

**UNIVERSIDADE FEDERAL DE MINAS GERAIS**  
**Instituto de Geociências**  
**Programa de Pós-Graduação em Geologia**

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**CARACTERIZAÇÃO TEXTURAL E RESPOSTAS ISOTÓPICAS U-Pb E Lu-Hf DE  
ZIRCÃO COMO INDICADOR PETROGENÉTICO DE GRANITOS PÓS-  
COLISIONAIS DO ORÓGENO ARAÇUAÍ NA REGIÃO CENTRO-SUL DO ESTADO  
DO ESPÍRITO SANTO**

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**Caracterização textural e respostas isotópicas U-Pb e Lu-Hf de zircão como indicador petrogenético de granitos pós-colisionais do Orógeno Araçuaí na região centro-sul do Estado do Espírito Santo**

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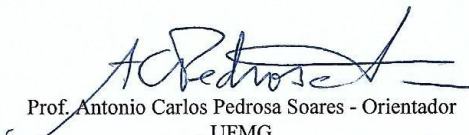
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**Caracterização textural e respostas isotópicas U-Pb e Lu-Hf de zircão como indicador petrogenético de granitos pós-colisionais do Orógeno Araçuaí na região centro-sul do Estado do Espírito Santo**

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*“Ah, o sorriso que tenho nos lábios é um sorriso geológico — o sorriso de quem sabe, olha,  
vê e compreende.”*

**(Monteiro Lobato)**

## RESUMO

O zircão é amplamente usado para obter informações petrogenéticas e geocronológicas, auxiliando na investigação da evolução da crosta e do manto da Terra. Com esse intuito, foi realizado um estudo focalizado na caracterização de zircões em amostras de três plútons pós-colisionais do Orógeno Araçuaí, localizados na região centro-sul do Estado do Espírito Santo, Brasil: granitos dos plútons Aracê (Pedra Azul) e Vitória e tonalito do plúton Mestre Álvaro. Além de um estudo detalhado da morfologia do zircão e de estruturas internas, foi realizada a análise isotópica *in situ* de U-Th-Pb e Lu-Hf. O marcante plutonismo pós-colisional (530-480 Ma) desse Orógeno ocorre associado a processos de colapso gravitacional e desestabilização do manto astenosférico. Em conjunto, os granitos pós-colisionais variam de cálcio-alcálinos a shoshoníticos e de férricos a magnesianos, incluindo granitos do tipo A e do tipo I. A geotermometria de saturação de Zr das amostras estudadas indica temperaturas para os magmas maior que 800 °C. Os zircões comumente apresentam formas prismáticas alongadas, elevada razão Th/U, cristais não zonados a fracamente zonados, estando frequentemente rodeados por domínios de dissolução–recristalização ou finas bordas de sobrecrecimento. A geocronologia U-Pb (LA-ICP-MS) em zircões resultou em idades de cristalização magmática de  $523 \pm 2$  Ma para o plúton Aracê (Pedra Azul),  $505 \pm 1$  Ma para o plúton Vitória e  $527 \pm 2$  Ma para o plúton Mestre Álvaro. Dados de Lu-Hf (plúton Aracê:  $\epsilon_{\text{Hf}}(t)$  -23.8 a -18.6, TDM 2.47 a 2.25 Ga; plúton Vitória:  $\epsilon_{\text{Hf}}(t)$  -10.3 a -7.4, TDM 1.71 a 1.58 Ga; e Mestre Álvaro plúton:  $\epsilon_{\text{Hf}}(t)$  -8.8 a -0.7, TDM 1.66 a 1.27 Ga) indicam importante participação crustal na evolução dos plútons. Todas essas características sugerem fontes híbridas envolvendo manto e crosta, bem como altas temperaturas de cristalização magmática. A fonte de calor pode estar associada ao influxo do manto astenosférico devido à sua desestabilização após a quebra da placa e ao surgimento de uma pluma matélica no final do estágio pós-colisional do Orógeno Araçuaí, resultando em inúmeras intrusões graníticas. Os zircões teriam cristalizado a altas taxas de resfriamento, provavelmente devido a uma rápida ascensão do magma até um nível crustal mais raso. Os domínios de dissolução–recristalização e de sobrecrecimento teriam ocorrido em resposta a interações com fluídos no final da cristalização magmática, após o alojamento dos plútons.

Palavras-chave: morfologia de zircão; geocronologia U-Pb; assinatura isotópica Hf; granitos pós-colisionais; Orógeno Araçuaí.

## ABSTRACT

Zircon is widely used to obtain petrogenetic and geochronological information, supporting in the investigation of the evolution of Earth's crust and mantle. With that purpose, a study was carried out focusing on the zircon characterization in samples from three post-collisional plutons of the Araçuaí orogen, located in the south-central region of the Espírito Santo State, Brazil: granites from the Aracê (Pedra Azul) and Vitória plutons, and tonalite from the Mestre Álvaro pluton. Besides a detailed study on zircon morphology and internal structures, we performed in situ U-Th-Pb and Lu-Hf isotopic spot analysis. The remarkable post-collision plutonism (530-480 Ma) of this orogen occurs in association with processes of gravitational collapse and destabilization of the asthenospheric mantle. All together, the post-collisional granites vary from calc-alkaline to shoshonitic, and magnesian to ferroan, including both I-type and A-type granites. Zircon saturation geothermometry in the studied samples indicates temperate for the magmas  $> 800$  °C. Zircons from samples commonly present long-prismatic forms, high Th/U ratio, unzoned to weakly zoned crystals, frequently surrounded by structureless domains of dissolution–recrystallization or thin overgrowth rims. Zircon geochronology resulted in magmatic crystallization ages of  $523 \pm 2$  Ma for the Aracê (Pedra Azul) pluton,  $505 \pm 1$  Ma for the Vitória pluton, and  $527 \pm 2$  Ma for the Mestre Álvaro pluton. Lu-Hf data (Aracê pluton:  $\epsilon_{\text{Hf}}(t)$  -23.8 to -18.6, TDM 2.47 to 2.25 Ga; Vitória pluton:  $\epsilon_{\text{Hf}}(t)$  -10.4 to -7.4, TDM 1.71 to 1.58 Ga; and Mestre Álvaro pluton:  $\epsilon_{\text{Hf}}(t)$  -8.8 to -5.7, TDM 1.66 to 1.49 Ga) indicate striking crustal involvement in magma genesis. These all features suggest hybrid sources involving mantle and crust, as well as high temperatures of magmatic crystallization. The heat source can be associate with inflow of the asthenospheric mantle due its destabilization after slab breakoff, and an upwelling of a mantle plume in final post-collisional stage of the Araçuaí orogen. The zircons would have crystallized with high cooling rates probably due to a rapid ascent of the magma to a higher crustal level. After the pluton emplacement, zircon changes by in situ dissolution–recrystallization and overgrowth would have occurred in response to interactions with late stage melts at end of magmatic crystallization.

Keywords: zircon morphology; U-Pb geochronology; Hf isotope; post-collisional granites; Araçuaí orogen.

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## **CAPÍTULO 1. INTRODUÇÃO**

### **1.1 Considerações Gerais**

Esta dissertação de mestrado apresenta um estudo de caracterização de zircões relacionando suas morfologias, texturas internas, idades U-Pb, razões Th/U e dados isotópicos de Lu-Hf integrados com atributos litoquímicos, petrográficos e de química mineral em rochas atribuídas ao estágio pós-colisional (c.a. 530 a 480 Ma) do Orógeno Araçuaí.

A realização deste trabalho contou com financiamento de projetos do CNPq e CODEMGE, coordenados pelo orientador Antônio Carlos Pedrosa Soares, em realização no Laboratório de Mapeamento Geológico, Geotectônica e Geodiversidade (MGD) do Centro de Pesquisa Professor Manoel Teixeira da Costa (CPMTC-IGC-UFMG). O presente trabalho também foi realizado com apoio da Coordenação de Aperfeiçoamento de Pessoal de Nível Superior - Brasil (CAPES) - Código de Financiamento 001.

Previamente, foi realizado um levantamento bibliográfico disponível sobre a região enfocada e sobre os métodos de estudos realizados. A geologia regional e os resultados obtidos, bem como as discussões, interpretações e conclusões estão apresentadas no artigo contido no Capítulo 2 e as tabelas com os dados compilados da literatura e com os dados analíticos estão incluídas nos anexos. As metodologias utilizadas estão descritas no Anexo B.

### **1.2 Objetivos**

O objetivo desta dissertação é investigar as informações petrológicas e geocronológicas que podem ser obtidas através cristais de zircão usando um estudo integrado de sua caracterização morfológica, textural e isotópica (U-Th-Pb e Lu-Hf), com o intuito de compreender suas histórias de cristalização em rochas graníticas. Tal estudo também ajuda a entender como a composição do magma e os processos envolvidos em sua geração podem influenciar nas diversas características dos zircões. No intuito de auxiliar no entendimento dos resultados obtidos, também utilizou-se química de rocha total e análise mineral em microsonda.

Para tanto, estudou-se três rochas pertencentes ao estágio pós-colisional do Orógeno Araçuaí, um estágio tectônico cuja atividade magmática foi marcada por inúmeras intrusões. Assim, este estudo contribui para agregar informações relevantes à geologia regional do Orógeno Araçuaí, auxiliando na elucidação da petrogênese granítica pós-colisional e colaborando para o avanço do conhecimento da evolução tectônica e geodinâmica das etapas finais desse Orógeno.

As rochas estudadas localizam-se no Estado do Espírito Santo, maior produtor de rochas ornamentais do Brasil. Assim, além da abordagem científica e geológica, este trabalho aborda aspectos petrográficos que podem ser importantes para o setor de recursos minerais, agregando informações para a geologia do Estado e contribuindo para futuros trabalhos como uma fonte bibliográfica.

### **1.3 Localização e vias de acesso**

A área englobada neste trabalho abrange parte da porção meridional do Orógeno Araçuaí, região centro-sul do Estado do Espírito Santo (Figura 1.1).

As amostras estudadas pertencem aos plutons pós-colisionais Aracê (também conhecido como Pedra Azul), Vitória e Mestre Álvaro, respectivamente nas cidades de Domingos Martins, Vitória e Serra (Figura 1.1). As principais vias de acesso são as rodovias BR-262 e BR-101.

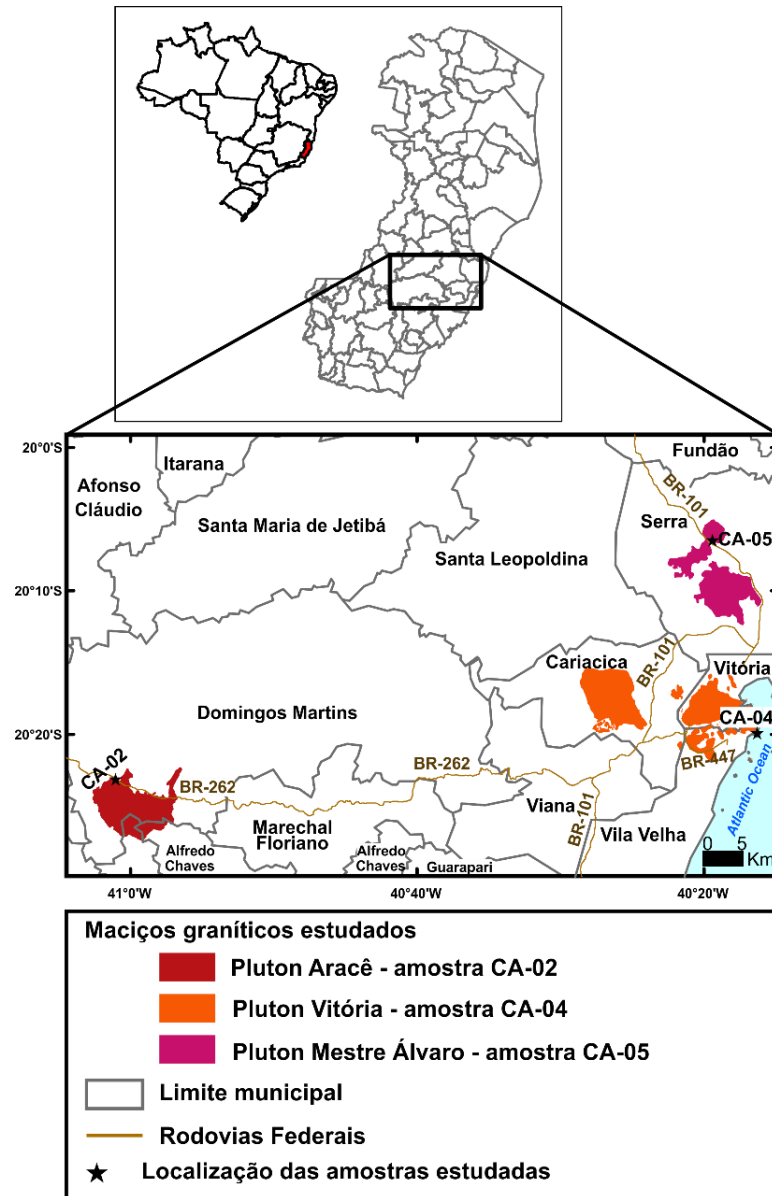


Figura 1.1: Localização e vias de acessos das amostras estudadas.

## CAPÍTULO 2.

### ZIRCON CRYSTALS AS PETROGENETIC INDICATORS: A STUDY OF CRYSTAL MORPHOLOGIES, INTERNAL TEXTURES, U-Th-Pb GEOCHRONOLOGY AND Hf ISOTOPE COMPOSITION IN THE BORDERS OF POST-COLLISIONAL PLUTONS (ARAÇUAÍ OROGEN, BRAZIL)

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#### ABSTRACT

The set of post-collisional intrusions, found in the eastern Araçuaí orogen (SE Brazil), provides a superb natural laboratory to apply diversified petrological approaches and compare their results. Here we use a combination of petrography, detailed study on zircon morphologies, internal structures, and isotopic analyses (U-Th-Pb and Lu-Hf) from borders of three distinct post-collisional intrusions: granite samples from the Aracê (or Pedra Azul) and Vitória plutons, and a tonalite sample from the Mestre Álvaro pluton. Mineral chemistry, whole-rock geochemistry, and a wide compilation data for literature were made for support and compare the zircon petrogenetic interpretations. All together, the post-collisional magmatic series vary from calc-alkaline to shoshonitic, and magnesian to ferroan, including both I-type and A-type granites. Zircon saturation geothermometry in the studied samples suggests igneous temperatures greater than 800 °C. Zircon geochronology resulted in robust crystallization ages of  $523 \pm 2$  Ma for the Aracê (Pedra Azul) pluton,  $505 \pm 1$  Ma for the Vitória pluton, and  $527 \pm 2$  Ma for the Mestre Álvaro pluton. Lu-Hf data (Aracê pluton:  $\epsilon_{\text{Hf}}(t)$  -23.8 to -18.6, TDM 2.47 to 2.25 Ga; Vitória pluton:  $\epsilon_{\text{Hf}}(t)$  -10.4 to -7.4, TDM 1.71 to 1.58 Ga; and Mestre Álvaro pluton:  $\epsilon_{\text{Hf}}(t)$  -8.8 to -0.7, TDM 1.66 to 1.27 Ga) indicate striking crustal involvement in magma genesis. Zircon morphologies and internal structures combined with analytical data suggest that the source rock of samples could be a hybrid magma with high temperatures and that the zircons

would have rapid growth crystallization probably at fast cooling rates. After pluton emplacement, zircons would have changed by *in situ* dissolution–recrystallization and overgrowth in response to crystal interactions with late-stage melts at the end of magmatic crystallization.

**KEYWORDS:** zircon morphologies; U-Pb geochronology; Hf isotope; post-collisional granites; Araçuaí orogen.

## 1. INTRODUCTION

Zircon is extensively studied in Earth sciences because it has a notable resistance to high-temperature diffusive re-equilibration and it contains a large spectrum of geochemically important trace elements, such as Y, Hf, U, Th, and the rare earth elements (REE) (Bea et al. 2018; Belousova et al., 2006; Cherniak and Watson, 2003; Hoskin and Schaltegger, 2003). The low diffusion rates of the REE and tetravalent cations (U, Th, and Hf) in zircon suggest that they are essentially immobile under most geological conditions (Cherniak and Watson, 2003; Tang et al., 2014). Thus, this mineral is a widely used in geochronological and geochemical studies of igneous and metamorphic rocks, as well as to constrain the growth and intra-crustal reworking processes, and investigate different stages of the rock history (Belousova et al., 2006; Corfu et al., 2003; Harley et al., 2007; Hoskin and Schaltegger, 2003; Tang et al., 2014).

The connection between zircon growth and granite petrology has been studied by several authors (e.g., Belousova et al., 2006; Benisek and Finger, 1993; Köksal et al., 2008; Pupin, 1980; Vavra, 1990, 1994; Wang et al., 2002). Accordingly, the morphology of zircon reflects the source characteristics of the host granite, like crystallization temperature, alkalinity index (Pupin, 1980), and the presence of certain chemical elements such as U and REE (Benisek and Finger, 1993; Vavra, 1990; Wang et al., 2002). Pupin (1980) established the fundamental basis for the study of zircon morphological populations relating arrangements of prismatic and pyramidal crystal faces with a genetic classification of the host granite, and the crystallization temperature of the granitic magma (see Supplementary File B for more details of zircon morphology). Although Pupin's scheme has been useful for various igneous suites, its principles were questioned by several researchers who inferred that the zircon morphologies do not reflect all stages of granitic evolution and are strongly dependent on the magma chemistry (e.g., Benisek and Finger, 1993; Vavra, 1990, 1994).

The Araçuaí orogen, in the southeastern region of Brazil, experienced a long and remarkable magmatic activity from the Ediacaran up to the Cambrian–Ordovician boundary that resulted in an abundant and wide range of different plutonic igneous rocks formed during the Western Gondwana amalgamation. Those rocks record the evolutionary history from the pre-collisional to post-collisional stages covering one-third of the orogenic region (Alkmim et al., 2017; Pedrosa-Soares et al., 2001, 2011) (Figure 1) and becoming the Araçuaí orogen a superb natural laboratory to study processes of orogenic magmatism. In this work, we focus on zircon characterization of post-collisional granites in the southern region of this orogen (Figure 1). We report the results of a detailed study on zircon features associated with U-Th-Pb and Lu-Hf data on zircon samples from selected granitic rocks in plutons borders. Our purpose is to investigate the petrological and geochronological implications of the morphologies, internal textures, and isotopic chemistry of the zircon crystals in order to understand their crystallization history and to add information to the final evolution of Araçuaí orogen. Analytical results were compared with mineral chemistry and bulk-rock geochemistry of the samples and with a wide compiled dataset from the previous studies of the post-collisional stage in Araçuaí orogen.

We use the name granite in a general sense, if not otherwise specified. Geographical coordinates refer to the present day position of continents, even in relation to paleocontinental descriptions. Besides the forthcoming sections, a thorough data compilation from the literature is found in Supplementary file A and D, detailed descriptions of the studied material and analytical methods are available in the Supplementary file B, and the new data are presented in Supplementary files C, D, and E.

## 2. GEOLOGICAL SETTING

The studied region is located in the high-grade (crystalline) core of the Araçuaí-West Congo orogenic system - AWCO (Alkmim et al., 2006, 2017; Pedrosa-Soares et al., 2001, 2008; Figure 1). The AWCO represents the evolution of a confined orogenic system formed during the Western Gondwana amalgamation in Late Neoproterozoic time, within an embayment surrounded by the São Francisco-Congo craton (Alkmim et al., 2006, 2017; Pedrosa-Soares et al., 2001, 2008). Long after that paleocontinental assemblage promoted by the Brasiliano - Pan-African orogeny, the AWCO was split apart in the Cretaceous, by the opening of the South Atlantic Ocean, leaving the Araçuaí orogen in South America, and the West Congo belt in Africa.

AWCO evolution includes three main orogenic stages: the pre-collisional stage (c. 630-580 Ma) related to the Rio Doce magmatic arc; the collisional stage (c. 585-540 Ma) associated with regional tectonics and metamorphism, and production of a huge amount of peraluminous granites; and the post-collisional stage (c. 530-480 Ma) related to the AWCO gravitational collapse, and the generation of a myriad of granitic and mafic intrusions associated with crustal decompression (Alkmim et al., 2006; De Campos et al., 2016; Degler et al., 2017; Gradim et al., 2014; Melo et al., 2017; Pedrosa-Soares et al., 2008, 2011; Richter et al., 2016; Serrano et al., 2018; Tedeschi et al., 2016).

A long-lasting succession of granite production events (c. 630 - 480 Ma) is one of the most remarkable features of the Araçuaí orogen. All those orogenic granites and related rocks have been grouped into five supersuites, namely G1 to G5, including suites, batholiths, stocks, individual plutons, and other minor igneous bodies (cf. Pedrosa-Soares et al., 2011).

The G1 supersuite (c. 630 - 580 Ma) encompasses the calc-alkaline, magnesian and metaluminous granitic to mafic rocks of the Rio Doce magmatic arc (Figure 1B), including magmas formed by crustal anatexis with minor involvement of mantle melts (e.g., Gonçalves et al., 2016; Tedeschi et al., 2016). The G1 supersuite represents a pre-collisional to early collisional orogenic stages, associated with subduction of oceanic crust, and corresponds to the plutonic portion of the Rio Doce arc (Pedrosa-Soares et al., 2011; Tedeschi et al., 2016). Chemical signature and hybrid isotopic attributes of the G1 rocks suggest an interaction between the Paleoproterozoic continental basement and minor mantle-derived magmas in a continental margin setting (Gonçalves et al., 2014, 2016; Pedrosa-Soares et al., 2011; Tedeschi et al., 2016). The arc-related supracrustal successions comprise metavolcano-sedimentary units of the Rio Doce Group in the arc domain, the Nova Venécia paragneiss complex in the back-arc region, and melange-related rock assemblages in the fore-arc zone (Gradim et al., 2014; Novo et al., 2018; Peixoto et al., 2015; Richter et al., 2016).

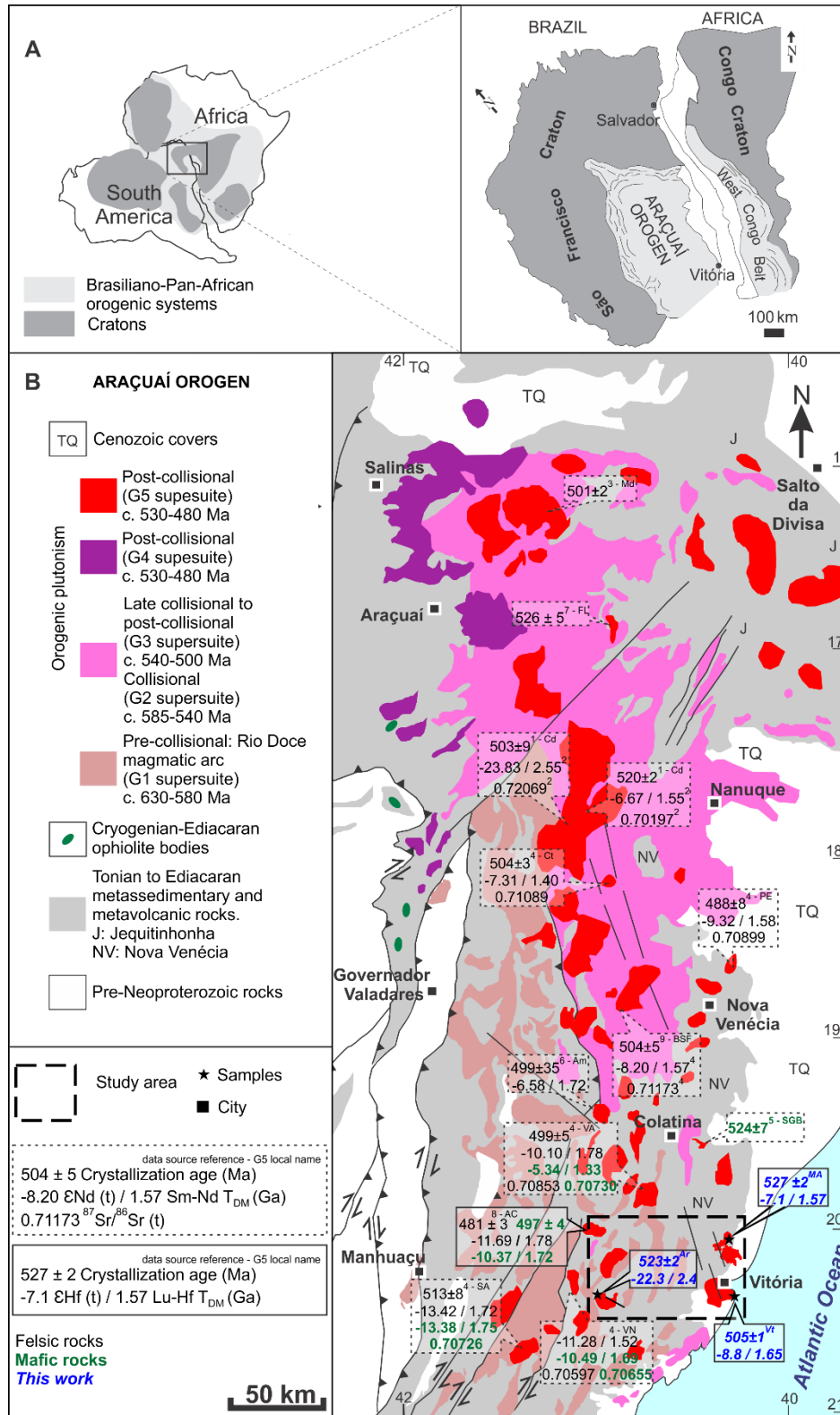


Figure 1: (A) The Araçuai–West Congo orogenic system and the related cratons in the context of West Gondwana (modified from Alkmim et al., 2006). (B) Simplified geological map of the Araçuai orogen (modified from Pedrosa-Soares et al., 2011) with isotope data from literature and this work. Data source references: (1) Noce et al., 2000; (2) Martins et al., 2004; (3) Serrano et al., 2018; (4) De Campos et al., 2016; (5) Belém, 2014; (6) Mello, 2000; (7) Gonçalves et al., 2016; (8) Aranda, 2018; (9) Gradim et al., 2014. G5 local name: (Cd) Caladão, (Md) Medina, (BSF) Barra de São Francisco, (PE) Pedra do

Elefante, (Ct) Cotaché, (SGB) São Gabriel da Baunilha, (Am) Aimorés, (VA) Várzea Alegre, (SA) Santa Angélica, (VN) Venda Nova, (MA) Mestre Álvaro, (Vt) Vitória, (Ar) Aracê or Pedra Azul. See Supplementary file A for further details.

A huge amount of peraluminous G2 granites (c. 585 - 540 Ma) formed from the late pre-collisional to late-collisional stages by the regional anatexis of Al-rich paragneisses under amphibolite to granulite facies conditions (Gradim et al., 2014; Melo et al., 2017; Pedrosa-Soares et al., 2011; Peixoto et al., 2015; Richter et al., 2016).

From the late collisional to post-collisional stages (c. 540 - 500 Ma), mica-free peraluminous leucogranites of the G3 supersuite formed from dehydrating partial melting processes on G2 granitic gneisses, under decompression conditions (Gradim et al., 2014; Melo et al. 2017; Pedrosa-Soares et al., 2011; Serrano et al., 2018).

Lastly, during the late orogenic extensional collapse, mantle delamination associated with possible inflow of the asthenospheric mantle due its destabilization after slab breakoff, and an upwelling of a mantle plume in final post-collisional stage provided an important heat source for the production of a number of post-collisional intrusions (De Campos et al., 2004, 2016; Gradim et al., 2014; Pedrosa-Soares et al., 2011; Serrano et al., 2018). In this context, the G4 supersuite mostly comprises peraluminous, sub-alkaline granites (Figure 1B) and the G5 supersuite, our focus in this work, consists of I-type and A-type, metaluminous to slightly peraluminous, high K-Fe calc-alkaline to alkaline granitic rocks and associated mafic terms (De Campos et al., 2016; Gradim et al., 2014; Pedrosa-Soares et al., 2011; Serrano et al., 2018).

The G5 supersuite (c. 530-480 Ma) represents the most outstanding post-collisional magmatic event of the Araçuaí orogen. It includes balloon-shaped, inversely-zoned, circumscribed plutons mostly composed of granitic-charnockitic and/or gabbro-noritic rocks, as well as batholiths encompassing several plutons, generally with widespread evidence of magma mixing and mingling (De Campos et al., 2004, 2016; Gradim et al., 2014; Pedrosa-Soares et al., 2011; Wiedemann et al., 2002).

Most G5 intrusions occur in the back-arc region to the west of the Rio Doce magmatic arc (Figure 1B) and in the northern ensialic domain of the Araçuaí orogen (Pedrosa-Soares et al., 2011). To the south of latitude 18°30' S, the pluton areas exposed are relatively small, and many of them show cores rich in gabbro-noritic rocks surrounded by granitic-charnockitic rocks, disclosing their mafic roots and suggesting emplacement at deeper crustal levels (De Campos et al., 2004, 2016; Pedrosa-Soares et al., 2001), which is also implied by granulitic host rocks. Conversely, to the north of latitude 18°30' S, the G5 bodies generally form composite batholiths, encompassing several single plutons, where microgranular enclaves are more

common than mafic rocks, suggesting exposure of higher crustal levels in this sector of the orogen. The available geothermobarometric quantitative data also suggest those crustal level relations: G5 plutons found to the south of latitude 18°30' S have provided crystallization pressures in the range of 5.7 – 11.5 kbar (Ludka and Wiedemann-Leonardos, 2000; Mello et al., 2011; Mendes et al., 1999; Mendes and De Campos, 2012; Wiedemann et al., 2002); while the northern Medina batholith was emplaced at pressures around 2.4 – 3.5 kbar (Serrano et al., 2018). The quoted data suggest emplacement depths from c. 9 km, in the region of the Medina batholith (Serrano et al., 2018), to c. 30 km, for the deeply eroded G5 plutons hosted by granulites in the southeastern tip of the Araçuaí orogen (De Campos et al., 2016).

The crystallization temperatures estimated for G5 plutons range from 700 °C and 1000 °C (Ludka and Wiedemann-Leonardos, 2000; Mello et al., 2007; Mendes et al., 1999; Mendes and De Campos, 2012; Serrano et al., 2018; Wiedemann et al., 2002). Isotopic signatures show wide variation ranges for  $^{87}\text{Sr}/^{86}\text{Sr}$  (0.702 – 0.721),  $\epsilon\text{Nd}(t)$  (-4 to -15), Nd  $T_{\text{DM}}$  model ages from 1.3 to 3.3 Ga,  $\epsilon\text{Hf}(t)$  (around -11), and Hf  $T_{\text{DM}}$  model ages around 1.7 Ga (Supplementary file A and Figure 1B), reflecting an important crustal contribution for the magmas that produced the rocks of the G5 supersuite. Extremely negative  $\epsilon\text{Nd}$  values (-20.4 to -23.7) with Neoproterozoic Nd  $T_{\text{DM}}$  ages (c. 2.6 Ga) are reported by Martins et al. (2004).

### 3. THE SAMPLED PLUTONS

The Aracê pluton (sample CA-02, figure 1B), also called Pedra Azul, is an intrusion hosted by the peraluminous migmatites of the Nova Venécia Complex. The pluton has a large volume of hybrid rocks, being an inversely-zoned pluton constituted by mingling and mixing of contrasting magmas now mainly represented by tonalite to granodiorite and granite (Costa-de-Moura et al., 1999; Costa-Nascimento et al., 1996; De Campos et al., 2004, 2016). Whole-rock Rb-Sr isotopic data suggest a crystallization age of  $536 \pm 31$  Ma (Platzer, 1997, in De Campos et al., 2004). Geochemical signature points to high-K calc-alkaline magmatism (Wiedemann et al., 2002; De Campos et al., 2004). The emplacement depth estimated for this pluton is c. 15 km (Wiedemann et al., 2002).

The Vitória pluton (sample CA-04, figure 1B) also intrudes the migmatitic paragneisses of the Nova Venécia complex, showing several magma pulses under different  $\text{H}_2\text{O}/\text{CO}_2$  fluid conditions (De Campos et al., 2004). It is predominantly composed of porphyritic biotite granite to diorite and pink granite. The pluton shows both isotropic and anisotropic fabrics, the latter with striking magmatic flow outlined by the orientation of euhedral K-feldspar megacrysts and

of mafic enclaves (De Campos et al., 2004; Vieira and Menezes, 2015). Several granite and basalt dikes cut the massif.

The Mestre Álvaro pluton (sample CA-05, figure 1B) is an irregularly-shaped intrusive body also hosted by the Nova Venécia paragneissic complex. It consists of porphyritic biotite granite to diorite, generally displaying isotropic fabrics, but locally with igneous flow features (Vieira and Menezes, 2015).

#### 4. PETROGRAPHY AND MINERAL CHEMISTRY

Coordinates of the outcrops, their characteristics, mineralogy, and main features of each studied sample are presented in Table 1. Microprobe analyses data on the mineral chemistry of biotite, feldspars, allanite, titanite, rutile, zircon and apatite are available on Supplementary file C. Mineral abbreviations are in accordance to Whitney and Evans (2010).

Table 1: Summary of the main features of the studied samples.

Pluton	Aracê	Vitória	Mestre Álvaro
Sample	CA-02	CA-04	CA-05
Coordinates	S20°23.237'/W41°01.044'	S20°20.032'/W40°16.383'	S20°06.828'/W40°19.291'
Location	Domingos Martins, Espírito Santo state	Vila Velha, Espírito Santo state	Serra, Espírito Santo state
Field Feature	Light gray, medium to coarse-grained, isotropic	Light pink to gray, medium-grained, isotropic	Light green to gray, coarse-grained, isotropic
Lithotype	Titanite-allanite-biotite granite	Biotite granite	Biotite tonalite
Microtexture	Inequigranular	Inequigranular	Equigranular
Main mineralogy*	Kfs-Qz-Pl-Bt	Kfs-Qz-Pl-Bt	Pl-Qz-Bt
Accessory mineralogy*	Aln-Ttn-Mag-Ap-Zrn-Ilm	Mag-Mnz-Zrn-Ap	Kfs-Mnz-Zrn-Ap-Mag
Secondary mineralogy	Ep-Ms-Chl-Ser	Ms-Chl-Ser-Ru-Cb-Mag-Ilm	Ms-Chl-Ser-Ru-Cb-Ilm
Geochemical characteristics	Ferroan, alkali-calcic, metaluminous, shoshonitic serie	Ferroan, alkali-calcic, slightly peraluminous, shoshonitic serie	Magnesian, calcic, slightly peraluminous, calc-alkaline serie

\* in decreasing order of abundance

Aln: allanite; Ap: apatite; Bt: biotite; Cb: carbonate; Chl, chlorite; Ilm, ilmenite; Kfs, K-feldspar; Mag, magnetite; Mnz, monazite; Ms: muscovite; Pl: plagioclase; Qz: quartz; Ru: rutile; Ttn: titanite; Zrn: zircon.

##### 4.1. Aracê pluton (sample CA-02)

A sample of titanite-allanite-biotite granite (Figure 2A) was collected in the northwest border of the pluton (Figure 1B). It presents K-feldspar (essentially perthitic microcline) with

compositions ranging from Or<sub>89</sub> to Or<sub>93</sub> (Figure 3A). Plagioclase varies from oligoclase (An<sub>13</sub>) to andesine (An<sub>31</sub>; Figure 3A) with reverse and normal slight zonation, and calcic spike. Thin rims of albite surround some crystals (Figure 2B). Antiperthitic and myrmekitic intergrowths are also observed. Biotite presents annite-phlogopite composition and exhibits Mg# (Mg/Mg+Fe) ranging from 0.39 to 0.46, Ti from 0.22 to 0.38 a.p.f.u. (Figure 3B, 3C), <sup>IV</sup>Al from 2.1 to 2.4 a.p.f.u., and high contents of F (1.03 to 0.61 a.p.f.u.). Allanite, relatively rich in Ce (8.0 to 11.9%), occurs as zoned euhedral to subhedral crystals controlled by the abundance of light rare-earth elements (LREE), Fe, Ca, and Th, commonly showing an increase in LREE, Fe, and Ca from core to rim. Titanite is relatively coarse (up to 1 mm) and displays appreciable contents of Al (0.52 to 0.61 a.p.f.u.) and Fe (0.20 to 0.33 a.p.f.u.). The analyzed apatite crystals have fluorapatite composition (F = 3.95 to 5.28%), with acicular shape coexisting with the usual stubby prismatic habit. Zircon commonly appears as inclusions in quartz, feldspars, biotite, allanite and titanite, showing slight increase of Fe from core to rim.

#### **4.2 Vitória pluton (sample CA-04)**

A sample of biotite granite (Figure 2C) was collected in the east border of the pluton (Figure 1B). K-feldspar, essentially perthitic microcline, ranges from Or<sub>82</sub> to Or<sub>92</sub> (Figure 3A). Plagioclase has andesine composition (An<sub>30-38</sub>; Figure 3A) and display slight normal zonation, with occasional antiperthitic and myrmekitic textures. Biotite shows annite-phlogopite composition and exhibits Mg# (Mg/Mg+Fe) ranging from 0.59 to 0.46, Ti from 0.34 to 0.49 a.p.f.u. (Figure 3B, 3C), <sup>IV</sup>Al from 2.4 to 2.7 a.p.f.u., and high contents of F (1.01 to 0.64 a.p.f.u.). Rutile occurs as dark inclusions in biotite or as granular aggregates frequently associated with biotite, feldspar, opaques, carbonate, zircon, and muscovite (Figure 2D, 2E). Apatite term is fluorapatite (F = 4.06 to 4.70%) with stubby prismatic and acicular habits. Zircon usually forms tiny inclusions in quartz, feldspars, and biotite.

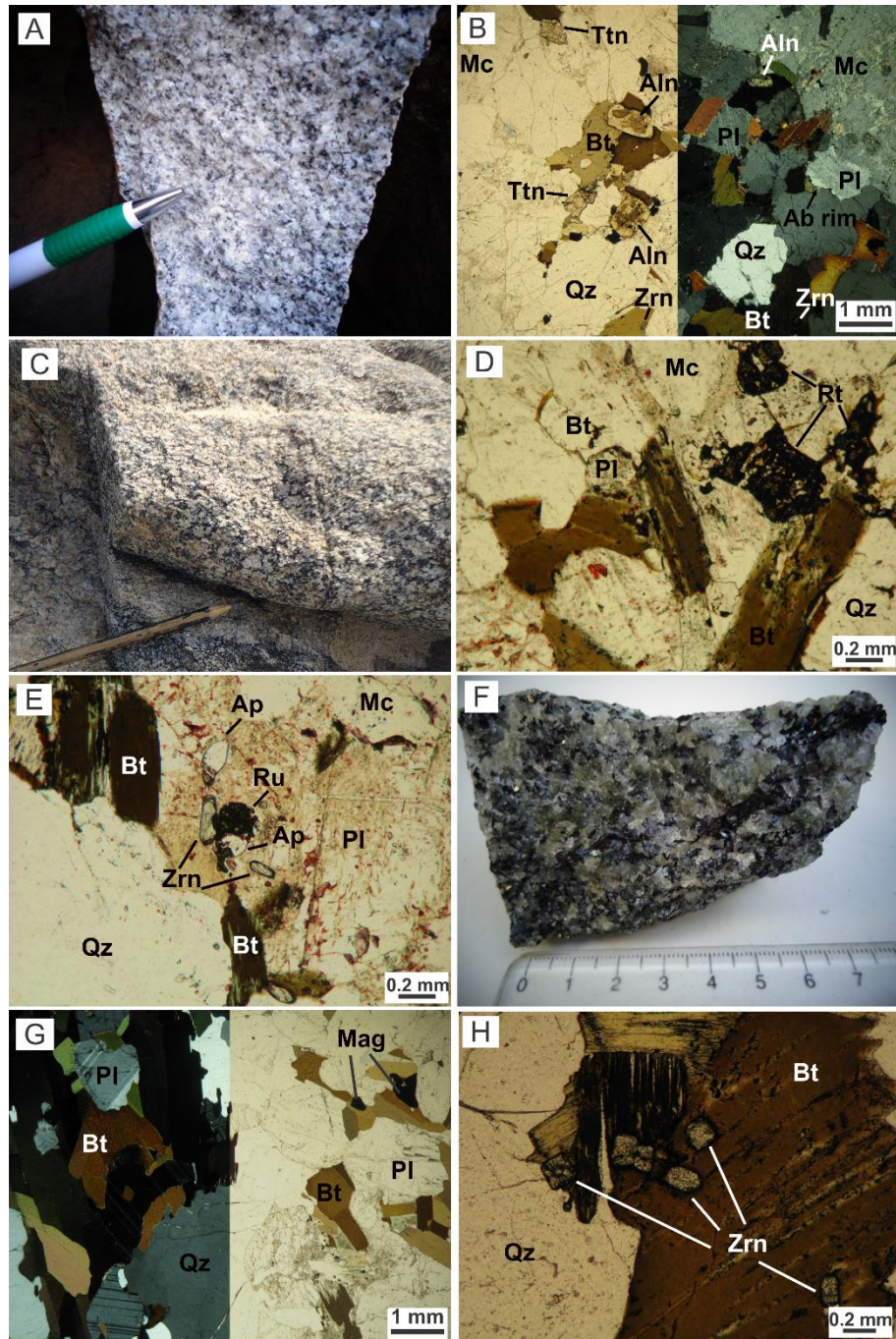


Figure 2: Photos and photomicrographs from the CA-02 (A, B), CA-04 (C, D, E), and CA-05 (F, G, H) samples. (A) Biotite granite sample. (B, G) Photomicrographs showing the main mineralogy. (C) CA-04 outcrop. (D, E, H) Rutile associated with biotite or as dark grains included in the biotite and (H) around zircons. (F) Biotite tonalite sample.

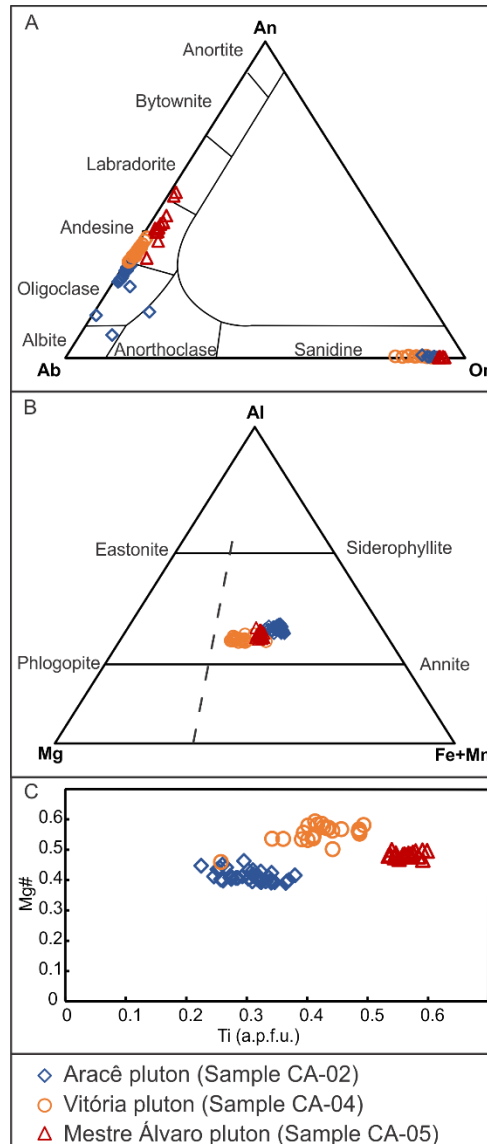


Figure 3: A) Ternary An-Ab-Or feldspar classification diagram; B) Ternary Al-Mg-Fe+Mn biotite classification diagram (Fedele et al., 2015); C) Mg# [Mg/(Fe+Mg)] vs. TiO<sub>2</sub> (wt.%) for biotite.

### 4.3 Mestre Álvaro pluton (sample CA-05)

A sample of biotite tonalite (Figure 2F) was collected in the northeast border of the pluton (Figure 1B). Plagioclase varies from andesine (An<sub>32</sub>) to labradorite (An<sub>52</sub>) with predominance of andesine terms (An<sub>30-50</sub>; Figure 3A), forming crystals with normal zonation and antiperthitic intergrowths. K-feldspar is essentially perthitic microcline with a mean composition of Or<sub>94</sub>. Biotite shows annite-phlogopite composition with mean Mg# (Mg/Mg+Fe) of 0.48 (2SD = 0.017), Ti from 0.56 to 0.60 a.p.f.u. (Figure 3B, 3C), IVAl from 2.3 to 2.5 a.p.f.u., and moderate contents of F (0.29 to 0.50 a.p.f.u.). Rutile appears as tiny granular aggregates included in biotite and plagioclase, being also associated with zircon, secondary muscovite, and chlorite. Sometimes, rutile appears as tiny dark grains around zircon

and included in biotite (Figure 2H). Apatite term is also fluorapatite ( $F = 4.19$  to  $4.55\%$ ) with stubby prismatic and acicular forms. Zircon is commonly found as inclusions in quartz, feldspars, and biotite.

## **5. STUDY OF ZIRCON CRYSTALS**

Here we present the first detailed study on the morphological and textural features, and isotopic Lu-Hf data from zircons extracted from post-collisional granites of the Araçuaí orogen, as well as new zircon U-Pb (LA-ICP-MS) analytical results (see Supplementary data files B and E).

### **5.1 Crystal morphology and internal textures**

We carried out a detailed study on the morphological and textural features of a great number of zircon grains in order to compare the distinct populations and correlated them with petrogenetic indicators.

#### **5.1.1 Aracê pluton (sample CA-02)**

The zircon population is light brown to colorless, translucent, exhibiting subhedral to euhedral terminations, and acicular to long-prismatic forms. Inclusions of apatite are common (Figure 4B). Most crystals show well developed and more dominant  $\{100\}$  face, with most common external morphology belonging to subtypes S19-20, S24-25, and P3 to P5 of Pupin's typological classification (Figure 4A). The grain lengths range from 130 to 600  $\mu\text{m}$ , with length/width ratios from 4 to 11. CL-images show non-zoned to thin magmatic oscillatory zoning, sometimes poorly developed, prevailing medium to low luminescence (Figure 4B). Structureless dark domains form thin rims surrounding several crystals (Figure 4B, zircons 011, 046, and 079). Few grains shows transgression of older zones by dissolution–recrystallization fronts (Figure 4B, zircons 011 and 090). In BSE-images, magmatic oscillatory zoning is either weak or absent (Figure 4B).

#### **5.1.2 Vitória pluton (sample CA-04)**

Zircon population is generally light brown to colorless, translucent, exhibiting subhedral to euhedral terminations, and acicular and short to long-prismatic forms, with well developed and more dominant  $\{100\}$  face. Most common external morphologies belong to subtypes S14, S18 to S20, S23 to S25, and P3 to P5 of Pupin's typological classification (Figure 4C).

Inclusions of apatite and monazite are common (Figure 4D). The grain lengths range from 130 to 500  $\mu\text{m}$  with length/width ratios between 2 and 11. CL-images show non-zoned to thin magmatic oscillatory zoning with prevalence of medium to low luminescence (Figure 4D). Several crystals are surrounded by structureless domains of dissolution–recrystallization and overgrowth rims (Figure 4D, zircons 114, 100, 059, and 029) and/or show transgression of older zones by fronts of dissolution–recrystallization (Figure 4D, zircon 027). In BSE-images, oscillatory zoning is absent to weak (Figure 4D).

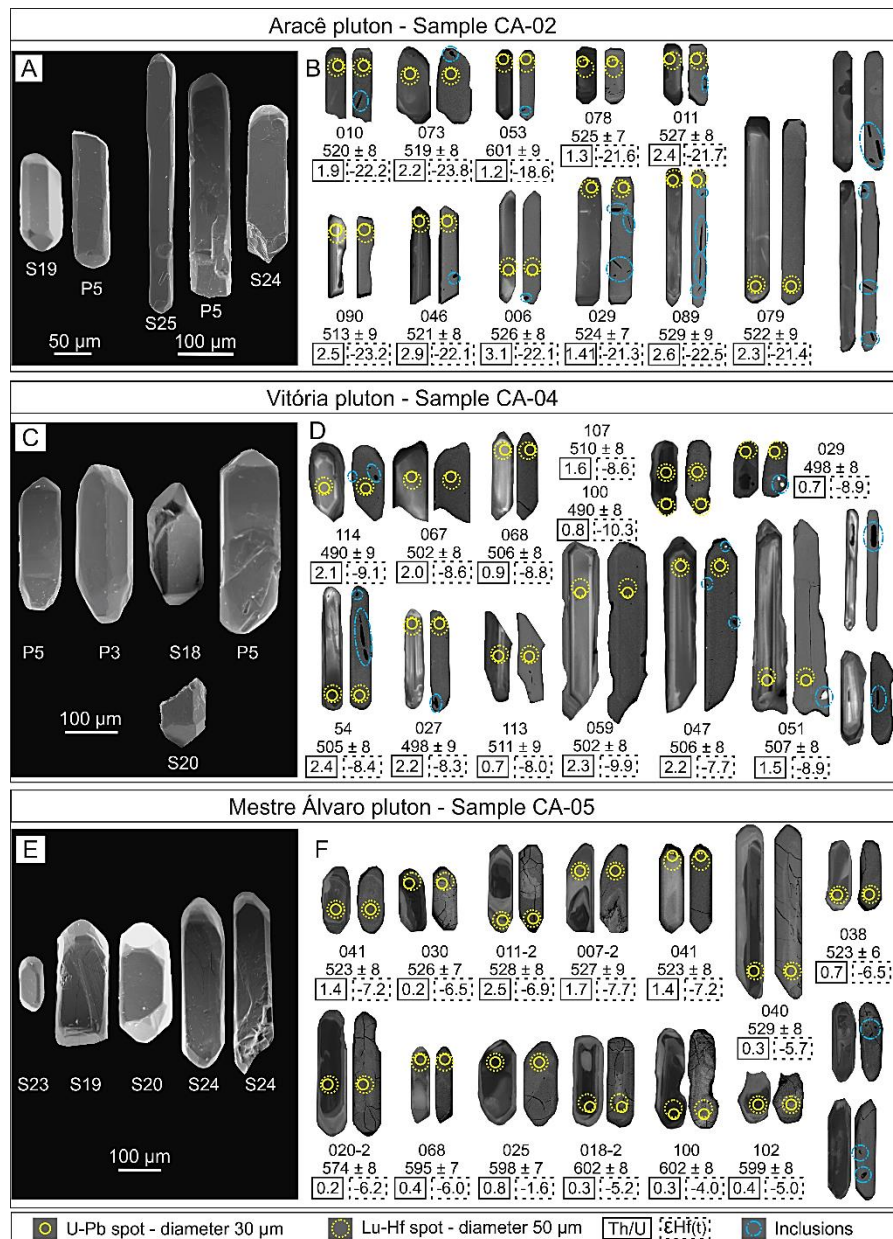


Figure 4: Representative zircon features. (A, C, and E) Secondary electron images showing some subtypes of external morphology by Pupin's typological classification. (B, D, and F) Textures visible by cathodoluminescence with U-Pb and Lu-Hf spots of analyzed zircons. The U-Pb ages are reported as  $^{206}\text{Pb}/^{238}\text{U}$  age in Ma with errors at  $2\sigma$ .

### 5.1.3 Mestre Álvaro pluton (sample CA-05)

Zircon are light brown and grey to colorless, exhibiting anhedral to euhedral terminations often with rounded edges. The external morphologies vary between long and short prismatic, mainly belonging to subtypes S14-15, S18 to S20, S23 to S25, and P2 to P5 of Pupin's typological classification (Figure 4E), with dominant and developed {100} face. Inclusions are scarce. The grain lengths range from 100 to 550  $\mu\text{m}$  with length/width between 2 and 8. CL-images show a heterogeneous zircon set with striking textural differences given by zoned to little or non-zoned grains (Figure 4F), secondary structures of dissolution–recrystallization and overgrowth rims (Figure 4F, zircons 041, 025, 102, and 018-2), occasionally presenting transgression of older zones by dissolution–recrystallization fronts (Figure 4F, zircons 030, 018-2, 041, and 100). Commonly, the grain cores are darker than their edges. In some grains, oscillatory zoning is only revealed by bleached ghost-like relics (Figure 4F, zircons 011-2, 102, 007-2, and 020-2). In BSE-images, zircon grains present weak to absent oscillatory zoning (Figure 4F).

## 5.2 Zircon U-Th-Pb and Lu-Hf data

The analytical U-Th-Pb spots cover rims and cores of the grains. Only data with discordance values lesser than 2%, low common Pb and suitable relations of isotopic ratios were selected for calculations and plotting in concordia diagrams. Representative grains with different U-Pb ages, morphologies and internal textures were chosen for performing Lu-Hf isotope analyses. If not otherwise specified, we use the  $^{206}\text{Pb}/^{238}\text{U}$  spot ages for all samples. Generally, domains of dissolution–recrystallization were not analyzed owing to their small thickness. The analytical results are in Supplementary file E and plots in figures 5 and 6.

### 5.2.1 Aracê pluton (sample CA-02)

Thirty spot ages range from  $513 \pm 9$  Ma to  $530 \pm 9$  Ma, giving a concordia age of  $522.9 \pm 1.6$  Ma (MSWD = 0.86) virtually equal to the mean age of  $522.3 \pm 1.6$  Ma (MSWD = 0.97), providing the best magmatic crystallization age (Figure 5A) for the northwestern border of the Aracê (Pedra Azul) pluton (Figure 1B). Ages from  $564 \pm 9$  Ma to  $601 \pm 9$  Ma (4 grains) much probably represent inherited grains because are in good agreement with the age range found for the country rocks (cf. Gradim et al., 2014; Richter et al., 2016, Pedrosa-Soares et al., 2011). Overall, the Th/U ratios range from 1.1 to 3.8 (Figure 6A, 6B), tending to be greater in younger grains (Figure 6C, 6D).

Nineteen isotopic Lu-Hf analyses on the c. 513 Ma to c. 530 Ma zircons yielded initial  $^{176}\text{Hf}/^{177}\text{Hf}$  ratios ranging from 0.281785 to 0.281852,  $\varepsilon\text{Hf}(t)$  values between  $-23.8$  and  $-21.3$  and Hf  $T_{\text{DM}}$  model ages from c. 2.47 Ga to c. 2.34 Ga (Figure 6E, 6F). Other seven analyses on the 533 Ma to 601 Ma grains yielded initial  $^{176}\text{Hf}/^{177}\text{Hf}$  ratios ranging from 0.281783 to 0.281882,  $\varepsilon\text{Hf}(t)$  values between  $-23.6$  and  $-18.6$  and Hf  $T_{\text{DM}}$  model ages 2.47 Ga to 2.25 Ga (Figure 6E, 6F).

### 5.2.2 Vitória pluton (sample CA-04)

Fifty-one spots analyzed in igneous grains show ages from  $490 \pm 9$  Ma to  $541 \pm 9$  Ma, and Th/U ratios from 0.7 to 2.8 (Figures 5C, 6A, 6B). For better analytical consistency, forty-five spot analyses were selected to plot, resulting in a robust concordia age of  $505.0 \pm 1.3$  Ma (MSWD = 0.81) and the corresponding mean age of  $505.8 \pm 1.2$  Ma (MSWD = 1.05), providing the best magmatic crystallization age ( $505 \pm 1$  Ma; Figure 5C) for the eastern border of the Vitória pluton (Figure 1B).

Eight spots analyses in domains of structureless rims furnished a concordia age of  $496.7 \pm 3.0$  Ma (MSWD = 0.93) and a mean age of  $496.9 \pm 4.5$  Ma (MSWD = 1.6), with Th/U ratios ranging from 0.6 to 2.2 (Figures 5D, 6A, 6B).

Twenty-two analyses on the c. 490 Ma to 541 Ma zircon grains show initial  $^{176}\text{Hf}/^{177}\text{Hf}$  ratios ranging from 0.282181 to 0.282248,  $\varepsilon\text{Hf}(t)$  between  $-10.1$  and  $-7.4$ , and Hf  $T_{\text{DM}}$  model ages from c. 1.71 Ga to c. 1.58 Ga (Figure 6E, 6F). Five Hf isotopic analyses in domains of structureless rims with ages from c. 490 Ma to c. 501 Ma, yielded initial  $^{176}\text{Hf}/^{177}\text{Hf}$  ratios ranging from 0.282186 to 0.282239,  $\varepsilon\text{Hf}(t)$  values between  $-10.3$  and  $-8.3$  and Hf  $T_{\text{DM}}$  model ages c. 1.71 Ga to c. 1.61 Ga (Figure 6E, 6F).

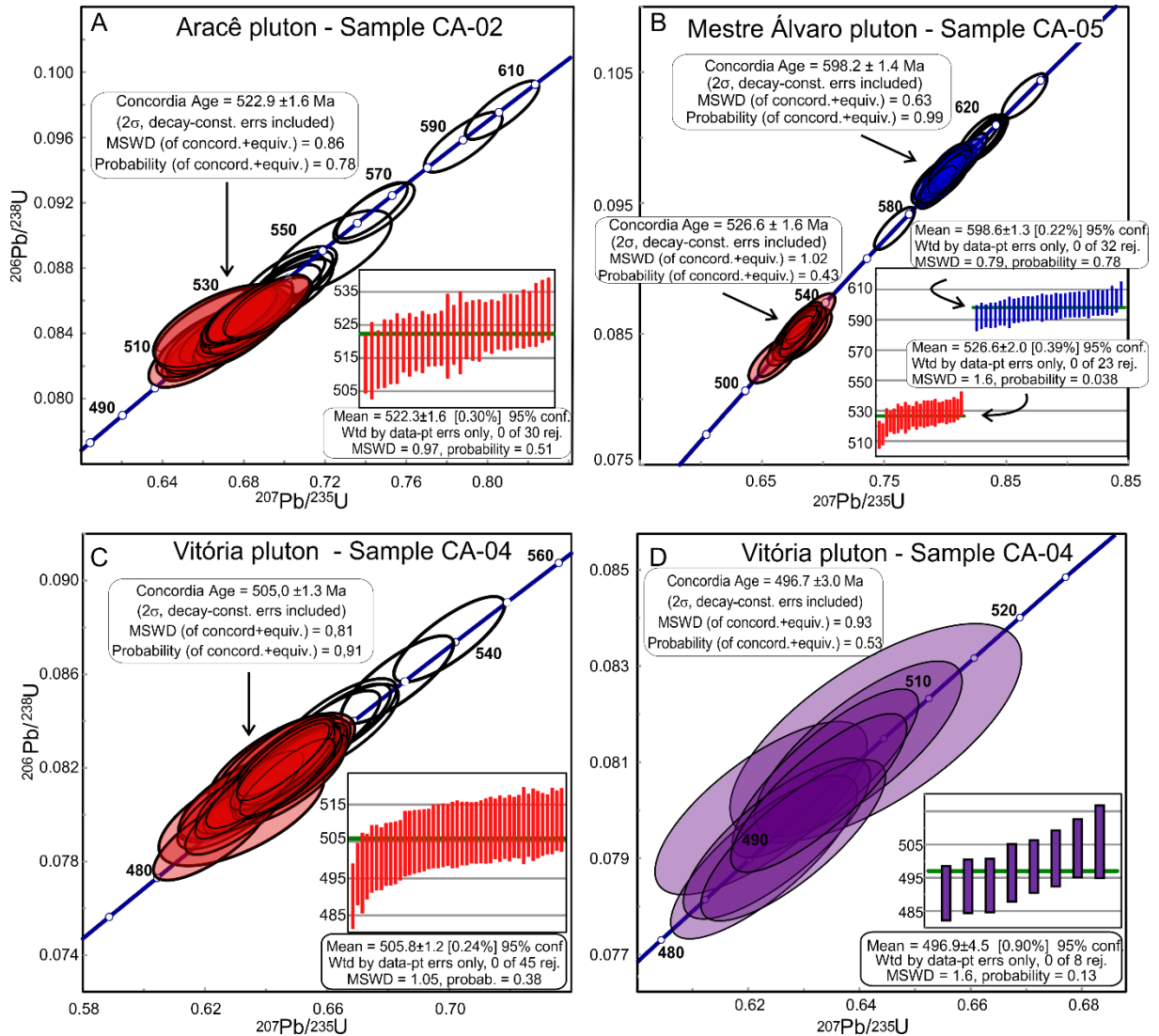


Figure 5: Concordia diagrams and weighted mean  $^{206}\text{Pb}/^{238}\text{U}$  ages showing the results for zircon LA-ICP-MS U-Pb analyses ( $2\sigma$  error ellipses), calculated with Isoplot 4.15 (Ludwig, 2012).

### 5.2.3 Mestre Álvaro pluton (sample CA-05)

Sixty-six spots analyzed on zircon grains show ages from  $514 \pm 9$  to  $633 \pm 8$  Ma, and Th/U between 0.2 and 2.6 (Figures 5B, 6A, 6B). The grains show two clusters of ages, one given the crystallization age and the other related to inherited grains. Twenty-three younger spots yield a concordia age of  $526.6 \pm 1.6$  Ma (MSWD = 1.02), a mean age of  $526.6 \pm 2.0$  Ma (MSWD = 1.6), and Th/U ratios from 0.24 to 2.6, providing the best magmatic crystallization age ( $527 \pm 2$  Ma) for the Mestre Álvaro sample. The thirty-two older spots furnished a concordia age of  $598.2 \pm 1.4$  Ma (MSWD = 0.63), a mean age of  $598.6 \pm 1.3$  Ma (MSWD = 0.79), and Th/U ratios between 0.23 and 1.3, suggesting the age of the main source of the inherited zircon grains.

Seventeen isotopic Lu-Hf analyses were performed on the younger zircons (c. 514 Ma to c. 531 Ma), showing initial  $^{176}\text{Hf}/^{177}\text{Hf}$  ratios from 0.282204 to 0.282290,  $\varepsilon\text{Hf}(t)$  between  $-8.8$  and  $-5.7$ , and Hf  $T_{\text{DM}}$  model ages from c. 1.66 Ga to c. 1.49 Ga (Figure 6E, 6F). For the older zircons (c. 574 Ma to c. 633 Ma), nineteen analyses yielded initial  $^{176}\text{Hf}/^{177}\text{Hf}$  ratios from 0.282234 to 0.282390,  $\varepsilon\text{Hf}(t)$  between  $-6.2$  and  $-0.7$ , and Hf  $T_{\text{DM}}$  model ages from 1.57 to 1.27 Ga (Figure 6E, 6F).

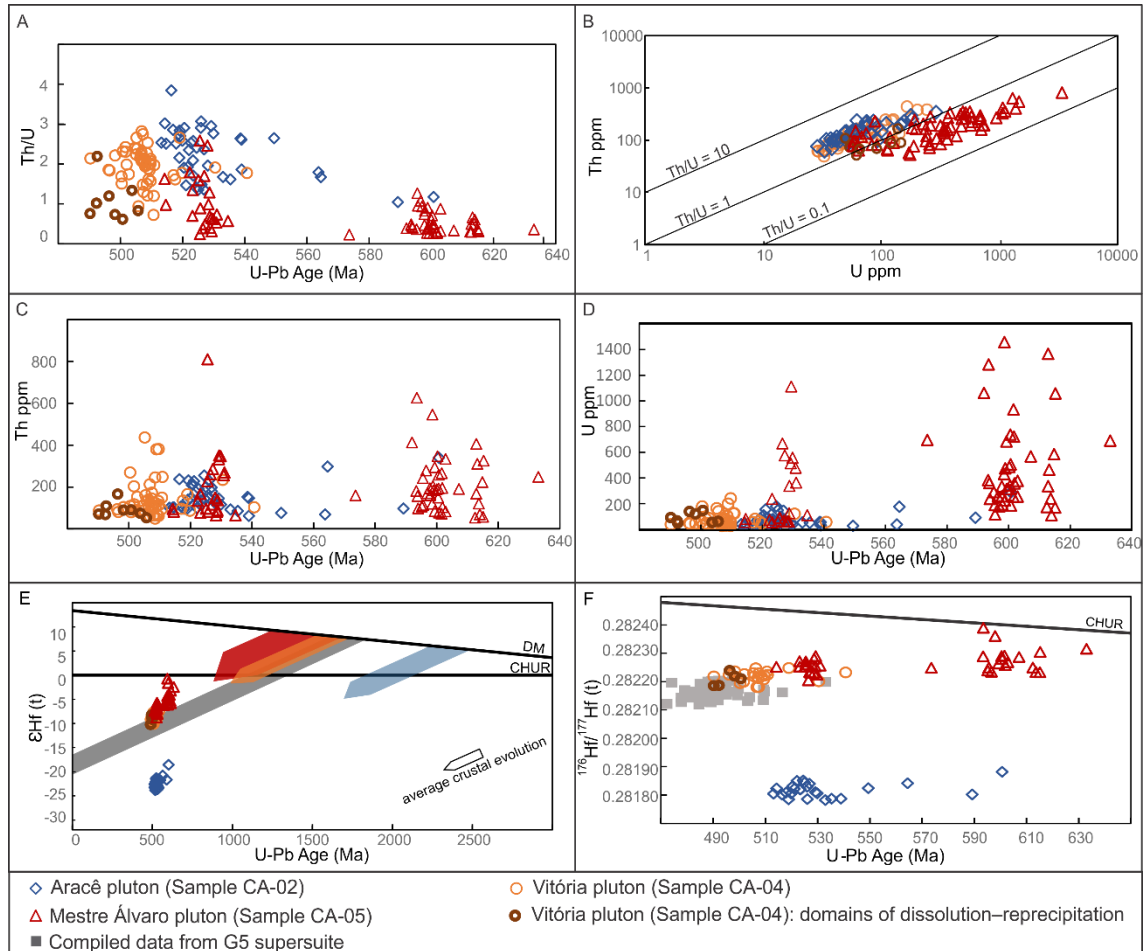


Figure 6: Diagrams including results of U-Th-Pb and Lu-Hf analyses in zircons of the samples and compiled data by LA-ICP-MS. (E) Isotopic evolution (shaded area) of the zircon population with  $^{206}\text{Pb}/^{238}\text{U}$  age. DM = depleted mantle, CHUR = chondrite uniform reservoir. Data compiled from Aranda, 2018 (G5 supersuite); see supplementary file A.

## 6. GEOCHEMISTRY

Despite the small number of studied samples, lithochemical studies were carried out, in the context of a thorough compilation of the literature, in order to provide further support to the zircon petrogenetic interpretations. The results are shown in Supplementary file D, figures 7 and 8, and summarized in Table 1.

Aracê and Vitória plutons samples (CA-02 and CA-04) present similar lithochemical patterns. Both are ferroan, alkali-calcic, metaluminous to slightly peraluminous ( $A/CNK < 1.1$ ), belonging to the shoshonitic series. In contrast, Mestre Álvaro sample (CA-05) is magnesian, calcic, slightly peraluminous ( $A/CNK 1.05$ ), and belongs to a calc-alkaline series (Figure 7A to 7D).

In the tectonic setting diagrams by Pearce et al. (1984, 1996), all studied samples plot in the post-collision granite field. In the discriminant diagrams by Whalen et al. (1987), the studied samples are A-type granites, although in some diagrams the sample CA-05 plots on the A-type field boundary (Figure 8).

According to most G5 granites, our samples are enriched in REE, with fractionation of LREE in relation to HREE, and samples CA-02 and CA-04 show negative Eu anomalies (Figure 7E). The spider diagram, representing incompatible elements normalized to primitive mantle, shows enrichment in LILE compared to HFSE, and negative anomalies for Sr, P, and Ba. Sample CA-05 shows Ta negative anomaly, while samples CA-02 and CA-04 display anomalies of Ti and Nb (Figure 7F). The Zr positive anomaly is remarkable in Mestre Álvaro sample (CA-05). Th positive anomaly appears in all samples, and is stronger for the Vitória sample (CA-04).

The lithochemical data are in very good agreement with the large dataset compiled from literature on the G5 magmatism (Supplementary file D, Figures 7, 8). It varies from calc-alkaline to shoshonitic, with expressive high-K content, predominance of alkali-calcic series and ferroan granites, characterizing A- and I-type plutonism formed in a post-collisional, within-plate tectonic setting.

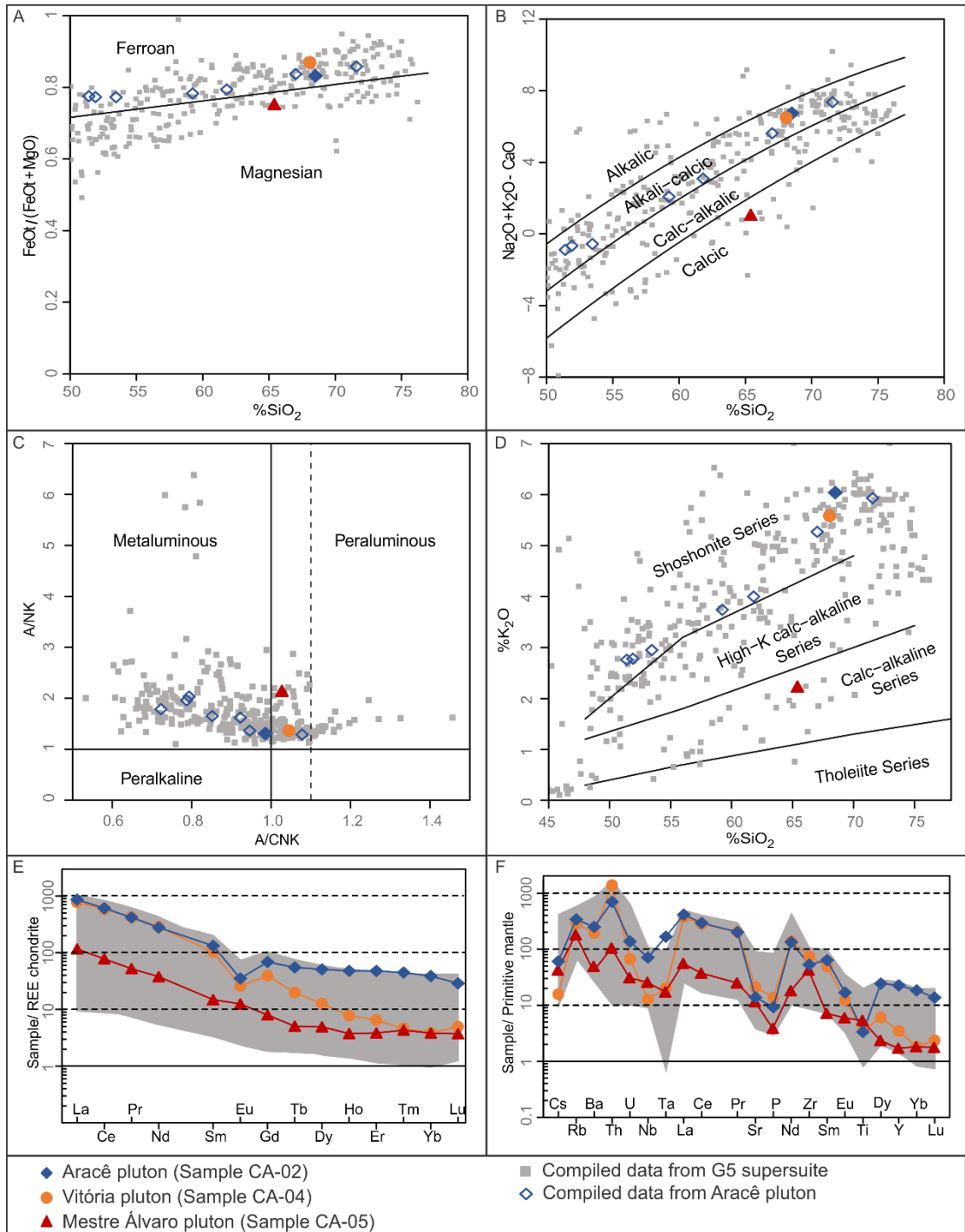


Figure 7: Lithochemical data for the studied samples compared with the available data for G5 rocks (see Supplementary file D). A) FeOt / (FeOt + MgO) vs. SiO<sub>2</sub> (wt%) (Frost et al., 2001); B) Na<sub>2</sub>O + K<sub>2</sub>O - CaO vs. SiO<sub>2</sub> (wt%) (Frost et al., 2001); C) Alumina saturation Index. Dashed line (A/CNK < 1.1) delimits the transition between I- and S-type granites according to

Chappell and White (1974); D)  $K_2O$  vs.  $SiO_2$  (wt%); E) Chondrite-normalized REE patterns, normalized according to Boynton, 1984); F) Multi-elemental diagram normalized to the primitive mantle, according to McDonough and Sun (1995).

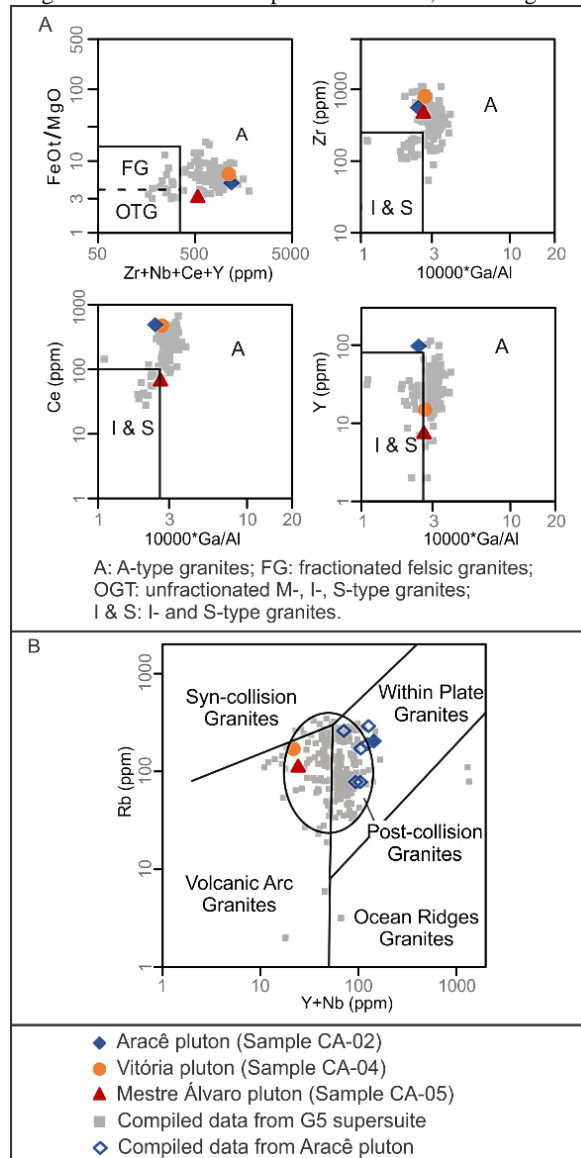


Figure 8: A) G5 granites in the discrimination diagrams by Whalen et al. (1987). B) G5 granites in the tectonic discriminating diagrams by Pearce et al. (1984) and Pearce (1996).

## 6.1 Zircon saturation geothermometry

Based on the presented chemical analyses, the Zr saturation temperature ( $T_{Zr}$ ) was calculated for the studied plutons (see Supplementary file B for details of the calculations). This method ( $T_{Zr}$ ), based on bulk chemical data, is a simple and useful tool to estimate crystallization temperature for magmatic rocks (Boehnke et al., 2013; Watson and Harrison, 1983).

Accordingly,  $T_{Zr}$  data calculated for the studied samples yield temperatures of 834 °C for the sample CA-05 (Mestre Álvaro pluton), 860 °C for the sample CA-02 (Aracê pluton), and 923 °C for the sample CA-04 (Vitória pluton), bracketing a temperature range in good agreement with the published data for other G5 plutons (cf. De Campos et al., 2016; Mello et

al., 2011; Mendes et al., 1999; Mendes and De Campos, 2012; Serrano et al., 2018; Wiedemann et al., 2002).

## 7. DISCUSSION

Despite minor differences, the studied zircon populations show similar morphologies and internal textures. Table 2 summarizes the main characteristics of the studied zircon grains. Here, we discuss those data in the light of the local and regional geology, as well as in comparison with the compiled data presented in supplementary data files.

Table 2: Summary of the main zircon characteristics for the studied samples.

Pluton	Aracê	Vitória	Mestre Álvaro
Sample	CA-02	CA-04	CA-05
Lithotype	Titanite-allanite-biotite granite	Biotite granite	Biotite tonalite
Color	Light brown to colorless, translucent	Light brown to colorless, translucent	Light brown and grey to colorless, translucent
Form	Acicular to long-prisms	Acicular and short to long-prisms	Short to long-prisms with rounded edges
Morphological type	S19-20, S24-25, P3 to P5	S14, S18 to S20, S23 to S25, P3 to P5	S14-15, S18 to S20, S23 to 25, P2 to P5
Size	130 to 600 $\mu\text{m}$	130 to 500 $\mu\text{m}$	100 to 550 $\mu\text{m}$
Length/width ratios	4 to 11	2 to 11	2 to 8
Inclusions	Many. Apatite	Many. Apatite and monazite	Scarce. Apatite
Internal Features in CL**	Unzoned to fine, sometimes weakly marked, magmatic oscillatory zoning. Medium to low luminescence (rarely high). Often surrounded by structureless and thin dark domains and present transgression of older zones	Unzoned to fined magmatic oscillatory zoning. Medium to low luminescence. Often surrounded by overgrowth, structureless domains and transgression of older zones	Zoned to little or no zoned and ghost-like relic. Medium to low luminescence. Often surrounded by overgrowth, structureless domains and transgression of older zones Commonly, the grain cores are dark and the edges are lighter
Internal Features in BSE*	Absence to weak magmatic oscillatory zoning	Absence to weak magmatic oscillatory zoning	Absence to weak magmatic oscillatory zoning
Th/U ratios	1.1 to 3.8	0.7 to 2.8 <i>0.6 to 2.2 (secondary domains)</i>	0.2 to 2.6 <i>0.2 to 1.3 (inherited grains)</i>
U-Pb age (Ma)**	522.9 $\pm$ 1.6	505.0 $\pm$ 1.3 496.7 $\pm$ 3.0	526.6 $\pm$ 1.6 598.2 $\pm$ 1.4
$^{176}\text{Hf}/^{177}\text{Hf}$ (t)	0.281785 to 0.281882	0.282181 to 0.282248 <i>0.282186 to 0.282239</i>	0.282204 to 0.282290 <i>0.282234 to 0.282390</i>
$\epsilon\text{Hf}(t)$	-23.8 to -18.6	-10.1 to -7.4 -10.3 to -8.3	-8.8 to -5.7 <i>-6.2 to -0.7</i>
$T_{\text{DM}}$ (Ga)	2.47 to 2.25	1.71 to 1.58 <i>1.71 to 1.61</i>	1.66 to 1.49 <i>1.57 to 1.27</i>

\* CL = cathodoluminescence images; BSE = Back-Scattered electron images

\*\* Concordia Age

### 7.1 Zircon morphology and internal textures as petrogenetic indicators

Morphological zircon types observed in the studied samples are characterized by the predominance of {100} and {101} faces over {110} and {211} faces (Figure 9).

According to Pupin (1980), these morphologies may imply hybrid sources involving crustal and mantelic components being more typical of zircon from charnockitic rocks, and calc-alkaline to sub-alkaline series granites and alkaline series granites, with temperatures of crystallization above 700°C and more inclusions. In fact, geochemical (Figure 7C, 7D) and TZr data (834 – 923 °C) for our samples are in agreement with Pupin’s scheme, moreover were also observed numerous inclusions in Aracê (CA-02) and Vitória (CA-04) samples (Figure 2, Table 2).

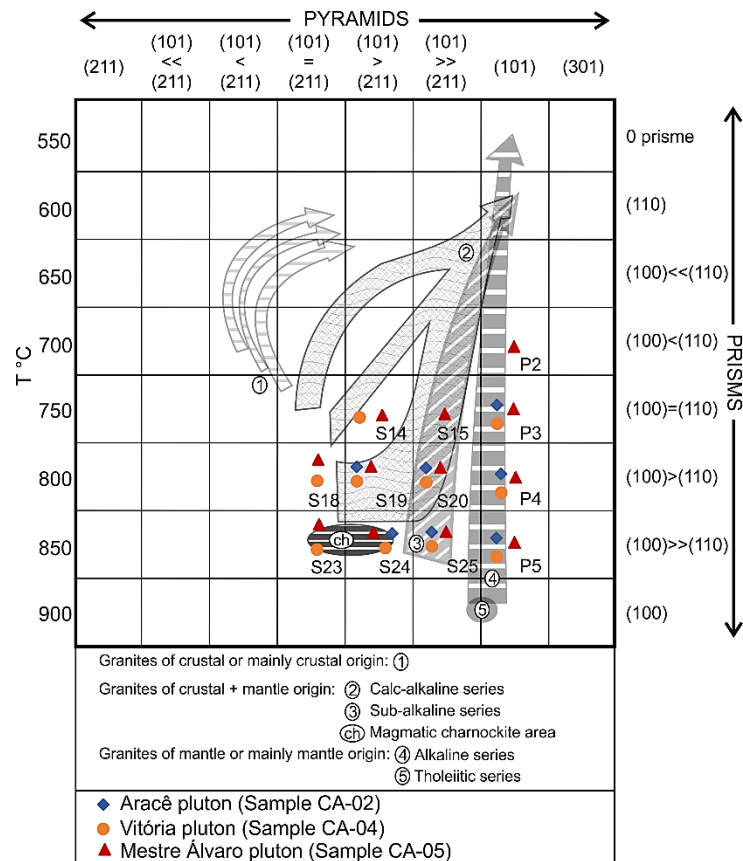


Figure 9: Morphological types of zircon grains found in the samples and their petrogenetic classification (diagram fields by Pupin, 1980).

Vavra (1994) described important compositional factors that control the morphologies of zircon crystals from different granites. Accordingly, high and constant growth rates (high cooling rates) of {100} form relative to the pyramidal forms and by symmetric growth of {101} characterize zircons from alkaline granites, while in calc-alkaline and anatectic granites the zircons exhibit fluctuating or gradually decreasing relative growth rates of {100}, asymmetric and highly variable growth of {101}, and a tendency of {110} to become growth-inhibited.

These compositional controls also reflect our data. Selective adsorption of elements of foreign atoms on different faces may also control the development of zircon faces such as restraining the growth of {211} face (Vavra, 1994) and {110} (Vavra, 1990).

Benisek and Finger (1993) concluded that low U(Th), Y(REE) and P contents relative to Zr in granitic melts tends to produce large {100} zircon face and to inhibit the growth of {110} face. Indeed, our samples display low U (except for CA-02 sample), Y, HREE, and P contents relative to Zr (Figure 7F) and this could be a factor controlling the morphologies observed. However, Th positive anomaly (Figure 7F) present in our samples suggest that this element not had morphology control for zircons studied.

Although Th is commonly more abundant than U in igneous rocks, with a mean Th/U ratio of 3-4 (Ahrens, 1965), in zircon crystals the Th/U ratios are typically less than 1 (Rubatto and Hermann, 2007; Wang et al., 2011). This is because U and Th contents in zircon are controlled by their availability in melt and their partition coefficients ( $D_U$  and  $D_{Th}$ ; Harley et al., 2007; Tang et al., 2014; Wang et al., 2011). As ionic radii of  $U^{4+}$  is closer to that of  $Zr^{4+}$ , it is preferentially accepted in the zircon crystal lattice than  $Th^{4+}$  (Hoskin and Schaltegger, 2003; Shannon, 1976). However, Th became more compatible in the zircon structure with increasing temperature (Tang et al., 2014; Wang et al., 2011) probably due to the expansion of crystal lattice that favors the substitution of  $Zr^{4+}$  by cations with larger ionic radii (Wang et al., 2011).

According to Wang et al. (2002) conditions of rapid growth at undercooling may also facilitate the entry of Th into the zircon lattice in greater amounts. These effects (i.e. high Th contents, high temperature, rapid growth, and undercooling) may explain the high Th/U ratios in the analyzed zircons, especially in the CA-04 and CA-02 samples (Figure 6A to 6D; Table 2). This is consistent with the high temperatures given by  $T_{Zr}$  data and with the Th positive anomaly observed in the studied samples (Figure 7F). Furthermore, the high elongation (length-to-width) ratios observed in most zircon crystals (table 2) may be an indication of rapid growth crystallization (Corfu et al., 2003).

The normal zonation in all samples, the sodic rims in Aracê (CA-02) sample, and the relationship between biotite and rutile in the Vitória (CA-04) and Mestre Álvaro (CA-05) samples are also evidence of high cooling. Granular agglomerates of rutile included in biotite suggest Ti re-equilibration within biotite during cooling. The absence of rutile in the Aracê sample may be related to Ca activity in the melt, inducing the formation of allanite and titanite at the expense of monazite and rutile (Angiboust and Harlov, 2017; Gieré and Sorensen, 2004). On the other hand, the acicular and mixed apatite morphologies present in all samples, and the

reverse zonation in Aracê sample are features of magma mingling and mixing (Baxter and Feely, 2002; Hibbard, 1995).

Mechanisms that reflect high cooling rates and can explain rapid growth crystallization are mixing of magmas and rapid ascent of the magma (Belousova et al. 2006; Wang et al., 2002). Indeed, these two factors are a feasible process during the post-collisional stage of Araçuaí orogen where the crustal setting was dominated by extension and decompression during a gravitational collapse episode, after ceasing the convergent stresses. Several authors have report evidence such as bimodal (felsic-mafic) nature, profuse magma mingling-mixing features, and the related geochemical and isotopic signatures associated with hybrid magma sources at high temperatures (> 700° to c. 1000°C) in the G5 magmatism (De Campos et al., 2016; Mello et al., 2011; Mendes et al., 1999; Mendes and De Campos, 2012; Pedrosa-Soares et al., 2011; Serrano et al., 2018; Wiedemann et al., 2002). Furthermore, the rapid ascent to a higher crustal level would have emplaced the bodies in contact with a cold crust causing a rapid growth crystallization in the borders of the bodies in magma at high temperatures. In fact, the studied samples that are located at the borders of the plutons, present finer granulation than those commonly found in G5 bodies.

Structureless rims are common in zircons of the studied samples, being more expressive in the Mestre Álvaro sample (CA-05; Figure 4). They show complex secondary textures characterized by transgression fronts over older zones, inward-penetrating, irregularly curved domains commonly cutting across primary growth zones, overgrowth rims, and ghost bleached oscillatory zones still visible but blurred. These textures indicate disequilibrium of primary zircon crystals within the magma and can be the result of *in situ* replacement of zircon by a coupled dissolution–reprecipitation or overgrowth processes in response to interactions with residual (late-stage) silicatic melts or deuteritic fluids (Geisler et al., 2007; Harley et al., 2007). The zirconium may have been released from the breakdown of minerals such biotite and rutile during reactions associated with late melt crystallization, promoting the growth of new zircon rims (Harley et al., 2007; Vavra et al., 1996). This may be a possible explanation to secondary textures present in some crystals as, sometimes, rutile has a close relationship with zircon grains (Figure 2E, 2H) that also show slight increase Fe, from the core to rim.

## 7.2 Implications of U-Th-Pb and Lu-Hf data

The U-Pb (LA-ICP-MS) zircon ages from the Aracê (c. 523 Ma), Vitória (c. 505 Ma) and Mestre Álvaro (c. 527 Ma; Figure 5) samples are in conformity with previously published

ages for many G5 intrusions (Supplementary file A, figure 1B). The presented ages, together those compiled from the literature, suggest two episodes of post-collisional magmatism: c. 530 – 515 Ma and c. 505 – 490 Ma.

It is remarkable that the zircons tend to present an increase in Th/U with decrease of age (Figure 6A). Other post-collisional plutons also present high Th/U ratios like the São Gabriel da Baunilha norite ( $524 \pm 7$  Ma, Th/U 1.6-2.2; Belém, 2014) and quartz monzonite ( $481 \pm 3$  Ma, Th/U 0.7-4.3; Aranda, 2018) and monzogabbro of Afonso Cláudio pluton ( $497 \pm 4$  Ma, Th/U 2.4-6.0; Aranda, 2018). This may be related to the high geothermal gradients of the G5 granitoids (De Campos et al., 2016; Serrano et al., 2018) that promote Th entry into zircon structure (as previously discussed). This heat source may be associated with a mantle delamination and asthenosphere upflow after slab breakoff, during the gravitational collapse of the orogen (Figure 10A, 10B), and an upwelling of a mantle plume in final post-collisional stage (Figure 10C), similarly to models presented by De Campos et al. (2016), Gradim et al. (2014), and Serrano et al. (2018).

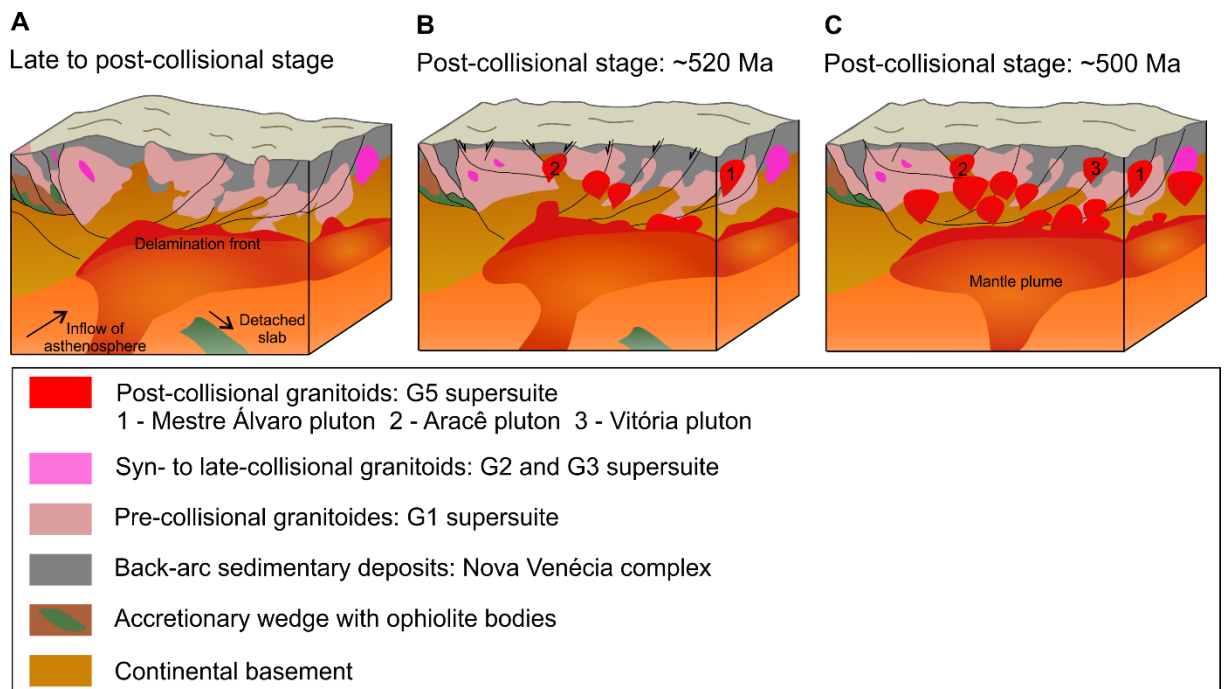


Figure 10: Schematic model illustrating the evolution for the studied region (not to scale).

The Lu-Hf isotopic data indicate important crustal contribution for the genesis of the studied plutons, as previously suggested by isotopic data from the literature (Supplementary file A). This is also consistent with the localization of the samples on borders of the plutons that would favor crustal contamination, although several published papers have quoted important evidence

of mingling-mixing processes involving mantelic magmas (De Campos et al., 2016; Ludka and Wiedemann-Leonardos, 2000; Mendes et al., 1999; Mendes and De Campos, 2012; Serrano et al., 2018; Wiedemann et al., 2002). The Vitória (CA-04;  $\epsilon\text{Hf}_{(t)}$ : -10.1 to -7.4) and the Mestre Álvaro (CA-05;  $\epsilon\text{Hf}_{(t)}$ : -8.8 to -5.7) samples show overlapping fields in the isotopic evolution diagram (Figure 6E) with Statherian to Calymmian (1.71 Ga to 1.49 Ga) Hf  $T_{\text{DM}}$  model ages. These data suggest that Vitória and Mestre Álvaro samples may have contributions from the same sources, which is according to their geographical proximity (Figure 1B). The Aracê (CA-05) sample shows much more negative  $\epsilon\text{Hf}_{(t)}$  values (-18.6 to -23.8) and older Hf  $T_{\text{DM}}$  model ages (2.47 Ga to 2.25 Ga) suggesting a contribution of the regional Paleoproterozoic basement (Degler et al., 2018). Our Hf  $T_{\text{DM}}$  model ages show good agreement with the previous Hf and Nd  $T_{\text{DM}}$  data for other plutons (Figure 1B and Supplementary File A). Thus, given the evidence of mixtures of magmas presented and the hybrid nature of the G5 magmatism, the  $T_{\text{DM}}$  ages can also represent mixed ages.

Only the Vitória (CA-04) sample has allowed to the isotopic spot analysis of structureless rim domains in zircons. The resulting age ( $497 \pm 3$  Ma; Figure 5D) is slightly younger than that obtained from igneous zircons of the same ( $505 \pm 1.3$  Ma; Figure 5C). Overall, those domains preserved the Hf isotopic signature of the igneous zircons, although they are more negative than the corresponding grain core, indicating an overgrowth process (Figure 4, grains 100 and 107). Therefore, the domains of structureless rims formed during the late crystallization stage of the pluton and may be associated with late-stage melts.

## 8. CONCLUSION

We present the data obtained from the detailed study of zircon grains that, together with a wide compilation of the literature, provide important petrological and geochronological implications for their crystallization history and for post-collisional rocks of the Araçuaí orogen.

U-Pb (LA-ICP-MS) zircon geochronology yielded robust crystallization ages for the Mestre Álvaro (c.  $527 \text{ Ma} \pm 2$ ), Aracê (c.  $523 \pm 2$  Ma), and Vitória (c.  $505 \pm 1$  Ma) samples (Figure 5). Their Lu-Hf isotopic data indicate a crustal contribution for magmas evolution and the TDM ages can also represent mixed ages.

The described zircon features and TZr calculated temperatures (c.  $834 - 923$  °C) allow us to infer a heat source associated with an asthenosphere upflow and upwelling of a mantle plume

that triggered the post-collisional crustal anatexis and formed the precursor magmas of the studied samples (Figure 10).

Moreover, according to the observed features and obtained data the source rock of samples could be a hybrid magma and the studied zircons would have crystallized from alkaline to calc-alkaline magmas with low U, Y, HREE, and P contents relatively to Zr at temperatures above 700°C and high cooling rates. The high cooling rates are probably related to a fast magma ascent and/or a mixing of magmas. After pluton emplacement, primary zircon crystals would have changed by in situ dissolution-recrystallization processes and/or overgrowth in response to zircon interactions with residual melts and/or deuteritic fluids at the end of pluton crystallization.

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### **CAPÍTULO 3. CONCLUSÕES**

As informações obtidas através dos cristais de zircão forneceram importantes contribuições para compreender as histórias evolutivas dos plútons estudados. As idades de cristalização pertencem ao estágio pós-colisional do Orógeno Araçuaí com indícios de importante participação crustal na evolução dos plútons.

As características observadas e os dados obtidos nos permitem inferir fontes híbridas envolvendo manto e crosta para plutonismo estudado, bem como altas temperaturas de cristalização magmática, acima de 800 ° C. A origem do calor pode estar associada ao influxo do manto astenosférico devido à sua desestabilização após a quebra da placa e ao surgimento de uma pluma matélica no final do estágio pós-colisional do Orógeno Araçuaí.

As morfologias dos zircões, bem como suas características texturais e elevadas razões Th/U, indicam altas taxas de resfriamento, provavelmente devido a uma rápida ascensão do magma através de fraquezas originadas no processo de descompressão da crosta durante o estágio pós-colisional. Os domínios de dissolução–recristalização e de sobrecrescimento observados nos zircões teriam ocorrido em resposta a interações com fluídos ao final da cristalização magmática, após o alojamento dos plútons.

O presente trabalho demonstra que o estudo detalhado dos cristais de zircão associado à análises U-Th-Pb e Lu-Hf (via LA-ICP-MS) podem fornecer importantes dados adicionais sobre a petrogênese granítica, auxiliando na elucidação da história de evolução dos plútons e na elaboração de modelos petrogenéticos.

## **ANEXOS**

## **Supplemnetary File A – Compiled Data**

G5 plutons ages obtained from literature					
G5 local name	Rock-type	Locality	Age (Ma)	Details	Data source
Caladão	Megaporphyritic granite	Minas Gerais state (between Teófilo Otoni and Ataléia)	520 ± 2	Pb-evaporation, zircon, n: 4. Sample: MU-1c	Noce et al. 2000
	Fine-grained granite vein		503 ± 9	Pb-evaporation, zircon, n: 2. Sample: MU-10b	Noce et al., 2000
Padre Paraíso	Charnockite	Minas Gerais state (between Teófilo Otoni and Ataléia)	516 ± 3	Pb-evaporation, zircon, n: 1. Sample: MU-2	Noce et al., 2000
Santa Angélica	Porphyric granite	Southern region of Espírito Santo state	513 ± 8	ID-TIMS, zircon, upper intercept. Sample: St A-51	Söller et al., 1991 in De Campos et al., 2016
	Titanite Granite		492 ± 15	Zircon	Wiedemann et al., 2002
Mimoso do Sul	Titanite Granite	Southern region of Espírito Santo state	480 ± 4	Sample: BU-11	Söller et al., 2000
	Monzosyenite		495 ± 5	ID-TIMS, zircon. Sample: MS-11	Söller et al., 2000
Medina	Sienogranite	Medina, Minas Gerais state	501 ± 2	LA-ICPMS, zircon, n: 21. Sample: R13A	Serrano et al., 2018
	Sienogranite		497 ± 2	LA-ICPMS, monazite, n: 28. Sample: R13A	Serrano et al., 2018
Várzea Alegre	Charnockite	Central region of Espírito Santo state	499 ± 5	TIMS, zircon, n: 4. Sample: VA-04	Mendes at al., 2005
Aimorés	Hypersthene granitoid	Central region of Espírito Santo state	513	LA-ICPMS, zircon. Sample: 2107-LC-168	Baltazar et al., 2010
	Hypersthene granitoid		502	LA-ICPMS, zircon. Sample: OF-172A	Baltazar et al., 2010
	Charnockite		499 ± 35	TIMS, zircon, lower intercept, n: 14. Sample: FAM10	Mello, 2000
Intrusive in Muniz Freire batolít	Granitoid	Southern region of Espírito Santo state	500 ± 4	Zircon	Silva et al., 2005
Barra de São Francisco	Charnockite	Central region of Espírito Santo state	523 ± 3	LA-ICPMS, zircon, n: 4. Sample: SC-01B	De Campos et al., 2016
	Charnockite	Barra de São Francisco, Espírito Santo state	504 ± 5	SHRIMP, zircon, n: 7. Sample: 470	Gradim et al., 2014
Pedra do Elefante	Granite	Northern region of Espírito Santo state	531 ± 34	LA-ICPMS, zircon, n: 4. Sample: SC-18B	De Campos et al., 2016
	Charnockite		488 ± 8	LA-ICPMS, zircon, n: 4. Sample: SC-18A	De Campos et al., 2016
Cotaché	Granite	Northern region of Espírito Santo state	504 ± 3	TIMS, zircon, n: 7, intecept. Sample: SC-13	De Campos et al., 2016
São Gabriel da Baunilha	Norite	Baunilha, Colatina, Espírito Santo state	524 ± 7	SHRIMP, zircon, n: 8. Sample: JB21B	Belém, 2014
Suíte Fundão	Gabronorite dike	João Neiva, Espírito Santo state	498 ± 16	SHRIMP, zircon, n: 4. Sample: D15	Belém, 2014
	Porphyritic olivine-basalt dike	Pendanga, Espírito Santo state	509 ± 16	SHRIMP, zircon, n: 6. Sample: JB16	Belém, 2014
	Enderbitic-norite dike	Alto de Santa Maria, Espírito Santo state	525 ± 10	SHRIMP, zircon, n: 6. Sample: JF120	Belém, 2014
Fazenda Liberdade	Granodiorite	Fonteira dos Vales, Minas Gerais state	526 ± 5	LA-MC-ICPMS, zircon, n: 31. Sample: LG29	Gonçalves et al., 2016
Afonso Cláudio	Quartz monzonite	Central region of Espírito Santo state	481 ± 3	LA-ICP-MS, zircon, n: 5. Sample: P98	Aranda, 2018
	Monzogabbro		497 ± 4	LA-ICP-MS, zircon, n: 5. Sample: P246-A	Aranda, 2018

*n*: number of grains

Sm-Nd, Rb-Sr, and Lu-Hf data of the G5 plutons obtained from literature								
G5 local name	Rock-type	Sample	Locality	$\epsilon$ Nd (t)	Sm- Nd TDM (Ga)	$^{87}\text{Sr}/^{86}\text{Sr}$ (t)	t (Ma)	Data source
Caladão	Aplite fine granite	MU-10b	Minas Gerais (between Teófilo Otoni and Ataléia)	-20.47	2.57	0.710652	505	Martins et al., 2004
		MU-13		-23.83	2.55	0.720693	505	Martins et al., 2004
	Granite	MU-01A		-6.67	1.55	0.70197	520	Martins et al., 2004
Padre Paraíso	Charnockite	MU-08A	Minas Gerais (between Teófilo Otoni and Ataléia)	-6.85	1.48	0.70978	520	Martins et al., 2004
Barra de São Francisco	Charnockite	SC-01B	Northern region of Espírito Santo	-8.20	1.57	0.71173	500	De Campos et al., 2016
	Granite	SC-01A		-14.44	1.58	0.71312	500	De Campos et al., 2016
Pedra do elefante	Charnockite	SC-18A	Northern region of Espírito Santo	-9.32	1.58	0.70899	500	De Campos et al., 2016
	Granite	SC-18B		-10.67	1.70	0.70948	500	De Campos et al., 2016
Cotaché	Granite	SC-14A	Northern region of Espírito Santo	-6.04	1.55	0.71291	500	De Campos et al., 2016
	Granite	SC-13		-7.31	1.40	0.71089	500	De Campos et al., 2016
Suíte Fundão	Gabronorite dike	D15	João Neiva, Espírito Santo	-6.93	1.96	0.7077*	500	Belém, 2014
	Porphyritic olivine-basalt dike	JB-16-3	Pendanga, Espírito Santo	-11.74	1.53	0.7066*	500	Belém, 2014
Aimorés	Charnockite	FAM-4	Central region of Espírito Santo state	-7.05	1.51	0.71756*	500	Mello, 2000
	Porphyritic granite	FAM-25		-6.58	1.72	0.71686*	500	Mello, 2000
	Granodiorite	FAM-21		-7.77	1.66	0.71962*	500	Mello, 2000
Várzea Alegre	Qtz-diorite	VA-06	Central region of Espírito Santo	-7.90	1.53	0.70726	500	De Campos et al., 2016
	Opx-gabbro	VA-218		-5.34	1.33	0.70730	500	De Campos et al., 2016
	Charnockite	VA-90		-8.38	1.63	0.70852	500	Mendes et al., 2005
	Charnockite	VA-261		-10.10	1.78	0.70853	500	Mendes et al., 2005
	Charnockite	VA-125		-8.89	1.67	0.71223	500	Mendes et al., 2005
	Granite	VA-176		-7.93	1.72	0.70847	500	De Campos et al., 2016
Santa Angélica	Gabbro/diorite	St A-63	Southern region of Espírito Santo	-13.07	1.76	0.70699	500	De Campos et al., 2016
	Gabbro/diorite	St A-71A		-13.38	1.75	0.70726	500	De Campos et al., 2016
	Gabbro/diorite	St A-72		-13.55	1.82	0.70711	500	De Campos et al., 2016
	Allanite-granite	St A-50		-12.73	1.65	0.71688	500	De Campos et al., 2016
	Allanite-granite	St A-51		-13.42	1.72	-	500	De Campos et al., 2016
Venda Nova	Alkali gabro	VNI-3	Southern region of Espírito Santo	-10.49	1.69	0.70655	500	De Campos et al., 2016
	Alkali gabro	VNI-12		-9.28	1.45	-	500	De Campos et al., 2016
	Charnockite	VN-13		-7.33	1.44	0.70753	500	De Campos et al., 2016
	Charnockite	VN-23		-11.28	1.52	0.70597	500	De Campos et al., 2016
Mimoso do Sul	Monzonite	M24	Southern region of Espírito Santo	-12.20	1.66	0.70672	500	De Campos et al., 2016
	Monzonite	M-81		-14.58	1.93	0.70681	500	De Campos et al., 2016
Jacutinga	Gabbro	M475	Southern region of Espírito Santo	-14.10	3.29	0.70712	500	De Campos et al., 2016
	Gabbro	M470(2)		-10.39	2.21	0.70813	500	De Campos et al., 2016
Itaoca	Gabbro	MHW-31	Southern region of Espírito Santo	-8.05	2.35	0.70604	500	De Campos et al., 2016
	Gabbro	PS-32		-3.83	2.65	0.70499	500	De Campos et al., 2016
G5 local name	Rock-type	Sample	Locality	$\epsilon$ Hf (t)	Lu-Hf TDM (Ga)	-	t (Ma)	Data source
Afonso Cláudio	Quartz monzonite	P-98	Central region of	-11.70	1.78	-	481	Aranda, 2018
	Monzogabbro	P-246A	Espírito Santo state	-10.37	1.72	-	497	Aranda, 2018

\* (t) not cited

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**Supplemnetary File B – Materials and methods**

## B. MATERIALS AND METHODS

### B.1 Petrography

The thin sections were made in CPMTc-UFMG (Centro de Pesquisa Professor Manoel Teixeira da Costa of the Federal University of Minas Gerais) and examined under transmitted and reflected light microscopy at the CPMTc-UFMG and DEGEO-UFOP (Geology Department of Federal University of Ouro Preto).

Mineral abbreviations, in accordance to Whitney and Evans (2010), are: Ab, albite; Aln, allanite; Ap, apatite; Bt, biotite; Cb, carbonate; Chl, chlorite; Crd, Cordierite; Ep, epidote; Grt, garnet; Hc, hercynite; Ilm, ilmenite; Kfs, K-feldspar; Mag, magnetite; Mc, microcline; Mnz, monazite; Ms, muscovite; Opq, opaques minerals; Pl, plagioclase; Qz, quartz; Ser, sericite; Sil; Sillimanite; Ru, rutile; Ttn, titanite; Zrn, zircon.

### B.2 Mineral chemistry

Microprobe data were obtained from feldspars, biotite, allanite, zircon, apatite, titanite, and rutile using an electron microprobe JEOL JXA-8230 at the Microscopy and Microanalysis Laboratory (LMIC), Federal University of Ouro Preto. For silicates (except allanite) and oxides, the column conditions were performed under an accelerating voltage of 15 kV, a beam current of 20 nA, and a spot diameter of 5  $\mu\text{m}$ . Quartz (Si),  $\text{CaF}_2$  (F), anorthoclase (Na), zircon (Zr), olivine (Mg), corundum (Al), magnetite (Fe), fluor-apatite (Ca and P), rutile (Ti), MnO (Mn), microcline (K), chromite ( $\text{Cr}_2\text{O}_3$ ), diopside (CaO), barite (Ba), scapolite (Cl) and strontianite (Sr) were used as standards. For allanite, the accelerating voltage was of 20 kV, with a beam current of 150 nA, and a spot diameter of 5  $\mu\text{m}$ ; the standards used were  $\text{YPO}_4$  (Y), quartz (Si), corundum (Al), olivine (Mg), U glass (U), monazite MADMON (Th and Ce), magnetite (Fe), lead sulphide (Pb), fluor-apatite (Ca and P), rutile (Ti),  $\text{GdPO}_4$  (Gd),  $\text{SmPO}_4$  (Sm), MnO (Mn),  $\text{NdPO}_4$  (Nd),  $\text{PrPO}_4$  (Pr),  $\text{LaPO}_4$  (La). Common matrix ZAF corrections were applied. All Fe is present as  $\text{Fe}^{2+}$ . Counting times on the peak/background were 10/5 s for most of the elements, except for U and Pb (40/20 s), and for Cl (30/5 s). Background intensities were collected at higher and lower energies relative to the corresponding  $K\alpha$  and  $L\alpha$  lines. Analytical errors are within 0.27 and 0.98%.

The chemical formulas (a.p.f.u. - atoms per formula unit) for all minerals were calculated according to Deer et al. (2013).

The feldspar end-member concentrations were calculated in percent as  $An = 100 * Ca / (Ca + Na + K)$ ,  $Ab = 100 * Na / (Ca + Na + K)$ ,  $Or = 100 * K / (Ca + Na + K)$ .

The results are presented in Supplementary File C.

### B.3 Whole-rock chemistry

The samples were carefully examined to select only fresh and homogenous parts, free of weathering superficialities, fracture fillings, veins or hydrothermal alteration signs. Then the samples were cleaned, crushed and milled at the SEPURA laboratory (Laboratório de Separação Mineral de Alta Pureza) of the Federal University of Minas Gerais, Brazil.

They were analyzed by whole-rock chemistry (majors, traces, and rare-earth elements - REE) in SGS Geosol Laboratories (Brazil). Major elements were analyzed by X-Ray fluorescence (XRF79C) after fusion with lithium tetraborate. Trace elements and REE concentrations were analyzed via inductively coupled plasma mass spectrometry (ICP-MS) after fusion with lithium tetraborate and digestion with a multi-acid solution (HCl, HNO<sub>3</sub>, HF, and HClO<sub>4</sub>). Detection limits are 0.01% for oxides and 0.1–0.01 ppm for most trace, and rare earth elements. The loss on ignition (LOI) was calculated by the weighting difference after 1000 °C heating. The results were analyzed by GCDKit software (Janoušek et al., 2006). They are presented in Supplementary File D.

#### B.3.1 Zr saturation temperature (T<sub>Zr</sub>)

Watson and Harrison (1983) established that the crystallization temperatures of the melts are related to zircon solubility, temperature, and major element composition of melt through the following relationship:

$$\ln D_{Zr} = (- 3.80 - [0.85(M - 1)]) + 12900/T$$

Where:

-T is temperature provided in kelvin;

-M value is a compositional factor calculated by the relation [(Na + K + 2\*Ca)/(Al\*Si)]

with all elements in cation fraction. This factor takes into account the dependence of zircon solubility with SiO<sub>2</sub> and melt aluminosity;

-D<sub>Zr</sub> is partition coefficient of Zr between zircon and melt.

Using modern experimental techniques, Boehnke et al. (2013) re-evaluated the zircon saturation geothermometer proposed by Watson and Harrison (1983) expanding the results for pressures up to 25 kbar and temperatures decreasing up to 700°C. They concluded that the new

relationship is not present significantly different from the original study of Watson and Harrison (1983) and provided the following equation:

$$\ln D_{Zr} = (10108/T) - 1.16 (M-1) 1.48$$

This geothermometer proposed by Boehnke et al. (2013) was applied in the crystallization temperatures calculation for the studied G5 samples.

#### **B.4 Zircons preparing**

About 3 kg of each rock sample were prepared for analyses. First, the samples were cleaned for removal of weathering layers and any other contaminants in SEPURA laboratory in CPMTC-UFMG, then concentrate to zircon in laboratories at USP (University of São Paulo). Zircon grains were handpicked (disregarding color, shape or size) under a binocular microscope and mounted in epoxy mounts at the DEGEO-UFOP (Geology Department of Federal University of Ouro Preto). After polished the mounts to expose grain centers, they were imaged under cathodoluminescence (CL) and the Backscattered electron (BSE) in a JEOL 6510 Scanning Electron Microscope hosted at Microscopy and Microanalysis Laboratory (LMIC) of the Federal University of Ouro Preto. These images were obtained to examine morphologic features, internal structures, and the possible presence of inclusions, cracks or damaged areas to help discriminating regions spot allocation. After observing all available zircon crystals in the concentrates of zircon, only the euhedral crystals representative of the zircon populations were separated and mounted in a carbon adhesive tape for typological investigations of the external morphology and imaged, without polishing, under secondary electron (SE) in a JEOL 6510 Scanning Electron Microscope hosted at CPMTC-UFMG.

##### **B.4.1 Zircon morphology**

The most common zircon crystals are morphologically constituted by two prismatic crystalline forms {100} and {110}, and two pyramidal forms {101} and {211} (Figure B1).

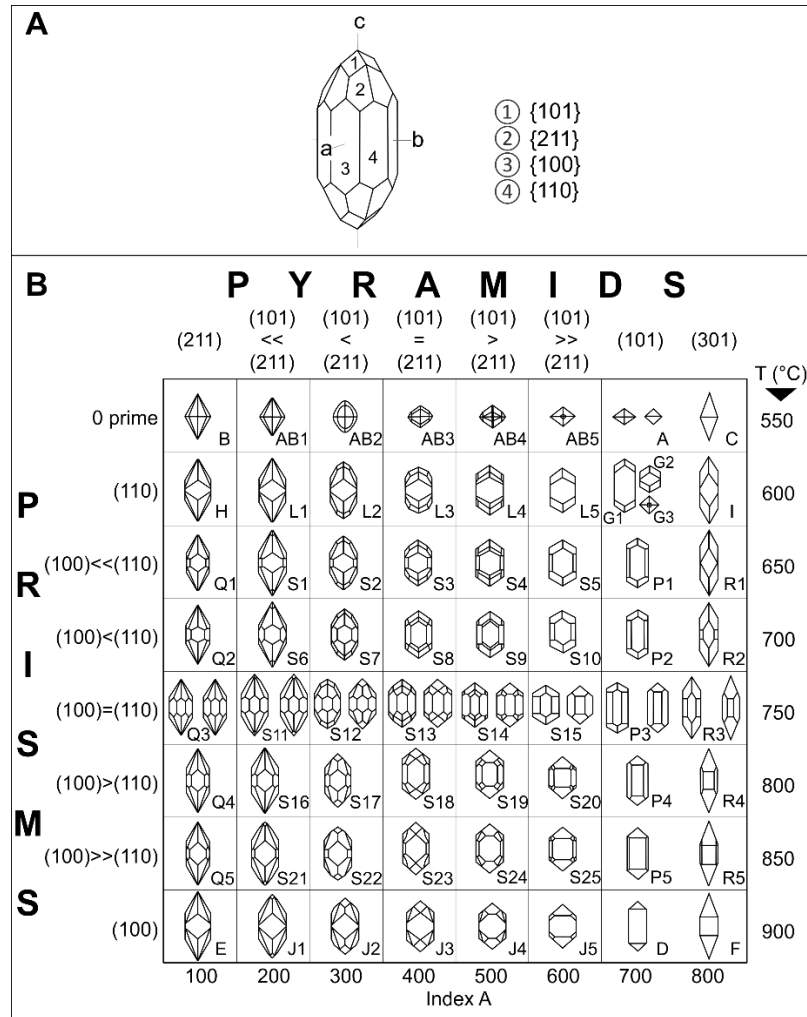


Figure B1: (A) Schemes of zircon morphology with the {100}, {110}, {211}, and {101} combined faces in S12 zircon type.

(B) Zircon typological classification proposed by Pupin (1980). Index A reflects the Al/(Na+K) ratio, controlling the development of zircon pyramids. T (°C) reflects temperature of the crystallization medium that affects the development of different zircon prisms. Modified from Pupin (1980).

Pupin (1980) proposed a scheme in which an arrangement of given prismatic and pyramidal crystal faces constitutes population types and relating the external zircon morphology to a genetic classification of the host-granitoid, the source Al/alkaline ration, and the temperature of crystallization of the granite magma (Figure B1 and B2).

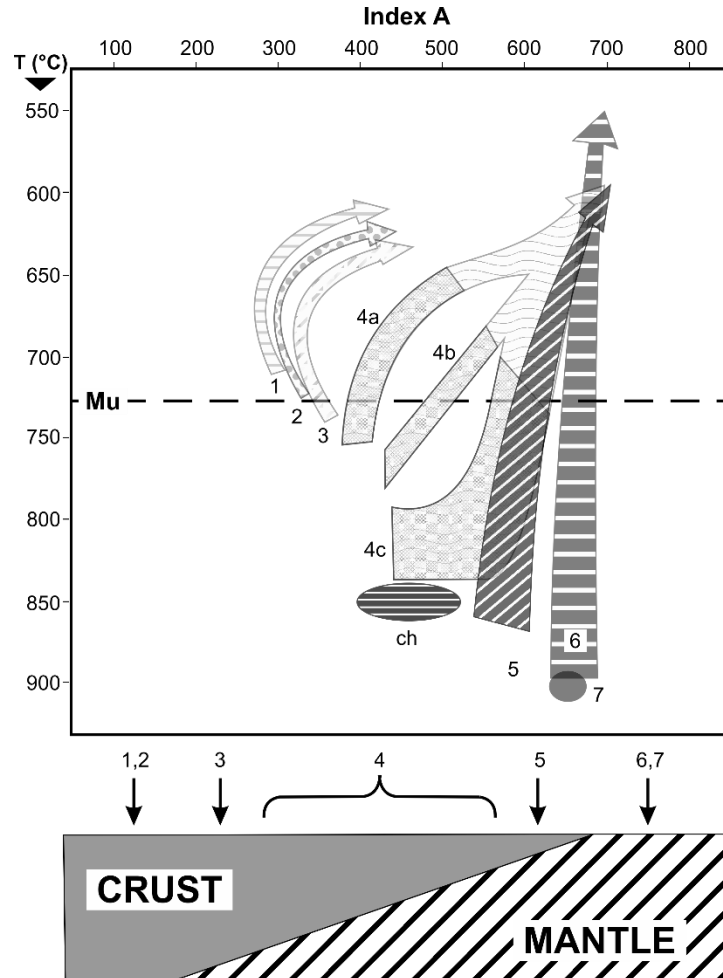


Figure B2: Petrogenetic classification proposed by Pupin (1980) based in zircon populations from: Granites of crustal or mainly crustal origin (orogenic granites): (1) aluminous leucogranites; (2) (sub) autochthonous monzogranites and granodiorites; (3) intrusive aluminous monzogranites and granodiorites. Granites of crustal + mantle origin, hybrid granites (orogenic granites): (4a–c) calc-alkaline series granites (dark area: granodiorites + monzogranites; clear area: monzogranites + alkaline granites); (5) sub-alkaline series granites. Granites of the mantle or mainly mantle origin (anorogenic granites): (6) alkaline series granites; (7) tholeiitic series granites. Ch: magmatic charnockite area; Mu, limit of muscovite granites ( $T < 725^{\circ}\text{C}$ ). Modified from Belousova et al., (2006).

## B.5 U-Pb analyses

U-Pb isotopic analyses were carried out using a ThermoScientific Element II sector field coupled to a PhotonMachine ArF 193 mm laser ablation system (LA-SF-ICP-MS) at the Isotope Geochemistry Laboratory of the DEGEO-UFOP. Laser ablations were performed in peak jumping mode during 20s background measurement followed by 20s sample ablation, spot-size 30  $\mu\text{m}$ , 1,9  $\text{J}/\text{cm}^2$  fluence, 6 Hz repetition rate and carried out using He as a carrier gas mixed with Ar prior to introduction into the ICP-MS. As primary standard were used the BB-9 zircon (Santos et al., 2017) and, for quality control, were used the Plesovice (Sláma et al., 2008) or

GJ-1 zircons (Jackson et al., 2004) as a secondary standard. Signal data were reduced using the software Glitter (van Achterbergh et al., 2001) and corrected for background signal, common Pb, laser-induced elemental fractionation, instrumental mass discrimination, and time-dependent elemental fractionation of Pb/U using a MS Excel spreadsheet program (Gerdes and Zeh, 2006). The common-Pb correction was based on the interference- and background-corrected  $^{204}\text{Pb}$  signal and on the Pb composition model (Stacey and Kramers, 1975). Zircons that were >2% discordant and with high error were discarded. The Concordia diagram and age distribution diagrams were obtained with the software Isoplot/Ex (Ludwig, 2012). The results are presented on Supplementary File E.

### **B.6 Lu-Hf isotopes analyses**

After U-Pb isotopic determinations, Lu and Hf isotopic ratios were obtained at the Isotope Geochemistry Laboratory of the DEGEO-UFOP using a Thermo-Scientific Finnigan Neptune multicollector inductively coupled to a PhotonMachine ArF 193 mm laser ablation system (LA-MC-ICP-MS). The Lu-Hf laser spot was drilled on top of the previous U-Pb laser spot in order to analyze zircons domains with the same isotopic characteristics. Where this was not possible, care was taken to drill into the same zirconium domain previously analyzed for U-Pb, characterized by the CL image. Data were collected in static mode during 60 s of ablation and the 50  $\mu\text{m}$  spotsize laser was drilled with at 9 Hz repetition rate. The isotopes  $^{172}\text{Yb}$ ,  $^{173}\text{Yb}$  and  $^{175}\text{Lu}$  were simultaneously monitored during each analyses step to allow for correction of isobaric interferences of Lu and Yb isotopes on mass 176. Corrections for background signal, instrumental mass bias and isobaric interferences of Lu and Yb isotopes on mass 176 were done following the methods by Gerdes and Zeh (2006, 2009). In this work was adopted the decay constant for  $^{176}\text{Lu}$  of  $1.865 \times 10^{-11} \text{ a}^{-1}$  (Scherer et al., 2001). The accuracy and external reproducibility were verified by analyses of the reference zircons BB-9 (Santos et al., 2017), GJ-1 (Jackson et al., 2004) and Plesovice (Sláma et al., 2008) which yielded an average  $^{176}\text{Hf}/^{177}\text{Hf}$  of  $0.281673 \pm 0.000017$  (n = 15),  $0.282001 \pm 0.000018$  (n = 15),  $0.282469 \pm 0.000019$  (n = 15) respectively (all errors are  $\pm 2\sigma$ ). These ratios are in good agreement with the accepted ratios data (Jackson et al., 2004; Santos et al., 2017; Sláma et al., 2008). The results are presented on Supplementary File E.

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## **Supplementary File C: Mineral Chemistry**

Spot	SiO <sub>2</sub>	Al <sub>2</sub> O <sub>3</sub>	TiO <sub>2</sub>	FeO	Cr <sub>2</sub> O <sub>3</sub>	MnO	MgO	CaO	Na <sub>2</sub> O	K <sub>2</sub> O	F	Cl	ZrO <sub>2</sub>	Total	Position
<b>Electron-microprobe analyses of biotite from Sample CA-02 (Aracê - Pedra Azul pluton)</b>															
<b>Major element compositions (wt%)</b>															
A-1	35.77	14.88	2.74	22.83	0.01	0.31	8.30	0.05	0.10	9.79	1.68	0.32	0.00	96.79	Rim
A-2	35.63	14.68	2.71	22.61	0.00	0.34	8.28	0.03	0.12	9.66	1.81	0.32	0.00	96.18	Core
A-3	35.43	14.49	2.85	22.69	0.02	0.35	8.19	0.03	0.14	9.60	1.72	0.31	0.00	95.83	Core
A-4	35.95	14.53	2.93	22.78	0.00	0.35	8.25	0.03	0.08	9.75	1.65	0.29	0.00	96.59	Intermediary
A-5	35.41	14.80	2.69	23.23	0.00	0.31	8.73	0.03	0.09	9.14	1.44	0.28	0.00	96.14	Rim
A-16	35.60	15.31	2.18	22.68	0.05	0.41	8.54	0.18	0.08	9.59	1.59	0.27	0.00	96.48	Rim
A-17	36.25	15.70	2.23	22.39	0.00	0.37	8.31	0.10	0.08	9.32	1.87	0.39	0.00	97.00	Rim
A-18	35.76	14.81	2.69	22.10	0.01	0.31	8.32	0.00	0.10	9.73	1.79	0.28	0.00	95.89	Rim
A-19	35.80	14.42	3.09	22.45	0.00	0.35	8.26	0.01	0.05	9.65	1.79	0.25	0.00	96.12	Core
A-20	35.59	14.28	3.06	22.81	0.00	0.38	8.19	0.00	0.03	9.67	1.64	0.27	0.00	95.92	Core
A-21	36.54	14.32	3.13	21.98	0.00	0.34	8.20	0.03	0.07	9.66	1.64	0.27	0.00	96.19	Core
A-22	35.92	14.81	2.84	21.70	0.00	0.35	8.40	0.03	0.08	9.76	1.74	0.26	0.00	95.87	Rim
A-35	36.83	14.86	2.72	21.46	0.01	0.33	8.07	0.03	0.12	9.51	1.68	0.27	0.00	95.88	Core
A-36	36.60	15.61	2.91	21.47	0.00	0.32	8.08	0.00	0.07	9.50	1.75	0.28	0.00	96.58	Rim
A-37	35.49	15.11	2.72	21.95	0.05	0.36	8.43	0.04	0.11	9.47	1.69	0.26	0.00	95.66	Core
A-38	35.74	15.57	3.23	21.36	0.00	0.33	8.53	0.05	0.10	9.58	1.51	0.26	0.00	96.26	Rim
A-48	36.05	15.13	2.61	21.88	0.02	0.36	8.03	0.01	0.11	9.47	1.68	0.26	0.00	95.60	Rim
A-49	36.07	15.38	2.67	21.24	0.00	0.30	8.22	0.02	0.08	9.38	1.73	0.25	0.00	95.31	Core
A-50	36.24	15.29	2.64	21.39	0.00	0.39	8.65	0.06	0.06	9.22	1.68	0.26	0.00	95.89	Rim
A-51	36.11	15.04	2.90	21.57	0.00	0.34	8.89	0.03	0.15	9.27	1.73	0.27	0.00	96.31	Rim
A-52	36.20	15.30	2.89	21.61	0.00	0.36	8.02	0.02	0.11	9.27	1.77	0.25	0.00	95.81	Core
A-53	35.68	14.71	2.77	22.17	0.02	0.36	8.14	0.01	0.05	9.28	1.42	0.25	0.00	94.86	Core
A-54	36.07	15.42	2.75	21.12	0.00	0.23	8.86	0.05	0.09	9.34	1.61	0.28	0.00	95.81	Rim
B-8	36.44	15.83	2.44	21.80	0.06	0.24	8.38	0.01	0.09	9.48	1.69	0.28	0.00	96.73	Rim
B-9	36.77	15.47	2.34	21.59	0.01	0.27	8.19	0.05	0.14	9.48	1.67	0.41	0.00	96.39	Core
B-10	36.38	15.37	2.49	21.32	0.02	0.35	8.40	0.01	0.09	9.40	1.81	0.28	0.00	95.92	Core
B-11	37.05	15.45	2.36	21.37	0.00	0.35	8.21	0.06	0.12	9.06	1.53	0.25	0.00	95.79	Core
B-12	36.55	15.21	2.32	21.77	0.02	0.27	8.42	0.04	0.08	9.38	1.61	0.27	0.00	95.92	Rim
B-27	36.76	15.32	2.59	21.68	0.00	0.31	8.24	0.01	0.08	9.39	1.79	0.27	0.00	96.42	Rim
B-28	36.76	15.24	2.72	21.45	0.00	0.31	8.33	0.02	0.11	9.34	1.65	0.25	0.00	96.18	Core

Spot	SiO <sub>2</sub>	Al <sub>2</sub> O <sub>3</sub>	TiO <sub>2</sub>	FeO	Cr <sub>2</sub> O <sub>3</sub>	MnO	MgO	CaO	Na <sub>2</sub> O	K <sub>2</sub> O	F	Cl	ZrO <sub>2</sub>	Total	Position
<b>Electron-microprobe analyses of biotite from Sample CA-02 (Aracê - Pedra Azul pluton)</b>															
<b>Major element compositions (wt%)</b>															
B-29	36.43	15.20	2.31	21.36	0.01	0.33	8.45	0.18	0.01	9.10	1.24	0.25	0.00	94.85	Core
B-30	36.52	15.27	2.64	20.86	0.01	0.40	8.23	0.01	0.07	9.20	1.76	0.26	0.00	95.22	Rim
B-31	36.65	15.32	2.65	20.95	0.00	0.30	8.95	0.03	0.09	8.97	1.63	0.22	0.00	95.76	Rim
B-32	36.54	15.55	2.60	21.65	0.05	0.26	8.27	0.02	0.09	9.26	1.75	0.24	0.00	96.26	Rim
B-33	37.59	14.42	2.41	21.67	0.01	0.32	8.34	0.01	0.10	9.21	1.72	0.23	0.00	96.03	Rim
B-34	37.48	15.37	2.57	20.38	0.00	0.33	9.85	0.03	0.11	9.10	1.61	0.24	0.00	97.07	Core
B-35	37.24	14.26	2.58	21.25	0.01	0.36	9.04	0.00	0.10	9.09	1.70	0.26	0.00	95.89	Core
B-37	36.12	15.14	2.26	21.32	0.02	0.33	9.47	0.04	0.20	9.11	2.09	0.25	0.00	96.34	Core
B-39	35.94	15.67	1.90	20.55	0.01	0.29	9.33	0.04	0.12	9.04	1.79	0.21	0.00	94.90	Rim
B-70	36.49	15.01	2.14	21.41	0.00	0.34	9.26	0.00	0.08	9.04	1.43	0.26	0.04	95.49	Rim
B-71	36.54	15.10	2.08	21.96	0.01	0.33	8.63	0.02	0.09	9.03	1.79	0.25	0.00	95.83	Core
B-72	36.06	15.02	2.15	21.19	0.00	0.35	9.41	0.00	0.08	9.00	1.59	0.26	0.00	95.11	Core
B-73	37.04	15.25	2.23	20.82	0.00	0.29	9.57	0.00	0.04	9.01	1.72	0.26	0.00	96.22	Rim

Spot	Si	<sup>IV</sup> Al	<sup>VI</sup> Al	Ti	Fe	Cr	Mn	Mg	Ca	Na	K	F	Cl	Zr	Fe#	Mg#
Numbers of ions on the basis of 22 oxygen equivalents															Fe/(Fe+Mg)	Mg/(Mg+Fe)
Electron-microprobe analyses of biotite from Sample CA-02 (Aracê - Pedra Azul pluton)																
A-1	5.616	2.384	0.370	0.324	2.998	0.001	0.041	1.943	0.009	0.030	1.961	0.836	0.085	0.000	0.61	0.39
A-2	5.634	2.366	0.370	0.322	2.990	0.000	0.045	1.951	0.004	0.038	1.948	0.906	0.085	0.000	0.61	0.39
A-3	5.626	2.374	0.336	0.340	3.013	0.002	0.047	1.939	0.005	0.044	1.945	0.863	0.084	0.000	0.61	0.39
A-4	5.650	2.350	0.342	0.346	2.994	0.000	0.047	1.934	0.005	0.025	1.955	0.818	0.077	0.000	0.61	0.39
A-5	5.577	2.423	0.324	0.318	3.060	0.000	0.042	2.051	0.006	0.027	1.837	0.715	0.074	0.000	0.60	0.40
A-16	5.593	2.407	0.428	0.257	2.980	0.006	0.054	2.001	0.030	0.026	1.922	0.790	0.073	0.000	0.60	0.40
A-17	5.649	2.351	0.534	0.261	2.918	0.000	0.049	1.930	0.017	0.023	1.853	0.923	0.102	0.000	0.60	0.40
A-18	5.651	2.349	0.410	0.320	2.921	0.002	0.041	1.960	0.000	0.029	1.962	0.894	0.074	0.000	0.60	0.40
A-19	5.652	2.348	0.336	0.367	2.964	0.000	0.046	1.945	0.002	0.016	1.944	0.894	0.068	0.000	0.60	0.40
A-20	5.639	2.361	0.307	0.365	3.023	0.000	0.051	1.935	0.000	0.010	1.954	0.823	0.074	0.000	0.61	0.39
A-21	5.731	2.269	0.377	0.370	2.883	0.000	0.045	1.918	0.005	0.023	1.933	0.815	0.072	0.000	0.60	0.40
A-22	5.662	2.338	0.413	0.336	2.860	0.000	0.046	1.973	0.004	0.024	1.962	0.868	0.069	0.000	0.59	0.41
A-35	5.767	2.233	0.509	0.320	2.810	0.001	0.044	1.885	0.006	0.036	1.900	0.833	0.071	0.000	0.60	0.40
A-36	5.688	2.312	0.547	0.340	2.790	0.000	0.041	1.872	0.000	0.020	1.884	0.861	0.073	0.000	0.60	0.40
A-37	5.607	2.393	0.420	0.323	2.901	0.006	0.048	1.985	0.007	0.034	1.909	0.845	0.069	0.000	0.59	0.41
A-38	5.578	2.422	0.440	0.380	2.788	0.000	0.043	1.984	0.008	0.031	1.906	0.746	0.070	0.000	0.58	0.42
A-48	5.684	2.316	0.496	0.309	2.885	0.002	0.048	1.887	0.002	0.034	1.904	0.835	0.070	0.000	0.60	0.40
A-49	5.681	2.319	0.536	0.316	2.798	0.000	0.040	1.930	0.003	0.023	1.884	0.861	0.066	0.000	0.59	0.41
A-50	5.670	2.330	0.490	0.311	2.798	0.000	0.052	2.018	0.010	0.019	1.841	0.830	0.070	0.000	0.58	0.42
A-51	5.640	2.360	0.409	0.341	2.818	0.000	0.045	2.070	0.005	0.044	1.847	0.856	0.072	0.000	0.58	0.42
A-52	5.682	2.318	0.511	0.342	2.837	0.000	0.047	1.877	0.003	0.034	1.856	0.880	0.067	0.000	0.60	0.40
A-53	5.667	2.333	0.421	0.331	2.944	0.003	0.049	1.927	0.002	0.014	1.879	0.713	0.068	0.000	0.60	0.40
A-54	5.640	2.360	0.482	0.323	2.762	0.000	0.031	2.066	0.008	0.027	1.862	0.794	0.074	0.000	0.57	0.43
B-8	5.659	2.341	0.555	0.285	2.830	0.008	0.031	1.940	0.001	0.028	1.877	0.829	0.072	0.000	0.59	0.41
B-9	5.730	2.270	0.572	0.275	2.814	0.002	0.035	1.904	0.009	0.042	1.884	0.823	0.109	0.000	0.60	0.40
B-10	5.699	2.301	0.537	0.293	2.793	0.003	0.047	1.961	0.002	0.027	1.878	0.897	0.073	0.000	0.59	0.41
B-11	5.768	2.232	0.603	0.276	2.782	0.000	0.045	1.906	0.009	0.035	1.799	0.751	0.067	0.000	0.59	0.41
B-12	5.720	2.280	0.525	0.273	2.849	0.002	0.036	1.963	0.007	0.025	1.873	0.796	0.070	0.000	0.59	0.41
B-27	5.726	2.274	0.538	0.303	2.824	0.000	0.040	1.914	0.001	0.024	1.865	0.884	0.072	0.000	0.60	0.40
B-28	5.725	2.275	0.523	0.318	2.794	0.000	0.041	1.935	0.004	0.032	1.855	0.812	0.067	0.000	0.59	0.41

Spot	Si	<sup>IV</sup> Al	<sup>VI</sup> Al	Ti	Fe	Cr	Mn	Mg	Ca	Na	K	F	Cl	Zr	Fe#	Mg#
Numbers of ions on the basis of 22 oxygen equivalents															Fe/(Fe+Mg)	Mg/(Mg+Fe)
Electron-microprobe analyses of biotite from Sample CA-02 (Aracê - Pedra Azul pluton)																
B-29	5.727	2.273	0.543	0.273	2.807	0.001	0.044	1.981	0.030	0.002	1.825	0.614	0.066	0.000	0.59	0.41
B-30	5.738	2.262	0.566	0.312	2.741	0.001	0.053	1.928	0.001	0.023	1.844	0.872	0.068	0.000	0.59	0.41
B-31	5.705	2.295	0.515	0.310	2.728	0.000	0.039	2.077	0.006	0.026	1.781	0.801	0.057	0.000	0.57	0.43
B-32	5.694	2.306	0.549	0.305	2.822	0.006	0.034	1.921	0.003	0.026	1.840	0.864	0.063	0.000	0.60	0.40
B-33	5.861	2.139	0.510	0.282	2.826	0.001	0.042	1.937	0.002	0.031	1.831	0.850	0.062	0.000	0.59	0.41
B-34	5.729	2.271	0.497	0.295	2.604	0.000	0.043	2.243	0.005	0.032	1.775	0.779	0.063	0.000	0.54	0.46
B-35	5.810	2.190	0.431	0.303	2.773	0.001	0.048	2.101	0.001	0.031	1.808	0.837	0.068	0.000	0.57	0.43
B-37	5.648	2.352	0.437	0.266	2.787	0.002	0.044	2.207	0.007	0.061	1.817	1.031	0.065	0.000	0.56	0.44
B-39	5.660	2.340	0.567	0.225	2.706	0.001	0.039	2.191	0.006	0.037	1.815	0.892	0.057	0.000	0.55	0.45
B-70	5.709	2.291	0.477	0.251	2.802	0.000	0.045	2.160	0.000	0.024	1.805	0.707	0.070	0.003	0.56	0.44
B-71	5.730	2.270	0.521	0.246	2.880	0.001	0.044	2.017	0.003	0.029	1.806	0.886	0.065	0.000	0.59	0.41
B-72	5.676	2.324	0.463	0.255	2.790	0.000	0.046	2.207	0.000	0.024	1.806	0.791	0.069	0.000	0.56	0.44
B-73	5.735	2.265	0.517	0.260	2.695	0.000	0.037	2.209	0.000	0.011	1.780	0.841	0.067	0.000	0.55	0.45

Spot	SiO <sub>2</sub>	Al <sub>2</sub> O <sub>3</sub>	TiO <sub>2</sub>	FeO	Cr <sub>2</sub> O <sub>3</sub>	MnO	MgO	CaO	Na <sub>2</sub> O	K <sub>2</sub> O	F	Cl	ZrO <sub>2</sub>	Total	Position
<b>Electron-microprobe analyses of biotite from Sample CA-04 (Vitória pluton)</b>															
<b>Major element compositions (wt%)</b>															
6	35.92	14.63	3.52	18.10	0.00	0.04	11.80	0.00	0.17	9.54	1.81	0.55	0.00	96.08	Core
7	35.65	15.11	2.22	24.17	0.02	0.07	11.51	0.05	0.17	5.65	1.22	0.35	0.00	96.19	Rim (altered)
19	37.13	14.37	3.64	16.51	0.02	0.08	12.90	0.04	0.15	9.52	1.79	0.61	0.00	96.75	Rim
20	36.40	13.82	3.67	16.88	0.00	0.06	13.35	0.05	0.15	9.55	1.93	0.53	0.00	96.38	Core
21	36.40	13.56	3.34	18.42	0.01	0.07	11.86	0.06	0.12	9.49	1.65	0.76	0.00	95.72	Rim
22	36.61	13.63	3.38	17.59	0.00	0.08	12.33	0.05	0.07	9.58	1.86	0.76	0.00	95.93	Rim
23	36.25	13.66	3.53	16.19	0.01	0.20	13.24	0.02	0.15	9.47	1.95	0.50	0.00	95.16	Core
24	36.71	13.70	3.46	16.74	0.00	0.09	12.95	0.01	0.10	9.52	2.07	0.61	0.00	95.95	Core
26	36.39	13.94	3.51	18.38	0.00	0.03	12.03	0.01	0.15	9.54	1.98	0.55	0.00	96.50	Rim
52	36.38	13.81	3.71	16.77	0.05	0.05	12.51	0.01	0.12	9.44	1.84	0.60	0.00	95.28	Rim
53	36.33	13.79	3.78	17.03	0.05	0.08	12.27	0.05	0.10	9.65	1.93	0.54	0.00	95.57	Rim
54	36.58	13.98	3.75	16.76	0.01	0.12	12.55	0.02	0.13	9.48	1.89	0.57	0.00	95.83	Rim
96	35.99	13.49	3.89	16.95	0.02	0.12	12.48	0.01	0.12	9.56	1.96	0.52	0.00	95.10	Rim
97	36.31	14.33	3.13	19.82	0.00	0.10	12.80	0.01	0.12	7.99	1.34	0.46	0.00	96.40	Core
98	36.42	13.87	3.68	16.97	0.00	0.08	12.81	0.01	0.12	9.72	1.84	0.57	0.00	96.07	Core
99	36.15	13.59	3.51	18.22	0.00	0.03	12.28	0.00	0.09	9.60	1.78	0.85	0.00	96.11	Core
100	36.75	14.20	2.98	19.74	0.01	0.04	12.78	0.02	0.10	8.16	1.48	0.46	0.00	96.71	Rim
101	36.08	13.38	3.40	18.51	0.00	0.08	11.81	0.02	0.15	9.53	1.59	0.81	0.01	95.37	Rim
102	35.90	14.77	3.80	19.67	0.00	0.05	11.11	0.00	0.11	8.39	1.42	0.49	0.00	95.72	Rim
119	36.31	13.48	4.19	17.75	0.05	0.02	12.68	0.02	0.12	9.68	1.57	0.55	0.00	96.40	Rim
120	36.24	13.58	4.19	17.76	0.05	0.08	12.32	0.01	0.15	9.64	1.95	0.50	0.00	96.47	Core
121	36.19	13.42	4.14	16.80	0.00	0.11	12.29	0.00	0.10	9.75	1.92	0.50	0.00	95.22	Core
122	36.87	13.85	4.29	16.33	0.02	0.16	12.70	0.02	0.15	9.57	2.05	0.49	0.02	96.50	Rim

Spot	Si	<sup>IV</sup> Al	<sup>VI</sup> Al	Ti	Fe	Cr	Mn	Mg	Ca	Na	K	F	Cl	Zr	Fe#	Mg#
Electron-microprobe analyses of biotite from Sample CA-04 (Vitória pluton)																
Numbers of ions on the basis of 22 oxygen equivalents																
6	5.565	2.435	0.236	0.410	2.344	0.000	0.005	2.725	0.001	0.050	1.885	0.888	0.145	0.000	0.46	0.54
7	5.498	2.502	0.245	0.258	3.118	0.002	0.009	2.647	0.008	0.051	1.112	0.595	0.090	0.000	0.54	0.46
19	5.651	2.349	0.229	0.417	2.102	0.003	0.010	2.928	0.007	0.044	1.849	0.862	0.156	0.000	0.42	0.58
20	5.596	2.404	0.100	0.424	2.171	0.000	0.008	3.059	0.007	0.046	1.872	0.938	0.137	0.000	0.42	0.58
21	5.673	2.327	0.163	0.391	2.400	0.001	0.009	2.755	0.009	0.037	1.886	0.811	0.202	0.000	0.47	0.53
22	5.681	2.319	0.172	0.394	2.282	0.000	0.010	2.853	0.008	0.022	1.896	0.911	0.199	0.000	0.44	0.56
23	5.632	2.368	0.132	0.413	2.103	0.001	0.026	3.066	0.003	0.044	1.876	0.960	0.133	0.000	0.41	0.59
24	5.672	2.328	0.166	0.401	2.163	0.000	0.011	2.983	0.002	0.029	1.877	1.009	0.158	0.000	0.42	0.58
26	5.628	2.372	0.167	0.409	2.377	0.000	0.004	2.773	0.002	0.044	1.881	0.970	0.143	0.000	0.46	0.54
52	5.650	2.350	0.176	0.433	2.178	0.006	0.007	2.897	0.002	0.037	1.870	0.903	0.157	0.000	0.43	0.57
53	5.641	2.359	0.165	0.442	2.211	0.006	0.011	2.841	0.008	0.030	1.911	0.945	0.141	0.000	0.44	0.56
54	5.646	2.354	0.188	0.436	2.163	0.001	0.015	2.888	0.004	0.038	1.866	0.922	0.149	0.000	0.43	0.57
96	5.623	2.377	0.106	0.457	2.214	0.003	0.015	2.908	0.002	0.038	1.906	0.966	0.137	0.000	0.43	0.57
97	5.563	2.437	0.149	0.360	2.539	0.000	0.013	2.922	0.001	0.035	1.562	0.650	0.119	0.000	0.46	0.54
98	5.620	2.380	0.142	0.427	2.190	0.000	0.010	2.947	0.002	0.035	1.913	0.897	0.148	0.000	0.43	0.57
99	5.625	2.375	0.117	0.411	2.371	0.000	0.004	2.849	0.000	0.028	1.904	0.875	0.225	0.000	0.45	0.55
100	5.615	2.385	0.171	0.342	2.522	0.001	0.005	2.912	0.003	0.028	1.590	0.714	0.120	0.000	0.46	0.54
101	5.656	2.344	0.128	0.401	2.427	0.000	0.011	2.760	0.004	0.046	1.905	0.786	0.215	0.001	0.47	0.53
102	5.556	2.444	0.251	0.442	2.546	0.000	0.007	2.563	0.000	0.033	1.657	0.694	0.129	0.000	0.50	0.50
119	5.591	2.409	0.036	0.485	2.286	0.006	0.003	2.911	0.003	0.036	1.902	0.763	0.144	0.000	0.44	0.56
120	5.597	2.403	0.069	0.487	2.294	0.006	0.011	2.837	0.002	0.044	1.899	0.950	0.131	0.000	0.45	0.55
121	5.641	2.359	0.107	0.486	2.190	0.000	0.014	2.857	0.000	0.031	1.940	0.945	0.132	0.000	0.43	0.57
122	5.645	2.355	0.143	0.493	2.091	0.002	0.021	2.898	0.003	0.045	1.868	0.991	0.126	0.002	0.42	0.58

Spot	SiO <sub>2</sub>	Al <sub>2</sub> O <sub>3</sub>	TiO <sub>2</sub>	FeO	Cr <sub>2</sub> O <sub>3</sub>	MnO	MgO	CaO	Na <sub>2</sub> O	K <sub>2</sub> O	F	Cl	ZrO <sub>2</sub>	Total	Position
<b>Electron-microprobe analyses of biotite from Sample CA-05 (Mestre Álvaro pluton)</b>															
<b>Major element compositions (wt%)</b>															
1	35.02	13.76	4.74	19.57	0.06	0.17	10.32	0.03	0.05	9.97	1.00	0.46	0.00	95.13	Rim
3	34.96	14.00	4.87	19.21	0.02	0.17	10.36	0.01	0.08	9.89	0.82	0.47	0.00	94.85	Core
4	35.74	14.15	4.86	19.31	0.00	0.20	10.30	0.01	0.06	9.96	0.80	0.48	0.00	95.87	Core
5	35.80	14.12	4.91	19.52	0.05	0.27	10.32	0.01	0.06	9.93	0.82	0.47	0.00	96.28	Rim
10	35.46	14.07	4.81	19.63	0.00	0.21	10.25	0.04	0.06	9.83	0.79	0.45	0.00	95.59	Rim
11	35.01	14.00	4.78	20.24	0.03	0.26	10.37	0.00	0.10	9.86	0.79	0.48	0.00	95.92	Intermediary
12	35.31	14.12	5.01	20.04	0.00	0.25	10.28	0.02	0.07	9.94	0.60	0.46	0.00	96.09	Core
13	35.32	13.87	4.86	19.68	0.00	0.23	10.22	0.01	0.07	9.85	0.79	0.47	0.00	95.36	Core
14	35.38	14.24	5.05	20.02	0.05	0.05	9.81	0.03	0.11	9.79	0.95	0.56	0.00	96.04	Rim
25	36.16	13.63	4.71	19.91	0.03	0.20	10.66	0.05	0.07	9.67	0.89	0.44	0.00	96.41	Rim
26	36.42	13.41	4.71	19.73	0.04	0.23	9.79	0.04	0.09	9.67	0.90	0.42	0.00	95.46	Rim
27	35.60	13.64	4.64	20.32	0.00	0.13	10.28	0.06	0.07	9.81	0.79	0.43	0.00	95.75	Rim
40	36.72	14.80	5.14	18.03	0.00	0.25	10.03	0.02	0.13	9.72	0.64	0.39	0.02	95.89	Rim
41	36.58	13.72	5.15	18.44	0.00	0.30	10.18	0.04	0.16	9.56	0.74	0.41	0.00	95.27	Core
42	36.40	13.74	4.93	18.88	0.03	0.31	10.17	0.07	0.18	9.47	0.63	0.42	0.09	95.32	Core
43	35.36	13.97	4.93	18.97	0.00	0.30	10.44	0.06	0.07	9.54	0.77	0.38	0.00	94.78	Core
44	37.00	13.56	4.66	18.87	0.00	0.29	10.57	0.04	0.10	9.50	0.84	0.40	0.00	95.83	Rim
73	36.50	14.99	4.69	19.48	0.00	0.21	10.21	0.01	0.06	9.51	0.72	0.46	0.01	96.86	Rim
74	36.58	14.95	4.66	19.54	0.00	0.24	10.09	0.03	0.07	9.38	0.75	0.47	0.00	96.75	Core
75	36.29	14.21	4.81	19.36	0.00	0.14	10.15	0.03	0.07	9.52	0.75	0.45	0.00	95.79	Core
76	36.63	14.05	4.85	19.64	0.00	0.23	10.17	0.00	0.07	9.36	0.89	0.48	0.00	96.36	Rim

Spot	Si	<sup>IV</sup> Al	<sup>VI</sup> Al	Ti	Fe	Cr	Mn	Mg	Ca	Na	K	F	Cl	Zr	Fe#	Mg#
Electron-microprobe analyses of biotite from Sample CA-05 (Mestre Álvaro pluton)																
Numbers of ions on the basis of 22 oxygen equivalents																
1	5.507	2.493	0.058	0.561	2.574	0.007	0.023	2.419	0.005	0.015	1.999	0.499	0.122	0.000	0.52	0.48
3	5.492	2.508	0.083	0.575	2.523	0.003	0.023	2.425	0.001	0.025	1.983	0.408	0.125	0.000	0.51	0.49
4	5.541	2.459	0.126	0.567	2.504	0.000	0.026	2.380	0.001	0.017	1.970	0.394	0.126	0.000	0.51	0.49
5	5.533	2.467	0.106	0.571	2.523	0.006	0.035	2.377	0.001	0.019	1.957	0.401	0.123	0.000	0.51	0.49
10	5.523	2.477	0.104	0.563	2.557	0.000	0.028	2.379	0.006	0.019	1.952	0.390	0.118	0.000	0.52	0.48
11	5.463	2.537	0.037	0.561	2.642	0.003	0.035	2.413	0.000	0.031	1.963	0.388	0.127	0.000	0.52	0.48
12	5.477	2.523	0.058	0.584	2.599	0.000	0.033	2.378	0.004	0.020	1.966	0.292	0.121	0.000	0.52	0.48
13	5.522	2.478	0.076	0.572	2.573	0.000	0.030	2.383	0.001	0.021	1.964	0.389	0.123	0.000	0.52	0.48
14	5.506	2.494	0.117	0.591	2.606	0.006	0.006	2.276	0.005	0.033	1.943	0.468	0.148	0.000	0.53	0.47
25	5.582	2.418	0.060	0.546	2.570	0.003	0.027	2.454	0.008	0.021	1.905	0.433	0.114	0.000	0.51	0.49
26	5.672	2.328	0.133	0.552	2.569	0.005	0.031	2.273	0.007	0.027	1.921	0.442	0.112	0.000	0.53	0.47
27	5.550	2.450	0.056	0.544	2.649	0.000	0.017	2.390	0.010	0.021	1.950	0.392	0.113	0.000	0.53	0.47
40	5.612	2.388	0.278	0.590	2.305	0.000	0.033	2.286	0.003	0.039	1.895	0.311	0.101	0.002	0.50	0.50
41	5.655	2.345	0.155	0.598	2.384	0.000	0.039	2.346	0.007	0.047	1.885	0.359	0.107	0.000	0.50	0.50
42	5.634	2.366	0.140	0.574	2.443	0.004	0.040	2.347	0.012	0.053	1.870	0.306	0.109	0.007	0.51	0.49
43	5.527	2.473	0.101	0.579	2.481	0.000	0.040	2.434	0.010	0.022	1.903	0.378	0.099	0.000	0.50	0.50
44	5.693	2.307	0.152	0.540	2.429	0.000	0.038	2.424	0.007	0.030	1.865	0.407	0.104	0.000	0.50	0.50
73	5.561	2.439	0.253	0.537	2.482	0.000	0.027	2.320	0.001	0.019	1.848	0.349	0.117	0.001	0.52	0.48
74	5.579	2.421	0.265	0.534	2.492	0.000	0.032	2.293	0.004	0.021	1.825	0.359	0.121	0.000	0.52	0.48
75	5.601	2.399	0.186	0.558	2.499	0.000	0.019	2.334	0.005	0.021	1.874	0.367	0.118	0.000	0.52	0.48
76	5.628	2.372	0.172	0.560	2.523	0.000	0.030	2.328	0.000	0.020	1.835	0.432	0.125	0.000	0.52	0.48

Spot	SiO <sub>2</sub>	Al <sub>2</sub> O <sub>3</sub>	TiO <sub>2</sub>	FeO	Cr <sub>2</sub> O <sub>3</sub>	MnO	MgO	CaO	Na <sub>2</sub> O	K <sub>2</sub> O	F	Cl	ZrO <sub>2</sub>	BaO	P <sub>2</sub> O <sub>5</sub>	Total	Position
<b>Electron-microprobe analyses of feldspar from Sample CA-02 (Aracê - Pedra Azul pluton)</b>																	
<b>Major element compositions (wt%)</b>																	
A-27	64.67	19.16	0.00	0.02	0.02	0.01	0.00	0.05	0.82	14.38	0.00	0.02	0.00	0.52	0.03	99.68	Rim
A-28	64.06	19.16	0.00	0.01	0.05	0.00	0.00	0.08	0.97	14.47	0.00	0.00	0.00	0.44	0.01	99.24	Core
A-29	64.09	19.40	0.00	0.02	0.00	0.01	0.00	0.07	0.76	14.05	0.00	0.01	0.00	0.43	0.00	98.85	Core
A-30	64.78	19.00	0.00	0.05	0.03	0.00	0.00	0.16	1.03	13.49	0.08	0.01	0.00	0.54	0.00	99.17	Rim
A-31	60.28	23.84	0.03	0.04	0.01	0.00	0.00	5.97	7.99	0.26	0.00	0.01	0.00	0.01	0.03	98.47	Rim
A-32	60.18	24.22	0.01	0.08	0.01	0.03	0.00	5.89	7.76	0.27	0.00	0.00	0.07	0.01	0.00	98.52	Core
A-33	60.14	23.86	0.00	0.05	0.02	0.02	0.02	5.97	8.08	0.20	0.05	0.00	0.00	0.03	0.00	98.44	Core
A-34	59.98	24.45	0.00	0.05	0.02	0.02	0.00	6.43	7.87	0.22	0.02	0.01	0.00	0.00	0.00	99.07	Rim
B-53	64.64	18.07	0.00	0.00	0.00	0.03	0.02	0.08	0.83	15.58	0.00	0.00	0.00	0.41	0.00	99.65	Rim
B-54	63.95	18.10	0.00	0.01	0.01	0.00	0.00	0.03	0.79	15.59	0.02	0.01	0.00	0.53	0.00	99.03	Core
B-55	64.66	18.84	0.00	0.00	0.02	0.03	0.00	0.05	0.93	14.54	0.03	0.03	0.02	0.52	0.01	99.69	Core
B-56	64.07	17.95	0.00	0.04	0.00	0.04	0.00	0.03	0.78	15.66	0.03	0.00	0.02	0.47	0.00	99.07	Core
B-16	60.44	24.80	0.01	0.11	0.00	0.00	0.00	5.82	7.95	0.15	0.00	0.01	0.00	0.06	0.00	99.35	Rim
B-18	60.22	24.96	0.00	0.06	0.01	0.00	0.01	6.26	7.86	0.20	0.05	0.01	0.00	0.02	0.00	99.66	Core
B-19	60.31	24.95	0.00	0.07	0.00	0.01	0.00	5.05	8.49	0.22	0.00	0.00	0.00	0.02	0.00	99.12	Rim
B-57	61.34	24.16	0.00	0.02	0.00	0.00	0.00	5.34	8.32	0.22	0.00	0.01	0.00	0.00	0.00	99.41	Rim
B-58	61.58	23.43	0.01	0.08	0.00	0.00	0.00	5.69	8.14	0.17	0.00	0.01	0.00	0.00	0.03	99.14	Core
B-60	61.83	23.52	0.00	0.07	0.00	0.02	0.00	5.84	8.02	0.18	0.11	0.01	0.00	0.02	0.03	99.64	Rim
B-61	61.32	24.11	0.00	0.06	0.00	0.01	0.00	5.22	8.43	0.23	0.00	0.00	0.00	0.00	0.00	99.39	Rim
B-62	61.69	24.10	0.00	0.03	0.00	0.00	0.00	4.99	8.59	0.17	0.00	0.01	0.02	0.00	0.00	99.58	Core
B-63	61.78	23.98	0.00	0.04	0.00	0.02	0.00	5.24	8.57	0.19	0.00	0.00	0.00	0.03	0.02	99.87	Rim
B-64	61.66	23.44	0.01	0.00	0.00	0.05	0.00	5.89	8.10	0.18	0.00	0.01	0.00	0.01	0.00	99.33	Rim
B-65	61.80	23.59	0.00	0.03	0.00	0.00	0.00	4.66	8.31	0.82	0.00	0.00	0.00	0.04	0.00	99.25	Rim
B-66	61.14	23.80	0.00	0.05	0.00	0.01	0.00	6.13	7.81	0.18	0.08	0.00	0.00	0.00	0.00	99.21	Core
B-67	60.19	24.29	0.00	0.11	0.00	0.01	0.00	6.52	7.82	0.16	0.05	0.01	0.00	0.01	0.00	99.15	Core
B-68	61.74	23.54	0.01	0.08	0.02	0.00	0.00	5.74	8.16	0.26	0.00	0.00	0.00	0.03	0.00	99.58	Core
B-69	63.39	22.21	0.00	0.06	0.00	0.00	0.00	2.76	9.69	0.14	0.00	0.00	0.00	0.00	0.05	98.29	Rim

Spot	Si	Al	Ti	Fe	Cr	Mn	Mg	Ca	Na	K	F	Cl	Zr	Ba	P	An	Or	Ab
Electron-microprobe analyses of feldspar from Sample CA-02 (Aracê - Pedra Azul pluton)																		
Numbers of ions on the basis of 32 oxygen																		
A-27	11.925	4.164	0.000	0.002	0.002	0.001	0.000	0.010	0.292	3.382	0.000	0.006	0.000	0.037	0.005	0.28	91.79	7.93
A-28	11.884	4.189	0.000	0.002	0.007	0.001	0.000	0.016	0.347	3.424	0.000	0.000	0.000	0.032	0.001	0.41	90.42	9.17
A-29	11.893	4.242	0.000	0.003	0.000	0.002	0.000	0.014	0.274	3.326	0.000	0.003	0.000	0.031	0.000	0.40	92.02	7.58
A-30	11.967	4.138	0.000	0.008	0.004	0.000	0.000	0.032	0.369	3.178	0.048	0.004	0.000	0.039	0.000	0.90	88.80	10.31
A-31	10.888	5.075	0.004	0.006	0.002	0.000	0.000	1.154	2.799	0.060	0.000	0.003	0.000	0.000	0.004	28.76	1.50	69.74
A-32	10.857	5.150	0.002	0.012	0.001	0.004	0.000	1.138	2.713	0.062	0.000	0.000	0.006	0.001	0.000	29.09	1.58	69.33
A-33	10.876	5.085	0.001	0.008	0.002	0.002	0.006	1.156	2.834	0.047	0.030	0.000	0.000	0.002	0.000	28.64	1.15	70.21
A-34	10.788	5.182	0.000	0.008	0.003	0.003	0.000	1.238	2.744	0.050	0.013	0.002	0.000	0.000	0.000	30.70	1.25	68.05
B-53	12.008	3.955	0.000	0.000	0.000	0.004	0.006	0.016	0.299	3.692	0.000	0.000	0.000	0.029	0.000	0.40	92.14	7.46
B-54	11.977	3.995	0.000	0.001	0.001	0.000	0.000	0.006	0.286	3.724	0.009	0.002	0.000	0.039	0.000	0.14	92.74	7.12
B-55	11.950	4.104	0.000	0.000	0.004	0.004	0.000	0.010	0.334	3.428	0.018	0.011	0.002	0.037	0.002	0.27	90.87	8.85
B-56	11.996	3.961	0.000	0.006	0.000	0.006	0.000	0.006	0.284	3.740	0.015	0.000	0.002	0.035	0.000	0.14	92.82	7.04
B-16	10.812	5.228	0.001	0.016	0.000	0.001	0.000	1.116	2.756	0.033	0.000	0.002	0.000	0.004	0.000	28.57	0.85	70.58
B-18	10.759	5.256	0.000	0.009	0.002	0.000	0.001	1.199	2.722	0.046	0.030	0.002	0.000	0.002	0.000	30.22	1.15	68.63
B-19	10.807	5.268	0.000	0.011	0.000	0.001	0.000	0.970	2.950	0.050	0.000	0.001	0.000	0.002	0.000	24.43	1.26	74.31
B-57	10.945	5.081	0.000	0.003	0.000	0.000	0.000	1.021	2.877	0.050	0.000	0.002	0.000	0.000	0.000	25.87	1.26	72.87
B-58	11.020	4.942	0.001	0.012	0.000	0.000	0.000	1.091	2.825	0.039	0.000	0.002	0.000	0.000	0.004	27.59	0.98	71.43
B-60	11.020	4.941	0.000	0.011	0.000	0.003	0.000	1.115	2.772	0.041	0.059	0.002	0.000	0.001	0.004	28.38	1.05	70.57
B-61	10.948	5.074	0.000	0.009	0.000	0.001	0.000	0.998	2.918	0.053	0.000	0.000	0.000	0.000	0.000	25.14	1.34	73.52
B-62	10.980	5.055	0.000	0.004	0.000	0.000	0.000	0.951	2.963	0.038	0.000	0.003	0.001	0.000	0.000	24.06	0.95	74.98
B-63	10.977	5.022	0.000	0.006	0.000	0.003	0.000	0.998	2.952	0.042	0.000	0.000	0.000	0.002	0.002	25.01	1.06	73.94
B-64	11.017	4.936	0.001	0.000	0.000	0.007	0.000	1.128	2.806	0.040	0.000	0.002	0.000	0.000	0.000	28.37	1.02	70.61
B-65	11.053	4.973	0.000	0.004	0.000	0.000	0.000	0.893	2.881	0.187	0.000	0.001	0.000	0.003	0.000	22.55	4.72	72.74
B-66	10.951	5.024	0.000	0.008	0.000	0.002	0.000	1.176	2.710	0.041	0.044	0.001	0.000	0.000	0.000	29.94	1.04	69.02
B-67	10.816	5.144	0.000	0.016	0.000	0.001	0.000	1.256	2.723	0.036	0.030	0.002	0.000	0.000	0.000	31.28	0.89	67.83
B-68	11.010	4.947	0.002	0.012	0.002	0.000	0.000	1.097	2.820	0.058	0.000	0.001	0.000	0.002	0.000	27.60	1.47	70.94
B-69	11.356	4.688	0.000	0.009	0.000	0.000	0.000	0.529	3.367	0.031	0.000	0.000	0.000	0.000	0.007	13.47	0.79	85.75

Spot	SiO <sub>2</sub>	Al <sub>2</sub> O <sub>3</sub>	TiO <sub>2</sub>	FeO	Cr <sub>2</sub> O <sub>3</sub>	MnO	MgO	CaO	Na <sub>2</sub> O	K <sub>2</sub> O	F	Cl	ZrO <sub>2</sub>	BaO	P <sub>2</sub> O <sub>5</sub>	Total	Position
<b>Electron-microprobe analyses of feldspar from Sample CA-04 (Vitória pluton)</b>																	
<b>Major element compositions (wt%)</b>																	
14	64.99	18.69	0.00	0.01	0.03	0.02	0.00	0.11	1.83	13.42	0.11	0.01	0.00	0.28	0.01	99.50	Rim
15	64.02	19.55	0.00	0.04	0.00	0.00	0.00	0.12	1.52	14.18	0.07	0.01	0.03	0.27	0.02	99.84	Core
16	63.85	18.50	0.00	0.02	0.02	0.01	0.01	0.10	1.42	15.33	0.00	0.00	0.00	0.33	0.06	99.63	Core
17	64.52	19.33	0.00	0.07	0.01	0.01	0.00	0.16	1.48	14.07	0.01	0.00	0.00	0.34	0.00	100.01	Core
18	64.46	18.24	0.00	0.00	0.00	0.00	0.00	0.10	1.08	14.91	0.00	0.00	0.00	0.30	0.00	99.09	Rim
47	64.88	18.40	0.00	0.09	0.00	0.05	0.00	0.05	1.01	14.89	0.02	0.00	0.00	0.33	0.02	99.76	Rim
48	64.10	18.59	0.00	0.02	0.02	0.00	0.02	0.08	1.79	14.90	0.04	0.01	0.00	0.34	0.03	99.93	Core
49	64.12	18.25	0.00	0.02	0.02	0.00	0.01	0.04	0.90	15.18	0.07	0.01	0.00	0.25	0.00	98.85	Rim
81	64.73	18.41	0.00	0.03	0.00	0.02	0.00	0.12	1.17	14.78	0.00	0.00	0.00	0.28	0.05	99.58	Rim
82	64.71	18.48	0.00	0.04	0.02	0.01	0.04	0.15	0.99	14.70	0.00	0.01	0.00	0.37	0.00	99.52	Rim
83	64.63	18.61	0.00	0.05	0.00	0.02	0.01	0.12	1.28	14.45	0.10	0.00	0.01	0.31	0.00	99.60	Core
114	64.64	18.46	0.00	0.03	0.00	0.01	0.00	0.12	1.30	14.60	0.00	0.00	0.00	0.36	0.05	99.57	Rim
115	64.42	18.48	0.00	0.00	0.04	0.00	0.00	0.11	1.15	14.99	0.10	0.00	0.00	0.27	0.07	99.62	Core
116	63.68	18.39	0.00	0.05	0.01	0.00	0.02	0.11	1.31	14.80	0.11	0.00	0.00	0.29	0.00	98.77	Rim
38	60.35	24.75	0.00	0.08	0.01	0.00	0.00	6.85	7.49	0.20	0.00	0.00	0.00	0.00	0.02	99.74	Rim
39	59.67	24.72	0.02	0.05	0.02	0.01	0.00	7.23	7.42	0.24	0.00	0.00	0.00	0.01	0.00	99.39	Core
40	59.97	24.72	0.00	0.04	0.01	0.00	0.00	7.28	7.29	0.23	0.00	0.01	0.00	0.00	0.00	99.56	Core
41	58.91	24.64	0.02	0.11	0.03	0.01	0.00	7.19	7.51	0.22	0.00	0.00	0.00	0.02	0.00	98.64	Rim
42	59.89	24.24	0.00	0.19	0.00	0.00	0.00	6.89	7.62	0.18	0.02	0.00	0.00	0.03	0.00	99.05	Rim
43	60.26	24.42	0.01	0.12	0.00	0.00	0.00	6.54	7.91	0.15	0.02	0.00	0.00	0.00	0.00	99.44	Rim
44	59.43	25.15	0.01	0.09	0.04	0.01	0.00	7.07	7.45	0.23	0.00	0.01	0.00	0.00	0.07	99.56	Core
45	60.07	24.86	0.00	0.12	0.00	0.00	0.00	7.02	7.50	0.22	0.07	0.00	0.00	0.00	0.01	99.87	Core
46	58.88	24.41	0.01	0.07	0.01	0.00	0.00	6.83	7.52	0.22	0.08	0.00	0.00	0.00	0.00	98.04	Rim
71	60.75	24.32	0.02	0.05	0.00	0.01	0.00	6.78	7.82	0.14	0.00	0.00	0.00	0.00	0.05	99.93	Rim
72	59.78	24.67	0.00	0.11	0.00	0.00	0.00	7.34	7.43	0.22	0.00	0.00	0.00	0.00	0.03	99.58	Core
73	59.49	24.64	0.00	0.03	0.00	0.01	0.00	7.25	7.35	0.25	0.00	0.01	0.00	0.00	0.02	99.05	Core
74	59.33	24.60	0.01	0.08	0.03	0.01	0.00	6.75	7.64	0.26	0.00	0.01	0.00	0.03	0.03	98.77	Core
75	60.40	24.29	0.01	0.05	0.00	0.01	0.00	6.46	7.96	0.14	0.00	0.02	0.00	0.02	0.00	99.37	Rim

Spot	SiO <sub>2</sub>	Al <sub>2</sub> O <sub>3</sub>	TiO <sub>2</sub>	FeO	Cr <sub>2</sub> O <sub>3</sub>	MnO	MgO	CaO	Na <sub>2</sub> O	K <sub>2</sub> O	F	Cl	ZrO <sub>2</sub>	BaO	P <sub>2</sub> O <sub>5</sub>	Total	Position
<b>Electron-microprobe analyses of feldspar from Sample CA-04 (Vitória pluton)</b>																	
<b>Major element compositions (wt%)</b>																	
76	59.75	24.87	0.00	0.06	0.00	0.00	0.00	7.33	7.32	0.22	0.00	0.00	0.00	0.00	0.00	99.55	Rim
77	59.38	25.20	0.01	0.09	0.06	0.01	0.00	7.97	6.97	0.25	0.00	0.01	0.00	0.00	0.01	99.95	Core
78	59.47	25.03	0.01	0.10	0.00	0.00	0.00	7.81	7.12	0.24	0.04	0.00	0.00	0.05	0.00	99.88	Core
79	58.79	24.94	0.00	0.09	0.06	0.02	0.00	7.45	7.15	0.23	0.00	0.00	0.08	0.01	0.05	98.87	Core
80	60.22	24.39	0.02	0.07	0.00	0.00	0.00	6.59	7.93	0.15	0.03	0.06	0.00	0.05	0.01	99.50	Rim
106	60.03	24.08	0.01	0.16	0.00	0.00	0.00	6.32	7.89	0.12	0.00	0.10	0.00	0.00	0.03	98.74	Rim
107	60.40	24.60	0.01	0.05	0.01	0.00	0.00	6.79	7.62	0.24	0.00	0.06	0.00	0.01	0.04	99.83	Core
108	59.43	24.75	0.01	0.06	0.00	0.00	0.00	6.83	7.72	0.20	0.00	0.00	0.00	0.00	0.00	99.00	Rim
109	59.01	25.10	0.01	0.07	0.02	0.00	0.00	7.47	7.53	0.21	0.00	0.00	0.00	0.00	0.01	99.43	Rim
110	59.55	24.94	0.01	0.06	0.02	0.00	0.00	7.31	7.27	0.22	0.00	0.00	0.00	0.00	0.00	99.38	Core
111	59.34	25.05	0.01	0.06	0.03	0.00	0.00	7.47	7.43	0.27	0.05	0.00	0.00	0.02	0.00	99.71	Core
112	59.75	24.89	0.03	0.09	0.00	0.00	0.00	7.30	7.31	0.27	0.00	0.00	0.00	0.00	0.01	99.65	Core
113	59.44	24.57	0.01	0.07	0.03	0.00	0.00	7.11	7.49	0.19	0.00	0.00	0.00	0.01	0.00	98.91	Rim

Spot	Si	Al	Ti	Fe	Cr	Mn	Mg	Ca	Na	K	F	Cl	Zr	Ba	P	An	Or	Ab
<b>Electron-microprobe analyses of feldspar from Sample CA-04 (Vitória pluton)</b>																		
<b>Numbers of ions on the basis of 32 oxygen</b>																		
14	11.975	4.059	0.000	0.001	0.004	0.002	0.000	0.022	0.654	3.154	0.064	0.002	0.000	0.020	0.002	0.58	82.34	17.07
15	11.810	4.251	0.000	0.006	0.000	0.000	0.001	0.023	0.544	3.337	0.041	0.003	0.002	0.020	0.003	0.58	85.49	13.93
16	11.882	4.058	0.000	0.002	0.002	0.001	0.002	0.020	0.512	3.638	0.000	0.000	0.000	0.024	0.009	0.47	87.25	12.28
17	11.866	4.188	0.000	0.011	0.002	0.002	0.000	0.031	0.527	3.301	0.006	0.001	0.000	0.024	0.000	0.81	85.53	13.66
18	11.996	4.000	0.000	0.000	0.000	0.000	0.000	0.020	0.389	3.540	0.000	0.000	0.000	0.022	0.000	0.50	89.65	9.84
47	11.992	4.008	0.000	0.014	0.000	0.007	0.001	0.011	0.362	3.511	0.011	0.000	0.000	0.024	0.004	0.28	90.40	9.32
48	11.881	4.060	0.000	0.002	0.004	0.000	0.005	0.015	0.644	3.523	0.021	0.002	0.000	0.025	0.005	0.37	84.23	15.40
49	11.982	4.019	0.000	0.003	0.003	0.000	0.002	0.009	0.327	3.617	0.041	0.002	0.000	0.018	0.000	0.22	91.51	8.28
81	11.977	4.014	0.000	0.004	0.000	0.003	0.000	0.023	0.419	3.489	0.000	0.001	0.000	0.020	0.008	0.58	88.77	10.65
82	11.980	4.032	0.000	0.006	0.002	0.002	0.012	0.030	0.354	3.471	0.000	0.003	0.000	0.027	0.000	0.79	90.03	9.19
83	11.958	4.057	0.000	0.008	0.000	0.003	0.002	0.025	0.460	3.411	0.057	0.000	0.001	0.022	0.000	0.63	87.57	11.80

Spot	Si	Al	Ti	Fe	Cr	Mn	Mg	Ca	Na	K	F	Cl	Zr	Ba	P	An	Or	Ab
Electron-microprobe analyses of feldspar from Sample CA-04 (Vitória pluton)																		
Numbers of ions on the basis of 32 oxygen																		
114	11.964	4.027	0.000	0.005	0.000	0.001	0.000	0.023	0.467	3.448	0.000	0.000	0.000	0.026	0.007	0.59	87.55	11.86
115	11.944	4.038	0.000	0.000	0.006	0.000	0.000	0.022	0.413	3.546	0.061	0.000	0.000	0.019	0.010	0.56	89.08	10.37
116	11.924	4.058	0.000	0.008	0.001	0.000	0.006	0.021	0.474	3.536	0.063	0.000	0.000	0.022	0.000	0.53	87.70	11.77
38	10.771	5.206	0.000	0.011	0.001	0.000	0.000	1.310	2.590	0.045	0.000	0.000	0.000	0.000	0.003	33.20	1.14	65.66
39	10.713	5.229	0.002	0.008	0.003	0.001	0.000	1.390	2.584	0.056	0.000	0.000	0.000	0.001	0.000	34.49	1.38	64.13
40	10.738	5.217	0.000	0.006	0.002	0.000	0.000	1.397	2.532	0.053	0.000	0.002	0.000	0.000	0.000	35.08	1.32	63.60
41	10.672	5.259	0.002	0.016	0.004	0.002	0.000	1.394	2.637	0.051	0.000	0.000	0.000	0.001	0.000	34.15	1.25	64.60
42	10.787	5.144	0.000	0.029	0.000	0.000	0.000	1.329	2.659	0.042	0.012	0.000	0.000	0.002	0.000	32.97	1.03	65.99
43	10.798	5.158	0.001	0.018	0.000	0.000	0.000	1.256	2.747	0.034	0.013	0.000	0.000	0.000	0.000	31.11	0.83	68.06
44	10.651	5.312	0.001	0.014	0.006	0.002	0.000	1.357	2.589	0.052	0.000	0.002	0.000	0.000	0.010	33.95	1.30	64.75
45	10.732	5.234	0.001	0.017	0.000	0.000	0.000	1.343	2.596	0.049	0.042	0.001	0.000	0.000	0.001	33.67	1.23	65.10
46	10.720	5.238	0.002	0.011	0.001	0.000	0.000	1.333	2.655	0.052	0.045	0.000	0.000	0.000	0.000	33.00	1.29	65.72
71	10.824	5.106	0.003	0.007	0.000	0.001	0.000	1.293	2.700	0.032	0.002	0.001	0.000	0.000	0.008	32.13	0.80	67.07
72	10.715	5.212	0.000	0.016	0.000	0.000	0.000	1.409	2.582	0.051	0.000	0.001	0.000	0.000	0.004	34.87	1.25	63.88
73	10.715	5.231	0.000	0.005	0.000	0.002	0.000	1.398	2.565	0.056	0.000	0.002	0.000	0.000	0.003	34.79	1.40	63.81
74	10.718	5.238	0.001	0.012	0.004	0.001	0.000	1.306	2.675	0.061	0.001	0.004	0.000	0.002	0.004	32.31	1.50	66.19
75	10.825	5.130	0.002	0.008	0.000	0.002	0.000	1.241	2.767	0.033	0.000	0.006	0.000	0.001	0.000	30.71	0.81	68.48
76	10.705	5.252	0.001	0.009	0.000	0.000	0.000	1.407	2.542	0.050	0.000	0.001	0.000	0.000	0.000	35.18	1.25	63.57
77	10.618	5.311	0.001	0.013	0.009	0.001	0.000	1.527	2.417	0.056	0.000	0.002	0.000	0.000	0.002	38.18	1.40	60.42
78	10.648	5.281	0.001	0.015	0.000	0.000	0.000	1.499	2.471	0.055	0.025	0.000	0.000	0.003	0.000	37.24	1.36	61.40
79	10.625	5.312	0.000	0.013	0.008	0.002	0.000	1.442	2.506	0.052	0.000	0.000	0.007	0.001	0.008	36.06	1.30	62.65
80	10.795	5.151	0.003	0.011	0.000	0.000	0.000	1.265	2.755	0.033	0.015	0.017	0.000	0.003	0.002	31.20	0.82	67.98
106	10.833	5.122	0.001	0.024	0.000	0.000	0.000	1.222	2.760	0.027	0.001	0.031	0.000	0.000	0.004	30.48	0.67	68.85
107	10.782	5.174	0.001	0.008	0.002	0.000	0.000	1.299	2.638	0.054	0.000	0.018	0.000	0.000	0.006	32.54	1.36	66.10
108	10.707	5.255	0.001	0.009	0.000	0.000	0.001	1.319	2.697	0.046	0.000	0.001	0.000	0.000	0.000	32.48	1.13	66.40
109	10.612	5.320	0.001	0.010	0.003	0.000	0.000	1.439	2.625	0.047	0.000	0.000	0.000	0.000	0.001	35.00	1.15	63.84
110	10.687	5.276	0.001	0.009	0.003	0.000	0.000	1.405	2.528	0.051	0.000	0.000	0.000	0.000	0.000	35.26	1.29	63.46
111	10.642	5.294	0.001	0.009	0.004	0.000	0.000	1.434	2.583	0.061	0.031	0.000	0.000	0.001	0.000	35.17	1.49	63.33
112	10.698	5.252	0.004	0.014	0.000	0.000	0.000	1.400	2.539	0.061	0.000	0.000	0.000	0.000	0.002	35.00	1.52	63.48
113	10.721	5.222	0.001	0.010	0.004	0.000	0.000	1.374	2.621	0.044	0.000	0.000	0.000	0.001	0.000	34.02	1.09	64.89

Spot	SiO <sub>2</sub>	Al <sub>2</sub> O <sub>3</sub>	TiO <sub>2</sub>	FeO	Cr <sub>2</sub> O <sub>3</sub>	MnO	MgO	CaO	Na <sub>2</sub> O	K <sub>2</sub> O	F	Cl	ZrO <sub>2</sub>	BaO	P <sub>2</sub> O <sub>5</sub>	Total	Position
<b>Electron-microprobe analyses of feldspar from Sample CA-05 (Mestre Álvaro pluton)</b>																	
<b>Major element compositions (wt%)</b>																	
47	64.55	18.27	0.00	0.00	0.02	0.01	0.01	0.07	0.72	15.55	0.05	0.00	0.00	0.16	0.06	99.46	Rim
48	64.24	18.19	0.00	0.04	0.00	0.06	0.01	0.04	0.71	15.56	0.00	0.00	0.00	0.08	0.00	98.91	Core
49	64.91	18.23	0.00	0.07	0.01	0.00	0.01	0.09	0.71	15.72	0.04	0.00	0.00	0.16	0.00	99.93	Rim
50	64.17	18.26	0.00	0.03	0.01	0.00	0.00	0.07	0.73	15.83	0.03	0.00	0.00	0.15	0.03	99.30	Rim
61	64.48	18.03	0.00	0.01	0.03	0.00	0.01	0.06	0.59	15.67	0.00	0.00	0.00	0.20	0.05	99.12	Core
62	64.88	18.24	0.00	0.04	0.00	0.01	0.00	0.09	0.59	15.62	0.00	0.00	0.00	0.19	0.00	99.65	Rim
63	64.72	18.22	0.00	0.02	0.04	0.00	0.00	0.05	0.55	15.62	0.14	0.00	0.00	0.16	0.04	99.55	Rim
64	63.98	18.18	0.00	0.03	0.02	0.00	0.00	0.08	0.66	15.55	0.00	0.00	0.00	0.17	0.03	98.70	Rim
21	57.81	26.10	0.01	0.08	0.06	0.00	0.01	8.85	6.35	0.44	0.00	0.00	0.00	0.00	0.00	99.70	Rim
22	57.41	26.24	0.01	0.10	0.01	0.04	0.00	9.05	6.26	0.49	0.00	0.00	0.00	0.01	0.01	99.64	Core
23	57.14	26.19	0.01	0.14	0.01	0.00	0.00	9.48	6.07	0.47	0.00	0.00	0.00	0.00	0.00	99.50	Core
24	57.56	25.98	0.01	0.08	0.00	0.02	0.00	8.49	6.42	0.45	0.03	0.01	0.00	0.02	0.01	99.07	Rim
51	58.14	25.95	0.00	0.05	0.00	0.00	0.00	8.59	6.64	0.38	0.00	0.00	0.00	0.03	0.02	99.80	Rim
52	57.70	25.82	0.00	0.14	0.03	0.02	0.00	8.70	6.50	0.44	0.09	0.00	0.00	0.00	0.01	99.46	Core
53	54.76	27.50	0.00	0.08	0.00	0.01	0.00	11.03	5.36	0.24	0.00	0.00	0.00	0.00	0.00	98.98	Core
54	54.87	27.49	0.02	0.14	0.00	0.01	0.00	10.71	5.46	0.24	0.02	0.00	0.00	0.00	0.00	98.95	Core
55	57.72	26.02	0.00	0.08	0.01	0.00	0.00	8.72	6.72	0.33	0.00	0.00	0.00	0.01	0.00	99.61	Rim
56	58.96	25.01	0.01	0.31	0.00	0.00	0.10	6.33	7.05	0.74	0.07	0.01	0.00	0.03	0.00	98.62	Rim
57	59.19	26.24	0.01	0.12	0.04	0.02	0.00	7.24	6.30	0.76	0.04	0.03	0.00	0.00	0.00	99.97	Intermediary
58	58.04	25.47	0.00	0.17	0.05	0.06	0.00	8.95	6.24	0.53	0.02	0.00	0.00	0.00	0.00	99.51	Core
59	58.64	25.72	0.02	0.15	0.00	0.00	0.00	8.29	6.59	0.48	0.00	0.01	0.00	0.02	0.00	99.90	Core
60	58.35	25.62	0.00	0.11	0.00	0.01	0.00	8.31	6.53	0.52	0.00	0.00	0.00	0.00	0.02	99.48	Core

Spot	Si	Al	Ti	Fe	Cr	Mn	Mg	Ca	Na	K	F	Cl	Zr	Ba	P	An	Or	Ab
Electron-microprobe analyses of feldspar from Sample CA-05 (Mestre Álvaro pluton)																		
Numbers of ions on the basis of 32 oxygen																		
47	11.988	3.998	0.000	0.000	0.003	0.001	0.002	0.014	0.259	3.683	0.029	0.000	0.000	0.012	0.009	0.34	93.11	6.55
48	11.993	4.001	0.000	0.007	0.000	0.009	0.002	0.007	0.258	3.705	0.000	0.000	0.000	0.006	0.000	0.18	93.33	6.49
49	12.008	3.973	0.000	0.010	0.001	0.000	0.003	0.018	0.254	3.709	0.026	0.000	0.000	0.011	0.000	0.44	93.19	6.37
50	11.963	4.012	0.000	0.005	0.002	0.000	0.000	0.013	0.263	3.765	0.017	0.000	0.000	0.011	0.004	0.32	93.18	6.50
61	12.018	3.959	0.000	0.002	0.004	0.000	0.002	0.013	0.212	3.724	0.002	0.001	0.000	0.014	0.008	0.32	94.32	5.36
62	12.019	3.982	0.000	0.006	0.000	0.001	0.000	0.017	0.211	3.691	0.000	0.001	0.000	0.014	0.000	0.45	94.17	5.39
63	12.012	3.984	0.000	0.003	0.006	0.000	0.001	0.010	0.198	3.698	0.079	0.000	0.000	0.012	0.007	0.26	94.67	5.07
64	11.979	4.011	0.000	0.005	0.002	0.000	0.000	0.017	0.241	3.714	0.000	0.001	0.000	0.013	0.004	0.42	93.51	6.07
21	10.403	5.535	0.001	0.012	0.008	0.000	0.002	1.705	2.214	0.100	0.000	0.001	0.000	0.000	0.000	42.43	2.50	55.08
22	10.352	5.577	0.001	0.016	0.001	0.006	0.001	1.749	2.188	0.112	0.000	0.001	0.000	0.001	0.002	43.19	2.77	54.04
23	10.327	5.579	0.002	0.020	0.001	0.000	0.001	1.835	2.126	0.108	0.000	0.001	0.000	0.000	0.000	45.09	2.65	52.25
24	10.420	5.542	0.001	0.012	0.000	0.003	0.000	1.646	2.254	0.103	0.016	0.002	0.000	0.001	0.001	41.12	2.57	56.30
51	10.444	5.495	0.000	0.008	0.000	0.000	0.000	1.653	2.312	0.087	0.000	0.000	0.000	0.002	0.003	40.80	2.14	57.06
52	10.424	5.496	0.000	0.022	0.004	0.003	0.000	1.684	2.277	0.102	0.054	0.000	0.000	0.000	0.001	41.44	2.52	56.04
53	9.992	5.912	0.000	0.012	0.000	0.001	0.000	2.157	1.897	0.056	0.000	0.000	0.000	0.000	0.000	52.47	1.36	46.17
54	10.011	5.910	0.003	0.021	0.000	0.001	0.000	2.093	1.930	0.057	0.011	0.001	0.000	0.000	0.000	51.30	1.39	47.31
55	10.401	5.525	0.000	0.012	0.001	0.000	0.000	1.684	2.349	0.075	0.000	0.000	0.000	0.001	0.000	40.99	1.84	57.17
56	10.680	5.338	0.002	0.047	0.000	0.000	0.026	1.229	2.477	0.171	0.037	0.002	0.000	0.002	0.000	31.69	4.42	63.89
57	10.565	5.520	0.001	0.017	0.005	0.003	0.000	1.384	2.180	0.172	0.021	0.008	0.000	0.000	0.000	37.05	4.60	58.35
58	10.475	5.416	0.000	0.025	0.007	0.009	0.000	1.729	2.181	0.121	0.010	0.001	0.000	0.000	0.000	42.89	3.00	54.10
59	10.514	5.434	0.002	0.022	0.000	0.001	0.000	1.592	2.291	0.109	0.000	0.002	0.000	0.001	0.000	39.88	2.73	57.38
60	10.508	5.436	0.000	0.017	0.000	0.001	0.000	1.604	2.280	0.120	0.001	0.000	0.000	0.000	0.004	40.05	3.01	56.94

Spot	SiO <sub>2</sub>	Al <sub>2</sub> O <sub>3</sub>	TiO <sub>2</sub>	FeO	Cr <sub>2</sub> O <sub>3</sub>	MnO	MgO	CaO	Na <sub>2</sub> O	K <sub>2</sub> O	F	Cl	ZrO <sub>2</sub>	P <sub>2</sub> O <sub>5</sub>	Total	Position
<b>Electron-microprobe analyses of titanite from Sample CA-02 (Aracê - Pedra Azul pluton)</b>																
<b>Major element compositions (wt%)</b>																
A-6	30.90	3.97	32.48	1.88	0.00	0.19	0.00	28.87	0.06	0.02	1.28	0.01	0.00	0.01	99.66	Rim
A-7	30.60	3.65	32.59	1.94	0.00	0.16	0.02	29.11	0.04	0.00	1.36	0.00	0.00	0.05	99.53	Core
A-8	30.30	3.44	32.03	1.93	0.00	0.25	0.01	29.49	0.07	0.00	0.99	0.00	0.00	0.03	98.53	Core
A-9	30.75	3.62	32.39	2.13	0.00	0.17	0.00	28.30	0.02	0.01	1.09	0.00	0.00	0.00	98.48	Rim
A-13	29.62	3.50	32.74	2.00	0.02	0.14	0.00	29.96	0.05	0.00	0.95	0.01	0.00	0.04	99.02	Core
A-14	30.60	3.40	32.96	2.08	0.00	0.16	0.05	29.17	0.07	0.01	1.11	0.01	0.00	0.00	99.62	Core
A-15	30.44	3.69	32.04	2.98	0.01	0.13	0.01	29.88	0.07	0.02	1.14	0.00	0.00	0.04	100.42	Core
A-23	30.55	3.64	31.97	2.16	0.00	0.22	0.05	29.53	0.10	0.01	1.08	0.00	0.00	0.01	99.32	Rim
A-24	30.59	3.54	32.22	2.93	0.00	0.20	0.00	29.08	0.09	0.01	1.11	0.00	0.00	0.00	99.77	Core
A-25	30.78	3.70	31.97	2.00	0.03	0.22	0.03	29.66	0.07	0.01	1.32	0.00	0.00	0.00	99.77	Core
A-26	30.89	4.03	32.63	1.85	0.04	0.15	0.00	29.11	0.07	0.01	1.22	0.00	0.00	0.00	100.00	Rim
B-74	30.97	3.50	32.20	1.98	0.00	0.17	0.01	29.99	0.05	0.01	1.39	0.01	0.00	0.01	100.30	Rim
B-75	30.96	3.71	32.82	2.04	0.00	0.18	0.00	29.31	0.09	0.01	1.41	0.01	0.00	0.01	100.53	Core
B-76	31.06	3.58	31.79	1.98	0.01	0.22	0.01	28.96	0.10	0.01	0.98	0.01	0.02	0.00	98.73	Core
B-77	31.13	3.80	31.37	2.01	0.00	0.19	0.00	28.77	0.08	0.01	1.20	0.00	0.00	0.00	98.54	Rim

Spot	Si	Al	Ti	Fe	Cr	Mn	Mg	Ca	Na	K	F	Cl	Zr	P
<b>Electron-microprobe analyses of titanite from Sample CA-02 (Aracê - Pedra Azul pluton)</b>														
<b>Numbers of ions on the basis of 4 silicon</b>														
A-6	4.000	0.606	3.163	0.203	0.000	0.021	0.000	4.003	0.014	0.003	0.526	0.001	0.000	0.001
A-7	4.000	0.562	3.204	0.213	0.000	0.018	0.004	4.077	0.010	0.000	0.564	0.000	0.000	0.006
A-8	4.000	0.535	3.181	0.213	0.000	0.027	0.001	4.170	0.018	0.001	0.411	0.000	0.000	0.003
A-9	4.000	0.555	3.169	0.232	0.000	0.019	0.001	3.944	0.006	0.001	0.447	0.000	0.000	0.000
A-13	4.000	0.557	3.325	0.226	0.002	0.016	0.000	4.334	0.013	0.000	0.407	0.002	0.000	0.004
A-14	4.000	0.523	3.240	0.227	0.000	0.017	0.010	4.085	0.017	0.002	0.458	0.002	0.000	0.000
A-15	4.000	0.571	3.167	0.328	0.001	0.014	0.001	4.207	0.018	0.003	0.472	0.000	0.000	0.004
A-23	4.000	0.561	3.149	0.236	0.000	0.024	0.010	4.141	0.026	0.002	0.448	0.000	0.000	0.001
A-24	4.000	0.546	3.170	0.321	0.000	0.022	0.000	4.074	0.022	0.001	0.459	0.001	0.000	0.000
A-25	4.000	0.567	3.125	0.217	0.003	0.024	0.005	4.129	0.017	0.001	0.541	0.000	0.000	0.000
A-26	4.000	0.615	3.178	0.200	0.004	0.017	0.000	4.038	0.018	0.002	0.498	0.000	0.000	0.000
B-74	4.000	0.533	3.128	0.214	0.000	0.018	0.002	4.149	0.013	0.001	0.569	0.002	0.000	0.001
B-75	4.000	0.565	3.190	0.221	0.000	0.019	0.000	4.058	0.021	0.002	0.575	0.002	0.000	0.001
B-76	4.000	0.543	3.080	0.213	0.001	0.024	0.002	3.996	0.025	0.002	0.398	0.002	0.002	0.000
B-77	4.000	0.575	3.032	0.216	0.000	0.020	0.000	3.959	0.019	0.001	0.486	0.000	0.000	0.000

Spot	SiO <sub>2</sub>	Al <sub>2</sub> O <sub>3</sub>	TiO <sub>2</sub>	FeO	Cr <sub>2</sub> O <sub>3</sub>	MnO	MgO	CaO	Na <sub>2</sub> O	K <sub>2</sub> O	F	Cl	ZrO <sub>2</sub>	P <sub>2</sub> O <sub>5</sub>	SrO	Total	Position
<b>Electron-microprobe analyses of rutile from Sample CA-04 (Vitória pluton)</b>																	
<b>Major element compositions (wt%)</b>																	
1	0.11	0.00	99.12	0.59	0.03	0.00	0.02	0.02	0.01	0.04	0.00	0.00	0.00	0.00	0.00	99.93	Core
2	0.09	0.00	99.30	0.42	0.00	0.00	0.01	0.02	0.00	0.01	0.00	0.00	0.00	0.04	0.03	99.92	Core
3	0.58	0.00	94.44	4.06	0.00	0.16	0.12	0.20	0.09	0.04	0.00	0.01	0.01	0.03	0.00	99.74	Core
4	0.06	0.00	99.03	0.47	0.01	0.00	0.00	0.02	0.03	0.02	0.08	0.00	0.00	0.00	0.00	99.70	Core
5	0.07	0.00	98.99	0.57	0.00	0.02	0.00	0.04	0.09	0.02	0.01	0.01	0.00	0.00	0.00	99.82	Core
27	0.04	0.00	99.24	0.39	0.00	0.00	0.00	0.03	0.00	0.02	0.20	0.00	0.00	0.00	0.00	99.92	Core
28	0.07	0.00	98.38	0.36	0.00	0.00	0.00	0.05	0.01	0.01	0.00	0.00	0.00	0.05	0.00	98.95	Core
29	0.04	0.00	98.53	0.42	0.01	0.00	0.00	0.02	0.04	0.02	0.08	0.00	0.00	0.06	0.00	99.22	Core
30	0.03	0.00	98.29	0.41	0.00	0.03	0.03	0.02	0.02	0.09	0.00	0.00	0.00	0.00	0.00	98.93	Rim
31	0.11	0.00	98.99	0.37	0.07	0.00	0.00	0.04	0.03	0.08	0.00	0.00	0.00	0.02	0.01	99.71	Core
65	0.04	0.00	97.89	0.34	0.04	0.00	0.00	0.04	0.02	0.01	0.02	0.01	0.00	0.02	0.00	98.41	Rim
66	0.05	0.00	98.03	0.28	0.00	0.01	0.00	0.07	0.00	0.01	0.00	0.00	0.00	0.04	0.01	98.49	Core
67	0.03	0.00	98.56	0.28	0.00	0.01	0.02	0.17	0.01	0.00	0.00	0.00	0.00	0.02	0.03	99.13	Rim
92	0.18	0.00	98.67	0.47	0.00	0.03	0.01	0.03	0.01	0.05	0.07	0.00	0.00	0.00	0.00	99.52	Core
93	0.08	0.00	98.31	0.46	0.01	0.00	0.01	0.06	0.05	0.02	0.00	0.01	0.00	0.00	0.00	99.01	Core
94	0.08	0.00	99.03	0.41	0.04	0.00	0.00	0.06	0.00	0.02	0.12	0.01	0.08	0.03	0.00	99.87	Core
123	0.11	0.00	97.60	0.81	0.02	0.00	0.00	0.03	0.01	0.18	0.00	0.00	0.00	0.00	0.10	98.85	Core
124	0.10	0.00	97.91	0.64	0.01	0.03	0.00	0.05	0.02	0.20	0.00	0.00	0.00	0.00	0.06	99.02	Core
125	0.09	0.00	98.38	0.40	0.00	0.00	0.00	0.07	0.01	0.20	0.01	0.00	0.04	0.00	0.07	99.26	Core

Spot	Si	Al	Ti	Fe	Cr	Mn	Mg	Ca	Na	K	F	Cl	Zr	P	Sr
<b>Electron-microprobe analyses of rutile from Sample CA-04 (Vitória pluton)</b>															
<b>Numbers of ions on the basis of 2 oxygen</b>															
1	0.001	0.000	0.995	0.007	0.000	0.000	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000
2	0.001	0.000	0.996	0.005	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
3	0.008	0.000	0.964	0.046	0.000	0.002	0.002	0.003	0.002	0.001	0.000	0.000	0.000	0.000	0.000
4	0.001	0.000	0.996	0.005	0.000	0.000	0.000	0.000	0.001	0.000	0.003	0.000	0.000	0.000	0.000
5	0.001	0.000	0.995	0.006	0.000	0.000	0.000	0.001	0.002	0.000	0.001	0.000	0.000	0.000	0.000
27	0.001	0.000	0.997	0.004	0.000	0.000	0.000	0.000	0.000	0.000	0.008	0.000	0.000	0.000	0.000
28	0.001	0.000	0.996	0.004	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.001	0.000
29	0.001	0.000	0.996	0.005	0.000	0.000	0.000	0.000	0.001	0.000	0.003	0.000	0.000	0.001	0.000
30	0.000	0.000	0.996	0.005	0.000	0.000	0.001	0.000	0.001	0.002	0.000	0.000	0.000	0.000	0.000
31	0.001	0.000	0.995	0.004	0.001	0.000	0.000	0.001	0.001	0.001	0.000	0.000	0.000	0.000	0.000
65	0.001	0.000	0.997	0.004	0.000	0.000	0.000	0.001	0.000	0.000	0.001	0.000	0.000	0.000	0.000
66	0.001	0.000	0.997	0.003	0.000	0.000	0.000	0.001	0.000	0.000	0.000	0.000	0.000	0.000	0.000
67	0.000	0.000	0.996	0.003	0.000	0.000	0.000	0.002	0.000	0.000	0.000	0.000	0.000	0.000	0.000
92	0.002	0.000	0.994	0.005	0.000	0.000	0.000	0.000	0.000	0.001	0.003	0.000	0.000	0.000	0.000
93	0.001	0.000	0.995	0.005	0.000	0.000	0.000	0.001	0.001	0.000	0.000	0.000	0.000	0.000	0.000
94	0.001	0.000	0.995	0.005	0.000	0.000	0.000	0.001	0.000	0.000	0.005	0.000	0.000	0.000	0.000
123	0.002	0.000	0.992	0.009	0.000	0.000	0.000	0.000	0.000	0.003	0.000	0.000	0.000	0.000	0.001
124	0.001	0.000	0.993	0.007	0.000	0.000	0.000	0.001	0.000	0.003	0.000	0.000	0.000	0.000	0.000
125	0.001	0.000	0.995	0.004	0.000	0.000	0.000	0.001	0.000	0.003	0.001	0.000	0.000	0.000	0.001

Spot	SiO <sub>2</sub>	Al <sub>2</sub> O <sub>3</sub>	TiO <sub>2</sub>	FeO	Cr <sub>2</sub> O <sub>3</sub>	MnO	MgO	CaO	K <sub>2</sub> O	F	Cl	ZrO <sub>2</sub>	BaO	P <sub>2</sub> O <sub>5</sub>	Total	Position
<b>Electron-microprobe analyses of zircon from Sample CA-02 (Aracê - Pedra Azul pluton)</b>																
<b>Major element compositions (wt%)</b>																
A-39	32.05	0.00	0.02	0.36	0.00	0.00	0.00	0.00	0.03	0.00	0.01	65.71	0.03	0.00	98.21	Rim
A-40	32.34	0.01	0.00	0.28	0.00	0.01	0.03	0.00	0.03	0.09	0.00	65.97	0.03	0.06	98.85	Core
A-41	32.02	0.01	0.02	0.29	0.00	0.00	0.00	0.03	0.02	0.04	0.00	65.60	0.00	0.00	98.03	Rim
A-42	32.96	0.03	0.00	0.13	0.00	0.03	0.01	0.02	0.02	0.15	0.00	65.43	0.00	0.07	98.85	Core
A-43	33.33	0.00	0.02	0.28	0.03	0.04	0.00	0.00	0.01	0.14	0.00	65.16	0.00	0.03	99.02	Rim
B-20	32.97	0.00	0.04	0.33	0.00	0.05	0.00	0.03	0.02	0.06	0.00	65.18	0.00	0.04	98.70	Core
B-21	32.23	0.00	0.08	0.22	0.03	0.00	0.03	0.00	0.00	0.13	0.00	65.75	0.00	0.06	98.53	Core
B-22	32.67	0.00	0.28	0.57	0.00	0.03	0.02	0.03	0.00	0.00	0.00	65.43	0.00	0.00	99.02	Rim
B-23	32.55	0.00	0.00	0.19	0.00	0.00	0.00	0.06	0.00	0.02	0.01	65.65	0.01	0.01	98.50	Rim
B-24	33.88	0.00	0.02	0.15	0.03	0.00	0.03	0.04	0.01	0.14	0.01	65.03	0.00	0.13	99.46	Core
B-25	32.60	0.00	0.01	0.17	0.02	0.05	0.00	0.06	0.01	0.10	0.00	65.58	0.04	0.03	98.67	Rim
B-26	33.78	0.03	0.00	0.56	0.00	0.00	0.00	0.08	0.01	0.04	0.01	65.39	0.03	0.04	99.96	Rim
B-46	32.47	0.01	0.01	0.20	0.01	0.00	0.01	0.05	0.01	0.00	0.01	65.52	0.03	0.06	98.38	Rim
B-47	32.83	0.03	0.02	0.17	0.01	0.00	0.02	0.05	0.01	0.15	0.01	65.69	0.00	0.06	99.04	Core
B-48	32.15	0.02	0.00	0.18	0.00	0.00	0.00	0.04	0.02	0.00	0.01	65.77	0.02	0.03	98.23	Core
B-49	33.36	0.00	0.02	0.17	0.00	0.04	0.02	0.01	0.01	0.17	0.01	65.15	0.00	0.10	99.05	Rim
B-50	33.16	0.00	0.00	0.17	0.01	0.02	0.00	0.07	0.01	0.10	0.01	65.46	0.00	0.05	99.05	Core

Spot	Si	Al	Ti	Fe	Cr	Mn	Mg	Ca	K	F	Cl	Zr	Ba	P
<b>Electron-microprobe analyses of zircon from Sample CA-02 (Aracê - Pedra Azul pluton)</b>														
<b>Numbers of ions on the basis of 16 oxygen</b>														
A-39	3.989	0.000	0.002	0.037	0.000	0.000	0.000	0.000	0.005	0.000	0.002	3.988	0.002	0.000
A-40	3.997	0.001	0.000	0.029	0.000	0.001	0.006	0.000	0.004	0.036	0.000	3.975	0.002	0.006
A-41	3.992	0.001	0.002	0.031	0.000	0.000	0.000	0.004	0.004	0.014	0.001	3.987	0.000	0.000
A-42	4.053	0.004	0.000	0.013	0.000	0.003	0.001	0.003	0.003	0.060	0.000	3.923	0.000	0.007
A-43	4.084	0.000	0.002	0.028	0.003	0.004	0.000	0.000	0.001	0.052	0.000	3.892	0.000	0.003
B-20	4.058	0.000	0.003	0.033	0.000	0.005	0.000	0.004	0.003	0.024	0.000	3.912	0.000	0.004
B-21	3.994	0.000	0.008	0.023	0.003	0.000	0.005	0.000	0.000	0.052	0.001	3.973	0.000	0.006
B-22	4.017	0.000	0.026	0.058	0.000	0.003	0.003	0.004	0.001	0.000	0.000	3.923	0.000	0.000
B-23	4.025	0.000	0.000	0.019	0.000	0.000	0.000	0.008	0.000	0.006	0.002	3.959	0.001	0.001
B-24	4.115	0.000	0.002	0.016	0.003	0.000	0.005	0.005	0.002	0.055	0.001	3.851	0.000	0.013
B-25	4.028	0.000	0.001	0.018	0.001	0.005	0.000	0.007	0.002	0.041	0.001	3.950	0.002	0.003
B-26	4.094	0.004	0.000	0.057	0.000	0.000	0.000	0.010	0.002	0.014	0.002	3.864	0.002	0.004
B-46	4.019	0.001	0.001	0.021	0.001	0.000	0.001	0.006	0.001	0.000	0.003	3.955	0.001	0.006
B-47	4.035	0.004	0.002	0.017	0.001	0.000	0.004	0.007	0.002	0.058	0.002	3.937	0.000	0.006
B-48	3.995	0.003	0.000	0.019	0.000	0.000	0.000	0.005	0.003	0.000	0.003	3.985	0.001	0.003
B-49	4.084	0.000	0.002	0.017	0.000	0.004	0.004	0.001	0.002	0.065	0.001	3.888	0.000	0.010
B-50	4.065	0.000	0.000	0.017	0.000	0.002	0.000	0.009	0.002	0.038	0.001	3.913	0.000	0.006

Spot	SiO <sub>2</sub>	Al <sub>2</sub> O <sub>3</sub>	TiO <sub>2</sub>	FeO	Cr <sub>2</sub> O <sub>3</sub>	MnO	MgO	CaO	K <sub>2</sub> O	F	Cl	ZrO <sub>2</sub>	BaO	P <sub>2</sub> O <sub>5</sub>	Total	Position
<b>Electron-microprobe analyses of zircon from Sample CA-04 (Vitória pluton)</b>																
<b>Major element compositions (wt%)</b>																
12	32.30	0.04	0.35	0.25	0.00	0.00	0.01	0.03	0.00	0.08	0.00	66.13	0.00	0.07	99.26	Core
13	31.90	0.01	0.58	0.59	0.02	0.01	0.00	0.02	0.02	0.00	0.00	65.10	0.00	0.16	98.40	Rim
50	32.38	0.00	0.10	0.22	0.00	0.00	0.00	0.04	0.01	0.10	0.00	66.25	0.00	0.00	99.11	Rim
51	31.83	0.04	0.20	0.03	0.02	0.00	0.00	0.02	0.01	0.17	0.01	65.90	0.00	0.09	98.30	Rim
68	31.86	0.01	0.05	0.00	0.00	0.04	0.00	0.02	0.01	0.03	0.01	66.06	0.00	0.03	98.11	Core
69	32.02	0.02	0.01	0.01	0.04	0.00	0.03	0.04	0.00	0.08	0.00	65.87	0.02	0.17	98.31	Core
70	32.19	0.00	0.02	0.07	0.00	0.03	0.04	0.05	0.00	0.01	0.00	65.94	0.00	0.04	98.39	Rim
117	32.33	0.00	0.01	0.26	0.00	0.01	0.00	0.04	0.02	0.12	0.00	65.91	0.00	0.05	98.75	Core
118	32.24	0.01	0.07	0.25	0.02	0.00	0.02	0.05	0.02	0.04	0.00	66.24	0.00	0.01	98.94	Rim

Spot	Si	Al	Ti	Fe	Cr	Mn	Mg	Ca	K	F	Cl	Zr	Ba	P
<b>Electron-microprobe analyses of zircon from Sample CA-04 (Vitória pluton)</b>														
<b>Numbers of ions on the basis of 16 oxygen</b>														
12	3.973	0.005	0.033	0.026	0.000	0.000	0.002	0.004	0.000	0.032	0.001	3.966	0.000	0.007
13	3.955	0.002	0.054	0.061	0.001	0.001	0.000	0.002	0.003	0.001	0.000	3.935	0.000	0.016
50	3.993	0.000	0.009	0.023	0.000	0.000	0.000	0.005	0.002	0.040	0.000	3.983	0.000	0.000
51	3.962	0.005	0.019	0.003	0.002	0.000	0.000	0.003	0.002	0.066	0.002	4.000	0.000	0.009
68	3.971	0.002	0.005	0.000	0.000	0.004	0.000	0.003	0.002	0.010	0.002	4.016	0.000	0.003
69	3.976	0.003	0.001	0.001	0.004	0.000	0.005	0.006	0.000	0.032	0.000	3.989	0.001	0.018
70	3.993	0.000	0.002	0.008	0.000	0.003	0.007	0.007	0.001	0.003	0.000	3.988	0.000	0.004
117	3.999	0.000	0.001	0.026	0.000	0.001	0.000	0.006	0.003	0.048	0.000	3.975	0.000	0.006
118	3.983	0.001	0.006	0.026	0.002	0.000	0.003	0.006	0.003	0.014	0.000	3.990	0.000	0.001

Spot	SiO <sub>2</sub>	Al <sub>2</sub> O <sub>3</sub>	TiO <sub>2</sub>	FeO	Cr <sub>2</sub> O <sub>3</sub>	MnO	MgO	CaO	K <sub>2</sub> O	F	Cl	ZrO <sub>2</sub>	BaO	P <sub>2</sub> O <sub>5</sub>	Total	Position
<b>Electron-microprobe analyses of zircon from Sample CA-05 (Mestre Álvaro pluton)</b>																
<b>Major element compositions (wt%)</b>																
6	32.46	0.00	0.01	0.12	0.01	0.00	0.00	0.01	0.02	0.11	0.00	66.72	0.00	0.03	99.47	Core
7	32.60	0.00	0.05	0.30	0.00	0.00	0.00	0.00	0.01	0.09	0.00	66.63	0.00	0.12	99.80	Rim
8	32.04	0.00	0.00	0.06	0.02	0.02	0.00	0.01	0.00	0.10	0.01	66.71	0.02	0.04	99.02	Core
9	32.13	0.01	0.00	0.27	0.02	0.02	0.02	0.00	0.01	0.00	0.00	65.59	0.00	0.06	98.14	Rim
15	32.09	0.00	0.03	0.04	0.05	0.00	0.03	0.00	0.02	0.00	0.00	65.90	0.02	0.13	98.32	Core
16	32.13	0.02	0.00	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	65.74	0.05	0.11	98.16	Rim
17	32.39	0.00	0.00	0.04	0.00	0.00	0.01	0.00	0.01	0.00	0.00	65.93	0.01	0.08	98.49	Rim
18	32.71	0.00	0.00	0.04	0.02	0.00	0.01	0.01	0.02	0.03	0.00	66.45	0.00	0.08	99.36	Rim
45	32.37	0.00	0.02	0.25	0.01	0.03	0.03	0.05	0.03	0.10	0.01	66.06	0.00	0.00	98.94	Rim
46	32.71	0.01	0.02	0.27	0.00	0.00	0.00	0.01	0.01	0.07	0.00	66.63	0.03	0.14	99.91	Rim

Spot	Si	Al	Ti	Fe	Cr	Mn	Mg	Ca	K	F	Cl	Zr	Ba	P
<b>Electron-microprobe analyses of zircon from Sample CA-05 (Mestre Álvaro pluton)</b>														
<b>Numbers of ions on the basis of 16 oxygen</b>														
6	3.989	0.000	0.001	0.012	0.000	0.000	0.001	0.001	0.002	0.042	0.000	3.998	0.000	0.004
7	3.989	0.000	0.004	0.031	0.000	0.000	0.000	0.000	0.002	0.035	0.000	3.975	0.000	0.012
8	3.963	0.000	0.000	0.006	0.002	0.002	0.000	0.001	0.000	0.039	0.001	4.024	0.001	0.004
9	3.995	0.002	0.000	0.028	0.002	0.002	0.004	0.001	0.001	0.000	0.000	3.976	0.000	0.007
15	3.983	0.000	0.003	0.004	0.005	0.000	0.005	0.000	0.003	0.000	0.000	3.987	0.001	0.014
16	3.993	0.002	0.000	0.012	0.000	0.000	0.000	0.000	0.000	0.000	0.000	3.984	0.003	0.011
17	4.007	0.000	0.000	0.005	0.000	0.000	0.001	0.000	0.002	0.001	0.000	3.978	0.001	0.009
18	4.011	0.000	0.000	0.004	0.002	0.000	0.002	0.002	0.002	0.010	0.001	3.973	0.000	0.008
45	3.998	0.000	0.001	0.025	0.001	0.003	0.006	0.006	0.004	0.041	0.001	3.978	0.000	0.000
46	3.995	0.001	0.002	0.027	0.000	0.000	0.000	0.001	0.002	0.029	0.000	3.968	0.001	0.015

Spot	Al <sub>2</sub> O <sub>3</sub>	TiO <sub>2</sub>	FeO	Cr <sub>2</sub> O <sub>3</sub>	MnO	MgO	CaO	Na <sub>2</sub> O	K <sub>2</sub> O	F	Cl	ZrO <sub>2</sub>	BaO	P <sub>2</sub> O <sub>5</sub>	SrO	Total	Position
<b>Electron-microprobe analyses of apatite from Sample CA-02 (Aracê - Pedra Azul pluton)</b>																	
<b>Major element compositions (wt%)</b>																	
A-45	0.03	0.01	0.25	0.00	0.10	0.00	54.85	0.01	0.05	3.95	0.01	0.00	0.00	42.48	0.01	101.75	Rim
B-13	0.00	0.00	0.12	0.01	0.08	0.00	55.58	0.04	0.01	5.28	0.01	0.00	0.01	39.07	0.00	100.21	Rim
B-14	0.03	0.01	0.11	0.00	0.07	0.00	54.92	0.00	0.00	5.28	0.01	0.00	0.00	40.26	0.00	100.70	Core
B-15	0.01	0.04	0.07	0.00	0.06	0.00	55.29	0.00	0.01	5.10	0.01	0.00	0.00	40.35	0.01	100.94	Rim
B-51	0.00	0.00	0.16	0.04	0.07	0.00	55.00	0.00	0.03	5.09	0.00	0.00	0.01	39.54	0.00	99.94	Core
B-52	0.01	0.00	0.23	0.00	0.06	0.00	55.91	0.00	0.02	4.96	0.01	0.00	0.00	39.87	0.00	101.07	Core

Spot	Al	Ti	Fe	Cr	Mn	Mg	Ca	Na	K	F	Cl	Zr	Ba	P	Sr
<b>Electron-microprobe analyses of apatite from Sample CA-02 (Aracê - Pedra Azul pluton)</b>															
<b>Numbers of ions on the basis of 26 (O, F, Cl)</b>															
A-45	0.006	0.001	0.034	0.000	0.013	0.000	9.457	0.004	0.010	2.008	0.004	0.000	0.000	5.786	0.001
B-13	0.001	0.000	0.016	0.001	0.010	0.000	9.726	0.012	0.001	2.727	0.003	0.000	0.001	5.402	0.000
B-14	0.006	0.002	0.015	0.000	0.010	0.000	9.502	0.000	0.000	2.697	0.003	0.000	0.000	5.505	0.000
B-15	0.002	0.005	0.009	0.000	0.009	0.000	9.567	0.000	0.001	2.606	0.002	0.000	0.000	5.517	0.001
B-51	0.000	0.000	0.022	0.005	0.010	0.000	9.638	0.000	0.006	2.630	0.001	0.000	0.000	5.475	0.000
B-52	0.001	0.000	0.031	0.000	0.009	0.000	9.719	0.000	0.005	2.547	0.002	0.000	0.000	5.476	0.000

Spot	Al <sub>2</sub> O <sub>3</sub>	TiO <sub>2</sub>	FeO	Cr <sub>2</sub> O <sub>3</sub>	MnO	MgO	CaO	Na <sub>2</sub> O	K <sub>2</sub> O	F	Cl	ZrO <sub>2</sub>	BaO	P <sub>2</sub> O <sub>5</sub>	SrO	Total	Position
<b>Electron-microprobe analyses of apatite from Sample CA-04 (Vitória pluton)</b>																	
<b>Major element compositions (wt%)</b>																	
32	0.01	0.02	0.33	0.00	0.70	0.00	55.49	0.07	0.01	4.59	0.31	0.00	0.02	40.28	0.01	101.84	Rim
34	0.00	0.08	0.06	0.02	0.08	0.00	55.54	0.02	0.01	4.66	0.10	0.00	0.00	41.01	0.00	101.58	Core
35	0.01	0.00	0.27	0.00	0.72	0.00	55.25	0.08	0.00	4.02	0.88	0.00	0.01	40.48	0.01	101.74	Core
36	0.00	0.03	0.34	0.00	0.62	0.00	55.59	0.06	0.01	4.53	0.64	0.00	0.00	40.51	0.08	102.41	Rim
37	0.01	0.00	0.19	0.01	0.47	0.00	55.04	0.06	0.00	4.06	0.53	0.00	0.00	40.64	0.09	101.10	Rim
61	0.02	0.00	0.30	0.00	0.36	0.00	55.27	0.06	0.00	4.33	0.53	0.00	0.02	41.24	0.03	102.16	Core
62	0.00	0.00	0.25	0.02	0.36	0.00	55.05	0.08	0.01	4.35	0.52	0.00	0.00	41.23	0.09	101.96	Rim
64	0.00	0.00	0.18	0.01	0.28	0.00	55.41	0.20	0.00	4.70	0.64	0.00	0.00	39.89	0.03	101.35	Core

Spot	Al	Ti	Fe	Cr	Mn	Mg	Ca	Na	K	F	Cl	Zr	Ba	P	Sr
<b>Electron-microprobe analyses of apatite from Sample CA-04 (Vitória pluton)</b>															
<b>Numbers of ions on the basis of 26 (O, F, Cl)</b>															
32	0.002	0.003	0.045	0.000	0.096	0.000	9.616	0.021	0.002	2.348	0.084	0.000	0.001	5.516	0.001
34	0.000	0.010	0.008	0.002	0.011	0.000	9.581	0.007	0.003	2.371	0.028	0.000	0.000	5.589	0.000
35	0.003	0.000	0.037	0.000	0.099	0.000	9.616	0.026	0.000	2.067	0.242	0.000	0.001	5.568	0.001
36	0.000	0.004	0.046	0.000	0.085	0.000	9.579	0.019	0.001	2.302	0.175	0.000	0.000	5.515	0.008
37	0.002	0.000	0.026	0.002	0.064	0.000	9.617	0.020	0.000	2.095	0.147	0.000	0.000	5.611	0.008
61	0.004	0.000	0.040	0.000	0.049	0.000	9.517	0.019	0.000	2.201	0.145	0.000	0.001	5.611	0.003
62	0.000	0.000	0.034	0.003	0.049	0.000	9.492	0.023	0.001	2.211	0.143	0.000	0.000	5.618	0.008
64	0.000	0.000	0.024	0.002	0.038	0.000	9.624	0.063	0.000	2.411	0.176	0.000	0.000	5.475	0.003

Spot	Al <sub>2</sub> O <sub>3</sub>	TiO <sub>2</sub>	FeO	Cr <sub>2</sub> O <sub>3</sub>	MnO	MgO	CaO	Na <sub>2</sub> O	K <sub>2</sub> O	F	Cl	ZrO <sub>2</sub>	BaO	P <sub>2</sub> O <sub>5</sub>	SrO	Total	Position
<b>Electron-microprobe analyses of apatite from Sample CA-05 (Mestre Álvaro pluton)</b>																	
<b>Major element compositions (wt%)</b>																	
65	0.00	0.00	0.24	0.00	0.29	0.00	56.82	0.10	0.00	4.24	0.60	0.00	0.00	39.10	0.01	101.39	Rim
66	0.00	0.00	0.21	0.00	0.25	0.00	56.87	0.10	0.00	4.28	0.55	0.00	0.01	38.89	0.01	101.17	Rim
68	0.00	0.00	0.22	0.00	0.33	0.00	56.34	0.10	0.00	4.19	0.53	0.00	0.00	40.26	0.06	102.03	Core
70	0.01	0.02	0.17	0.02	0.24	0.00	56.56	0.10	0.00	4.37	0.67	0.00	0.03	39.76	0.04	101.98	Core

Spot	Al	Ti	Fe	Cr	Mn	Mg	Ca	Na	K	F	Cl	Zr	Ba	P	Sr
<b>Electron-microprobe analyses of apatite from Sample CA-05 (Mestre Álvaro pluton)</b>															
<b>Numbers of ions on the basis of 26 (O, F, Cl)</b>															
65	0.000	0.000	0.033	0.000	0.040	0.000	9.981	0.032	0.000	2.197	0.165	0.000	0.000	5.427	0.001
66	0.000	0.000	0.029	0.000	0.035	0.000	10.013	0.033	0.000	2.223	0.154	0.000	0.000	5.411	0.001
68	0.001	0.000	0.030	0.000	0.045	0.000	9.790	0.031	0.000	2.148	0.145	0.000	0.000	5.528	0.006
70	0.002	0.002	0.023	0.003	0.032	0.000	9.832	0.032	0.000	2.241	0.183	0.000	0.002	5.462	0.003

Spot	SiO <sub>2</sub>	Al <sub>2</sub> O <sub>3</sub>	TiO <sub>2</sub>	FeO	MnO	MgO	CaO	P <sub>2</sub> O <sub>5</sub>	UO <sub>2</sub>	ThO <sub>2</sub>	PbO	Y <sub>2</sub> O <sub>3</sub>	Gd <sub>2</sub> O <sub>3</sub>	Sm <sub>2</sub> O <sub>3</sub>	Nd <sub>2</sub> O <sub>3</sub>	Pr <sub>2</sub> O <sub>3</sub>	Ce <sub>2</sub> O <sub>3</sub>	La <sub>2</sub> O <sub>3</sub>	Total	Position
<b>Electron-microprobe analyses of allanite from Sample CA-02 (Aracê - Pedra Azul pluton)</b>																				
<b>Major element compositions (wt%)</b>																				
1	35.31	16.19	1.20	14.20	0.45	0.48	10.91	0.02	0.05	0.94	0.05	0.11	0.14	0.35	3.02	1.01	9.71	4.70	98.81	Rim
2	39.97	15.71	2.80	11.03	0.49	0.32	9.28	0.00	0.06	1.95	0.03	0.08	0.16	0.29	2.40	0.89	9.19	4.41	99.03	Core
3	39.07	14.51	2.83	9.41	0.50	0.22	7.64	0.00	0.10	2.59	0.03	0.20	0.16	0.25	2.26	0.77	8.07	3.60	92.22	Core
4	34.08	15.91	1.16	14.14	0.61	0.43	10.87	0.00	0.03	1.07	0.07	0.04	0.14	0.30	2.98	0.98	10.50	5.25	98.56	Rim
5	34.58	15.97	1.19	15.02	0.70	0.34	10.75	0.00	0.02	0.99	0.11	0.00	0.07	0.16	2.68	0.90	10.68	5.58	99.74	Rim
6	37.94	14.68	2.73	12.02	0.48	0.36	8.32	0.02	0.07	1.66	0.04	0.07	0.13	0.25	2.29	0.90	9.49	4.80	96.24	Core
7	34.99	17.49	1.30	12.44	0.72	0.19	10.93	0.00	0.03	1.24	0.04	0.05	0.18	0.32	3.16	1.11	10.50	5.28	99.94	Rim
8	38.56	15.09	2.89	12.85	0.47	0.42	8.88	0.03	0.08	1.51	0.06	0.05	0.08	0.22	2.36	0.92	9.81	4.95	99.22	Core
9	44.88	13.88	2.79	5.78	0.28	0.17	6.17	0.02	0.34	3.21	0.02	0.17	0.11	0.36	2.54	0.88	8.36	3.42	93.38	Rim
10	32.24	14.18	1.87	17.25	0.40	1.12	10.36	0.00	0.01	0.74	0.01	0.01	0.12	0.35	3.21	1.04	11.88	6.04	100.8 2	Core
11	32.33	14.25	1.91	17.39	0.40	1.14	10.28	0.00	0.00	0.74	0.01	0.03	0.14	0.30	3.15	1.11	11.89	6.09	101.1 4	Core
12	45.26	15.41	1.97	7.27	0.33	0.26	8.23	0.02	0.38	2.24	0.04	0.12	0.12	0.32	2.63	0.87	9.00	3.94	98.40	Rim
13	44.44	14.74	2.20	7.18	0.33	0.28	8.25	0.00	0.29	2.14	0.02	0.00	0.11	0.27	2.41	0.86	8.93	4.31	96.73	Rim
14	32.90	18.17	0.71	11.97	0.85	0.20	11.09	0.00	0.04	1.24	0.07	0.00	0.12	0.34	3.00	1.02	10.09	4.95	96.75	Rim
15	38.48	16.51	1.90	11.15	0.47	0.25	10.30	0.00	0.04	2.43	0.05	0.03	0.08	0.25	2.47	0.85	8.91	4.27	98.42	Core
16	37.84	15.80	1.98	10.55	0.48	0.23	9.87	0.00	0.04	2.68	0.05	0.03	0.12	0.33	2.40	0.85	8.48	3.90	95.63	Core
17	32.99	17.13	0.57	13.44	0.65	0.21	12.23	0.00	0.03	1.24	0.06	0.00	0.13	0.28	2.56	0.91	9.14	4.74	96.30	Rim
18	32.10	16.50	0.55	12.82	0.67	0.12	11.59	0.00	0.02	1.19	0.04	0.00	0.09	0.24	3.07	1.08	10.26	5.08	95.42	Rim

Spot	Si	Al	Ti	Fe	Mn	Mg	Ca	P	U	Th	Pb	Y	Gd	Sm	Nd	Pr	Ce	La
Electron-microprobe analyses of allanite from Sample CA-02 (Aracê - Pedra Azul pluton)																		
Numbers of ions on the basis of 12.5 oxygen																		
1	3.228	1.745	0.083	1.086	0.034	0.065	1.068	0.001	0.001	0.020	0.001	0.005	0.004	0.015	0.099	0.034	0.325	0.158
2	3.506	1.624	0.185	0.809	0.036	0.042	0.872	0.000	0.001	0.039	0.001	0.004	0.005	0.012	0.075	0.028	0.295	0.143
3	3.629	1.588	0.198	0.731	0.039	0.030	0.760	0.000	0.002	0.055	0.001	0.010	0.005	0.011	0.075	0.026	0.274	0.123
4	3.172	1.745	0.081	1.101	0.048	0.060	1.084	0.000	0.001	0.023	0.002	0.002	0.004	0.013	0.099	0.033	0.358	0.180
5	3.181	1.731	0.082	1.156	0.054	0.046	1.059	0.000	0.000	0.021	0.003	0.000	0.002	0.007	0.088	0.030	0.360	0.189
6	3.473	1.584	0.188	0.920	0.037	0.049	0.816	0.001	0.001	0.034	0.001	0.004	0.004	0.011	0.075	0.030	0.318	0.162
7	3.175	1.870	0.088	0.944	0.055	0.025	1.062	0.000	0.001	0.026	0.001	0.002	0.005	0.014	0.102	0.037	0.349	0.177
8	3.435	1.584	0.193	0.957	0.036	0.055	0.847	0.002	0.002	0.031	0.001	0.002	0.002	0.009	0.075	0.030	0.320	0.163
9	3.982	1.452	0.186	0.429	0.021	0.023	0.586	0.001	0.007	0.065	0.001	0.008	0.003	0.015	0.081	0.029	0.272	0.112
10	3.036	1.574	0.133	1.359	0.032	0.157	1.046	0.000	0.000	0.016	0.000	0.001	0.004	0.016	0.108	0.036	0.410	0.210
11	3.036	1.576	0.135	1.365	0.032	0.159	1.034	0.000	0.000	0.016	0.000	0.001	0.004	0.014	0.106	0.038	0.409	0.211
12	3.850	1.545	0.126	0.517	0.024	0.033	0.750	0.002	0.007	0.043	0.001	0.005	0.003	0.013	0.080	0.027	0.280	0.124
13	3.853	1.506	0.143	0.520	0.024	0.036	0.766	0.000	0.006	0.042	0.001	0.000	0.003	0.011	0.075	0.027	0.283	0.138
14	3.087	2.009	0.050	0.939	0.068	0.028	1.114	0.000	0.001	0.026	0.002	0.000	0.004	0.016	0.101	0.035	0.346	0.171
15	3.422	1.730	0.127	0.829	0.035	0.033	0.982	0.000	0.001	0.049	0.001	0.001	0.002	0.011	0.078	0.027	0.290	0.140
16	3.456	1.700	0.136	0.806	0.037	0.031	0.966	0.000	0.001	0.056	0.001	0.001	0.004	0.014	0.078	0.028	0.284	0.131
17	3.107	1.902	0.041	1.059	0.052	0.030	1.234	0.000	0.001	0.027	0.001	0.000	0.004	0.013	0.086	0.031	0.315	0.165
18	3.097	1.877	0.040	1.035	0.055	0.018	1.198	0.000	0.000	0.026	0.001	0.000	0.003	0.011	0.106	0.038	0.362	0.181

## **Supplementary File D: Geochemistry Data**

Data Source	G5 local name	Rock-type	Sample	SiO <sub>2</sub>	TiO <sub>2</sub>	Al <sub>2</sub> O <sub>3</sub>	FeO	Fe <sub>2</sub> O <sub>3</sub>	MnO	MgO	CaO	Na <sub>2</sub> O	K <sub>2</sub> O	P <sub>2</sub> O <sub>5</sub>
<b>This work</b>	Aracê	Titanite-allanite-biotite granite	CA-02	68.50	0.67	14.30	-	3.85	0.05	0.70	1.97	2.67	6.04	0.19
<b>This work</b>	Vitória	Biotite granite	CA-04	68.40	0.71	13.90	-	5.72	0.05	0.79	1.63	2.53	5.58	0.28
<b>This work</b>	Mestre Álvaro	Biotite tonalite	CA-05	65.40	1.08	14.60	-	6.77	0.07	2.05	4.00	2.78	2.19	0.08
Mendes et al., 2005	Várzea Alegre	Charnockitic rock	VA42	64.90	0.94	15.10	-	5.57	0.11	0.99	3.60	3.50	3.60	0.42
Mendes et al., 2005	Várzea Alegre	Charnockitic rock	VA164	64.00	0.78	16.10	-	5.45	0.08	1.00	4.80	3.50	3.40	0.39
Mendes et al., 2005	Várzea Alegre	Charnockitic rock	HR29	62.40	1.40	15.30	-	7.38	0.17	1.60	3.80	3.00	3.70	0.49
Mendes et al., 2005	Várzea Alegre	Charnockitic rock	VA262	62.39	0.89	16.14	-	6.45	0.15	1.02	3.64	3.21	4.14	0.39
Mendes et al., 2005	Várzea Alegre	Charnockitic rock	VA244	61.82	1.37	14.84	-	7.93	0.13	1.98	3.58	3.01	3.72	0.50
Mendes et al., 2005	Várzea Alegre	Charnockitic rock	VA125	61.00	1.10	16.10	-	6.75	0.10	2.60	3.90	3.20	3.60	0.53
Mendes et al., 2005	Várzea Alegre	Charnockitic rock	VA16	61.00	1.30	16.10	-	7.08	0.12	1.70	4.50	3.50	3.10	0.44
Mendes et al., 2005	Várzea Alegre	Charnockitic rock	MP161	60.70	1.10	17.50	-	6.46	0.11	0.99	4.60	3.50	3.90	0.42
Mendes et al., 2005	Várzea Alegre	Charnockitic rock	MP128	59.90	1.00	17.20	-	7.81	0.11	1.00	4.40	3.50	4.10	0.41
Mendes et al., 2005	Várzea Alegre	Charnockitic rock	VA90	59.00	1.50	15.10	-	9.30	0.14	1.80	5.00	3.50	3.40	0.66
Mendes et al., 2005	Várzea Alegre	Charnockitic rock	VA264	57.43	1.58	15.89	-	9.52	0.16	2.29	4.99	3.39	2.84	0.73
Mendes et al., 2005	Várzea Alegre	Charnockitic rock	VA261	53.99	1.97	16.58	-	11.28	0.18	2.76	6.22	3.28	2.02	0.95
Mendes et al., 2005	Várzea Alegre	Charnockitic rock	MP718	54.40	1.90	17.10	-	11.20	0.18	1.80	6.60	3.00	2.40	0.86
Mendes et al., 2005	Várzea Alegre	Charnockitic rock	MP173	53.10	1.90	16.20	-	9.60	0.15	3.70	7.90	3.20	2.30	0.77
Mendes et al., 2002	Venda Nova	Norite	VN5	42.17	2.46	18.69	-	15.68	0.21	5.42	12.61	1.34	0.28	0.81
Mendes et al., 2002	Venda Nova	Norite	VN22	42.41	1.99	18.64	-	15.38	0.24	5.95	12.41	1.21	0.29	0.70
Mendes et al., 2002	Venda Nova	Norite	VN10	43.29	1.65	18.81	-	13.97	0.19	6.49	13.38	0.72	0.11	0.35
Mendes et al., 2002	Venda Nova	Norite	VN9	43.38	2.31	18.25	-	14.91	0.21	5.75	12.75	0.74	0.14	0.64
Mendes et al., 2002	Venda Nova	Norite	VN7	43.84	1.53	18.29	-	13.66	0.21	6.80	13.36	0.67	0.11	0.39
Mendes et al., 2002	Venda Nova	Norite	VN3	43.88	2.15	18.19	-	14.53	0.21	5.67	11.98	1.67	0.27	0.76
Mendes et al., 2002	Venda Nova	Norite	VN26	44.95	1.42	19.04	-	12.21	0.19	7.11	12.76	1.04	0.22	0.27
Mendes et al., 2002	Venda Nova	Norite	VN8	45.27	1.47	18.21	-	13.04	0.19	6.46	12.72	1.19	0.18	0.30
Mendes et al., 2002	Venda Nova	Norite	VN6	46.45	1.69	19.16	-	13.37	0.21	4.86	10.80	2.25	0.28	0.48
Mendes et al., 2002	Venda Nova	Norite	VN14	46.57	0.99	18.44	-	10.91	0.18	7.79	13.28	0.66	0.13	0.16
Mendes et al., 2002	Venda Nova	Norite	VN11	48.88	1.19	17.69	-	12.97	0.22	5.85	10.20	1.56	0.43	0.32
Mendes et al., 2002	Venda Nova	Charnoenderbite	VN38	54.46	0.89	18.03	-	8.57	0.21	4.27	8.01	3.67	1.00	0.22

Data Source	G5 local name	Rock-type	Sample	SiO <sub>2</sub>	TiO <sub>2</sub>	Al <sub>2</sub> O <sub>3</sub>	FeO	Fe <sub>2</sub> O <sub>3</sub>	MnO	MgO	CaO	Na <sub>2</sub> O	K <sub>2</sub> O	P <sub>2</sub> O <sub>5</sub>
Mendes et al., 2002	Venda Nova	Charnoenderbite	VN35	54.96	0.87	17.49	-	9.19	0.17	4.23	7.75	3.28	1.23	0.21
Mendes et al., 2002	Venda Nova	Charnoenderbite	VN17	55.24	0.88	17.79	-	8.79	0.16	4.08	7.92	3.36	0.66	0.22
Mendes et al., 2002	Venda Nova	Charnoenderbite	VN36	56.31	0.87	17.45	-	8.41	0.16	3.96	7.39	3.38	0.91	0.21
Mendes et al., 2002	Venda Nova	Charnoenderbite	VN20	56.37	0.84	17.41	-	8.28	0.15	3.98	7.67	3.61	0.87	0.21
Mendes et al., 2002	Venda Nova	Charnoenderbite	VN23	56.77	0.89	16.28	-	8.84	0.15	4.21	7.53	3.02	0.96	0.23
Mendes et al., 2002	Venda Nova	Charnoenderbite	VN15	57.40	0.84	17.72	-	8.23	0.14	3.23	7.35	3.43	0.71	0.22
Mendes et al., 2002	Venda Nova	Charnoenderbite	VN19	57.43	0.81	17.23	-	8.15	0.14	3.94	6.99	3.29	0.96	0.20
Mendes et al., 2002	Venda Nova	Charnoenderbite	VN18	57.47	0.80	17.12	-	8.16	0.14	3.75	7.09	3.39	1.14	0.20
Mendes et al., 2002	Venda Nova	Charnoenderbite	VN1	58.41	0.79	16.74	-	7.83	0.12	3.64	6.95	3.12	1.52	0.19
Mendes et al., 2002	Venda Nova	Charnoenderbite	VN16	59.06	0.77	16.59	-	7.50	0.13	3.34	6.80	3.06	1.59	0.19
Mendes et al., 2002	Venda Nova	Charnoenderbite	VN13	61.13	0.90	16.92	-	7.15	0.14	2.44	5.26	3.72	1.43	0.27
Mendes et al., 2002	Venda Nova	Charnoenderbite	VN24	62.45	0.76	16.18	-	6.87	0.14	2.47	5.35	3.64	1.17	0.23
Mendes et al., 2002	Venda Nova	Charnoenderbite	VN2	65.17	0.71	15.67	-	6.77	0.13	1.34	5.80	2.73	0.76	0.22
Mendes et al., 2002	Venda Nova	Charnoenderbite	VN27	66.24	0.53	15.64	-	5.21	0.12	1.28	4.47	3.96	1.35	0.21
Mendes et al., 2002	Venda Nova	Charnoenderbite	VN31	67.12	0.50	15.49	-	4.81	0.12	1.22	3.79	3.88	1.85	0.20
Mendes et al., 1997	Várzea Alegre	Charnockitic rock	VA 260	63.14	0.88	16.29	-	5.75	0.10	0.94	4.10	3.45	3.70	0.30
Mendes et al., 1997	Várzea Alegre	Charnockitic rock	VA 252	62.73	0.92	15.89	-	6.27	0.14	0.99	4.05	3.33	3.58	0.36
Mendes et al., 1997	Várzea Alegre	Charnockitic rock	VA 250	63.35	0.76	16.28	-	5.03	0.09	0.84	3.63	3.20	4.73	0.26
Mendes et al., 1997	Várzea Alegre	Charnockitic rock	VA 241	60.01	1.49	14.84	-	8.64	0.14	2.14	4.16	2.99	3.41	0.62
Mendes et al., 1997	Várzea Alegre	Charnockitic rock	VA 249	59.51	1.16	16.78	-	7.38	0.15	1.55	4.92	3.45	3.23	0.46
Mendes et al., 1997	Várzea Alegre	Charnockitic rock	VA 242	58.71	1.70	14.86	-	10.09	0.16	2.58	4.41	2.95	2.94	0.72
Mendes et al., 1997	Várzea Alegre	Charnockitic rock	VA 263	60.17	0.99	17.21	-	6.42	0.11	1.26	4.41	3.58	4.01	0.35
Mendes et al., 1997	Várzea Alegre	Charnockitic rock	VA 253	57.34	1.65	15.71	-	9.76	0.15	2.36	5.19	3.09	2.78	0.76
Mendes et al., 1997	Várzea Alegre	Charnockitic rock	VA 56	56.46	1.40	16.37	-	8.43	0.14	1.90	5.28	3.41	3.49	0.60
Mendes et al., 1997	Várzea Alegre	Charnockitic rock	VA 237	56.81	1.78	14.68	-	11.14	0.18	2.57	5.00	3.09	2.46	0.90
Mendes et al., 1997	Várzea Alegre	Charnockitic rock	VA 257	56.22	1.74	15.37	-	10.43	0.17	2.47	5.39	3.32	2.62	0.84
Mendes et al., 1997	Várzea Alegre	Charnockitic rock	VA 182	55.23	1.95	15.55	-	11.61	0.18	2.83	5.39	3.18	2.39	0.96
De Campos, 2015	Santa Angélica	Diorite	1	54.48	2.11	15.73	8.71	-	0.13	4.45	7.14	3.30	2.78	1.17
De Campos, 2015	Santa Angélica	Diorite	2	52.79	2.80	14.93	9.53	-	0.13	4.89	7.74	3.06	2.48	1.65
De Campos, 2015	Santa Angélica	Diorite	3	54.24	2.05	16.02	8.29	-	0.13	4.78	7.49	3.23	2.65	1.13
De Campos, 2015	Santa Angélica	Diorite	4a	53.31	2.63	15.04	9.79	-	0.14	4.36	7.33	3.30	2.70	1.40
De Campos, 2015	Santa Angélica	Gabbro	4b	51.48	2.94	14.82	10.58	-	0.16	4.56	7.83	3.25	2.67	1.72

Data Source	G5 local name	Rock-type	Sample	SiO <sub>2</sub>	TiO <sub>2</sub>	Al <sub>2</sub> O <sub>3</sub>	FeO	Fe <sub>2</sub> O <sub>3</sub>	MnO	MgO	CaO	Na <sub>2</sub> O	K <sub>2</sub> O	P <sub>2</sub> O <sub>5</sub>
De Campos, 2015	Santa Angélica	Diorite	5b	52.45	3.23	14.77	9.71	-	0.13	4.40	7.59	3.07	2.83	1.82
De Campos, 2015	Santa Angélica	Diorite	6	59.38	1.85	16.09	7.47	-	0.14	2.19	4.15	3.50	4.62	0.61
De Campos, 2015	Santa Angélica	Diorite	8	53.33	2.11	15.45	9.16	-	0.14	5.76	7.97	3.15	1.93	1.02
De Campos, 2015	Santa Angélica	Diorite	9	62.21	1.55	16.15	6.11	-	0.10	1.70	3.10	3.67	5.01	0.42
De Campos, 2015	Santa Angélica	Granite	10	68.88	0.50	16.54	2.94	-	0.07	0.85	3.26	3.89	2.95	0.13
De Campos, 2015	Santa Angélica	Diorite	12	54.62	2.43	15.14	8.94	-	0.14	4.20	7.02	3.34	2.97	1.20
De Campos, 2015	Santa Angélica	Granite	13	74.78	0.36	13.15	1.62	-	0.05	0.20	1.00	3.09	5.71	0.06
De Campos, 2015	Santa Angélica	Gabbro	14a	52.08	1.94	16.16	8.27	-	0.11	6.44	8.52	3.23	2.28	0.96
De Campos, 2015	Santa Angélica	Diorite	14b	55.27	2.21	16.34	8.98	-	0.15	2.92	5.43	3.69	4.17	0.84
De Campos, 2015	Santa Angélica	Gabbro	15	51.31	2.63	16.73	10.22	-	0.15	4.54	6.45	3.67	3.06	1.25
De Campos, 2015	Santa Angélica	Granite	17	75.83	0.22	13.38	1.28	-	0.03	0.20	1.07	3.19	4.77	0.04
De Campos, 2015	Santa Angélica	Granite	20	73.66	0.31	14.06	1.98	-	0.06	0.45	1.85	3.49	4.06	0.08
De Campos, 2015	Santa Angélica	Granite	21a	75.29	0.21	13.60	1.37	-	0.05	0.25	1.40	3.23	4.56	0.05
De Campos, 2015	Santa Angélica	Diorite	21b	54.59	2.25	16.42	8.45	-	0.12	3.79	6.47	3.74	3.14	1.02
De Campos, 2015	Santa Angélica	Granite	22	74.67	0.23	13.76	1.52	-	0.04	0.29	1.58	3.44	4.43	0.05
De Campos, 2015	Santa Angélica	Granite	23a	72.85	0.34	14.64	1.88	-	0.06	0.41	1.99	3.68	4.08	0.07
De Campos, 2015	Santa Angélica	Diorite	23b	54.29	2.64	15.05	10.26	-	0.14	3.40	6.66	3.34	3.07	1.17
De Campos, 2015	Santa Angélica	Diorite	25	53.25	2.63	16.04	9.48	-	0.14	3.87	6.52	3.47	3.28	1.33
De Campos, 2015	Santa Angélica	Diorite	27	62.24	1.46	15.68	6.44	-	0.09	2.16	3.79	3.73	3.81	0.60
De Campos, 2015	Santa Angélica	Diorite	28	58.22	1.67	17.45	6.95	-	0.12	2.15	4.13	4.38	4.29	0.64
De Campos, 2015	Santa Angélica	Diorite	31	57.68	2.10	16.06	8.64	-	0.15	2.29	4.99	3.63	3.83	0.63
De Campos, 2015	Santa Angélica	Granite	32	75.69	0.13	13.86	1.01	-	0.04	0.14	1.19	3.58	4.33	0.03
De Campos, 2015	Santa Angélica	Gabbro	33	50.37	3.86	14.90	11.12	-	0.15	3.93	7.36	3.17	3.05	2.10
De Campos, 2015	Santa Angélica	Diorite	34	52.65	1.76	18.11	8.05	-	0.14	4.98	7.67	3.56	2.25	0.84
De Campos, 2015	Santa Angélica	Gabbro	35	50.15	2.59	16.12	10.70	-	0.16	4.78	8.10	3.68	2.49	1.24
De Campos, 2015	Santa Angélica	Diorite	36	60.22	0.86	19.23	5.55	-	0.16	1.61	5.22	4.30	2.64	0.22
De Campos, 2015	Santa Angélica	Diorite	37	60.77	0.86	19.41	5.09	-	0.15	1.51	5.42	4.12	2.46	0.21
De Campos, 2015	Santa Angélica	Granite	38a	69.31	0.40	15.77	3.01	-	0.06	0.62	2.28	4.41	4.03	0.11
De Campos, 2015	Santa Angélica	Gabbro	39a	48.56	1.51	15.89	9.79	-	0.15	10.74	8.11	2.83	1.78	0.65
De Campos, 2015	Santa Angélica	Gabbro	39b	47.95	2.92	17.31	12.53	-	0.17	3.74	6.84	3.54	3.37	1.63
De Campos, 2015	Santa Angélica	Diorite	40	54.91	2.16	16.78	8.92	-	0.15	3.11	5.34	4.53	3.02	1.09
De Campos, 2015	Santa Angélica	Gabbro	41	48.63	2.29	14.89	10.80	-	0.17	7.76	8.91	2.82	2.71	1.03

Data Source	G5 local name	Rock-type	Sample	SiO <sub>2</sub>	TiO <sub>2</sub>	Al <sub>2</sub> O <sub>3</sub>	FeO	Fe <sub>2</sub> O <sub>3</sub>	MnO	MgO	CaO	Na <sub>2</sub> O	K <sub>2</sub> O	P <sub>2</sub> O <sub>5</sub>
De Campos, 2015	Santa Angélica	Gabbro	42a	50.88	1.77	14.32	10.40	-	0.19	8.39	7.86	2.91	1.61	1.67
De Campos, 2015	Santa Angélica	Gabbro	42b	49.82	2.40	16.37	10.16	-	0.16	6.13	8.41	3.20	2.20	1.17
De Campos, 2015	Santa Angélica	Diorite	43	59.15	1.50	17.46	6.06	-	0.12	2.03	4.09	4.29	4.73	0.57
De Campos, 2015	Santa Angélica	Diorite	44	53.18	1.96	15.67	9.20	-	0.20	5.38	6.81	3.87	2.85	0.88
De Campos, 2015	Santa Angélica	Gabbro	45	50.10	2.98	15.52	10.59	-	0.16	4.91	8.51	3.20	2.44	1.59
De Campos, 2015	Santa Angélica	Gabbro	46	50.58	2.56	15.97	11.41	-	0.16	5.57	6.93	3.41	2.43	0.99
De Campos, 2015	Santa Angélica	Gabbro	47	51.66	2.15	16.26	10.54	-	0.15	5.86	6.73	3.47	2.31	0.87
De Campos, 2015	Santa Angélica	Diorite	48	55.82	2.30	16.37	8.86	-	0.13	2.70	5.30	3.79	3.82	0.93
De Campos, 2015	Santa Angélica	Diorite	49	55.34	2.40	15.57	9.69	-	0.13	3.12	5.98	3.37	3.42	0.98
De Campos, 2015	Santa Angélica	Granite	50	68.22	0.73	15.43	2.96	-	0.06	0.70	1.77	3.74	6.23	0.18
Bayer et al., 1987	Santa Angélica	Fine-grained gabbro	P438B	48.45	2.58	16.53	5.46	3.64	0.10	5.83	6.98	4.53	2.42	1.52
Bayer et al., 1987	Santa Angélica	Fine-grained gabbro	P191	49.24	1.84	16.26	4.53	3.02	0.08	6.81	10.30	3.60	1.99	0.80
Bayer et al., 1987	Santa Angélica	Fine-grained gabbro	P007B	42.35	3.39	15.00	8.41	5.60	0.20	6.23	8.07	3.79	2.74	2.01
Bayer et al., 1987	Santa Angélica	Fine-grained gabbro	P297B	49.32	2.39	16.07	6.08	4.05	0.13	6.23	7.10	2.91	3.10	1.70
Bayer et al., 1987	Santa Angélica	Coarse-grained gabbro	R412C	51.46	2.85	15.59	5.96	3.98	0.13	4.98	6.74	1.90	3.33	1.85
Bayer et al., 1987	Santa Angélica	Coarse-grained gabbro	P050	50.07	2.98	15.71	5.31	3.54	0.11	5.72	8.45	2.93	1.99	1.94
Bayer et al., 1987	Santa Angélica	Coarse-grained gabbro	P180A	51.88	2.39	15.58	5.32	3.55	0.14	4.49	6.42	4.13	3.04	1.39
Bayer et al., 1987	Santa Angélica	Coarse-grained gabbro	R410S	50.65	2.68	14.40	6.22	4.15	0.18	5.36	7.24	2.98	2.78	1.49
Bayer et al., 1987	Santa Angélica	Hybrid rock	P491A	59.24	1.89	15.01	4.78	3.19	0.09	2.78	4.69	2.29	4.25	0.89
Bayer et al., 1987	Santa Angélica	Hybrid rock	R410A	57.10	1.29	17.73	3.76	2.51	0.59	3.22	4.51	3.47	4.16	0.64
Bayer et al., 1987	Santa Angélica	Hybrid rock	R410B	53.19	2.80	14.56	5.87	3.91	0.13	4.23	5.72	4.32	3.48	1.74
Bayer et al., 1987	Santa Angélica	Hybrid rock	R410E	58.63	2.19	14.41	4.78	3.19	0.13	2.88	4.65	2.48	4.07	1.19
Bayer et al., 1987	Santa Angélica	Hybrid rock	R410G	56.76	2.28	14.54	4.88	3.26	0.14	3.57	4.96	3.67	3.47	1.19
Bayer et al., 1987	Santa Angélica	Hybrid rock	P485A	61.26	1.69	13.78	4.51	3.00	0.11	2.60	4.58	2.79	4.18	0.75

Data Source	G5 local name	Rock-type	Sample	SiO <sub>2</sub>	TiO <sub>2</sub>	Al <sub>2</sub> O <sub>3</sub>	FeO	Fe <sub>2</sub> O <sub>3</sub>	MnO	MgO	CaO	Na <sub>2</sub> O	K <sub>2</sub> O	P <sub>2</sub> O <sub>5</sub>
Bayer et al., 1987	Santa Angélica	Granite	P485B	75.61	0.13	12.67	0.77	0.51	0.03	0.50	1.02	3.08	4.53	0.01
Bayer et al., 1987	Santa Angélica	Granite	P495	74.75	0.13	12.98	0.66	0.44	0.05	0.12	1.33	3.55	4.62	0.01
Bayer et al., 1987	Santa Angélica	Granite	P354E	71.66	0.26	14.12	1.05	0.70	0.06	0.45	1.25	3.25	5.78	0.05
Bayer et al., 1987	Santa Angélica	Granite	P187B	69.48	0.44	15.03	1.68	1.12	0.05	0.90	2.69	3.78	3.53	0.12
Mello, 2000	Aimorés	Qtz monzodiorite	FAM32	50.05	3.39	15.29	-	13.76	0.19	3.05	7.35	3.14	1.77	1.29
Mello, 2000	Aimorés	Monzodiorite	FAM28	50.73	2.92	15.19	-	13.65	0.20	3.46	7.37	3.27	2.20	1.38
Mello, 2000	Aimorés	Monzodiorite	FAM52	51.00	2.94	15.35	-	13.70	0.20	3.51	7.41	3.22	2.19	1.40
Mello, 2000	Aimorés	Monzodiorite	FAM85	51.62	2.66	16.05	-	12.71	0.19	2.88	7.29	3.23	2.43	1.24
Mello, 2000	Aimorés	Tonalite to granodiorite	FAM21G	62.94	0.78	16.22	-	6.06	0.10	1.76	4.47	3.35	2.04	0.22
Mello, 2000	Aimorés	Tonalite to granodiorite	FAM21	63.66	0.83	16.58	-	6.63	0.12	1.92	4.62	3.36	1.82	0.24
Mello, 2000	Aimorés	Tonalite to granodiorite	FAM21D	64.73	0.76	16.25	-	5.98	0.10	1.80	4.49	3.32	1.96	0.21
Mello, 2000	Aimorés	Qtz monzodiorite titanite-bearing	FAM71	55.41	2.15	16.77	-	9.14	0.13	2.94	5.79	3.46	3.24	0.80
Mello, 2000	Aimorés	Qtz monzodiorite titanite-bearing	FAM47	55.78	2.33	16.41	-	9.68	0.14	2.30	5.50	2.96	2.84	0.95
Mello, 2000	Aimorés	Qtzo monzonite	FAM10	57.34	1.65	15.25	-	10.77	0.18	1.69	4.56	3.43	3.74	0.67
Mello, 2000	Aimorés	Qtzo monzonite	FAM84D	60.69	1.40	15.39	-	9.73	0.16	1.39	3.93	3.43	3.88	0.57
Mello, 2000	Aimorés	Qtzo monzonite	FAM84E	62.57	1.14	15.62	-	7.74	0.13	1.14	3.32	3.34	4.89	0.42
Mello, 2000	Aimorés	Qtzo monzonite	FAM4L	62.60	1.10	15.50	-	7.34	0.12	1.09	3.23	3.40	4.86	0.42
Mello, 2000	Aimorés	Qtzo monzonite	FAM84F	62.71	1.03	15.98	-	7.14	0.11	1.00	3.32	3.56	4.98	0.40
Mello, 2000	Aimorés	Qtzo monzonite	FAM4	62.84	0.76	16.75	-	5.33	0.09	0.83	2.86	3.48	5.79	0.30
Mello, 2000	Aimorés	Qtzo monzonite	FAM4I	62.96	0.83	16.35	-	6.11	0.09	1.63	3.31	3.21	5.24	0.32
Mello, 2000	Aimorés	Qtzo monzonite	FAM4J	63.35	0.90	15.37	-	6.00	0.10	0.93	2.71	3.20	4.98	0.34
Mello, 2000	Aimorés	Qtzo monzonite	FAM4K	63.78	0.94	15.89	-	6.24	0.10	0.88	3.33	3.35	4.98	0.38
Mello, 2000	Aimorés	Qtzo monzonite	FAM4H	63.80	0.96	15.64	-	6.27	0.10	0.95	2.95	3.23	5.24	0.38
Mello, 2000	Aimorés	Qtzo monzonite	FAM4G	64.55	0.87	15.62	-	5.83	0.09	0.85	2.64	3.19	5.90	0.37
Mello, 2000	Aimorés	Granite	FAM84C	67.43	0.67	15.42	-	4.67	0.08	0.71	2.70	3.32	5.13	0.31
Mello, 2000	Aimorés	Qtz monzodiorite	FAM25	62.59	1.22	14.82	-	8.55	0.14	1.24	3.47	3.02	4.32	0.47
Mello, 2000	Aimorés	Granite	FAM24A	64.27	0.84	15.27	-	5.68	0.09	0.96	2.60	3.10	5.12	0.34

Data Source	G5 local name	Rock-type	Sample	SiO <sub>2</sub>	TiO <sub>2</sub>	Al <sub>2</sub> O <sub>3</sub>	FeO	Fe <sub>2</sub> O <sub>3</sub>	MnO	MgO	CaO	Na <sub>2</sub> O	K <sub>2</sub> O	P <sub>2</sub> O <sub>5</sub>
Mello, 2000	Aimorés	Granite	FAM5A	65.11	0.89	15.43	-	5.91	0.09	0.98	2.64	3.12	5.09	0.34
Mello, 2000	Aimorés	Granite	FAM9B	72.76	0.24	14.81	-	1.76	0.03	0.50	1.32	2.74	5.90	0.08
Mello, 2000	Aimorés	Granite	FAM1	73.08	0.21	14.11	-	1.81	0.02	0.47	1.09	2.52	5.60	0.13
Mello, 2000	Aimorés	Granite	FAM9A	74.65	0.28	13.36	-	2.44	0.04	0.53	1.17	2.45	5.34	0.09
Mello, 2000	Lagoa Preta	Leucogabbro	MLP1	43.01	0.05	24.26	-	7.41	0.09	13.08	12.60	0.33	0.04	0.00
Mello, 2000	Lagoa Preta	Diorite	MLP4	47.64	2.93	14.43	-	18.17	0.32	3.47	8.44	3.24	0.52	1.45
Mello, 2000	Ibituba	Qtzo monzonite	I4	57.02	1.93	15.98	-	9.31	0.15	2.40	5.51	3.35	3.96	0.82
Ludka and Wiedemann-Leonardos, 2000	Amparo	Coronitic rock	A2	41.46	0.17	15.98	10.29	2.29	0.15	20.73	8.16	1.11	0.08	0.04
Ludka and Wiedemann-Leonardos, 2000	Amparo	Coronitic rock	A6.2	42.06	0.12	19.09	8.54	2.45	0.13	16.07	9.69	0.99	0.06	0.03
Ludka and Wiedemann-Leonardos, 2000	Amparo	Coronitic rock	A8.1	43.40	0.24	18.01	8.09	2.49	0.14	14.73	10.66	1.06	0.09	0.04
Ludka and Wiedemann-Leonardos, 2000	Jacutinga	Gabbro-norite	J470	46.46	1.27	17.57	8.32	3.60	0.18	8.60	11.25	1.17	0.23	0.10
Ludka and Wiedemann-Leonardos, 2000	Jacutinga	Gabbro-norite	J471	45.72	2.08	18.34	8.89	3.84	0.18	7.24	11.11	1.29	0.21	0.39
Ludka and Wiedemann-Leonardos, 2000	Jacutinga	Gabbro-norite	J472	44.70	1.83	18.20	9.56	4.12	0.21	6.87	11.04	1.72	0.31	0.36
Ludka and Wiedemann-Leonardos, 2000	Jacutinga	Gabbro-norite	J475	41.90	2.50	15.00	10.70	7.80	0.24	7.40	11.90	1.10	0.07	0.06
Ludka and Wiedemann-Leonardos, 2000	Itaoca	Gabbro-norite	Ita25	46.82	0.75	22.63	5.15	2.39	0.15	5.64	15.13	0.64	0.22	0.01

Data Source	G5 local name	Rock-type	Sample	SiO <sub>2</sub>	TiO <sub>2</sub>	Al <sub>2</sub> O <sub>3</sub>	FeO	Fe <sub>2</sub> O <sub>3</sub>	MnO	MgO	CaO	Na <sub>2</sub> O	K <sub>2</sub> O	P <sub>2</sub> O <sub>5</sub>
Ludka and Wiedemann-Leonardos, 2000	Itaoca	Coronitic rock	Ita31	45.88	0.96	21.02	7.66	2.29	0.12	6.94	12.55	1.93	0.11	0.33
Ludka and Wiedemann-Leonardos, 2000	Itaoca	Piroxineto	Ita34	48.39	0.57	6.47	6.27	4.20	0.34	15.93	14.41	1.34	0.26	0.38
Ludka and Wiedemann-Leonardos, 2000	Itaoca	Piroxineto	Ita95	48.54	0.59	8.78	6.93	3.72	0.14	13.52	15.65	1.49	0.49	0.40
De Campos et al., 2004	Santa Angélica	Gabbro	SA1.1	45.24	2.83	16.66	8.03	5.35	0.19	5.87	7.71	2.83	2.64	1.34
De Campos et al., 2004	Santa Angélica	Gabbro	SA1.2	42.35	3.39	15.00	8.41	5.60	0.20	6.23	8.07	3.79	2.74	2.01
De Campos et al., 2004	Santa Angélica	Gabbro	SA1.3	48.41	2.08	15.49	5.18	3.45	0.13	7.42	7.52	4.08	3.50	1.39
De Campos et al., 2004	Santa Angélica	Gabbro	SA1.4	48.95	2.45	16.34	5.94	3.96	0.12	5.80	6.91	3.21	3.04	2.12
De Campos et al., 2004	Castelo	Gabbro	CA1.1	50.19	2.96	13.31	6.49	4.33	0.14	5.50	6.35	3.96	3.09	2.12
De Campos et al., 2004	Castelo	Diorite	CA1.2	53.34	2.64	14.33	5.52	3.68	0.11	5.11	5.70	2.04	4.14	1.78
De Campos et al., 2004	Venda Nova	Gabbro	VN1.1	47.47	2.29	18.00	5.54	3.69	0.16	5.26	6.59	4.54	4.20	1.32
De Campos et al., 2004	Venda Nova	Gabbro	VN1.2	43.07	2.49	15.12	6.71	4.48	0.26	8.31	11.44	3.28	1.99	1.19
De Campos et al., 2004	Venda Nova	Gabbro	VN1.3	48.97	2.47	15.63	5.85	3.90	0.20	5.77	7.37	4.38	2.59	1.44
De Campos et al., 2004	Santa Angélica	Diorite	SA2.1	54.74	2.11	16.95	5.13	3.42	0.10	3.36	5.28	2.54	3.86	1.24
De Campos et al., 2004	Santa Angélica	Diorite	SA2.2	52.38	3.07	14.37	5.85	3.90	0.13	4.26	5.75	3.57	3.22	1.85

Data Source	G5 local name	Rock-type	Sample	SiO <sub>2</sub>	TiO <sub>2</sub>	Al <sub>2</sub> O <sub>3</sub>	FeO	Fe <sub>2</sub> O <sub>3</sub>	MnO	MgO	CaO	Na <sub>2</sub> O	K <sub>2</sub> O	P <sub>2</sub> O <sub>5</sub>
De Campos et al., 2004	Santa Angélica	Diorite	SA2.3	53.23	3.03	14.67	5.96	3.97	0.13	4.33	5.72	2.79	3.23	1.74
De Campos et al., 2004	Santa Angélica	Diorite	SA2.4	52.69	2.44	14.84	5.56	3.71	0.12	5.63	6.69	2.63	3.37	1.60
De Campos et al., 2004	Castelo	Diorite	CA2.1	57.25	1.87	13.42	5.93	3.95	0.14	4.21	5.57	1.57	3.48	1.69
De Campos et al., 2004	Castelo	Diorite	CA2.2	58.17	2.18	13.63	5.71	381.00	0.14	3.86	5.35	0.99	3.27	1.29
De Campos et al., 2004	Castelo	Diorite	CA2.3	57.58	2.18	13.65	5.91	3.94	0.14	3.66	5.43	0.99	3.82	1.24
De Campos et al., 2004	Venda Nova	Gabbro	VN2.1	50.88	1.30	15.26	5.22	3.48	0.13	8.63	10.76	1.80	1.06	0.65
De Campos et al., 2004	Venda Nova	Diorite	VN2.2	56.30	1.69	19.33	3.25	2.17	0.09	1.95	4.14	4.39	5.45	0.52
De Campos et al., 2004	Venda Nova	Diorite	VN2.3	52.49	1.91	19.61	3.30	2.20	0.06	3.28	3.53	4.69	4.70	1.13
De Campos et al., 2004	Santa Angélica	Diorite	SA3.1	56.76	2.28	14.54	4.88	3.26	0.14	3.57	4.96	3.67	3.47	1.19
De Campos et al., 2004	Santa Angélica	Diorite	SA3.2	56.09	2.11	14.51	5.26	3.51	0.14	4.19	5.69	2.67	3.07	1.09
De Campos et al., 2004	Santa Angélica	Diorite	SA3.3	57.10	1.29	17.73	3.76	2.51	0.59	3.22	4.51	3.47	4.16	0.64
De Campos et al., 2004	Santa Angélica	Diorite	SA3.4	57.56	1.69	17.24	4.12	2.75	0.06	2.05	3.68	3.07	5.50	0.70
De Campos et al., 2004	Castelo	Diorite	CA3.1	61.89	1.74	14.86	5.76	1.02	0.09	2.26	2.40	1.29	5.03	1.08
De Campos et al., 2004	Castelo	Granite	CA3.2	66.97	0.74	15.28	3.68	0.65	0.07	1.45	2.40	2.13	4.89	0.31
De Campos et al., 2004	Venda Nova	Diorite	VN3.1	58.57	0.93	22.62	2.36	1.57	0.06	0.95	2.20	1.89	6.53	0.32
De Campos et al., 2004	Venda Nova	Diorite	VN3.2	59.07	1.30	19.03	2.80	1.86	0.07	1.30	3.19	3.49	6.38	0.40

Data Source	G5 local name	Rock-type	Sample	SiO <sub>2</sub>	TiO <sub>2</sub>	Al <sub>2</sub> O <sub>3</sub>	FeO	Fe <sub>2</sub> O <sub>3</sub>	MnO	MgO	CaO	Na <sub>2</sub> O	K <sub>2</sub> O	P <sub>2</sub> O <sub>5</sub>
De Campos et al., 2004	Venda Nova	Diorite	VN3.3	62.54	0.82	17.51	3.31	2.21	0.06	1.61	5.13	3.50	1.18	0.15
De Campos et al., 2004	Santa Angélica	Granite	SA4.1	71.81	0.42	13.86	1.36	0.90	0.04	0.69	2.68	3.34	3.47	0.10
De Campos et al., 2004	Santa Angélica	Granite	SA4.2	76.20	0.15	12.44	0.71	0.47	0.04	0.36	1.00	3.93	4.33	0.02
De Campos et al., 2004	Castelo	Granite	CA4.1	68.15	0.80	14.23	2.49	1.66	0.11	0.85	2.73	2.33	5.38	0.36
De Campos et al., 2004	Castelo	Granite	CA4.3	70.78	0.53	14.47	1.68	1.12	0.06	0.52	1.55	2.18	6.02	0.09
De Campos et al., 2004	Castelo	Granite	CA4.4	72.44	0.35	13.30	1.45	0.97	0.03	0.42	1.49	1.94	5.90	0.12
De Campos et al., 2004	Venda Nova	Granite	VN4.1	70.06	0.55	16.57	0.83	0.55	0.05	0.71	1.21	2.16	6.23	0.12
De Campos et al., 2004	Venda Nova	Granite	VN4.2	74.01	0.20	14.77	0.68	0.45	0.02	0.31	0.57	1.64	5.92	0.13
De Campos et al., 2004	Venda Nova	Granite	VN4.3	74.63	0.18	14.09	0.65	0.43	0.01	0.29	0.34	1.58	5.45	0.06
De Campos et al., 2004	Santa Angélica	Granite	SA5.2	68.14	0.70	14.82	4.16	0.73	0.08	0.99	4.38	2.79	1.99	0.19
De Campos et al., 2004	Santa Angélica	Granite	SA5.3	68.72	0.70	14.74	2.90	0.51	0.09	0.41	2.79	2.00	5.58	0.14
De Campos et al., 2004	Santa Angélica	Granite	SA5.4	72.45	0.66	11.87	2.62	0.46	0.05	0.84	1.84	2.83	4.94	0.18
De Campos et al., 2004	Castelo	Granite	CA5.1	71.99	0.36	14.04	2.09	0.37	0.06	0.55	1.44	2.29	5.92	0.18
De Campos et al., 2004	Castelo	Granite	CA5.2	72.12	0.47	13.81	2.31	0.41	0.06	0.78	1.46	1.49	5.83	0.17
De Campos et al., 2004	Castelo	Granite	CA5.3	74.17	0.18	13.54	1.35	0.24	0.03	0.35	1.29	3.09	4.93	0.06
Ludka et al., 1998	G5 - Venda Nova	Syeno-monzonite	-	57.60	1.04	18.96	2.45	1.76	0.09	1.57	4.11	4.40	6.02	0.27
Ludka et al., 1998	Venda Nova	Syeno-monzonite	-	56.67	1.21	18.64	2.13	2.86	0.10	1.78	4.38	4.40	5.74	0.33

Data Source	G5 local name	Rock-type	Sample	SiO <sub>2</sub>	TiO <sub>2</sub>	Al <sub>2</sub> O <sub>3</sub>	FeO	Fe <sub>2</sub> O <sub>3</sub>	MnO	MgO	CaO	Na <sub>2</sub> O	K <sub>2</sub> O	P <sub>2</sub> O <sub>5</sub>
Ludka et al., 1998	Venda Nova	Monzodiorite	-	53.03	2.74	14.94	3.82	6.76	0.15	3.24	6.15	3.34	3.41	1.41
Ludka et al., 1998	Venda Nova	Monzodiorite	-	52.75	2.43	15.24	5.08	4.92	0.15	3.94	6.66	3.52	3.15	1.21
Ludka et al., 1998	Venda Nova	Gabbro-norite	-	46.10	2.30	15.50	6.80	5.10	0.17	6.40	10.30	2.50	1.50	1.07
Ludka et al., 1998	Venda Nova	Gabbro-norite	-	48.44	3.00	15.56	5.91	3.95	0.14	6.67	10.03	2.55	1.41	1.56
Ludka et al., 1998	Venda Nova	Gabbro-norite	-	50.38	1.44	15.28	6.23	2.37	0.17	7.24	10.33	2.90	1.19	0.65
Ludka et al., 1998	Venda Nova	Gabbro-norite	-	49.75	1.77	15.10	6.15	2.97	0.16	7.71	10.64	2.70	1.16	0.98
Offman, 1990 in Ludka et al., 1998	Venda Nova	Allanite granite	-	71.40	0.53	13.63	1.79	1.49	0.02	0.49	1.42	2.59	6.37	0.22
Offman, 1990 in Ludka et al., 1998	Venda Nova	Allanite granite	-	70.14	0.62	13.58	2.05	1.45	0.05	0.63	1.76	2.67	6.42	0.18
Offman, 1990 in Ludka et al., 1998	Venda Nova	Allanite granite	-	-	-	-	-	-	-	-	-	-	-	-
Offman, 1990 in Ludka et al., 1998	Venda Nova	Granite	-	72.67	0.46	13.11	0.79	1.37	0.07	0.50	0.95	3.32	5.45	0.10
Offman, 1990 in Ludka et al., 1998	Venda Nova	Leucogranite	-	74.52	0.18	13.34	0.58	1.43	0.06	0.37	2.34	3.08	3.30	0.04
Wiedemann et al., 2002	Várzea Alegre	Basic rock	VA-1	47.57	2.95	19.14	-	11.16	0.15	3.94	10.06	3.17	0.77	1.38
Wiedemann et al., 2002	Várzea Alegre	Basic rock	VA-2	50.84	1.51	17.95	-	9.06	0.13	6.30	8.36	2.88	1.30	0.70
Wiedemann et al., 2002	Várzea Alegre	Basic rock	VA-3	51.27	3.72	13.87	-	12.51	0.18	3.81	7.53	2.30	2.42	2.00
Wiedemann et al., 2002	Várzea Alegre	Intermediate rock	VA-4	53.70	2.51	15.29	-	10.50	0.15	3.57	6.45	2.82	2.75	1.01
Wiedemann et al., 2002	Várzea Alegre	Intermediate rock	VA-5	52.64	2.30	15.66	-	10.13	0.14	4.20	7.24	3.10	2.37	1.01
Wiedemann et al., 2002	Várzea Alegre	Intermediate rock	VA-6	52.83	2.57	14.83	-	10.77	0.15	3.85	7.06	2.91	2.35	1.13
Wiedemann et al., 2002	Várzea Alegre	Intermediate rock	VA-7	64.52	1.05	15.46	-	4.54	0.50	1.32	2.78	2.77	5.55	0.40
Wiedemann et al., 2002	Várzea Alegre	Acid rock	VA-8	68.48	0.67	14.71	-	4.04	0.07	0.76	1.88	3.19	4.74	0.40

Data Source	G5 local name	Rock-type	Sample	SiO <sub>2</sub>	TiO <sub>2</sub>	Al <sub>2</sub> O <sub>3</sub>	FeO	Fe <sub>2</sub> O <sub>3</sub>	MnO	MgO	CaO	Na <sub>2</sub> O	K <sub>2</sub> O	P <sub>2</sub> O <sub>5</sub>
Wiedemann et al., 2002	Várzea Alegre	Acid rock	VA-9	71.49	0.30	14.69	-	2.35	0.03	0.32	1.40	3.16	6.05	0.15
Wiedemann et al., 2002	Várzea Alegre	Intermediate rock	VAc-1	53.99	1.97	16.58	-	11.28	0.18	2.76	6.22	3.28	2.02	0.95
Wiedemann et al., 2002	Várzea Alegre	Intermediate rock	Vac-2	56.98	1.66	15.82	-	9.74	0.16	2.39	4.87	3.16	3.33	0.77
Wiedemann et al., 2002	Várzea Alegre	Intermediate rock	VAc-3	59.00	1.50	15.10	-	9.30	0.14	1.80	5.00	3.50	3.40	0.66
Wiedemann et al., 2002	Várzea Alegre	Intermediate rock	Vac-4	62.39	0.89	16.14	-	6.45	0.15	1.02	3.64	3.21	4.14	0.39
Wiedemann et al., 2002	Várzea Alegre	Intermediate rock	Vac-5	64.90	0.94	15.10	-	5.57	0.11	0.99	3.60	3.50	3.60	0.42
Wiedemann et al., 2002	Santa Angélica	Basic rock	SA-1	42.35	3.39	15.00	8.41	5.60	0.20	6.23	8.07	3.79	2.74	2.01
Wiedemann et al., 2002	Santa Angélica	Basic rock	SA-2	48.95	2.45	16.34	5.94	3.96	0.12	5.80	6.91	3.21	3.04	2.12
Wiedemann et al., 2002	Santa Angélica	Intermediate rock	SA-3	54.74	2.11	16.95	5.13	3.42	0.10	3.36	5.28	2.54	3.86	1.24
Wiedemann et al., 2002	Santa Angélica	Intermediate rock	SA-4	52.69	2.44	14.84	5.56	3.71	0.12	5.63	6.69	2.63	3.37	1.60
Wiedemann et al., 2002	Santa Angélica	Intermediate rock	SA-5	56.09	2.11	14.51	5.26	3.51	0.14	4.19	5.69	2.67	3.07	1.09
Wiedemann et al., 2002	Santa Angélica	Intermediate rock	SA-6	57.10	1.29	17.73	3.76	2.51	0.59	3.22	4.51	3.47	4.16	0.64
Wiedemann et al., 2002	Castelo	Basic rock	CA-1	50.19	2.96	13.31	6.49	4.33	0.14	5.50	6.35	3.96	3.09	2.12
Wiedemann et al., 2002	Castelo	Intermediate rock	CA-2	53.34	2.64	14.33	5.52	3.68	0.11	5.11	5.70	2.04	4.14	1.78
Wiedemann et al., 2002	Castelo	Intermediate rock	CA-3	58.17	2.18	13.63	5.71	3.81	0.14	3.86	5.35	0.99	3.27	1.29
Wiedemann et al., 2002	Castelo	Intermediate rock	CA-4	57.58	2.18	13.65	5.91	3.94	0.14	3.66	5.43	0.99	3.82	1.24

Data Source	G5 local name	Rock-type	Sample	SiO <sub>2</sub>	TiO <sub>2</sub>	Al <sub>2</sub> O <sub>3</sub>	FeO	Fe <sub>2</sub> O <sub>3</sub>	MnO	MgO	CaO	Na <sub>2</sub> O	K <sub>2</sub> O	P <sub>2</sub> O <sub>5</sub>
Wiedemann et al., 2002	Castelo	Intermediate rock	CA-5	61.89	1.74	14.86	5.76	1.02	0.09	2.26	2.40	1.29	5.03	1.08
Wiedemann et al., 2002	Castelo	Acid rock	CA-6	66.97	0.74	15.28	3.68	0.65	0.07	1.45	2.40	2.13	4.89	0.31
Wiedemann et al., 2002	Castelo	Acid rock	CA-7	72.12	0.47	13.81	2.31	0.41	0.06	0.78	1.46	1.49	5.83	0.17
Wiedemann et al., 2002	Castelo	Acid rock	CA-8	72.44	0.35	13.30	1.45	0.97	0.03	0.42	1.49	1.94	5.90	0.12
Wiedemann et al., 2002	Santa Angélica	Acid rock	SA-7	71.81	0.42	13.86	1.36	0.90	0.04	0.69	2.68	3.34	3.47	0.10
Wiedemann et al., 2002	Santa Angélica	Acid rock	SA-8	76.20	0.15	12.44	0.71	0.47	0.04	0.36	1.00	3.93	4.33	0.02
Wiedemann et al., 2002	Santa Angélica	Acid rock	SA-9	72.45	0.66	11.87	2.62	0.46	0.05	0.84	1.84	2.83	4.94	0.18
Wiedemann et al., 2002	Mimoso do Sul	High-calk-alkaline/alkaline rocks	MI-1	64.81	0.43	17.39	1.51	0.55	0.28	0.42	2.32	2.83	8.31	0.22
Wiedemann et al., 2002	Mimoso do Sul	High-calk-alkaline/alkaline rocks	MI-2	56.55	1.13	17.29	4.30	2.35	0.14	3.70	5.37	1.81	5.27	0.72
Wiedemann et al., 2002	Mimoso do Sul	High-calk-alkaline/alkaline rocks	MI-3	46.66	2.22	12.35	5.66	4.62	0.28	7.30	7.42	4.59	5.14	2.04
Wiedemann et al., 2002	Mimoso do Sul	High-calk-alkaline/alkaline rocks	MI-4	38.11	2.27	9.02	10.31	4.93	0.21	10.28	14.78	1.69	3.09	2.37
Wiedemann et al., 2002	Conceição do Muqui	High-calk-alkaline/alkaline rocks	CM-1	71.34	0.41	13.36	1.41	1.04	0.05	0.18	1.75	2.83	5.29	0.17
Wiedemann et al., 2002	Conceição do Muqui	High-calk-alkaline/alkaline rocks	CM-2	66.05	0.67	14.33	2.36	0.69	0.08	1.02	3.22	4.23	5.59	0.14

Data Source	G5 local name	Rock-type	Sample	SiO <sub>2</sub>	TiO <sub>2</sub>	Al <sub>2</sub> O <sub>3</sub>	FeO	Fe <sub>2</sub> O <sub>3</sub>	MnO	MgO	CaO	Na <sub>2</sub> O	K <sub>2</sub> O	P <sub>2</sub> O <sub>5</sub>
Wiedemann et al., 2002	Conceição do Muqui	High-calk-alkaline/alkaline rocks	CM-3	52.27	1.33	15.69	3.41	2.67	0.09	2.98	3.20	4.03	4.84	0.84
Wiedemann et al., 2002	Conceição do Muqui	High-calk-alkaline/alkaline rocks	CM-4	45.83	2.60	15.72	5.99	5.10	0.09	6.01	7.41	2.57	4.92	2.81
Zanon et al., 2015	Santa Angélica	Diorite	D5MIX23A	56.39	2.08	15.62	10.09	-	0.11	2.22	4.85	3.52	4.22	0.65
Zanon et al., 2015	Santa Angélica	Diorite	M5G9	52.31	2.55	15.74	10.64	-	0.14	3.95	6.13	3.04	3.50	1.38
Zanon et al., 2015	Santa Angélica	Gabbro	M5G17	51.80	2.96	14.93	11.24	-	0.15	4.12	7.00	3.21	3.54	1.72
Zanon et al., 2015	Santa Angélica	Diorite	F5G38	61.28	1.29	16.41	6.34	-	0.09	1.45	3.38	3.48	6.03	0.42
Zanon et al., 2015	Santa Angélica	Diorite	H18	59.37	1.65	14.73	7.54	-	0.11	1.81	3.80	3.20	4.87	0.59
Zanon et al., 2015	Santa Angélica	Diorite	H517	58.32	1.96	16.53	8.63	-	0.09	1.85	4.00	3.71	5.17	0.58
Zanon et al., 2015	Santa Angélica	Diorite	H16A	55.77	2.50	15.63	9.86	-	0.13	2.58	4.98	3.23	4.43	1.11
Zanon et al., 2015	Santa Angélica	Diorite	M5G16	52.43	1.89	16.33	10.28	-	0.12	5.06	7.41	3.05	2.88	0.86
Zanon et al., 2015	Santa Angélica	Granite	F5G15	65.10	0.74	16.24	4.32	-	0.08	0.77	1.95	4.11	7.01	0.21
Zanon et al., 2015	Santa Angélica	Gabbro	MP19	51.96	2.00	14.64	9.84	-	0.15	5.23	6.32	3.16	2.73	0.90
Paes et al., 2010	Medina		CP-334	71.20	0.60	14.40	2.10	-	0.00	0.60	1.20	2.70	6.00	0.20
Paes et al., 2010	Medina		PJ-404	70.40	0.60	13.90	3.20	-	0.00	0.50	1.30	2.40	6.00	0.30
Paes et al., 2010	Medina		CP-12	71.10	0.50	14.20	3.00	-	0.10	0.50	1.40	2.90	5.70	0.30
Paes et al., 2010	Medina		CP-005B	72.30	0.40	13.60	2.80	-	0.00	0.30	1.50	2.40	5.60	0.20
Paes et al., 2010	Medina		CP-358	72.80	0.40	13.60	3.00	-	0.00	0.30	1.40	2.60	5.30	0.20
Paes et al., 2010	Medina		CP-005A	73.40	0.30	13.40	2.60	-	0.00	0.20	1.30	2.40	6.00	0.20
Paes et al., 2010	Medina		CP-119A	74.80	0.30	12.60	2.60	-	0.00	0.30	1.20	2.60	5.20	0.10
Paes et al., 2010	Medina		CP-019	75.00	0.30	12.50	2.60	-	0.00	0.20	1.20	1.60	5.20	0.10
Paes et al., 2010	Medina		CP-361	73.50	0.50	13.00	3.00	-	0.00	0.50	1.60	3.00	4.40	0.30
Paes et al., 2010	Medina		CH-530	71.10	0.40	14.10	2.70	-	0.00	0.30	1.40	2.50	6.30	0.20
Paes et al., 2010	Medina		CP-353	70.70	0.60	13.80	3.90	-	0.10	0.50	1.50	2.60	5.70	0.30
Paes et al., 2010	Medina		CP-009A	73.20	0.30	13.50	2.50	-	0.00	0.30	1.10	2.60	5.90	0.10
Paes et al., 2010	Medina		CP-009B	74.30	0.20	13.60	1.60	-	0.00	0.20	1.00	2.80	6.00	0.10
Paes et al., 2010	Medina		CP-015A	72.10	0.70	12.90	3.60	-	0.10	0.70	1.90	2.80	4.40	0.30
Paes et al., 2010	Medina		CP-051	73.00	0.30	14.80	1.40	-	0.00	0.30	0.90	3.70	5.60	0.10
Paes et al., 2010	Medina		CP-003	67.50	0.90	14.40	4.80	-	0.10	0.80	2.40	2.70	5.20	0.60

Data Source	G5 local name	Rock-type	Sample	SiO <sub>2</sub>	TiO <sub>2</sub>	Al <sub>2</sub> O <sub>3</sub>	FeO	Fe <sub>2</sub> O <sub>3</sub>	MnO	MgO	CaO	Na <sub>2</sub> O	K <sub>2</sub> O	P <sub>2</sub> O <sub>5</sub>
Paes et al., 2010	Medina		CP-023	66.20	1.00	14.30	5.00	-	0.10	1.00	2.30	2.40	6.10	0.80
Paes et al., 2010	Medina		CP-118	64.40	1.50	14.30	6.50	-	0.10	1.30	3.00	2.60	4.90	0.70
Paes et al., 2010	Medina		CP-001	67.00	1.10	14.00	5.50	-	0.10	1.00	2.70	2.50	4.70	0.70
Serrano et al., 2018	Medina	Granite	M61B	72.90	0.40	13.30	2.30	-	0.00	0.30	0.80	2.40	6.10	0.10
Serrano et al., 2018	Medina	Granite	R13A	68.30	0.80	14.40	4.20	-	0.10	0.60	1.90	2.70	5.40	0.40
Paes et al., 2010	Caladão		PJ-302B	70.20	0.60	14.40	5.30	-	0.00	0.60	1.20	2.60	6.00	0.30
Paes et al., 2010	Caladão		PJ-389	70.90	0.40	14.80	3.20	-	0.00	0.50	1.20	3.30	5.70	0.20
Paes et al., 2010	Córrego do Calção		CH-89	70.10	0.50	14.60	4.60	-	0.00	0.50	1.00	2.80	6.20	0.30
Paes et al., 2010	Córrego do Calção		CH-90	69.20	0.60	14.40	5.20	-	0.00	0.60	1.40	2.80	6.10	0.30
Paes et al., 2010	Córrego do Calção		CH-91	71.44	0.27	15.50	0.93	1.82	0.02	0.40	1.33	4.45	4.19	0.12
Paes et al., 2010	Emparedado		CP-170	72.30	0.40	13.10	3.70	-	0.10	0.60	1.70	3.60	4.60	0.30
Paes et al., 2010	Emparedado		CP-175A	71.23	0.23	15.06	0.61	1.46	0.04	0.40	1.12	3.62	6.11	0.18
Paes et al., 2010	Emparedado		CP-251	69.17	0.50	14.79	0.85	2.75	0.04	0.85	1.82	3.33	5.27	0.31
Paes et al., 2010	Fazenda Liberdade		PJ-185	70.40	0.50	14.60	3.90	-	0.00	0.60	1.20	2.70	6.30	0.20
Paes et al., 2010	Fazenda Liberdade		PJ-192	70.60	0.50	14.80	4.50	-	0.00	0.60	1.20	2.50	6.30	0.30
Paes et al., 2010	Fazenda Liberdade		PJ-196	67.90	0.70	14.90	8.00	-	0.10	1.50	1.30	2.40	5.00	0.20
Paes et al., 2010	Fazenda Liberdade		PJ-250	68.10	0.80	14.90	6.00	-	0.10	1.00	1.60	2.80	5.70	0.40
Paes et al., 2010	Fazenda Liberdade		PJ-272	72.20	0.40	14.00	4.10	-	0.00	0.60	0.90	2.80	5.40	0.20
Paes et al., 2010	Fazenda Liberdade		PJ-280	70.02	0.61	14.17	2.40	3.58	0.03	0.59	1.19	2.61	6.03	0.27
Paes et al., 2010	Fazenda Liberdade		PJ-306	69.18	0.68	14.18	2.60	4.01	0.04	0.67	1.31	2.65	5.76	0.31
Paes et al., 2010	General Dutra		CH-021	69.30	0.50	15.10	4.50	-	0.00	0.70	1.20	3.10	5.90	0.20
Paes et al., 2010	General Dutra		CH-290	64.90	1.20	14.90	8.10	-	0.10	1.50	2.80	3.40	3.50	0.60
Paes et al., 2010	General Dutra		CH-574	74.10	0.50	12.50	5.10	-	0.10	0.50	1.20	2.50	4.90	0.20
Paes et al., 2010	General Dutra		CH-600	67.26	0.75	15.24	2.90	3.98	0.04	0.88	1.83	2.71	5.74	0.33
Paes et al., 2010	Landim		CH-010	71.40	0.40	14.10	3.50	-	0.00	0.60	1.90	3.70	3.90	0.20
Paes et al., 2010	Landim		CH-511	71.55	0.27	14.46	0.54	1.22	0.01	0.31	0.23	2.68	7.74	0.17
Paes et al., 2010	Landim		CH-514	67.80	0.60	15.00	4.30	-	0.00	0.90	1.90	3.50	5.00	1.30
Paes et al., 2010	Pau de Canoa		CH-310	68.92	0.70	15.10	2.40	3.30	0.04	0.82	1.58	2.73	5.52	0.12
Paes et al., 2010	Pau de Canoa		CH-389	67.60	0.80	15.30	6.50	-	0.00	1.10	1.50	3.00	5.40	0.40
Paes et al., 2010	Pedra Azul		CP-167	68.80	0.80	14.50	4.80	-	0.10	0.80	2.10	3.10	5.80	0.40
Paes et al., 2010	Pedra Azul		CP-215A	65.80	1.00	15.30	6.00	-	0.10	1.40	2.80	3.60	4.50	0.60
Paes et al., 2010	Pedra Azul		CP-228A	70.28	0.30	15.68	0.57	1.26	0.01	0.33	2.01	3.36	5.44	0.12

Data Source	G5 local name	Rock-type	Sample	SiO <sub>2</sub>	TiO <sub>2</sub>	Al <sub>2</sub> O <sub>3</sub>	FeO	Fe <sub>2</sub> O <sub>3</sub>	MnO	MgO	CaO	Na <sub>2</sub> O	K <sub>2</sub> O	P <sub>2</sub> O <sub>5</sub>
Paes et al., 2010	Pedra Grande		PJ-007	68.10	0.80	14.40	6.40	-	0.10	0.90	2.20	2.40	5.10	0.30
Paes et al., 2010	Pedra Grande		PJ-008	67.70	0.90	14.80	5.80	-	0.10	1.10	1.90	2.50	4.90	0.40
Paes et al., 2010	Pedra Grande		PJ-017	67.50	0.90	14.80	6.10	-	0.00	0.90	1.70	2.70	5.80	0.40
Paes et al., 2010	Santa Cruz de Salinas		CH-102	71.40	0.40	14.00	3.80	-	0.00	0.40	1.40	3.20	5.70	0.10
Paes et al., 2010	Santa Cruz de Salinas		CH-108	71.30	0.40	14.20	3.90	-	0.00	0.40	1.20	3.20	5.50	0.10
Paes et al., 2010	Santa Cruz de Salinas		CH-171	72.96	0.16	14.33	0.86	1.47	<0,01	0.18	0.43	2.86	7.01	0.06
Paes et al., 2010	Santa Cruz de Salinas		CH-237	71.70	0.30	14.20	3.20	-	0.00	0.30	1.10	3.20	5.90	0.10
Aranda, 2018	Cláudio Afonso	Monzogranite	P 246-A	49.40	2.60	15.33	-	11.59	0.17	6.30	8.46	3.16	1.98	1.15
Aranda, 2018	Cláudio Afonso	Monzogranite	P 276-A	50.42	2.97	15.31	-	12.42	0.19	3.71	7.33	3.21	2.47	1.36
Aranda, 2018	Cláudio Afonso	Monzodiorite	P 292-B	51.17	2.71	16.80	-	11.92	0.18	3.38	6.49	3.85	3.95	1.18
Aranda, 2018	Cláudio Afonso	Monzogranite	P 292-A	51.36	2.97	14.51	-	11.22	0.17	4.68	7.76	3.14	2.37	1.32
Aranda, 2018	Cláudio Afonso	Monzodiorite	P 277-A	52.35	2.34	16.13	-	10.06	0.15	3.05	6.34	3.40	3.12	1.07
Aranda, 2018	Cláudio Afonso	Jotunite	P 193-B	53.29	2.43	13.79	-	10.89	0.20	2.66	5.78	2.90	3.43	1.12
Aranda, 2018	Cláudio Afonso	Monzodiorite	P 156-A	54.99	2.53	14.96	-	10.73	0.15	3.93	6.59	2.94	2.95	1.11
Aranda, 2018	Cláudio Afonso	Qtz mangerite	P 197-C	55.70	1.67	15.92	-	9.09	0.08	2.04	4.91	3.76	3.52	0.71
Aranda, 2018	Cláudio Afonso	Qtz monzonite	P 288	59.68	1.18	15.76	-	7.07	0.12	1.41	4.11	3.43	3.90	0.49
Aranda, 2018	Cláudio Afonso	Qtz monzonite	P 295-B	62.28	1.55	14.32	-	7.96	0.12	1.73	4.05	3.45	3.57	0.52
Aranda, 2018	Cláudio Afonso	Qtz monzonite	P 285-B	62.37	1.15	15.09	-	6.62	0.12	1.40	3.69	3.17	4.57	0.47
Aranda, 2018	Cláudio Afonso	Qtz monzonite	P 206-D	62.81	0.90	15.80	-	5.21	0.10	1.02	4.07	3.37	4.12	0.35
Aranda, 2018	Cláudio Afonso	Qtz monzonite	P 98	63.65	1.07	14.96	-	5.24	0.08	1.33	3.36	3.21	5.15	0.41
Aranda, 2018	Cláudio Afonso	Qtz monzonite	P 297	65.27	0.86	16.06	-	4.13	0.06	1.00	2.67	3.43	6.01	0.31
Aranda, 2018	Cláudio Afonso	Qtz monzonite	P 296	65.43	1.33	14.58	-	6.86	0.11	1.53	3.60	3.05	4.69	0.49
Aranda, 2018	Cláudio Afonso	Qtz monzonite	P 146-B	66.65	0.94	14.39	-	5.36	0.09	1.17	2.98	3.11	5.00	0.37
Aranda, 2018	Cláudio Afonso	Qtz monzonite	P 291	66.71	1.07	14.50	-	5.35	0.09	1.22	3.07	3.25	4.98	0.39
Aranda, 2018	Cláudio Afonso	Qtz monzonite	P 298	66.77	0.60	16.29	-	4.05	0.07	0.72	2.87	3.78	4.62	0.21
Aranda, 2018	Cláudio Afonso	Qtz monzonite	P 90-A	66.86	0.69	14.44	-	3.97	0.08	0.77	2.17	3.19	5.69	0.26
Aranda, 2018	Cláudio Afonso	Qtz monzonite	P 102	69.08	1.01	13.79	-	5.30	0.09	1.20	2.67	3.13	4.87	0.34
Baltazar et al., 2010	Aimorés	Charnockite	OF174A	72.48	0.27	13.32	-	3.39	0.05	0.18	1.51	2.57	5.51	0.08

Data Source	G5 local name	Rock-type	Sample	SiO <sub>2</sub>	TiO <sub>2</sub>	Al <sub>2</sub> O <sub>3</sub>	FeO	Fe <sub>2</sub> O <sub>3</sub>	MnO	MgO	CaO	Na <sub>2</sub> O	K <sub>2</sub> O	P <sub>2</sub> O <sub>5</sub>
Baltazar et al., 2010	Aimorés	Charnockite	OF172A	70.51	0.33	13.76	-	3.28	0.05	0.16	1.53	2.68	6.10	0.10
Baltazar et al., 2010	Aimorés	Charnockite	OF198	62.94	1.31	15.18	-	7.84	0.13	1.48	3.62	2.83	3.49	0.53
Baltazar et al., 2010	Aimorés	Charnockite	SS058	65.12	0.97	15.93	-	5.40	0.08	1.33	3.98	2.93	3.24	0.35
Baltazar et al., 2010	Aimorés	Charnockite	SS023	65.04	0.54	17.09	-	5.32	0.10	1.59	4.80	2.99	1.86	0.21
Baltazar et al., 2010	Aimorés	Charnockite	OF245C	57.97	2.03	14.13	-	11.50	0.17	1.52	4.55	2.67	2.38	1.12
Baltazar et al., 2010	Aimorés	Granite	OF156	63.94	1.51	14.55	-	5.47	0.06	1.29	3.34	2.50	4.89	0.56
Baltazar et al., 2010	Aimorés	Granite	OF166B	66.15	0.69	14.97	-	5.37	0.08	0.63	2.30	3.14	5.53	0.28
Baltazar et al., 2010	Aimorés	Granite	SS094	68.40	0.76	14.78	-	4.04	0.03	0.65	1.62	2.42	5.70	0.21
Baltazar et al., 2010	Aimorés	Mangerite	LC168	59.10	1.48	16.21	-	8.47	0.13	1.55	4.74	3.36	3.77	0.55
Baltazar et al., 2010	Aimorés	Mangerite	OF144	59.80	0.79	17.47	-	7.70	0.14	3.36	5.76	2.50	1.82	0.22
Baltazar et al., 2010	Aimorés	Mangerite	SS027A	59.83	1.46	16.14	-	8.04	0.12	1.54	4.61	3.28	4.17	0.56
Baltazar et al., 2010	Aimorés	Mangerite	OF051	57.99	2.62	13.85	-	10.17	0.14	1.74	4.71	2.50	3.58	1.10
Baltazar et al., 2010	Aimorés	Diorite	OF022	54.97	2.45	14.54	-	9.89	0.13	2.69	6.20	2.72	3.39	0.99
Baltazar et al., 2010	Aimorés	Mangerite	OF074B	67.28	0.75	14.56	-	5.06	0.05	0.56	1.65	2.26	6.08	0.33
Baltazar et al., 2010	Aimorés	Mangerite	OF117	62.51	1.25	14.50	-	8.66	0.14	0.97	3.28	2.76	4.59	0.53
Baltazar et al., 2010	Aimorés	Charnockite	OF23	67.56	0.49	17.36	-	6.29	0.13	1.56	4.50	3.10	2.36	0.12
Baltazar et al., 2010	Aimorés	Charnockite	OF24	64.38	0.53	16.27	-	6.38	0.09	1.45	3.64	2.60	4.12	0.22
Baltazar et al., 2010	Aimorés	Charnockite	OF93	60.89	1.07	16.17	-	9.06	0.08	2.71	4.27	2.91	2.56	0.30
Baltazar et al., 2010	Aimorés	Charnockite	OF98A	68.28	0.34	15.80	-	4.59	0.09	0.99	3.48	3.20	3.05	0.11
Baltazar et al., 2010	Aimorés	Charnockite	OF101	66.09	0.50	16.56	-	5.85	0.12	1.22	4.18	3.14	2.24	0.12
Baltazar et al., 2010	Aimorés	Gabbro	SA16	48.61	4.00	14.06	-	15.22	0.18	3.43	7.84	2.41	2.09	1.75
Pedrosa-Soares et al., 2006	Aimorés	Granite	SC-01A	67.80	0.63	15.35	-	4.66	0.06	0.60	2.46	2.98	5.21	0.23
Pedrosa-Soares et al., 2006	Aimorés	Granite	SC-13	65.17	1.13	15.62	-	5.37	0.07	1.24	3.03	2.97	5.09	0.35
Pedrosa-Soares, et al. 2006	Aimorés	Granite	MQ-03A	69.00	0.89	14.40	-	3.95	0.08	0.64	2.70	2.60	4.69	0.33
Pedrosa-Soares, et al. 2006	Aimorés	Charnockite	MQ-03B	69.10	0.89	14.20	-	3.77	0.08	0.64	2.90	2.55	4.34	0.34
Pedrosa-Soares, et al. 2006	Aimorés	Granite	MQ-04	70.10	0.69	14.60	-	3.11	0.07	1.70	3.63	3.02	2.07	0.07

Data Source	G5 local name	Rock-type	Sample	SiO <sub>2</sub>	TiO <sub>2</sub>	Al <sub>2</sub> O <sub>3</sub>	FeO	Fe <sub>2</sub> O <sub>3</sub>	MnO	MgO	CaO	Na <sub>2</sub> O	K <sub>2</sub> O	P <sub>2</sub> O <sub>5</sub>
Pedrosa-Soares, et al. 2006	Aimorés	Charnockite	MQ-81	70.40	0.93	14.20	-	2.35	0.02	0.71	2.01	2.27	5.47	0.32
Pedrosa-Soares, et al. 2006	Aimorés	Charnockite	MQ-123	67.90	0.83	14.50	-	4.61	0.08	0.57	2.32	2.64	5.74	0.39
Pedrosa-Soares, et al. 2006	Aimorés	Charnockite	EC-92	73.50	0.81	14.60	-	4.67	0.01	0.37	0.05	0.13	4.59	0.04
Pedrosa-Soares, et al. 2006	Aimorés	Charnockite	EC-90	73.20	0.32	14.10	-	1.98	0.05	0.16	1.47	2.65	4.97	0.13
Pedrosa-Soares, et al. 2006	Aimorés	Sienogranite	EC-01	70.90	0.75	14.20	-	1.98	0.01	0.54	1.27	2.15	5.80	0.29
Pedrosa-Soares, et al. 2006	Aimorés	Charnockite	EB-89A	69.60	0.60	14.40	-	2.43	0.04	0.75	2.25	2.60	4.64	0.27
Pedrosa-Soares, et al. 2006	Aimorés	Norite	EP-15	53.60	1.50	15.20	-	10.50	0.11	6.12	8.11	2.97	0.42	0.05
Wiedemann et al., 2002	Pedra Azul	Basic rock	PA-I	51.91	3.10	14.95	-	12.56	0.18	3.32	6.25	2.81	2.78	1.59
Wiedemann et al., 2002	Pedra Azul	Basic rock	PA-2	51.41	3.11	14.83	-	12.54	0.18	3.27	6.27	2.62	2.76	1.60
Wiedemann et al., 2002	Pedra Azul	Intermediate rock	PA-3	53.46	2.73	13.95	-	11.13	0.14	2.95	6.32	2.81	2.95	1.54
Wiedemann et al., 2002	Pedra Azul	Intermediate rock	PA-4	59.24	2.15	14.51	-	9.02	0.13	2.25	4.54	2.88	3.74	0.96
Wiedemann et al., 2002	Pedra Azul	Intermediate rock	PA-5	61.81	1.62	14.56	-	7.84	0.11	1.83	3.74	2.83	4.00	0.70
Wiedemann et al., 2002	Pedra Azul	Acid rock	PA-6	67.02	1.02	14.26	-	4.97	0.07	0.87	2.54	2.89	5.27	0.31
Wiedemann et al., 2002	Pedra Azul	Acid rock	PA-7	71.57	0.38	13.71	-	2.98	0.08	0.44	1.14	2.57	5.93	0.11

Data Source	G5 local name	Rock-type	Sample	Ba	Rb	Sr	Zn	Zr	V	Ce	Co	Cs	Cu	Dy	Er	Eu	Ga	Gd	Hf	Ho	La
<b>This work</b>	Aracê	Titanite-allanite-biotite granite	CA-02	1645	203.8	275	94	556	40	492	75.10	1.27	8	16.38	10.03	2.59	18.3	17.80	13.51	3.44	267.90
<b>This work</b>	Vitória	Biotite granite	CA-04	1278	171.9	420	86	784	55	473	148.90	0.33	18	4.07	1.36	1.90	21.5	10.18	20.74	0.56	240.10
<b>This work</b>	Mestre Álvaro	Biotite tonalite	CA-05	268	108.4	231	103	447	115	63	51.60	0.89	8	1.59	0.81	0.92	20.3	2.07	11.68	0.27	36.10
Mendes et al., 2005	Várzea Alegre	Charnockitic rock	VA42	2246	79.0	428	101	819	35	-	-	-	-	-	-	-	20.0	-	22.30	-	-
Mendes et al., 2005	Várzea Alegre	Charnockitic rock	VA164	2593	82.0	458	98	642	31	-	-	-	-	-	-	-	23.0	-	17.10	-	-
Mendes et al., 2005	Várzea Alegre	Charnockitic rock	HR29	2060	110.0	510	105	50	178	89	-	-	-	-	1.57	8.43	30.0	4.23	1000.00	0.78	190.70
Mendes et al., 2005	Várzea Alegre	Charnockitic rock	VA262	2588	84.0	475	102	840	43	127	-	-	-	-	0.94	3.54	19.0	7.21	22.00	5.04	56.18
Mendes et al., 2005	Várzea Alegre	Charnockitic rock	VA244	2101	87.0	437	117	767	88	213	-	-	-	-	1.06	3.26	19.0	9.69	22.00	5.91	100.90
Mendes et al., 2005	Várzea Alegre	Charnockitic rock	VA125	3043	91.0	518	126	915	67	-	-	-	-	-	-	-	23.0	-	22.90	-	-
Mendes et al., 2005	Várzea Alegre	Charnockitic rock	VA16	2594	72.0	534	130	860	57	-	-	-	-	-	-	-	22.0	-	21.80	-	-
Mendes et al., 2005	Várzea Alegre	Charnockitic rock	MP161	3010	79.0	650	65	0	122	8	-	-	-	-	1.38	3.80	30.0	0.66	18.00	1.60	48.98
Mendes et al., 2005	Várzea Alegre	Charnockitic rock	MP128	3400	110.0	531	31	0	182	11	-	-	-	-	1.91	4.95	40.0	0.93	25.00	2.52	58.44
Mendes et al., 2005	Várzea Alegre	Charnockitic rock	VA90	2727	64.0	579	134	724	125	-	-	-	-	-	-	-	21.0	-	18.30	-	-
Mendes et al., 2005	Várzea Alegre	Charnockitic rock	VA264	2154	62.0	581	135	828	106	153	-	-	-	-	1.32	3.73	21.0	9.75	20.50	6.95	67.15
Mendes et al., 2005	Várzea Alegre	Charnockitic rock	VA261	1746	36.0	677	169	1084	121	160	-	-	-	-	1.27	3.46	21.0	9.67	23.00	6.77	70.38
Mendes et al., 2005	Várzea Alegre	Charnockitic rock	MP718	2030	38.0	760	58	70	160	85	-	-	-	-	2.74	10.19	30.0	6.16	1760.00	1.15	140.10

Data Source	G5 local name	Rock-type	Sample	Ba	Rb	Sr	Zn	Zr	V	Ce	Co	Cs	Cu	Dy	Er	Eu	Ga	Gd	Hf	Ho	La
Mendes et al., 2005	Várzea Alegre	Charnockitic rock	MP173	1070	67.0	890	85	54	216	-	-	-	-	-	-	-	28.0	-	600.00	-	-
Mendes et al., 2002	Venda Nova	Norite	VN5	88	-	479	-	106	323	-	-	-	-	-	-	-	24.0	-	-	-	-
Mendes et al., 2002	Venda Nova	Norite	VN22	64	-	475	-	57	290	50	-	-	-	2.91	1.31	1.54	21.0	3.91	-	0.55	18.15
Mendes et al., 2002	Venda Nova	Norite	VN10	53	-	454	-	46	447	-	-	-	-	-	-	-	21.0	-	-	-	-
Mendes et al., 2002	Venda Nova	Norite	VN9	29	-	435	-	76	452	-	-	-	-	-	-	-	22.0	-	-	-	-
Mendes et al., 2002	Venda Nova	Norite	VN7	35	-	439	-	39	377	22	-	-	-	2.22	1.05	0.89	21.0	2.39	-	0.43	8.71
Mendes et al., 2002	Venda Nova	Norite	VN3	130	-	481	-	154	297	-	-	-	-	-	-	-	22.0	-	-	-	-
Mendes et al., 2002	Venda Nova	Norite	VN26	53	-	419	-	71	330	29	-	-	-	2.59	1.08	1.02	19.0	3.03	-	0.48	11.18
Mendes et al., 2002	Venda Nova	Norite	VN8	89	-	418	-	97	381	-	-	-	-	-	-	-	20.0	-	-	-	-
Mendes et al., 2002	Venda Nova	Norite	VN6	159	-	554	-	149	278	23	-	-	-	2.70	1.06	1.06	21.0	3.06	-	0.49	8.44
Mendes et al., 2002	Venda Nova	Norite	VN14	62	-	391	-	38	292	-	-	-	-	-	-	-	17.0	-	-	-	-
Mendes et al., 2002	Venda Nova	Norite	VN11	284	10.0	453	-	139	240	-	-	-	-	-	-	-	23.0	-	-	-	-
Mendes et al., 2002	Venda Nova	Charnoenderbite	VN38	436	19.0	561	-	144	202	41	-	-	-	2.41	1.13	0.88	21.0	2.80	-	0.46	18.98
Mendes et al., 2002	Venda Nova	Charnoenderbite	VN35	382	29.0	459	-	99	198	-	-	-	-	-	-	-	21.0	-	-	-	-
Mendes et al., 2002	Venda Nova	Charnoenderbite	VN17	338	17.0	557	-	113	188	39	-	-	-	2.78	1.48	0.94	20.0	2.71	-	0.55	16.44
Mendes et al., 2002	Venda Nova	Charnoenderbite	VN36	356	19.0	464	-	94	182	-	-	-	-	-	-	-	20.0	-	-	-	-

Data Source	G5 local name	Rock-type	Sample	Ba	Rb	Sr	Zn	Zr	V	Ce	Co	Cs	Cu	Dy	Er	Eu	Ga	Gd	Hf	Ho	La
Mendes et al., 2002	Venda Nova	Charnoenderbite	VN20	417	22.0	506	-	114	183	-	-	-	-	-	-	-	21.0	-	-	-	-
Mendes et al., 2002	Venda Nova	Charnoenderbite	VN23	428	26.0	495	-	125	189	70	-	-	-	3.95	2.21	1.13	19.0	3.77	-	0.80	29.09
Mendes et al., 2002	Venda Nova	Charnoenderbite	VN15	429	21.0	489	-	154	162	-	-	-	-	-	-	-	19.0	-	-	-	-
Mendes et al., 2002	Venda Nova	Charnoenderbite	VN19	554	26.0	513	-	126	165	8	-	-	-	0.54	0.24	0.17	20.0	0.47	-	0.10	3.68
Mendes et al., 2002	Venda Nova	Charnoenderbite	VN18	282	36.0	467	-	111	176	-	-	-	-	-	-	-	20.0	-	-	-	-
Mendes et al., 2002	Venda Nova	Charnoenderbite	VN1	458	53.0	454	-	124	157	-	-	-	-	-	-	-	19.0	-	-	-	-
Mendes et al., 2002	Venda Nova	Charnoenderbite	VN16	445	62.0	436	-	121	154	45	-	-	-	3.65	2.19	0.93	19.0	3.36	-	0.76	19.21
Mendes et al., 2002	Venda Nova	Charnoenderbite	VN13	883	37.0	371	-	210	113	35	-	-	-	2.16	0.93	0.99	20.0	2.65	-	0.40	16.06
Mendes et al., 2002	Venda Nova	Charnoenderbite	VN24	581	25.0	380	-	178	110	-	-	-	-	-	-	-	17.0	-	-	-	-
Mendes et al., 2002	Venda Nova	Charnoenderbite	VN2	196	20.0	533	-	377	46	-	-	-	-	-	-	-	20.0	-	-	-	-
Mendes et al., 2002	Venda Nova	Charnoenderbite	VN27	849	34.0	358	-	196	55	39	-	-	-	2.84	1.57	0.88	18.0	2.73	-	0.57	18.47
Mendes et al., 2002	Venda Nova	Charnoenderbite	VN31	679	50.0	315	-	158	46	-	-	-	-	-	-	-	17.0	-	-	-	-
Mendes et al., 1997	Várzea Alegre	Charnockitic rock	VA 260	2356	82.0	487	-	910	43	-	23.00	-	-	-	-	-	19.0	-	-	-	-
Mendes et al., 1997	Várzea Alegre	Charnockitic rock	VA 252	2479	68.0	501	-	937	42	-	36.00	-	-	-	-	-	20.0	-	-	-	-
Mendes et al., 1997	Várzea Alegre	Charnockitic rock	VA 250	3250	85.0	551	-	800	35	-	35.00	-	-	-	-	-	17.0	-	-	-	-
Mendes et al., 1997	Várzea Alegre	Charnockitic rock	VA 241	2317	74.0	498	-	819	93	-	24.00	-	-	-	-	-	20.0	-	-	-	-





Data Source	G5 local name	Rock-type	Sample	Ba	Rb	Sr	Zn	Zr	V	Ce	Co	Cs	Cu	Dy	Er	Eu	Ga	Gd	Hf	Ho	La
De Campos, 2015	Santa Angélica	Gabbro	39a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
De Campos, 2015	Santa Angélica	Gabbro	39b	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
De Campos, 2015	Santa Angélica	Diorite	40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
De Campos, 2015	Santa Angélica	Gabbro	41	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
De Campos, 2015	Santa Angélica	Gabbro	42a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
De Campos, 2015	Santa Angélica	Gabbro	42b	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
De Campos, 2015	Santa Angélica	Diorite	43	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
De Campos, 2015	Santa Angélica	Diorite	44	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
De Campos, 2015	Santa Angélica	Gabbro	45	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
De Campos, 2015	Santa Angélica	Gabbro	46	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
De Campos, 2015	Santa Angélica	Gabbro	47	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
De Campos, 2015	Santa Angélica	Diorite	48	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
De Campos, 2015	Santa Angélica	Diorite	49	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
De Campos, 2015	Santa Angélica	Granite	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bayer et al., 1987	Santa Angélica	Fine-grained gabbro	P438B	2264	57.0	1389	126	206	307	-	35.00	-	38	-	-	-	24.0	-	-	-	-
Bayer et al., 1987	Santa Angélica	Fine-grained gabbro	P191	1942	35.0	1545	79	81	189	-	51.00	-	35	-	-	-	18.0	-	-	-	-
Bayer et al., 1987	Santa Angélica	Fine-grained gabbro	P007B	2232	59.0	1299	163	361	654	-	36.00	-	29	-	-	-	30.0	-	-	-	-
Bayer et al., 1987	Santa Angélica	Fine-grained gabbro	P297B	1522	70.0	1121	105	414	373	-	47.00	-	26	-	-	-	25.0	-	-	-	-
Bayer et al., 1987	Santa Angélica	Coarse-grained gabbro	R412C	1588	79.0	1045	137	440	315	-	25.00	-	45	-	-	-	25.0	-	-	-	-
Bayer et al., 1987	Santa Angélica	Coarse-grained gabbro	P050	2083	75.0	767	132	344	208	-	12.00	-	31	-	-	-	24.0	-	-	-	-

Data Source	G5 local name	Rock-type	Sample	Ba	Rb	Sr	Zn	Zr	V	Ce	Co	Cs	Cu	Dy	Er	Eu	Ga	Gd	Hf	Ho	La
Bayer et al., 1987	Santa Angélica	Coarse-grained gabbro	P180A	2515	56.0	1115	130	246	239	-	18.00	-	55	-	-	-	24.0	-	-	-	-
Bayer et al., 1987	Santa Angélica	Coarse-grained gabbro	R410S	1607	87.0	1003	173	342	228	-	15.00	-	28	-	-	-	26.0	-	-	-	-
Bayer et al., 1987	Santa Angélica	Hybrid rock	P491A	1777	96.0	948	134	630	198	-	14.00	-	34	-	-	-	24.0	-	-	-	-
Bayer et al., 1987	Santa Angélica	Hybrid rock	R410A	833	122.0	348	157	59	160	-	30.00	-	21	-	-	-	26.0	-	-	-	-
Bayer et al., 1987	Santa Angélica	Hybrid rock	R410B	2440	74.0	1085	172	376	223	-	9.00	-	56	-	-	-	24.0	-	-	-	-
Bayer et al., 1987	Santa Angélica	Hybrid rock	R410E	1423	105.0	837	138	476	221	-	19.00	-	34	-	-	-	25.0	-	-	-	-
Bayer et al., 1987	Santa Angélica	Hybrid rock	R410G	2053	97.0	971	177	289	173	-	7.00	-	47	-	-	-	21.0	-	-	-	-
Bayer et al., 1987	Santa Angélica	Hybrid rock	P485A	1731	89.0	845	172	431	208	-	12.00	-	33	-	-	-	22.0	-	-	-	-
Bayer et al., 1987	Santa Angélica	Granite	P485B	1086	110.0	245	192	54	34	-	5.00	-	18	-	-	-	19.0	-	-	-	-
Bayer et al., 1987	Santa Angélica	Granite	P495	910	108.0	148	184	141	20	-	1.00	-	24	-	-	-	22.0	-	-	-	-
Bayer et al., 1987	Santa Angélica	Granite	P354E	801	151.0	209	172	349	19	-	3.00	-	17	-	-	-	26.0	-	-	-	-
Bayer et al., 1987	Santa Angélica	Granite	P187B	1233	120.0	324	220	180	82	-	6.00	-	26	-	-	-	28.0	-	-	-	-
Mello, 2000	Aimorés	Qtz monzodiorite	FAM32	1345	35.3	643	137	371	183	156	-	5.00	-	7.16	3.09	3.07	24.6	9.84	13.00	-	67.70
Mello, 2000	Aimorés	Monzodiorite	FAM28	1817	42.7	530	128	557	166	196	-	5.00	-	9.62	4.52	4.17	25.0	13.40	13.50	-	86.00
Mello, 2000	Aimorés	Monzodiorite	FAM52	1580	32.4	579	136	497	171	172	-	5.00	-	9.52	4.77	3.99	25.4	12.90	11.00	-	75.60
Mello, 2000	Aimorés	Monzodiorite	FAM85	1660	37.1	651	125	469	142	154	-	5.00	-	9.47	4.41	4.05	26.6	12.40	12.70	-	72.10
Mello, 2000	Aimorés	Tonalite to granodiorite	FAM21G	721	61.1	213	69	198	90	55	-	5.00	-	4.03	1.78	1.33	20.2	4.21	4.50	-	26.80
Mello, 2000	Aimorés	Tonalite to granodiorite	FAM21	535	66.2	204	79	206	98	77	-	5.00	-	-	-	1.68	19.8	-	5.50	-	38.30
Mello, 2000	Aimorés	Tonalite to granodiorite	FAM21D	608	63.7	209	70	189	91	56	-	5.00	-	3.67	1.64	1.30	19.5	4.20	6.10	-	27.80
Mello, 2000	Aimorés	Qtz monzodiorite titanite-bearing	FAM71	1367	82.2	524	116	414	128	223	-	5.00	-	-	-	3.20	23.3	-	12.50	-	101.00

Data Source	G5 local name	Rock-type	Sample	Ba	Rb	Sr	Zn	Zr	V	Ce	Co	Cs	Cu	Dy	Er	Eu	Ga	Gd	Hf	Ho	La
Mello, 2000	Aimorés	Qtz monzodiorite titanite-bearing	FAM47	1509	80.5	488	123	432	136	196	-	5.00	-	7.96	3.60	3.18	22.7	11.40	11.20	-	86.40
Mello, 2000	Aimorés	Qtzo monzonite	FAM10	1852	81.8	400	137	728	59	159	-	5.00	-	9.27	4.40	3.21	23.9	11.40	15.10	-	70.50
Mello, 2000	Aimorés	Qtzo monzonite	FAM84D	1325	120.5	292	135	614	55	161	-	5.00	-	-	-	3.15	24.3	-	12.80	-	66.10
Mello, 2000	Aimorés	Qtzo monzonite	FAM84E	1726	146.6	307	110	560	39	169	-	5.00	-	-	-	3.29	23.3	-	14.90	-	68.80
Mello, 2000	Aimorés	Qtzo monzonite	FAM4L	1645	124.5	303	107	567	39	143	-	5.00	-	6.82	3.08	2.71	23.8	9.67	13.60	-	62.80
Mello, 2000	Aimorés	Qtzo monzonite	FAM84F	1756	130.1	322	93	521	32	111	-	5.00	-	5.70	2.57	2.38	24.1	8.22	13.10	-	54.80
Mello, 2000	Aimorés	Qtzo monzonite	FAM4	1842	138.6	318	83	436	30	136	-	5.00	-	-	-	3.21	24.1	-	10.60	-	64.20
Mello, 2000	Aimorés	Qtzo monzonite	FAM4I	1767	129.1	306	88	427	30	108	-	5.00	-	4.90	2.41	2.68	22.0	6.99	12.20	-	51.30
Mello, 2000	Aimorés	Qtzo monzonite	FAM4J	1746	137.3	292	99	481	32	139	-	7.80	-	-	-	3.16	22.5	-	15.50	-	65.80
Mello, 2000	Aimorés	Qtzo monzonite	FAM4K	1689	125.4	299	93	469	29	111	-	5.00	-	-	-	2.80	23.2	-	14.00	-	51.40
Mello, 2000	Aimorés	Qtzo monzonite	FAM4H	1741	129.5	296	95	514	33	114	-	5.80	-	-	-	3.24	22.1	-	13.40	-	50.30
Mello, 2000	Aimorés	Qtzo monzonite	FAM4G	1973	142.3	304	91	441	30	149	-	5.00	-	-	-	3.31	22.0	-	11.90	-	62.00
Mello, 2000	Aimorés	Granite	FAM84C	1784	134.2	304	69	353	22	112	-	8.20	-	-	-	2.59	21.1	-	10.80	-	48.80
Mello, 2000	Aimorés	Qtz monzodiorite	FAM25	1753	124.5	315	130	593	43	118	-	5.90	-	9.34	4.61	3.37	22.4	12.10	10.70	-	47.80
Mello, 2000	Aimorés	Granite	FAM24A	1413	160.5	249	96	451	31	119	-	8.70	-	6.11	2.85	2.17	22.8	8.71	10.60	-	82.70
Mello, 2000	Aimorés	Granite	FAM5A	1489	227.1	251	100	481	35	137	-	8.10	-	7.44	3.35	2.54	24.8	9.64	8.40	-	95.30
Mello, 2000	Aimorés	Granite	FAM9B	560	152.9	109	43	136	12	118	-	6.80	-	5.11	3.09	0.76	17.1	8.32	3.60	-	55.20
Mello, 2000	Aimorés	Granite	FAM1	371	144.6	75	33	108	6	41	-	5.00	-	2.11	0.65	0.49	15.2	3.81	3.00	-	20.10
Mello, 2000	Aimorés	Granite	FAM9A	380	138.7	78	43	115	10	90	-	5.00	-	-	-	0.65	16.2	-	3.00	-	42.70
Mello, 2000	Lagoa Preta	Leucogabbro	MLP1	28	2.0	445	34	23	23	2	-	5.00	-	-	-	0.20	12.6	-	3.00	-	0.95
Mello, 2000	Lagoa Preta	Diorite	MLP4	245	3.2	491	147	246	0	42	-	5.00	-	-	-	3.45	23.9	-	3.90	-	20.00
Mello, 2000	Ibituba	Qtzo monzonite	I4	2484	57.0	639	116	402	3	217	-	5.00	-	-	-	4.29	23.9	-	11.70	-	98.10
Ludka and Wiedemann- Leonardos, 2000	Amparo	Coronitic rock	A2	29	0.9	186	-	23	-	7	-	-	-	0.61	0.33	0.34	-	0.81	-	0.12	2.91
Ludka and Wiedemann- Leonardos, 2000	Amparo	Coronitic rock	A6.2	49	0.2	228	-	14	-	7	-	-	-	0.34	0.14	0.24	-	0.48	-	0.06	3.17
Ludka and Wiedemann- Leonardos, 2000	Amparo	Coronitic rock	A8.1	16	0.3	246	-	22	-	15	-	-	-	0.50	0.25	0.29	-	0.69	-	0.10	6.62

Data Source	G5 local name	Rock-type	Sample	Ba	Rb	Sr	Zn	Zr	V	Ce	Co	Cs	Cu	Dy	Er	Eu	Ga	Gd	Hf	Ho	La
Ludka and Wiedemann-Leonardos, 2000	Jacutinga	Gabbro-norite	J470	74	3.9	420	-	62	-	25	-	-	-	2.08	1.19	0.87	-	2.21	-	0.43	10.53
Ludka and Wiedemann-Leonardos, 2000	Jacutinga	Gabbro-norite	J471	58	2.1	516	-	51	-	38	-	-	-	2.59	1.36	1.18	-	3.03	-	0.51	15.49
Ludka and Wiedemann-Leonardos, 2000	Jacutinga	Gabbro-norite	J472	69	0.9	485	-	93	-	53	-	-	-	3.86	1.85	1.65	-	4.81	-	0.74	18.80
Ludka and Wiedemann-Leonardos, 2000	Jacutinga	Gabbro-norite	J475	37	7.0	319	-	45	-	18	-	-	-	1.61	0.66	0.80	-	1.97	-	0.29	7.11
Ludka and Wiedemann-Leonardos, 2000	Itaoca	Gabbro-norite	Ita25	200	8.0	519	-	47	-	43	-	-	-	3.71	2.07	1.38	-	4.75	-	0.90	18.70
Ludka and Wiedemann-Leonardos, 2000	Itaoca	Coronitic rock	Ita31	313	3.0	362	-	18	-	18	-	-	-	1.87	1.12	0.83	-	1.88	-	0.39	7.84
Ludka and Wiedemann-Leonardos, 2000	Itaoca	Piroxineto	Ita34	97	3.0	95	-	-	-	18	-	-	-	1.73	0.87	0.54	-	2.19	-	0.56	6.99
Ludka and Wiedemann-Leonardos, 2000	Itaoca	Piroxineto	Ita95	-	-	-	-	-	-	18	-	-	-	2.36	1.25	0.60	-	2.26	-	0.34	7.50
De Campos et al., 2004	Santa Angélica	Gabbro	SA1.1	1032	132.0	327	156	1290	103	-	10.00	-	23	-	-	-	28.0	-	-	-	-
De Campos et al., 2004	Santa Angélica	Gabbro	SA1.2	2232	59.0	1299	163	361	654	-	36.00	-	29	-	-	-	30.0	-	-	-	-
De Campos et al., 2004	Santa Angélica	Gabbro	SA1.3	2714	65.0	1711	85	140	267	-	35.00	-	66	-	-	-	18.0	-	-	-	-
De Campos et al., 2004	Santa Angélica	Gabbro	SA1.4	1485	59.0	1271	130	401	333	-	34.00	-	51	-	-	-	26.0	-	-	-	-

Data Source	G5 local name	Rock-type	Sample	Ba	Rb	Sr	Zn	Zr	V	Ce	Co	Cs	Cu	Dy	Er	Eu	Ga	Gd	Hf	Ho	La
De Campos et al., 2004	Castelo	Gabbro	CA1.1	2316	63.0	1395	137	147	349	-	24.00	-	86	-	-	-	21.0	-	-	-	-
De Campos et al., 2004	Castelo	Diorite	CA1.2	3358	105.0	1120	192	178	178	-	4.00	-	69	-	-	-	22.0	-	-	-	-
De Campos et al., 2004	Venda Nova	Gabbro	VN1.1	2878	40.0	1466	103	123	252	-	18.00	-	51	-	-	-	23.0	-	-	-	-
De Campos et al., 2004	Venda Nova	Gabbro	VN1.2	1778	34.0	1370	93	241	401	-	590.00	-	52	-	-	-	19.0	-	-	-	-
De Campos et al., 2004	Venda Nova	Gabbro	VN1.3	3108	33.0	1970	103	105	319	-	30.00	-	45	-	-	-	25.0	-	-	-	-
De Campos et al., 2004	Santa Angélica	Diorite	SA2.1	1337	86.0	1150	109	622	286	-	35.00	-	28	-	-	-	22.0	-	-	-	-
De Campos et al., 2004	Santa Angélica	Diorite	SA2.2	1870	80.0	1076	136	709	432	-	24.00	-	50	-	-	-	24.0	-	-	-	-
De Campos et al., 2004	Santa Angélica	Diorite	SA2.3	1461	74.0	1084	131	449	370	-	32.00	-	38	-	-	-	26.0	-	-	-	-
De Campos et al., 2004	Santa Angélica	Diorite	SA2.4	2621	214.0	1371	119	317	243	-	20.00	-	27	-	-	-	32.0	-	-	-	-
De Campos et al., 2004	Castelo	Diorite	CA2.1	1460	97.0	825	154	446	311	-	36.00	-	38	-	-	-	25.0	-	-	-	-
De Campos et al., 2004	Castelo	Diorite	CA2.2	992	184.0	758	175	623	281	-	25.00	-	28	-	-	-	28.0	-	-	-	-
De Campos et al., 2004	Castelo	Diorite	CA2.3	1815	93.0	884	143	423	279	-	24.00	-	53	-	-	-	22.0	-	-	-	-
De Campos et al., 2004	Venda Nova	Gabbro	VN2.1	1358	19.0	1614	76	324	170	-	58.00	-	31	-	-	-	17.0	-	-	-	-
De Campos et al., 2004	Venda Nova	Diorite	VN2.2	4297	70.0	1440	118	543	132	-	4.00	-	38	-	-	-	30.0	-	-	-	-
De Campos et al., 2004	Venda Nova	Diorite	VN2.3	4048	74.0	1439	148	704	179	-	5.00	-	44	-	-	-	28.0	-	-	-	-
De Campos et al., 2004	Santa Angélica	Diorite	SA3.1	2053	97.0	971	177	289	173	-	7.00	-	47	-	-	-	21.0	-	-	-	-

Data Source	G5 local name	Rock-type	Sample	Ba	Rb	Sr	Zn	Zr	V	Ce	Co	Cs	Cu	Dy	Er	Eu	Ga	Gd	Hf	Ho	La
De Campos et al., 2004	Santa Angélica	Diorite	SA3.2	2287	83.0	1178	171	304	162	-	9.00	-	31	-	-	-	27.0	-	-	-	-
De Campos et al., 2004	Santa Angélica	Diorite	SA3.3	833	122.0	348	157	59	160	-	30.00	-	21	-	-	-	26.0	-	-	-	-
De Campos et al., 2004	Santa Angélica	Diorite	SA3.4	2719	104.0	1079	100	868	212	-	14.00	-	26	-	-	-	27.0	-	-	-	-
De Campos et al., 2004	Castelo	Diorite	CA3.1	751	222.0	507	130	550	49	-	28.00	-	26	-	-	-	27.0	-	-	-	-
De Campos et al., 2004	Castelo	Granite	CA3.2	1446	200.0	509	127	395	137	-	12.00	-	22	-	-	-	22.0	-	-	-	-
De Campos et al., 2004	Venda Nova	Diorite	VN3.1	4073	94.0	1262	95	423	82	-	5.00	-	38	-	-	-	32.0	-	-	-	-
De Campos et al., 2004	Venda Nova	Diorite	VN3.2	3258	69.0	1076	92	930	99	-	5.00	-	35	-	-	-	27.0	-	-	-	-
De Campos et al., 2004	Venda Nova	Diorite	VN3.3	862	45.0	363	126	161	132	-	29.00	-	24	-	-	-	23.0	-	-	-	-
De Campos et al., 2004	Santa Angélica	Granite	SA4.1	1547	68.0	1041	114	309	344	-	40.00	-	36	-	-	-	24.0	-	-	-	-
De Campos et al., 2004	Santa Angélica	Granite	SA4.2	530	107.0	143	275	149	17	-	1.00	-	32	-	-	-	21.0	-	-	-	-
De Campos et al., 2004	Castelo	Granite	CA4.1	1308	211.0	475	134	448	81	-	6.00	-	27	-	-	-	30.0	-	-	-	-
De Campos et al., 2004	Castelo	Granite	CA4.3	598	265.0	263	121	459	59	-	8.00	-	18	-	-	-	24.0	-	-	-	-
De Campos et al., 2004	Castelo	Granite	CA4.4	1483	185.0	585	101	321	35	-	5.00	-	22	-	-	-	23.0	-	-	-	-
De Campos et al., 2004	Venda Nova	Granite	VN4.1	889	99.0	199	93	1070	42	-	6.00	-	13	-	-	-	23.0	-	-	-	-
De Campos et al., 2004	Venda Nova	Granite	VN4.2	1310	134.0	193	98	150	25	-	6.00	-	29	-	-	-	17.0	-	-	-	-
De Campos et al., 2004	Venda Nova	Granite	VN4.3	1058	124.0	183	158	164	36	-	5.00	-	23	-	-	-	20.0	-	-	-	-

Data Source	G5 local name	Rock-type	Sample	Ba	Rb	Sr	Zn	Zr	V	Ce	Co	Cs	Cu	Dy	Er	Eu	Ga	Gd	Hf	Ho	La
De Campos et al., 2004	Santa Angélica	Granite	SA5.2	1528	273.0	936	126	398	255	-	23.00	-	24	-	-	-	24.0	-	-	-	-
De Campos et al., 2004	Santa Angélica	Granite	SA5.3	529	234.0	297	96	651	81	-	11.00	-	10	-	-	-	22.0	-	-	-	-
De Campos et al., 2004	Santa Angélica	Granite	SA5.4	1230	130.0	345	99	446	99	-	12.00	-	26	-	-	-	19.0	-	-	-	-
De Campos et al., 2004	Castelo	Granite	CA5.1	909	265.0	228	195	330	55	-	5.00	-	28	-	-	-	21.0	-	-	-	-
De Campos et al., 2004	Castelo	Granite	CA5.2	1039	219.0	3335	143	438	50	-	4.00	-	25	-	-	-	24.0	-	-	-	-
De Campos et al., 2004	Castelo	Granite	CA5.3	804	236.0	157	129	140	36	-	6.00	-	16	-	-	-	21.0	-	-	-	-
Ludka et al., 1998	G5 - Venda Nova	Syeno-monzonite	-	5028	86.0	1338	46	158	59	489	13.00	-	-	12.34	3.82	6.09	-	21.68	-	0.72	218.40
Ludka et al., 1998	Venda Nova	Syeno-monzonite	-	6043	81.0	1332	62	1186	69	348	12.00	-	-	9.42	2.88	7.23	-	19.72	-	0.74	160.30
Ludka et al., 1998	Venda Nova	Monzodiorite	-	4588	69.0	1441	104	610	216	213	20.00	-	-	6.18	2.59	3.77	-	10.48	-	1.14	89.37
Ludka et al., 1998	Venda Nova	Monzodiorite	-	3634	58.0	1326	104	580	190	254	20.00	-	-	4.16	1.51	4.02	-	9.12	-	0.74	117.70
Ludka et al., 1998	Venda Nova	Gabbro-norite	-	3185	26.0	1324	-	121	-	-	-	-	-	-	-	-	-	-	-	-	-
Ludka et al., 1998	Venda Nova	Gabbro-norite	-	1517	28.0	1350	88	258	199	-	30.00	-	-	-	-	-	-	-	-	-	-
Ludka et al., 1998	Venda Nova	Gabbro-norite	-	1779	24.0	1915	77	-	173	-	49.00	-	-	-	-	-	-	-	-	-	-
Ludka et al., 1998	Venda Nova	Gabbro-norite	-	1499	23.0	1528	84	185	183	-	37.00	-	-	-	-	-	-	-	-	-	-
Offman, 1990 in Ludka et al., 1998	Venda Nova	Allanite granite	-	1010	218.0	299	134	442	44	82	3.00	-	-	1.74	0.65	0.92	-	3.72	-	0.61	36.73
Offman, 1990 in Ludka et al., 1998	Venda Nova	Allanite granite	-	1135	210.0	360	222	482	55	97	4.00	-	-	2.40	0.95	1.15	-	4.77	-	0.27	48.99
Offman, 1990 in Ludka et al., 1998	Venda Nova	Allanite granite	-	-	-	-	-	-	-	91	-	-	-	-	1.08	1.68	-	6.23	-	0.70	38.91

Data Source	G5 local name	Rock-type	Sample	Ba	Rb	Sr	Zn	Zr	V	Ce	Co	Cs	Cu	Dy	Er	Eu	Ga	Gd	Hf	Ho	La
Offman, 1990 in Ludka et al., 1998	Venda Nova	Granite	-	1628	217.0	289	49	343	23	66	21.00	-	-	3.60	2.14	0.85	-	3.77	-	0.77	25.37
Offman, 1990 in Ludka et al., 1998	Venda Nova	Leucogranite	-	797	54.0	238	39	122	22	15	19.00	-	-	1.07	0.52	0.68	-	1.19	-	0.10	8.18
Wiedemann et al., 2002	Várzea Alegre	Basic rock	VA-1	720	6.0	1188	115	96	284	-	93.00	-	31	-	-	-	23.0	-	-	-	-
Wiedemann et al., 2002	Várzea Alegre	Basic rock	VA-2	1091	27.0	1393	102	109	157	-	63.00	-	23	-	-	-	21.0	-	-	-	-
Wiedemann et al., 2002	Várzea Alegre	Basic rock	VA-3	1300	67.0	684	155	364	320	-	65.00	-	29	-	-	-	-	-	-	-	-
Wiedemann et al., 2002	Várzea Alegre	Intermediate rock	VA-4	1660	90.0	714	138	435	-	-	51.00	-	25	-	-	-	-	-	-	-	-
Wiedemann et al., 2002	Várzea Alegre	Intermediate rock	VA-5	1841	49.0	1040	127	340	195	-	60.00	-	28	-	-	-	22.0	-	-	-	-
Wiedemann et al., 2002	Várzea Alegre	Intermediate rock	VA-6	1826	52.0	891	142	368	232	-	72.00	-	30	-	-	-	21.0	-	-	-	-
Wiedemann et al., 2002	Várzea Alegre	Intermediate rock	VA-7	1836	184.0	341	93	651	69	-	48.00	-	13	-	-	-	19.0	-	-	-	-
Wiedemann et al., 2002	Várzea Alegre	Acid rock	VA-8	1613	212.0	280	86	359	8	-	69.00	-	32	-	-	-	22.0	-	-	-	-
Wiedemann et al., 2002	Várzea Alegre	Acid rock	VA-9	771	229.0	147	-	224	15	-	42.00	-	43	-	-	-	22.0	-	-	-	-
Wiedemann et al., 2002	Várzea Alegre	Intermediate rock	VAc-1	1746	36.0	677	169	1084	121	-	31.00	-	-	-	-	-	21.0	-	-	-	-
Wiedemann et al., 2002	Várzea Alegre	Intermediate rock	Vac-2	2779	58.0	614	128	841	107	-	38.00	-	-	-	-	-	20.0	-	-	-	-
Wiedemann et al., 2002	Várzea Alegre	Intermediate rock	VAc-3	2727	64.0	579	134	724	125	-	61.00	-	-	-	-	-	21.0	-	-	-	-
Wiedemann et al., 2002	Várzea Alegre	Intermediate rock	Vac-4	2588	84.0	475	102	840	43	-	22.00	-	-	-	-	-	19.0	-	-	-	-

Data Source	G5 local name	Rock-type	Sample	Ba	Rb	Sr	Zn	Zr	V	Ce	Co	Cs	Cu	Dy	Er	Eu	Ga	Gd	Hf	Ho	La
Wiedemann et al., 2002	Várzea Alegre	Intermediate rock	Vac-5	2246	79.0	428	101	819	35	-	56.00	-	-	-	-	-	20.0	-	-	-	-
Wiedemann et al., 2002	Santa Angélica	Basic rock	SA-1	2232	59.0	1299	163	361	654	-	36.00	-	29	-	-	-	30.0	-	-	-	-
Wiedemann et al., 2002	Santa Angélica	Basic rock	SA-2	1485	59.0	1271	130	401	333	-	34.00	-	51	-	-	-	26.0	-	-	-	-
Wiedemann et al., 2002	Santa Angélica	Intermediate rock	SA-3	1337	86.0	1150	109	622	286	-	35.00	-	28	-	-	-	22.0	-	-	-	-
Wiedemann et al., 2002	Santa Angélica	Intermediate rock	SA-4	2621	214.0	1371	119	317	243	-	20.00	-	27	-	-	-	32.0	-	-	-	-
Wiedemann et al., 2002	Santa Angélica	Intermediate rock	SA-5	2287	83.0	1178	171	304	162	-	9.00	-	31	-	-	-	27.0	-	-	-	-
Wiedemann et al., 2002	Santa Angélica	Intermediate rock	SA-6	833	122.0	348	157	59	160	-	30.00	-	21	-	-	-	26.0	-	-	-	-
Wiedemann et al., 2002	Castelo	Basic rock	CA-1	2316	63.0	1395	137	147	349	-	24.00	-	86	-	-	-	21.0	-	-	-	-
Wiedemann et al., 2002	Castelo	Intermediate rock	CA-2	3358	105.0	1120	192	178	178	-	4.00	-	69	-	-	-	22.0	-	-	-	-
Wiedemann et al., 2002	Castelo	Intermediate rock	CA-3	992	184.0	758	175	623	281	-	25.00	-	28	-	-	-	28.0	-	-	-	-
Wiedemann et al., 2002	Castelo	Intermediate rock	CA-4	1815	93.0	884	143	423	279	-	24.00	-	53	-	-	-	22.0	-	-	-	-
Wiedemann et al., 2002	Castelo	Intermediate rock	CA-5	751	222.0	507	130	550	49	-	28.00	-	26	-	-	-	27.0	-	-	-	-
Wiedemann et al., 2002	Castelo	Acid rock	CA-6	1446	200.0	509	127	395	137	-	12.00	-	22	-	-	-	22.0	-	-	-	-
Wiedemann et al., 2002	Castelo	Acid rock	CA-7	1039	219.0	3335	143	438	50	-	4.00	-	25	-	-	-	24.0	-	-	-	-
Wiedemann et al., 2002	Castelo	Acid rock	CA-8	1483	185.0	585	101	321	35	-	5.00	-	22	-	-	-	23.0	-	-	-	-
Wiedemann et al., 2002	Santa Angélica	Acid rock	SA-7	1547	68.0	1041	114	309	344	-	40.00	-	36	-	-	-	24.0	-	-	-	-

Data Source	G5 local name	Rock-type	Sample	Ba	Rb	Sr	Zn	Zr	V	Ce	Co	Cs	Cu	Dy	Er	Eu	Ga	Gd	Hf	Ho	La
Wiedemann et al., 2002	Santa Angélica	Acid rock	SA-8	530	107.0	143	275	149	17	-	1.00	-	32	-	-	-	21.0	-	-	-	-
Wiedemann et al., 2002	Santa Angélica	Acid rock	SA-9	1230	130.0	345	99	446	99	-	12.00	-	26	-	-	-	19.0	-	-	-	-
Wiedemann et al., 2002	Mimoso do Sul	High-calk-alkaline/alkaline rocks	MI-1	-	201.0	3001	124	369	9	-	2.00	-	6	-	-	-	23.0	-	-	-	-
Wiedemann et al., 2002	Mimoso do Sul	High-calk-alkaline/alkaline rocks	MI-2	-	145.0	2532	94	758	173	-	14.00	-	37	-	-	-	78.0	-	-	-	-
Wiedemann et al., 2002	Mimoso do Sul	High-calk-alkaline/alkaline rocks	MI-3	-	102.0	5001	67	478	291	-	42.00	-	66	-	-	-	21.0	-	-	-	-
Wiedemann et al., 2002	Mimoso do Sul	High-calk-alkaline/alkaline rocks	MI-4	-	6673.0	2322	106	323	457	-	93.00	-	55	-	-	-	65.0	-	-	-	-
Wiedemann et al., 2002	Conceição do Muqui	High-calk-alkaline/alkaline rocks	CM-1	1640	195.0	305	128	325	24	-	4.00	-	3	-	-	-	27.0	-	-	-	-
Wiedemann et al., 2002	Conceição do Muqui	High-calk-alkaline/alkaline rocks	CM-2	-	425.0	2070	80	385	14	-	2.00	-	28	-	-	-	21.0	-	-	-	-
Wiedemann et al., 2002	Conceição do Muqui	High-calk-alkaline/alkaline rocks	CM-3	2471	160.0	1187	162	612	130	-	7.00	-	31	-	-	-	26.0	-	-	-	-
Wiedemann et al., 2002	Conceição do Muqui	High-calk-alkaline/alkaline rocks	CM-4	6757	70.0	3215	127	272	28	-	15.00	-	72	-	-	-	24.0	-	-	-	-
Zanon et al., 2015	Santa Angélica	Diorite	D5MIX23A	2961	93.5	992	155	855	166	320	21.40	0.49	22	10.15	5.21	3.52	26.1	15.86	14.67	1.90	179.10
Zanon et al., 2015	Santa Angélica	Diorite	M5G9	2364	74.7	1328	140	491	186	179	31.30	0.75	33	5.12	2.11	2.85	20.7	8.66	6.48	0.93	108.50
Zanon et al., 2015	Santa Angélica	Gabbro	M5G17	2410	67.3	1145	145	568	178	204	34.90	0.58	22	5.80	2.38	3.15	21.9	10.82	7.91	1.05	110.60

Data Source	G5 local name	Rock-type	Sample	Ba	Rb	Sr	Zn	Zr	V	Ce	Co	Cs	Cu	Dy	Er	Eu	Ga	Gd	Hf	Ho	La
Zanon et al., 2015	Santa Angélica	Diorite	F5G38	3342	144.8	834	107	807	94	292	11.30	0.65	14	6.24	2.97	3.29	26.7	11.05	13.43	1.08	174.30
Zanon et al., 2015	Santa Angélica	Diorite	H18	2756	135.3	889	110	663	102	285	16.40	0.62	17	6.98	3.12	3.43	27.2	12.72	12.23	1.23	171.20
Zanon et al., 2015	Santa Angélica	Diorite	H517	3721	97.2	1135	108	679	132	142	18.40	0.88	13	4.36	2.11	2.44	25.9	7.56	8.72	0.85	86.50
Zanon et al., 2015	Santa Angélica	Diorite	H16A	2718	116.2	1017	153	677	122	258	23.50	0.71	19	6.94	2.96	3.46	24.0	12.15	8.88	1.15	147.10
Zanon et al., 2015	Santa Angélica	Diorite	M5G16	2476	49.6	1270	99	684	126	125	40.00	0.37	24	4.28	2.13	2.58	19.9	7.24	8.97	0.79	73.90
Zanon et al., 2015	Santa Angélica	Granite	F5G15	2254	164.5	479	76	1100	29	377	5.20	0.46	6	6.86	3.40	3.25	21.9	11.64	12.24	1.24	227.40
Zanon et al., 2015	Santa Angélica	Gabbro	MP19	1935	66.4	1026	108	306	168	190	44.10	0.30	26	5.41	2.69	3.03	23.5	10.41	5.98	1.09	112.10
Paes et al., 2010	Medina		CP-334	666	278.6	101	-	347	-	291	2.40	3.00	-	9.00	2.80	1.10	22.4	13.60	10.40	1.20	126.20
Paes et al., 2010	Medina		PJ-404	621	272.7	136	-	441	-	415	3.40	1.20	-	13.20	4.90	1.10	25.0	18.80	13.40	1.90	181.80
Paes et al., 2010	Medina		CP-12	1075	277.9	244	-	353	-	234	3.00	3.20	-	7.50	4.10	1.40	23.1	10.90	10.90	1.50	114.90
Paes et al., 2010	Medina		CP-005B	1353	214.5	342	-	265	-	299	2.10	1.00	-	6.20	2.00	1.90	21.7	9.90	7.80	0.80	149.60
Paes et al., 2010	Medina		CP-358	1040	236.4	253	-	312	-	417	2.50	0.90	-	8.60	2.70	1.90	23.1	14.50	10.60	1.30	197.00
Paes et al., 2010	Medina		CP-005A	1052	236.5	322	-	220	-	220	2.00	1.10	-	5.30	2.00	1.70	21.8	7.50	7.00	0.80	112.10
Paes et al., 2010	Medina		CP-119A	410	214.6	169	-	202	-	199	1.60	0.90	-	4.30	1.10	1.00	20.5	7.30	7.10	0.60	92.50
Paes et al., 2010	Medina		CP-019	592	250.9	153	-	228	-	271	1.50	1.40	-	8.60	2.90	1.10	21.8	13.10	8.00	1.20	129.70
Paes et al., 2010	Medina		CP-361	630	230.2	201	-	281	-	254	3.20	2.60	-	7.40	2.80	1.40	22.4	10.90	8.50	1.20	121.50
Paes et al., 2010	Medina		CH-530	1294	247.8	338	-	196	-	299	1.30	1.20	-	6.30	1.90	1.70	18.4	7.30	5.80	0.80	155.00
Paes et al., 2010	Medina		CP-353	1091	266.4	276	-	452	-	438	3.80	1.40	-	10.90	3.90	1.80	24.6	15.80	13.50	1.60	209.00
Paes et al., 2010	Medina		CP-009A	803	255.1	202	-	229	-	267	1.90	1.20	-	6.20	2.10	1.40	22.0	9.50	7.60	1.00	132.20
Paes et al., 2010	Medina		CP-009B	389	243.3	173	-	139	-	100	1.50	0.90	-	2.40	0.80	1.20	21.9	3.90	4.50	0.30	50.60
Paes et al., 2010	Medina		CP-015A	750	213.1	227	-	284	-	299	3.80	2.10	-	8.00	2.70	1.50	21.8	11.30	8.80	1.10	143.00
Paes et al., 2010	Medina		CP-051	701	198.3	182	-	164	-	100	1.30	3.50	-	2.50	0.80	0.80	22.9	4.20	5.10	0.40	53.60

Data Source	G5 local name	Rock-type	Sample	Ba	Rb	Sr	Zn	Zr	V	Ce	Co	Cs	Cu	Dy	Er	Eu	Ga	Gd	Hf	Ho	La
Paes et al., 2010	Medina		CP-003	1892	261.7	522	-	544	-	440	5.60	1.70	-	10.30	4.50	2.90	25.6	13.90	16.20	1.70	228.00
Paes et al., 2010	Medina		CP-023	1542	310.3	347	-	591	-	269	5.70	3.50	-	9.90	4.50	2.10	24.5	13.20	17.30	1.70	126.50
Paes et al., 2010	Medina		CP-118	2290	194.1	626	-	696	-	500	9.30	1.00	-	10.70	4.70	3.90	25.2	15.40	16.50	1.70	255.40
Paes et al., 2010	Medina		CP-001	2054	212.8	621	-	554	-	467	6.40	1.30	-	10.80	4.60	3.60	24.9	13.60	15.40	1.70	248.00
Serrano et al., 2018	Medina	Granite	M61B	541	277.6	107	-	213	-	158	81.20	0.60	-	3.80	1.10	0.70	21.4	8.20	7.00	0.50	71.50
Serrano et al., 2018	Medina	Granite	R13A	1548	268.0	336	-	473	-	371	49.00	1.30	-	9.70	4.30	2.20	26.6	16.20	12.10	1.60	179.80
Paes et al., 2010	Caladão		PJ-302B	676	270.0	97	-	515	-	456	3.30	1.40	-	13.20	3.70	1.30	23.7	18.80	14.70	1.90	196.90
Paes et al., 2010	Caladão		PJ-389	838	251.0	118	-	346	-	344	2.50	1.60	-	5.50	0.80	1.00	25.3	11.60	10.90	0.50	163.50
Paes et al., 2010	Córrego do Calção		CH-89	1203	250.0	271	-	353	-	312	3.40	4.20	-	6.90	2.60	2.00	22.1	8.90	11.10	1.00	168.50
Paes et al., 2010	Córrego do Calção		CH-90	1098	232.0	291	-	394	-	332	3.40	1.90	-	6.50	2.30	1.80	21.0	8.20	11.60	1.00	174.50
Paes et al., 2010	Córrego do Calção		CH-91	942	177.8	407	56	148	25	88	1.10	4.80	2	1.30	0.38	0.90	24.8	1.98	4.40	0.19	48.50
Paes et al., 2010	Emparedado		CP-170	1325	234.0	881	-	247	-	224	2.70	6.20	-	4.70	2.10	1.80	27.0	7.60	7.50	0.80	121.20
Paes et al., 2010	Emparedado		CP-175A	2027	304.9	972	39	148	17	110	2.10	3.70	1	2.64	1.62	1.76	27.0	3.75	4.10	0.51	61.10
Paes et al., 2010	Emparedado		CP-251	2863	131.9	1315	59	290	37	265	4.50	0.80	6	3.40	1.50	2.95	22.6	7.00	7.40	0.56	150.00
Paes et al., 2010	Fazenda Liberdade		PJ-185	474	330.0	120	-	291	-	257	3.20	3.00	-	3.70	1.00	0.80	25.3	8.80	7.80	0.60	105.60
Paes et al., 2010	Fazenda Liberdade		PJ-192	396	347.0	99	-	349	-	319	3.40	1.80	-	5.80	1.80	0.80	25.1	10.20	10.20	0.80	126.40
Paes et al., 2010	Fazenda Liberdade		PJ-196	532	301.0	123	-	304	-	199	9.00	5.00	-	5.10	1.80	1.10	27.6	8.20	8.60	0.90	83.50
Paes et al., 2010	Fazenda Liberdade		PJ-250	1212	288.0	762	-	429	-	477	7.60	6.20	-	5.10	2.50	3.20	25.6	9.70	11.40	1.00	221.00

Data Source	G5 local name	Rock-type	Sample	Ba	Rb	Sr	Zn	Zr	V	Ce	Co	Cs	Cu	Dy	Er	Eu	Ga	Gd	Hf	Ho	La
Paes et al., 2010	Fazenda Liberdade		PJ-272	368	254.0	89	-	256	-	203	3.70	1.40	-	8.20	3.50	1.20	22.7	11.10	8.40	1.50	85.30
Paes et al., 2010	Fazenda Liberdade		PJ-280	660	273.7	108	118	533	20	506	3.70	0.60	5	13.83	5.88	1.52	25.0	18.90	14.90	2.50	214.50
Paes et al., 2010	Fazenda Liberdade		PJ-306	745	257.7	108	121	566	24	540	4.00	2.80	10	19.07	8.35	1.65	24.8	21.28	16.80	3.19	233.90
Paes et al., 2010	General Dutra		CH-021	640	245.0	172	-	235	-	183	3.80	1.90	-	4.90	2.10	1.10	23.8	6.70	8.80	0.80	91.80
Paes et al., 2010	General Dutra		CH-290	864	199.0	449	-	529	-	297	7.70	6.10	-	6.70	2.60	2.30	26.3	10.00	14.10	1.10	155.00
Paes et al., 2010	General Dutra		CH-574	560	224.0	186	-	286	-	201	2.60	2.30	-	6.00	2.50	1.10	21.3	8.40	9.60	0.90	97.70
Paes et al., 2010	General Dutra		CH-600	2871	223.3	530	83	434	39	367	5.70	2.40	5	16.51	7.83	4.72	23.5	18.96	12.80	3.08	195.20
Paes et al., 2010	Landim		CH-010	1552	183.0	1131	-	265	-	250	3.60	2.60	-	4.40	1.80	2.20	24.0	5.30	8.70	0.60	146.10
Paes et al., 2010	Landim		CH-511	972	262.1	531	25	123	<8	84	1.30	2.30	1	2.24	0.53	0.89	18.7	5.16	4.20	0.28	38.70
Paes et al., 2010	Landim		CH-514	2245	194.0	1233	-	368	-	350	6.90	3.40	-	5.30	1.90	2.80	24.6	6.40	10.70	0.80	204.00
Paes et al., 2010	Pau de Canoa		CH-310	1097	262.2	210	69	396	32	295	5.10	7.30	10	11.67	6.56	1.81	24.8	13.07	10.90	2.19	136.50
Paes et al., 2010	Pau de Canoa		CH-389	899	289.0	204	-	428	-	304	7.60	7.30	-	8.10	3.60	1.90	26.6	11.40	11.30	1.40	139.70
Paes et al., 2010	Pedra Azul		CP-167	1290	203.0	489	-	474	-	452	4.40	1.00	-	5.10	1.60	2.50	24.8	9.80	12.70	0.80	236.00
Paes et al., 2010	Pedra Azul		CP-215A	1370	211.0	628	-	523	-	248	7.10	2.60	-	3.00	1.30	2.70	28.1	5.70	12.70	0.50	132.70
Paes et al., 2010	Pedra Azul		CP-228A	5592	119.6	1794	18	202	20	73	1.70	0.30	1	1.52	0.67	2.35	22.2	2.59	5.60	0.24	46.70
Paes et al., 2010	Pedra Grande		PJ-007	1654	227.0	330	-	395	-	265	7.00	5.50	-	8.60	3.60	2.40	24.9	10.50	11.10	1.30	123.70
Paes et al., 2010	Pedra Grande		PJ-008	876	289.0	250	-	410	-	266	7.90	4.60	-	9.70	3.40	1.70	28.6	11.80	11.10	1.10	120.40
Paes et al., 2010	Pedra Grande		PJ-017	902	287.0	172	-	627	-	486	6.30	1.40	-	10.70	4.00	1.70	26.4	16.10	17.40	1.50	206.30
Paes et al., 2010	Santa Cruz de Salinas		CH-102	1305	229.0	284	-	276	-	244	2.50	1.90	-	5.80	2.50	1.50	25.2	8.40	8.50	1.00	135.90
Paes et al., 2010	Santa Cruz de Salinas		CH-108	762	246.0	164	-	245	-	171	2.40	2.00	-	8.00	4.20	1.20	20.2	6.50	8.10	1.60	92.20

Data Source	G5 local name	Rock-type	Sample	Ba	Rb	Sr	Zn	Zr	V	Ce	Co	Cs	Cu	Dy	Er	Eu	Ga	Gd	Hf	Ho	La
Paes et al., 2010	Santa Cruz de Salinas		CH-171	899	321.1	177	30	89	<8	100	1.30	4.30	0	5.23	2.76	1.25	23.3	4.85	3.10	1.03	61.90
Paes et al., 2010	Santa Cruz de Salinas		CH-237	1150	212.0	179	-	252	-	218	2.50	1.60	-	7.10	3.40	1.20	21.8	9.20	8.00	1.30	117.20
Aranda, 2018	Cláudio Afonso	Monzogranite	P 246-A	1980	39.6	1238	130	352	229	191	36.30	0.52	33	6.94	3.16	3.52	18.5	11.53	7.48	1.20	93.30
Aranda, 2018	Cláudio Afonso	Monzogranite	P 276-A	2482	36.5	818	174	556	227	250	30.30	0.39	19	10.58	4.62	4.52	21.3	16.93	11.81	1.80	113.40
Aranda, 2018	Cláudio Afonso	Monzodiorite	P 292-B	4081	77.5	1171	168	701	191	297	24.40	0.60	20	9.82	4.31	5.08	24.0	16.05	13.94	1.69	145.30
Aranda, 2018	Cláudio Afonso	Monzogranite	P 292-A	2435	52.5	1156	148	595	224	265	70.70	0.34	29	8.22	3.67	4.51	21.5	13.98	15.20	1.39	130.10
Aranda, 2018	Cláudio Afonso	Monzodiorite	P 277-A	2960	77.2	1150	138	628	160	229	21.40	1.69	21	7.05	3.24	4.02	21.0	12.24	13.21	1.21	109.20
Aranda, 2018	Cláudio Afonso	Jotunite	P 193-B	2609	78.8	824	149	489	205	230	23.90	0.43	18	8.73	3.88	4.33	21.2	13.72	11.59	1.43	110.30
Aranda, 2018	Cláudio Afonso	Monzodiorite	P 156-A	1964	78.0	879	131	446	235	179	22.00	1.37	17	7.22	3.30	3.53	20.9	11.66	9.94	1.24	86.70
Aranda, 2018	Cláudio Afonso	Qtz mangerite	P 197-C	2875	81.0	993	139	1019	135	242	16.40	0.91	17	5.90	2.59	3.88	25.0	10.51	21.91	0.97	121.80
Aranda, 2018	Cláudio Afonso	Qtz monzonite	P 288	4492	80.3	1003	156	837	80	299	9.50	0.69	16	7.16	3.09	4.95	22.8	13.01	18.41	1.18	150.20
Aranda, 2018	Cláudio Afonso	Qtz monzonite	P 295-B	1966	103.2	627	142	832	109	416	13.10	0.49	13	19.14	8.21	5.38	24.4	26.73	20.36	3.23	184.50
Aranda, 2018	Cláudio Afonso	Qtz monzonite	P 285-B	4735	89.2	898	115	854	75	268	9.90	0.44	8	7.98	3.81	4.73	22.4	13.53	18.13	1.38	129.70
Aranda, 2018	Cláudio Afonso	Qtz monzonite	P 206-D	4307	82.6	935	102	806	61	264	7.20	0.42	8	7.20	3.31	5.16	24.1	12.69	18.97	1.21	132.10
Aranda, 2018	Cláudio Afonso	Qtz monzonite	P 98	3059	134.7	741	82	458	83	225	10.50	2.20	9	5.48	2.46	2.91	21.7	9.41	11.95	0.97	113.70
Aranda, 2018	Cláudio Afonso	Qtz monzonite	P 297	3635	144.0	809	68	413	78	157	8.00	2.22	7	5.11	2.45	2.74	23.1	7.92	8.29	0.92	79.80
Aranda, 2018	Cláudio Afonso	Qtz monzonite	P 296	2798	116.7	685	106	647	98	263	12.80	0.69	18	8.51	3.67	3.65	22.2	13.74	14.62	1.37	128.80
Aranda, 2018	Cláudio Afonso	Qtz monzonite	P 146-B	2999	117.0	705	104	555	60	316	7.90	0.59	5	8.48	3.64	3.81	21.8	14.16	13.41	1.47	152.90
Aranda, 2018	Cláudio Afonso	Qtz monzonite	P 291	2772	131.1	635	98	586	63	275	9.70	1.14	16	8.15	3.52	3.50	22.8	12.71	12.67	1.36	135.20
Aranda, 2018	Cláudio Afonso	Qtz monzonite	P 298	3327	113.9	764	84	529	45	457	5.30	1.88	6	7.42	3.16	4.31	20.8	13.43	11.64	1.24	221.40
Aranda, 2018	Cláudio Afonso	Qtz monzonite	P 90-A	2926	138.8	641	79	412	50	303	5.50	1.25	11	6.22	2.58	4.73	20.5	12.87	9.96	1.06	302.60
Aranda, 2018	Cláudio Afonso	Qtz monzonite	P 102	2545	130.4	586	98	533	72	281	8.70	1.13	11	7.87	3.69	3.38	21.5	12.89	13.14	1.37	141.50
Baltazar et al., 2010	Aimorés	Charnockite	OF174A	1537	165.1	159	56	348	5	311	1.50	1.00	6	6.88	2.26	2.32	20.8	11.99	9.30	1.07	153.50
Baltazar et al., 2010	Aimorés	Charnockite	OF172A	2096	165.3	188	47	486	5	118	1.70	0.50	3	4.44	1.92	2.68	20.0	6.38	12.00	0.76	57.40
Baltazar et al., 2010	Aimorés	Charnockite	OF198	981	78.7	180	55	895	69	349	12.80	1.10	18	18.62	9.84	2.84	22.3	25.38	22.80	3.63	161.30
Baltazar et al., 2010	Aimorés	Charnockite	SS058	938	70.3	182	48	528	66	270	10.60	0.90	15	12.86	5.96	2.43	21.9	19.48	13.70	2.28	124.30

Data Source	G5 local name	Rock-type	Sample	Ba	Rb	Sr	Zn	Zr	V	Ce	Co	Cs	Cu	Dy	Er	Eu	Ga	Gd	Hf	Ho	La
Baltazar et al., 2010	Aimorés	Charnockite	SS023	537	64.2	342	48	114	54	43	8.40	0.70	6	2.66	1.36	1.21	18.3	3.16	3.30	0.49	21.10
Baltazar et al., 2010	Aimorés	Charnockite	OF245C	1019	88.8	402	118	683	72	153	13.70	2.80	22	11.22	4.91	3.75	24.4	11.78	15.70	1.85	59.00
Baltazar et al., 2010	Aimorés	Granite	OF156	2320	195.0	448	146	1086	62	673	8.90	0.60	9	5.62	1.78	3.56	26.6	11.68	28.70	0.75	318.40
Baltazar et al., 2010	Aimorés	Granite	OF166B	1540	204.4	226	86	593	22	176	5.50	2.00	4	8.39	4.03	2.61	24.1	11.80	15.00	1.45	80.20
Baltazar et al., 2010	Aimorés	Granite	SS094	2379	194.8	242	83	737	28	488	4.40	0.40	7	3.08	0.97	2.67	22.6	6.73	18.10	0.45	250.30
Baltazar et al., 2010	Aimorés	Mangerite	LC168	2385	68.7	537	43	958	78	208	12.20	0.20	8	7.61	3.79	4.17	25.2	11.22	23.00	1.23	96.10
Baltazar et al., 2010	Aimorés	Mangerite	OF144	381	85.7	200	48	118	157	62	18.30	1.40	38	4.48	2.57	1.20	21.2	4.44	3.30	0.83	31.50
Baltazar et al., 2010	Aimorés	Mangerite	SS027A	2527	74.8	564	35	838	76	194	12.20	0.40	7	7.42	3.70	4.31	22.7	11.24	19.80	1.38	88.00
Baltazar et al., 2010	Aimorés	Mangerite	OF051	1554	133.6	409	123	721	103	248	17.60	1.00	14	10.65	4.65	4.14	27.4	15.03	19.30	1.79	111.00
Baltazar et al., 2010	Aimorés	Diorite	OF022	2204	89.3	811	116	635	170	315	19.80	0.30	17	10.46	4.69	4.43	24.8	15.53	15.50	1.73	142.20
Baltazar et al., 2010	Aimorés	Mangerite	OF074B	1902	225.8	289	100	575	26	283	5.70	1.70	7	4.60	1.84	3.21	25.0	8.88	15.40	0.71	134.60
Baltazar et al., 2010	Aimorés	Mangerite	OF117	1806	153.5	343	94	746	49	225	12.70	0.90	12	9.97	4.44	4.03	26.9	13.98	17.30	1.67	105.30
Baltazar et al., 2010	Aimorés	Charnockite	OF23	511	79.4	318	44	178	100	28	10.50	0.90	11	5.22	4.85	1.28	19.2	3.14	4.90	1.30	16.30
Baltazar et al., 2010	Aimorés	Charnockite	OF24	797	166.8	286	55	168	68	62	10.30	1.60	13	3.30	1.77	1.23	16.8	3.75	4.40	0.59	33.60
Baltazar et al., 2010	Aimorés	Charnockite	OF93	742	114.4	286	57	313	125	102	17.80	1.10	20	2.29	0.52	1.83	20.6	5.62	8.30	0.29	55.50
Baltazar et al., 2010	Aimorés	Charnockite	OF98A	559	81.7	269	32	109	35	35	6.00	0.70	2	4.70	2.74	0.97	15.7	3.51	3.70	1.01	21.10





Data Source	G5 local name	Rock-type	Sample	Lu	Mo	Nb	Nd	Ni	Pr	Sm	Sn	Ta	Tb	Th	Tl	Tm	U	Y	Yb	Eu/Eu* <sup>a</sup>	La <sub>N</sub> /Yb <sub>N</sub> <sup>a</sup>
<b>This work</b>	Aracê	Titanite-allanite-biotite granite	CA-02	0.93	4.0	46.7	166.8	7	51.05	25.80	4.80	6.16	2.61	55.90	0.60	1.45	2.74	97.22	8.10	0.37	22.30
<b>This work</b>	Vitória	Biotite granite	CA-04	0.16	3.0	8.4	170.8	16	51.43	20.00	1.80	0.75	0.94	110.90	0.70	0.15	1.33	14.92	0.80	0.41	202.34
<b>This work</b>	Mestre Álvaro	Biotite tonalite	CA-05	0.12	5.0	16.9	22.7	14	6.38	2.90	2.50	0.64	0.24	8.40	<0,5	0.14	0.62	7.36	0.80	1.15	30.42
Mendes et al., 2005	Várzea Alegre	Charnockitic rock	VA42	-	-	36.2	-	-	-	-	-	-	-	-	-	-	-	29.00	-	-	-
Mendes et al., 2005	Várzea Alegre	Charnockitic rock	VA164	-	-	28.0	-	-	-	-	-	-	-	-	-	-	-	26.00	-	-	-
Mendes et al., 2005	Várzea Alegre	Charnockitic rock	HR29	0.13	-	50.0	12.1	-	-	3.19	-	-	-	-	-	-	-	0.30	1.03	7.02	124.82
Mendes et al., 2005	Várzea Alegre	Charnockitic rock	VA262	1.48	-	29.5	57.7	-	-	10.50	-	-	-	-	-	-	-	34.00	2.21	1.24	17.14
Mendes et al., 2005	Várzea Alegre	Charnockitic rock	VA244	1.33	-	33.8	93.9	-	-	15.28	-	-	-	-	-	-	-	32.00	2.24	0.82	30.37
Mendes et al., 2005	Várzea Alegre	Charnockitic rock	VA125	-	-	33.2	-	-	-	-	-	-	-	-	-	-	-	32.00	-	-	-
Mendes et al., 2005	Várzea Alegre	Charnockitic rock	VA16	-	-	33.4	-	-	-	-	-	-	-	-	-	-	-	32.00	-	-	-
Mendes et al., 2005	Várzea Alegre	Charnockitic rock	MP161	-	-	940.0	3.8	-	-	6.15	-	-	-	-	-	-	-	409.60	0.18	5.77	183.46
Mendes et al., 2005	Várzea Alegre	Charnockitic rock	MP128	-	-	1000.0	4.1	-	-	8.02	-	-	-	-	-	-	-	309.30	0.26	5.54	151.54
Mendes et al., 2005	Várzea Alegre	Charnockitic rock	VA90	-	-	35.2	-	-	-	-	-	-	-	-	-	-	-	36.00	-	-	-
Mendes et al., 2005	Várzea Alegre	Charnockitic rock	VA264	2.28	-	38.6	14.1	-	-	79.22	-	-	-	-	-	-	-	36.00	3.20	0.41	14.15
Mendes et al., 2005	Várzea Alegre	Charnockitic rock	VA261	2.14	-	46.0	82.6	-	-	14.08	-	-	-	-	-	-	-	36.00	3.03	0.91	15.66
Mendes et al., 2005	Várzea Alegre	Charnockitic rock	MP718	0.28	-	64.0	13.6	-	-	4.32	-	-	-	-	-	-	-	0.24	2.19	6.04	43.13



Data Source	G5 local name	Rock-type	Sample	Lu	Mo	Nb	Nd	Ni	Pr	Sm	Sn	Ta	Tb	Th	Tl	Tm	U	Y	Yb	Eu/Eu <sup>*a</sup>	La <sub>N</sub> /Yb <sub>N</sub> <sup>a</sup>
Mendes et al., 2002	Venda Nova	Charnoenderbite	VN20	-	-	9.2	-	32	-	-	-	-	-	-	-	-	-	-	-	-	-
Mendes et al., 2002	Venda Nova	Charnoenderbite	VN23	0.25	-	9.0	30.1	34	-	5.24	-	-	-	-	-	-	-	-	-	0.78	-
Mendes et al., 2002	Venda Nova	Charnoenderbite	VN15	-	-	8.5	-	23	-	-	-	-	-	-	-	-	-	-	-	-	-
Mendes et al., 2002	Venda Nova	Charnoenderbite	VN19	0.04	-	9.9	3.2	31	-	0.64	-	-	-	-	-	-	-	-	-	0.95	-
Mendes et al., 2002	Venda Nova	Charnoenderbite	VN18	-	-	11.7	-	45	-	-	-	-	-	-	-	-	-	-	-	-	-
Mendes et al., 2002	Venda Nova	Charnoenderbite	VN1	-	-	9.3	-	27	-	-	-	-	-	-	-	-	-	-	-	-	-
Mendes et al., 2002	Venda Nova	Charnoenderbite	VN16	0.25	-	9.4	21.2	28	-	4.26	-	-	-	-	-	-	-	-	-	0.75	-
Mendes et al., 2002	Venda Nova	Charnoenderbite	VN13	0.11	-	11.0	16.6	20	-	3.37	-	-	-	-	-	-	-	-	-	1.01	-
Mendes et al., 2002	Venda Nova	Charnoenderbite	VN24	-	-	9.9	-	21	-	-	-	-	-	-	-	-	-	-	-	-	-
Mendes et al., 2002	Venda Nova	Charnoenderbite	VN2	-	-	10.7	-	18	-	-	-	-	-	-	-	-	-	-	-	-	-
Mendes et al., 2002	Venda Nova	Charnoenderbite	VN27	0.19	-	14.0	17.0	41	-	3.19	-	-	-	-	-	-	-	-	-	0.91	-
Mendes et al., 2002	Venda Nova	Charnoenderbite	VN31	-	-	10.5	-	31	-	-	-	-	-	-	-	-	-	-	-	-	-
Mendes et al., 1997	Várzea Alegre	Charnockitic rock	VA 260	-	-	29.3	-	-	-	-	-	-	-	-	-	-	-	23.00	-	-	-
Mendes et al., 1997	Várzea Alegre	Charnockitic rock	VA 252	-	-	31.0	-	-	-	-	-	-	-	-	-	-	-	26.00	-	-	-
Mendes et al., 1997	Várzea Alegre	Charnockitic rock	VA 250	-	-	22.4	-	-	-	-	-	-	-	-	-	-	-	19.00	-	-	-
Mendes et al., 1997	Várzea Alegre	Charnockitic rock	VA 241	-	-	33.8	-	-	-	-	-	-	-	-	-	-	-	32.00	-	-	-





Data Source	G5 local name	Rock-type	Sample	Lu	Mo	Nb	Nd	Ni	Pr	Sm	Sn	Ta	Tb	Th	Tl	Tm	U	Y	Yb	Eu/Eu <sup>2+</sup> <sup>a</sup>	La <sub>N</sub> /Yb <sub>N</sub> <sup>a</sup>
De Campos, 2015	Santa Angélica	Gabbro	39a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
De Campos, 2015	Santa Angélica	Gabbro	39b	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
De Campos, 2015	Santa Angélica	Diorite	40	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
De Campos, 2015	Santa Angélica	Gabbro	41	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
De Campos, 2015	Santa Angélica	Gabbro	42a	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
De Campos, 2015	Santa Angélica	Gabbro	42b	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
De Campos, 2015	Santa Angélica	Diorite	43	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
De Campos, 2015	Santa Angélica	Diorite	44	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
De Campos, 2015	Santa Angélica	Gabbro	45	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
De Campos, 2015	Santa Angélica	Gabbro	46	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
De Campos, 2015	Santa Angélica	Gabbro	47	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
De Campos, 2015	Santa Angélica	Diorite	48	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
De Campos, 2015	Santa Angélica	Diorite	49	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
De Campos, 2015	Santa Angélica	Granite	50	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Bayer et al., 1987	Santa Angélica	Fine-grained gabbro	P438B	-	-	24.0	-	46	-	-	-	-	-	-	-	-	-	36.00	-	-	-
Bayer et al., 1987	Santa Angélica	Fine-grained gabbro	P191	-	-	17.0	-	45	-	-	-	-	-	-	-	-	-	33.00	-	-	-
Bayer et al., 1987	Santa Angélica	Fine-grained gabbro	P007B	-	-	27.0	-	23	-	-	-	-	-	-	-	-	-	53.00	-	-	-
Bayer et al., 1987	Santa Angélica	Fine-grained gabbro	P297B	-	-	23.0	-	57	-	-	-	-	-	-	-	-	-	41.00	-	-	-
Bayer et al., 1987	Santa Angélica	Coarse-grained gabbro	R412C	-	-	25.0	-	33	-	-	-	-	-	-	-	-	-	49.00	-	-	-
Bayer et al., 1987	Santa Angélica	Coarse-grained gabbro	P050	-	-	18.0	-	39	-	-	-	-	-	-	-	-	-	54.00	-	-	-

Data Source	G5 local name	Rock-type	Sample	Lu	Mo	Nb	Nd	Ni	Pr	Sm	Sn	Ta	Tb	Th	Tl	Tm	U	Y	Yb	Eu/Eu <sup>2+</sup> <sup>a</sup>	La <sub>N</sub> /Yb <sub>N</sub> <sup>a</sup>
Bayer et al., 1987	Santa Angélica	Coarse-grained gabbro	P180A	-	-	25.0	-	44	-	-	-	-	-	-	-	-	-	53.00	-	-	-
Bayer et al., 1987	Santa Angélica	Coarse-grained gabbro	R410S	-	-	25.0	-	37	-	-	-	-	-	-	-	-	-	52.00	-	-	-
Bayer et al., 1987	Santa Angélica	Hybrid rock	P491A	-	-	21.0	-	41	-	-	-	-	-	-	-	-	-	50.00	-	-	-
Bayer et al., 1987	Santa Angélica	Hybrid rock	R410A	-	-	18.0	-	21	-	-	-	-	-	-	-	-	-	12.00	-	-	-
Bayer et al., 1987	Santa Angélica	Hybrid rock	R410B	-	-	25.0	-	63	-	-	-	-	-	-	-	-	-	44.00	-	-	-
Bayer et al., 1987	Santa Angélica	Hybrid rock	R410E	-	-	24.0	-	26	-	-	-	-	-	-	-	-	-	52.00	-	-	-
Bayer et al., 1987	Santa Angélica	Hybrid rock	R410G	-	-	22.0	-	47	-	-	-	-	-	-	-	-	-	43.00	-	-	-
Bayer et al., 1987	Santa Angélica	Hybrid rock	P485A	-	-	21.0	-	47	-	-	-	-	-	-	-	-	-	60.00	-	-	-
Bayer et al., 1987	Santa Angélica	Granite	P485B	-	-	5.0	-	26	-	-	-	-	-	-	-	-	-	6.00	-	-	-
Bayer et al., 1987	Santa Angélica	Granite	P495	-	-	1.0	-	60	-	-	-	-	-	-	-	-	-	27.00	-	-	-
Bayer et al., 1987	Santa Angélica	Granite	P354E	-	-	16.0	-	12	-	-	-	-	-	-	-	-	-	27.00	-	-	-
Bayer et al., 1987	Santa Angélica	Granite	P187B	-	-	12.0	-	58	-	-	-	-	-	-	-	-	-	27.00	-	-	-
Mello, 2000	Aimorés	Qtz monzodiorite	FAM32	-	-	38.6	78.3	22	-	15.40	-	-	-	2.20	-	-	-	32.30	2.41	0.76	18.94
Mello, 2000	Aimorés	Monzodiorite	FAM28	-	-	51.8	98.4	4	-	20.50	-	-	-	2.20	-	-	-	50.80	3.53	0.77	16.43
Mello, 2000	Aimorés	Monzodiorite	FAM52	-	-	44.9	108.0	4	-	19.50	-	-	-	2.90	-	-	-	46.80	3.30	0.77	15.45
Mello, 2000	Aimorés	Monzodiorite	FAM85	-	-	43.6	98.4	5	-	16.40	-	-	-	6.40	-	-	-	47.80	3.43	0.87	14.17
Mello, 2000	Aimorés	Tonalite to granodiorite	FAM21G	-	-	14.8	25.0	11	-	5.72	-	-	-	5.00	-	-	-	22.50	1.22	0.83	14.81
Mello, 2000	Aimorés	Tonalite to granodiorite	FAM21	-	-	27.7	-	12	-	-	-	-	-	6.90	-	-	-	22.00	1.49	-	17.33
Mello, 2000	Aimorés	Tonalite to granodiorite	FAM21D	-	-	21.0	25.7	12	-	6.09	-	-	-	4.90	-	-	-	18.50	0.95	0.79	19.73
Mello, 2000	Aimorés	Qtz monzodiorite titanite-bearing	FAM71	-	-	34.0	-	8	-	-	-	-	-	9.10	-	-	-	30.90	2.57	-	26.50

Data Source	G5 local name	Rock-type	Sample	Lu	Mo	Nb	Nd	Ni	Pr	Sm	Sn	Ta	Tb	Th	Tl	Tm	U	Y	Yb	Eu/Eu <sup>*a</sup>	La <sub>N</sub> /Yb <sub>N</sub> <sup>a</sup>
Mello, 2000	Aimorés	Qtz monzodiorite titanite-bearing	FAM47	-	-	36.3	100.0	5	-	19.70	-	-	-	3.70	-	-	-	40.80	2.58	0.65	22.58
Mello, 2000	Aimorés	Qtzo monzonite	FAM10	-	-	49.5	86.7	4	-	17.80	-	-	-	3.10	-	-	-	45.20	3.11	0.69	15.28
Mello, 2000	Aimorés	Qtzo monzonite	FAM84D	-	-	45.4	-	3	-	-	-	-	-	6.50	-	-	-	44.40	4.17	-	10.69
Mello, 2000	Aimorés	Qtzo monzonite	FAM84E	-	-	47.0	-	3	-	-	-	-	-	12.00	-	-	-	37.40	3.27	-	14.18
Mello, 2000	Aimorés	Qtzo monzonite	FAM4L	-	-	29.8	72.4	2	-	15.90	-	-	-	5.50	-	-	-	33.50	2.34	0.67	18.09
Mello, 2000	Aimorés	Qtzo monzonite	FAM84F	-	-	37.3	61.3	2	-	13.60	-	-	-	7.70	-	-	-	28.70	1.91	0.69	19.34
Mello, 2000	Aimorés	Qtzo monzonite	FAM4	-	-	44.9	-	2	-	-	-	-	-	8.20	-	-	-	22.80	2.06	-	21.01
Mello, 2000	Aimorés	Qtzo monzonite	FAM4I	-	-	33.6	57.8	15	-	12.40	-	-	-	6.50	-	-	-	26.70	2.04	0.88	16.95
Mello, 2000	Aimorés	Qtzo monzonite	FAM4J	-	-	33.8	-	2	-	-	-	-	-	9.50	-	-	-	27.80	2.49	-	17.82
Mello, 2000	Aimorés	Qtzo monzonite	FAM4K	-	-	29.0	-	2	-	-	-	-	-	8.50	-	-	-	21.70	-	-	-
Mello, 2000	Aimorés	Qtzo monzonite	FAM4H	-	-	33.7	-	2	-	-	-	-	-	4.40	-	-	-	26.60	-	-	-
Mello, 2000	Aimorés	Qtzo monzonite	FAM4G	-	-	32.3	-	2	-	-	-	-	-	8.20	-	-	-	26.10	-	-	-
Mello, 2000	Aimorés	Granite	FAM84C	-	-	23.6	-	2	-	-	-	-	-	5.20	-	-	-	20.20	-	-	-
Mello, 2000	Aimorés	Qtz monzodiorite	FAM25	-	-	52.2	82.2	2	-	16.20	-	-	-	10.00	-	-	-	49.70	3.39	0.74	9.51
Mello, 2000	Aimorés	Granite	FAM24A	-	-	32.8	80.5	1	-	13.30	-	-	-	12.30	-	-	-	31.30	2.15	0.62	25.93
Mello, 2000	Aimorés	Granite	FAM5A	-	-	36.3	91.1	2	-	15.70	-	-	-	12.40	-	-	-	34.20	2.32	0.63	27.69
Mello, 2000	Aimorés	Granite	FAM9B	-	-	10.2	63.5	2	-	12.80	-	-	-	27.60	-	-	-	29.00	2.69	0.23	13.83
Mello, 2000	Aimorés	Granite	FAM1	-	-	8.0	21.5	1	-	4.49	-	-	-	14.00	-	-	-	8.69	0.42	0.36	32.26
Mello, 2000	Aimorés	Granite	FAM9A	-	-	12.9	-	2	-	-	-	-	-	24.30	-	-	-	23.20	2.15	-	13.39
Mello, 2000	Lagoa Preta	Leucogabbro	MLP1	-	-	17.6	-	164	-	-	-	-	-	1.30	-	-	-	0.44	0.35	-	1.83
Mello, 2000	Lagoa Preta	Diorite	MLP4	-	-	25.0	-	1	-	-	-	-	-	4.90	-	-	-	41.70	1.58	-	8.53
Mello, 2000	Ibituba	Qtzo monzonite	I4	-	-	32.9	-	6	-	-	-	-	-	3.90	-	-	-	42.90	1.75	-	37.79
Ludka and Wiedemann- Leonardos, 2000	Amparo	Coronitic rock	A2	-	-	-	4.5	-	-	1.10	-	-	-	-	-	-	-	4.00	0.22	1.10	8.92
Ludka and Wiedemann- Leonardos, 2000	Amparo	Coronitic rock	A6.2	-	-	-	3.2	-	-	0.80	-	-	-	-	-	-	-	3.00	0.12	1.18	17.81
Ludka and Wiedemann- Leonardos, 2000	Amparo	Coronitic rock	A8.1	0.05	-	-	6.0	-	-	1.12	-	-	-	-	-	-	-	4.00	0.20	1.01	22.32

Data Source	G5 local name	Rock-type	Sample	Lu	Mo	Nb	Nd	Ni	Pr	Sm	Sn	Ta	Tb	Th	Tl	Tm	U	Y	Yb	Eu/Eu <sup>*a</sup>	La <sub>N</sub> /Yb <sub>N</sub> <sup>a</sup>
Ludka and Wiedemann-Leonardos, 2000	Jacutinga	Gabbro-norite	J470	0.15	-	-	14.8	-	-	3.24	-	-	-	-	-	-	-	1.30	0.82	0.99	8.66
Ludka and Wiedemann-Leonardos, 2000	Jacutinga	Gabbro-norite	J471	0.13	-	-	21.5	-	-	4.43	-	-	-	-	-	-	-	15.00	0.87	0.98	12.00
Ludka and Wiedemann-Leonardos, 2000	Jacutinga	Gabbro-norite	J472	0.16	-	-	32.9	-	-	6.97	-	-	-	-	-	-	-	30.00	1.21	0.87	10.48
Ludka and Wiedemann-Leonardos, 2000	Jacutinga	Gabbro-norite	J475	0.09	-	-	11.3	-	-	2.81	-	-	-	-	-	-	-	-	0.53	1.04	9.04
Ludka and Wiedemann-Leonardos, 2000	Itaoca	Gabbro-norite	Ita25	0.25	-	-	18.6	-	-	3.91	-	-	-	-	-	-	-	5.00	2.19	0.98	5.76
Ludka and Wiedemann-Leonardos, 2000	Itaoca	Coronitic rock	Ita31	0.11	-	-	10.3	-	-	2.66	-	-	-	-	-	-	-	7.00	0.74	1.13	7.14
Ludka and Wiedemann-Leonardos, 2000	Itaoca	Piroxineto	Ita34	0.20	-	-	4.6	-	-	1.05	-	-	-	-	-	-	-	3.00	0.91	1.09	5.18
Ludka and Wiedemann-Leonardos, 2000	Itaoca	Piroxineto	Ita95	0.16	-	-	9.0	-	-	1.21	-	-	-	-	-	-	-	-	1.33	1.11	3.80
De Campos et al., 2004	Santa Angélica	Gabbro	SA1.1	-	-	25.0	-	18	-	-	-	-	-	-	-	-	-	141.00	-	-	-
De Campos et al., 2004	Santa Angélica	Gabbro	SA1.2	-	-	27.0	-	23	-	-	-	-	-	-	-	-	-	53.00	-	-	-
De Campos et al., 2004	Santa Angélica	Gabbro	SA1.3	-	-	23.0	-	41	-	-	-	-	-	-	-	-	-	51.00	-	-	-
De Campos et al., 2004	Santa Angélica	Gabbro	SA1.4	-	-	24.0	-	42	-	-	-	-	-	-	-	-	-	37.00	-	-	-

Data Source	G5 local name	Rock-type	Sample	Lu	Mo	Nb	Nd	Ni	Pr	Sm	Sn	Ta	Tb	Th	Tl	Tm	U	Y	Yb	Eu/Eu <sup>2+</sup> <sup>a</sup>	La <sub>N</sub> /Yb <sub>N</sub> <sup>a</sup>
De Campos et al., 2004	Castelo	Gabbro	CA1.1	-	-	25.0	-	66	-	-	-	-	-	-	-	-	-	60.00	-	-	-
De Campos et al., 2004	Castelo	Diorite	CA1.2	-	-	26.0	-	115	-	-	-	-	-	-	-	-	-	34.00	-	-	-
De Campos et al., 2004	Venda Nova	Gabbro	VN1.1	-	-	21.0	-	35	-	-	-	-	-	-	-	-	-	60.00	-	-	-
De Campos et al., 2004	Venda Nova	Gabbro	VN1.2	-	-	19.0	-	55	-	-	-	-	-	-	-	-	-	39.00	-	-	-
De Campos et al., 2004	Venda Nova	Gabbro	VN1.3	-	-	23.0	-	36	-	-	-	-	-	-	-	-	-	63.00	-	-	-
De Campos et al., 2004	Santa Angélica	Diorite	SA2.1	-	-	23.0	-	21	-	-	-	-	-	-	-	-	-	50.00	-	-	-
De Campos et al., 2004	Santa Angélica	Diorite	SA2.2	-	-	25.0	-	51	-	-	-	-	-	-	-	-	-	51.00	-	-	-
De Campos et al., 2004	Santa Angélica	Diorite	SA2.3	-	-	24.0	-	41	-	-	-	-	-	-	-	-	-	47.00	-	-	-
De Campos et al., 2004	Santa Angélica	Diorite	SA2.4	-	-	31.0	-	55	-	-	-	-	-	-	-	-	-	11.00	-	-	-
De Campos et al., 2004	Castelo	Diorite	CA2.1	-	-	25.0	-	36	-	-	-	-	-	-	-	-	-	71.00	-	-	-
De Campos et al., 2004	Castelo	Diorite	CA2.2	-	-	29.0	-	37	-	-	-	-	-	-	-	-	-	61.00	-	-	-
De Campos et al., 2004	Castelo	Diorite	CA2.3	-	-	25.0	-	34	-	-	-	-	-	-	-	-	-	69.00	-	-	-
De Campos et al., 2004	Venda Nova	Gabbro	VN2.1	-	-	18.0	-	72	-	-	-	-	-	-	-	-	-	30.00	-	-	-
De Campos et al., 2004	Venda Nova	Diorite	VN2.2	-	-	25.0	-	27	-	-	-	-	-	-	-	-	-	72.00	-	-	-
De Campos et al., 2004	Venda Nova	Diorite	VN2.3	-	-	26.0	-	25	-	-	-	-	-	-	-	-	-	95.00	-	-	-
De Campos et al., 2004	Santa Angélica	Diorite	SA3.1	-	-	22.0	-	47	-	-	-	-	-	-	-	-	-	43.00	-	-	-

Data Source	G5 local name	Rock-type	Sample	Lu	Mo	Nb	Nd	Ni	Pr	Sm	Sn	Ta	Tb	Th	Tl	Tm	U	Y	Yb	Eu/Eu <sup>2+</sup> <sup>a</sup>	La <sub>N</sub> /Yb <sub>N</sub> <sup>a</sup>
De Campos et al., 2004	Santa Angélica	Diorite	SA3.2	-	-	22.0	-	35	-	-	-	-	-	-	-	-	-	36.00	-	-	-
De Campos et al., 2004	Santa Angélica	Diorite	SA3.3	-	-	18.0	-	21	-	-	-	-	-	-	-	-	-	12.00	-	-	-
De Campos et al., 2004	Santa Angélica	Diorite	SA3.4	-	-	23.0	-	20	-	-	-	-	-	-	-	-	-	41.00	-	-	-
De Campos et al., 2004	Castelo	Diorite	CA3.1	-	-	26.0	-	22	-	-	-	-	-	-	-	-	-	54.00	-	-	-
De Campos et al., 2004	Castelo	Granite	CA3.2	-	-	21.0	-	18	-	-	-	-	-	-	-	-	-	24.00	-	-	-
De Campos et al., 2004	Venda Nova	Diorite	VN3.1	-	-	25.0	-	40	-	-	-	-	-	-	-	-	-	57.00	-	-	-
De Campos et al., 2004	Venda Nova	Diorite	VN3.2	-	-	25.0	-	19	-	-	-	-	-	-	-	-	-	41.00	-	-	-
De Campos et al., 2004	Venda Nova	Diorite	VN3.3	-	-	13.0	-	23	-	-	-	-	-	-	-	-	-	36.00	-	-	-
De Campos et al., 2004	Santa Angélica	Granite	SA4.1	-	-	24.0	-	20	-	-	-	-	-	-	-	-	-	50.00	-	-	-
De Campos et al., 2004	Santa Angélica	Granite	SA4.2	-	-	2.0	-	71	-	-	-	-	-	-	-	-	-	16.00	-	-	-
De Campos et al., 2004	Castelo	Granite	CA4.1	-	-	24.0	-	44	-	-	-	-	-	-	-	-	-	45.00	-	-	-
De Campos et al., 2004	Castelo	Granite	CA4.3	-	-	22.0	-	18	-	-	-	-	-	-	-	-	-	34.00	-	-	-
De Campos et al., 2004	Castelo	Granite	CA4.4	-	-	16.0	-	34	-	-	-	-	-	-	-	-	-	30.00	-	-	-
De Campos et al., 2004	Venda Nova	Granite	VN4.1	-	-	12.0	-	18	-	-	-	-	-	-	-	-	-	101.00	-	-	-
De Campos et al., 2004	Venda Nova	Granite	VN4.2	-	-	12.0	-	20	-	-	-	-	-	-	-	-	-	2.00	-	-	-
De Campos et al., 2004	Venda Nova	Granite	VN4.3	-	-	7.0	-	33	-	-	-	-	-	-	-	-	-	5.00	-	-	-

Data Source	G5 local name	Rock-type	Sample	Lu	Mo	Nb	Nd	Ni	Pr	Sm	Sn	Ta	Tb	Th	Tl	Tm	U	Y	Yb	Eu/Eu <sup>2+*</sup>	La <sub>N</sub> /Yb <sub>N</sub> <sup>a</sup>
De Campos et al., 2004	Santa Angélica	Granite	SA5.2	-	-	30.0	-	23	-	-	-	-	-	-	-	-	-	14.00	-	-	-
De Campos et al., 2004	Santa Angélica	Granite	SA5.3	-	-	23.0	-	3	-	-	-	-	-	-	-	-	-	20.00	-	-	-
De Campos et al., 2004	Santa Angélica	Granite	SA5.4	-	-	17.0	-	17	-	-	-	-	-	-	-	-	-	44.00	-	-	-
De Campos et al., 2004	Castelo	Granite	CA5.1	-	-	22.0	-	28	-	-	-	-	-	-	-	-	-	54.00	-	-	-
De Campos et al., 2004	Castelo	Granite	CA5.2	-	-	18.0	-	36	-	-	-	-	-	-	-	-	-	34.00	-	-	-
De Campos et al., 2004	Castelo	Granite	CA5.3	-	-	15.0	-	25	-	-	-	-	-	-	-	-	-	18.00	-	-	-
Ludka et al., 1998	G5 - Venda Nova	Syeno-monzonite	-	0.75	-	2.0	189.9	10	55.62	30.77	-	-	-	-	-	-	-	28.00	4.19	0.72	35.14
Ludka et al., 1998	Venda Nova	Syeno-monzonite	-	0.31	-	2.1	164.8	15	42.77	27.48	-	-	-	-	-	-	-	34.00	3.10	0.95	34.86
Ludka et al., 1998	Venda Nova	Monzodiorite	-	0.18	-	29.0	114.2	29	-	17.97	-	-	-	-	-	-	-	37.00	1.38	0.84	43.66
Ludka et al., 1998	Venda Nova	Monzodiorite	-	0.09	-	30.0	117.9	40	-	17.84	-	-	-	-	-	-	-	3835.00	0.57	0.96	139.22
Ludka et al., 1998	Venda Nova	Gabbro-norite	-	-	-	14.0	-	-	-	-	-	-	-	-	-	-	-	26.00	-	-	-
Ludka et al., 1998	Venda Nova	Gabbro-norite	-	-	-	20.0	-	95	-	-	-	-	-	-	-	-	-	24.00	-	-	-
Ludka et al., 1998	Venda Nova	Gabbro-norite	-	-	-	-	-	87	-	-	-	-	-	-	-	-	-	-	-	-	-
Ludka et al., 1998	Venda Nova	Gabbro-norite	-	-	-	17.0	-	140	-	-	-	-	-	-	-	-	-	22.00	-	-	-
Offman, 1990 in Ludka et al., 1998	Venda Nova	Allanite granite	-	0.14	-	-	30.1	-	10.42	6.00	-	-	-	-	-	-	-	27.00	0.66	0.60	37.52
Offman, 1990 in Ludka et al., 1998	Venda Nova	Allanite granite	-	0.15	-	-	37.3	-	13.18	6.36	-	-	-	-	-	-	-	39.00	1.10	0.64	30.03
Offman, 1990 in Ludka et al., 1998	Venda Nova	Allanite granite	-	0.10	-	-	38.8	-	10.81	7.17	-	-	-	-	-	-	-	-	1.07	0.77	24.52

Data Source	G5 local name	Rock-type	Sample	Lu	Mo	Nb	Nd	Ni	Pr	Sm	Sn	Ta	Tb	Th	Tl	Tm	U	Y	Yb	Eu/Eu <sup>*a</sup>	La <sub>N</sub> /Yb <sub>N</sub> <sup>a</sup>
Offman, 1990 in Ludka et al., 1998	Venda Nova	Granite	-	0.23	-	35.0	25.2	9	9.09	5.23	-	-	-	-	-	-	-	114.00	2.20	0.59	7.77
Offman, 1990 in Ludka et al., 1998	Venda Nova	Leucogranite	-	0.12	-	9.0	4.7	10	-	1.79	-	-	-	-	-	-	-	8.00	0.56	-	-
Wiedemann et al., 2002	Várzea Alegre	Basic rock	VA-1	-	-	19.8	-	14	-	-	-	-	-	-	-	-	-	26.00	-	-	-
Wiedemann et al., 2002	Várzea Alegre	Basic rock	VA-2	-	-	10.4	-	46	-	-	-	-	-	-	-	-	-	18.00	-	-	-
Wiedemann et al., 2002	Várzea Alegre	Basic rock	VA-3	-	-	35.7	-	12	-	-	-	-	-	-	-	-	-	54.00	-	-	-
Wiedemann et al., 2002	Várzea Alegre	Intermediate rock	VA-4	-	-	27.6	-	16	-	-	-	-	-	-	-	-	-	42.00	-	-	-
Wiedemann et al., 2002	Várzea Alegre	Intermediate rock	VA-5	-	-	24.1	-	25	-	-	-	-	-	-	-	-	-	33.00	-	-	-
Wiedemann et al., 2002	Várzea Alegre	Intermediate rock	VA-6	-	-	27.5	-	25	-	-	-	-	-	-	-	-	-	36.00	-	-	-
Wiedemann et al., 2002	Várzea Alegre	Intermediate rock	VA-7	-	-	-	-	10	-	-	-	-	-	-	-	-	-	15.00	-	-	-
Wiedemann et al., 2002	Várzea Alegre	Acid rock	VA-8	-	-	33.0	-	10	-	-	-	-	-	-	-	-	-	48.00	-	-	-
Wiedemann et al., 2002	Várzea Alegre	Acid rock	VA-9	-	-	25.0	-	10	-	-	-	-	-	-	-	-	-	39.00	-	-	-
Wiedemann et al., 2002	Várzea Alegre	Intermediate rock	VAc-1	-	-	46.0	-	17	-	-	-	-	-	-	-	-	-	36.00	-	-	-
Wiedemann et al., 2002	Várzea Alegre	Intermediate rock	Vac-2	-	-	36.0	-	15	-	-	-	-	-	-	-	-	-	35.00	-	-	-
Wiedemann et al., 2002	Várzea Alegre	Intermediate rock	VAc-3	-	-	35.0	-	14	-	-	-	-	-	-	-	-	-	36.00	-	-	-
Wiedemann et al., 2002	Várzea Alegre	Intermediate rock	Vac-4	-	-	29.0	-	-	-	-	-	-	-	-	-	-	-	34.00	-	-	-

Data Source	G5 local name	Rock-type	Sample	Lu	Mo	Nb	Nd	Ni	Pr	Sm	Sn	Ta	Tb	Th	Tl	Tm	U	Y	Yb	Eu/Eu <sup>2+</sup> <sup>a</sup>	La <sub>N</sub> /Yb <sub>N</sub> <sup>a</sup>
Wiedemann et al., 2002	Várzea Alegre	Intermediate rock	Vac-5	-	-	36.0	-	11	-	-	-	-	-	-	-	-	-	29.00	-	-	-
Wiedemann et al., 2002	Santa Angélica	Basic rock	SA-1	-	-	27.0	-	23	-	-	-	-	-	-	-	-	-	53.00	-	-	-
Wiedemann et al., 2002	Santa Angélica	Basic rock	SA-2	-	-	24.0	-	42	-	-	-	-	-	-	-	-	-	37.00	-	-	-
Wiedemann et al., 2002	Santa Angélica	Intermediate rock	SA-3	-	-	23.0	-	21	-	-	-	-	-	-	-	-	-	50.00	-	-	-
Wiedemann et al., 2002	Santa Angélica	Intermediate rock	SA-4	-	-	31.0	-	55	-	-	-	-	-	-	-	-	-	11.00	-	-	-
Wiedemann et al., 2002	Santa Angélica	Intermediate rock	SA-5	-	-	22.0	-	35	-	-	-	-	-	-	-	-	-	36.00	-	-	-
Wiedemann et al., 2002	Santa Angélica	Intermediate rock	SA-6	-	-	18.0	-	21	-	-	-	-	-	-	-	-	-	12.00	-	-	-
Wiedemann et al., 2002	Castelo	Basic rock	CA-1	-	-	25.0	-	66	-	-	-	-	-	-	-	-	-	60.00	-	-	-
Wiedemann et al., 2002	Castelo	Intermediate rock	CA-2	-	-	26.0	-	115	-	-	-	-	-	-	-	-	-	34.00	-	-	-
Wiedemann et al., 2002	Castelo	Intermediate rock	CA-3	-	-	29.0	-	37	-	-	-	-	-	-	-	-	-	61.00	-	-	-
Wiedemann et al., 2002	Castelo	Intermediate rock	CA-4	-	-	25.0	-	34	-	-	-	-	-	-	-	-	-	69.00	-	-	-
Wiedemann et al., 2002	Castelo	Intermediate rock	CA-5	-	-	26.0	-	22	-	-	-	-	-	-	-	-	-	54.00	-	-	-
Wiedemann et al., 2002	Castelo	Acid rock	CA-6	-	-	21.0	-	18	-	-	-	-	-	-	-	-	-	24.00	-	-	-
Wiedemann et al., 2002	Castelo	Acid rock	CA-7	-	-	18.0	-	36	-	-	-	-	-	-	-	-	-	34.00	-	-	-
Wiedemann et al., 2002	Castelo	Acid rock	CA-8	-	-	16.0	-	34	-	-	-	-	-	-	-	-	-	30.00	-	-	-
Wiedemann et al., 2002	Santa Angélica	Acid rock	SA-7	-	-	24.0	-	20	-	-	-	-	-	-	-	-	-	50.00	-	-	-

Data Source	G5 local name	Rock-type	Sample	Lu	Mo	Nb	Nd	Ni	Pr	Sm	Sn	Ta	Tb	Th	Tl	Tm	U	Y	Yb	Eu/Eu <sup>2+*</sup>	La <sub>N</sub> /Yb <sub>N</sub> <sup>a</sup>
Wiedemann et al., 2002	Santa Angélica	Acid rock	SA-8	-	-	2.0	-	71	-	-	-	-	-	-	-	-	-	16.00	-	-	-
Wiedemann et al., 2002	Santa Angélica	Acid rock	SA-9	-	-	17.0	-	17	-	-	-	-	-	-	-	-	-	44.00	-	-	-
Wiedemann et al., 2002	Mimoso do Sul	High-calk-alkaline/alkaline rocks	MI-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wiedemann et al., 2002	Mimoso do Sul	High-calk-alkaline/alkaline rocks	MI-2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	52.00	-	-	-
Wiedemann et al., 2002	Mimoso do Sul	High-calk-alkaline/alkaline rocks	MI-3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	79.00	-	-	-
Wiedemann et al., 2002	Mimoso do Sul	High-calk-alkaline/alkaline rocks	MI-4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	73.00	-	-	-
Wiedemann et al., 2002	Conceição do Muqui	High-calk-alkaline/alkaline rocks	CM-1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	25.00	-	-	-
Wiedemann et al., 2002	Conceição do Muqui	High-calk-alkaline/alkaline rocks	CM-2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.00	-	-	-
Wiedemann et al., 2002	Conceição do Muqui	High-calk-alkaline/alkaline rocks	CM-3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	56.00	-	-	-
Wiedemann et al., 2002	Conceição do Muqui	High-calk-alkaline/alkaline rocks	CM-4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	41.00	-	-	-
Zanon et al., 2015	Santa Angélica	Diorite	D5MIX23A	0.84	-	62.0	152.3	23	38.96	22.50	-	1.62	2.14	12.30	-	0.76	1.09	32.00	5.40	0.57	22.36
Zanon et al., 2015	Santa Angélica	Diorite	M5G9	0.24	-	55.0	86.1	34	22.47	13.50	-	0.15	0.95	8.10	-	0.24	1.86	29.00	1.80	0.81	40.64
Zanon et al., 2015	Santa Angélica	Gabbro	M5G17	0.30	-	49.0	98.3	39	24.64	14.20	-	0.43	1.26	6.10	-	0.32	1.78	31.00	1.80	0.78	41.43

Data Source	G5 local name	Rock-type	Sample	Lu	Mo	Nb	Nd	Ni	Pr	Sm	Sn	Ta	Tb	Th	Tl	Tm	U	Y	Yb	Eu/Eu <sup>*a</sup>	La <sub>N</sub> /Yb <sub>N</sub> <sup>a</sup>
Zanon et al., 2015	Santa Angélica	Diorite	F5G38	0.33	-	61.0	121.6	7	33.59	16.50	-	0.37	1.43	17.50	-	0.37	2.49	29.00	2.30	0.74	51.09
Zanon et al., 2015	Santa Angélica	Diorite	H18	0.40	-	56.0	119.9	9	32.56	18.60	-	1.59	1.59	17.60	-	0.42	2.30	32.00	2.50	0.68	46.17
Zanon et al., 2015	Santa Angélica	Diorite	H517	0.28	-	39.0	70.0	5	17.75	10.70	-	1.76	0.92	8.80	-	0.26	1.65	20.00	1.40	0.83	41.66
Zanon et al., 2015	Santa Angélica	Diorite	H16A	0.32	-	57.0	114.4	14	30.01	17.20	-	3.46	1.51	15.40	-	0.39	2.20	36.00	2.50	0.73	39.67
Zanon et al., 2015	Santa Angélica	Diorite	M5G16	0.31	-	25.0	62.1	41	14.98	9.70	-	0.60	0.89	3.90	-	0.23	0.91	22.00	1.70	0.94	29.31
Zanon et al., 2015	Santa Angélica	Granite	F5G15	0.29	-	71.0	134.3	3	39.71	19.60	-	3.04	1.55	21.20	-	0.50	2.42	27.00	2.80	0.66	54.75
Zanon et al., 2015	Santa Angélica	Gabbro	MP19	0.45	-	51.0	88.8	44	22.96	13.50	-	1.82	1.17	9.00	-	0.36	1.35	27.00	2.30	0.78	32.86
Paes et al., 2010	Medina		CP-334	0.30	-	26.4	116.3	6	33.60	22.90	-	0.90	2.00	-	-	0.40	-	35.80	1.90	0.19	44.78
Paes et al., 2010	Medina		PJ-404	0.60	-	54.1	173.3	1	47.60	27.50	-	1.70	3.10	-	-	0.70	-	56.50	4.30	0.15	28.50
Paes et al., 2010	Medina		CP-12	0.60	-	39.2	94.0	6	26.10	15.70	-	2.70	1.50	-	-	0.70	-	41.60	3.60	0.33	21.52
Paes et al., 2010	Medina		CP-005B	0.20	-	29.3	104.5	5	31.10	17.10	-	1.30	1.50	-	-	0.30	-	26.20	1.50	0.45	67.24
Paes et al., 2010	Medina		CP-358	0.20	-	31.3	147.5	7	45.30	24.20	-	1.10	2.10	-	-	0.30	-	35.30	1.80	0.31	73.79
Paes et al., 2010	Medina		CP-005A	0.20	-	27.6	77.8	5	23.30	13.50	-	1.50	1.10	-	-	0.20	-	24.30	1.30	0.52	58.14
Paes et al., 2010	Medina		CP-119A	0.10	-	30.7	69.9	5	21.60	13.70	-	1.20	1.20	-	-	0.20	-	18.60	1.00	0.31	62.36
Paes et al., 2010	Medina		CP-019	0.20	-	36.9	105.8	5	29.40	19.70	-	1.10	1.80	-	-	0.30	-	35.60	1.80	0.21	48.58
Paes et al., 2010	Medina		CP-361	0.30	-	28.9	92.1	5	27.70	16.70	-	1.50	1.60	-	-	0.40	-	33.10	2.00	0.32	40.96
Paes et al., 2010	Medina		CH-530	0.20	-	25.8	121.6	0	34.60	16.40	-	1.00	1.30	-	-	0.30	-	24.60	1.70	0.48	61.47
Paes et al., 2010	Medina		CP-353	0.40	-	38.6	156.2	5	48.20	27.40	-	1.60	2.30	-	-	0.50	-	46.40	3.00	0.26	46.97
Paes et al., 2010	Medina		CP-009A	0.20	-	28.4	100.5	5	28.90	16.60	-	1.10	1.50	-	-	0.20	-	26.40	1.70	0.34	52.43
Paes et al., 2010	Medina		CP-009B	0.10	-	18.4	36.3	5	10.80	6.70	-	0.70	0.50	-	-	0.10	-	9.20	0.50	0.72	68.23
Paes et al., 2010	Medina		CP-015A	0.30	-	34.6	124.4	5	33.80	20.80	-	1.80	1.70	-	-	0.40	-	31.20	2.20	0.30	43.82
Paes et al., 2010	Medina		CP-051	0.10	-	18.7	33.6	5	10.20	6.20	-	1.30	0.60	-	-	0.10	-	11.70	0.80	0.48	45.17

Data Source	G5 local name	Rock-type	Sample	Lu	Mo	Nb	Nd	Ni	Pr	Sm	Sn	Ta	Tb	Th	Tl	Tm	U	Y	Yb	Eu/Eu <sup>*a</sup>	La <sub>N</sub> /Yb <sub>N</sub> <sup>a</sup>
Paes et al., 2010	Medina		CP-003	0.50	-	53.8	160.5	5	46.30	25.30	-	3.70	2.10	-	-	0.80	-	49.90	4.20	0.47	36.60
Paes et al., 2010	Medina		CP-023	0.50	-	49.7	117.3	5	30.50	19.90	-	3.10	2.00	-	-	0.60	-	48.80	3.80	0.40	22.44
Paes et al., 2010	Medina		CP-118	0.40	-	54.0	187.1	5	53.70	28.50	-	2.80	2.30	-	-	0.60	-	51.50	3.20	0.57	53.81
Paes et al., 2010	Medina		CP-001	0.40	-	45.1	175.3	5	48.90	26.50	-	2.70	2.10	-	-	0.60	-	53.00	2.80	0.58	59.71
Serrano et al., 2018	Medina	Granite	M61B	0.10	-	12.9	61.6		18.00	11.90	-	0.10	1.00	-	-	0.10	-	12.90	0.70	0.22	68.86
Serrano et al., 2018	Medina	Granite	R13A	0.50	-	40.3	135.9		39.00	23.30	-	1.50	2.10	-	-	0.60	-	44.40	3.70	0.35	32.76
Paes et al., 2010	Caladão		PJ-302B	0.30	-	38.0	180.5	3	48.10	31.10	-	1.40	3.00	-	-	0.50	-	55.70	2.40	0.16	55.31
Paes et al., 2010	Caladão		PJ-389	0.10	-	26.8	126.0	2	37.20	18.60	-	1.30	1.60	-	-	0.10	-	15.00	0.50	0.21	220.46
Paes et al., 2010	Córrego do Calção		CH-89	0.30	-	28.2	125.3	1	35.40	18.40	-	1.20	1.70	-	-	0.40	-	32.90	1.80	0.48	63.11
Paes et al., 2010	Córrego do Calção		CH-90	0.30	-	28.2	123.5	2	37.50	19.10	-	1.10	1.60	-	-	0.30	-	27.50	1.80	0.44	65.36
Paes et al., 2010	Córrego do Calção		CH-91	0.06	0.3	12.5	33.8	2	9.36	5.00	6.00	1.00	0.39	23.30	-	0.07	6.20	6.00	0.36	0.27	90.83
Paes et al., 2010	Emparedado		CP-170	0.20	-	30.8	77.8	2	23.30	13.40	-	2.30	1.10	-	-	0.30	-	24.40	1.70	0.55	48.07
Paes et al., 2010	Emparedado		CP-175A	0.20	0.1	22.0	39.3	2	11.00	6.40	4.00	1.40	0.64	19.70	-	0.25	5.10	18.10	1.31	0.78	31.45
Paes et al., 2010	Emparedado		CP-251	0.14	0.1	11.7	87.9	3	26.15	12.60	3.00	0.30	0.76	25.80	-	0.18	1.80	19.90	0.84	1.23	120.39
Paes et al., 2010	Fazenda Liberdade		PJ-185	0.10	-	18.4	105.0	3	28.80	18.80	-	1.10	1.10	-	-	0.10	-	16.40	0.80	0.19	88.99
Paes et al., 2010	Fazenda Liberdade		PJ-192	0.20	-	22.3	129.2	8	35.00	21.30	-	0.90	1.20	-	-	0.20	-	24.90	1.40	0.17	60.87
Paes et al., 2010	Fazenda Liberdade		PJ-196	0.20	-	27.9	75.6	18	21.20	13.80	-	1.60	1.20	-	-	0.30	-	25.70	1.60	0.32	35.18
Paes et al., 2010	Fazenda Liberdade		PJ-250	0.30	-	19.6	173.3	7	48.20	23.50	-	1.50	1.40	-	-	0.40	-	33.10	2.10	0.65	70.95

Data Source	G5 local name	Rock-type	Sample	Lu	Mo	Nb	Nd	Ni	Pr	Sm	Sn	Ta	Tb	Th	Tl	Tm	U	Y	Yb	Eu/Eu <sup>2+</sup> <sup>a</sup>	La <sub>N</sub> /Yb <sub>N</sub> <sup>a</sup>
Paes et al., 2010	Fazenda Liberdade		PJ-272	0.40	-	23.9	80.1	6	21.70	15.10	-	0.90	1.70	-	-	0.50	-	48.60	2.90	0.28	19.83
Paes et al., 2010	Fazenda Liberdade		PJ-280	0.57	2.9	44.5	192.7	3	53.42	33.30	<1	1.50	2.92	136.30	-	0.82	5.60	70.50	4.56	0.65	31.71
Paes et al., 2010	Fazenda Liberdade		PJ-306	0.88	2.1	50.7	206.9	4	56.32	35.10	1.00	1.80	3.53	136.50	-	1.21	5.10	98.50	5.03	0.75	31.35
Paes et al., 2010	General Dutra		CH-021	0.30	-	20.0	82.9	6	21.30	13.10	-	0.70	1.20	-	-	0.40	-	22.80	2.00	0.36	30.95
Paes et al., 2010	General Dutra		CH-290	0.30	-	43.4	126.4	5	35.80	17.60	-	2.10	1.30	-	-	0.40	-	27.00	2.20	0.53	47.50
Paes et al., 2010	General Dutra		CH-574	0.30	-	24.4	84.7	2	24.30	13.90	-	1.10	1.20	-	-	0.40	-	27.60	2.20	0.31	29.94
Paes et al., 2010	General Dutra		CH-600	0.65	1.1	30.6	166.4	4	45.36	25.00	3.00	1.40	3.13	85.60	-	1.03	4.00	113.00	4.99	2.70	26.37
Paes et al., 2010	Landim		CH-010	0.20	-	30.3	86.1	2	26.40	12.70	-	2.40	1.10	-	-	0.20	-	19.50	1.30	0.82	75.77
Paes et al., 2010	Landim		CH-511	0.05	0.5	15.7	36.8	1	10.16	7.76	7.00	0.90	0.54	29.20	-	0.08	5.70	7.10	0.42	0.45	62.12
Paes et al., 2010	Landim		CH-514	0.20	-	31.3	133.2	4	37.70	16.90	-	2.70	1.10	-	-	0.30	-	21.50	1.60	0.82	85.96
Paes et al., 2010	Pau de Canoa		CH-310	0.99	0.9	25.9	111.3	5	30.97	20.10	4.00	1.80	2.11	71.40	-	1.06	9.50	67.30	6.52	0.89	14.11
Paes et al., 2010	Pau de Canoa		CH-389	0.40	-	29.7	116.4	9	32.10	19.50	-	1.60	1.80	-	-	0.50	-	45.80	2.80	0.39	33.64
Paes et al., 2010	Pedra Azul		CP-167	0.20	-	41.3	160.8	2	47.20	22.00	-	1.60	1.20	-	-	0.20	-	22.90	1.50	0.52	106.07
Paes et al., 2010	Pedra Azul		CP-215A	0.20	-	36.7	93.1	5	26.10	12.60	-	2.40	0.80	-	-	0.20	-	15.30	1.40	0.97	63.90
Paes et al., 2010	Pedra Azul		CP-228A	0.08	0.1	9.2	23.2	1	7.13	3.90	1.00	0.40	0.31	6.90	-	0.10	0.80	7.40	0.50	1.18	62.97
Paes et al., 2010	Pedra Grande		PJ-007	0.40	-	35.5	111.3	7	30.60	16.00	-	1.90	1.80	-	-	0.50	-	40.20	2.80	0.57	29.78
Paes et al., 2010	Pedra Grande		PJ-008	0.30	-	49.1	110.4	7	30.20	16.80	-	2.80	2.00	-	-	0.40	-	41.20	2.30	0.37	35.29
Paes et al., 2010	Pedra Grande		PJ-017	0.40	-	41.8	211.3	3	57.30	28.60	-	1.70	2.40	-	-	0.60	-	46.30	2.90	0.24	47.96
Paes et al., 2010	Santa Cruz de Salinas		CH-102	0.30	-	38.3	537.0	1	27.10	13.50	-	1.80	1.10	-	-	0.30	-	23.50	1.90	0.43	48.22
Paes et al., 2010	Santa Cruz de Salinas		CH-108	0.60	-	31.1	63.5	1	18.40	10.80	-	2.80	1.60	-	-	0.60	-	47.90	3.20	0.44	19.43

Data Source	G5 local name	Rock-type	Sample	Lu	Mo	Nb	Nd	Ni	Pr	Sm	Sn	Ta	Tb	Th	Tl	Tm	U	Y	Yb	Eu/Eu <sup>2+</sup> <sup>a</sup>	La <sub>N</sub> /Yb <sub>N</sub> <sup>a</sup>
Paes et al., 2010	Santa Cruz de Salinas		CH-171	0.22	0.4	18.6	42.4	0	11.78	6.41	6.00	1.30	0.95	44.00	-	0.31	12.50	37.90	1.70	0.71	24.55
Paes et al., 2010	Santa Cruz de Salinas		CH-237	0.40	-	20.8	79.0	1	24.20	13.00	-	1.20	1.30	-	-	0.50	-	33.00	2.90	0.34	27.25
Aranda, 2018	Cláudio Afonso	Monzogranite	P 246-A	0.36	<2	21.5	87.3	88	22.59	15.20	<0.3	0.60	1.36	4.20	<0.5	0.40	0.77	30.76	2.50	0.81	25.16
Aranda, 2018	Cláudio Afonso	Monzogranite	P 276-A	0.50	<2	33.2	128.0	36	31.22	22.80	<0.3	0.88	2.02	2.20	<0.5	0.56	0.33	45.24	3.50	0.70	21.84
Aranda, 2018	Cláudio Afonso	Monzodiorite	P 292-B	0.48	<2	34.6	135.7	12	35.66	21.90	<0.3	0.92	1.88	4.70	<0.5	0.55	0.80	42.86	3.30	0.83	29.68
Aranda, 2018	Cláudio Afonso	Monzogranite	P 292-A	0.42	2	29.1	120.6	50	30.87	19.70	<0.3	1.02	1.66	5.70	<0.5	0.46	0.92	36.55	3.00	0.83	29.24
Aranda, 2018	Cláudio Afonso	Monzodiorite	P 277-A	0.35	<2	27.0	102.3	21	27.05	17.40	<0.3	0.81	1.44	7.80	<0.5	0.40	1.48	31.52	2.50	0.84	29.45
Aranda, 2018	Cláudio Afonso	Jotunite	P 193-B	0.44	<2	31.3	110.7	10	27.76	18.60	<0.3	0.91	1.71	5.40	<0.5	0.52	0.60	37.94	3.10	0.83	23.99
Aranda, 2018	Cláudio Afonso	Monzodiorite	P 156-A	0.36	<2	23.7	86.5	30	21.71	15.30	<0.3	0.64	1.41	9.90	<0.5	0.41	1.32	31.74	2.50	0.81	23.38
Aranda, 2018	Cláudio Afonso	Qtz mangerite	P 197-C	0.31	<2	14.7	100.3	11	27.11	15.50	<0.3	<0.05	1.21	5.00	<0.5	0.33	0.99	26.23	2.10	0.93	39.10
Aranda, 2018	Cláudio Afonso	Qtz monzonite	P 288	0.34	<2	20.5	128.2	10	34.48	19.80	<0.3	0.18	1.45	9.30	<0.5	0.38	0.76	30.48	2.30	0.94	44.03
Aranda, 2018	Cláudio Afonso	Qtz monzonite	P 295-B	0.77	<2	43.5	212.4	12	52.64	39.00	<0.3	2.23	3.55	17.30	<0.5	0.98	1.29	85.34	5.80	0.51	21.45
Aranda, 2018	Cláudio Afonso	Qtz monzonite	P 285-B	0.39	<2	17.3	122.1	9	31.54	19.50	<0.3	0.20	1.58	6.60	<0.5	0.44	0.60	38.03	2.70	0.89	32.39
Aranda, 2018	Cláudio Afonso	Qtz monzonite	P 206-D	0.35	<2	20.6	116.6	10	30.59	18.50	<0.3	0.16	1.47	7.50	<0.5	0.40	0.62	30.45	2.50	1.03	35.62
Aranda, 2018	Cláudio Afonso	Qtz monzonite	P 98	0.34	<2	19.8	88.8	13	25.00	13.60	<0.3	1.39	1.09	16.40	1.00	0.34	2.11	24.61	2.10	0.79	36.50
Aranda, 2018	Cláudio Afonso	Qtz monzonite	P 297	0.31	<2	18.7	66.7	10	18.71	11.20	<0.3	0.42	0.99	9.00	<0.5	0.33	1.92	26.22	2.10	0.89	25.62
Aranda, 2018	Cláudio Afonso	Qtz monzonite	P 296	0.41	<2	28.0	116.4	12	30.96	18.70	<0.3	0.64	1.63	10.40	<0.5	0.49	1.02	38.64	2.90	0.70	29.94
Aranda, 2018	Cláudio Afonso	Qtz monzonite	P 146-B	0.44	<2	22.5	130.4	12	36.40	20.50	<0.3	1.17	1.64	15.70	0.70	0.48	1.10	38.90	3.10	0.68	33.25
Aranda, 2018	Cláudio Afonso	Qtz monzonite	P 291	0.40	<2	26.8	113.2	10	30.95	19.10	<0.3	0.50	1.57	12.90	<0.5	0.47	1.20	36.99	2.90	0.69	31.43
Aranda, 2018	Cláudio Afonso	Qtz monzonite	P 298	0.38	<2	15.9	159.9	11	46.61	22.00	<0.3	0.34	1.51	19.80	<0.5	0.41	1.26	30.65	2.50	0.77	59.71
Aranda, 2018	Cláudio Afonso	Qtz monzonite	P 90-A	0.33	<2	16.8	166.0	8	50.32	20.60	<0.3	0.26	1.38	16.90	<0.5	0.35	1.86	30.38	2.20	0.89	92.73
Aranda, 2018	Cláudio Afonso	Qtz monzonite	P 102	0.40	<2	27.3	113.8	10	31.62	18.70	1.50	0.67	1.57	14.60	<0.5	0.47	1.45	37.16	3.00	0.67	31.80
Baltazar et al., 2010	Aimorés	Charnockite	OF174A	0.21	0.7	16.4	127.4	11	35.22	19.60	-	0.60	1.62	19.70	-	0.28	0.90	27.30	1.46	70.88	4.93
Baltazar et al., 2010	Aimorés	Charnockite	OF172A	0.21	0.8	23.5	52.6	5	13.72	8.50	-	0.80	0.94	4.90	-	0.26	0.70	21.30	1.68	23.03	4.25
Baltazar et al., 2010	Aimorés	Charnockite	OF198	1.33	0.9	40.8	159.3	9	41.89	29.60	-	2.50	3.57	68.40	-	1.36	1.80	101.20	8.68	12.53	3.43
Baltazar et al., 2010	Aimorés	Charnockite	SS058	0.78	0.6	22.4	124.8	14	32.23	23.10	-	1.60	2.57	62.60	-	0.80	1.40	66.10	5.42	15.46	3.38

Data Source	G5 local name	Rock-type	Sample	Lu	Mo	Nb	Nd	Ni	Pr	Sm	Sn	Ta	Tb	Th	Tl	Tm	U	Y	Yb	Eu/Eu <sup>*a</sup>	La <sub>N</sub> /Yb <sub>N</sub> <sup>a</sup>
Baltazar et al., 2010	Aimorés	Charnockite	SS023	0.16	0.1	5.9	20.3	5	5.17	3.90	-	0.30	0.52	1.50	-	0.19	0.20	17.00	0.95	14.97	3.40
Baltazar et al., 2010	Aimorés	Charnockite	OF245C	0.48	0.9	44.5	85.8	9	21.04	16.10	-	3.60	2.00	2.20	-	0.59	2.80	57.40	3.48	11.43	2.31
Baltazar et al., 2010	Aimorés	Granite	OF156	0.18	0.7	29.1	256.0	5	75.21	29.90	-	1.20	1.31	108.90	-	0.25	2.10	24.70	1.53	140.30	6.70
Baltazar et al., 2010	Aimorés	Granite	OF166B	0.46	2.7	34.6	88.4	5	22.57	16.60	-	1.60	1.77	6.30	-	0.54	1.50	42.80	3.34	16.19	3.04
Baltazar et al., 2010	Aimorés	Granite	SS094	0.12	0.9	24.0	174.6	7	51.18	18.80	-	1.00	0.92	17.70	-	0.11	0.40	12.50	0.85	198.53	8.37
Baltazar et al., 2010	Aimorés	Mangerite	LC168	0.44	1.1	34.3	107.3	11	25.88	16.70	-	1.80	1.56	3.50	-	0.50	0.90	39.70	3.32	19.52	3.62
Baltazar et al., 2010	Aimorés	Mangerite	OF144	0.32	0.2	9.0	26.7	16	7.12	4.60	-	0.70	0.79	4.40	-	0.37	0.40	25.80	2.26	9.40	4.31
Baltazar et al., 2010	Aimorés	Mangerite	SS027A	0.43	0.7	31.2	94.9	10	24.04	16.00	-	1.70	1.53	1.90	-	0.50	0.80	38.00	2.80	21.19	3.46
Baltazar et al., 2010	Aimorés	Mangerite	OF051	0.59	1.1	36.9	122.8	10	31.00	21.10	-	2.40	2.16	14.50	-	0.59	1.10	55.00	3.95	18.95	3.31
Baltazar et al., 2010	Aimorés	Diorite	OF022	0.53	0.8	34.3	153.7	18	38.78	23.90	-	1.70	2.22	4.60	-	0.62	0.60	53.90	4.11	23.33	3.74
Baltazar et al., 2010	Aimorés	Mangerite	OF074B	0.24	1.3	20.0	119.9	7	32.89	16.20	-	0.90	1.05	35.10	-	0.25	1.80	22.30	1.71	53.07	5.23
Baltazar et al., 2010	Aimorés	Mangerite	OF117	0.54	0.9	35.7	106.2	9	27.49	18.80	-	1.90	2.00	13.80	-	0.54	0.60	47.60	3.42	20.76	3.52
Baltazar et al., 2010	Aimorés	Charnockite	OF23	1.12	0.2	9.7	12.6	9	3.22	2.83	-	0.30	0.77	0.80	-	0.93	0.40	35.20	6.89	1.59	3.62
Baltazar et al., 2010	Aimorés	Charnockite	OF24	0.33	0.3	10.4	26.0	7	7.06	4.69	-	0.50	0.57	8.50	-	0.32	0.70	19.10	1.98	11.44	4.51
Baltazar et al., 2010	Aimorés	Charnockite	OF93	0.10	0.1	15.2	49.8	21	13.02	7.77	-	0.50	0.66	13.30	-	0.08	0.40	8.60	0.51	73.37	4.49
Baltazar et al., 2010	Aimorés	Charnockite	OF98A	0.38	3.8	6.9	17.1	5	4.49	3.18	-	0.30	0.73	2.30	-	0.44	0.40	31.40	2.56	5.56	4.17

Data Source	G5 local name	Rock-type	Sample	Lu	Mo	Nb	Nd	Ni	Pr	Sm	Sn	Ta	Tb	Th	Tl	Tm	U	Y	Yb	Eu/Eu <sup>2+*</sup>	La <sub>N</sub> /Yb <sub>N</sub> <sup>a</sup>
Baltazar et al., 2010	Aimorés	Charnockite	OF101	0.31	0.1	11.2	20.1	6	5.21	3.15	-	0.30	0.75	1.20	-	0.34	0.30	27.60	2.17	7.80	5.01
Baltazar et al., 2010	Aimorés	Gabbro	SA16	0.41	0.9	38.8	122.6	10	30.06	20.17	-	1.60	1.80	9.30	-	0.52	1.20	41.20	3.00	23.64	3.28
Pedrosa-Soares et al., 2006	Aimorés	Granite	SC-01A	0.31	-	17.0	75.7	30	18.03	12.30	-	1.20	1.21	16.30	-	0.35	-	36.00	2.07	27.07	4.25
Pedrosa-Soares et al., 2006	Aimorés	Granite	SC-13	0.29	-	14.0	78.2	31	18.58	12.10	-	1.40	0.04	16.70	-	0.29	-	31.00	2.00	0.79	26.12
Pedrosa-Soares, et al. 2006	Aimorés	Granite	MQ-03A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pedrosa-Soares, et al. 2006	Aimorés	Charnockite	MQ-03B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pedrosa-Soares, et al. 2006	Aimorés	Granite	MQ-04	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pedrosa-Soares, et al. 2006	Aimorés	Charnockite	MQ-81	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pedrosa-Soares, et al. 2006	Aimorés	Charnockite	MQ-123	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pedrosa-Soares, et al. 2006	Aimorés	Charnockite	EC-92	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pedrosa-Soares, et al. 2006	Aimorés	Charnockite	EC-90	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pedrosa-Soares, et al. 2006	Aimorés	Sienogranite	EC-01	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pedrosa-Soares, et al. 2006	Aimorés	Charnockite	EB-89A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pedrosa-Soares, et al. 2006	Aimorés	Norite	EP-15	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wiedemann et al., 2002	Pedra Azul	Basic rock	PA-I	-	-	55.0	-	26	-	-	-	-	-	-	-	-	-	50.00	-	-	-

Data Source	G5 local name	Rock-type	Sample	Lu	Mo	Nb	Nd	Ni	Pr	Sm	Sn	Ta	Tb	Th	Tl	Tm	U	Y	Yb	Eu/Eu* <sup>a</sup>	La <sub>N</sub> /Yb <sub>N</sub> <sup>a</sup>
Wiedemann et al., 2002	Pedra Azul	Basic rock	PA-2	-	-	57.0	-	27	-	-	-	-	-	-	-	-	-	37.00	-	-	-
Wiedemann et al., 2002	Pedra Azul	Intermediate rock	PA-3	-	-	-	-	25	-	-	-	-	-	-	-	-	-	48.00	-	-	-
Wiedemann et al., 2002	Pedra Azul	Intermediate rock	PA-4	-	-	51.0	-	17	-	-	-	-	-	-	-	-	-	55.00	-	-	-
Wiedemann et al., 2002	Pedra Azul	Intermediate rock	PA-5	-	-	59.0	-	16	-	-	-	-	-	-	-	-	-	65.00	-	-	-
Wiedemann et al., 2002	Pedra Azul	Acid rock	PA-6	-	-	52.0	-	8	-	-	-	-	-	-	-	-	-	75.00	-	-	-
Wiedemann et al., 2002	Pedra Azul	Acid rock	PA-7	-	-	34.0	-	5	-	-	-	-	-	-	-	-	-	37.00	-	-	-

<sup>a</sup> Normalized elements for chondrite (Boynton, 1984).

$$\text{Eu/Eu}^* = \text{Eu}_N / [(\text{Sm}_N) + (\text{Gd}_N)]^{1/2}$$

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