



Post Cretaceous tectonic evolution of the intraplate “Serouanout Basin” (Hoggar Shield, Algeria)

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The Serouanout cretaceous sedimentary “basin” which belongs largely to the central part of the Hoggar basement swell (south Algeria) is considered to be tectonically stable during the last 60 Ma. This poorly documented basin is whatsoever one of the largest post-orogenic sedimentary district recovering the Panafrican and Precambrian province in the Hoggar swell.

The study of these cretaceous continental deposits and their deformation can give important clues to understand the recent uplift of the Hoggar swell.

In the Serouanout area, well exposed cretaceous sediments favor tectonic investigations. Field tectonic observations, measurements and analysis provide a reference frame and chronological data for “neo-tectonic” structural evolution. Indeed, the studied area is characterized by post late cretaceous folds, thrust or reverse fault and strike slip.

We interpret these observations as evidence of significant Tertiary tectonic activity triggered by the North South convergence between Eurasia and Africa plates and subsequent Alpine deformation.