



Blocks rotations revealed by paleomagnetic investigations: Transpressive tectonics along a major E–W crustal structure on the northern Algeria

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A paleomagnetic study was conducted on volcanic rocks of Miocene age outcropping on the northern border of the seismogenic Neogene Chelif basin in northern Algeria. The results evidenced that several tectonic blocks underwent clockwise rotations within a narrow E-W area. The magnitude of these dextral rotations is often important and of different strengths according to the studied sites. This E-W area corresponds to a major structure suggested by geophysical data. It is comparable with that previously evidenced on the southern side of the same basin. The present paleomagnetic results therefore agree with a model of relative convergence motion between the Africa and Eurasia plates yielding a transpressional tectonic deformation with block rotations within the African continental margin.