



Onshore fracture zones and their extension offshore in the South Atlantic: insights from geophysical anomalies and low-temperature thermochronology

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The south and southeast passive continental margin of Brazil and Namibia is a key-area to understand post-break-up processes of the South-Atlantic driven by endogen and exogen forces. Fault movement, rock and surface uplift, and subsidence and inversion of offshore basins are the surface expressions of lithospheric and mantle processes. Important for the understanding of the causes of the dynamic topography evolution along the passive continental margins of the South Atlantic are the evolution of NW-SE fault zones. These onshore fault zones are often reactivated shear and fault zones of Neoproterozoic age. They can be traced to fracture zones offshore. Therefore, their dynamic evolution is important for the understanding of the sedimentary basins offshore.

The integration of low-temperature thermochronology data, with topography, gravitational and aeromagnetic maps, and seismic reflection profiles allow to discuss the long-term exhumation history since Late Cretaceous – Paleocene time.