

THE LOWER MARICÁ FORMATION OF THE NEOPROTEROZOIC CAMAQUÃ GROUP, RIO GRANDE DO SUL STATE, BRAZIL.

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The Maricá formation is the basal unit of the neoproterozoic Camaquã group of later Brazilides tectonics Camaquã basin. This unit outcrops in northwestern portion of the Gaúcho shield in the Rio Grande do Sul state covering the metamorphic rocks of the Rio Vacacaí terrane and transitionally covered by pyroclastic rocks of the middle Crespos formation. The basal succession of the Maricá formation (Passo da Promessa member) is composed by a braided alluvial system characterised by well rounded conglomeratic arkosic sandstones with medium trough cross stratification. The provenance analysis indicate that the source areas were composed by metamorphic rocks, granites and rhyolites. The paleocurrent data indicate an unimodal pattern of sedimentary transport with mean vector eastwards. This alluvial system is covered by a shallow marine succession (São Rafael member) composed by monotonous sandstones (locally siltstones) rhythmites deposited by density currents and minor sandstones with hummocky cross stratification. The facies analysis indicates quasi-cratonic tectonic depositional conditions for the Maricá formation and an important neoproterozoic transgressive event, marked by the passage from a braided alluvial system to storm dominated shallow marine deposits. After its evolution the basin evolved to rift-type volcanic conditions.