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The Laalam (Bejaia, North-East Algeria) moderate earthquake (Mw= 5.3) on March 20^{th}, 2006. Macroseismic effects, Seismology and Seismotectonic implications.

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On March 20^{th}, 2006, a moderate-magnitude earthquake of Mw 5.3 hit the region of the Babors chain, in the Alpine Tell Atlas (Wilaya of Bejaïa, Northeast Algeria). The epicentre was located 70 km south-east of Bejaïa, the second most important city in the Kabylian region. It was felt in a great area (radius of 100 km), covering a large part of north-eastern Algeria. The most important damages were observed at the Laâlam village, where some buildings and private houses where severely affected or totally collapsed, causing four died persons and 68 injured. These damages were due to a landslide triggered by the earthquake. Besides, rock falls have been observed throughout this mountainous region. The maximum observed intensity I_0 was estimated to VII (EMS-98 scale). According to the focal mechanism solutions and the spatial distribution of aftershocks, the main shock was reliably generated by a sinistral strike-slip fault trending NW-SE, independent from the Kherrata fault. Analysis of aftershocks distribution shows also the existence of two other trends: NW-SE and E-W. The compressive component $\sigma 1$ is oriented N143. This is in agreement with the direction of convergence between Eurasia and Africa.