



Evidence of Post Cenozoic Tectonics in the Hoggar Shield (South Algeria)

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The “Atakor” massif belongs to the central part of the Hoggar basement swell, South Algeria, which is thought to be tectonically stable since the panafrican orogeny. This area is whatsoever one of the largest volcanic districts of Hoggar province: The Mio-Pliocene lava flows and domes within this massif were emitted along inherited lithosphere-scale fault zones probably linked to the so-called “Oued Amdad” lineament (shear zone). Several studies suggest that the volcanic episodes were triggered by tectonic activity along major fault zones in relation to the Alpine orogeny and Africa-Eurasia plate convergence. However, the occurrence of such recent tectonic events still needs to be demonstrated. A fluvial and lacustrine deposit, called ‘Tirhitine formation’, probably Cretaceous in age, outcrops within the “Atakor” massif at 2000 m altitude. Recent field analysis of this formation shows an extensive and well preserved network of normal faults which affects both the sedimentary series and the more recent volcanic rocks. We interpret this observation as an evidence of the tertiary tectonic activity of this region that may have triggered the volcanic events.