Tectonic analysis of South Setifian domain and its neighboors area (Eastern Algeria)

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The presenct study focuses on area located at the southern fringe of external zones of eastern Algeria alpine belt, situated on the Aures meridian (Batna), in this area, fracturing is well developed, although, vegetal cover masks often structural and geological informations. This study aims to enhance the identification of major accidents and their associated geological structure in order to facilate mapping by using Landsat satellite images and SRTM DEMs . Structural analysis undertaken in this work have permitted to get new results specifying or modifying the results obtained by our prodecessors, we can distinguish two types of folds: faulted-folds, in the northern part of the study area and propagation folds in the southern area, all anticlines associated to overlapps are verging south and we can not extend them to tangential tectogensis.

The validation of these resultas was made on the basis of existing geological maps and photogeology and field knowledge.

KEYWORDS: Algeria, Landsat, satellite images, SRTM DEMs, structural analysis, folds.