

## **PISTON CORES FROM THE SE BRAZIL CONTINENTAL SLOPE**

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As part of a speculative natural-seep detection effort in lease areas of the Agência Nacional de Petróleo, 1000 twenty-foot long piston cores were recovered in deep waters of the Espírito Santo, Campos and Santos basins, Southeast Brazil. One hundred of these cores were described and dated in order to understand the patterns of regional sedimentation on the continental slope and adjacent salt basin.

In northern Campos basin, cores were mainly concentrated in the distal portions, in a morphology of plateaus, escarpments, linear ridges and associated basins related to salt tectonics. Pelagic and hemipelagic sediments composed of foraminifera oozes, marls and carbonate-rich muds dominate, turbidites of bioclastic composition and pelagic debris-flows, dating mainly of the Last Interglacial. In the southern Campos basin, the dominant lithologies are hemipelagic and debris-flows, derived from the slope environment, occurred across the Last Interglacial/ Glacial boundary.

In Santos, sediments were collected on the upper and middle slope and are overwhelmingly terrigenous, with ages rarely reaching the Last Interglacial. Laminated fine grained sand/silt packets are common and are believed to be bottom current induced.

In Espírito Santo, cores were recovered in deep waters off the Rio Doce mouth. Intense (74 flows/ meter of core) thin-bedded micaceous turbidites, characteristic of overbank deposits as well as debris-flows and slumps involving hemipelagic sediments are common in the Glacial Wisconsin section.