

Structural relation between the High and the Middle Atlas Mountains (Morocco) During the Jurassic-Cretaceous Transition

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A geological map (1/50.000) of a key-region of the Northwest border of the Atlas Ranges of Morocco has been realized by using observation and measurement data from the field as well as remote sensing data and the rare already existing cartographic works. The region of Aghbala-Naour is situated at the articulation of The Middle and High Atlas and the Haute Moulouya plane. In comparison with the Beni Mellal region in the Southwest, it enables the discussion of the sedimentologic and tectonic evolution of the western slope of the Atlas ranges.

After the permo-triassic red-bed sedimentation, which covered the whole region and presented a typical rifting state of an intracontinental basin, marine transgressions introduced the differentiated distribution of sedimentary basins, as the High and Middle Atlas troughs. Complexes transtensional systems of extension and local compression movements since the Lower and Middle Jurassic dominated the sedimentation during Mesozoic times. The transition from a Tethys supported sedimentation to an Atlantic regime is recorded in the Upper Jurassic and Lower Cretaceous mostly red bed sediments.