

## **Geological and tectonic framework of the Roraima State, Guyana Shield - An overview**

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The Roraima State occupies the heart of Guyana Shield, and its geological framework records most of the evolution of the shield. Four major domains are present: (i) *The Urariquëra Domain* (north-northeast Roraima) exhibits WNW-ESE and E-W trends. Granitoids and volcanics with calc-alkaline affinities (1.98-1.96Ga) and A-type granites (1.81Ga) prevail, and bear local greenschist facies metamorphic features. Sedimentary rocks (1.8Ga) partly cover the granitoids and volcanics. Trans-Amazonian (2.2-2.0Ga), amphibolite facies, supracrustal rocks are exposed; (ii) *The Central Guyana Belt* stretches in the NE-SW direction across central Roraima. Amphibolite facies orthogneisses (1.96-1.91Ga) predominate over amphibolite to granulite facies supracrustal rocks (also exposed in the Urariquëra Domain). A Mesoproterozoic association (1.56-1.53Ga) of anorthosites (gabbros), mangerites-charnockites and rapakivi granites (AMCG) intrudes older units. The Tacutu graben represents an extensional Mesozoic reactivation; (iii) In the *Parima Domain* (west-northwest Roraima), NW-SE structural lineaments prevail and Trans-Amazonian granite-greenstone terranes are extensive. Granitoids and volcanics, are subordinate. Batholiths of rapakivi granites (1.55Ga), sedimentary tables and mafic-ultramafic bodies are present; (iv) *The Anauá-Jatapu Domain* (southeast Roraima), exhibits NW-SE and NE-SW trends and widespread undeformed granitoid rocks. S-type granites (1.96-1.93Ga), calc-alkaline granites (and volcanics) (1.95-1.88Ga) and A-type granites (1.81-1.55) are present. Sedimentary tables were locally preserved. Greenschist to amphibolite facies Trans-Amazonian orthogneisses and supracrustal rocks also occur.