



## **Regional comparison of syn- and post-rift sequences in salt and salt-free basins offshore Brazil and Angola/Namibia, South Atlantic**

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The large South Atlantic basins offshore South America and Africa record a highly variable syn- to post-breakup tectono-stratigraphic development. The present-day diversity in the structural and sedimentary architecture of the conjugate margins offshore southern Brazil, Namibia and Angola reflects variations in the interplay of a number of controlling factors, of which the most important are i) the structural configuration of each margin segment at the time of break-up, ii) the post break-up geodynamic history including tectonics and magmatism, and iii) variations in the type, quantity and distribution of sediment input to the respective margin segment. Particularly the basins around the Rio Grande Rise - Walvis Ridge volcanic complex show a pronounced tectono-stratigraphic asymmetry both along the respective continental margin and across the Atlantic.

Only a few attempts exist to establish a regional tectono-stratigraphic correlation framework across the South Atlantic Ocean, mainly because of the lack of data across entire margin segments and limited resolution of basin wide geophysics. Still unresolved issues particularly concern the explanation of the basin-specific geological evolution of respective margin segments along the same continental margin, as well as the correlation of conjugate basins and margin segments across the Atlantic Ocean. In our study we present interpretations and first-pass restorations of regional 2D seismic-reflectivity data from the large basins offshore Brazil (Pelotas Basin, Santos Basin, Campos Basin, Espirito Santo Basin), and offshore Namibia and Angola (Walvis Basin, Namibe Basin, Benguela Basin, Kwanza Basin), which represent four adjacent pairs of conjugate basins on both sides of the South Atlantic. Results are used to document and compare on a basin-scale the contrasting styles of rift and post-rift settings during and after the continental breakup.