

Paleogeography of the Coastal Plain of the “São Francisco do Sul” Island, SC, Brazil

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The study of the coastal Quaternary geology of “São Francisco do Sul” Island, allowed to define the paleogeographic evolution of the island during the last 2MA, based on transgressives and regressives events of South Atlantic and paleoclimactic phenomenons.

Seven evolutive stages are suggested, subdivided in three interstages (coastal submergence); three stages (coastal emergence) and one, mixed, typical of progradation and retrogradation of the coastline. These stages are relative to next periods: (I) Maximum of the Pliocene Transgression; (II) Maximum of the Pliocene Regression; (III) Transgressions and regressions of the Lower and Medium Pleistocene; (IV) Maximum of the Upper Pleistocene Transgression; (V) Maximum of the Upper Pleistocene Regression; (VI) Maximum of the Holocene Transgression and (VII) Maximum of the Holocene Regression.

In “São Francisco do Sul” Island are evidenced the erosive and depositional consequences of the stages (IV) and e (V) of Pleistocene (MSL $\uparrow 8\pm 2\text{m}$, $\downarrow 100\text{-}105\text{m}$, between 120-18ka); and, (VI) and (VII) of Holocene (MSL $\uparrow 4.5\text{-}5\text{m}$, $\downarrow 0\text{m}$, between 18-5.1ka-present).

The lowering of the relative sea level proportionated the formation of the regressive beach ridges plains, marine terraces, littoral dunes, lagoonal and estuarines terraces. In these geomorphological features, are predominate the sandy sediments.

Until the end of the Stage (V), the “São Francisco do Sul” Island would remain united to the mainland through pleistocenic deposits and Crystalline Basement rocks. On the occasion of holocenic transgressions and regressions, the island was individualized. At this moment, “São Francisco do Sul” Island is separate of the continent through “Babitonga” Bay and “Linguado” Channel waters.