

## **The Jurassic Evolution of Guercif Basin Reconstructed from Seismic Line Interpretation**

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The Guercif Basin is a depression of the African margin of Théthys, made of Jurassic grounds filled by a discordantly tertiary series. It is included in the Taza-Oujda corridor and is located in the prolongation towards the North-East of the Middle Atlas and the High Plateaux. The phases and the tectonic evolution recognized in the Middle Atlas, also exist in the Guercif basin, because the structures of this last are septentrional prolongations of those of the Middle Atlas. The present study is based on the interpretation of 8 seismic lines 03 ML (300 km) acquired by the ONHYM in 2003, like some several old lines to show the structural evolution of this basin during the Jurassic and consist to prove that this basin is the result of two compressional events: Atlasic and Alpine. Opening and filling of the basin preceded each event. The atlasic phase: Started in the Cretaceous and show folds of direction ranging between N30 and N50 (atlasic direction). The anticlines are often tight and faulted and the synclinal broad and at flat bottom. The directions attributed to this event are NE-SW and N-S.

The alpine phase: Started in the Miocene with two directions NW-SE and E-W. The structures of this system line a succession of concentric arcs with convexity towards the South. The folds are of cased style, regular; the anticlines and the synclinal have comparable dimensions.

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