



The Eocene-Miocene tectonic evolution of the Rif chain (Morocco): new data from the Jebha area

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The Jebha area, located in the Central Rif, is a key sector to understand the orogenic evolution of the Rif chain. Here, the left lateral Jebha-Chrafate transfer fault, allowed, in the Miocene time, the westward migration of the internal thrust front. The structural analysis of the area revealed a complex tectonic history. The Eocene orogenic pulse produced the tectonic stacking of the Ghomaride thrust sheets. During the late Aquitanian and Langhian, under a dominant ENE-WSW shortening, imbrication of several Internal Dorsale Calcaire slices occurred. The following orogenic stage, characterized by a main SE tectonic transport, allowed the External Dorsale Calcaire to overthrust the Maghrebien Flysch Basin Units by means of a dominant thin-skinned tectonics. Synchronously with the buttressing following the collision of the allochthonous wedge against the External Rif domain, an out-of-sequence thrusting stage involved the Ghomaride and Dorsale Calcaire Units and a general back-thrusting deformed the entire tectonic pile. A renewal of the NE-SW shortening produced strike-slip faults and SW-verging folds and finally a radial extension affected the whole chain.