

Compartmentation of the Beaches of the “Santa Catarina” Island, SC, Brazil, according to Morphologic and Granulometric Aspects.

HORN FILHO, N.O.; OLIVEIRA, J.S. de. and LEAL, P.C.
Departamento de Geociências, Universidade Federal de Santa Catarina
– UFSC, PO. Box 476, Florianópolis, SC, Brazil, 88040-900.

“Santa Catarina” Island, one of the more exuberant landscapes of the Brazilian littoral, is located in its Southeast-South Coast, more specifically in the Central Sector of the “Santa Catarina” State (SC). Represents a typical coastal island, elongated NE-SW, dominated by a subtropical humid climate, under microtidal regime (<2m).

The littoral of the island is compartmented in six coasts, according to geomorphological aspects: (1) Southwest Coast (SW) (43.5km); (2) North Coast (N) (33km); (3) Northwest Coast (NW) (29km); (4) Northeast Coast (NE) (27.5km); (5) Southeast Coast (SE) (26.2km) and (6) South Coast (S) (15.1km).

Along of 174.3km total perimeter, exhibits the “Santa Catarina” Island, **117 sandy beaches**, essentially quartzose, distributed in 22 beach systems. The beaches present maximum and medium width of 90m and 14.93m; maximum and medium foreshore slopes of 12° and 6.9° and maximum and medium lengths of 11.250m and 752m, respectively.

In *SW Coast* are recognized 45 beaches, constituted by sandy sediments, fine to coarse grained, with medium width of 8.9m, average foreshore slope of 7° and medium length of 273m. The 21 beaches of *N Coast* are composed by fine sands, which width, declivity and length mediums are of 20.3m, 5.5° e 1.139m, respectively. The *NW Coast* exhibits 30 sandy beaches, medium to coarse grained; with median values of width, slope and length of 7.3m, 8.2° e 286m, respectively. In *NE Coast*, the 8 beaches present sands from medium/coarse to fine grained. The median width is 32.1m; the medium foreshore slope is 5.5° and the average length is 2.313m. The 8 beaches of the *SE Coast* show sandy sediments, medium to coarse; and width, declivity and length medians of 26.3m, 7.1° e 2.415m, respectively. In *S Coast*, the 5 beaches are sandy, fine, extends (average width of 37.6m), low foreshore slope (medium of 4.6°) and medium length of 1.180m.