MARINE MESSINIAN IN EASTERN TUNISIA

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Abstract
Deep dessication in Western Mediterranean has been proposed in 1973 by W.B.F.Ryan and al. Leg. 13 of Joides. Subsidence in Tunisia was proven in Eastern Tunisia both in Kerkennah Islands (La Mer Pélagienne, Geol.Med.t VI.1.1979) and Eastern Tunisia on land and off shore.
Keywords: Messinian, Salinity

In Eastern Tunisia, South of Sousse, outcrops of Marine Messinian are known near Zeramedine and Bou Merdas with fossils including Bryozoa, Oysters and microfauna. They overlay the Tortonian Somaa sands and are followed by the continental Segui Formation Off-shore, above the Somaa sand there is a marine unit called Melqart Formation with a few beds of limestone and a rich Messinian microfauna. In the upper part it begins to be lagoonish with gypsum layers and is named Oued Bel Kredim Formation. They are overlain by the marine Early Pliocene Raf-Raf shale. In North East Tunisia (Bizerte and Raf-Raf area) the post-orogenic molasse presents above the Kechabta Tortonian detritic unit, the Oued Bel Kredim Formation: open marine at base with Messinian microfauna, it becomes lagoonish in the upper part and presents some lacustrine limestone layers. It is overlain, with angular unconformity, by the Early Pliocene Raf-Raf shale. It is evident that the presence of open marine Messinian sediments excludes the presence of deep holes with dessication in the Western Mediterranean. On an other hand, a thick sequence of Salt is known. The western Mediterranean was a lagoon with concentration of halite. The hypothesis of a deep dessication was due to an erroneous tectonic interpretation. In fact, there has been a regular subsidence during and after the salt sedimentation: a present rate of subsidence of 1 or 2 millimeters by year is known in numerous places around the Mediterranean.

References
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