

Interactive comment on “Brief communication: Post-seismic landslides, the tough lesson of a catastrophe” by Qiang Xu et al.

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Received and published: 21 November 2017

The manuscript by Xu et al., in the case of 2017 Xinmo landslide, aims to layout the logistics of how such a dynamic early warning system is possible and should be established in the region with strong seismicity. I think that the subject is relevant to publication in NHESS, especially for format of “Brief communication”, but there are several places where I think a bit more explanation and minor revision are needed. More detailed comments are listed below.

Lines 100-111: “tens of meters of interconnected cracks in the landslide area”, please specify the size of this precursor cracks and don’t simply refer tens of meters.

Lines 126-127: “for instance through ground-based SAR, ambient noise recordings

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and acoustic sensors”, please add the references and paragraph on the description of “ambient noise recordings” and “acoustic sensors” for non-specialists.

Lines 134-136: Chen et al. (2013) also presented the characteristics of high-frequency seismic signals related to the different mass movements (e.g., rockfall, rock slide). Please also add a reference of Chen et al. (2013).

Chen, C. H., W. A. Chao, Y. M. Wu, L. Zhao, Y. G. Chen, W. Y. Ho, T. L. Lin, K. H. Kuo and R. M. Zhang (2013) A Seismological Study of Landquakes Using a Real-Time Broadband Seismic Network. *Geophys. J. Int.*, 194, 885-898.

Line 140: typo error “thee”.

Lines 140-144: Please replace “energy released” by “potential energy released”. Did you compute aforementioned values (runout distance, drop height, sliding velocity, energy release and collapse volume) by yourself? If not, you should add the references and/or the mathematic expressions to clarify above parameters, which relates to source kinematics. You show the potential energy released during the landslide to be 290 TJ. Do you think this is a realistic value for landslides? Please also compare your results with published studies. The reader may want to find explored by the authors.

Lines 143-145: “. . .within seconds from. . .”. In fact, the computing time depends mainly on the length of seismic waveforms used in the source determination. In a case of seismic waveform inversion (long-period seismic signals), a few minutes (> 100 sec) of data length is needed for an inversion scheme. Please replace “seconds” by “a few minutes”.

Interactive comment on *Nat. Hazards Earth Syst. Sci. Discuss.*, <https://doi.org/10.5194/nhess-2017-363>, 2017.

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