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Defining Frontier Petroleum Systems with Higher Granularity: Examples from Plate Reconstructions of the Atlantic Margins

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Abstract

Plate reconstruction software and plate models are evolving towards true restoration of pre-rift configurations rather than simple rotations-plus-translations of present-day maps. However, most models are defined from vector data (points, lines or polygons) that under-represent the resolution within newer global geophysical data coverages. These models are used to simulate paleo-environments that produced hydrocarbon source rocks but again, there is a general paucity of hard geochemical data to test models of source rock deposition and hydrocarbon generation. Our poster presents snapshots from an ongoing project that addresses both shortcomings with examples from the South Atlantic conjugate margins.