

## LATE PERMIAN OPENING OF THE NEOTETHYS IN OMAN

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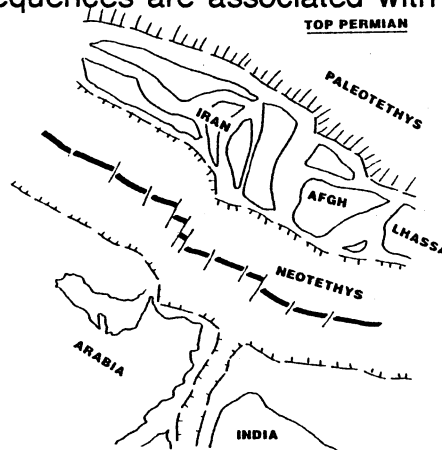
The geodynamic evolution of the Permian rift in Oman is marked by a mid Permian thermal uplift of the rift shoulders. Following erosion of the shoulders and their transgression in late Permian, an early stage of passive margin is initiated since that time. Different elements of this margins are now found in the autochton and the nappes, the oceanic elements being well exposed in the Oman exotics.

-The anterift series are represented by Infracambrian basement and their lower Paleozoic cover characterized by a pan-African unconformity and Gondwanian affinities.

-The synrift series start in J.Khamar in early Permian (Artinskian), the same limestone is found in Haushi and must predate the thermal uplift of the shoulder. In Sumeini the series consist of thick Permo-Triassic slope deposits. The late Permian transgression of the rift shoulder is well established in the Jebel Akhdar, where the platform carbonates are found directly on Infracambrian series.

- The oceanic series consist of various pelagic sediments. Locally the top part of the oceanic basement is represented by tholeiitic pillow lava, tuffites with radiolarites or calciturbidites and red nodular ammoid rich limestones with manganese coating of Wordian age. Locally large megabreccia sequences with late Permian platform limestone blocks are found and they are derived from the Exotics These Exotics consist mainly of late Permian perireefal limestones overlain abruptly by Hallstatt type early Triassic limestone, or of a late Triassic carbonate platform covered by middle Jurassic Ammonitico Rosso limestones. Both sequences are associated with Alkali-basalts and are interpreted as seamounts.

In conclusion we propose that a rifting phase affected the Gondwanian border in early Permian. It was followed by a mid Permian oceanisation process accompanied by the rift shoulder uplift and followed by sea-floor spreading since late Permian. Seamounts of transform fault type or hot spot type were emplaced mainly in late Permian and late Triassic.



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