

Coastal Geology of the "São Francisco do Sul" Island, SC, Brazil

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"São Francisco do Sul" Island is located in Setentrional Littoral of the "Santa Catarina" State, Brazilian Southeast Coast, according to geographical coordinates 26° 18' 04" South latitude and 48° 36' 45" West longitude. Presents triangular shape, 560km² area, 35km length (N-S), 94km perimeter, 318m maximum altitude and 16km medium width.

The Coastal Plain is constituted dominantly by pleistocenic and holocenic deposits, comprehending marine, eolic, lagoonal, fluvio-lagoonal, estuarine e paludial environments. Between these deposits, outcrop rocks, associated to continental deposits (colluviums and alluviums) of the Undifferentiated Quaternary.

The predominant rocks of the Crystalline Basement include granites and gneisses, and secondarily schists, quartzites, anfibolites and migmatites. Are typical of the Catarinense Shield, of Pre-Cambrian aged, exposed in "Serra do Mar" and "Serras do Leste Catarinense",

The interperic process acting above pre-existent rocks, propiciated the development of thick elluvial soils, that originated the colluviums and alluviums of the continental depositional system, allied to hillsides of the Basement.

Associated to relative sea level changes of the South Atlantic during the Quaternary, outcrop the sediments of the littoral depositional system. Enclose the deposits: intertidal marine recovered by eolic and lagoonal, of pleistocenic and holocenic ages; and eolian, fluvio-lagoonal, paludial, estuarine and anthropogenic (shell-middens), of holocenic age. The granulometric analyses of 383 surface sediment samples, unveiled the predominance of fine sand among the majority of the deposits.