

The geological map of the central-eastern Roraima State, Brazil: New data on the central portion of Guyana Shield

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Geological mapping of the central-eastern Roraima State has led to the characterization of two large structural domains: Urariqüera and Central Guyana Belt. The Urariqüera Domain shows a NW-SE to E-W trend and consists of amphibolite facies supracrustal rocks of the Cauarane Group (2.2Ga) and minor orthogneisses of the Urariqüera Suite, both units formed and/or reworked during Trans-Amazonian Cycle. A volcano-plutonism with calc-alkaline affinities (2.0-1.96Ga), represented by the Surumu Group and Pedra Pintada Suite, and A-type granites (Saracura Suite, 1.81Ga) are exposed and, locally, record metamorphism at greenschist facies (Macuxí Episode). A remaining sedimentary table (Tepequém Formation) showing gentle folds (K' Mudku Episode, 1.2Ga) lies unconformably over the previously deformed volcanics. Mafic and ultramafic bodies comprise the Uraricaá Suite. In the NE-SW Central Guyana Belt, the amphibolite facies orthogneisses (1.96-1.91Ga) of the Rio Urubu Suite dominates. Cauarane supracrustals show amphibolite to granulite facies and may constitute xenoliths (with previously folded foliation) within the Rio Urubu Suite. S-type granitic bodies have also been mapped. Mesoproterozoic charnockitic rocks (Serra da Prata Suite, 1.56Ga), rapakivi granites (Mucajá Suite, 1.54Ga), and anorthosites and gabbros (Repartimento, 1.53Ga) occur in close association (AMCG). Narrow mylonitic belts (K' Mudku Episode) cut all older units. The Takutu Graben records the extensional reactivation of the belt during Mesozoic times, also recorded by coeval sedimentary rocks, basaltic lavas, dolerite dykes and alkaline stocks. Paleocene-Eocene sediments cover extensive areas.