

NEOPROTEROZOIC GLACIAL AND GRAVITATIONAL SEDIMENTATION ON A CONTINENTAL RIFTED MARGIN: THE JEQUITAÍ-MACAÚBAS SEQUENCE (MINAS GERAIS, BRAZIL).

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This is a contribution to the knowledge of the sedimentation of neoproterozoic sequences, known as the Jequitaí Formation and Macaúbas Group. These sequences are present along the transitional zone between the São Francisco Craton and the Brasiliano (600 Ma) Araçuaí fold belt in Minas Gerais, Brazil. A sedimentological study of these Neoproterozoic sequences is important to distinguish between true continental and marine glacial facies and glacial material reworked by various subaqueous gravitational processes. The cratonic Jequitaí Formation consists of massive and stratified diamictites from 0-100 m thick. This diamictite association is tentatively interpreted as glaciomarine in origin. It continues eastward, in the Araçuaí fold belt, as the metasedimentary Macaúbas Group, which is composed of metadiamictites, quartzites and schists from 5-12 (?) km thick. The Macaúbas Group consists of resedimented glacial material deposited by subaqueous debris-flow and turbidity currents. A depositional model is proposed for the Jequitaí-Macaúbas glacial/gravitational sequence. From West to East, a glaciomarine sequence, possibly deposited near the front of an ice-sheet and slightly reworked by gravitational process, is reworked along the São Francisco cratonic border to generate a slope apron system made of diamictites associated with turbidites and rhythmites.