

Interactive comment on “Failure modes of loose landslide deposits in 2008 Wenchuan earthquake area in China” by J. Gan and Y. X. Zhang

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Received and published: 2 August 2019

Explanation of the Revision

Dear Editors and Reviewers: Thank you to tell me Anonymous Referee#2's valuable advice from public review and discussion. According to the opinions and suggestions of the reviewer, the main proceedings as flowing:

Response to comment: 1) Were all deposits formed by pre-existing landslide phenomena or by other erosional processes. In the first case, landslide processes will be of reactivation type only. Response: Based on the all deposits formed by pre-existing landslide phenomena or other erosional processes, in the first case, the "4.1.1 Reactivation of old landslide" has been changed to "4.1.1 Rotational of the loose deposit".

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Response to comment: 2) Landslide and erosional processes are wrongly mixed and, in some cases, linked to the same classification (e.g. Cruden & Varnes, 1996). Response: Sliding and erosion are classified according to Cruden & Varnes' classification in 1996. E.g. "4.1.4 Integral sliding" in the original text is changed to "4.1.4 Translational slide"; and "4.3.1 scouring and lateral erosion" has been changed to "4.3.1 Sheet erosion" and the "4.3.2 Steam bank erosion" changed to "Gully erosion"; and "4.4.1 debris avalanche" has been changed to "4.4.1 rock avalanche," all the modification have already amended the corresponding contents of the article.

Response to comment: 3) Being the Wenchuan area no figure regarding isoseismal map or historical distribution of earthquakes is shown. Response: The isoseismal map has been added in Fig.2.

Response to comment: 4) Geotechnical data is declared to have been used but any elaboration of it, even simple, was not shown. Moreover, the most important literature concerning landslide classification has not been clearly applied to analyze and interpret mechanisms of phenomena studied or not well considered (e.g. Hungr et al., 2001 regards the flow-like landslide only). Response: 4) limited to the number of words in the article, the geotechnical data has not been included, and the relevant content has been deleted. The other types of landslides provided by Hungr et al. 2001 were not included due to the purpose of this study is to develop a classification method of post-earthquake loose deposit, We will conduct further research in the future.;

Kind regards.

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Please also note the supplement to this comment:

<https://www.nat-hazards-earth-syst-sci-discuss.net/nhess-2019-25/nhess-2019-25-SC2-supplement.zip>

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