

MESOPROTEROZOIC OROGENIC SYSTEM IN THE AMAZONIAN AND CENTRAL BRAZIL AREAS

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Actually the Mesoproterozoic regimes have started in the Amazonian block very early, after the Trans-Amazonian Orogeny. Besides the existent data, the Paleo to Mesoproterozoic transition still under debate. Three major provinces have been reported to represent the Mesoproterozoic (Rio Negro/Juruena; S. Inacio/Rondonian; and Sunsás). The Mesoproterozoic has benn started with crust generation from mantle related sources. Also, during this transition time intensive intracontinental rifting generated large felsic-intermediate volcanisms (e.g. Iriri, Roosevelt). It is an important period for the generation of intracontinental basins. The end of the Calymmian was marked by a granite-forming event derivated from crustal (?) components (Santa Helena Block), and by magmatic events related to the Rondonian Province. At the end of the Mesoproterozoic the Sunsas Orogeny that is related to the Grenville Cycle, marks the amalgamation of Rodinia. During the Mesoproterozoic different phases of granitic intrusions have been affected the Amazonian Craton. In Central Brazil, there is the Tocantins Province. The general configuration of the region was defined during the Neoproterozoic while in the older Goiás massif terrains it is possible to recognize units ranging from Archaean (Greenstone belts and associated TTG) to Paleoproterozoic (Barro Alto-Niquelândia-Cana Brava Complexes). Although the role of Mesoproterozoic events is not well understood in the region, there are many geochronological data supporting that, in different extensions during this period older rocks have been tectonically reworked and isotopically resetted, and probably new units have been formed (e.g. the metavolcano-sedimentary sequences of Juscelândia, Indaianópolis and Palmeirópolis). This research is supported by PADCT/FINEP (0812/98) and FAPESP (97/00640-5).