

## **Evolution of the Coastal Plain of the "Brava-Amores" Beach System, SC, Southern Brazil.**

<sup>1</sup>AMIN JR., A.H.; <sup>2</sup>HORN FILHO, N.O. and <sup>1</sup>DIEHL, F.L. <sup>1</sup>Centro de Ciências Tecnológicas da Terra e do Mar, Universidade do Vale do Itajaí - UNIVALI, PO. Box 360, Itajaí, SC, Brazil, 88301-970; <sup>2</sup>Departamento de Geociências, Universidade Federal de Santa Catarina - UFSC, PO. Box 476, Florianópolis, SC, Brazil, 88040-900.

The "Brava-Amores" Beach System is located between municipalities of "Itajaí" (Northward) and "Camboriú" Balneary (Southward), "Santa Catarina" State. The extreme geographical coordinates of the studied area are 26°55'59" and 26°57'28" South latitudes and 48°35' and 48°40' West longitudes. The geology of the Coastal Plain is constituted by rocks of the Crystalline Basement and continental and transitional deposits of Quaternary age. Four geoevolutive stages were defined in the attempt of characterizing the paleogeography of the area. (I): Maximum Yarmoutian Transgression/Regression (<<120Ka); (II): Maximum Sangamonian Transgression/Regression (120-18Ka); (III): Maximum Flandrian Transgression (18-5.1Ka) and (IV) Holocene Regression (5.1Ka-present). During the *Stage I*, the sea level was situated above of the current, individualizing continental islands of the Crystalline Basement. On the occasion of the *Stage II*, were reworked and eroded the distal portions of the continental deposits (colluviums and alluvial fans) and rocks, dominantly schists. Later, during the regression period, was established the pleistocenic lagoon-barrier system, including beach-marine and lagoonal deposits. In *Stage III*, the sea level was relatively lower than the pleistocenic ones. The older deposits were total or partially eroded, resulting in the formation of cliffs, that delimit the pleistocenic from the holocenic deposits. During the regression of the *Stage IV*, were originated the more recent deposits of the Coastal Plain, comprehending eolian, lagoonal, fluvial, paludial and intertidal beach-marine sediments. These deposits represent the holocenic lagoon-barrier depositional system of the area.