

## CAMPANERO UNIT: A PROBABLE PALEOPROTEROZOIC BASEMENT AND ITS CORRELATION TO OTHER UNITS OF SOUTHEASTERN URUGUAY

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**Keywords:** Paleoproterozoic, Campanero Unit, Carapé Complex, geochronology

The basement of the supracrustal metamorphic belts of Uruguay is composed by batholiths formed in the margins of preexisting continental crust during the accretion peaks and crustal recycling. The emplacement ages would correspond to inferred subduction periods that preceded juxtaposition of blocks and/or continental collision. Using this inference as a starting point, it is a way to recognize the paleoeffort regime in ancient arcs, where the rising of magma is controlled by deformation and it is governed by the characteristic deformation partition of orogenes. The magmatic structures yield keys to reconstruct tectonic and geologic history. A detailed reinterpretation of gneissic structures of southeastern rocks of Uruguay suggests that, in spite of the presence of solid state deformation superimposed, there exist magmatic structures related to the emplacement (Sánchez Bettucci, 1998). In the southeasternmost point of the Dom Feliciano Belt it has been recognized a group of granitoids with variable deformation grade (Campanero Unit), which is intruded by a neoproterozoic calcalkaline granitoid suite corresponding to the Carapé Complex (Sánchez Bettucci, 1998).

On the other hand, the pre-tectonic granitoids grouped as Campanero Unit are represented by heterogeneous bodies that share the effects of deformation. These granitoids have variable texture from gneissic to mylonitic. Their characteristic feature is an outstanding mylonitic foliation that generated recrystallization (blastesis). Several facies use to show biotite bands (schlieren) (Sánchez Bettucci, 1998). U-P studies made

on the Campanero Unit have yielded paleoproterozoic ages (Fig. 1).

Above this basement are developed in tectonic contact the Lavallega Group. This group is represented by a neoproterozoic volcano-sedimentary sequence which was separated into three formations (Minas, Fuente del Puma and Zanja del Tigre) (Sánchez Bettucci, 1998; Sánchez Bettucci et al., 2001). U-Pb ages (obtained from rutile) from a metabasalt yielded a possible crystallization age of ca. 670 Ma and a metamorphic age of ca. 630 Ma (Fig. 2).

On the other hand, Carapé Complex intruded Campanero Unit basement and Lavallega Group. This complex constitutes an example of poli-intrusive felsic magmatism that was syn-tardi to post orogenic separated (Sánchez Bettucci, 1998; Sánchez Bettucci et al., 2003). Isotopic studies made over the post-orogenic granitic body produced an U-Pb (zircon) age of  $572 \pm 14$  Ma (fig. 3).

### REFERENCES

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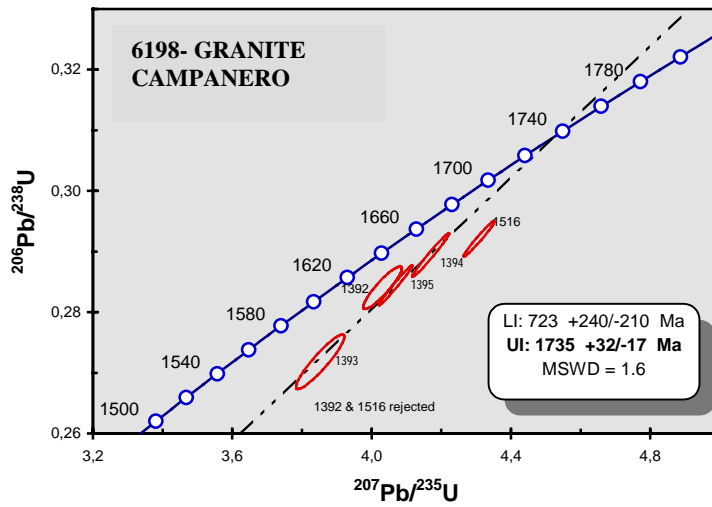


Figure 1. U-Pb concordia diagram of sample 6198 from biotite-amphibole mylonitic granite of the Campanero Unit.

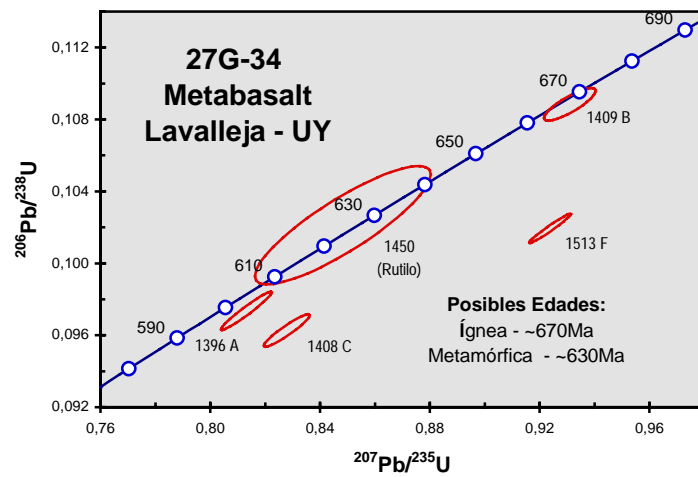


Figure 2. U-Pb concordia diagram of sample 27G-34 from metabasalt (Lavalleya, Uruguay)

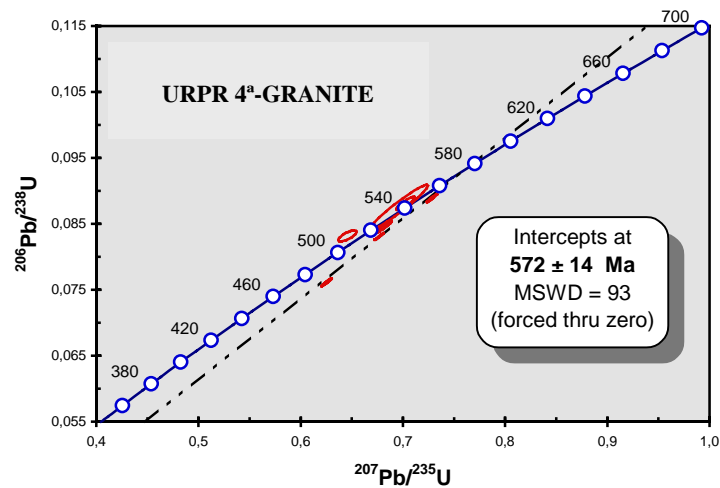


Figure 3. U-Pb concordia diagram of sample URPR 4A from biotite-amphibole granite, Carapé Granitic Complex.