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**Felsic magmatic events within 1.36 – 1.00 Ga time interval in the SW Amazonian Craton, Brazil and Bolivia: tectonic implications and magma sources**

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Late Mesoproterozoic felsic igneous rocks have been recently recognized, based on SHRIMP U-Pb zircon ages and zircon Lu-Hf isotopes, in the Costa Marques (Rondônia, Brazil) and Magdalena and Huanchaca (Bolivia) regions, SW Amazonian craton. They are: Ouro Fino (OFIS: 1347 ± 9 Ma; granites, quartz syenites, trackytes and rhyolites), São Domingos (SDIS: 1086-1057 Ma; granites and quartz syenites), and Costa Marques (CMIS: 998 ± 10 Ma; trackydacites to trackyandesites) intrusive suites in Brazil, and Orobayaya (OG: 1359 ± 5 Ma), Discordancia (DG: 1343 ± 4 Ma) and Itenez (IG: 1272 ± 5Ma) granites in Bolivia.

OG, OFIS and DG are interpreted to occur in the Paraguá Terrane and related to the evolution of the Rondonian-San Ignacio province (1.56-1.30 Ga, Bettencourt et al. [1]). IG, SDIS, and CMIS are interpreted to be controlled by east-west lineaments related to the evolution of the Western Amazon belt (1.20-0.95 Ga, Rizzotto et al. [2]). These lineaments apparently crosscut the tectonic boundary between the Paraguá Terrane and the Guaporé Suture Zone.

Zircons from OG, OFIS, DG, IG, SDIS, and CMIS have  $\epsilon_{\text{Hf}(t)}$  values ranging from +4.6 to +1.1, +0.1 to +6.0, +4.5 to +1.8, +5.6 to +4.3, -28.7 to +6.5, and -6.2 to + 5.4, respectively, suggest variable crustal and juvenile source contributions to the felsic magmas. Inherited zircon with ages of 1754 ± 22 Ma and 1375 ± 7 Ma from the SDIS indicate the involvement of Paleo- and Mesoproterozoic crusts for the genesis of the parental magma.

*References:*

[1] Bettencourt et al. (2010) In: Journal of South American Earth Sciences 29: 28-46

[2] Rizzotto et al. (2014) In: Annals of the Brazilian Academy of Sciences 86 (1): 57-84

