

THE QUATERNARY GEOLOGY OF THE SÃO JOÃO DE PIRABAS COASTAL PLAIN, NORTHEAST OF THE PARÁ STATE

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In the coastal plain of the São João de Pirabas occurs principally Tertiary and Quaternary deposits, where the distribution and the thickness were influenced by tectonic movements since the Miocene. This study involves a stratigraphical analysis of the NW region of the São João de Pirabas coastal plain what permitted the identification of 4 marine successions with different sedimentation patterns: (i) lower retrogradational marine succession, where it is possible to identify subtidal muddy sediments, old beach ridges, and sand tidal channels; (ii) marine progradational succession, characterized by shoreface sandy sediments; (iii) progradational succession, with tidal plain and cheniers associated and; (iv) recent retrogradational succession, constituted by dune-beach ridge and longitudinal sandy bars that migrate landward over the mangrove deposits. The evolution of this area is related to the sea level fluctuations responsible by development of the lower retrogradational succession, during the upper Pleistocene transgression. These successions have been developed from transgressive and regressive cycles, since 5,100 years B.P.