

The Neoproterozoic Andrelândia Basin, southern Minas Gerais State, Brazil.

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The Andrelândia Basin is the southern portion of a neoproterozoic intraplate continental margin developed around the São Francisco paleocontinent. It was deformed and metamorphosed during the Brasiliano orogenies. The preserved succession (Andrelândia Sequence) comprises five lithofacies associations. From base to top and towards the basin depocenter, these are the following: A1- biotite paragneiss with minor quartzite and schist intercalation upward, interpreted as deposited in mixed paleoenvironment during the early rifting stage. Contemporaneous igneous activity is now represented by amphibolite and minor metafelsite intercalation; A2- green-mica quartzite, representing a transgressive plataformal succession comprising a stacking of agradacional parasequences; A3- grey phyllites/schists with minor quartzites intercalations, deposited during maximum flooding of the transgressive event; A4- biotite schist/gneiss related to the Riphean glaciation. Pelitic turbidite aprons with minor debris-flow and dropstone intercalations, covered by offshore pelitic schists/phyllites represent the glacial and post-glacial events, respectively. A5- pelitic gneiss (including high pressure granulites), tholeiitic ortho-amphibolites and minor quartzite, Mn-metachert and calc-silicatic intercalations. They represent the distal facies association deposited on offshore ramps, probably during the entire evolution of the basin. The A4 succession grades upward and basinward toward A5.