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

Anonymous Referee #2

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The manuscript deals with a potentially very interesting topic regarding mass wasting processes involving loose deposits of the earthquake-prone Wenchuan area (China) which, also due to geological features, mountainous morphology and intense rainfall regime, is a geomorphologically active area, as it is clearly testified by various land-slide and erosion phenomena occurring in it. Notwithstanding the general interesting topic, the scientific quality of the manuscript is poor due to the complete lack of a clear scientific focus, if not novel. In fact, seeming the main focus being addressed to the creation of a new classification for failures modes of loose landslide deposits, the following weakness points are critical: 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. 2) Landslide and erosional processes are wrongly mixed

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and, in some cases, linked to the same classification (e.g. Cruden & Varnes, 1996). 3) Being the Wenchuan area no figure regarding isoseismal map or historical distribution of earthquakes is shown. 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). According to these major observations, and not considering specific comments concerning several inconsistencies throughout the text, this Reviewer considers the manuscript far beyond the acceptance limit of NHESS journal.

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