

NEOTECTONICS IN THE BOCAINA RANGE, SOUTHEASTERN BRAZIL

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The landscape and geology of the Bocaina Range and neighbourhoods reveal the influence of Mesozoic-Cenozoic faults in the morphogenesis, sedimentation and deformation, as indicated by the nature and distribution of deposits, the tectonic features and geomorphologic compartmentation. These faults are related to two tectonic events: (i) the first of extensional regime, with stress axis s_1 vertical / s_2 NE / s_3 NW, active during the Paleogene, which developed the Resende and Volta Redonda basins and formed the residual deposits in the Paleogene; (ii) the second of strike-slip regime, with stress axis s_1 NW / s_2 vertical / s_3 NE, active since the Neogene, which imposed landscape rearrangement with general uplift and change of the local morphodynamics, identified by adjustments of the drainage net, captures and deflection of fluvial channels, block-tiltings, formation and/or reactivation of faults, and deformation of sediments. Two tectonic pulses are recognised for the second event: a first one with displacements of NE and ENE-trending right-hand strike-slip faults and ENE-EW and N-S normal faults during the Pliocene-Pleistocene; and a second one, in Pleistocene-Holocene, with movements along E-W strike-slip faults and NW and N-S normal faults. The present landscape and morphodynamics, and the deformation of Holocenic sediments, allow to refer the last pulse as current (active tectonics). The coincidence of the Cenozoic faults with Precambrian structures is seen as evidence of the strong control of ancient discontinuities or anisotropies on the Cenozoic geologic and geomorphologic evolution (resurgent tectonics). Financial support FAPESP (95/04417-3)