

GLACIAL DEPOSITS OF THE NEOPROTEROZOIC GLACIATION IN CENTRAL MINAS GERAIS, BRAZIL: FACIES DISTRIBUTION AND GENESIS

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A variety of different deposits of the Neoproterozoic glaciation, which affected large portions of central-eastern Brazil, are widely distributed in the Serra do Cabral area and vicinities. They are underlain by different formations of the Espinhaço Supergroup, among them the Galho do Miguel-, Santa Rita-, and Córrego dos Borges Formation. The contact between the glacial deposits and rocks of the Espinhaço Supergroup is marked by an important erosive unconformity, with unevenness of up to 200 m. Near Conselheiro Mata, at the western border of the Serra do Espinhaço, about 60 km to the south-east, glacial outwash sediments cover partly a dolomitic reef paleokarst of the uppermost Espinhaço sequence - The Rio Pardo Grande Formation. Several stratigraphic crosssections along 60 km in north-south direction were studied at the east border of the Serra do Cabral. Two main glaciogenic facies have been determined. At both extremities occur clast rich diamictites with a thickness of up to 250 m. They are geographically separated by a sequence of up to 150 m of white lutites, locally laminated. The thick diamictites were interpreted as string-like deposits of terminal moraines, formed during stages of ice retreat. The lutites represent probably lacustrine deposits, which sedimented between the mentioned string-like tills. Cross bedded fluvial sandstones cover both facies and represent the end of the glaciation.