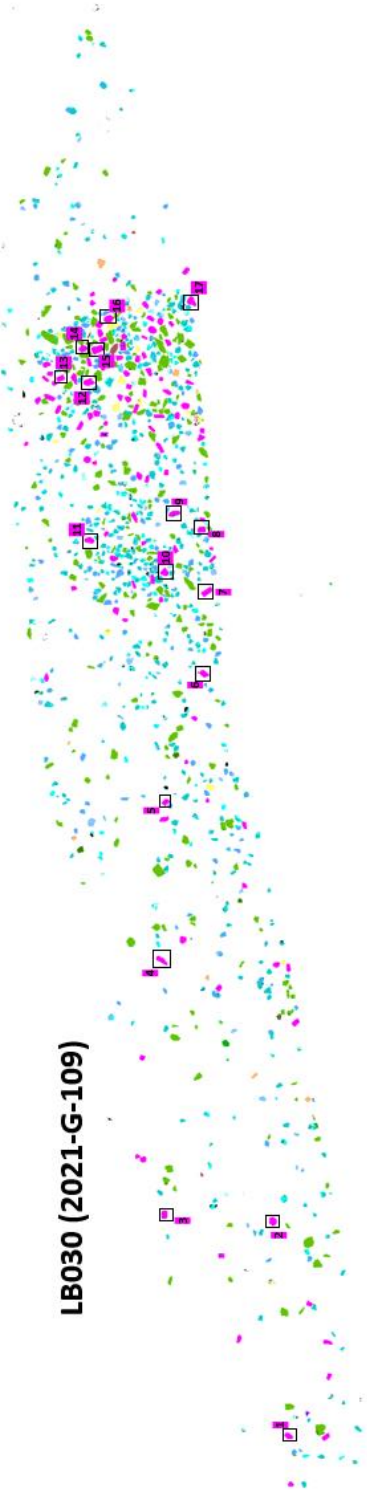


LB028 (2021-G-107)

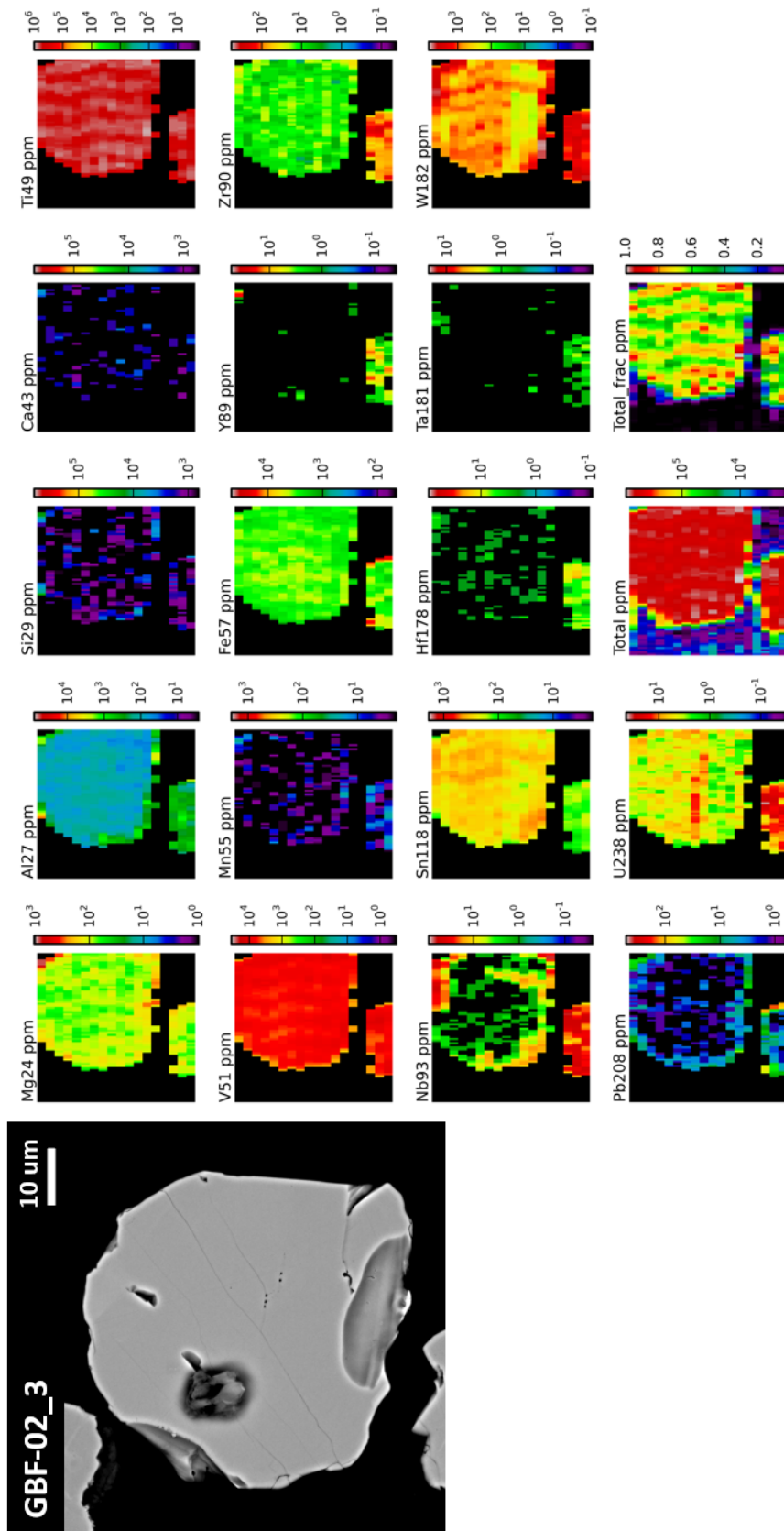


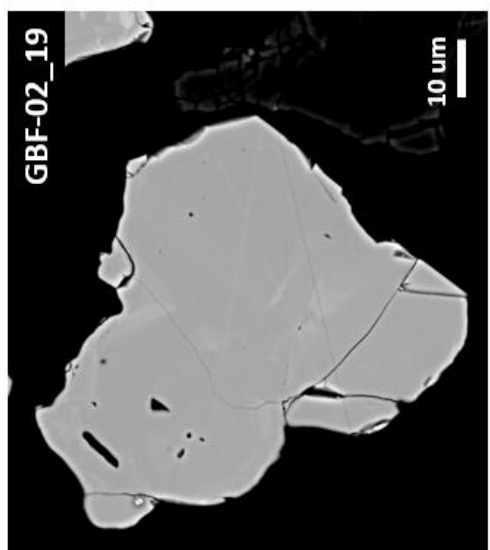
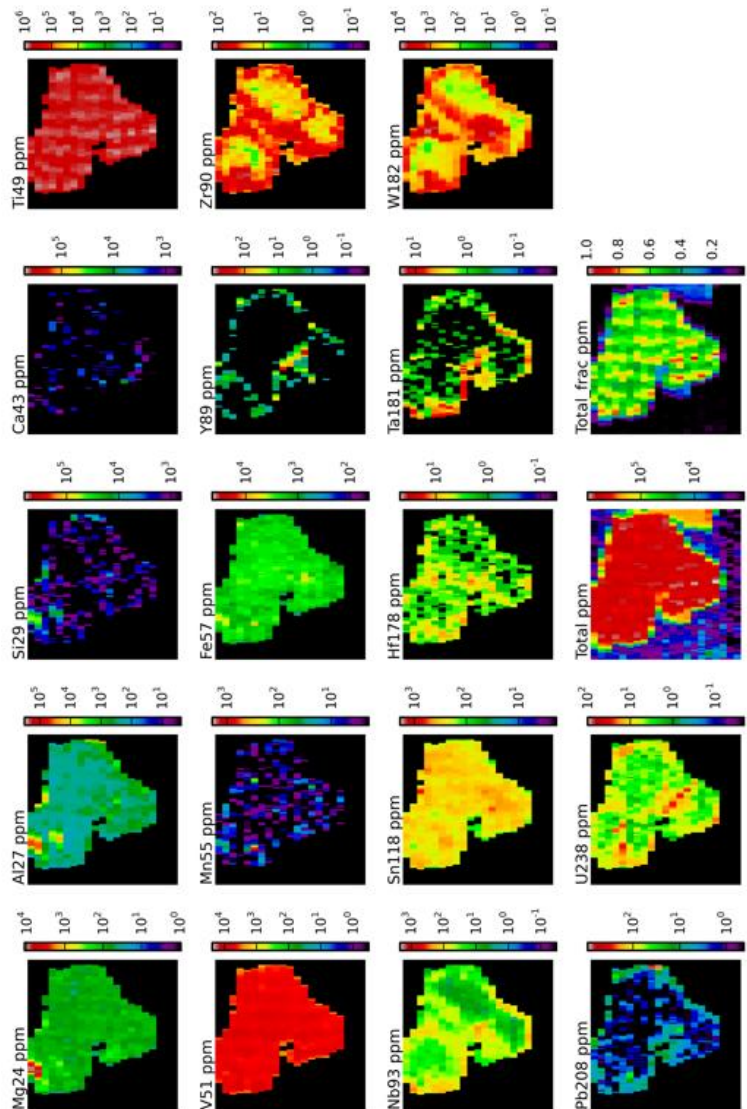
LB029 (2021-G-108)

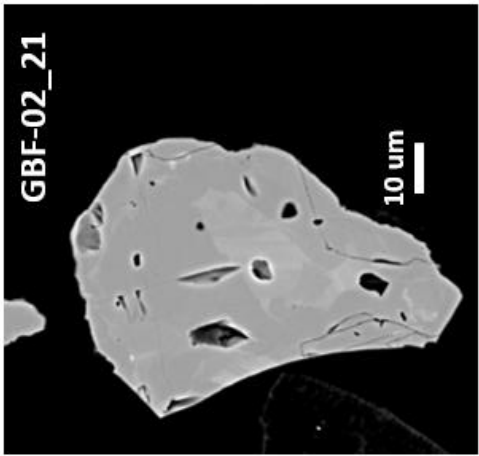
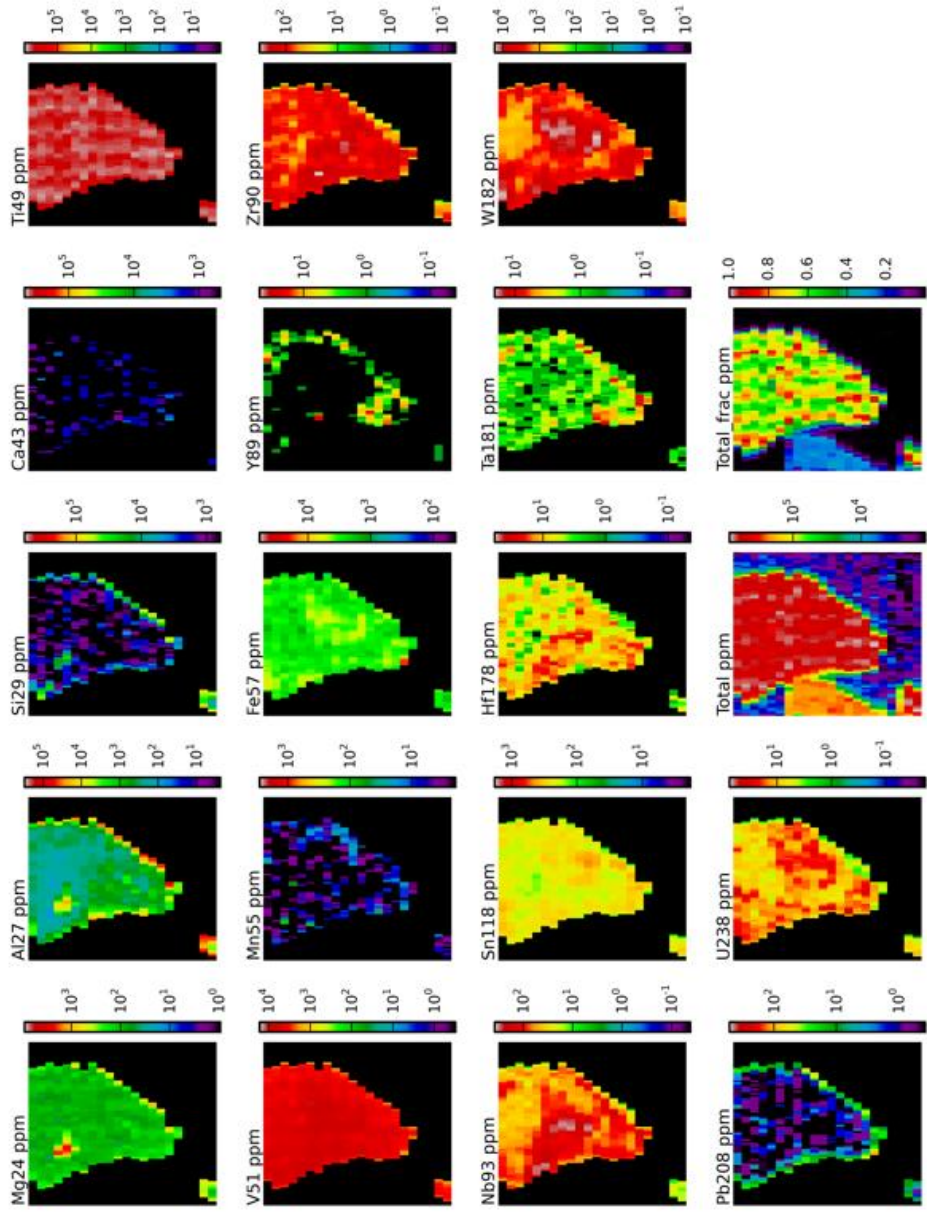


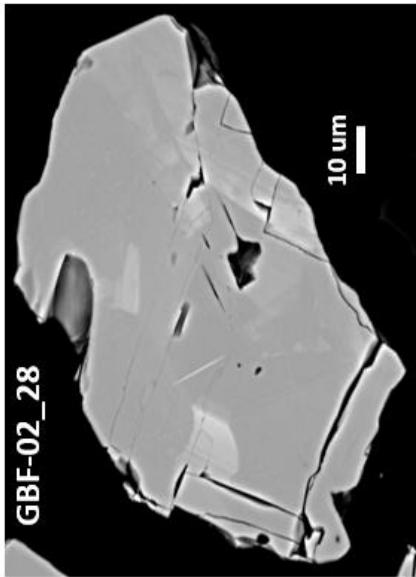
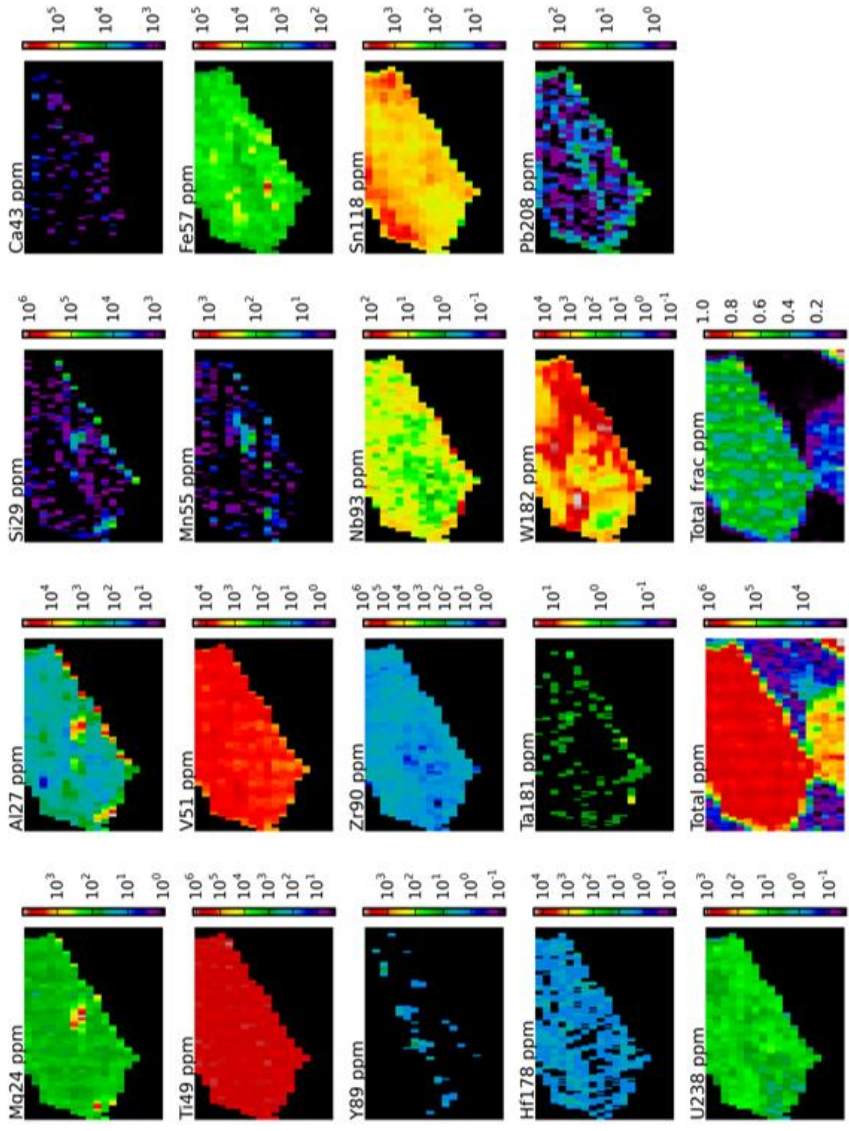


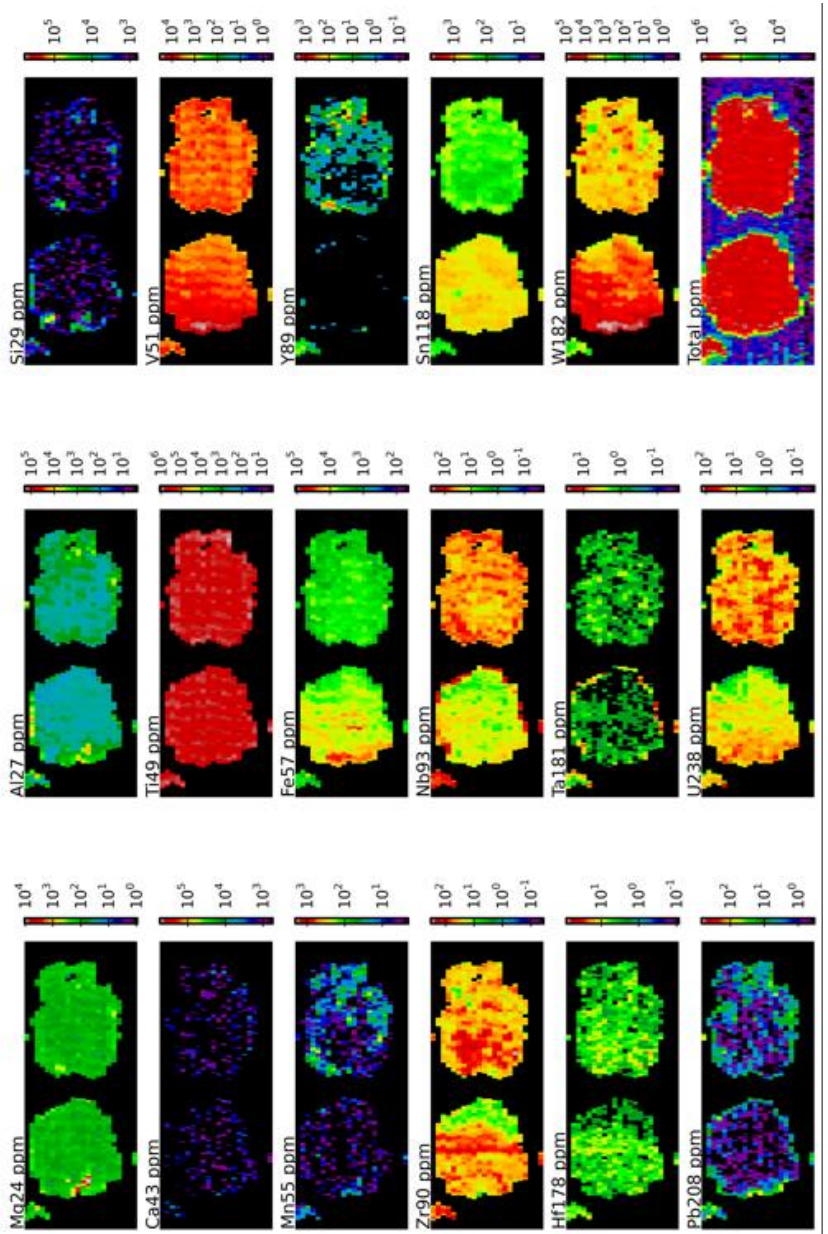
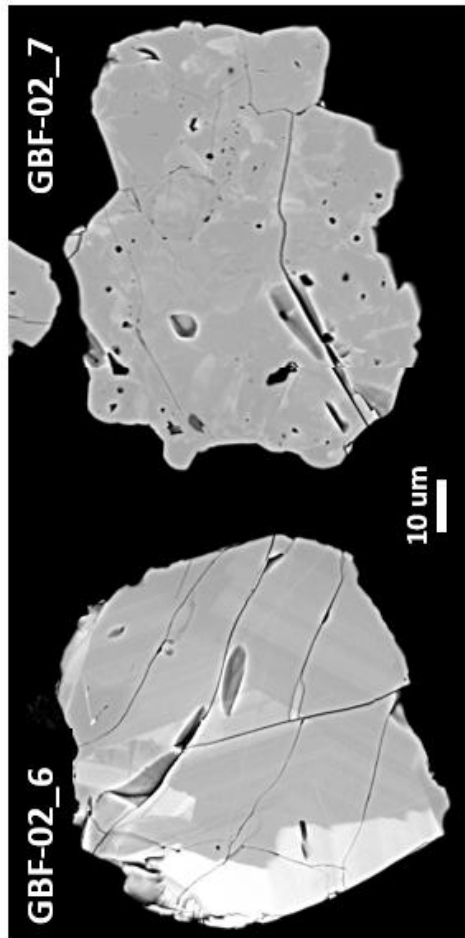
Appendix F: Rutile laser maps











Appendix G: U-Pb geochronology age standards

| Analysis | Mineral | Pref. Age (Ma) | 207 cor 206Pb/238U Age (Ma) | 207 cor 206Pb/238U 2s% | 238U/206Pb ratio | 1s% | 207Pb/206Pb ratio | 1s% | 207Pb/235U (calc) ratio | 1s% | 206Pb/238U ratio | 1s% | 206Pb/238U Age (Ma) | 2s% | 207Pb/206Pb Age (Ma) | 2s% | 207Pb/235U (calc) Age (Ma) | 2s% | |
|--|---------|----------------|-----------------------------|------------------------|------------------|--------|-------------------|--------|-------------------------|--------|------------------|---------|---------------------|---------|----------------------|---------|----------------------------|------|--|
| 91500_1_1 | Zircon | | | | 5.5975 | 0.6584 | 0.0740 | 1.7324 | 1.8126 | 0.1786 | 2.5466 | 0.6645 | 1059.41 | 1.33 | 1040.11 | 6.72 | 1050.02 | 5.09 | |
| 91500_1_2 | Zircon | | 1064.5 | | 5.5687 | 0.6584 | 0.0750 | 1.5719 | 1.8479 | 0.1796 | 2.5466 | 0.6645 | 1064.68 | 1.33 | 1067.37 | 5.92 | 1062.70 | 5.09 | |
| 91500_1_3 | Zircon | | | | 5.5381 | 0.6584 | 0.0743 | 1.8371 | 1.8605 | 0.1806 | 2.5466 | 0.6645 | 1070.35 | 1.33 | 1048.94 | 7.06 | 1067.16 | 5.09 | |
| 91500_1_4 | Zircon | | 1060.0 | | 5.5714 | 0.6584 | 0.0782 | 1.7219 | 1.9449 | 0.1795 | 2.5466 | 0.6645 | 1064.06 | 1.33 | 1149.83 | 5.95 | 1066.68 | 5.09 | |
| 91500_1_5 | Zircon | | | | 5.6087 | 0.6584 | 0.0720 | 1.8237 | 1.7875 | 0.1782 | 2.5466 | 0.6645 | 1057.30 | 1.33 | 984.94 | 7.54 | 1040.92 | 5.09 | |
| 91500_1_6 | Zircon | | | | 5.5750 | 0.6584 | 0.0729 | 1.6210 | 1.8221 | 0.1794 | 2.5466 | 0.6645 | 1063.74 | 1.33 | 1010.83 | 6.50 | 1053.45 | 5.09 | |
| 91500_1_7 | Zircon | | 1052.2 | 2.7 | 5.6313 | 1.4245 | 0.0757 | 1.7523 | 1.8508 | 0.1776 | 1.4080 | 1053.74 | 2.82 | 1086.23 | 6.47 | 1063.72 | 0.09 | | |
| 91500_1_8 | Zircon | | | | 5.5190 | 1.4245 | 0.0742 | 1.7176 | 1.8496 | 0.1812 | 1.4080 | 1073.26 | 2.82 | 1044.76 | 6.63 | 1063.30 | 0.09 | | |
| 91500_1_9 | Zircon | | 1063.0 | 1.0 | 5.5690 | 0.5044 | 0.0763 | 1.0781 | 1.8849 | 0.1796 | 1.4287 | 1064.74 | 1.01 | 1101.22 | 3.92 | 1075.80 | 2.86 | | |
| 91500_1_10 | Zircon | | | | 5.5737 | 0.5044 | 0.0733 | 1.1711 | 1.8099 | 0.1794 | 1.4287 | 1063.76 | 1.01 | 1021.57 | 4.64 | 1049.03 | 2.86 | | |
| 91500_1_11 | Zircon | | | | 5.5718 | 0.5044 | 0.0750 | 1.1305 | 1.8466 | 0.1795 | 1.4287 | 1064.07 | 1.01 | 1067.22 | 4.26 | 1062.23 | 2.86 | | |
| 91500_1_12 | Zircon | | 1063.9 | 1.0 | 5.6240 | 0.5044 | 0.0750 | 1.1527 | 1.8301 | 0.1778 | 1.4287 | 1054.86 | 1.01 | 1068.07 | 4.34 | 1056.30 | 2.86 | | |
| 91500_1_13 | Zircon | | 1064.2 | 1.0 | 5.5285 | 0.5044 | 0.0759 | 1.1405 | 1.8806 | 0.1809 | 1.4287 | 1071.70 | 1.01 | 1091.38 | 4.19 | 1074.28 | 2.86 | | |
| 91500_1_14 | Zircon | | 1058.0 | 1.0 | 5.5897 | 0.5044 | 0.0772 | 1.1697 | 1.8929 | 0.1789 | 1.4287 | 1061.03 | 1.01 | 1126.23 | 4.14 | 1076.61 | 2.86 | | |
| 91500_1_15 | Zircon | | | | 5.5794 | 0.5044 | 0.0745 | 1.1379 | 1.8289 | 0.1792 | 1.4287 | 1062.50 | 1.01 | 1054.49 | 4.35 | 1056.25 | 2.86 | | |
| 91500_1_16 | Zircon | | | | 5.5450 | 0.5044 | 0.0744 | 1.1391 | 1.8400 | 0.1804 | 1.4287 | 1069.10 | 1.01 | 1052.31 | 4.36 | 1059.87 | 2.86 | | |
| 91500_1_17 | Zircon | | 1057.7 | 1.0 | 5.6054 | 0.5044 | 0.0749 | 1.2104 | 1.8382 | 0.1784 | 1.4287 | 1058.13 | 1.01 | 1065.86 | 4.57 | 1058.51 | 2.86 | | |
| 91500_1_18 | Zircon | | | | 5.5505 | 0.5044 | 0.0739 | 1.2483 | 1.8286 | 0.1801 | 1.4287 | 1067.54 | 1.01 | 1037.85 | 4.86 | 1055.77 | 2.86 | | |
| 91500_1_19 | Zircon | | 1057.1 | 1.0 | 5.6082 | 0.5044 | 0.0752 | 1.2467 | 1.8502 | 0.1783 | 1.4287 | 1057.85 | 1.01 | 1072.51 | 4.67 | 1063.51 | 2.86 | | |
| 91500_1_20 | Zircon | | 1066.3 | 1.0 | 5.5669 | 0.5044 | 0.0754 | 1.2794 | 1.8727 | 0.1800 | 1.4287 | 1066.82 | 1.01 | 1078.15 | 4.76 | 1071.49 | 2.86 | | |
| Mean = 1063.4 ± 2.7 Ma, MSWD = 0.665, prob = 0.87 | | | | | | | | | | | | | | | | | | | |
| Recommended age mean = 1063.51 ± 0.39 Ma, Horstwood et al., 2016, TMS | | | | | | | | | | | | | | | | | | | |
| Plesovice_1_1 | Zircon | 343.1 | 1.5 | | 18.2871 | 0.7611 | 0.0539 | 1.2255 | 0.4074 | 2.8868 | 0.0547 | 0.7665 | 343.36 | 1.53 | 367.75 | 15.02 | 347.01 | 5.77 | |
| Plesovice_1_2 | Zircon | 339.1 | 1.6 | | 18.5229 | 0.7558 | 0.0527 | 1.2527 | 0.3959 | 2.8428 | 0.0540 | 0.7779 | 339.10 | 1.56 | 313.70 | 18.17 | 336.66 | 5.69 | |
| Plesovice_1_3 | Zircon | 340.9 | 1.5 | | 18.4076 | 0.7558 | 0.0540 | 1.1253 | 0.4088 | 2.8303 | 0.0544 | 0.7705 | 341.22 | 1.54 | 371.62 | 13.64 | 348.00 | 5.66 | |
| Plesovice_1_4 | Zircon | 343.7 | 1.5 | | 18.2550 | 0.7503 | 0.0531 | 1.2661 | 0.4045 | 2.8457 | 0.0548 | 0.7747 | 343.66 | 1.55 | 331.73 | 17.31 | 344.91 | 5.69 | |
| Plesovice_1_5 | Zircon | 341.4 | 1.6 | | 18.3792 | 0.7503 | 0.0530 | 1.2056 | 0.4010 | 2.8820 | 0.0544 | 0.7909 | 341.40 | 1.58 | 328.11 | 16.67 | 342.39 | 5.76 | |
| Plesovice_1_6 | Zircon | 340.0 | 1.2 | | 18.4611 | 0.5909 | 0.0529 | 1.0006 | 0.3893 | 1.7730 | 0.0542 | 0.5996 | 340.04 | 1.20 | 323.45 | 14.05 | 333.83 | 3.55 | |
| Plesovice_1_7 | Zircon | 339.5 | 1.2 | | 18.4955 | 0.5882 | 0.0530 | 0.9088 | 0.3928 | 1.7262 | 0.0541 | 0.5942 | 339.53 | 1.19 | 327.92 | 12.58 | 338.43 | 3.45 | |
| Plesovice_1_8 | Zircon | 340.2 | 1.3 | | 18.4631 | 0.5838 | 0.0530 | 0.8354 | 0.3937 | 1.6672 | 0.0542 | 0.6481 | 340.17 | 1.30 | 327.50 | 11.58 | 337.08 | 3.33 | |
| Plesovice_1_9 | Zircon | 337.8 | 1.2 | | 18.5904 | 0.5830 | 0.0537 | 1.1338 | 0.3941 | 1.7989 | 0.0538 | 0.5945 | 338.04 | 1.19 | 359.50 | 14.23 | 337.38 | 3.60 | |
| Plesovice_1_10 | Zircon | 340.4 | 1.2 | | 18.4447 | 0.5867 | 0.0520 | 1.0936 | 0.3866 | 1.7889 | 0.0542 | 0.6155 | 340.38 | 1.23 | 283.14 | 17.67 | 331.85 | 3.58 | |
| Plesovice_1_11 | Zircon | 341.6 | 1.2 | | 18.3843 | 0.5791 | 0.0531 | 1.0130 | 0.3963 | 1.7549 | 0.0544 | 0.5901 | 341.65 | 1.18 | 330.21 | 13.92 | 338.96 | 3.51 | |
| Mean = 340.5 ± 1.3 Ma, MSWD = 0.63, prob = 0.87 | | | | | | | | | | | | | | | | | | | |
| Recommended age mean = 337.19 ± 0.37 Ma, Slama et al., 2008, TMS | | | | | | | | | | | | | | | | | | | |
| Temora_1_1 | Zircon | 422.9 | 1.8 | | 14.7413 | 0.9054 | 0.0556 | 2.5049 | 0.5206 | 3.5890 | 0.0678 | 0.9132 | 423.06 | 1.83 | 433.96 | 25.71 | 425.59 | 7.14 | |
| Temora_1_2 | Zircon | 419.7 | 1.8 | | 14.9037 | 0.8576 | 0.0553 | 2.0698 | 0.5177 | 3.3083 | 0.0673 | 0.9051 | 419.71 | 1.81 | 423.04 | 21.83 | 423.62 | 6.62 | |
| Temora_1_3 | Zircon | 422.9 | 1.9 | | 14.7197 | 0.9354 | 0.0565 | 2.9689 | 0.5349 | 3.9150 | 0.0679 | 0.9433 | 423.54 | 1.89 | 472.63 | 27.79 | 435.08 | 7.83 | |
| Temora_1_4 | Zircon | 420.0 | 2.0 | | 14.8644 | 0.8669 | 0.0547 | 3.0296 | 0.5120 | 3.9146 | 0.0673 | 0.9197 | 420.04 | 1.96 | 398.31 | 34.09 | 418.80 | 7.83 | |
| Temora_1_5 | Zircon | 418.5 | 1.8 | | 14.8100 | 0.8528 | 0.0540 | 2.1733 | 0.5060 | 3.5663 | 0.0671 | 0.8793 | 418.46 | 1.76 | 379.90 | 25.72 | 418.78 | 6.71 | |
| Temora_1_6 | Zircon | 414.9 | 1.2 | | 15.0427 | 0.6190 | 0.0551 | 1.3892 | 0.5031 | 1.9833 | 0.0665 | 0.6209 | 414.92 | 1.24 | 414.35 | 14.98 | 413.79 | 3.97 | |
| Temora_1_7 | Zircon | 411.8 | 1.5 | | 15.1525 | 0.7026 | 0.0555 | 2.2061 | 0.5032 | 2.5351 | 0.0660 | 0.7246 | 412.08 | 1.45 | 431.00 | 22.81 | 413.87 | 5.07 | |
| Temora_1_8 | Zircon | 419.3 | 1.2 | | 14.8777 | 0.6128 | 0.0553 | 1.3337 | 0.5093 | 1.9921 | 0.0672 | 0.6147 | 419.30 | 1.23 | 422.67 | 14.08 | 417.98 | 3.98 | |
| Temora_1_9 | Zircon | 419.4 | 1.2 | | 14.8537 | 0.6168 | 0.0562 | 1.5312 | 0.5184 | 1.9823 | 0.0673 | 0.6257 | 419.97 | 1.25 | 459.92 | 14.76 | 424.10 | 3.96 | |
| Temora_1_10 | Zircon | 420.7 | 1.3 | | 14.8161 | 0.6490 | 0.0560 | 1.5839 | 0.5187 | 2.1419 | 0.0675 | 0.6697 | 421.13 | 1.34 | 450.68 | 15.61 | 424.28 | 4.28 | |
| Temora_1_11 | Zircon | 414.8 | 1.5 | | 14.9910 | 0.7301 | 0.0580 | 2.1294 | 0.5353 | 2.5281 | 0.0667 | 0.7316 | 416.31 | 1.46 | 529.59 | 17.62 | 435.31 | 5.06 | |
| Mean = 416.1 ± 2.3 Ma, MSWD = 1.18, prob = 0.30 | | | | | | | | | | | | | | | | | | | |
| Recommended age mean = 416.9 ± 1.1 Ma, Black et al., 2003, TMS | | | | | | | | | | | | | | | | | | | |

Appendix G: U-Pb geochronology age standards

| Analysis | Mineral | Pref. Age (Ma) | Pref. Age 2s% (Ma) | 207 cor 206Pb/238U Age (Ma) | 207 cor 206Pb/238U 2s% (Ma) | 238U/206Pb ratio | 207Pb/206Pb ratio | 207Pb/235U ratio (calc) | 206Pb/238U ratio | 15s% ratio | 1s% ratio | 206Pb/238U ratio | 15s% ratio | 1s% ratio | 206Pb/238U Age (Ma) | 2s% (Ma) | 207Pb/206Pb Age (Ma) | 2s% (Ma) | 207Pb/235U (calc) Age (Ma) | 2s% (Ma) |
|---|---------|----------------|--------------------|-----------------------------|-----------------------------|------------------|-------------------|-------------------------|------------------|------------|-----------|------------------|------------|-----------|---------------------|----------|----------------------|----------|----------------------------|----------|
| | | | | | | | | | | | | | | | | | | | | |
| 91500_2_1 | Zircon | | | 1057.6 | | 5.6095 | 0.5150 | 1.7950 | 1.8336 | 2.2974 | 0.1783 | 0.5166 | 1057.82 | 1.03 | 1061.69 | 6.80 | 1057.56 | 4.59 | | |
| 91500_2_2 | Zircon | | | | | 5.5445 | 0.5150 | 1.9495 | 1.8271 | 2.2974 | 0.1803 | 0.5166 | 1068.76 | 1.03 | 1031.97 | 7.63 | 1055.23 | 4.59 | | |
| 91500_2_3 | Zircon | | | 1069.8 | | 5.6318 | 0.5150 | 1.7353 | 1.8848 | 2.2974 | 0.1808 | 0.5166 | 1071.08 | 1.03 | 1097.74 | 6.33 | 1075.75 | 4.59 | | |
| 91500_2_4 | Zircon | | | 1062.2 | | 5.6092 | 0.5150 | 1.8495 | 1.9192 | 2.2974 | 0.1782 | 0.5166 | 1057.10 | 1.03 | 1162.28 | 6.31 | 1087.80 | 4.59 | | |
| 91500_2_5 | Zircon | | | | | 5.5840 | 0.5150 | 1.9550 | 1.8097 | 2.2974 | 0.1790 | 0.5166 | 1061.51 | 1.03 | 1043.01 | 7.56 | 1048.97 | 4.59 | | |
| 91500_2_6 | Zircon | | | | | 5.5737 | 0.5150 | 1.8879 | 1.8084 | 2.2974 | 0.1796 | 0.5166 | 1064.58 | 1.03 | 1036.11 | 7.36 | 1048.51 | 4.59 | | |
| 91500_2_7 | Zircon | | | | | 5.5884 | 0.3512 | 1.8222 | 1.8165 | 2.5808 | 0.1789 | 0.3458 | 1061.22 | 0.69 | 1055.61 | 6.95 | 1051.42 | 5.16 | | |
| 91500_2_8 | Zircon | | | 1063.3 | | 5.5661 | 0.5444 | 1.8840 | 1.8551 | 2.2974 | 0.1797 | 0.5225 | 1065.80 | 1.11 | 1059.28 | 5.27 | 1065.24 | 2.54 | | |
| 91500_2_9 | Zircon | | | 1058.0 | | 5.6052 | 0.5444 | 1.3675 | 1.8494 | 1.2713 | 0.1784 | 0.5225 | 1058.43 | 1.11 | 1068.19 | 5.15 | 1063.20 | 2.54 | | |
| 91500_2_10 | Zircon | | | 1069.7 | | 5.5359 | 0.5444 | 1.2051 | 1.8662 | 1.2713 | 0.1807 | 0.5225 | 1070.67 | 1.11 | 1091.79 | 4.42 | 1076.26 | 2.54 | | |
| 91500_2_11 | Zircon | | | | | 5.5855 | 0.5444 | 1.2649 | 1.7986 | 1.2713 | 0.1790 | 0.5225 | 1061.60 | 1.11 | 1015.73 | 5.05 | 1045.32 | 2.54 | | |
| 91500_2_12 | Zircon | | | | | 5.5666 | 0.5444 | 1.2271 | 1.8422 | 1.2713 | 0.1790 | 0.5225 | 1061.76 | 1.11 | 1068.83 | 4.61 | 1060.67 | 2.54 | | |
| 91500_2_13 | Zircon | | | 1061.4 | | 5.6117 | 0.5444 | 1.3399 | 1.8662 | 1.2713 | 0.1782 | 0.5225 | 1056.89 | 1.11 | 1103.64 | 4.85 | 1068.84 | 2.54 | | |
| 91500_2_14 | Zircon | | | 1054.7 | | 5.5466 | 0.5444 | 1.3112 | 1.8461 | 1.2713 | 0.1803 | 0.5225 | 1068.60 | 1.11 | 1063.24 | 4.96 | 1062.03 | 2.54 | | |
| 91500_2_15 | Zircon | | | 1070.3 | | 5.5349 | 0.5444 | 1.2093 | 1.8663 | 1.2713 | 0.1807 | 0.5225 | 1070.88 | 1.11 | 1083.00 | 4.48 | 1069.92 | 2.54 | | |
| 91500_2_16 | Zircon | | | 1064.2 | | 5.6122 | 0.5444 | 1.3308 | 1.8588 | 1.2713 | 0.1782 | 0.5225 | 1056.92 | 1.11 | 1115.26 | 4.76 | 1066.57 | 2.54 | | |
| 91500_2_17 | Zircon | | | 1063.4 | | 5.5734 | 0.5444 | 1.8313 | 1.2713 | 1.2713 | 0.1794 | 0.5225 | 1063.84 | 1.11 | 1071.75 | 5.12 | 1056.74 | 2.54 | | |
| 91500_2_18 | Zircon | | | 1062.6 | | 5.5666 | 0.5466 | 1.8469 | 1.8469 | 1.2148 | 0.1796 | 0.5641 | 1064.94 | 1.13 | 1115.23 | 7.36 | 1062.31 | 2.43 | | |
| 91500_2_19 | Zircon | | | 1059.2 | | 5.5655 | 0.5466 | 1.9961 | 1.8509 | 1.2148 | 0.1791 | 0.5641 | 1062.07 | 1.13 | 1123.08 | 6.94 | 1065.91 | 2.43 | | |
| 91500_2_20 | Zircon | | | | | 5.5655 | 0.5466 | 1.8636 | 1.8290 | 1.2148 | 0.1797 | 0.5641 | 1065.46 | 1.13 | 1034.82 | 7.28 | 1055.91 | 2.43 | | |
| 91500_2_21 | Zircon | | | | | 5.5666 | 0.5466 | 1.7326 | 1.8773 | 1.2148 | 0.1789 | 0.5641 | 1061.23 | 1.13 | 1084.08 | 6.34 | 1073.10 | 2.43 | | |
| 91500_2_22 | Zircon | | | 1059.7 | | 5.5289 | 0.5466 | 1.8502 | 1.8742 | 1.2148 | 0.1809 | 0.5641 | 1071.89 | 1.13 | 1039.81 | 7.18 | 1072.03 | 2.43 | | |
| 91500_2_23 | Zircon | | | | | 5.6196 | 0.5466 | 1.7679 | 1.8231 | 1.2148 | 0.1779 | 0.5641 | 1055.46 | 1.13 | 1016.99 | 7.12 | 1053.79 | 2.43 | | |
| 91500_2_24 | Zircon | | | 1067.8 | | 5.5452 | 0.3770 | 1.2779 | 1.8523 | 0.4613 | 0.1803 | 0.3748 | 1068.47 | 0.75 | 1082.69 | 4.73 | 1064.27 | 0.92 | | |
| 91500_2_25 | Zircon | | | 1055.5 | | 5.6081 | 0.3770 | 1.1673 | 1.8594 | 0.4613 | 0.1783 | 0.3748 | 1057.94 | 0.75 | 1111.31 | 4.27 | 1066.76 | 0.92 | | |
| 91500_2_26 | Zircon | | | | | 5.5510 | 0.3770 | 1.3165 | 1.8335 | 0.4613 | 0.1802 | 0.3748 | 1068.00 | 0.75 | 1049.57 | 5.06 | 1057.52 | 0.92 | | |
| 91500_2_27 | Zircon | | | 1059.2 | | 5.5932 | 0.3770 | 1.3165 | 1.8523 | 0.4613 | 0.1788 | 0.3748 | 1060.38 | 0.75 | 1085.59 | 4.87 | 1064.25 | 0.92 | | |
| 91500_2_28 | Zircon | | | 1064.5 | | 5.5631 | 0.3770 | 1.2980 | 1.8554 | 0.4613 | 0.1797 | 0.3748 | 1065.55 | 0.75 | 1086.91 | 4.79 | 1065.37 | 0.92 | | |
| 91500_2_29 | Zircon | | | 1058.2 | | 5.5939 | 0.3770 | 1.4769 | 1.8515 | 0.4613 | 0.1787 | 0.3748 | 1059.81 | 0.75 | 1084.42 | 5.40 | 1063.97 | 0.92 | | |
| 91500_2_30 | Zircon | | | 1061.1 | | 5.5609 | 0.3770 | 1.3208 | 1.8435 | 0.4613 | 0.1791 | 0.3748 | 1062.08 | 0.75 | 1082.59 | 4.89 | 1061.13 | 0.92 | | |
| 91500_2_31 | Zircon | | | 1065.7 | | 5.5734 | 0.3770 | 1.4106 | 1.8444 | 0.4613 | 0.1798 | 0.3748 | 1066.15 | 0.75 | 1074.90 | 5.27 | 1061.45 | 0.92 | | |
| 91500_2_32 | Zircon | | | | | 5.5734 | 0.3770 | 1.2239 | 1.8620 | 0.4613 | 0.1794 | 0.3748 | 1063.85 | 0.75 | 1065.33 | 4.62 | 1067.68 | 0.92 | | |
| 91500_2_33 | Zircon | | | 1063.7 | | 5.5734 | 0.3770 | 1.2239 | 1.8620 | 0.4613 | 0.1794 | 0.3748 | 1062.86 | 0.75 | 1065.33 | 4.62 | 1067.68 | 0.92 | | |
| 91500_2_34 | Zircon | | | | | 5.5734 | 0.3770 | 1.3179 | 1.8479 | 0.4613 | 0.1792 | 0.3748 | 1062.86 | 0.75 | 1060.87 | 5.05 | 1062.67 | 0.92 | | |
| Mean = 1063.5 ± 1.6 Ma, MSWD = 0.75, prob = 0.85 | | | | | | | | | | | | | | | | | | | | |
| Recommended age mean = 1063.5 ± 0.39 Ma, Horstwood et al., 2016; TIMS | | | | | | | | | | | | | | | | | | | | |
| Plesovice_2_1 | Zircon | 341.5 | 1.3 | | | 18.3732 | 0.8519 | 1.3598 | 0.3941 | 2.7032 | 0.0544 | 0.8671 | 341.49 | 1.33 | 318.34 | 19.42 | 337.38 | 5.41 | | |
| Plesovice_2_2 | Zircon | 342.1 | 1.3 | 342.1 | | 18.3270 | 0.8470 | 1.2360 | 0.4053 | 2.6878 | 0.0543 | 0.8636 | 342.56 | 1.33 | 384.50 | 14.44 | 345.46 | 5.38 | | |
| Plesovice_2_3 | Zircon | 344.3 | 1.3 | | | 18.2370 | 0.8332 | 1.2339 | 0.3936 | 2.6860 | 0.0549 | 0.8427 | 344.32 | 1.29 | 310.35 | 18.10 | 337.00 | 5.33 | | |
| Plesovice_2_4 | Zircon | 340.7 | 1.3 | 340.7 | | 18.4173 | 0.8368 | 0.9972 | 0.4005 | 1.6669 | 0.0543 | 0.8432 | 340.81 | 1.28 | 349.70 | 12.89 | 341.99 | 3.33 | | |
| Plesovice_2_5 | Zircon | 344.1 | 1.3 | 344.1 | | 18.2417 | 0.8351 | 0.8922 | 0.4059 | 1.6290 | 0.0549 | 0.8403 | 344.37 | 1.29 | 374.35 | 10.73 | 345.90 | 3.26 | | |
| Plesovice_2_6 | Zircon | 343.6 | 1.3 | 343.6 | | 18.2350 | 0.8665 | 0.8922 | 0.4039 | 1.5678 | 0.0548 | 0.8598 | 343.90 | 1.32 | 371.29 | 10.91 | 344.44 | 3.14 | | |
| Plesovice_2_7 | Zircon | 344.1 | 1.3 | | | 18.2438 | 0.8275 | 1.5971 | 0.3892 | 1.6372 | 0.0548 | 0.8372 | 344.07 | 1.27 | 285.05 | 14.71 | 333.76 | 3.19 | | |
| Plesovice_2_8 | Zircon | 337.7 | 1.4 | | | 18.5896 | 0.8666 | 1.2417 | 0.3863 | 1.8661 | 0.0538 | 0.7202 | 337.66 | 1.44 | 326.87 | 17.24 | 333.10 | 3.73 | | |
| Plesovice_2_9 | Zircon | 338.8 | 1.4 | 338.8 | | 18.5343 | 0.8873 | 1.4604 | 0.4010 | 1.9716 | 0.0540 | 0.7103 | 338.80 | 1.42 | 342.19 | 19.58 | 342.41 | 3.94 | | |
| Plesovice_2_10 | Zircon | 339.0 | 1.1 | 339.0 | | 18.5477 | 0.5003 | 0.9447 | 0.3891 | 1.0581 | 0.0540 | 0.5681 | 340.39 | 1.12 | 340.39 | 12.57 | 333.72 | 2.12 | | |
| Plesovice_2_11 | Zircon | 339.9 | 1.0 | 339.9 | | 18.4676 | 0.4883 | 0.9591 | 0.3935 | 1.0777 | 0.0541 | 0.5011 | 339.94 | 1.00 | 340.33 | 12.76 | 336.91 | 2.16 | | |
| Plesovice_2_12 | Zircon | 343.3 | 1.0 | | | 18.2835 | 0.4973 | 0.9952 | 0.3937 | 1.0676 | 0.0547 | 0.5012 | 343.28 | 1.00 | 324.70 | 12.66 | 337.06 | 2.14 | | |
| Plesovice_2_13 | Zircon | 340.9 | 1.0 | 340.9 | | 18.3914 | 0.5135 | 0.8493 | 0.4020 | 1.0476 | 0.0544 | 0.5002 | 341.19 | 1.00 | 364.53 | 10.50 | 343.06 | 2.10 | | |
| Mean = 341.5 ± 1.1 Ma, MSWD = 1.09, prob = 0.36 | | | | | | | | | | | | | | | | | | | | |
| Recommended age mean = 337.19 ± 0.37 Ma, Slama et al., 2008; TIMS | | | | | | | | | | | | | | | | | | | | |

Appendix G: U-Pb geochronology age standards

| Analysis | Mineral | Pref. Age (Ma) | Pref. Age 2s% (Ma) | 207 cor 206Pb/238U Age (Ma) | 207 cor 206Pb/238U 2s% (Ma) | 238U/206Pb ratio | 1s% ratio | 207Pb/206Pb ratio | 1s% ratio | 207Pb/235U (calc) ratio | 1s% ratio | 206Pb/238U ratio | 1s% ratio | 206Pb/238U Age (Ma) | 2s% (Ma) | 207Pb/235U (calc) Age (Ma) | 2s% (Ma) |
|--|---------|----------------|--------------------|-----------------------------|-----------------------------|------------------|-----------|-------------------|-----------|-------------------------|-----------|------------------|-----------|---------------------|----------|----------------------------|----------|
| Temora_2_1 | Zircon | 413.4 | 1.9 | | | 15.1023 | 0.8910 | 0.0533 | 3.0319 | 0.4840 | 3.7424 | 0.0662 | 0.9453 | 413.36 | 1.89 | 404.49 | 7.48 |
| Temora_2_2 | Zircon | 416.7 | 2.0 | 416.7 | 2.0 | 14.9190 | 0.9657 | 0.0588 | 3.3791 | 0.5383 | 4.0788 | 0.0671 | 0.9693 | 418.49 | 1.94 | 557.14 | 8.16 |
| Temora_2_3 | Zircon | 418.3 | 1.5 | 418.3 | 1.5 | 14.8793 | 0.7128 | 0.0570 | 1.8501 | 0.5223 | 2.9831 | 0.0672 | 0.7700 | 419.21 | 1.54 | 469.60 | 5.97 |
| Temora_2_4 | Zircon | 424.1 | 1.4 | 424.1 | 1.4 | 14.7287 | 0.7016 | 0.0560 | 1.7405 | 0.5232 | 2.1737 | 0.0681 | 0.7113 | 424.45 | 1.42 | 450.75 | 4.35 |
| Temora_2_5 | Zircon | 420.1 | 1.7 | | | 14.8414 | 0.8082 | 0.0539 | 2.5241 | 0.4978 | 2.8099 | 0.0673 | 0.8666 | 420.08 | 1.73 | 363.81 | 5.62 |
| Temora_2_6 | Zircon | 418.2 | 1.6 | 416.2 | 1.6 | 15.0142 | 0.7511 | 0.0563 | 2.0287 | 0.5130 | 2.3780 | 0.0668 | 0.7939 | 416.80 | 1.59 | 464.34 | 4.76 |
| Temora_2_7 | Zircon | 417.7 | 1.7 | 417.7 | 1.7 | 14.9287 | 0.8283 | 0.0556 | 2.6938 | 0.4670 | 3.0567 | 0.0670 | 0.8382 | 417.93 | 1.68 | 434.26 | 6.11 |
| Temora_2_8 | Zircon | 417.4 | 1.7 | | | 14.9381 | 0.8209 | 0.0512 | 2.7290 | 0.4670 | 3.1020 | 0.0669 | 0.8744 | 417.43 | 1.75 | 247.36 | 50.79 |
| Temora_2_9 | Zircon | 419.2 | 1.7 | | | 14.8800 | 0.7992 | 0.0544 | 2.2784 | 0.5092 | 2.6333 | 0.0672 | 0.8457 | 419.23 | 1.69 | 384.65 | 26.61 |
| Temora_2_10 | Zircon | 414.1 | 1.2 | | | 15.0825 | 0.5758 | 0.0550 | 1.7269 | 0.4988 | 1.7827 | 0.0663 | 0.6150 | 414.10 | 1.23 | 410.85 | 18.80 |
| Temora_2_11 | Zircon | 419.1 | 1.2 | | | 14.9889 | 0.6062 | 0.0546 | 1.9118 | 0.5000 | 1.9542 | 0.0672 | 0.6246 | 419.09 | 1.25 | 395.44 | 3.91 |
| Temora_2_12 | Zircon | 412.2 | 1.4 | 412.2 | 1.4 | 15.1100 | 0.8665 | 0.0567 | 2.2285 | 0.5108 | 2.2478 | 0.0662 | 0.7007 | 413.08 | 1.40 | 479.71 | 20.53 |
| Temora_2_13 | Zircon | 416.0 | 1.2 | 416.0 | 1.2 | 14.9739 | 0.5753 | 0.0569 | 1.8190 | 0.5204 | 1.9145 | 0.0668 | 0.5862 | 416.90 | 1.17 | 487.34 | 3.83 |
| Mean = 417.2 ± 1.7 Ma, MSWD = 1.05, prob = 0.40 | | | | | | | | | | | | | | | | | |
| Recommended age mean = 416.9 ± 1.1 Ma, Black et al., 2003, TIMS | | | | | | | | | | | | | | | | | |
| 91500_3_1 | Zircon | | | 1069.9 | 0.9 | 5.5864 | 0.4707 | 0.0761 | 1.2061 | 1.8834 | 1.6422 | 0.1790 | 0.4665 | 1061.56 | 0.93 | 1097.90 | 4.40 |
| 91500_3_2 | Zircon | | | 1066.9 | 0.9 | 5.5557 | 0.4707 | 0.0750 | 1.3556 | 1.8646 | 1.6422 | 0.1800 | 0.4665 | 1066.92 | 0.93 | 1067.54 | 5.10 |
| 91500_3_3 | Zircon | | | 1067.4 | 0.9 | 5.5486 | 0.4707 | 0.0755 | 1.2502 | 1.8672 | 1.6422 | 0.1802 | 0.4665 | 1068.04 | 0.93 | 1081.48 | 4.64 |
| 91500_3_4 | Zircon | | | | | 5.5242 | 0.4707 | 0.0732 | 1.3016 | 1.7839 | 1.6422 | 0.1778 | 0.4665 | 1054.81 | 0.93 | 1017.22 | 5.18 |
| 91500_3_5 | Zircon | | | | | 5.5481 | 0.4707 | 0.0743 | 1.2879 | 1.8284 | 1.6422 | 0.1803 | 0.4665 | 1068.59 | 0.93 | 1047.89 | 4.96 |
| 91500_3_6 | Zircon | | | 1069.9 | 0.9 | 5.5943 | 0.4707 | 0.0749 | 1.3917 | 1.8289 | 1.6422 | 0.1788 | 0.4665 | 1060.21 | 0.93 | 1085.68 | 5.25 |
| 91500_3_7 | Zircon | | | 1069.2 | 0.9 | 5.5331 | 0.4707 | 0.0761 | 1.2900 | 1.8752 | 1.6422 | 0.1806 | 0.4665 | 1070.51 | 0.93 | 1097.78 | 4.70 |
| 91500_3_8 | Zircon | | | 1061.6 | 0.9 | 5.5829 | 0.4707 | 0.0753 | 1.4717 | 1.8397 | 1.6422 | 0.1791 | 0.4665 | 1062.25 | 0.93 | 1076.54 | 5.49 |
| 91500_3_9 | Zircon | | | 1057.7 | 0.9 | 5.5918 | 0.4707 | 0.0773 | 1.2799 | 1.8895 | 1.6422 | 0.1789 | 0.4665 | 1060.82 | 0.93 | 1127.92 | 4.52 |
| 91500_3_10 | Zircon | | | 1055.4 | 0.9 | 5.6088 | 0.4707 | 0.0764 | 1.3078 | 1.8611 | 1.6422 | 0.1783 | 0.4665 | 1057.53 | 0.93 | 1103.96 | 4.74 |
| 91500_3_11 | Zircon | | | 1064.5 | 0.9 | 5.5643 | 0.4707 | 0.0758 | 1.1883 | 1.8772 | 1.6422 | 0.1797 | 0.4665 | 1065.59 | 0.93 | 1088.96 | 4.37 |
| 91500_3_12 | Zircon | | | | | 5.5571 | 0.4707 | 0.0736 | 1.2956 | 1.8246 | 1.6422 | 0.1799 | 0.4665 | 1066.55 | 0.93 | 1029.04 | 5.09 |
| 91500_3_13 | Zircon | | | | | 5.5865 | 0.4707 | 0.0730 | 1.3747 | 1.8170 | 1.6422 | 0.1790 | 0.4665 | 1061.62 | 0.93 | 1013.98 | 5.49 |
| 91500_3_14 | Zircon | | | 5.5706 | | | 0.4707 | 0.0746 | 1.2007 | 1.8626 | 1.6422 | 0.1795 | 0.4665 | 1064.12 | 0.93 | 1058.14 | 4.57 |
| Mean = 1063.5 ± 2.6 Ma, MSWD = 0.81, prob = 0.65 | | | | | | | | | | | | | | | | | |
| Recommended age mean = 1063.51 ± 0.39 Ma, Horstwood et al., 2016, TIMS | | | | | | | | | | | | | | | | | |
| Plesovice_3_1 | Zircon | 339.7 | 1.1 | | | 18.4801 | 0.5556 | 0.0520 | 0.9550 | 0.3873 | 1.9125 | 0.0541 | 0.5597 | 339.67 | 1.12 | 285.58 | 15.29 |
| Plesovice_3_2 | Zircon | 338.6 | 1.1 | 338.6 | 1.1 | 18.5345 | 0.5426 | 0.0536 | 0.9312 | 0.3959 | 1.8866 | 0.0540 | 0.5534 | 338.78 | 1.11 | 354.41 | 11.87 |
| Plesovice_3_3 | Zircon | 341.4 | 1.2 | | | 18.4091 | 0.5777 | 0.0531 | 1.0348 | 0.3931 | 1.9574 | 0.0544 | 0.6040 | 341.42 | 1.21 | 332.11 | 14.13 |
| Plesovice_3_4 | Zircon | 338.7 | 1.1 | 338.7 | 1.1 | 18.5536 | 0.5761 | 0.0536 | 0.9053 | 0.3937 | 1.8982 | 0.0540 | 0.5724 | 338.81 | 1.14 | 352.07 | 11.62 |
| Plesovice_3_5 | Zircon | 339.7 | 1.1 | 339.7 | 1.1 | 18.4777 | 0.5837 | 0.0534 | 0.8456 | 0.3957 | 1.8575 | 0.0541 | 0.5758 | 339.78 | 1.15 | 343.83 | 11.13 |
| Plesovice_3_6 | Zircon | 340.5 | 1.1 | | | 18.4215 | 0.5750 | 0.0532 | 0.9786 | 0.3978 | 1.8971 | 0.0542 | 0.5532 | 340.46 | 1.11 | 337.57 | 13.13 |
| Mean = 339.7 ± 1.5 Ma, MSWD = 0.30, prob = 0.92 | | | | | | | | | | | | | | | | | |
| Recommended age mean = 337.19 ± 0.37 Ma, Sierra et al., 2008, TIMS | | | | | | | | | | | | | | | | | |
| Temora_3_1 | Zircon | 416.3 | 1.3 | | | 14.9909 | 0.6557 | 0.0540 | 2.2017 | 0.4958 | 2.7610 | 0.0667 | 0.6626 | 416.34 | 1.33 | 370.96 | 26.73 |
| Temora_3_2 | Zircon | 419.1 | 1.3 | 419.1 | 1.3 | 14.8957 | 0.6192 | 0.0552 | 1.6067 | 0.5073 | 2.2683 | 0.0672 | 0.6565 | 419.16 | 1.31 | 420.52 | 17.06 |
| Temora_3_3 | Zircon | 416.3 | 1.5 | 416.3 | 1.5 | 15.0102 | 0.7368 | 0.0560 | 2.3773 | 0.5089 | 2.8174 | 0.0668 | 0.7630 | 416.76 | 1.53 | 450.53 | 23.43 |
| Temora_3_4 | Zircon | 417.4 | 1.4 | 417.4 | 1.4 | 14.9335 | 0.6728 | 0.0560 | 2.0117 | 0.5115 | 2.5376 | 0.0670 | 0.6923 | 417.87 | 1.38 | 450.36 | 19.84 |
| Temora_3_5 | Zircon | 418.6 | 1.3 | 418.6 | 1.3 | 14.9010 | 0.6157 | 0.0555 | 1.5982 | 0.5112 | 2.2668 | 0.0671 | 0.6406 | 418.81 | 1.28 | 432.68 | 16.46 |
| Temora_3_6 | Zircon | 417.1 | 1.6 | | | 14.9846 | 0.8205 | 0.0528 | 2.8434 | 0.4880 | 3.2379 | 0.0668 | 0.8215 | 417.09 | 1.64 | 319.26 | 40.48 |
| Mean = 417.6 ± 2.3 Ma, MSWD = 0.17, prob = 0.97 | | | | | | | | | | | | | | | | | |
| Recommended age mean = 416.8 ± 1.1 Ma, Black et al., 2003, TIMS | | | | | | | | | | | | | | | | | |

Appendix G: U-Pb geochronology age standards

| Analysis | Mineral | Pref. Age (Ma) | 2σ Pref. Age (Ma) | 207 cor 206Pb/238U Age (Ma) | 207 cor 206Pb/238U 2σ% | 238U/206Pb ratio | 207Pb/206Pb ratio | 207Pb/206Pb 1σ% | 207Pb/206Pb 1σ% | 206Pb/238U ratio | 206Pb/238U 1σ% | 206Pb/238U ratio | 206Pb/238U 1σ% | 207Pb/235U (calc) ratio | 207Pb/235U (calc) 1σ% | 207Pb/235U (calc) 1σ% | 207Pb/206Pb Age (Ma) | 207Pb/206Pb 2σ% | 207Pb/238U (calc) Age (Ma) | 207Pb/238U 2σ% |
|--|---------|----------------|-------------------|-----------------------------|------------------------|------------------|-------------------|-----------------|-----------------|------------------|----------------|------------------|----------------|-------------------------|-----------------------|-----------------------|----------------------|-----------------|----------------------------|----------------|
| 91500_4_1 | Zircon | | | 1060.6 | | 5.5835 | 0.9433 | 0.0760 | 1.8595 | 1.8520 | 1.8307 | 0.1791 | 0.8332 | 1062.09 | 1.67 | 1093.19 | 6.81 | 1064.16 | 3.86 | |
| 91500_4_2 | Zircon | | | 1063.7 | | 5.5548 | 0.9433 | 0.0776 | 1.9393 | 1.9042 | 1.8307 | 0.1800 | 0.8332 | 1067.01 | 1.67 | 1136.20 | 6.79 | 1082.55 | 3.66 | |
| 91500_4_3 | Zircon | | | | | 5.5277 | 0.9433 | 0.0728 | 1.9129 | 1.8152 | 1.8307 | 0.1809 | 0.8332 | 1072.11 | 1.67 | 1006.60 | 7.71 | 1050.96 | 3.66 | |
| 91500_4_4 | Zircon | | | | | 5.5602 | 0.9433 | 0.0739 | 2.3296 | 1.8035 | 1.8307 | 0.1769 | 0.8332 | 1050.19 | 1.67 | 1037.87 | 9.06 | 1046.71 | 3.66 | |
| 91500_4_5 | Zircon | | | | | 5.5022 | 0.9433 | 0.0741 | 1.9126 | 1.8664 | 1.8307 | 0.1816 | 0.8332 | 1075.87 | 1.67 | 1042.01 | 7.41 | 1069.25 | 3.66 | |
| 91500_4_6 | Zircon | | | 1050.3 | | 5.5402 | 0.9433 | 0.0762 | 2.0232 | 1.8744 | 1.8307 | 0.1774 | 0.8332 | 1052.49 | 1.67 | 1098.89 | 7.37 | 1072.09 | 3.66 | |
| 91500_4_7 | Zircon | | | | | 5.5800 | 0.9433 | 0.0729 | 1.9448 | 1.8095 | 1.8307 | 0.1792 | 0.8332 | 1062.72 | 1.67 | 1009.71 | 7.81 | 1046.89 | 3.66 | |
| 91500_4_8 | Zircon | | | | | 5.5508 | 0.9433 | 0.0734 | 2.1501 | 1.8313 | 1.8307 | 0.1801 | 0.8332 | 1067.60 | 1.67 | 1024.18 | 8.49 | 1056.75 | 3.66 | |
| 91500_4_9 | Zircon | | | 1066.7 | | 5.5035 | 0.9433 | 0.0760 | 2.3567 | 1.8667 | 1.8307 | 0.1784 | 0.8332 | 1058.44 | 1.67 | 1095.47 | 8.61 | 1069.35 | 3.66 | |
| 91500_4_10 | Zircon | | | | | 5.5578 | 0.9433 | 0.0760 | 2.0234 | 1.8791 | 1.8307 | 0.1799 | 0.8332 | 1066.54 | 1.67 | 1092.96 | 7.41 | 1073.73 | 3.66 | |
| 91500_4_11 | Zircon | | | | | 5.5738 | 0.9433 | 0.0743 | 1.3157 | 1.8248 | 1.8307 | 0.1794 | 0.8332 | 1063.72 | 1.14 | 1047.41 | 5.06 | 1054.42 | 2.59 | |
| 91500_4_12 | Zircon | | | 1062.3 | | 5.5779 | 0.9433 | 0.0755 | 1.3257 | 1.8543 | 1.8307 | 0.1793 | 0.8332 | 1063.18 | 1.14 | 1080.88 | 4.92 | 1064.97 | 2.59 | |
| 91500_4_13 | Zircon | | | 1066.9 | | 5.5514 | 0.9433 | 0.0754 | 1.2606 | 1.8609 | 1.8307 | 0.1801 | 0.8332 | 1067.49 | 1.14 | 1078.93 | 4.69 | 1067.30 | 2.59 | |
| 91500_4_14 | Zircon | | | 1050.3 | | 5.5652 | 0.9433 | 0.0767 | 1.3279 | 1.8662 | 1.8307 | 0.1775 | 0.8332 | 1053.06 | 1.14 | 1113.28 | 4.76 | 1068.84 | 2.59 | |
| 91500_4_15 | Zircon | | | 1068.4 | | 5.5444 | 0.9433 | 0.0754 | 1.4189 | 1.8619 | 1.8307 | 0.1803 | 0.8332 | 1068.81 | 1.14 | 1077.43 | 5.29 | 1067.67 | 2.59 | |
| 91500_4_16 | Zircon | | | | | 5.5553 | 0.9433 | 0.0748 | 1.3033 | 1.8438 | 1.8307 | 0.1800 | 0.8332 | 1066.95 | 1.14 | 1061.65 | 4.94 | 1061.23 | 2.59 | |
| 91500_4_17 | Zircon | | | | | 5.5830 | 0.9433 | 0.0735 | 1.3261 | 1.8031 | 1.8307 | 0.1791 | 0.8332 | 1062.23 | 1.14 | 1026.43 | 5.23 | 1046.60 | 2.59 | |
| 91500_4_18 | Zircon | | | 1059.5 | | 5.5898 | 0.9433 | 0.0756 | 1.3679 | 1.8530 | 1.8307 | 0.1788 | 0.8332 | 1060.62 | 1.14 | 1084.40 | 5.06 | 1064.49 | 2.59 | |
| 91500_4_19 | Zircon | | | 1077.0 | | 5.4984 | 0.9433 | 0.0755 | 1.2628 | 1.8803 | 1.8307 | 0.1819 | 0.8332 | 1077.19 | 1.14 | 1080.19 | 4.69 | 1074.16 | 2.59 | |
| 91500_4_20 | Zircon | | | 1063.4 | | 5.5209 | 0.9433 | 0.0764 | 1.3016 | 1.8618 | 1.8307 | 0.1779 | 0.8332 | 1055.67 | 1.14 | 1104.31 | 4.71 | 1067.62 | 2.59 | |
| 91500_4_21 | Zircon | | | 1065.0 | | 5.5624 | 0.9433 | 0.0752 | 1.3373 | 1.8525 | 1.8307 | 0.1797 | 0.8332 | 1065.48 | 1.14 | 1073.98 | 5.00 | 1064.33 | 2.59 | |
| 91500_4_22 | Zircon | | | 1060.5 | | 5.5879 | 0.9433 | 0.0756 | 1.2563 | 1.8537 | 1.8307 | 0.1790 | 0.8332 | 1061.56 | 1.14 | 1083.62 | 4.65 | 1064.76 | 2.59 | |
| 91500_4_23 | Zircon | | | 1057.3 | | 5.5844 | 0.9433 | 0.0774 | 1.5017 | 1.8969 | 1.8307 | 0.1788 | 0.8332 | 1060.59 | 1.14 | 1131.51 | 5.28 | 1060.01 | 2.59 | |
| 91500_4_24 | Zircon | | | | | 5.5844 | 0.9433 | 0.0738 | 1.4960 | 1.8109 | 1.8307 | 0.1791 | 0.8332 | 1061.97 | 1.14 | 1035.68 | 5.83 | 1049.42 | 2.59 | |
| 91500_4_25 | Zircon | | | | | 5.5572 | 0.9433 | 0.0743 | 1.4026 | 1.8315 | 1.8307 | 0.1789 | 0.8332 | 1066.53 | 1.14 | 1048.96 | 5.39 | 1056.82 | 2.59 | |
| 91500_4_26 | Zircon | | | 1060.2 | | 5.5886 | 0.9433 | 0.0754 | 1.2541 | 1.8488 | 1.8307 | 0.1789 | 0.8332 | 1061.07 | 1.14 | 1079.06 | 4.66 | 1062.99 | 2.59 | |
| Mean = 1063.4 ± 2.6 Ma, MSWD = 0.79, prob = 0.75 | | | | | | | | | | | | | | | | | | | | |
| Recommended age mean = 1063.51 ± 0.39 Ma; Horstwood et al., 2016; TIMS | | | | | | | | | | | | | | | | | | | | |
| Plesovice_4_1 | Zircon | 353.0 | 1.9 | | | 17.7826 | 0.9537 | 0.0530 | 0.7202 | 0.4035 | 2.0532 | 0.0563 | 0.9467 | 353.02 | 1.89 | 326.90 | 10.00 | 344.20 | 4.11 | |
| Plesovice_4_2 | Zircon | 342.2 | 1.9 | | | 18.3577 | 0.9519 | 0.0532 | 1.3013 | 0.4016 | 2.3088 | 0.0545 | 0.9505 | 342.17 | 1.90 | 335.67 | 17.57 | 342.83 | 4.62 | |
| Plesovice_4_3 | Zircon | 340.9 | 2.0 | 340.9 | | 18.4647 | 0.9896 | 0.0551 | 1.7267 | 0.4167 | 2.5614 | 0.0544 | 0.9889 | 341.68 | 1.98 | 416.00 | 18.54 | 353.72 | 5.12 | |
| Plesovice_4_4 | Zircon | 347.3 | 1.8 | | | 18.0527 | 0.9191 | 0.0529 | 1.2290 | 0.4037 | 2.2115 | 0.0554 | 0.9213 | 347.33 | 1.84 | 321.46 | 17.37 | 344.32 | 4.42 | |
| Plesovice_4_5 | Zircon | 344.8 | 1.4 | | | 18.2122 | 0.7372 | 0.0532 | 0.7101 | 0.3899 | 1.4998 | 0.0549 | 0.7160 | 344.78 | 1.43 | 334.47 | 9.62 | 334.30 | 3.00 | |
| Plesovice_4_6 | Zircon | 342.5 | 1.3 | | | 18.3115 | 0.6641 | 0.0528 | 0.7632 | 0.4005 | 1.6037 | 0.0546 | 0.6529 | 342.50 | 1.31 | 318.02 | 11.20 | 0.00 | | |
| Plesovice_4_7 | Zircon | 345.5 | 1.4 | 345.5 | | 18.1863 | 0.7578 | 0.0535 | 0.8935 | 0.4005 | 1.6037 | 0.0551 | 0.7224 | 345.50 | 1.44 | 349.18 | 11.57 | 342.02 | 3.21 | |
| Plesovice_4_8 | Zircon | 339.4 | 1.3 | 339.4 | | 18.4569 | 0.6690 | 0.0548 | 1.1245 | 0.4094 | 1.7238 | 0.0542 | 0.6759 | 340.03 | 1.35 | 401.32 | 12.55 | 348.46 | 3.45 | |
| Plesovice_4_9 | Zircon | 339.2 | 1.3 | | | 18.5108 | 0.6333 | 0.0528 | 0.9329 | 0.3911 | 1.5903 | 0.0540 | 0.6347 | 339.21 | 1.27 | 321.02 | 13.20 | 335.16 | 3.18 | |
| Plesovice_4_10 | Zircon | 345.9 | 1.3 | 345.9 | | 18.1265 | 0.6795 | 0.0535 | 0.8323 | 0.4011 | 1.5480 | 0.0551 | 0.6737 | 345.94 | 1.35 | 351.14 | 10.71 | 342.46 | 3.10 | |
| Plesovice_4_11 | Zircon | 341.2 | 1.2 | 341.2 | | 18.3945 | 0.6343 | 0.0535 | 0.8999 | 0.3963 | 1.5928 | 0.0544 | 0.6319 | 341.29 | 1.26 | 348.23 | 11.68 | 340.42 | 3.19 | |
| Mean = 342.6 ± 2.0 Ma, MSWD = 1.3, prob = 0.24 | | | | | | | | | | | | | | | | | | | | |
| Recommended age mean = 337.19 ± 0.37 Ma; Stams et al., 2008; TIMS | | | | | | | | | | | | | | | | | | | | |

Appendix G: U-Pb geochronology age standards

| Analysis | Minera | Pref. Age (Ma) | Pref. Age 2s% (Ma) | 207 cor 206Pb/238U | 207 cor 206Pb/238U 2s% | 238U/206Pb ratio | 1s% | 207Pb/206Pb ratio | 1s% | 208Pb/238U ratio | 1s% | 207Pb/235U U (calc) ratio | 1s% | 206Pb/238U Age (Ma) | 2s% | 207Pb/206Pb Age (Ma) | 2s% | 207Pb/235U (calc) Age (Ma) | 2s% |
|---|--------|----------------|--------------------|--------------------|------------------------|------------------|--------|-------------------|--------|------------------|--------|---------------------------|------|---------------------|-------|----------------------|------|----------------------------|-----|
| Temora_4_1 | Zircon | 418.5 | 2.8 | 14.9561 | 1.3659 | 0.0532 | 4.4993 | 0.4910 | 4.7975 | 0.0671 | 1.3774 | 418.54 | 2.75 | 336.84 | 60.52 | 405.56 | 9.60 | | |
| Temora_4_2 | Zircon | 420.6 | 2.3 | 14.8390 | 1.1689 | 0.0544 | 3.3424 | 0.5075 | 3.8978 | 0.0674 | 1.1601 | 420.59 | 2.32 | 384.74 | 39.03 | 416.79 | 7.78 | | |
| Temora_4_3 | Zircon | 417.7 | 2.2 | 14.9148 | 1.0618 | 0.0569 | 2.7612 | 0.5297 | 3.4134 | 0.0671 | 1.1074 | 418.60 | 2.21 | 487.13 | 25.20 | 431.61 | 6.83 | | |
| Temora_4_4 | Zircon | 417.8 | 2.4 | 14.9338 | 1.1892 | 0.0521 | 3.7310 | 0.4817 | 4.2181 | 0.0670 | 1.1826 | 417.79 | 2.37 | 290.79 | 58.61 | 389.27 | 8.44 | | |
| Temora_4_5 | Zircon | 421.3 | 1.7 | 14.8289 | 0.7682 | 0.0547 | 2.3633 | 0.5036 | 2.6023 | 0.0675 | 0.8279 | 421.29 | 1.66 | 398.43 | 26.58 | 414.15 | 5.20 | | |
| Temora_4_6 | Zircon | 420.3 | 1.6 | 14.8466 | 0.7775 | 0.0545 | 2.2092 | 0.5027 | 2.4852 | 0.0674 | 0.8193 | 420.28 | 1.64 | 389.55 | 25.46 | 413.50 | 4.97 | | |
| Temora_4_7 | Zircon | 415.4 | 1.5 | 15.0136 | 0.7384 | 0.0555 | 1.8636 | 0.5061 | 2.2488 | 0.0666 | 0.7365 | 415.58 | 1.47 | 430.67 | 19.28 | 415.85 | 4.50 | | |
| Temora_4_8 | Zircon | 414.9 | 1.5 | 15.0455 | 0.7463 | 0.0543 | 1.9411 | 0.4940 | 2.3110 | 0.0665 | 0.7443 | 414.95 | 1.49 | 380.45 | 22.94 | 407.66 | 4.62 | | |
| Temora_4_9 | Zircon | 416.7 | 1.6 | 14.9738 | 0.7504 | 0.0549 | 2.0213 | 0.5021 | 2.4467 | 0.0668 | 0.7773 | 416.73 | 1.55 | 406.68 | 22.24 | 413.14 | 4.89 | | |
| Temora_4_10 | Zircon | 415.9 | 1.5 | 14.9981 | 0.7463 | 0.0560 | 1.9127 | 0.5113 | 2.2872 | 0.0667 | 0.7524 | 416.31 | 1.50 | 449.55 | 18.90 | 419.29 | 4.57 | | |
| Temora_4_11 | Zircon | 419.8 | 1.4 | 14.8459 | 0.6801 | 0.0559 | 1.2863 | 0.5154 | 1.8493 | 0.0673 | 0.6887 | 420.16 | 1.38 | 446.07 | 12.82 | 422.09 | 3.70 | | |
| Mean = 417.8 ± 2.1 Ma, MSWD = 0.43, prob = 0.93 | | | | | | | | | | | | | | | | | | | |
| Recommended age mean = 416.8 ± 1.1 Ma, Black et al., 2003; TIMS | | | | | | | | | | | | | | | | | | | |
| 91500_5_1 | Zircon | 1063.2 | 0.4 | 5.5738 | 0.1549 | 0.0752 | 1.8068 | 1.8484 | 1.1731 | 0.1794 | 0.1481 | 1063.64 | 0.30 | 1071.63 | 6.77 | 1062.86 | 2.35 | | |
| 91500_5_2 | Zircon | 1063.4 | 0.4 | 5.5740 | 0.1549 | 0.0753 | 1.9116 | 1.8530 | 1.1731 | 0.1795 | 0.1481 | 1063.97 | 0.30 | 1075.00 | 7.14 | 1064.50 | 2.35 | | |
| 91500_5_3 | Zircon | 1063.4 | 0.4 | 5.5843 | 0.1549 | 0.0730 | 1.7729 | 1.8234 | 1.1731 | 0.1791 | 0.1481 | 1061.98 | 0.30 | 1012.92 | 7.09 | 1053.90 | 2.35 | | |
| 91500_5_4 | Zircon | 1063.4 | 0.4 | 5.5686 | 0.1549 | 0.0749 | 1.8965 | 1.8761 | 1.1731 | 0.1795 | 0.1481 | 1064.44 | 0.30 | 1063.99 | 7.17 | 1072.70 | 2.35 | | |
| 91500_5_5 | Zircon | 1063.4 | 0.4 | 5.5638 | 0.1549 | 0.0726 | 1.2815 | 1.8138 | 1.4310 | 0.1798 | 0.1481 | 1065.88 | 0.30 | 1003.29 | 5.18 | 1050.45 | 2.86 | | |
| 91500_5_6 | Zircon | 1059.0 | 0.9 | 5.5989 | 0.4713 | 0.0751 | 1.3298 | 1.8633 | 1.4310 | 0.1786 | 0.1481 | 1059.56 | 0.93 | 1070.87 | 4.99 | 1068.16 | 2.86 | | |
| 91500_5_7 | Zircon | 1067.0 | 0.9 | 5.5487 | 0.4713 | 0.0755 | 1.1297 | 1.8795 | 1.4310 | 0.1801 | 0.1481 | 1067.66 | 0.93 | 1081.98 | 4.19 | 1073.89 | 2.86 | | |
| 91500_5_8 | Zircon | 1067.0 | 0.9 | 5.5638 | 0.4713 | 0.0748 | 1.3487 | 1.8483 | 1.4310 | 0.1790 | 0.1481 | 1061.62 | 0.93 | 1061.04 | 5.11 | 1062.81 | 2.86 | | |
| 91500_5_9 | Zircon | 1069.3 | 0.9 | 5.5375 | 0.4713 | 0.0753 | 1.2355 | 1.8680 | 1.4310 | 0.1805 | 0.1481 | 1069.63 | 0.93 | 1076.15 | 4.61 | 1069.82 | 2.86 | | |
| 91500_5_10 | Zircon | 1061.3 | 0.9 | 5.5724 | 0.4713 | 0.0767 | 1.4856 | 1.8907 | 1.4310 | 0.1794 | 0.1481 | 1063.61 | 0.93 | 1113.18 | 5.33 | 1077.85 | 2.86 | | |
| 91500_5_11 | Zircon | 1063.8 | 0.9 | 5.6030 | 0.4713 | 0.0744 | 1.2494 | 1.8156 | 1.4310 | 0.1785 | 0.1481 | 1058.98 | 0.93 | 1052.09 | 4.78 | 1051.09 | 2.86 | | |
| 91500_5_12 | Zircon | 1061.6 | 0.9 | 5.6286 | 0.4713 | 0.0749 | 1.3544 | 1.8196 | 1.4310 | 0.1777 | 0.1481 | 1064.44 | 0.93 | 1080.73 | 5.05 | 1060.02 | 2.86 | | |
| 91500_5_13 | Zircon | 1061.6 | 0.9 | 5.5841 | 0.4713 | 0.0755 | 1.3601 | 1.8404 | 1.4310 | 0.1792 | 0.1481 | 1062.44 | 0.93 | 1085.15 | 4.95 | 1054.96 | 2.86 | | |
| 91500_5_14 | Zircon | 1064.1 | 0.9 | 5.5552 | 0.4713 | 0.0745 | 1.2881 | 1.8263 | 1.4310 | 0.1801 | 0.1481 | 1067.41 | 0.93 | 1085.15 | 4.95 | 1054.96 | 2.86 | | |
| 91500_5_15 | Zircon | 1069.1 | 0.9 | 5.5709 | 0.4713 | 0.0752 | 1.2372 | 1.8348 | 1.4310 | 0.1795 | 0.1481 | 1064.48 | 0.93 | 1072.72 | 4.63 | 1058.01 | 2.86 | | |
| 91500_5_16 | Zircon | 1069.1 | 0.9 | 5.5339 | 0.4713 | 0.0766 | 1.3284 | 1.8807 | 1.4310 | 0.1807 | 0.1481 | 1070.88 | 0.93 | 1109.01 | 4.79 | 1074.31 | 2.86 | | |
| 91500_5_17 | Zircon | 1057.9 | 0.9 | 5.5865 | 0.4713 | 0.0776 | 1.2389 | 1.8935 | 1.4310 | 0.1790 | 0.1481 | 1061.31 | 0.93 | 1134.56 | 4.34 | 1078.81 | 2.86 | | |
| 91500_5_18 | Zircon | 1063.5 | 0.9 | 5.5688 | 0.4713 | 0.0752 | 1.1019 | 1.8406 | 1.4310 | 0.1794 | 0.1481 | 1063.87 | 0.93 | 1071.95 | 4.13 | 1060.08 | 2.86 | | |
| 91500_5_19 | Zircon | 1064.1 | 0.9 | 5.5658 | 0.4713 | 0.0756 | 1.4056 | 1.8701 | 1.4310 | 0.1796 | 0.1481 | 1064.96 | 0.93 | 1082.82 | 5.21 | 1070.56 | 2.86 | | |
| 91500_5_20 | Zircon | 1056.4 | 0.9 | 5.6128 | 0.4713 | 0.0747 | 1.3105 | 1.8328 | 1.4310 | 0.1781 | 0.1481 | 1056.57 | 0.93 | 1058.72 | 4.98 | 1057.29 | 2.86 | | |
| 91500_5_21 | Zircon | 1056.4 | 0.9 | 5.5623 | 0.4713 | 0.0730 | 1.2727 | 1.8358 | 1.4310 | 0.1799 | 0.1481 | 1066.39 | 0.93 | 1012.66 | 5.09 | 1058.95 | 2.86 | | |
| Mean = 1063.8 ± 1.3 Ma, MSWD = 0.72, prob = 0.81 | | | | | | | | | | | | | | | | | | | |
| Recommended age mean = 1063.51 ± 0.39 Ma, Horstwood et al., 2016; TIMS | | | | | | | | | | | | | | | | | | | |
| Plesovice_5_1 | Zircon | 346.5 | 1.0 | 18.0894 | 0.4881 | 0.0537 | 8.8006 | 0.4052 | 1.6511 | 0.0552 | 0.4855 | 346.60 | 0.97 | 355.42 | 10.17 | 345.41 | 3.30 | | |
| Plesovice_5_2 | Zircon | 341.7 | 0.9 | 18.3649 | 0.4263 | 0.0533 | 9.9000 | 0.4016 | 1.7051 | 0.0544 | 0.4497 | 341.72 | 0.90 | 339.08 | 12.02 | 342.82 | 3.41 | | |
| Plesovice_5_3 | Zircon | 335.6 | 1.1 | 18.6833 | 0.5510 | 0.0544 | 1.0153 | 0.4035 | 1.7549 | 0.0535 | 0.5574 | 335.08 | 1.11 | 387.74 | 11.76 | 344.17 | 3.51 | | |
| Plesovice_5_4 | Zircon | 343.4 | 1.1 | 18.2766 | 0.5505 | 0.0531 | 0.9533 | 0.4009 | 1.7243 | 0.0547 | 0.5506 | 343.36 | 1.10 | 333.87 | 12.94 | 342.28 | 3.45 | | |
| Plesovice_5_5 | Zircon | 342.1 | 1.1 | 18.3370 | 0.5550 | 0.0535 | 0.9250 | 0.3999 | 1.7078 | 0.0545 | 0.5551 | 342.22 | 1.11 | 350.82 | 11.92 | 341.57 | 3.42 | | |
| Plesovice_5_6 | Zircon | 348.8 | 1.2 | 17.9685 | 0.5970 | 0.0532 | 0.6242 | 0.3866 | 1.5986 | 0.0556 | 0.5914 | 348.82 | 1.16 | 336.05 | 8.42 | 331.88 | 3.12 | | |
| Plesovice_5_7 | Zircon | 348.5 | 1.1 | 17.9946 | 0.5815 | 0.0533 | 0.8378 | 0.3973 | 1.6527 | 0.0555 | 0.5723 | 348.48 | 1.14 | 339.83 | 11.16 | 339.68 | 3.31 | | |
| Plesovice_5_8 | Zircon | 342.9 | 1.2 | 18.2554 | 0.6199 | 0.0550 | 0.7566 | 0.4041 | 1.6245 | 0.0547 | 0.5969 | 343.62 | 1.19 | 412.69 | 8.20 | 344.62 | 3.25 | | |
| Plesovice_5_9 | Zircon | 345.9 | 1.3 | 18.1270 | 0.6595 | 0.0536 | 0.7269 | 0.3958 | 1.6043 | 0.0551 | 0.6416 | 345.94 | 1.28 | 351.64 | 9.34 | 338.58 | 3.21 | | |
| Plesovice_5_10 | Zircon | 339.2 | 1.1 | 18.5069 | 0.5415 | 0.0531 | 0.9614 | 0.3988 | 1.7113 | 0.0540 | 0.5519 | 339.24 | 1.10 | 333.19 | 13.08 | 340.78 | 3.42 | | |
| Mean = 343.2 ± 2.9 Ma, MSWD = 4.8, prob 0.00 | | | | | | | | | | | | | | | | | | | |
| Recommended age mean = 337.19 ± 0.37 Ma, Sierra et al., 2006; TIMS | | | | | | | | | | | | | | | | | | | |

Appendix G: U-Pb geochronology age standards

| Analysis | Mineral | Pref. Age (Ma) | Pref. Age 2s% | 207 cor 206Pb/238U Age (Ma) | 207 cor 206Pb/238U 2s% | 238U/206Pb ratio | 1s% | 207Pb/206Pb ratio | 1s% | 207Pb/235U (calc) ratio | 1s% | 206Pb/238U ratio | 1s% | 206Pb/238U Age (Ma) | 2s% | 207Pb/206Pb Age (Ma) | 2s% | 207Pb/235U (calc) Age (Ma) | 2s% |
|-------------|---------|----------------|---------------|-----------------------------|------------------------|------------------|--------|-------------------|--------|-------------------------|--------|------------------|--------|---------------------|------|----------------------|-------|----------------------------|------|
| Temora_5_1 | Zircon | 415.7 | 1.7 | | | 15.0984 | 0.8602 | 0.0525 | 3.8251 | 0.4857 | 3.8528 | 0.0686 | 0.8664 | 415.69 | 1.73 | 307.76 | 56.60 | 401.96 | 7.71 |
| Temora_5_2 | Zircon | 416.4 | 1.8 | 416.4 | 1.8 | 15.0112 | 0.8470 | 0.0558 | 3.4092 | 0.5177 | 3.5216 | 0.0688 | 0.8935 | 416.76 | 1.79 | 444.14 | 34.13 | 423.59 | 7.04 |
| Temora_5_3 | Zircon | 418.1 | 1.3 | | | 14.9123 | 0.6261 | 0.0543 | 1.6322 | 0.5042 | 2.2068 | 0.0670 | 0.6495 | 418.13 | 1.30 | 383.24 | 19.14 | 414.56 | 4.41 |
| Temora_5_4 | Zircon | 419.6 | 1.2 | | | 14.8631 | 0.5758 | 0.0547 | 1.2612 | 0.5063 | 1.9001 | 0.0672 | 0.5876 | 419.56 | 1.18 | 397.85 | 14.21 | 415.97 | 3.80 |
| Temora_5_5 | Zircon | 415.1 | 1.4 | | | 15.0341 | 0.6726 | 0.0543 | 1.9658 | 0.4949 | 2.4171 | 0.0665 | 0.7039 | 415.15 | 1.41 | 382.98 | 23.30 | 408.24 | 4.83 |
| Temora_5_6 | Zircon | 420.5 | 1.3 | | | 14.8466 | 0.8219 | 0.0540 | 1.6377 | 0.4964 | 2.1886 | 0.0674 | 0.6276 | 420.50 | 1.26 | 371.80 | 19.83 | 409.29 | 4.38 |
| Temora_5_7 | Zircon | 423.9 | 1.6 | | | 14.7266 | 0.8079 | 0.0552 | 3.0086 | 0.5116 | 3.3579 | 0.0680 | 0.8048 | 423.91 | 1.61 | 419.23 | 32.05 | 419.50 | 6.72 |
| Temora_5_8 | Zircon | 422.0 | 1.3 | | | 14.7960 | 0.6311 | 0.0540 | 1.7035 | 0.4971 | 2.2039 | 0.0677 | 0.6292 | 422.00 | 1.26 | 369.86 | 20.75 | 409.72 | 4.41 |
| Temora_5_9 | Zircon | 422.5 | 1.2 | | | 14.7516 | 0.5851 | 0.0550 | 1.3886 | 0.5111 | 2.0223 | 0.0677 | 0.6051 | 422.50 | 1.21 | 412.74 | 15.04 | 419.21 | 4.04 |
| Temora_5_10 | Zircon | 411.0 | 1.4 | 411.0 | 1.4 | 15.1785 | 0.6962 | 0.0556 | 2.2322 | 0.5092 | 2.6335 | 0.0659 | 0.7143 | 411.30 | 1.43 | 435.37 | 22.83 | 417.88 | 5.27 |

Mean = 418.8 ± 2.8 Ma, MSWD = 1.8, prob = 0.065

Recommended age mean = 418.8 ± 1.1 Ma, Black et al., 2003, TIMS

Appendix G: U-Pb geochronology age standards

| Analysis | Mineral | 207con 206Pb/238U Age (Ma) | 207con 206Pb/238U 2s% | 207cor 206Pb/238U 2s% | 238U/206Pb ratio | 1s% | 207Pb/206Pb ratio | 1s% | 207Pb/235U ratio | 1s% | 206Pb/238U ratio | 1s% | 206Pb/238U Age (Ma) | 2s% | 207Pb/206Pb Age (Ma) | 2s% | 207Pb/235U (calc) Age (Ma) | 2s% | |
|--|---------|----------------------------------|-----------------------------|-----------------------------|---------------------|--------|----------------------|--------|---------------------|---------|---------------------|---------|------------------------|---------|-------------------------|-----|----------------------------------|-----|--|
| Durango_1_1 | Apatite | 36.5 | 16.9 | 131.2153 | 6.4812 | 0.2474 | 11.2231 | 0.0076 | 6.5128 | 48.89 | 13.03 | 3167.36 | 12.90 | 234.63 | 22.45 | | | | |
| Durango_1_2 | Apatite | 25.4 | 24.8 | 144.7054 | 6.9996 | 0.3859 | 9.7648 | 0.0069 | 7.0220 | 44.49 | 14.04 | 3854.30 | 9.35 | 318.18 | 19.53 | | | | |
| Durango_1_3 | Apatite | 29.9 | 16.5 | 152.4836 | 9.4344 | 0.2775 | 11.4178 | 0.0066 | 5.9894 | 42.13 | 11.98 | 3348.02 | 10.66 | 226.85 | 19.61 | | | | |
| Durango_1_4 | Apatite | 30.8 | 13.5 | 163.8479 | 5.5193 | 0.2190 | 11.2808 | 0.0061 | 5.4227 | 39.33 | 10.85 | 2972.89 | 12.23 | 171.92 | 19.94 | | | | |
| Durango_1_5 | Apatite | 33.2 | 10.2 | 151.4103 | 4.6310 | 0.2024 | 7.4492 | 0.0066 | 4.4024 | 42.58 | 8.18 | 2986.69 | 9.09 | 187.15 | 14.90 | | | | |
| Durango_1_6 | Apatite | 33.3 | 12.2 | 138.6200 | 4.4812 | 0.2702 | 8.6005 | 0.0072 | 4.4966 | 46.38 | 8.99 | 3306.76 | 8.16 | 242.44 | 14.83 | | | | |
| Durango_1_7 | Apatite | 37.8 | 10.7 | 138.2219 | 4.4916 | 0.1896 | 9.8980 | 0.0072 | 4.8785 | 46.11 | 9.02 | 2737.95 | 11.89 | 174.50 | 17.75 | | | | |
| Durango_1_8 | Apatite | 34.1 | 13.0 | 137.1517 | 4.9007 | 0.2615 | 8.2323 | 0.0073 | 4.8848 | 46.75 | 9.77 | 3254.82 | 9.21 | 236.61 | 16.46 | | | | |
| Durango_1_9 | Apatite | 32.6 | 11.5 | 149.5504 | 4.4648 | 0.2373 | 7.5439 | 0.0067 | 4.6661 | 42.93 | 9.33 | 3101.38 | 8.85 | 200.22 | 15.09 | | | | |
| Mean = 33.4 ± 2.1 Ma, MSWD = 1.4, prob = 0.20 | | | | | | | | | | | | | | | | | | | |
| Recommended age mean = 31.44 ± 0.18, McDowell et al., 2005, Ar-Ar | | | | | | | | | | | | | | | | | | | |
| OD306_1_1 | Apatite | 1591.7 | 1.1 | 3.5693 | 0.5376 | 0.0986 | 2.2661 | 0.5263 | 0.2802 | 1592.20 | 1.05 | 1597.00 | 5.30 | 1593.81 | 1.05 | | | | |
| OD306_1_2 | Apatite | 3.5264 | 0.5376 | 0.0986 | 2.2635 | 0.5263 | 3.8051 | 0.5263 | 0.2802 | 1592.20 | 1.05 | 1597.00 | 5.30 | 1603.15 | 1.05 | | | | |
| OD306_1_3 | Apatite | 1593.0 | 1.1 | 3.5678 | 0.5376 | 0.0986 | 2.2932 | 0.5263 | 0.2804 | 1593.33 | 1.05 | 1596.26 | 5.36 | 1594.24 | 1.05 | | | | |
| OD306_1_4 | Apatite | 1591.0 | 1.1 | 3.5716 | 0.5376 | 0.0986 | 2.1102 | 0.5263 | 0.2800 | 1591.57 | 1.05 | 1596.55 | 4.93 | 1593.41 | 1.05 | | | | |
| OD306_1_5 | Apatite | 1590.5 | 1.1 | 3.5720 | 0.5376 | 0.0986 | 1.7076 | 0.5263 | 0.2799 | 1591.07 | 1.05 | 1595.99 | 3.99 | 1593.25 | 1.05 | | | | |
| OD306_1_6 | Apatite | 1589.2 | 1.1 | 3.5739 | 0.5376 | 0.0986 | 1.8286 | 0.5263 | 0.2797 | 1589.95 | 1.05 | 1596.67 | 4.28 | 1592.60 | 1.05 | | | | |
| OD306_1_7 | Apatite | 3.5389 | 0.5376 | 0.0986 | 1.8176 | 0.5263 | 3.8379 | 0.5263 | 0.2826 | 1604.63 | 1.05 | 1596.38 | 4.25 | 1600.74 | 1.05 | | | | |
| OD306_1_8 | Apatite | 1596.0 | 1.2 | 3.5593 | 0.5894 | 0.0986 | 1.3531 | 0.6119 | 0.2810 | 1596.15 | 1.18 | 1596.53 | 3.16 | 1597.82 | 1.22 | | | | |
| OD306_1_9 | Apatite | 3.5510 | 0.5894 | 0.0986 | 1.1462 | 0.5883 | 3.8337 | 0.6119 | 0.2817 | 1599.81 | 1.18 | 1596.10 | 2.68 | 1599.85 | 1.22 | | | | |
| OD306_1_10 | Apatite | 3.5220 | 0.5894 | 0.0986 | 1.3756 | 0.6119 | 3.8639 | 0.6119 | 0.2839 | 1611.09 | 1.18 | 1596.25 | 3.22 | 1606.18 | 1.22 | | | | |
| OD306_1_11 | Apatite | 1582.3 | 1.2 | 3.5913 | 0.5894 | 0.0986 | 1.3115 | 0.6119 | 0.2784 | 1593.54 | 1.18 | 1596.10 | 3.07 | 1590.45 | 1.22 | | | | |
| OD306_1_12 | Apatite | 1595.5 | 1.2 | 3.5598 | 0.5894 | 0.0986 | 1.5074 | 0.6119 | 0.2808 | 1595.59 | 1.18 | 1595.99 | 3.53 | 1596.79 | 1.22 | | | | |
| OD306_1_13 | Apatite | 1592.7 | 1.2 | 3.5651 | 0.5894 | 0.0986 | 1.3587 | 0.6119 | 0.2803 | 1593.06 | 1.18 | 1596.23 | 3.18 | 1595.25 | 1.22 | | | | |
| OD306_1_14 | Apatite | 1595.1 | 1.2 | 3.5623 | 0.5894 | 0.0986 | 1.3277 | 0.6119 | 0.2808 | 1595.29 | 1.18 | 1596.32 | 3.10 | 1595.66 | 1.22 | | | | |
| OD306_1_15 | Apatite | 1593.9 | 1.2 | 3.5646 | 0.5894 | 0.0986 | 1.5610 | 0.6119 | 0.2806 | 1594.15 | 1.18 | 1596.17 | 3.65 | 1594.95 | 1.22 | | | | |
| OD306_1_16 | Apatite | 1591.6 | 1.2 | 3.5943 | 0.5894 | 0.0985 | 1.3821 | 0.6119 | 0.2783 | 1592.84 | 1.18 | 1595.80 | 3.23 | 1587.09 | 1.22 | | | | |
| OD306_1_17 | Apatite | 1590.2 | 1.2 | 3.5717 | 0.5894 | 0.0985 | 1.8632 | 0.6119 | 0.2799 | 1590.76 | 1.18 | 1595.90 | 4.36 | 1591.44 | 1.22 | | | | |
| OD306_1_18 | Apatite | 3.5318 | 0.5894 | 0.0985 | 1.4748 | 0.6119 | 3.8313 | 0.6119 | 0.2831 | 1607.09 | 1.18 | 1595.87 | 3.45 | 1599.34 | 1.22 | | | | |
| OD306_1_19 | Apatite | 3.5467 | 0.5894 | 0.0985 | 1.3063 | 0.6119 | 3.8144 | 0.6119 | 0.2820 | 1601.23 | 1.18 | 1595.92 | 3.06 | 1595.78 | 1.22 | | | | |
| Mean = 1595.8 ± 4.0 Ma, MSWD = 0.75, prob = 0.77 | | | | | | | | | | | | | | | | | | | |
| Recommended age Concordia intercept = 1695.9 ± 6.9 Ma, Thompson et al., 2016, MC-ICP-MS | | | | | | | | | | | | | | | | | | | |
| 401_1_1 | Apatite | 530.6 | 3.3 | 11.4615 | 1.6156 | 0.0705 | 4.8675 | 0.6467 | 1.6246 | 536.59 | 3.25 | 943.19 | 21.14 | 622.86 | 9.52 | | | | |
| 401_1_2 | Apatite | 533.6 | 3.3 | 11.4552 | 1.6385 | 0.0684 | 5.0095 | 0.6241 | 1.6471 | 540.16 | 3.29 | 880.91 | 23.52 | 610.35 | 9.80 | | | | |
| 401_1_3 | Apatite | 535.2 | 3.3 | 11.4722 | 1.6158 | 0.0642 | 5.0791 | 0.6471 | 1.6246 | 539.04 | 3.25 | 745.99 | 28.78 | 580.17 | 9.95 | | | | |
| 401_1_4 | Apatite | 522.9 | 3.3 | 11.6624 | 1.6129 | 0.0692 | 4.8990 | 0.6857 | 1.6224 | 530.09 | 3.24 | 904.75 | 22.32 | 606.83 | 9.59 | | | | |
| 401_1_5 | Apatite | 531.6 | 2.4 | 11.3508 | 1.1775 | 0.0768 | 3.4517 | 0.9597 | 1.1937 | 544.96 | 2.49 | 1166.16 | 11.73 | 683.14 | 6.86 | | | | |
| 401_1_6 | Apatite | 531.6 | 2.4 | 11.5155 | 1.2020 | 0.0663 | 3.4763 | 0.9564 | 1.2069 | 536.88 | 2.41 | 1168.08 | 11.70 | 594.20 | 7.03 | | | | |
| 401_1_7 | Apatite | 550.2 | 2.7 | 11.2049 | 1.3535 | 0.0594 | 4.2418 | 0.892 | 1.3707 | 550.76 | 2.74 | 579.70 | 31.79 | 557.76 | 8.32 | | | | |
| 401_1_8 | Apatite | 528.4 | 2.4 | 11.6309 | 1.1892 | 0.0631 | 3.4653 | 0.8600 | 1.1906 | 531.58 | 2.38 | 709.31 | 20.85 | 566.22 | 6.89 | | | | |
| 401_1_9 | Apatite | 528.9 | 2.5 | 11.6040 | 1.2105 | 0.0640 | 3.5709 | 0.862 | 1.2428 | 532.73 | 2.49 | 742.20 | 20.35 | 572.92 | 7.03 | | | | |
| Mean = 532.4 ± 4.5 Ma, MSWD = 0.96, prob = 0.46 | | | | | | | | | | | | | | | | | | | |
| Recommended age Concordia intercept = 530.3 ± 1.4 Ma, Thompson et al., 2016 | | | | | | | | | | | | | | | | | | | |

Appendix G: U-Pb geochronology age standards

| Analysis | Mineral | 207con 206Pb/238U | | 207con 206Pb/238U | | 238U/206Pb | | 207Pb/206Pb | | 207Pb/235U | | 206Pb/238U | | 207Pb/206Pb | | 207Pb/235U | | |
|---|---------|----------------------|-----|----------------------|----------|------------|--------|-------------|--------|------------|--------|------------|---------|-------------|---------|------------|---------|-------|
| | | Age (Ma) | 2s% | ratio | 1s% | ratio | 1s% | ratio | 1s% | ratio | 1s% | ratio | 1s% | ratio | 1s% | ratio | 1s% | ratio |
| McClure_1_1 | Apatite | 514.7 | | 3.8 | 9.3995 | 1.6054 | 0.2348 | 2.8731 | 3.4375 | 2.8026 | 0.1063 | 1.6335 | 650.99 | 3.27 | 3084.06 | 2.97 | 1513.02 | 5.81 |
| McClure_1_2 | Apatite | 546.0 | | 3.3 | 9.9377 | 1.5144 | 0.1563 | 3.3332 | 2.1619 | 3.2562 | 0.1005 | 1.5312 | 617.10 | 3.06 | 2415.00 | 4.69 | 1168.87 | 6.51 |
| McClure_1_3 | Apatite | 521.4 | | 3.3 | 10.2313 | 1.3816 | 0.1708 | 2.8659 | 2.3060 | 2.6221 | 0.0978 | 1.5479 | 601.74 | 3.10 | 2565.17 | 3.76 | 1213.81 | 5.24 |
| McClure_1_4 | Apatite | 537.9 | | 3.1 | 10.2830 | 1.4637 | 0.1443 | 3.1229 | 1.9341 | 3.0264 | 0.0973 | 1.4664 | 596.64 | 2.93 | 2278.84 | 4.72 | 1092.95 | 6.05 |
| McClure_1_5 | Apatite | 534.9 | | 2.1 | 10.2357 | 1.0066 | 0.1511 | 1.9035 | 2.0389 | 1.9708 | 0.0977 | 1.0109 | 600.82 | 2.02 | 2358.14 | 2.76 | 1128.59 | 3.74 |
| McClure_1_6 | Apatite | 527.8 | | 2.3 | 8.8419 | 0.9751 | 0.2582 | 1.4252 | 4.0334 | 1.8034 | 0.1132 | 0.9769 | 691.03 | 1.95 | 3234.77 | 1.39 | 1640.95 | 3.01 |
| McClure_1_7 | Apatite | 527.8 | | 3.3 | 8.6563 | 1.3449 | 0.2703 | 2.2023 | 4.3098 | 2.0607 | 0.1154 | 1.3512 | 704.23 | 2.70 | 3307.09 | 2.09 | 1685.25 | 4.12 |
| McClure_1_8 | Apatite | 526.2 | | 3.2 | 9.7208 | 1.4111 | 0.2010 | 2.6319 | 2.6652 | 2.5731 | 0.1032 | 1.4539 | 633.87 | 2.91 | 2833.87 | 3.03 | 1372.81 | 5.15 |
| McClure_1_9 | Apatite | 522.3 | | 1.9 | 10.6516 | 0.8907 | 0.1401 | 1.5882 | 1.8090 | 1.8212 | 0.0939 | 0.8945 | 578.55 | 1.79 | 2228.13 | 2.48 | 1048.73 | 3.64 |
| Mean = 528.4 ± 6.3 Ma, MSWD = 1.3, prob = 0.22 | | | | | | | | | | | | | | | | | | |
| Recommended age mean = 523.98 ± 0.12 Ma, Schoene and Bowring, 2006 | | | | | | | | | | | | | | | | | | |
| Durango_2_1 | Apatite | 41.4 | | 16.6 | 124.7337 | 6.8539 | 0.2022 | 14.6894 | 0.2241 | 13.1181 | 0.0080 | 6.8828 | 51.45 | 13.77 | 2843.50 | 16.84 | 205.36 | 26.24 |
| Durango_2_2 | Apatite | 35.8 | | 17.9 | 151.0789 | 7.7082 | 0.1784 | 17.2939 | 0.1635 | 15.6113 | 0.0067 | 7.6701 | 42.87 | 15.34 | 2637.38 | 21.78 | 153.78 | 31.22 |
| Durango_2_3 | Apatite | 32.1 | | 17.7 | 150.9105 | 6.8640 | 0.2430 | 13.7297 | 0.2206 | 12.0156 | 0.0066 | 6.8885 | 42.62 | 13.78 | 3138.82 | 13.90 | 202.38 | 24.03 |
| Durango_2_4 | Apatite | 30.8 | | 13.2 | 144.3344 | 4.8078 | 0.2866 | 8.8430 | 0.2709 | 7.5946 | 0.0069 | 4.7552 | 44.18 | 9.51 | 3398.62 | 8.10 | 243.40 | 15.19 |
| Durango_2_5 | Apatite | 31.6 | | 11.8 | 156.5581 | 5.5277 | 0.2290 | 9.4840 | 0.2026 | 8.3662 | 0.0064 | 4.7291 | 41.01 | 9.46 | 3044.17 | 9.98 | 187.32 | 16.73 |
| Durango_2_6 | Apatite | 34.2 | | 12.6 | 136.8102 | 4.9116 | 0.2574 | 9.2363 | 0.2571 | 8.0391 | 0.0073 | 4.7775 | 46.62 | 9.55 | 3230.30 | 9.02 | 232.31 | 16.08 |
| Durango_2_7 | Apatite | 34.6 | | 13.2 | 127.7390 | 4.3101 | 0.2940 | 7.8937 | 0.3170 | 6.7733 | 0.0078 | 5.0326 | 50.23 | 10.07 | 3438.02 | 7.13 | 279.62 | 13.55 |
| Mean = 34.0 ± 1.8 Ma, MSWD = 1.6, prob = 0.13 | | | | | | | | | | | | | | | | | | |
| Recommended age mean = 31.44 ± 0.18 Ma, McDowell et al., 2005, Ar-Ar | | | | | | | | | | | | | | | | | | |
| McClure_2_1 | Apatite | 545.4 | | 4.8 | 8.8946 | 1.9476 | 0.2355 | 3.3980 | 3.6565 | 3.1507 | 0.1124 | 2.1022 | 686.73 | 4.20 | 3088.97 | 3.51 | 1561.94 | 6.30 |
| McClure_2_2 | Apatite | 524.9 | | 4.1 | 10.0928 | 1.8516 | 0.1763 | 3.6979 | 2.4108 | 3.5702 | 0.0992 | 1.8484 | 609.52 | 3.70 | 2618.05 | 4.70 | 1245.83 | 7.14 |
| McClure_2_3 | Apatite | 549.6 | | 4.2 | 9.3691 | 1.8970 | 0.0986 | 2.1200 | 3.8400 | 1.0745 | 0.2822 | 0.9942 | 1602.47 | 1.99 | 1596.68 | 4.96 | 1601.17 | 2.15 |
| McClure_2_4 | Apatite | 543.0 | | 2.9 | 9.6715 | 1.3351 | 0.1821 | 2.1507 | 2.5987 | 2.2798 | 0.1035 | 1.3509 | 634.65 | 2.70 | 2671.09 | 2.67 | 1300.28 | 4.56 |
| McClure_2_5 | Apatite | 529.5 | | 3.6 | 9.8715 | 1.4451 | 0.1850 | 2.3885 | 2.5824 | 2.5045 | 0.1013 | 1.5433 | 621.89 | 3.09 | 2697.16 | 2.92 | 1295.67 | 5.01 |
| McClure_2_6 | Apatite | 533.7 | | 2.8 | 9.2835 | 1.2718 | 0.2219 | 1.7032 | 3.2956 | 1.8133 | 0.1077 | 1.2680 | 659.62 | 2.54 | 2994.14 | 1.83 | 1480.01 | 3.63 |
| McClure_2_7 | Apatite | 513.8 | | 4.0 | 8.4000 | 1.5666 | 0.3083 | 2.247 | 5.0488 | 2.1501 | 0.1189 | 1.5968 | 724.44 | 3.19 | 3511.55 | 1.96 | 1827.55 | 4.30 |
| Mean = 532.9 ± 6.9 Ma, MSWD = 1.6, prob = 0.13 | | | | | | | | | | | | | | | | | | |
| Recommended age mean = 523.98 ± 0.12 Ma, Schoene and Bowring, 2006 | | | | | | | | | | | | | | | | | | |
| OD306_2_1 | Apatite | 1578.2 | | 2.0 | 3.6030 | 1.0113 | 0.0986 | 2.2651 | 3.7868 | 1.0745 | 0.2777 | 0.9942 | 1579.81 | 1.99 | 1596.28 | 5.30 | 1589.95 | 2.15 |
| OD306_2_2 | Apatite | | | | 3.5382 | 1.0113 | 0.0986 | 2.0891 | 3.8521 | 1.0745 | 0.2824 | 0.9942 | 1603.51 | 1.99 | 1597.46 | 4.88 | 1603.71 | 2.15 |
| OD306_2_3 | Apatite | | | | 3.5416 | 1.0113 | 0.0986 | 2.1200 | 3.8400 | 1.0745 | 0.2822 | 0.9942 | 1602.47 | 1.99 | 1596.68 | 4.96 | 1601.17 | 2.15 |
| OD306_2_4 | Apatite | | | | 3.5518 | 1.0113 | 0.0986 | 2.1539 | 3.8326 | 1.0745 | 0.2817 | 0.9942 | 1599.89 | 1.99 | 1596.40 | 5.04 | 1599.63 | 2.15 |
| OD306_2_5 | Apatite | 1592.0 | | 2.0 | 3.5681 | 1.0113 | 0.0986 | 2.4946 | 3.8005 | 1.0745 | 0.2802 | 0.9942 | 1592.39 | 1.99 | 1596.12 | 5.83 | 1592.86 | 2.15 |
| OD306_2_6 | Apatite | 1569.2 | | 2.0 | 3.6209 | 1.0113 | 0.0986 | 2.6885 | 3.7307 | 1.0745 | 0.2761 | 0.9942 | 1571.58 | 1.99 | 1596.37 | 6.24 | 1577.98 | 2.15 |
| OD306_2_7 | Apatite | | | | 3.5131 | 1.0113 | 0.0986 | 2.2336 | 3.8470 | 1.0745 | 0.2846 | 0.9942 | 1614.33 | 1.99 | 1596.06 | 5.22 | 1602.64 | 2.15 |
| OD306_2_8 | Apatite | | | | 3.5558 | 0.9279 | 0.0986 | 1.6570 | 3.8222 | 0.9046 | 0.2813 | 0.9160 | 1598.01 | 1.83 | 1596.17 | 3.88 | 1597.42 | 1.81 |
| OD306_2_9 | Apatite | | | | 3.5360 | 0.9279 | 0.0986 | 1.4208 | 3.8415 | 0.9046 | 0.2827 | 0.9160 | 1605.18 | 1.83 | 1596.26 | 3.32 | 1601.46 | 1.81 |
| OD306_2_10 | Apatite | 1572.8 | | 1.8 | 3.6122 | 0.9279 | 0.0986 | 1.4846 | 3.7610 | 0.9046 | 0.2767 | 0.9160 | 1574.83 | 1.83 | 1595.86 | 3.47 | 1584.46 | 1.81 |
| OD306_2_11 | Apatite | | | | 3.5515 | 0.9279 | 0.0986 | 1.2947 | 3.8267 | 0.9046 | 0.2816 | 0.9160 | 1599.31 | 1.83 | 1595.77 | 3.03 | 1598.39 | 1.81 |
| OD306_2_12 | Apatite | | | | 3.5482 | 0.9279 | 0.0986 | 1.3288 | 3.8302 | 0.9046 | 0.2819 | 0.9160 | 1600.76 | 1.83 | 1596.22 | 3.11 | 1599.11 | 1.81 |
| OD306_2_13 | Apatite | | | | 3.5213 | 0.9279 | 0.0986 | 1.4957 | 3.8575 | 0.9046 | 0.2839 | 0.9160 | 1610.73 | 1.83 | 1596.22 | 3.50 | 1604.84 | 1.81 |
| OD306_2_14 | Apatite | | | | 3.5931 | 0.9279 | 0.0986 | 1.3334 | 3.7775 | 0.9046 | 0.2782 | 0.9160 | 1582.32 | 1.83 | 1595.87 | 3.12 | 1587.97 | 1.81 |
| OD306_2_15 | Apatite | 1581.0 | | 1.8 | 3.6079 | 0.9279 | 0.0986 | 1.2599 | 3.7655 | 0.9046 | 0.2773 | 0.9160 | 1577.80 | 1.83 | 1595.95 | 2.95 | 1585.43 | 1.81 |
| OD306_2_16 | Apatite | 1576.0 | | 1.8 | 3.5264 | 0.9279 | 0.0986 | 1.5612 | 3.8434 | 0.9046 | 0.2834 | 0.9160 | 1608.67 | 1.83 | 1595.79 | 3.65 | 1601.88 | 1.81 |
| OD306_2_17 | Apatite | | | | 3.5476 | 0.9279 | 0.0986 | 1.3568 | 3.8236 | 0.9046 | 0.2820 | 0.9160 | 1601.18 | 1.83 | 1596.13 | 3.17 | 1597.73 | 1.81 |
| OD306_2_18 | Apatite | | | | 3.5476 | 0.9279 | 0.0986 | 1.3568 | 3.8236 | 0.9046 | 0.2820 | 0.9160 | 1601.18 | 1.83 | 1596.13 | 3.17 | 1597.73 | 1.81 |
| Mean = 1595.7 ± 7.0 Ma, MSWD = 0.74, prob = 0.77 | | | | | | | | | | | | | | | | | | |
| Recommended Concordia Intercept age = 1635.9 ± 5.9 Ma, Thompson et al., 2016, MC-ICP-MS | | | | | | | | | | | | | | | | | | |

Appendix G: U-Pb geochronology age standards

| Analysis | Mineral | 207cor 206Pb/238 U Age (Ma) | 207cor 206Pb/238 U 2σs% | 238U/206P b ratio | 1σs% | 207Pb/206P b ratio | 1σs% | 207Pb/235 U (calc) ratio | 1σs% | 206Pb/238U Age (Ma) | 1σs% | 206Pb/206P b Age (Ma) | 2σs% | 207Pb/206P b Age (Ma) | 2σs% | 207Pb/235U (calc) Age (Ma) | 2σs% |
|---|---------|--------------------------------------|----------------------------------|-------------------------|--------|--------------------------|--------|--------------------------------|--------|------------------------|--------|-----------------------------|------|-----------------------------|-------|----------------------------------|-------|
| 401_2_1 | Apatite | 530.5 | 3.9 | 11.3859 | 1.9281 | 0.0774 | 5.0497 | 0.9398 | 5.0059 | 0.0879 | 1.9315 | 542.88 | 3.86 | 1130.69 | 17.79 | 672.78 | 10.01 |
| 401_2_2 | Apatite | 542.3 | 4.2 | 11.3614 | 1.9355 | 0.0598 | 5.7150 | 0.7245 | 5.6739 | 0.0879 | 2.1341 | 543.24 | 4.27 | 595.83 | 41.56 | 553.34 | 11.35 |
| 401_2_3 | Apatite | 534.6 | 4.1 | 11.5653 | 2.0724 | 0.0614 | 6.1688 | 0.7336 | 6.0954 | 0.0668 | 2.0669 | 536.66 | 4.13 | 654.06 | 40.47 | 558.64 | 12.19 |
| 401_2_4 | Apatite | 544.4 | 3.1 | 11.2850 | 1.5036 | 0.0635 | 4.0044 | 0.7777 | 3.9836 | 0.0887 | 1.5391 | 547.73 | 3.08 | 724.90 | 23.43 | 584.17 | 7.97 |
| 401_2_5 | Apatite | 543.1 | 3.1 | 11.3778 | 1.5093 | 0.0591 | 4.3830 | 0.7188 | 4.4067 | 0.0880 | 1.5758 | 543.53 | 3.15 | 568.78 | 33.47 | 549.96 | 8.81 |
| 401_2_6 | Apatite | 530.8 | 2.9 | 11.5943 | 1.4508 | 0.0614 | 4.0066 | 0.7290 | 4.1010 | 0.0862 | 1.4458 | 532.95 | 2.89 | 651.65 | 26.39 | 555.94 | 8.20 |
| 401_2_7 | Apatite | 538.4 | 2.9 | 11.3718 | 1.4762 | 0.0666 | 3.7834 | 0.8086 | 3.7718 | 0.0880 | 1.4668 | 543.78 | 2.93 | 823.15 | 19.19 | 601.67 | 7.54 |
| Mean = 537.8 ± 6.5, MSWD = 0.44, prob = 0.85 | | | | | | | | | | | | | | | | | |
| Recommended Concordia intercept age = 530.3 ± 1.4 Ma, Thompson et al., 2016 | | | | | | | | | | | | | | | | | |
| Durango_3_1 | Apatite | 33.6 | 9.6 | 153.5509 | 3.7662 | 0.2006 | 8.0754 | 0.1796 | 7.2179 | 0.0065 | 4.0818 | 41.69 | 8.16 | 2830.22 | 9.31 | 167.75 | 14.44 |
| Durango_3_2 | Apatite | 35.0 | 13.7 | 127.1305 | 4.6524 | 0.2889 | 9.1626 | 0.3088 | 7.8393 | 0.0078 | 4.8873 | 50.18 | 9.77 | 3399.97 | 8.39 | 273.24 | 15.68 |
| Durango_3_3 | Apatite | 31.2 | 11.2 | 165.9978 | 4.6150 | 0.2005 | 9.9110 | 0.1663 | 8.8428 | 0.0060 | 4.6361 | 38.77 | 9.27 | 2829.83 | 11.43 | 156.22 | 17.69 |
| Durango_3_4 | Apatite | 32.8 | 10.2 | 151.9488 | 4.0754 | 0.2232 | 8.4192 | 0.2016 | 7.4368 | 0.0066 | 4.0986 | 42.21 | 8.20 | 3003.38 | 9.01 | 186.52 | 14.87 |
| Mean = 33.1 ± 1.7 Ma, MSWD = 0.71, prob = 0.55 | | | | | | | | | | | | | | | | | |
| Recommended age mean = 31.44 ± 0.8 Ma; McDowell et al., 2005; Ar-Ar | | | | | | | | | | | | | | | | | |
| 401_3_1 | Apatite | 542.5 | 2.6 | 11.2927 | 1.2968 | 0.0647 | 3.9553 | 0.7900 | 3.9306 | 0.0885 | 1.2982 | 546.55 | 2.60 | 763.76 | 21.83 | 591.15 | 7.86 |
| 401_3_2 | Apatite | 534.8 | 2.6 | 11.4582 | 1.2768 | 0.0652 | 3.8903 | 0.7841 | 3.8241 | 0.0872 | 1.2820 | 539.23 | 2.56 | 776.54 | 21.01 | 587.80 | 7.65 |
| 401_3_3 | Apatite | 533.7 | 2.5 | 11.4986 | 1.2502 | 0.0657 | 3.8017 | 0.7882 | 3.5514 | 0.0871 | 1.2548 | 538.51 | 2.51 | 796.06 | 18.97 | 590.16 | 7.10 |
| 401_3_4 | Apatite | 531.0 | 2.6 | 11.6112 | 1.2984 | 0.0615 | 3.8972 | 0.7301 | 3.8382 | 0.0862 | 1.3005 | 533.14 | 2.60 | 656.17 | 25.48 | 556.61 | 7.68 |
| Mean = 535.2 ± 6.7 Ma, MSWD = 0.61, prob = 0.61 | | | | | | | | | | | | | | | | | |
| Recommended Concordia intercept age = 530.3 ± 1.4 Ma, Thompson et al., 2016 | | | | | | | | | | | | | | | | | |
| McClure_3_1 | Apatite | 528.0 | 2.2 | 10.5402 | 1.0588 | 0.1422 | 2.0013 | 1.8589 | 2.0245 | 0.0948 | 1.0643 | 563.79 | 2.13 | 2253.25 | 3.07 | 1066.60 | 4.05 |
| McClure_3_2 | Apatite | 527.0 | 3.0 | 8.7481 | 1.2025 | 0.2679 | 1.8697 | 4.2173 | 1.8905 | 0.1142 | 1.2101 | 697.00 | 2.42 | 3292.91 | 1.78 | 1677.39 | 3.78 |
| McClure_3_3 | Apatite | 514.3 | 2.3 | 9.4610 | 0.9788 | 0.343 | 1.4412 | 3.4127 | 1.4855 | 0.1058 | 0.9841 | 648.03 | 1.97 | 3081.08 | 1.49 | 1507.32 | 2.97 |
| McClure_3_4 | Apatite | 531.2 | 2.5 | 9.2616 | 1.0597 | 0.2287 | 1.6367 | 3.4079 | 1.6484 | 0.1083 | 1.0983 | 663.02 | 2.20 | 3042.28 | 1.72 | 1506.21 | 3.30 |
| Mean = 522.4 ± 6.2 Ma, MSWD = 1.4, prob = 0.23 | | | | | | | | | | | | | | | | | |
| Recommended age mean = 523.98 ± 0.12 Ma, Schoene and Bowring, 2005 | | | | | | | | | | | | | | | | | |
| OD306_3_1 | Apatite | 1585.2 | 1.3 | 3.5864 | 0.6236 | 0.0986 | 1.6530 | 3.7883 | 0.6305 | 0.2790 | 0.6215 | 1586.23 | 1.24 | 1596.29 | 3.87 | 1590.28 | 1.26 |
| OD306_3_2 | Apatite | 1585.2 | 1.3 | 3.5331 | 0.6236 | 0.0986 | 1.6471 | 3.8461 | 0.6305 | 0.2832 | 0.6215 | 1607.26 | 1.24 | 1596.29 | 3.85 | 1602.45 | 1.26 |
| OD306_3_3 | Apatite | 1588.3 | 1.2 | 3.5458 | 0.6236 | 0.0984 | 1.6234 | 3.8249 | 0.6305 | 0.2816 | 0.6215 | 1599.56 | 1.24 | 1593.61 | 3.80 | 1588.00 | 1.26 |
| OD306_3_4 | Apatite | 1588.3 | 1.2 | 3.5737 | 0.6236 | 0.0984 | 1.2793 | 3.7957 | 0.6305 | 0.2795 | 0.6215 | 1588.80 | 1.24 | 1593.65 | 3.00 | 1591.84 | 1.26 |
| OD306_3_5 | Apatite | 1583.3 | 1.3 | 3.5343 | 0.6236 | 0.0986 | 1.6031 | 3.8460 | 0.6305 | 0.2831 | 0.6215 | 1607.18 | 1.24 | 1596.46 | 3.75 | 1602.43 | 1.26 |
| OD306_3_6 | Apatite | 1583.3 | 1.3 | 3.5901 | 0.6236 | 0.0985 | 1.5737 | 3.7835 | 0.6305 | 0.2786 | 0.6215 | 1584.41 | 1.24 | 1595.95 | 3.68 | 1589.25 | 1.26 |
| OD306_3_7 | Apatite | 1588.3 | 1.3 | 3.5362 | 0.6236 | 0.0986 | 1.5528 | 3.8408 | 0.6305 | 0.2828 | 0.6215 | 1605.44 | 1.24 | 1597.80 | 3.63 | 1601.33 | 1.26 |
| OD306_3_8 | Apatite | 1588.9 | 1.3 | 3.5794 | 0.6236 | 0.0986 | 1.5862 | 3.7980 | 0.6305 | 0.2797 | 0.6215 | 1599.71 | 1.24 | 1597.83 | 3.71 | 1592.32 | 1.26 |
| OD306_3_9 | Apatite | 1594.5 | 1.2 | 3.5612 | 0.6236 | 0.0985 | 1.4324 | 3.8116 | 0.6305 | 0.2807 | 0.6215 | 1594.74 | 1.24 | 1595.99 | 3.35 | 1595.20 | 1.26 |
| OD306_3_10 | Apatite | 1595.4 | 1.2 | 3.5597 | 0.6236 | 0.0985 | 1.2842 | 3.8141 | 0.6305 | 0.2808 | 0.6215 | 1595.51 | 1.24 | 1595.80 | 3.00 | 1595.73 | 1.26 |
| Mean = 1595.8 ± 6.1 Ma, MSWD = 0.76, prob = 0.65 | | | | | | | | | | | | | | | | | |
| Recommended Concordia intercept age = 1595.9 ± 5.9 Ma, Thompson et al., 2016; MC-ICP-MS | | | | | | | | | | | | | | | | | |

Appendix G: U-Pb geochronology age standards

| Analysis | Mineral | 207 ^{cor} 206Pb/238U Age (Ma) | 207 ^{cor} 206Pb/238U 2s% | 238U/206Pb ratio | 1s% | 207Pb/206Pb ratio | 1s% | 207Pb/235U U (calc) ratio | 1s% | 206Pb/238U Age (Ma) | 2s% | 207Pb/206Pb Age (Ma) b | 2s% | 207Pb/235U Age (Ma) (calc) | 2s% |
|--|---------|--|---|---------------------|--------|----------------------|---------|---------------------------------|---------|------------------------|-------|------------------------------|-------|----------------------------------|-------|
| McChure_4_1 | Apatite | 542.3 | 3.6 | 9.9692 | 1.5940 | 0.1615 | 3.7378 | 2.2337 | 3.6041 | 616.70 | 3.24 | 2470.39 | 5.11 | 1191.68 | 7.21 |
| McChure_4_2 | Apatite | 517.1 | 3.9 | 9.6029 | 1.6578 | 0.2206 | 3.0051 | 3.1650 | 2.9134 | 638.71 | 3.42 | 2984.27 | 3.24 | 1448.67 | 5.83 |
| McChure_4_3 | Apatite | 527.3 | 2.5 | 10.0466 | 1.1145 | 0.1762 | 1.8120 | 2.4178 | 1.8372 | 612.02 | 2.31 | 2618.41 | 2.31 | 1247.90 | 3.67 |
| McChure_4_4 | Apatite | 521.1 | 2.9 | 10.7700 | 1.3211 | 0.1354 | 2.8305 | 1.7420 | 2.7847 | 573.44 | 2.82 | 2168.41 | 4.55 | 1024.21 | 5.57 |
| McChure_4_5 | Apatite | 547.2 | 4.4 | 8.4154 | 1.7776 | 0.2692 | 3.0495 | 4.4042 | 1.1188 | 723.86 | 3.55 | 3300.55 | 2.90 | 1713.14 | 5.55 |
| McChure_4_6 | Apatite | 531.1 | 3.3 | 8.4849 | 1.3413 | 0.2835 | 2.0096 | 4.6109 | 1.9186 | 719.07 | 2.71 | 3381.58 | 1.85 | 1751.24 | 3.84 |
| McChure_4_7 | Apatite | 535.6 | 3.4 | 9.1793 | 1.4484 | 0.2289 | 2.4280 | 3.4119 | 2.3006 | 666.56 | 3.02 | 3029.51 | 2.57 | 1507.13 | 4.60 |
| McChure_4_8 | Apatite | 517.7 | 2.8 | 9.8087 | 1.2197 | 0.2054 | 2.0227 | 2.8887 | 2.0147 | 625.91 | 2.48 | 2868.78 | 2.29 | 1378.44 | 4.03 |
| McChure_4_9 | Apatite | 541.2 | 2.7 | 9.3916 | 1.2150 | 0.2052 | 1.9555 | 3.0225 | 1.9249 | 653.00 | 2.43 | 2867.31 | 2.22 | 1413.30 | 3.85 |
| Mean = 528.2 ± 5.4 Ma, MSWD = 1.5, prob = 0.14 | | | | | | | | | | | | | | | |
| Recommended age mean = 623.38 ± 0.12 Ma, Schoene and Bowring, 2005 | | | | | | | | | | | | | | | |
| Durango_5_1 | Apatite | 31.5 | 20.6 | 141.9732 | 7.3257 | 0.2892 | 13.7829 | 0.2819 | 11.7851 | 45.42 | 14.68 | 3412.54 | 12.56 | 252.13 | 23.57 |
| Durango_5_2 | Apatite | 36.9 | 18.1 | 133.3249 | 7.1280 | 0.2360 | 14.3926 | 0.2446 | 12.6236 | 48.40 | 14.21 | 3092.43 | 14.85 | 222.19 | 25.25 |
| Durango_5_3 | Apatite | 33.8 | 14.0 | 136.3807 | 6.3485 | 0.2692 | 9.7703 | 0.2363 | 8.5154 | 46.92 | 10.48 | 3300.95 | 9.29 | 243.63 | 17.03 |
| Durango_5_4 | Apatite | 35.3 | 11.9 | 138.0158 | 4.7002 | 0.2369 | 9.1458 | 0.2363 | 8.1119 | 46.47 | 9.44 | 3098.88 | 9.41 | 215.39 | 16.22 |
| Durango_5_5 | Apatite | 33.8 | 12.7 | 143.7611 | 4.9984 | 0.2409 | 9.6734 | 0.2321 | 8.5494 | 44.79 | 9.99 | 3123.22 | 9.85 | 211.89 | 17.10 |
| Durango_5_6 | Apatite | 34.7 | 9.9 | 148.9481 | 4.1547 | 0.2030 | 8.4622 | 4.1689 | 7.6530 | 43.18 | 8.34 | 2850.12 | 9.67 | 174.81 | 15.31 |
| Durango_5_7 | Apatite | 31.2 | 12.4 | 151.9469 | 4.7783 | 0.2534 | 9.0926 | 0.2293 | 8.0028 | 42.22 | 9.60 | 3205.36 | 8.97 | 209.64 | 16.01 |
| Durango_5_8 | Apatite | 31.4 | 12.6 | 149.6573 | 4.7977 | 0.2611 | 9.0099 | 0.2412 | 7.9021 | 43.08 | 9.62 | 3252.39 | 8.72 | 219.40 | 15.80 |
| Mean = 33.6 ± 1.5 Ma, MSWD = 0.73, prob = 0.65 | | | | | | | | | | | | | | | |
| Recommended age mean = 31.44 ± 0.18 Ma, McDowell et al., 2005, A-Ar | | | | | | | | | | | | | | | |
| OD306_5_1 | Apatite | 1597.3 | 1.2 | 3.5549 | 0.5623 | 0.0987 | 2.5368 | 3.8188 | 0.5325 | 1597.42 | 1.09 | 1597.94 | 5.93 | 1586.71 | 1.07 |
| OD306_5_2 | Apatite | 1594.2 | 1.2 | 3.5647 | 0.5623 | 0.0986 | 2.1670 | 3.8115 | 0.5325 | 1594.54 | 1.09 | 1597.49 | 5.06 | 1585.18 | 1.07 |
| OD306_5_3 | Apatite | 1585.7 | 1.2 | 3.5838 | 0.5623 | 0.0985 | 2.1421 | 3.7905 | 0.5325 | 1586.66 | 1.09 | 1595.86 | 5.01 | 1590.74 | 1.07 |
| OD306_5_4 | Apatite | 1563.3 | 2.8 | 3.5366 | 0.5623 | 0.0985 | 2.1085 | 3.8388 | 0.5325 | 1604.92 | 1.09 | 1595.16 | 4.94 | 1600.92 | 1.07 |
| OD306_5_5 | Apatite | 1597.3 | 1.2 | 3.5370 | 1.4058 | 0.0985 | 1.6228 | 3.7345 | 1.4074 | 1585.95 | 2.82 | 1594.31 | 3.80 | 1578.79 | 2.81 |
| OD306_5_6 | Apatite | 1588.6 | 2.8 | 3.5596 | 1.4058 | 0.0985 | 1.4641 | 3.8135 | 1.4074 | 1595.36 | 2.82 | 1594.22 | 3.43 | 1585.59 | 2.81 |
| OD306_5_7 | Apatite | 1597.3 | 1.2 | 3.4242 | 1.4058 | 0.0984 | 1.4606 | 3.9618 | 1.4074 | 1580.06 | 2.82 | 1594.08 | 3.42 | 1626.41 | 2.81 |
| OD306_5_8 | Apatite | 1589.0 | 2.7 | 3.5759 | 1.4058 | 0.0985 | 1.3945 | 3.7974 | 1.4074 | 1589.52 | 2.82 | 1594.22 | 3.27 | 1592.19 | 2.81 |
| OD306_5_9 | Apatite | 1588.6 | 2.8 | 3.5753 | 1.4058 | 0.0986 | 1.5298 | 3.7972 | 1.4074 | 1589.32 | 2.82 | 1596.31 | 3.58 | 1592.16 | 2.81 |
| OD306_5_10 | Apatite | 1597.3 | 1.2 | 3.5145 | 1.4058 | 0.0986 | 1.5653 | 3.8633 | 1.4074 | 1613.82 | 2.82 | 1596.39 | 3.66 | 1606.05 | 2.81 |
| OD306_5_11 | Apatite | 1573.6 | 2.8 | 3.6104 | 1.4058 | 0.0987 | 1.6745 | 3.7610 | 1.4074 | 1575.74 | 2.82 | 1596.24 | 3.91 | 1584.47 | 2.81 |
| OD306_5_12 | Apatite | 1581.7 | 2.8 | 3.5827 | 1.4058 | 0.0986 | 1.5406 | 3.7885 | 1.4074 | 1586.24 | 2.82 | 1597.43 | 3.60 | 1580.31 | 2.81 |
| OD306_5_13 | Apatite | 1581.7 | 2.7 | 3.5939 | 1.4058 | 0.0987 | 1.2813 | 3.7807 | 1.4074 | 1583.20 | 2.82 | 1596.33 | 2.99 | 1588.65 | 2.81 |
| OD306_5_14 | Apatite | 1596.3 | 2.7 | 3.5597 | 1.4058 | 0.0987 | 1.2860 | 3.8145 | 1.4074 | 1595.64 | 2.82 | 1596.05 | 3.00 | 1585.82 | 2.81 |
| OD306_5_15 | Apatite | 1596.3 | 2.7 | 3.5294 | 1.4058 | 0.0986 | 1.5517 | 3.8493 | 1.4074 | 1608.69 | 2.82 | 1596.59 | 3.63 | 1603.12 | 2.81 |
| OD306_5_16 | Apatite | 1593.0 | 2.7 | 3.5663 | 1.4058 | 0.0986 | 1.3981 | 3.8081 | 1.4074 | 1593.34 | 2.82 | 1596.25 | 3.27 | 1584.45 | 2.81 |
| OD306_5_17 | Apatite | 1596.3 | 2.7 | 3.5667 | 1.4058 | 0.0984 | 1.4718 | 3.8089 | 1.4074 | 1593.61 | 2.82 | 1592.32 | 3.45 | 1584.63 | 2.81 |
| OD306_5_18 | Apatite | 1596.3 | 2.7 | 3.5441 | 1.4058 | 0.0984 | 1.5311 | 3.8300 | 1.4074 | 1601.56 | 2.82 | 1592.40 | 3.59 | 1589.08 | 2.81 |
| Mean = 1595.7 ± 6.9 Ma, MSWD = 0.71, prob = 0.79 | | | | | | | | | | | | | | | |
| Recommended Concordia intercept age = 1695.9 ± 5.9 Ma, Thompson et al., 2016, MC-ICP-MS | | | | | | | | | | | | | | | |

Appendix G: U-Pb geochronology age standards

| Analysis | Mineral | 207cor 206Pb/238 U Age (Ma) | 207cor 206Pb/238 U 2s% | 238U/206P b ratio | 1s% | 207Pb/206P b ratio | 1s% | 207Pb/235 U (calc) ratio | 1s% | 206Pb/238 U ratio | 1s% | 206Pb/238U Age (Ma) | 2s% | 207Pb/206P b Age (Ma) | 2s% | 207Pb/235U (calc) Age (Ma) | 2s% | |
|--|---------|--------------------------------------|---------------------------------|-------------------------|--------|--------------------------|--------|--------------------------------|--------|-------------------------|--------|------------------------|------|-----------------------------|-------|----------------------------------|-------|--|
| 401_5_1 | Apatite | 550.2 | 3.7 | 11.0950 | 1.8044 | 0.0667 | 5.5405 | 0.8265 | 5.4650 | 0.0900 | 1.8184 | 555.53 | 3.64 | 827.00 | 27.95 | 611.66 | 10.93 | |
| 401_5_2 | Apatite | 555.9 | 3.9 | 11.0043 | 1.8068 | 0.0669 | 5.5307 | 0.8388 | 5.4553 | 0.0910 | 1.9391 | 561.35 | 3.88 | 833.20 | 27.67 | 618.49 | 10.91 | |
| 401_5_3 | Apatite | 514.1 | 3.7 | 11.9120 | 1.8516 | 0.0675 | 3.9671 | 0.7832 | 4.0820 | 0.0940 | 1.8539 | 520.20 | 3.71 | 852.68 | 19.33 | 587.31 | 8.16 | |
| 401_5_4 | Apatite | 529.1 | 3.8 | 11.6092 | 1.8608 | 0.0641 | 4.1393 | 0.7622 | 4.3082 | 0.0862 | 1.8970 | 532.90 | 3.79 | 743.48 | 23.54 | 575.28 | 8.62 | |
| 401_5_5 | Apatite | 527.2 | 3.6 | 11.6261 | 1.7971 | 0.0651 | 3.7459 | 0.7718 | 3.8887 | 0.0860 | 1.8001 | 531.65 | 3.60 | 776.05 | 20.30 | 580.78 | 7.78 | |
| 401_5_6 | Apatite | 537.4 | 3.6 | 11.4223 | 1.7909 | 0.0633 | 3.7772 | 0.7630 | 3.9202 | 0.0875 | 1.7970 | 540.61 | 3.59 | 716.60 | 22.38 | 575.72 | 7.84 | |
| 401_5_7 | Apatite | 516.0 | 3.6 | 11.7984 | 1.8188 | 0.0704 | 4.0867 | 0.8213 | 4.2186 | 0.0947 | 1.8254 | 523.87 | 3.65 | 940.14 | 17.82 | 608.77 | 8.44 | |
| 401_5_8 | Apatite | 536.5 | 3.6 | 11.4505 | 1.7976 | 0.0643 | 3.7795 | 0.7765 | 3.9189 | 0.0874 | 1.8268 | 540.41 | 3.65 | 752.06 | 21.22 | 583.49 | 7.84 | |
| Mean = 534 ± 12 Ma, MSWD = 2.3, prob = 0.022 | | | | | | | | | | | | | | | | | | |
| Recommended Concordia intercept age = 530.3 ± 1.4 Ma, Thompson et al., 2016 | | | | | | | | | | | | | | | | | | |
| McClure_5_1 | Apatite | 555.6 | 6.4 | 8.6850 | 2.6618 | 0.2378 | 5.1290 | 3.7720 | 5.2826 | 0.1149 | 2.8659 | 701.23 | 5.33 | 3104.44 | 5.27 | 1586.81 | 10.57 | |
| McClure_5_2 | Apatite | 513.7 | 4.0 | 10.4371 | 1.7697 | 0.1693 | 3.9396 | 2.2414 | 4.1153 | 0.0960 | 1.7839 | 591.21 | 3.57 | 2550.26 | 5.17 | 1194.11 | 8.23 | |
| McClure_5_3 | Apatite | 527.0 | 4.3 | 9.7373 | 2.0026 | 0.1978 | 2.9324 | 2.8088 | 3.1714 | 0.1027 | 2.0049 | 630.03 | 4.01 | 2807.42 | 3.42 | 1357.90 | 6.34 | |
| McClure_5_4 | Apatite | 541.9 | 4.7 | 8.0774 | 1.9301 | 0.3007 | 2.3806 | 5.1473 | 2.6387 | 0.1238 | 2.0189 | 752.64 | 4.04 | 3473.32 | 2.12 | 1843.95 | 5.28 | |
| McClure_5_5 | Apatite | 524.7 | 3.9 | 9.2438 | 1.7880 | 0.2364 | 2.0340 | 3.5221 | 2.3167 | 0.1082 | 1.7966 | 662.53 | 3.59 | 3094.98 | 2.10 | 1532.18 | 4.63 | |
| McClure_5_6 | Apatite | 526.7 | 3.6 | 8.8550 | 1.6595 | 0.2608 | 1.6236 | 4.0509 | 2.0443 | 0.1128 | 1.6646 | 689.28 | 3.33 | 3250.85 | 1.57 | 1644.49 | 4.09 | |
| McClure_5_7 | Apatite | 516.9 | 3.4 | 10.4505 | 1.6744 | 0.1626 | 2.0135 | 2.1540 | 2.3476 | 0.0958 | 1.6747 | 589.53 | 3.35 | 2481.76 | 2.74 | 1166.33 | 4.70 | |
| McClure_5_8 | Apatite | 537.6 | 3.5 | 9.7500 | 1.7021 | 0.1836 | 2.0340 | 2.5988 | 2.3483 | 0.1026 | 1.7072 | 629.90 | 3.41 | 2684.96 | 2.50 | 1300.58 | 4.70 | |
| Mean = 526.0 ± 7.4 Ma, MSWD = 1.15, prob = 0.33 | | | | | | | | | | | | | | | | | | |
| Recommended age mean = 523.98 ± 0.12 Ma, Schoene and Bowring, 2006 | | | | | | | | | | | | | | | | | | |

Appendix G: U-Pb geochronology age standards

| Analysis | Mineral | 207cor | 207cor | 238U/206Pb | 1s% | ratio | 207Pb/206Pb | 1s% | ratio | 207Pb/235U | 1s% | ratio | 206Pb/238U | 2s% | Age (Ma) | 207Pb/206Pb | 2s% | Age (Ma) | 207Pb/235U | 2s% | Age (Ma) |
|--|----------|----------|--------|------------|--------|--------|-------------|--------|--------|------------|--------|--------|------------|-------|----------|-------------|-------|----------|------------|-------|----------|
| | | Age (Ma) | 2s% | ratio | ratio | ratio | ratio | ratio | ratio | ratio | ratio | ratio | ratio | ratio | ratio | ratio | ratio | ratio | ratio | ratio | ratio |
| 19686_1_1 | Titanite | 1124.8 | 5.3 | 5.2380 | 2.7335 | 0.0781 | 2.7488 | 0.1909 | 2.7488 | 2.0602 | 2.7469 | 2.7488 | 1126.00 | 5.50 | 1148.24 | 1148.24 | 5.34 | 1135.69 | 1135.69 | 5.49 | 1138.48 |
| 19686_1_2 | Titanite | | | 5.0639 | 2.7335 | 0.0781 | 2.7488 | 0.1966 | 2.7488 | 2.1224 | 2.7469 | 2.7488 | 1157.16 | 5.50 | 1148.17 | 1148.17 | 6.02 | 1156.13 | 1156.13 | 5.49 | 1138.48 |
| 19686_1_3 | Titanite | | | 4.9592 | 2.7335 | 0.0781 | 2.7488 | 0.2015 | 2.7488 | 2.1757 | 2.7469 | 2.7488 | 1183.52 | 5.50 | 1148.69 | 1148.69 | 6.03 | 1173.31 | 1173.31 | 5.49 | 1138.48 |
| 19686_1_4 | Titanite | 1115.6 | 5.3 | 5.2606 | 2.7335 | 0.0781 | 2.7488 | 0.1892 | 2.7488 | 2.0432 | 2.7469 | 2.7488 | 1117.18 | 5.50 | 1148.87 | 1148.87 | 4.38 | 1130.04 | 1130.04 | 5.49 | 1138.48 |
| 19686_1_5 | Titanite | 1114.0 | 5.3 | 5.2883 | 2.7335 | 0.0781 | 2.7488 | 0.1889 | 2.7488 | 2.0396 | 2.7469 | 2.7488 | 1115.65 | 5.50 | 1148.41 | 1148.41 | 5.14 | 1128.82 | 1128.82 | 5.49 | 1138.48 |
| 19686_1_6 | Titanite | | | 5.0302 | 2.7335 | 0.0781 | 2.7488 | 0.1986 | 2.7488 | 2.1441 | 2.7469 | 2.7488 | 1167.91 | 5.50 | 1148.36 | 1148.36 | 5.32 | 1163.14 | 1163.14 | 5.49 | 1138.48 |
| 19686_1_7 | Titanite | 1139.8 | 2.4 | 5.1689 | 2.8779 | 0.0781 | 2.7488 | 0.1935 | 2.7488 | 2.0826 | 2.7469 | 2.7488 | 1140.25 | 2.52 | 1148.21 | 1148.21 | 4.28 | 1143.11 | 1143.11 | 3.35 | 1138.48 |
| 19686_1_8 | Titanite | | | 5.1249 | 2.8779 | 0.0781 | 2.7488 | 0.1951 | 2.7488 | 2.0995 | 2.7469 | 2.7488 | 1148.89 | 2.52 | 1148.19 | 1148.19 | 4.24 | 1148.65 | 1148.65 | 3.35 | 1138.48 |
| 19686_1_9 | Titanite | | | 5.0798 | 2.8779 | 0.0781 | 2.7488 | 0.1970 | 2.7488 | 2.1442 | 2.7469 | 2.7488 | 1159.14 | 2.52 | 1147.55 | 1147.55 | 5.30 | 1163.18 | 1163.18 | 3.35 | 1138.48 |
| 19686_1_10 | Titanite | 1129.4 | 2.4 | 5.2124 | 2.8779 | 0.0781 | 2.7488 | 0.1916 | 2.7488 | 2.0667 | 2.7469 | 2.7488 | 1130.29 | 2.52 | 1147.97 | 1147.97 | 4.22 | 1137.85 | 1137.85 | 3.35 | 1138.48 |
| 19686_1_11 | Titanite | 1126.5 | 2.4 | 5.2371 | 2.8779 | 0.0781 | 2.7488 | 0.1769 | 2.7488 | 2.0545 | 2.7469 | 2.7488 | 1127.64 | 2.52 | 1148.59 | 1148.59 | 6.12 | 1133.80 | 1133.80 | 3.35 | 1138.48 |
| 19686_1_12 | Titanite | | | 5.0577 | 2.8779 | 0.0781 | 2.7488 | 0.1974 | 2.7488 | 2.1477 | 2.7469 | 2.7488 | 1161.29 | 2.52 | 1147.98 | 1147.98 | 4.20 | 1164.31 | 1164.31 | 3.35 | 1138.48 |
| 19686_1_13 | Titanite | | | 5.0967 | 2.8779 | 0.0781 | 2.7488 | 0.1862 | 2.7488 | 2.1134 | 2.7469 | 2.7488 | 1154.76 | 2.52 | 1148.29 | 1148.29 | 4.22 | 1153.18 | 1153.18 | 3.35 | 1138.48 |
| 19686_1_14 | Titanite | 1133.9 | 2.4 | 5.1958 | 2.8779 | 0.0781 | 2.7488 | 0.1924 | 2.7488 | 2.0717 | 2.7469 | 2.7488 | 1134.63 | 2.52 | 1148.29 | 1148.29 | 3.86 | 1139.48 | 1139.48 | 3.35 | 1138.48 |
| Mean = 1144.2 ± 9.3 Ma, MSWD = 0.77, prob = 0.69 | | | | | | | | | | | | | | | | | | | | | |
| Recommended age = 1144.6 ± 6.0 Ma, unpub. ID-MC-ICP-MS age from Roland Mass, internal std. | | | | | | | | | | | | | | | | | | | | | |
| 100606_1_1 | Titanite | 450.6 | 5.6 | 13.3249 | 2.8382 | 0.0850 | 3.9408 | 0.0751 | 2.8654 | 0.8818 | 3.9408 | 0.0751 | 2.8654 | 5.73 | 1314.16 | 1314.16 | 7.81 | 641.94 | 641.94 | 7.68 | 726.48 |
| 100606_1_2 | Titanite | 461.1 | 5.6 | 12.9271 | 2.8391 | 0.0884 | 3.7616 | 0.0773 | 2.8596 | 0.9551 | 3.7616 | 0.0773 | 2.8596 | 5.71 | 1411.79 | 1411.79 | 6.72 | 680.78 | 680.78 | 7.52 | 726.48 |
| 100606_1_3 | Titanite | 445.3 | 5.9 | 12.6809 | 2.9097 | 0.1317 | 4.362 | 0.0789 | 2.9635 | 1.4362 | 4.0407 | 0.0789 | 2.9635 | 5.93 | 2120.55 | 2120.55 | 5.02 | 904.16 | 904.16 | 8.08 | 726.48 |
| 100606_1_4 | Titanite | 438.8 | 3.2 | 13.2544 | 1.5618 | 0.1097 | 3.0540 | 0.0755 | 1.5869 | 1.1469 | 3.0540 | 0.0755 | 1.5869 | 3.17 | 1793.59 | 1793.59 | 5.37 | 775.76 | 775.76 | 6.11 | 726.48 |
| 100606_1_5 | Titanite | 432.9 | 2.8 | 13.6149 | 1.4149 | 0.1001 | 2.5672 | 0.0735 | 1.3912 | 1.0261 | 2.5672 | 0.0735 | 1.3912 | 4.75 | 1625.95 | 1625.95 | 4.75 | 517.00 | 517.00 | 5.13 | 726.48 |
| 100606_1_6 | Titanite | 427.2 | 2.9 | 13.6806 | 1.4550 | 0.1057 | 2.1155 | 0.0730 | 1.4470 | 1.0722 | 2.1155 | 0.0730 | 1.4470 | 2.89 | 1724.97 | 1724.97 | 4.50 | 739.63 | 739.63 | 5.21 | 726.48 |
| 100606_1_7 | Titanite | 430.0 | 2.7 | 14.1330 | 1.3574 | 0.0745 | 2.2349 | 0.0706 | 1.3570 | 0.7336 | 2.2349 | 0.0706 | 1.3570 | 2.71 | 1054.26 | 1054.26 | 5.71 | 558.69 | 558.69 | 4.47 | 726.48 |
| 100606_1_8 | Titanite | 433.2 | 3.0 | 13.5905 | 1.4773 | 0.1006 | 2.2024 | 0.0736 | 1.4522 | 1.0452 | 2.2024 | 0.0736 | 1.4522 | 3.02 | 1634.64 | 1634.64 | 5.01 | 726.48 | 726.48 | 5.44 | 726.48 |
| Mean = 434.5 ± 7.0 Ma, MSWD = 1.3, prob = 0.25 | | | | | | | | | | | | | | | | | | | | | |
| Recommended age = 432.02 ± 0.84 Ma, Best, 2012; TIMS | | | | | | | | | | | | | | | | | | | | | |
| FC-3_1_1 | Titanite | 30.6 | 16.3 | 76.2360 | 3.5132 | 0.5529 | 4.0686 | 0.0131 | 3.5259 | 1.0023 | 4.0686 | 0.0131 | 3.5259 | 7.05 | 4388.28 | 4388.28 | 2.44 | 704.96 | 704.96 | 8.14 | 726.48 |
| FC-3_1_2 | Titanite | 31.0 | 11.0 | 109.5955 | 3.4801 | 0.4191 | 4.0418 | 0.0091 | 3.6162 | 0.5263 | 4.5527 | 0.0091 | 3.6162 | 7.23 | 3978.52 | 3978.52 | 3.04 | 429.38 | 429.38 | 9.11 | 726.48 |
| FC-3_1_3 | Titanite | 30.0 | 9.8 | 112.9017 | 3.3126 | 0.4214 | 3.4000 | 0.0088 | 3.3263 | 0.5155 | 4.0062 | 0.0088 | 3.3263 | 6.65 | 3986.72 | 3986.72 | 2.55 | 422.15 | 422.15 | 8.01 | 726.48 |
| FC-3_1_4 | Titanite | 28.7 | 11.6 | 83.3263 | 2.0680 | 0.5451 | 2.7004 | 0.0120 | 2.1285 | 0.9014 | 2.7782 | 0.0120 | 2.1285 | 4.25 | 4367.41 | 4367.41 | 1.81 | 652.50 | 652.50 | 5.56 | 726.48 |
| FC-3_1_5 | Titanite | 28.5 | 8.3 | 116.0132 | 2.0934 | 0.4319 | 3.1271 | 0.0086 | 2.1869 | 0.5442 | 3.1079 | 0.0086 | 2.1869 | 5.42 | 4023.28 | 4023.28 | 2.32 | 419.66 | 419.66 | 6.22 | 726.48 |
| FC-3_1_6 | Titanite | 28.2 | 10.6 | 87.1911 | 1.9917 | 0.5370 | 2.5478 | 0.0115 | 1.9750 | 0.8534 | 2.6875 | 0.0115 | 1.9750 | 3.95 | 4345.37 | 4345.37 | 1.72 | 626.54 | 626.54 | 5.38 | 726.48 |
| FC-3_1_7 | Titanite | 26.3 | 8.4 | 113.8746 | 1.9911 | 0.4703 | 2.8635 | 0.0088 | 1.9737 | 0.5736 | 2.8885 | 0.0088 | 1.9737 | 3.95 | 4150.12 | 4150.12 | 1.90 | 480.35 | 480.35 | 5.77 | 726.48 |
| FC-3_1_8 | Titanite | 30.1 | 9.1 | 90.6751 | 1.9587 | 0.5035 | 2.5153 | 0.0110 | 1.9362 | 0.7725 | 2.7755 | 0.0110 | 1.9362 | 3.87 | 4250.97 | 4250.97 | 1.74 | 581.21 | 581.21 | 5.55 | 726.48 |
| Mean = 28.7 ± 1.4 Ma, MSWD = 1.3, prob = 0.25 | | | | | | | | | | | | | | | | | | | | | |
| Recommended age = 28.13 ± 0.49 Ma, Dixe et al., 2003; TIMS | | | | | | | | | | | | | | | | | | | | | |
| Dromedary_1_1 | Titanite | 100.1 | 5.8 | 60.5336 | 2.8682 | 0.0917 | 3.0686 | 0.0166 | 2.9032 | 0.2097 | 4.1909 | 0.0166 | 2.9032 | 5.81 | 1460.15 | 1460.15 | 7.98 | 193.30 | 193.30 | 8.38 | 726.48 |
| Dromedary_1_2 | Titanite | 103.3 | 6.3 | 52.5315 | 3.0243 | 0.1682 | 4.1712 | 0.0190 | 3.0392 | 0.4426 | 4.1712 | 0.0190 | 3.0392 | 6.08 | 2539.53 | 2539.53 | 4.40 | 372.05 | 372.05 | 8.34 | 726.48 |
| Dromedary_1_3 | Titanite | 101.0 | 6.1 | 56.3383 | 2.9821 | 0.1350 | 3.4363 | 0.0177 | 2.9979 | 0.3308 | 4.2323 | 0.0177 | 2.9979 | 6.00 | 2163.22 | 2163.22 | 5.54 | 290.18 | 290.18 | 8.46 | 726.48 |
| Dromedary_1_4 | Titanite | 99.5 | 3.2 | 56.4253 | 1.5996 | 0.1458 | 2.4010 | 0.0177 | 1.5380 | 0.3552 | 2.9306 | 0.0177 | 1.5380 | 3.08 | 2296.90 | 2296.90 | 3.59 | 308.60 | 308.60 | 5.66 | 726.48 |
| Dromedary_1_5 | Titanite | 100.1 | 3.4 | 53.5158 | 1.6816 | 0.1769 | 2.3163 | 0.0187 | 1.6020 | 0.4547 | 2.7644 | 0.0187 | 1.6020 | 3.20 | 2622.84 | 2622.84 | 2.94 | 380.54 | 380.54 | 5.53 | 726.48 |
| Dromedary_1_6 | Titanite | 96.1 | 2.8 | 63.7736 | 1.4121 | 0.0815 | 1.9760 | 0.0157 | 1.3883 | 0.1772 | 2.6670 | 0.0157 | 1.3883 | 2.78 | 1232.71 | 1232.71 | 6.29 | 165.68 | 165.68 | 5.13 | 726.48 |
| Dromedary_1_7 | Titanite | 98.9 | 3.5 | 54.2809 | 1.6241 | 0.1760 | 2.5019 | 0.0184 | 1.6241 | 0.4501 | 2.8822 | 0.0184 | 1.6241 | 3.21 | 2614.71 | 2614.71 | 3.19 | 377.34 | 377.34 | 5.76 | 726.48 |
| Dromedary_1_8 | Titanite | 99.6 | 3.3 | 54.9021 | 1.5696 | 0.1621 | 2.3464 | 0.0182 | 1.5508 | 0.4090 | 2.8550 | 0.0182 | 1.5508 | 3.10 | 2476.63 | 2476.63 | 3.20 | 348.18 | 348.18 | 5.71 | 726.48 |
| Mean = 99.0 ± 1.3 Ma, MSWD = 1.08, prob = 0.37 | | | | | | | | | | | | | | | | | | | | | |
| Recommended age = 88.7 ± 0.6 Ma, Khon et al., 1990 | | | | | | | | | | | | | | | | | | | | | |

Appendix G: U-Pb geochronology age standards

| Analysis | Mineral | 207 ^{cor} 206Pb/238U | | 207 ^{cor} 206Pb/238U | | 238U/206Pb | | 207Pb/206Pb | | 206Pb/238U | | 207Pb/235U | | 206Pb/238U | | 207Pb/206Pb | | 207Pb/235U | |
|---|----------|----------------------------------|------|----------------------------------|--------|------------|--------|-------------|--------|------------|--------|------------|------|------------|-------|-------------|------|------------|-----|
| | | Age (Ma) | 2σ% | ratio | 1σ% | ratio | 1σ% | ratio | 1σ% | ratio | 1σ% | ratio | 1σ% | Age (Ma) | 2σ% | Age (Ma) | 2σ% | Age (Ma) | 2σ% |
| 19886_2_1 | Titanite | 1140.5 | 2.5 | 5.1668 | 1.2704 | 0.0781 | 1.8902 | 2.0909 | 1.2533 | 0.1936 | 1.2638 | 1140.94 | 2.53 | 1148.56 | 6.54 | 1145.82 | 2.51 | | |
| 19886_2_2 | Titanite | | | 5.0975 | 1.9172 | 0.0781 | 1.9172 | 2.1164 | 1.2533 | 0.1961 | 1.2638 | 1154.52 | 2.53 | 1148.47 | 6.63 | 1154.17 | 2.51 | | |
| 19886_2_3 | Titanite | 1143.4 | 2.5 | 5.1493 | 1.2704 | 0.0781 | 1.9583 | 2.0947 | 1.2533 | 0.1941 | 1.2638 | 1143.67 | 2.53 | 1148.29 | 6.77 | 1147.08 | 2.51 | | |
| 19886_2_4 | Titanite | | | 5.0712 | 1.2704 | 0.0781 | 1.9321 | 2.1295 | 1.2533 | 0.1972 | 1.2638 | 1160.17 | 2.53 | 1148.49 | 6.68 | 1158.44 | 2.51 | | |
| 19886_2_5 | Titanite | 1118.3 | 2.5 | 5.2701 | 1.2704 | 0.0781 | 1.9881 | 2.0488 | 1.2533 | 0.1897 | 1.2638 | 1119.77 | 2.53 | 1148.36 | 6.88 | 1131.90 | 2.51 | | |
| 19886_2_6 | Titanite | | | 5.1227 | 0.6674 | 0.0781 | 1.8178 | 2.1079 | 1.2533 | 0.1953 | 0.7086 | 1149.82 | 1.42 | 1148.49 | 6.29 | 1151.40 | 1.42 | | |
| 19886_2_7 | Titanite | 1138.9 | 1.4 | 5.1707 | 0.6674 | 0.0781 | 1.9175 | 2.0871 | 1.2533 | 0.1933 | 0.7086 | 1139.42 | 1.42 | 1147.93 | 6.24 | 1144.59 | 1.42 | | |
| 19886_2_8 | Titanite | | | 5.0979 | 0.7184 | 0.0781 | 1.3372 | 2.0993 | 1.2533 | 0.1961 | 0.6984 | 1154.25 | 1.40 | 1148.19 | 4.63 | 1148.57 | 0.40 | | |
| 19886_2_9 | Titanite | 1133.6 | 1.4 | 5.1985 | 0.7184 | 0.0781 | 1.6473 | 2.0956 | 1.2533 | 0.1924 | 0.6984 | 1134.38 | 1.40 | 1148.15 | 5.70 | 1147.37 | 0.40 | | |
| 19886_2_10 | Titanite | 1147.4 | 1.4 | 5.1327 | 0.7184 | 0.0781 | 1.3266 | 2.1024 | 1.2533 | 0.1948 | 0.6984 | 1147.49 | 1.40 | 1148.00 | 4.59 | 1149.58 | 0.40 | | |
| 19886_2_11 | Titanite | 1142.2 | 1.4 | 5.1566 | 0.7184 | 0.0781 | 1.3443 | 2.0928 | 1.2533 | 0.1939 | 0.6984 | 1142.53 | 1.40 | 1147.94 | 4.65 | 1146.45 | 0.40 | | |
| 19886_2_12 | Titanite | 1144.2 | 1.4 | 5.1476 | 0.7184 | 0.0781 | 1.3288 | 2.0976 | 1.2533 | 0.1943 | 0.6984 | 1144.44 | 1.40 | 1148.10 | 4.60 | 1146.03 | 0.40 | | |
| Mean = 1144.4 ± 5.4, MSWD = 0.80, prob = 0.64 | | | | | | | | | | | | | | | | | | | |
| Recommended age = 1144.6 ± 6.0 Ma, unpub. ID=ICP-MS age from Roland Mass, internal std. | | | | | | | | | | | | | | | | | | | |
| 100606_2_1 | Titanite | 440.8 | 3.1 | 13.3837 | 1.5351 | 0.0979 | 2.8915 | 1.0106 | 3.0960 | 0.0747 | 1.5464 | 464.13 | 3.09 | 1584.51 | 6.82 | 709.15 | 6.19 | | |
| 100606_2_2 | Titanite | 447.1 | 3.5 | 12.1852 | 1.6646 | 0.1617 | 2.7067 | 1.8446 | 2.9076 | 0.0825 | 1.6663 | 511.26 | 3.33 | 2473.05 | 3.69 | 1061.49 | 5.82 | | |
| 100606_2_3 | Titanite | 436.8 | 2.8 | 13.9867 | 1.3662 | 0.0720 | 1.8736 | 0.7122 | 3.3227 | 0.0716 | 1.4061 | 445.56 | 2.81 | 985.09 | 7.74 | 546.06 | 4.65 | | |
| 100606_2_4 | Titanite | 438.3 | 3.5 | 13.2128 | 1.7154 | 0.1120 | 3.4065 | 1.1717 | 3.5473 | 0.0756 | 1.7126 | 469.89 | 3.43 | 1831.72 | 6.74 | 787.44 | 7.09 | | |
| 100606_2_5 | Titanite | 429.9 | 2.4 | 13.6660 | 1.1330 | 0.1029 | 2.6932 | 1.0681 | 2.6475 | 0.0733 | 1.1936 | 455.72 | 2.39 | 1677.05 | 5.93 | 732.90 | 5.30 | | |
| 100606_2_6 | Titanite | 426.6 | 1.9 | 13.6885 | 0.9138 | 0.1066 | 1.9173 | 1.0774 | 2.1214 | 0.0730 | 0.9016 | 454.43 | 1.80 | 1741.47 | 4.03 | 742.35 | 4.24 | | |
| Mean = 433.4 ± 7.8, MSWD = 1.7, prob = 0.14 | | | | | | | | | | | | | | | | | | | |
| Recommended age = 432.02 ± 0.64 Ma, Best, 2012, TIMS | | | | | | | | | | | | | | | | | | | |
| FC-3_2_1 | Titanite | 30.8 | 12.4 | 104.8682 | 2.9456 | 0.4421 | 4.7583 | 0.5829 | 4.4537 | 0.0095 | 2.9436 | 61.21 | 5.89 | 4058.28 | 3.49 | 466.32 | 8.91 | | |
| FC-3_2_2 | Titanite | 29.5 | 12.1 | 102.3345 | 2.6388 | 0.4676 | 4.0583 | 0.6315 | 3.6518 | 0.0098 | 2.8988 | 62.69 | 5.80 | 4141.40 | 2.91 | 497.05 | 7.30 | | |
| FC-3_2_3 | Titanite | 33.0 | 12.3 | 107.3037 | 3.1988 | 0.4043 | 5.4296 | 0.5228 | 4.8641 | 0.0093 | 3.3808 | 59.94 | 6.76 | 3924.66 | 4.16 | 427.04 | 9.73 | | |
| FC-3_2_4 | Titanite | 27.1 | 13.7 | 106.6751 | 2.7914 | 0.4836 | 4.4066 | 0.6269 | 3.8478 | 0.0094 | 2.9406 | 60.16 | 5.88 | 4191.18 | 3.11 | 494.16 | 7.70 | | |
| FC-3_2_5 | Titanite | 30.2 | 9.5 | 108.1491 | 2.1953 | 0.4381 | 3.7200 | 0.5692 | 3.1887 | 0.0093 | 2.1887 | 59.49 | 4.38 | 4044.68 | 2.74 | 457.47 | 6.34 | | |
| FC-3_2_6 | Titanite | 31.0 | 8.9 | 96.5686 | 1.7985 | 0.4706 | 2.9650 | 0.6738 | 2.4892 | 0.0104 | 1.8112 | 66.39 | 3.62 | 4151.10 | 2.12 | 523.00 | 4.98 | | |
| Mean = 30.2 ± 1.3 Ma, MSWD = 1.06, prob = 0.38 | | | | | | | | | | | | | | | | | | | |
| Recommended age = 28.13 ± 0.48 Ma, Daze et al., 2003, TIMS | | | | | | | | | | | | | | | | | | | |
| Dromedary_2_1 | Titanite | 98.3 | 3.1 | 63.0086 | 1.4892 | 0.0734 | 3.2589 | 0.1609 | 3.4797 | 0.0159 | 1.5209 | 101.52 | 3.04 | 1023.63 | 12.88 | 151.50 | 6.96 | | |
| Dromedary_2_2 | Titanite | 107.4 | 6.5 | 43.2538 | 2.3374 | 0.2670 | 4.4364 | 0.8554 | 4.4906 | 0.0232 | 2.5178 | 147.64 | 5.04 | 3287.70 | 4.24 | 627.60 | 8.98 | | |
| Dromedary_2_3 | Titanite | 103.7 | 4.3 | 54.2938 | 1.9459 | 0.1452 | 4.3013 | 0.3708 | 4.3859 | 0.0185 | 1.9432 | 116.01 | 3.89 | 2289.40 | 6.46 | 320.22 | 8.79 | | |
| Dromedary_2_4 | Titanite | 100.6 | 4.5 | 53.5130 | 1.9185 | 0.1754 | 3.6335 | 0.4536 | 3.6492 | 0.0187 | 2.0363 | 119.58 | 4.07 | 2609.27 | 4.64 | 379.77 | 7.30 | | |
| Dromedary_2_5 | Titanite | 99.6 | 2.5 | 58.1169 | 1.1494 | 0.1233 | 2.8079 | 0.2947 | 2.5409 | 0.0172 | 1.1884 | 109.95 | 2.34 | 2003.25 | 4.62 | 262.21 | 5.08 | | |
| Dromedary_2_6 | Titanite | 95.6 | 2.8 | 55.8903 | 1.2236 | 0.1791 | 2.4883 | 0.4433 | 2.3941 | 0.0179 | 1.2146 | 114.33 | 2.43 | 2643.55 | 3.14 | 372.58 | 4.79 | | |
| Mean = 99.1 ± 3.3 Ma, MSWD = 3.5, prob = 0.003 | | | | | | | | | | | | | | | | | | | |
| Recommended age = 98.7 ± 0.8 Ma, Khan et al., 1990 | | | | | | | | | | | | | | | | | | | |

Appendix G: U-Pb geochronology age standards

| Analysis | Mineral | 207 ^{cor} 206Pb/238U | | 207 ^{cor} 206Pb/238U | | 238U/206Pb | | 207Pb/206Pb | | 207Pb/235U | | 206Pb/238U | | 207Pb/206Pb | | 207Pb/235U | | |
|--|----------|----------------------------------|-----|----------------------------------|--------|------------|--------|-------------|--------|------------|--------|------------|------|-------------|------|------------|------|----------|
| | | Age (Ma) | 2σ% | ratio | 1σ% | ratio | 1σ% | ratio | 1σ% | ratio | 1σ% | ratio | 1σ% | Age (Ma) | 2σ% | Age (Ma) | 2σ% | Age (Ma) |
| 19686_3_1 | Titanite | | | 5.1167 | 2.0889 | 0.0778 | 1.8477 | 2.1090 | 2.0268 | 0.1953 | 2.0268 | 1150.28 | 4.05 | 1141.16 | 6.44 | 1151.74 | 4.06 | |
| 19686_3_2 | Titanite | | | 5.1629 | 2.0889 | 0.0778 | 1.8726 | 2.0914 | 2.0306 | 0.1937 | 2.0268 | 1141.62 | 4.05 | 1141.61 | 6.52 | 1145.99 | 4.06 | |
| 19686_3_3 | Titanite | | | 5.1797 | 2.0889 | 0.0780 | 1.6687 | 2.0840 | 2.0306 | 0.1930 | 2.0268 | 1137.84 | 4.05 | 1144.73 | 5.79 | 1145.56 | 4.06 | |
| 19686_3_4 | Titanite | | | 5.1649 | 2.0889 | 0.0780 | 1.8666 | 2.0900 | 2.0306 | 0.1936 | 2.0268 | 1140.83 | 4.05 | 1144.89 | 6.48 | 1145.53 | 4.06 | |
| 19686_3_5 | Titanite | | | 5.0812 | 2.0889 | 0.0781 | 1.8739 | 2.1238 | 2.0306 | 0.1967 | 2.0268 | 1157.73 | 4.05 | 1148.13 | 6.48 | 1156.59 | 4.06 | |
| 19686_3_6 | Titanite | | | 5.0706 | 2.0889 | 0.0781 | 1.8821 | 2.1275 | 2.0306 | 0.1971 | 2.0268 | 1159.56 | 4.05 | 1148.09 | 6.51 | 1157.79 | 4.06 | |
| 19686_3_7 | Titanite | | | 5.4177 | 2.0889 | 0.0782 | 1.3353 | 1.9910 | 2.0306 | 0.1845 | 2.0268 | 1091.28 | 4.05 | 1151.19 | 4.61 | 1112.45 | 4.06 | |
| 19686_3_8 | Titanite | | | 5.0552 | 2.0889 | 0.0782 | 1.8851 | 2.1349 | 2.0306 | 0.1978 | 2.0268 | 1163.31 | 4.05 | 1151.88 | 6.50 | 1160.17 | 4.06 | |
| 19686_3_9 | Titanite | | | 5.1656 | 2.0889 | 0.0784 | 1.8279 | 2.0882 | 2.0306 | 0.1934 | 2.0268 | 1139.77 | 4.05 | 1154.94 | 5.57 | 1144.93 | 4.06 | |
| 19686_3_10 | Titanite | | | 5.0522 | 2.0889 | 0.0784 | 1.8796 | 2.1355 | 2.0306 | 0.1978 | 2.0268 | 1163.64 | 4.05 | 1154.95 | 6.46 | 1160.38 | 4.06 | |
| Mean = 1144 ± 14 Ma, MSWD = 0.89, prob = 0.53 | | | | | | | | | | | | | | | | | | |
| Recommended age = 1144.8 ± 6.0 Ma, unpub. ID-MC-ICP-MS age from Roland Mass, internal std. | | | | | | | | | | | | | | | | | | |
| 100606_3_1 | Titanite | | | 13.6175 | 2.3411 | 0.1079 | 3.1850 | 1.0986 | 3.6911 | 0.0735 | 2.3047 | 457.29 | 4.61 | 1762.74 | 6.60 | 752.67 | 7.38 | |
| 100606_3_2 | Titanite | | | 13.3056 | 2.2777 | 0.0987 | 2.2246 | 1.0313 | 3.3183 | 0.0756 | 2.2700 | 469.68 | 4.54 | 1598.16 | 5.20 | 719.56 | 6.64 | |
| 100606_3_3 | Titanite | | | 13.1583 | 2.4782 | 0.1212 | 4.0635 | 1.2735 | 4.3463 | 0.0761 | 2.4289 | 472.56 | 4.86 | 1973.25 | 7.34 | 833.96 | 8.69 | |
| 100606_3_4 | Titanite | | | 13.9099 | 2.1535 | 0.0719 | 1.8256 | 0.7122 | 2.7413 | 0.0719 | 2.0953 | 447.39 | 4.19 | 981.89 | 7.57 | 546.06 | 5.48 | |
| Mean = 436.8 ± 9.0 Ma, MSWD = 0.40, prob = 0.75 | | | | | | | | | | | | | | | | | | |
| Recommended age = 432.02 ± 0.64 Ma, Best, 2012, TIMS | | | | | | | | | | | | | | | | | | |
| FC-3_3_1 | Titanite | | | 107.0533 | 3.1298 | 0.4393 | 4.1687 | 0.5692 | 4.0608 | 0.0094 | 3.1624 | 60.01 | 6.32 | 4048.57 | 3.07 | 457.47 | 8.12 | |
| FC-3_3_2 | Titanite | | | 79.8225 | 3.1510 | 0.5630 | 3.8832 | 0.9747 | 3.7544 | 0.0125 | 3.1875 | 80.12 | 6.37 | 4414.73 | 2.57 | 690.86 | 7.51 | |
| FC-3_3_3 | Titanite | | | 112.8345 | 3.2607 | 0.4468 | 4.4421 | 0.5469 | 4.4719 | 0.0089 | 3.2951 | 56.88 | 6.59 | 4074.05 | 3.25 | 442.98 | 8.94 | |
| FC-3_3_4 | Titanite | | | 91.4188 | 3.1713 | 0.5246 | 4.1227 | 0.7894 | 4.0293 | 0.0109 | 3.1439 | 70.01 | 6.29 | 4311.31 | 2.81 | 590.83 | 8.06 | |
| Mean = 28.8 ± 1.9 Ma, MSWD = 0.39, prob = 0.76 | | | | | | | | | | | | | | | | | | |
| Recommended age = 28.13 ± 0.49 Ma, Daze et al., 2003, TIMS | | | | | | | | | | | | | | | | | | |
| Dromedary_3_1 | Titanite | | | 50.4632 | 2.6977 | 0.1795 | 4.3026 | 0.4838 | 4.7459 | 0.0198 | 2.6515 | 126.65 | 5.30 | 2647.77 | 5.39 | 407.49 | 9.49 | |
| Dromedary_3_2 | Titanite | | | 55.4024 | 2.4470 | 0.1839 | 3.2115 | 0.4592 | 3.6104 | 0.0181 | 2.3954 | 115.32 | 4.79 | 2667.75 | 3.95 | 383.67 | 7.22 | |
| Dromedary_3_3 | Titanite | | | 58.4698 | 2.3908 | 0.1293 | 3.3563 | 0.3051 | 3.7922 | 0.0171 | 2.3991 | 109.21 | 4.80 | 2087.80 | 5.65 | 270.41 | 7.58 | |
| Dromedary_3_4 | Titanite | | | 55.3581 | 2.4038 | 0.1492 | 3.4010 | 0.3719 | 3.9154 | 0.0181 | 2.3515 | 115.52 | 4.70 | 2336.36 | 4.98 | 321.03 | 7.83 | |
| Mean = 99.9 ± 2.6 Ma, MSWD = 2.4, prob = 0.069 | | | | | | | | | | | | | | | | | | |
| Recommended age = 98.7 ± 0.6 Ma, Khon et al., 1990 | | | | | | | | | | | | | | | | | | |
| 19686_5_1 | Titanite | | | 5.1002 | 2.8155 | 0.0781 | 1.8562 | 2.1171 | 2.8235 | 0.1961 | 2.8139 | 1154.38 | 5.63 | 1148.92 | 6.42 | 1154.41 | 5.65 | |
| 19686_5_2 | Titanite | | | 5.1951 | 2.8155 | 0.0781 | 1.8663 | 2.0785 | 2.8235 | 0.1925 | 2.8139 | 1135.10 | 5.63 | 1149.26 | 6.45 | 1141.76 | 5.65 | |
| 19686_5_3 | Titanite | | | 5.0414 | 2.8155 | 0.0782 | 1.8565 | 2.1389 | 2.8235 | 0.1981 | 2.8139 | 1165.06 | 5.63 | 1151.73 | 6.40 | 1161.46 | 5.65 | |
| 19686_5_4 | Titanite | | | 5.2596 | 2.8155 | 0.0782 | 2.1157 | 2.0502 | 2.8235 | 0.1900 | 2.8139 | 1121.24 | 5.63 | 1151.06 | 7.30 | 1132.35 | 5.65 | |
| 19686_5_5 | Titanite | | | 4.9464 | 2.8155 | 0.0781 | 1.8598 | 2.1803 | 2.8235 | 0.2019 | 2.8139 | 1185.78 | 5.63 | 1148.34 | 6.43 | 1174.76 | 5.65 | |
| 19686_5_6 | Titanite | | | 5.3374 | 2.8155 | 0.0781 | 1.1266 | 2.0202 | 2.8235 | 0.1871 | 2.8139 | 1105.85 | 5.63 | 1148.03 | 3.90 | 1122.34 | 5.65 | |
| 19686_5_7 | Titanite | | | 5.1407 | 0.7673 | 0.0781 | 1.2718 | 2.0998 | 0.7638 | 0.1945 | 0.7580 | 1145.77 | 1.52 | 1147.59 | 4.40 | 1148.75 | 1.53 | |
| 19686_5_8 | Titanite | | | 5.1654 | 0.7673 | 0.0781 | 1.2748 | 2.0899 | 0.7638 | 0.1936 | 0.7580 | 1140.87 | 1.52 | 1147.36 | 4.41 | 1145.50 | 1.53 | |
| 19686_5_9 | Titanite | | | 5.0765 | 0.7673 | 0.0778 | 1.2679 | 2.1261 | 0.7638 | 0.1969 | 0.7580 | 1158.78 | 1.52 | 1142.14 | 4.41 | 1157.33 | 1.53 | |
| 19686_5_10 | Titanite | | | 5.1923 | 0.7673 | 0.0778 | 1.2824 | 2.0791 | 0.7638 | 0.1926 | 0.7580 | 1135.39 | 1.52 | 1142.07 | 4.46 | 1141.93 | 1.53 | |
| 19686_5_11 | Titanite | | | 5.1629 | 0.7673 | 0.0782 | 1.2649 | 2.0915 | 0.7638 | 0.1937 | 0.7580 | 1141.65 | 1.52 | 1150.01 | 4.37 | 1146.01 | 1.53 | |
| 19686_5_12 | Titanite | | | 5.1423 | 0.7673 | 0.0782 | 1.2573 | 2.0988 | 0.7638 | 0.1944 | 0.7580 | 1145.25 | 1.52 | 1150.12 | 4.34 | 1148.40 | 1.53 | |
| Mean = 1144.4 ± 6.7 Ma, MSWD = 0.75, prob = 0.69 | | | | | | | | | | | | | | | | | | |
| Recommended age = 1144.8 ± 6.0 Ma, unpub. ID-MC-ICP-MS age from Roland Mass, internal std. | | | | | | | | | | | | | | | | | | |

Appendix G: U-Pb geochronology age standards

| Analysis | Mineral | 207 ^{cor} 206Pb/238U | | 207 ^{cor} 206Pb/238U | | 238U/206Pb | | 207Pb/206Pb | | 206Pb/238U | | 207Pb/235U | | 206Pb/238U | | 207Pb/206Pb | | 207Pb/235U | |
|--|----------|----------------------------------|------|----------------------------------|--------|------------|--------|-------------|--------|------------|--------|------------|----------|------------|----------|-------------|----------|------------|----------|
| | | Age (Ma) | 2σ% | Age (Ma) | 2σ% | ratio | 1σ% | ratio | 1σ% | ratio | 1σ% | 1σ% | Age (Ma) | 2σ% | Age (Ma) | 2σ% | Age (Ma) | 2σ% | Age (Ma) |
| 100606_5_1 | Titanite | 438.2 | 5.7 | 13.7120 | 2.8987 | 0.0849 | 2.2478 | 0.8551 | 3.6461 | 0.0730 | 2.9182 | 454.06 | 5.84 | 1312.19 | 6.65 | 627.42 | 7.29 | | |
| 100606_5_2 | Titanite | 435.9 | 5.8 | 13.4772 | 2.9486 | 0.1013 | 2.6803 | 1.0370 | 3.9095 | 0.0741 | 2.9576 | 461.05 | 5.92 | 1647.97 | 6.03 | 722.41 | 7.82 | | |
| 100606_5_3 | Titanite | 445.3 | 5.9 | 13.3741 | 2.9762 | 0.0904 | 3.1310 | 0.9320 | 4.1815 | 0.0747 | 2.9910 | 464.38 | 5.98 | 1432.20 | 8.34 | 668.67 | 8.36 | | |
| 100606_5_4 | Titanite | 428.6 | 1.7 | 14.0618 | 0.8795 | 0.0824 | 1.4702 | 0.8119 | 1.7479 | 0.0711 | 0.8746 | 442.89 | 1.75 | 1254.36 | 4.58 | 603.53 | 3.50 | | |
| 100606_5_5 | Titanite | 438.7 | 2.2 | 13.3694 | 1.0264 | 0.1038 | 2.0730 | 1.0766 | 2.1860 | 0.0749 | 1.0623 | 465.38 | 2.12 | 1692.08 | 4.52 | 741.96 | 4.37 | | |
| 100606_5_6 | Titanite | 427.7 | 1.7 | 14.2082 | 0.8577 | 0.0759 | 1.2691 | 0.7402 | 1.4989 | 0.0704 | 0.8527 | 438.48 | 1.71 | 1090.93 | 4.66 | 562.51 | 2.99 | | |
| Mean = 431.4 ± 4.3 Ma, MSWD = 1.10, prob = 0.36 Recommended age = 432.02 ± 0.84 Ma, Best, 2012; TMS | | | | | | | | | | | | | | | | | | | |
| FC-3_5_1 | Titanite | 27.9 | 12.1 | 115.3344 | 3.6582 | 0.4416 | 4.1774 | 0.5286 | 4.5411 | 0.0086 | 3.6967 | 55.51 | 7.39 | 4056.48 | 3.07 | 430.91 | 9.08 | | |
| FC-3_5_2 | Titanite | 28.5 | 12.9 | 107.2454 | 3.6661 | 0.4627 | 4.1299 | 0.5960 | 4.4921 | 0.0093 | 3.7563 | 59.88 | 7.51 | 4125.98 | 2.97 | 474.67 | 8.98 | | |
| FC-3_5_3 | Titanite | 31.4 | 10.0 | 84.2716 | 1.7961 | 0.5133 | 2.7559 | 0.8444 | 2.5421 | 0.0119 | 1.7938 | 76.00 | 3.59 | 4279.07 | 1.89 | 621.59 | 5.08 | | |
| FC-3_5_4 | Titanite | 25.7 | 7.7 | 127.7949 | 1.8158 | 0.4351 | 2.9583 | 0.4721 | 2.7090 | 0.0078 | 1.8128 | 50.31 | 3.63 | 4034.46 | 2.19 | 392.65 | 5.42 | | |
| FC-3_5_5 | Titanite | 27.3 | 8.3 | 109.6096 | 1.7430 | 0.4701 | 2.7379 | 0.5945 | 2.4374 | 0.0091 | 1.7403 | 58.56 | 3.48 | 4149.54 | 1.96 | 473.73 | 4.87 | | |
| Mean = 27.5 ± 2.6 Ma, MSWD = 2.5, prob = 0.04 Recommended age = 28.13 ± 0.48 Ma, Daze et al., 2003; TMS | | | | | | | | | | | | | | | | | | | |
| Dromedary_5_1 | Titanite | 97.1 | 5.9 | 61.2091 | 2.9475 | 0.1044 | 2.6967 | 0.2354 | 3.8808 | 0.0163 | 2.9476 | 104.43 | 5.90 | 1703.74 | 5.83 | 214.67 | 7.76 | | |
| Dromedary_5_2 | Titanite | 97.6 | 5.8 | 62.8545 | 2.9145 | 0.0797 | 2.6656 | 0.1749 | 3.8416 | 0.0159 | 2.9149 | 101.66 | 5.83 | 1188.14 | 8.86 | 163.66 | 7.68 | | |
| Dromedary_5_3 | Titanite | 96.9 | 4.0 | 49.6177 | 1.4424 | 0.2464 | 3.1956 | 0.6889 | 2.7663 | 0.0202 | 1.4524 | 128.71 | 2.90 | 3161.24 | 3.21 | 532.15 | 5.53 | | |
| Dromedary_5_4 | Titanite | 100.2 | 3.2 | 55.4483 | 1.3955 | 0.1528 | 3.3363 | 0.3871 | 3.2781 | 0.0180 | 1.4226 | 115.28 | 2.85 | 2377.03 | 4.78 | 332.25 | 6.56 | | |
| Dromedary_5_5 | Titanite | 97.2 | 2.0 | 62.7733 | 0.9910 | 0.0858 | 2.0950 | 0.1894 | 2.3290 | 0.0160 | 0.9923 | 102.03 | 1.98 | 1332.27 | 6.08 | 176.11 | 4.66 | | |
| Mean = 97.8 ± 1.4 Ma, MSWD = 0.72, prob = 0.68 Recommended age = 98.7 ± 0.6 Ma, Kohn et al., 1990 | | | | | | | | | | | | | | | | | | | |

Appendix G: U-Pb geochronology age standards

| Analysis | Mineral | Pref. Age (Ma) | 207Pb/206Pb U (Ma) | 207Pb/206Pb U (calc) | 207Pb/235 U (calc) | 208Pb/238 U ratio | 208Pb/238 U ratio | 1s% | 1s% | 1s% | 1s% | 207Pb/206Pb b ratio | 238U/206Pb b ratio | 207Pb/235 U (calc) | 208Pb/238 U ratio | 208Pb/238 U ratio | Age (Ma) | 2s% | 207Pb/206Pb b Age (Ma) | 207Pb/235 U (calc) | 207Pb/235 U (calc) | Age (Ma) | 2s% | 207Pb/235 U (calc) | 207Pb/235 U (calc) | Age (Ma) | 2s% | | | | | | |
|---|---------|----------------|--------------------|----------------------|--------------------|-------------------|-------------------|--------|--------|----------|------|---------------------|--------------------|--------------------|-------------------|-------------------|----------|-----|------------------------|--------------------|--------------------|----------|-----|--------------------|--------------------|----------|-----|--|--|--|--|--|--|
| R10_1.1 | Rutile | 1134.0 | 1.7 | 0.7907 | 1.3689 | 2.0176 | 1.8719 | 0.1923 | 0.8385 | 1.133.99 | 1.68 | 1116.53 | 4.89 | 1121.44 | 3.74 | | | | | | | | | | | | | | | | | | |
| R10_1.2 | Rutile | 1112.4 | 1.8 | 0.9535 | 1.4096 | 1.9270 | 1.8976 | 0.1884 | 0.9061 | 1112.44 | 1.81 | 1063.68 | 5.33 | 1090.51 | 3.80 | | | | | | | | | | | | | | | | | | |
| R10_1.3 | Rutile | 1094.0 | 2.2 | 1.1840 | 1.5955 | 1.9078 | 1.5955 | 0.1850 | 1.0939 | 1094.04 | 2.19 | 1056.36 | 3.84 | 1083.80 | 3.19 | | | | | | | | | | | | | | | | | | |
| R10_1.4 | Rutile | 1093.6 | 2.2 | 1.1925 | 1.6148 | 1.9379 | 1.6148 | 0.1849 | 1.1223 | 1093.57 | 2.24 | 1092.96 | 3.70 | 1094.29 | 3.23 | | | | | | | | | | | | | | | | | | |
| R10_1.5 | Rutile | 1089.9 | 2.2 | 1.1973 | 1.6066 | 1.9107 | 1.5802 | 0.1842 | 1.1096 | 1089.92 | 2.22 | 1070.21 | 3.78 | 1084.84 | 3.16 | | | | | | | | | | | | | | | | | | |
| R10_1.6 | Rutile | 1099.0 | 2.3 | 1.2241 | 1.6877 | 1.9130 | 1.6877 | 0.1859 | 1.1343 | 1099.00 | 2.27 | 1057.16 | 4.39 | 1085.64 | 3.38 | | | | | | | | | | | | | | | | | | |
| R10_1.7 | Rutile | 1087.2 | 2.1 | 1.1657 | 1.6061 | 1.9374 | 1.5410 | 0.1839 | 1.0945 | 1088.14 | 2.19 | 1107.00 | 3.63 | 1094.09 | 3.08 | | | | | | | | | | | | | | | | | | |
| R10_1.8 | Rutile | 1096.5 | 2.3 | 1.2132 | 1.6897 | 1.9462 | 1.5156 | 0.1854 | 1.1279 | 1096.51 | 2.26 | 1096.42 | 3.61 | 1097.14 | 3.03 | | | | | | | | | | | | | | | | | | |
| <p>Mean = 1083 ± 15 Ma, MSWD = 1.07, prob = 0.38 Recommended age = 1091.6 ± 3.5 Ma, Luvizotto et al., 2009; TIMS</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| R19_1.1 | Rutile | 502.3 | 2.5 | 1.2341 | 4.5527 | 0.5946 | 4.4707 | 0.0810 | 1.2565 | 502.26 | 2.51 | 353.74 | 58.14 | 473.83 | 8.94 | | | | | | | | | | | | | | | | | | |
| R19_1.2 | Rutile | 500.8 | 2.5 | 1.2286 | 4.0689 | 0.6442 | 4.1538 | 0.0809 | 1.2502 | 501.46 | 2.50 | 540.93 | 32.89 | 504.88 | 8.31 | | | | | | | | | | | | | | | | | | |
| R19_1.3 | Rutile | 474.8 | 3.0 | 1.3046 | 3.7269 | 0.6472 | 3.7863 | 0.0767 | 1.5176 | 476.61 | 3.04 | 593.73 | 27.21 | 506.73 | 7.57 | | | | | | | | | | | | | | | | | | |
| R19_1.4 | Rutile | 478.7 | 2.6 | 1.2899 | 3.9228 | 0.6421 | 3.1994 | 0.0774 | 1.3218 | 480.67 | 2.64 | 608.68 | 21.36 | 503.64 | 6.40 | | | | | | | | | | | | | | | | | | |
| R19_1.5 | Rutile | 474.0 | 2.7 | 1.3067 | 3.6555 | 0.5915 | 3.1409 | 0.0763 | 1.3254 | 473.98 | 2.65 | 459.29 | 28.60 | 471.86 | 6.28 | | | | | | | | | | | | | | | | | | |
| R19_1.6 | Rutile | 488.2 | 2.6 | 1.2596 | 3.9211 | 0.6099 | 3.1177 | 0.0753 | 1.3214 | 468.16 | 2.64 | 521.41 | 24.58 | 477.82 | 6.24 | | | | | | | | | | | | | | | | | | |
| R19_1.7 | Rutile | 473.3 | 2.7 | 1.3121 | 3.4443 | 0.6212 | 3.4443 | 0.0762 | 1.3577 | 473.30 | 2.72 | 572.81 | 23.47 | 490.60 | 6.69 | | | | | | | | | | | | | | | | | | |
| R19_1.8 | Rutile | 488.5 | 2.7 | 1.4227 | 3.2338 | 0.6162 | 3.4933 | 0.0787 | 1.3529 | 488.47 | 2.71 | 462.85 | 30.96 | 487.47 | 6.88 | | | | | | | | | | | | | | | | | | |
| <p>Mean = 483 ± 11 Ma, MSWD = 4.3, prob = 0.00 Recommended age = 489.5 ± 0.9 Ma, Zack et al., 2011, TIMS</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| TB-1_1.1 | Rutile | 511.5 | 0.2 | 12.0972 | 1.7722 | 0.6557 | 0.0000 | 0.0827 | 0.0000 | 512.00 | 0.00 | 539.93 | 14.36 | 512.00 | 0.00 | | | | | | | | | | | | | | | | | | |
| TB-1_1.2 | Rutile | 510.3 | 2.0 | 12.0972 | 2.1539 | 0.6576 | 0.0000 | 0.0827 | 0.0000 | 512.00 | 0.00 | 511.97 | 18.49 | 508.82 | 2.13 | | | | | | | | | | | | | | | | | | |
| TB-1_1.3 | Rutile | 510.3 | 2.0 | 12.2095 | 1.0879 | 0.6506 | 1.0633 | 0.0824 | 0.9922 | 510.33 | 1.98 | 512.74 | 18.79 | 508.82 | 2.13 | | | | | | | | | | | | | | | | | | |
| TB-1_1.4 | Rutile | 511.9658 | 1.0879 | 1.6289 | 0.6609 | 0.6575 | 1.6289 | 0.0831 | 0.9922 | 514.67 | 1.98 | 510.89 | 14.01 | 515.18 | 2.13 | | | | | | | | | | | | | | | | | | |
| TB-1_1.5 | Rutile | 507.1 | 1.9 | 11.9731 | 1.0879 | 0.6575 | 1.5292 | 0.0833 | 0.9922 | 515.86 | 1.98 | 510.96 | 13.15 | 516.02 | 2.13 | | | | | | | | | | | | | | | | | | |
| TB-1_1.6 | Rutile | 509.5 | 2.0 | 12.2065 | 1.0879 | 0.6576 | 1.2301 | 0.0819 | 0.9922 | 507.21 | 1.98 | 511.92 | 10.56 | 508.34 | 2.13 | | | | | | | | | | | | | | | | | | |
| TB-1_1.7 | Rutile | 507.0 | 1.9 | 12.1532 | 1.0879 | 0.6576 | 1.6639 | 0.0823 | 0.9922 | 509.59 | 1.98 | 511.80 | 14.29 | 510.06 | 2.13 | | | | | | | | | | | | | | | | | | |
| TB-1_1.8 | Rutile | 507.0 | 1.9 | 12.2209 | 1.0879 | 0.6576 | 1.4163 | 0.0818 | 0.9922 | 507.09 | 1.98 | 513.25 | 12.12 | 508.13 | 2.13 | | | | | | | | | | | | | | | | | | |
| TB-1_1.9 | Rutile | 511.9658 | 1.0879 | 1.4458 | 0.6575 | 0.6524 | 1.0633 | 0.0823 | 0.9922 | 510.01 | 1.98 | 509.67 | 12.47 | 509.96 | 2.13 | | | | | | | | | | | | | | | | | | |
| TB-1_1.10 | Rutile | 511.9658 | 1.0879 | 1.2653 | 0.6575 | 0.6575 | 1.2653 | 0.0842 | 0.9922 | 521.23 | 1.98 | 511.60 | 10.87 | 519.42 | 2.13 | | | | | | | | | | | | | | | | | | |
| <p>Mean = 511.9 ± 3.5 Ma, MSWD = 0.91, prob = 0.50 Recommended age = 512.6 ± 3.9 Ma, Internal Standard, University of Tasmania</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| R10_2.1 | Rutile | 1103.6 | 2.9 | 5.3456 | 1.4963 | 0.781 | 1.3759 | 0.1871 | 1.4835 | 1105.79 | 2.97 | 1148.94 | 4.76 | 1120.20 | 4.26 | | | | | | | | | | | | | | | | | | |
| R10_2.2 | Rutile | 1119.9 | 3.0 | 5.2695 | 1.5042 | 0.761 | 1.5844 | 0.1897 | 1.4867 | 1119.90 | 2.97 | 1098.00 | 5.77 | 1112.38 | 4.31 | | | | | | | | | | | | | | | | | | |
| R10_2.3 | Rutile | 1117.9 | 2.9 | 5.2729 | 1.5244 | 0.777 | 1.3663 | 0.1896 | 1.5127 | 1118.95 | 3.03 | 1138.64 | 4.77 | 1125.60 | 4.11 | | | | | | | | | | | | | | | | | | |
| R10_2.4 | Rutile | 1089.0 | 5.8 | 5.4224 | 2.8948 | 0.777 | 1.3039 | 0.1840 | 2.8985 | 1089.01 | 5.80 | 1080.27 | 3.83 | 1095.00 | 5.54 | | | | | | | | | | | | | | | | | | |
| R10_2.5 | Rutile | 1100.3 | 5.8 | 5.3620 | 2.8948 | 0.760 | 1.0117 | 0.1861 | 2.8966 | 1100.31 | 5.77 | 1062.98 | 3.71 | 1097.08 | 5.48 | | | | | | | | | | | | | | | | | | |
| R10_2.6 | Rutile | 1104.4 | 5.8 | 5.3395 | 2.8735 | 0.764 | 1.0265 | 0.1869 | 2.8796 | 1104.45 | 5.76 | 1103.48 | 3.72 | 1103.66 | 5.49 | | | | | | | | | | | | | | | | | | |
| R10_2.7 | Rutile | 1096.8 | 5.8 | 5.3789 | 2.8925 | 0.746 | 1.0429 | 0.1855 | 2.8978 | 1096.80 | 5.80 | 1055.82 | 3.98 | 1082.89 | 5.50 | | | | | | | | | | | | | | | | | | |
| R10_2.8 | Rutile | 1093.4 | 5.8 | 5.3981 | 2.8812 | 0.744 | 1.0571 | 0.1849 | 2.8856 | 1093.42 | 5.77 | 1052.09 | 4.05 | 1079.35 | 5.51 | | | | | | | | | | | | | | | | | | |
| R10_2.9 | Rutile | 1090.7 | 5.6 | 5.4128 | 2.9053 | 0.762 | 1.1579 | 0.1844 | 2.9067 | 1091.21 | 5.81 | 1100.51 | 4.21 | 1096.54 | 5.57 | | | | | | | | | | | | | | | | | | |
| R10_2.10 | Rutile | 1097.6 | 5.8 | 5.3761 | 2.9157 | 0.757 | 1.0373 | 0.1856 | 2.9107 | 1097.65 | 5.82 | 1087.38 | 3.82 | 1093.66 | 5.65 | | | | | | | | | | | | | | | | | | |
| <p>Mean = 1107 ± 14, MSWD = 0.24, prob = 0.99 Recommended age = 1091.6 ± 3.5 Ma, Luvizotto et al., 2009; TIMS</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Appendix G: U-Pb geochronology age standards

| Analysis | Mineral | Pref. Age (Ma) | Pref. Age (Ma) 2σ | 207cor 206Pb/238 U | 206Pb/238 U | 238U/206Pb b | ratio | 1σ | 207Pb/206Pb b | ratio | 1σ | 207Pb/235 U (calc) | ratio | 1σ | 206Pb/238 U | ratio | 1σ | 207Pb/235 U (calc) | ratio | 1σ | 206Pb/238 U | Age (Ma) | 2σ | 207Pb/235 U (calc) | Age (Ma) | 2σ | |
|--|---------|----------------|-------------------|--------------------|-------------|--------------|--------|--------|---------------|--------|--------|--------------------|--------|--------|-------------|--------|---------|--------------------|---------|------|-------------|----------|-------|--------------------|----------|------|---|
| R19_2_1 | Rutile | 489.6 | 3.7 | 489.6 | 3.7 | 12.5920 | 1.8400 | 0.0620 | 4.1451 | 0.6779 | 4.3078 | 14.899 | 0.0794 | 1.8582 | 492.55 | 3.72 | 671.84 | 26.39 | 525.53 | 8.62 | 29.8 | 525.53 | 26.39 | 525.53 | 8.62 | 29.8 | |
| R19_2_2 | Rutile | 543.1 | 7.3 | 485.1 | 3.8 | 11.3807 | 3.7325 | 0.0584 | 14.5138 | 0.7079 | 14.899 | 0.0879 | 3.6419 | 543.11 | 7.28 | 543.03 | 116.83 | 543.03 | 543.50 | 0 | 0 | 543.50 | 0 | 543.50 | 0 | 29.8 | |
| R19_2_3 | Rutile | 485.1 | 3.8 | 485.1 | 3.8 | 12.7649 | 1.8452 | 0.0592 | 4.0941 | 0.6394 | 4.2871 | 0.6394 | 0.0784 | 1.8958 | 486.47 | 3.79 | 573.99 | 31.02 | 501.90 | 8.53 | 0 | 501.90 | 31.02 | 501.90 | 8.53 | 0 | |
| R19_2_4 | Rutile | 487.7 | 5.9 | 487.7 | 5.9 | 12.6989 | 2.9826 | 0.0576 | 3.8945 | 0.6234 | 3.9722 | 0.6234 | 0.0787 | 2.9867 | 488.11 | 5.97 | 514.56 | 28.72 | 492.01 | 7.94 | 0 | 492.01 | 28.72 | 492.01 | 7.94 | 0 | |
| R19_2_5 | Rutile | 478.5 | 5.8 | 478.5 | 5.8 | 12.8718 | 2.9697 | 0.0613 | 2.8600 | 0.6537 | 3.7875 | 0.6537 | 0.0775 | 2.9739 | 481.16 | 5.95 | 647.62 | 19.17 | 510.75 | 7.58 | 0 | 510.75 | 19.17 | 510.75 | 7.58 | 0 | |
| R19_2_6 | Rutile | 483.3 | 6.0 | 483.3 | 6.0 | 12.8182 | 2.9847 | 0.0562 | 3.1980 | 0.6024 | 4.1057 | 0.6024 | 0.0779 | 3.0029 | 483.35 | 6.01 | 458.37 | 30.94 | 478.73 | 8.21 | 0 | 478.73 | 30.94 | 478.73 | 8.21 | 0 | |
| R19_2_7 | Rutile | 481.2 | 6.0 | 481.2 | 6.0 | 12.8952 | 3.0446 | 0.0623 | 3.9042 | 0.6275 | 4.0055 | 0.6275 | 0.0808 | 3.0488 | 484.37 | 6.10 | 682.91 | 24.41 | 0.00 | 0.00 | 0.00 | 0.00 | 24.41 | 0.00 | 0.00 | 0.00 | 0 |
| R19_2_8 | Rutile | 501.1 | 6.0 | 495.5 | 5.9 | 12.3438 | 2.9816 | 0.0564 | 3.1732 | 0.6394 | 3.8820 | 0.6394 | 0.0800 | 2.9657 | 501.09 | 5.97 | 465.38 | 30.20 | 484.53 | 8.01 | 0 | 484.53 | 30.20 | 484.53 | 8.01 | 0 | |
| R19_2_9 | Rutile | 495.5 | 5.9 | 495.5 | 5.9 | 12.4692 | 2.9710 | 0.0580 | 3.0572 | 0.6394 | 3.8820 | 0.6394 | 0.0800 | 2.9989 | 496.09 | 6.00 | 530.23 | 25.26 | 501.96 | 7.76 | 0 | 501.96 | 25.26 | 501.96 | 7.76 | 0 | |
| R19_2_10 | Rutile | 483.1 | 5.9 | 483.1 | 5.9 | 12.8115 | 2.9666 | 0.0567 | 2.9518 | 0.6076 | 3.8373 | 0.6076 | 0.0778 | 2.9698 | 483.14 | 5.94 | 477.57 | 27.32 | 482.06 | 7.67 | 0 | 482.06 | 27.32 | 482.06 | 7.67 | 0 | |
| <p>Mean = 489.5 ± 8.0, MSWD = 1.08, prob = 0.38</p> <p>Recommended age = 489.5 ± 0.9 Ma, Zack et al., 2011, TIMS</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| TB-1_2_1 | Rutile | 503.6 | 2.6 | 503.6 | 2.6 | 12.3025 | 1.3530 | 0.0576 | 1.9122 | 0.6447 | 1.3466 | 0.6447 | 0.0813 | 1.3351 | 503.79 | 2.67 | 512.00 | 16.41 | 505.19 | 2.69 | 0 | 505.19 | 16.41 | 505.19 | 2.69 | 0 | |
| TB-1_2_2 | Rutile | 503.6 | 2.6 | 503.6 | 2.6 | 11.9343 | 1.3530 | 0.0576 | 2.0992 | 0.6648 | 1.3466 | 0.6648 | 0.0833 | 1.3351 | 518.68 | 2.67 | 512.80 | 17.22 | 517.52 | 2.89 | 0 | 517.52 | 17.22 | 517.52 | 2.89 | 0 | |
| TB-1_2_3 | Rutile | 507.2 | 2.6 | 507.2 | 2.6 | 12.0029 | 1.3530 | 0.0576 | 2.2296 | 0.6605 | 1.3466 | 0.6605 | 0.0819 | 1.3466 | 515.56 | 2.67 | 512.09 | 19.13 | 514.91 | 2.69 | 0 | 514.91 | 19.13 | 514.91 | 2.69 | 0 | |
| TB-1_2_4 | Rutile | 507.2 | 2.6 | 507.2 | 2.6 | 12.2125 | 1.3514 | 0.0576 | 2.0857 | 0.6481 | 1.3466 | 0.6481 | 0.0819 | 1.3466 | 507.33 | 2.69 | 512.67 | 17.64 | 507.28 | 2.69 | 0 | 507.28 | 17.64 | 507.28 | 2.69 | 0 | |
| TB-1_2_5 | Rutile | 507.2 | 2.6 | 507.2 | 2.6 | 11.9820 | 1.3514 | 0.0576 | 1.8007 | 0.6807 | 1.3466 | 0.6807 | 0.0834 | 1.3466 | 516.67 | 2.69 | 512.63 | 15.43 | 515.04 | 2.69 | 0 | 515.04 | 15.43 | 515.04 | 2.69 | 0 | |
| TB-1_2_6 | Rutile | 507.2 | 2.6 | 507.2 | 2.6 | 12.0363 | 2.8466 | 0.0576 | 1.2849 | 0.6565 | 2.5272 | 0.6565 | 0.0829 | 2.8499 | 513.55 | 5.70 | 511.92 | 11.03 | 512.47 | 5.05 | 0 | 512.47 | 11.03 | 512.47 | 5.05 | 0 | |
| TB-1_2_7 | Rutile | 507.2 | 2.6 | 507.2 | 2.6 | 11.6255 | 2.8466 | 0.0576 | 1.6145 | 0.6796 | 2.5272 | 0.6796 | 0.0859 | 2.8499 | 530.96 | 5.70 | 511.73 | 13.87 | 526.56 | 5.05 | 0 | 526.56 | 13.87 | 526.56 | 5.05 | 0 | |
| TB-1_2_8 | Rutile | 507.2 | 2.6 | 507.2 | 2.6 | 11.7979 | 2.8466 | 0.0576 | 1.4556 | 0.6704 | 2.5272 | 0.6704 | 0.0846 | 2.8499 | 523.77 | 5.70 | 512.32 | 12.48 | 520.97 | 5.05 | 0 | 520.97 | 12.48 | 520.97 | 5.05 | 0 | |
| TB-1_2_9 | Rutile | 507.2 | 2.6 | 507.2 | 2.6 | 12.3600 | 2.8466 | 0.0575 | 1.5630 | 0.6401 | 2.5272 | 0.6401 | 0.0808 | 2.8499 | 501.02 | 5.70 | 511.59 | 13.43 | 502.35 | 5.05 | 0 | 502.35 | 13.43 | 502.35 | 5.05 | 0 | |
| TB-1_2_10 | Rutile | 507.2 | 2.6 | 507.2 | 2.6 | 12.5145 | 2.8466 | 0.0576 | 1.5359 | 0.6323 | 2.5272 | 0.6323 | 0.0798 | 2.8499 | 494.90 | 5.70 | 512.18 | 13.18 | 497.54 | 5.05 | 0 | 497.54 | 13.18 | 497.54 | 5.05 | 0 | |
| TB-1_2_11 | Rutile | 507.2 | 2.6 | 507.2 | 2.6 | 12.5145 | 2.8466 | 0.0576 | 2.3883 | 0.6317 | 2.5272 | 0.6317 | 0.0797 | 2.8499 | 494.29 | 5.70 | 511.86 | 20.50 | 497.16 | 5.05 | 0 | 497.16 | 20.50 | 497.16 | 5.05 | 0 | |
| TB-1_2_12 | Rutile | 507.2 | 2.6 | 507.2 | 2.6 | 12.6850 | 2.8466 | 0.0575 | 2.2455 | 0.6427 | 2.5272 | 0.6427 | 0.0790 | 2.8499 | 489.95 | 5.70 | 510.77 | 19.32 | 503.97 | 5.05 | 0 | 503.97 | 19.32 | 503.97 | 5.05 | 0 | |
| TB-1_2_13 | Rutile | 507.2 | 2.6 | 507.2 | 2.6 | 11.7193 | 2.8466 | 0.0576 | 1.4675 | 0.6782 | 2.5272 | 0.6782 | 0.0855 | 2.8499 | 529.14 | 5.70 | 512.56 | 12.58 | 525.68 | 5.05 | 0 | 525.68 | 12.58 | 525.68 | 5.05 | 0 | |
| TB-1_2_14 | Rutile | 507.2 | 2.6 | 507.2 | 2.6 | 11.7967 | 2.8466 | 0.0576 | 1.1587 | 0.6706 | 2.5272 | 0.6706 | 0.0846 | 2.8499 | 523.28 | 5.70 | 512.17 | 9.94 | 521.07 | 5.05 | 0 | 521.07 | 9.94 | 521.07 | 5.05 | 0 | |
| TB-1_2_15 | Rutile | 507.2 | 2.6 | 507.2 | 2.6 | 11.9079 | 2.8466 | 0.0576 | 2.7099 | 0.6614 | 2.5272 | 0.6614 | 0.0844 | 2.8499 | 522.58 | 5.70 | 512.63 | 23.23 | 515.47 | 5.05 | 0 | 515.47 | 23.23 | 515.47 | 5.05 | 0 | |
| TB-1_2_16 | Rutile | 507.2 | 2.6 | 507.2 | 2.6 | 12.1679 | 2.8466 | 0.0576 | 1.2530 | 0.6502 | 2.5272 | 0.6502 | 0.0820 | 2.8499 | 508.10 | 5.70 | 512.19 | 10.75 | 508.59 | 5.05 | 0 | 508.59 | 10.75 | 508.59 | 5.05 | 0 | |
| TB-1_2_17 | Rutile | 507.2 | 2.6 | 507.2 | 2.6 | 12.2430 | 2.8466 | 0.0576 | 1.5190 | 0.6461 | 2.5272 | 0.6461 | 0.0815 | 2.8499 | 505.13 | 5.70 | 511.82 | 13.04 | 506.08 | 5.05 | 0 | 506.08 | 13.04 | 506.08 | 5.05 | 0 | |
| TB-1_2_18 | Rutile | 507.2 | 2.6 | 507.2 | 2.6 | 11.8954 | 2.8466 | 0.0576 | 1.3100 | 0.6647 | 2.5272 | 0.6647 | 0.0839 | 2.8499 | 519.14 | 5.70 | 512.12 | 11.24 | 517.49 | 5.05 | 0 | 517.49 | 11.24 | 517.49 | 5.05 | 0 | |
| <p>Mean = 511.9 ± 4.8, MSWD = 0.87, prob = 0.61</p> <p>Recommended age = 512.6 ± 3.9 Ma, Internal standard, University of Tasmania</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| R10_3_1 | Rutile | 1069.8 | 6.9 | 1069.8 | 6.9 | 5.5294 | 3.5497 | 0.0758 | 1.0591 | 1.8889 | 3.7103 | 1.8889 | 0.1807 | 3.5634 | 1070.76 | 7.17 | 1089.67 | 3.89 | 1077.19 | 7.42 | 0 | 1077.19 | 3.89 | 1077.19 | 7.42 | 0 | |
| R10_3_2 | Rutile | 1073.0 | 6.9 | 1073.0 | 6.9 | 5.5015 | 3.5218 | 0.0770 | 1.0023 | 1.9248 | 3.6909 | 1.9248 | 0.1815 | 3.5657 | 1075.18 | 7.13 | 1121.30 | 3.56 | 1089.74 | 7.36 | 0 | 1089.74 | 3.56 | 1089.74 | 7.36 | 0 | |
| R10_3_3 | Rutile | 1087.9 | 7.1 | 1087.9 | 7.1 | 5.4334 | 3.5255 | 0.0752 | 1.0623 | 1.9035 | 3.6892 | 1.9035 | 0.1838 | 3.5747 | 1087.86 | 7.15 | 1074.11 | 3.97 | 1082.31 | 7.38 | 0 | 1082.31 | 3.97 | 1082.31 | 7.38 | 0 | |
| R10_3_4 | Rutile | 1094.5 | 6.9 | 1094.5 | 6.9 | 5.3930 | 3.5158 | 0.0771 | 0.9862 | 1.9692 | 3.6918 | 1.9692 | 0.1853 | 3.5619 | 1095.84 | 7.12 | 1123.17 | 3.50 | 1105.04 | 7.38 | 0 | 1105.04 | 3.50 | 1105.04 | 7.38 | 0 | |
| <p>Mean = 1081 ± 37 Ma, MSWD = 0.099, prob = 0.96</p> <p>Recommended age = 1091.6 ± 3.5 Ma, Luvizotto et al., 2009, TIMS</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| R19_3_1 | Rutile | 469.6 | 7.3 | 469.6 | 7.3 | 13.2051 | 3.5847 | 0.0547 | 2.9763 | 0.5699 | 4.5830 | 0.5699 | 0.0756 | 3.6308 | 469.56 | 7.26 | 398.33 | 33.49 | 457.92 | 9.17 | 0 | 457.92 | 33.49 | 457.92 | 9.17 | 0 | |
| R19_3_2 | Rutile | 470.5 | 7.1 | 470.5 | 7.1 | 13.1555 | 3.5914 | 0.0578 | 3.3231 | 0.6037 | 4.8546 | 0.6037 | 0.0758 | 3.6362 | 471.25 | 7.27 | 521.73 | 27.94 | 479.60 | 9.71 | 0 | 479.60 | 27.94 | 479.60 | 9.71 | 0 | |
| R19_3_3 | Rutile | 472.4 | 7.3 | 472.4 | 7.3 | 13.1448 | 3.5857 | 0.0564 | 3.3731 | 0.5904 | 5.0060 | 0.5904 | 0.0760 | 3.6507 | 472.36 | 7.30 | 468.95 | 31.84 | 471.15 | 9.1 | 0 | 471.15 | 31.84 | 471.15 | 9.1 | 0 | |
| <p>Mean = 471 ± 19 Ma, MSWD = 0.0069, prob = 0.993</p> <p>Recommended age = 489.5 ± 0.9 Ma, Zack et al., 2011, TIMS</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Appendix G: U-Pb geochronology age standards

| Analysis | Mineral | Pref. Age (Ma) | Pref. Age (Ma) 2σ | ²⁰⁷ Pb/ ²⁰⁶ Pb U | ²⁰⁷ Pb/ ²⁰⁶ Pb U | 2σ% | ²⁰⁷ con/ ²⁰⁶ Pb/ ²³⁸ U | 238U/ ²⁰⁶ Pb b | ratio | 1σ% | ratio | 207Pb/ ²⁰⁶ Pb b | ratio | 1σ% | ratio | 207Pb/ ²³⁵ U (calc) | ratio | 1σ% | ratio | 206Pb/ ²³⁸ U | Age (Ma) | 2σ% | Age (Ma) | 2σ% | Age (Ma) | 2σ% |
|--|---------|----------------|-------------------|--|--|--------|---|---------------------------|--------|--------|---------|----------------------------|--------|--------|--------|--------------------------------|---------|-------|---------|-------------------------|----------|-------|----------|------|----------|------|
| TB-1_3_1 | Rutile | | | | | | | 11.4629 | 3.4874 | 0.0575 | 1.6343 | 0.6907 | 3.5300 | 0.0871 | 3.5329 | 538.22 | 508.62 | 14.13 | 533.25 | 538.22 | 7.07 | 14.13 | 533.25 | 7.06 | 533.25 | 7.06 |
| TB-1_3_2 | Rutile | 488.4 | | 12.6455 | 3.4874 | 0.0575 | 6.9 | 12.6455 | 3.4874 | 0.0575 | 1.4922 | 0.6261 | 3.5300 | 0.0789 | 3.5329 | 489.67 | 508.76 | 12.90 | 493.66 | 489.67 | 7.07 | 12.90 | 493.66 | 7.06 | 493.66 | 7.06 |
| TB-1_3_3 | Rutile | 496.9 | | 11.8286 | 3.4874 | 0.0576 | 6.9 | 12.4530 | 3.4874 | 0.0576 | 1.1273 | 0.6695 | 3.5300 | 0.0844 | 3.5329 | 522.35 | 512.30 | 9.67 | 520.38 | 497.14 | 7.07 | 9.67 | 520.38 | 7.06 | 520.38 | 7.06 |
| TB-1_3_4 | Rutile | | | 12.0341 | 3.4874 | 0.0576 | 6.9 | 12.0341 | 3.4874 | 0.0576 | 1.3347 | 0.6601 | 3.5300 | 0.0832 | 3.5329 | 515.34 | 515.14 | 11.38 | 514.69 | 497.14 | 7.07 | 11.38 | 514.69 | 7.06 | 514.69 | 7.06 |
| TB-1_3_5 | Rutile | 514.1 | | 12.0325 | 3.4874 | 0.0576 | 6.9 | 12.0325 | 3.4874 | 0.0576 | 1.3103 | 0.6586 | 3.5300 | 0.0830 | 3.5329 | 514.10 | 514.29 | 11.19 | 513.79 | 514.10 | 7.07 | 11.19 | 513.79 | 7.06 | 513.79 | 7.06 |
| TB-1_3_6 | Rutile | 498.7 | | 12.3807 | 3.4874 | 0.0575 | 6.9 | 12.3807 | 3.4874 | 0.0575 | 1.4651 | 0.6395 | 3.5300 | 0.0806 | 3.5329 | 489.95 | 512.77 | 12.55 | 502.00 | 498.7 | 7.07 | 12.55 | 502.00 | 7.06 | 498.7 | 7.06 |
| TB-1_3_7 | Rutile | 496.4 | | 12.4771 | 3.4874 | 0.0575 | 6.9 | 12.4771 | 3.4874 | 0.0575 | 1.5763 | 0.6354 | 3.5300 | 0.0801 | 3.5329 | 496.61 | 510.08 | 13.58 | 498.44 | 496.4 | 7.07 | 13.58 | 498.44 | 7.06 | 498.44 | 7.06 |
| TB-1_3_9 | Rutile | | | 11.5604 | 3.4874 | 0.0575 | 6.9 | 11.5604 | 3.4874 | 0.0575 | 1.2318 | 0.6856 | 3.5300 | 0.0864 | 3.5329 | 534.45 | 509.37 | 10.63 | 530.18 | 534.45 | 7.07 | 10.63 | 530.18 | 7.06 | 530.18 | 7.06 |
| Mean = 511 ± 12 Ma, MSWD = 0.91, prob = 0.51 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Recommended age = 512.6 ± 3.9 Ma, Internal standard, University of Tasmania | | | | | | | | | | | | | | | | | | | | | | | | | | |
| R10_4_1 | Rutile | 1075.1 | 5.6 | 5.5130 | 2.8655 | 0.0759 | 5.6 | 5.5130 | 2.8655 | 0.0759 | 1.5555 | 1.9029 | 3.2670 | 0.1816 | 2.9143 | 1075.89 | 1082.50 | 5.70 | 1082.10 | 1075.89 | 5.83 | 5.70 | 1082.10 | 6.53 | 1082.10 | 6.53 |
| R10_4_2 | Rutile | 1090.1 | 5.8 | 5.4148 | 2.8757 | 0.0757 | 5.8 | 5.4148 | 2.8757 | 0.0757 | 1.5576 | 1.9233 | 3.2865 | 0.1842 | 2.9248 | 1090.05 | 1085.47 | 5.75 | 1089.21 | 1090.05 | 5.85 | 5.75 | 1089.21 | 6.57 | 1089.21 | 6.57 |
| R10_4_3 | Rutile | 1124.3 | 5.9 | 5.2424 | 2.8808 | 0.0767 | 5.9 | 5.2424 | 2.8808 | 0.0767 | 1.4456 | 2.0151 | 3.2451 | 0.1905 | 2.9306 | 1124.28 | 1112.73 | 5.19 | 1120.62 | 1124.28 | 5.86 | 5.19 | 1120.62 | 6.49 | 1120.62 | 6.49 |
| R10_4_4 | Rutile | 1111.2 | 5.8 | 5.3212 | 2.8434 | 0.0749 | 5.8 | 5.3212 | 2.8434 | 0.0749 | 1.6419 | 1.9429 | 3.3308 | 0.1881 | 2.8954 | 1111.19 | 1084.95 | 6.20 | 1095.98 | 1111.19 | 5.79 | 6.20 | 1095.98 | 6.66 | 1095.98 | 6.66 |
| R10_4_5 | Rutile | 1128.9 | 5.8 | 5.2338 | 2.8633 | 0.0771 | 5.8 | 5.2338 | 2.8633 | 0.0771 | 1.5612 | 2.0334 | 3.2842 | 0.1914 | 2.9101 | 1128.89 | 1122.75 | 5.61 | 1126.77 | 1128.89 | 5.82 | 5.61 | 1126.77 | 6.57 | 1126.77 | 6.57 |
| R10_4_6 | Rutile | 1117.9 | 4.7 | 5.2833 | 2.9332 | 0.0745 | 4.7 | 5.2833 | 2.9332 | 0.0745 | 1.8555 | 1.9416 | 2.6346 | 0.1894 | 2.3453 | 1117.87 | 1052.82 | 4.54 | 1095.54 | 1117.87 | 4.69 | 4.54 | 1095.54 | 5.27 | 1095.54 | 5.27 |
| R10_4_7 | Rutile | 1112.5 | 4.7 | 5.3217 | 2.9098 | 0.0743 | 4.7 | 5.3217 | 2.9098 | 0.0743 | 1.2785 | 1.9533 | 2.6551 | 0.1884 | 2.3314 | 1112.48 | 1048.54 | 4.92 | 1099.58 | 1112.48 | 4.66 | 4.92 | 1099.58 | 5.31 | 1099.58 | 5.31 |
| R10_4_8 | Rutile | 1080.8 | 4.5 | 5.4608 | 2.2914 | 0.0779 | 4.5 | 5.4608 | 2.2914 | 0.0779 | 1.0666 | 1.9631 | 2.5268 | 0.1831 | 2.3103 | 1083.65 | 1142.77 | 3.71 | 1102.95 | 1083.65 | 4.62 | 3.71 | 1102.95 | 5.05 | 1102.95 | 5.05 |
| R10_4_9 | Rutile | 1089.6 | 4.5 | 5.4239 | 2.3102 | 0.0761 | 4.5 | 5.4239 | 2.3102 | 0.0761 | 1.1146 | 1.9311 | 2.5722 | 0.1842 | 2.3156 | 1089.98 | 1097.17 | 4.07 | 1091.93 | 1089.98 | 4.63 | 4.07 | 1091.93 | 5.14 | 1091.93 | 5.14 |
| R10_4_10 | Rutile | 1092.3 | 4.5 | 5.4132 | 2.2912 | 0.0761 | 4.5 | 5.4132 | 2.2912 | 0.0761 | 1.0783 | 1.9363 | 2.5218 | 0.1847 | 2.3096 | 1092.62 | 1097.69 | 3.93 | 1093.74 | 1092.62 | 4.62 | 3.93 | 1093.74 | 5.04 | 1093.74 | 5.04 |
| Mean = 1100 ± 17 Ma, MSWD = 0.43, prob = 0.92 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Recommended age = 1091.6 ± 3.5 Ma, Luvizotto et al., 2009, TIMS | | | | | | | | | | | | | | | | | | | | | | | | | | |
| R19_4_1 | Rutile | 495.4 | 6.3 | 12.5169 | 3.0767 | 0.0538 | 6.3 | 12.5169 | 3.0767 | 0.0538 | 4.7225 | 0.5924 | 5.4215 | 0.0789 | 3.1608 | 495.38 | 362.22 | 58.80 | 472.41 | 495.38 | 6.32 | 58.80 | 472.41 | 10.8 | 472.41 | 10.8 |
| R19_4_2 | Rutile | 485.2 | 6.3 | 12.7534 | 3.0815 | 0.0563 | 6.3 | 12.7534 | 3.0815 | 0.0563 | 4.5960 | 0.6074 | 5.3128 | 0.0782 | 3.1541 | 485.18 | 462.30 | 44.06 | 481.91 | 485.18 | 6.31 | 44.06 | 481.91 | 10.6 | 481.91 | 10.6 |
| R19_4_3 | Rutile | 490.7 | 6.4 | 12.6942 | 3.1023 | 0.0568 | 6.4 | 12.6942 | 3.1023 | 0.0568 | 4.8403 | 0.6192 | 5.5122 | 0.0791 | 3.2102 | 480.68 | 481.28 | 44.43 | 489.33 | 480.68 | 6.42 | 44.43 | 489.33 | 11.0 | 489.33 | 11.0 |
| R19_4_4 | Rutile | 482.6 | 5.0 | 12.8926 | 2.5338 | 0.0573 | 5.0 | 12.8926 | 2.5338 | 0.0573 | 4.5019 | 0.6219 | 4.8997 | 0.0778 | 2.5470 | 482.91 | 501.65 | 39.51 | 491.02 | 482.91 | 5.09 | 39.51 | 491.02 | 9.80 | 491.02 | 9.80 |
| R19_4_5 | Rutile | 471.1 | 4.8 | 13.1651 | 2.4251 | 0.0575 | 4.8 | 13.1651 | 2.4251 | 0.0575 | 3.5669 | 0.6016 | 4.1950 | 0.0759 | 2.4399 | 471.66 | 511.00 | 30.68 | 478.22 | 471.66 | 4.88 | 30.68 | 478.22 | 8.39 | 478.22 | 8.39 |
| R19_4_6 | Rutile | 468.6 | 4.8 | 13.2423 | 2.4244 | 0.0580 | 4.8 | 13.2423 | 2.4244 | 0.0580 | 3.2225 | 0.6031 | 3.8818 | 0.0755 | 2.4525 | 469.45 | 528.59 | 26.71 | 479.23 | 469.45 | 4.90 | 26.71 | 479.23 | 7.76 | 479.23 | 7.76 |
| R19_4_7 | Rutile | 484.1 | 4.8 | 12.7985 | 2.4211 | 0.0580 | 4.8 | 12.7985 | 2.4211 | 0.0580 | 3.1860 | 0.6243 | 3.8434 | 0.0781 | 2.4348 | 484.81 | 530.41 | 26.31 | 492.55 | 484.81 | 4.87 | 26.31 | 492.55 | 7.69 | 492.55 | 7.69 |
| R19_4_8 | Rutile | 495.4 | 6.2 | 12.5031 | 3.0895 | 0.0586 | 6.2 | 12.5031 | 3.0895 | 0.0586 | 4.6462 | 0.6465 | 5.3493 | 0.0800 | 3.1377 | 496.30 | 551.47 | 36.78 | 506.34 | 496.30 | 6.28 | 36.78 | 506.34 | 10.7 | 506.34 | 10.7 |
| R19_4_9 | Rutile | 465.0 | 4.8 | 13.3219 | 2.4110 | 0.0588 | 4.8 | 13.3219 | 2.4110 | 0.0588 | 3.0742 | 0.6078 | 3.7734 | 0.0750 | 2.4451 | 466.43 | 559.68 | 23.94 | 482.19 | 466.43 | 4.89 | 23.94 | 482.19 | 7.55 | 482.19 | 7.55 |
| R19_4_10 | Rutile | 510.5 | 9.4 | 11.9015 | 4.5162 | 0.0755 | 9.4 | 11.9015 | 4.5162 | 0.0755 | 12.0828 | 0.8799 | 5 | 0.0843 | 4.6521 | 521.55 | 1081.06 | 44.84 | 640.94 | 521.55 | 9.30 | 44.84 | 640.94 | 0 | 640.94 | 0 |
| Mean = 481.4 ± 8.1 Ma, MSWD = 0.91, prob = 0.51 | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Recommended age = 489.5 ± 0.9 Ma, Zack et al., 2011, TIMS | | | | | | | | | | | | | | | | | | | | | | | | | | |

Appendix G: U-Pb geochronology age standards

| Analysis | Mineral | Pref. Age (Ma) | Pref. Age (Ma) 2σ | 207 ^{cor} 206Pb/238U | 207 ^{cor} 206Pb/238U | 238U/206Pb _b | 207Pb/206Pb _b | ratio | 1σ | ratio | 207Pb/235U U (calc) | 1σ | ratio | 206Pb/238U | 1σ | ratio | 206Pb/238U | Age (Ma) | 2σ | 207Pb/206Pb _b | Age (Ma) | 2σ | 207Pb/235U U (calc) | Age (Ma) | 2σ |
|---|---------|----------------|-------------------|-------------------------------|-------------------------------|-------------------------|--------------------------|--------|--------|--------|---------------------|--------|---------|------------|--------|--------|------------|----------|---------|--------------------------|----------|---------|---------------------|----------|----|
| TB-1_4_1 | Rutile | 502.0 | | 5.5 | 12.4095 | 2.7824 | 0.0575 | 2.1596 | 0.6425 | 2.8177 | 0.0810 | 2.8346 | 502.11 | 2.8346 | 0.0810 | 2.8346 | 502.11 | 18.65 | 509.10 | 509.10 | 18.65 | 503.85 | 5.64 | | |
| TB-1_4_2 | Rutile | | | | 12.1133 | 2.7824 | 0.0575 | 1.7337 | 0.6529 | 2.8177 | 0.0823 | 2.8346 | 509.77 | 2.8346 | 0.0823 | 2.8346 | 509.77 | 15.34 | 508.46 | 508.46 | 15.34 | 510.24 | 5.64 | | |
| TB-1_4_3 | Rutile | | | | 11.2865 | 2.7824 | 0.0575 | 2.2352 | 0.7010 | 2.8177 | 0.0884 | 2.8346 | 546.09 | 2.8346 | 0.0884 | 2.8346 | 546.09 | 19.31 | 509.51 | 509.51 | 19.31 | 539.41 | 5.64 | | |
| TB-1_4_4 | Rutile | | | | 12.0733 | 2.7824 | 0.0575 | 1.8337 | 0.6552 | 2.8177 | 0.0826 | 2.8346 | 511.53 | 2.8346 | 0.0826 | 2.8346 | 511.53 | 15.82 | 509.57 | 509.57 | 15.82 | 511.70 | 5.64 | | |
| TB-1_4_5 | Rutile | 494.7 | | 5.6 | 12.4997 | 2.7824 | 0.0575 | 2.6909 | 0.6333 | 2.8177 | 0.0798 | 2.8346 | 495.00 | 2.8346 | 0.0798 | 2.8346 | 495.00 | 23.16 | 510.71 | 510.71 | 23.16 | 498.17 | 5.64 | | |
| TB-1_4_6 | Rutile | | | | 12.0514 | 2.7824 | 0.0575 | 2.4200 | 0.6569 | 2.8177 | 0.0828 | 2.8346 | 513.01 | 2.8346 | 0.0828 | 2.8346 | 513.01 | 20.87 | 509.77 | 509.77 | 20.87 | 512.70 | 5.64 | | |
| TB-1_4_7 | Rutile | 501.9 | | 5.6 | 12.3212 | 2.7824 | 0.0575 | 3.3780 | 0.6425 | 2.8177 | 0.0810 | 2.8346 | 502.07 | 2.8346 | 0.0810 | 2.8346 | 502.07 | 29.08 | 510.55 | 510.55 | 29.08 | 503.87 | 5.64 | | |
| TB-1_4_8 | Rutile | 499.8 | | 5.5 | 12.3947 | 2.7824 | 0.0576 | 2.2952 | 0.6388 | 2.8177 | 0.0806 | 2.8346 | 499.97 | 2.8346 | 0.0806 | 2.8346 | 499.97 | 19.69 | 512.20 | 512.20 | 19.69 | 502.19 | 5.64 | | |
| TB-1_4_9 | Rutile | | | | 12.0155 | 2.7824 | 0.0576 | 3.2915 | 0.6605 | 2.8177 | 0.0833 | 2.8346 | 515.58 | 2.8346 | 0.0833 | 2.8346 | 515.58 | 28.23 | 514.39 | 514.39 | 28.23 | 514.90 | 5.64 | | |
| TB-1_4_10 | Rutile | | | | 12.0627 | 2.7824 | 0.0576 | 1.9358 | 0.6580 | 2.8177 | 0.0829 | 2.8346 | 513.56 | 2.8346 | 0.0829 | 2.8346 | 513.56 | 16.59 | 512.67 | 512.67 | 16.59 | 513.37 | 5.64 | | |
| TB-1_4_11 | Rutile | | | | 11.8418 | 2.7824 | 0.0576 | 2.9911 | 0.6704 | 2.8177 | 0.0845 | 2.8346 | 523.18 | 2.8346 | 0.0845 | 2.8346 | 523.18 | 25.67 | 512.11 | 512.11 | 25.67 | 520.97 | 5.64 | | |
| TB-1_4_12 | Rutile | | | | 11.9653 | 2.2406 | 0.0576 | 1.2625 | 0.6629 | 2.2542 | 0.0836 | 2.2553 | 517.32 | 2.2553 | 0.0836 | 2.2553 | 517.32 | 10.82 | 512.63 | 512.63 | 10.82 | 516.37 | 4.51 | | |
| TB-1_4_13 | Rutile | | | | 11.8392 | 2.2406 | 0.0576 | 1.3773 | 0.6703 | 2.2542 | 0.0845 | 2.2553 | 522.96 | 2.2553 | 0.0845 | 2.2553 | 522.96 | 4.51 | 513.64 | 513.64 | 11.78 | 520.88 | 4.51 | | |
| TB-1_4_14 | Rutile | 502.2 | | 4.4 | 12.3284 | 2.2406 | 0.0576 | 1.8891 | 0.6429 | 2.2542 | 0.0811 | 2.2553 | 502.42 | 2.2553 | 0.0811 | 2.2553 | 502.42 | 16.18 | 513.09 | 513.09 | 16.18 | 504.11 | 4.51 | | |
| TB-1_4_15 | Rutile | 497.4 | | 4.4 | 12.4639 | 2.2406 | 0.0576 | 1.6521 | 0.6367 | 2.2542 | 0.0803 | 2.2553 | 497.68 | 2.2553 | 0.0803 | 2.2553 | 497.68 | 14.12 | 513.97 | 513.97 | 14.12 | 500.23 | 4.51 | | |
| TB-1_4_16 | Rutile | 506.1 | | 4.4 | 12.2028 | 2.2406 | 0.0576 | 1.3959 | 0.6481 | 2.2542 | 0.0817 | 2.2553 | 506.25 | 2.2553 | 0.0817 | 2.2553 | 506.25 | 11.92 | 514.43 | 514.43 | 11.92 | 507.33 | 4.51 | | |
| TB-1_4_17 | Rutile | 508.8 | | 4.4 | 12.1744 | 2.2406 | 0.0576 | 1.7418 | 0.6516 | 2.2542 | 0.0821 | 2.2553 | 508.89 | 2.2553 | 0.0821 | 2.2553 | 508.89 | 14.88 | 514.27 | 514.27 | 14.88 | 509.48 | 4.51 | | |
| TB-1_4_18 | Rutile | | | | 12.0227 | 2.2406 | 0.0576 | 1.3909 | 0.6596 | 2.2542 | 0.0831 | 2.2553 | 514.90 | 2.2553 | 0.0831 | 2.2553 | 514.90 | 11.80 | 514.04 | 514.04 | 11.80 | 514.40 | 4.51 | | |
| TB-1_4_19 | Rutile | | | | 11.7435 | 2.2406 | 0.0576 | 1.7277 | 0.6752 | 2.2542 | 0.0851 | 2.2553 | 526.61 | 2.2553 | 0.0851 | 2.2553 | 526.61 | 14.77 | 513.82 | 513.82 | 14.77 | 523.89 | 4.51 | | |
| TB-1_4_20 | Rutile | | | | 11.7699 | 2.2406 | 0.0576 | 1.4719 | 0.6737 | 2.2542 | 0.0849 | 2.2553 | 525.52 | 2.2553 | 0.0849 | 2.2553 | 525.52 | 12.59 | 513.46 | 513.46 | 12.59 | 522.96 | 4.51 | | |
| TB-1_4_21 | Rutile | 497.1 | | 4.4 | 12.4622 | 2.2406 | 0.0576 | 1.8801 | 0.6363 | 2.2542 | 0.0802 | 2.2553 | 497.37 | 2.2553 | 0.0802 | 2.2553 | 497.37 | 16.08 | 513.67 | 513.67 | 16.08 | 499.99 | 4.51 | | |
| Mean = 511.5 ± 3.5 Ma, MSWD = 0.85, prob = 0.66 | | | | | | | | | | | | | | | | | | | | | | | | | |
| Recommended age = 512.6 ± 3.9 Ma, Internal standard, University of Tasmania | | | | | | | | | | | | | | | | | | | | | | | | | |
| TB-1_5_1 | Rutile | | | | 12.1009 | 0.9162 | 0.0573 | 1.8906 | 0.6637 | 1.7040 | 0.0826 | 0.9268 | 511.85 | 0.9268 | 0.0826 | 0.9268 | 511.85 | 16.55 | 502.74 | 502.74 | 16.55 | 516.87 | 3.41 | | |
| TB-1_5_2 | Rutile | | | | 11.9675 | 0.9162 | 0.0574 | 1.7025 | 0.6523 | 1.7040 | 0.0835 | 0.9268 | 517.16 | 0.9268 | 0.0835 | 0.9268 | 517.16 | 14.81 | 505.75 | 505.75 | 14.81 | 509.89 | 3.41 | | |
| TB-1_5_3 | Rutile | | | | 12.2218 | 0.9162 | 0.0574 | 2.2475 | 0.6389 | 1.7040 | 0.0818 | 0.9268 | 507.06 | 0.9268 | 0.0818 | 0.9268 | 507.06 | 19.52 | 506.39 | 506.39 | 19.52 | 501.64 | 3.41 | | |
| TB-1_5_4 | Rutile | 508.0 | | 1.8 | 12.1880 | 0.9162 | 0.0575 | 1.7407 | 0.6562 | 1.7040 | 0.0820 | 0.9268 | 508.01 | 0.9268 | 0.0820 | 0.9268 | 508.01 | 15.03 | 509.33 | 509.33 | 15.03 | 512.28 | 3.41 | | |
| TB-1_5_5 | Rutile | | | | 12.0080 | 0.9162 | 0.0575 | 1.6582 | 0.6676 | 1.7040 | 0.0833 | 0.9268 | 515.91 | 0.9268 | 0.0833 | 0.9268 | 515.91 | 14.29 | 510.12 | 510.12 | 14.29 | 519.23 | 3.41 | | |
| TB-1_5_6 | Rutile | 508.8 | | 3.5 | 12.1882 | 1.9432 | 0.0575 | 1.2984 | 0.6498 | 2.2566 | 0.0821 | 1.7660 | 508.81 | 1.7660 | 0.0821 | 1.7660 | 508.81 | 11.21 | 509.42 | 509.42 | 11.21 | 508.38 | 4.51 | | |
| TB-1_5_7 | Rutile | 509.2 | | 3.5 | 12.1754 | 1.9432 | 0.0575 | 1.4861 | 0.6505 | 2.2566 | 0.0822 | 1.7660 | 509.25 | 1.7660 | 0.0822 | 1.7660 | 509.25 | 12.82 | 509.46 | 509.46 | 12.82 | 508.76 | 4.51 | | |
| TB-1_5_8 | Rutile | | | | 11.9821 | 1.9432 | 0.0576 | 1.2365 | 0.6619 | 2.2566 | 0.0834 | 1.7660 | 516.42 | 1.7660 | 0.0834 | 1.7660 | 516.42 | 10.61 | 512.01 | 512.01 | 10.61 | 515.78 | 4.51 | | |
| TB-1_5_9 | Rutile | 508.8 | | 3.5 | 12.1708 | 1.9432 | 0.0576 | 1.3214 | 0.6518 | 2.2566 | 0.0821 | 1.7660 | 508.83 | 1.7660 | 0.0821 | 1.7660 | 508.83 | 11.34 | 512.04 | 512.04 | 11.34 | 509.57 | 4.51 | | |
| TB-1_5_10 | Rutile | | | | 11.6622 | 1.9432 | 0.0576 | 1.2258 | 0.6813 | 2.2566 | 0.0856 | 1.7660 | 529.21 | 1.7660 | 0.0856 | 1.7660 | 529.21 | 10.46 | 514.70 | 514.70 | 10.46 | 527.54 | 4.51 | | |
| TB-1_5_11 | Rutile | 503.1 | | 3.5 | 12.2925 | 1.9432 | 0.0576 | 2.2660 | 0.6465 | 2.2566 | 0.0812 | 1.7660 | 503.27 | 1.7660 | 0.0812 | 1.7660 | 503.27 | 19.33 | 514.85 | 514.85 | 19.33 | 506.35 | 4.51 | | |
| TB-1_5_12 | Rutile | 517.0 | | 3.5 | 11.9094 | 1.9432 | 0.0578 | 1.1796 | 0.6700 | 2.2566 | 0.0835 | 1.7660 | 517.13 | 1.7660 | 0.0835 | 1.7660 | 517.13 | 9.93 | 521.33 | 521.33 | 9.93 | 520.74 | 4.51 | | |
| TB-1_5_13 | Rutile | 502.7 | | 3.5 | 12.3974 | 1.9432 | 0.0578 | 1.8654 | 0.6340 | 2.2566 | 0.0812 | 1.7660 | 503.03 | 1.7660 | 0.0812 | 1.7660 | 503.03 | 15.67 | 522.18 | 522.18 | 15.67 | 498.59 | 4.51 | | |
| Mean = 511.9 ± 3.5 Ma, MSWD = 0.83, prob = 0.62 | | | | | | | | | | | | | | | | | | | | | | | | | |
| Recommended age = 512.6 ± 3.9 Ma, Internal standard, University of Tasmania | | | | | | | | | | | | | | | | | | | | | | | | | |
| R10_5_1 | Rutile | 1106.0 | 2.5 | 2.5 | 5.4187 | 1.2620 | 0.0770 | 1.5748 | 1.9799 | 2.4107 | 0.1873 | 1.2956 | 1106.71 | 1.2956 | 0.1873 | 1.2956 | 1106.71 | 5.60 | 1120.62 | 1120.62 | 5.60 | 1108.70 | 4.82 | | |
| R10_5_2 | Rutile | 1096.3 | 2.5 | 2.5 | 5.3995 | 1.3349 | 0.0751 | 1.5748 | 1.8982 | 2.4039 | 0.1854 | 1.2956 | 1096.30 | 1.2956 | 0.1854 | 1.2956 | 1096.30 | 5.90 | 1071.51 | 1071.51 | 5.90 | 1080.46 | 4.81 | | |
| R10_5_3 | Rutile | 1081.4 | 3.8 | 3.8 | 5.4920 | 2.0592 | 0.0749 | 1.1425 | 1.9211 | 2.6874 | 0.1826 | 1.8900 | 1081.41 | 1.8900 | 0.1826 | 1.8900 | 1081.41 | 4.31 | 1085.35 | 1085.35 | 4.31 | 1088.46 | 5.37 | | |
| R10_5_4 | Rutile | 1084.4 | 3.7 | 3.7 | 5.4840 | 2.0865 | 0.0766 | 1.2410 | 2.0061 | 2.7334 | 0.1834 | 1.9120 | 1085.66 | 1.9120 | 0.1834 | 1.9120 | 1085.66 | 4.46 | 1111.13 | 1111.13 | 4.46 | 1117.58 | 5.47 | | |
| R10_5_5 | Rutile | 1091.5 | 3.7 | 3.7 | 5.4446 | 2.0881 | 0.0761 | 1.2216 | 2.0135 | 2.7945 | 0.1845 | 1.9219 | 1091.74 | 1.9219 | 0.1845 | 1.9219 | 1091.74 | 4.64 | 1095.91 | 1095.91 | 4.64 | 1120.08 | 5.57 | | |
| R10_5_6 | Rutile | 1095.7 | 3.8 | 3.8 | 5.4242 | 2.0397 | 0.0748 | 1.2854 | 2.0033 | 2.6167 | 0.1853 | 1.8783 | 1095.74 | 1.8783 | 0.1853 | 1.8783 | 1095.74 | 4.87 | 1061.49 | 1061.49 | 4.87 | 1116.82 | 5.23 | | |
| Mean = 1095 ± 14 Ma, MSWD = 0.28, prob = 0.93 | | | | | | | | | | | | | | | | | | | | | | | | | |
| Recommended age = 1091.6 ± 3.5 Ma, Internal standard, University of Tasmania | | | | | | | | | | | | | | | | | | | | | | | | | |
| TIMS | | | | | | | | | | | | | | | | | | | | | | | | | |

Appendix G: U-Pb geochronology age standards

| Analysis | Mineral | Pref. Age (Ma) | Pref. Age (Ma) 2s% | ²⁰⁷ co/ ²⁰⁶ Pb/ ²³⁸ U Age (Ma) | ²⁰⁷ co/ ²⁰⁶ Pb/ ²³⁸ U 2s% | ²³⁸ U/ ²⁰⁶ Pb ratio | 1s% | ²⁰⁷ Pb/ ²⁰⁶ Pb ratio | 1s% | ²⁰⁷ Pb/ ²³⁵ U (calc) ratio | 1s% | ²⁰⁶ Pb/ ²³⁸ U ratio | 1s% | ²⁰⁶ Pb/ ²³⁸ U Age (Ma) | 2s% | ²⁰⁷ Pb/ ²⁰⁶ Pb Age (Ma) | 2s% | ²⁰⁷ Pb/ ²³⁵ U (calc) Age (Ma) | 2s% |
|---|---------|----------------|--------------------|---|--|---|--------|--|--------|--|--------|---|--------|--|------|---|-------|---|------|
| R19_5_1 | Rutile | 484.9 | 3.8 | | | 12.6999 | 1.8202 | 0.0552 | 5.4248 | 0.6071 | 5.2261 | 0.0798 | 1.9033 | 494.91 | 3.81 | 421.06 | 57.51 | 481.73 | 10.4 |
| R19_5_2 | Rutile | 488.8 | 3.8 | | | 12.6429 | 1.8552 | 0.0565 | 4.8878 | 0.6198 | 5.0895 | 0.0804 | 1.8997 | 498.80 | 3.80 | 472.49 | 45.77 | 489.73 | 10.1 |
| R19_5_3 | Rutile | 483.3 | 4.5 | 483.3 | 4.5 | 12.9724 | 2.3275 | 0.0588 | 4.0214 | 0.6493 | 4.5197 | 0.0780 | 2.2586 | 484.44 | 4.52 | 559.33 | 31.34 | 508.04 | 9.04 |
| R19_5_4 | Rutile | 473.6 | 4.3 | | | 13.1420 | 2.2900 | 0.0554 | 3.5395 | 0.5925 | 4.3450 | 0.0762 | 2.1254 | 473.65 | 4.25 | 426.47 | 37.01 | 472.46 | 8.69 |
| R19_5_5 | Rutile | 478.8 | 4.2 | 478.8 | 4.2 | 13.0027 | 2.2051 | 0.0567 | 3.7523 | 0.6288 | 4.3517 | 0.0771 | 2.1165 | 478.81 | 4.23 | 480.76 | 34.48 | 495.36 | 8.70 |
| R19_5_6 | Rutile | 492.0 | 4.2 | 492.0 | 4.2 | 12.7037 | 2.2858 | 0.0574 | 4.2874 | 0.6638 | 4.6760 | 0.0794 | 2.1314 | 492.26 | 4.26 | 507.53 | 37.15 | 516.91 | 9.35 |
| Mean = 487.3 ± 8.0, MSWD = 1.01, prob = 0.41 Recommended age = 483.5 ± 0.9 Ma, Zack et al., 2011, TIMS | | | | | | | | | | | | | | | | | | | |