

## **PALEOGENE TECTONIC STRATIGRAPHIC DEPOSITIONAL SEQUENCES OF THE ESPIRITO SANTO BASIN**

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Four second order depositional sequences are recognized within the thick prograding marine Tertiary megasequence of the Espírito Santo Basin, Brazil. Studying spatial and temporal relationships it is possible to observe a close interaction between the genesis of these sequences, the relative fluctuations of sea level, and tectonic events in the Brazilian Atlantic margin occurred during the evolution of the basin. These Paleogene depositional sequences can be correlated with global sea level falls; also, spatial distribution and siliciclastic input were strongly controlled by tectonic events. Tectonic movements are of special importance and relevance as the Serra do Mar mountains uplift, the development of the Abrolhos regional volcanic events and salt tectonics. The Serra do Mar event apparently commenced at the Cretaceous to Paleocene boundary contributing with sediments for the Brazilian marginal basins, including the Espírito Santo area. The Abrolhos volcanoclastic event extended from late Cretaceous through late Eocene, influencing the geomorphology of the southeastern portion of the basin and controlling the distribution of sediments. The salt movement created many structures minibasins-like, salt domes and rafts that led to a morphological particular aspect and created restrictions to sand distribution.