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Is the Eocene-Miocene stretching a regional or local Phenomon on both sides of the South Atlantic Margins? - Low Temperature Thermochronology in SE Brasil and Angola

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The tectonic history on both sides of the South Atlantic margins needs to be discussed considering the break-up of the Gondwana and his later reactivations. Geological and geomorphologic knowledge in on- and offshore regions of both side of the Atlantic Ocean must be considered. The literature describe a complex morphotectonic evolution with: i) Early Cretaceous tectonic, magmatism and exhumation processes related to the Gondwana break-up, around 130 Ma; ii) Late Cretaceous basement uplift and surface formation as a response of thermal anomaly induced by plumes; iii) Early Paleocene extensional tectonic causing uplift and erosion; and iv) Eocene to Miocene reactivation in NE-SW and NW-SE directions followed by exhumation and denudation. Related sedimentary basins are described in off- and onshore regions.
Apatite/zircon fission track and (U-Th-Sm)\He data on basement rocks and on Eocene sedimentary rocks (Taubaté Basin) south of Rio de Janeiro (Brazil), and along a E-W profile south of Luanda (Angola), provide correlations of the two counterparts.
In the Brazilian margin, all the over mentioned morphotectonic entities (i-iv) are recognized, in Angola the Eocene to Miocene reactivation is missing. Is that a local or regional effect related to heterogeneous block tectonics in both sides of the Atlantic margins.
The heterogeneous evolution on both sides of the South Atlantic margins may influence the sedimentation in on- and offshore basins with economic impact.

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