

Seychelles and the Western Indian Ocean Palaeo-Reconstruction by Recourse to Biomarker Assemblages from Significant Oil Accumulations and Shows in the Present Day Indian Ocean Margin

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In the same way that West African geochemical data derived from oil accumulations in coastal South America and conjugate West Africa were used to predict the likely Paleoenvironment of deposition on each side of the Atlantic was determined by recourse to stable isotope measurement and biomarker analysis using gas chromatography-mass spectrometry data, the more complex break up of Gondwana and the separation of East Africa, Seychelles and India can also be charted.

Oil samples and oil show extracts from the limited number of wells and the known seeps are used to help understand the multiphase break up of the East African margin, India and the Seychelles Microcontinent.

Geochemical data is presented with current plate tectonic reconstruction models to contribute to the understanding of the rifting sequences that were initiated during the Triassic that have resulted in the present day continental settings with seemingly contradictory oil geochemical signatures.