

Nat. Hazards Earth Syst. Sci. Discuss., author comment AC2
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Reply on RC2

Tayeb Smail et al.

Author comment on "Earthquake-induced landslide monitoring and survey by means of InSAR" by Tayeb Smail et al., Nat. Hazards Earth Syst. Sci. Discuss.,
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Block	Referee's comments	Authors' replies and comments
I	<p>The paper "Earthquake-induced landslides monitoring and survey by means of InSAR" presents the results of the application of SAR images and different techniques for the assessment and the definition of landslides triggered by earthquake in the Mila regions (Algeria). The paper does not present relevant and particular novelties, relying on standard and very widely implemented applications such as Interferometric techniques (although with a newly developed algorithm such as LiCSBAS) and Coherence change detection; moreover, optical imagery were used to validate the results, however only through visual interpretation of pre-and post-event imagery. Moreover, the structure of the paper is not very clear and needs to be intensely revised.</p>	<p>As stated in the previous discussion, the authors will thoroughly revise the paper if the Editors requests it. Obviously, the revised paper will incorporate all of the comments and suggestions made by the referees and standard readers.</p>

II Also, the authors should indicate which is the novelty of their work and how these standard approaches used are improved (if so). To strengthen the results obtained, the authors should consider also to use other SAR-based techniques, as amplitude analysis or pixel-offset techniques.

In this case, the use of the pixel-offset technique is limited due to the incoherent arechange of the ground.

III Hereon, a list of detailed revisions to be addressed, in my opinion:

By disorder, we mean any ground changes. Yes, there was geomorphological evidence in the area (see Figures 2 and 20).

The abstract needs to be revised in some points: what does exactly means disorder (in line 18 and 19)? Is there any geomorphological evidence? Please, use correct terminology to define these elements.

IV In line 21, please mention the exact number of interferograms used for the research.

As shown in table 2, 224 interferograms were used to perform time series analysis with LiCSBAS. We will add it in the sentence.

V Line 23: is it real subsidence displacement or it is a deformation induced by landslide activity? please, specify and clarify it.

VI

