The evolution of the Lansarine–Baouala salt canopy in the North African Cretaceous passive margin in Tunisia

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Abstract
Detailed geological mapping, dating, and gravimetric and seismic data are used to interpret the Lansarine–Baouala salt structure (North Tunisia) as a salt canopy emplaced during the Cretaceous Period. The extensional tectonic regime related to the Cretaceous continental margin offered at least two factors that encouraged buried Triassic salt to extrude onto the sea floor and flow downslope: (i) extension induced normal faults that provided routes to the surface, and led to the formation of submarine slopes along which salt could flow; (ii) this structural setting led to differential sedimentation and consequently differential loading as a mechanism for salt movement. The present 40-km-long Lansarine–Baouala salt structure with its unique mass of allochthonous Triassic salt at surface was fed from at least four stems. The salt structure is recognized as one of the few examples worldwide of a subaerial salt canopy due to the coalescence of submarine sheets of Triassic salt extruded in Cretaceous times.