

Interactive comment on “An improved method of Newmark analysis for mapping hazards of coseismic landslides” by Mingdong Zang et al.

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Thanks very much for your nice comment. And we deeply appreciate your time devoted by reviewing our manuscript. Your constructive comments are invaluable to the improvement of our manuscript.

Q1: The English writing should be improved. We suggest to be polished by a native English speaker. R1: Yes, we have polished the manuscript with the help of a native English speaker.

Q2: The geological map of Ludian earthquake should be added in Fig.1 including tectonic setting and the distribution of the faults. R2: Yes, we have added a geologic map of the study area showing the distribution of lithology and faults, see Line 83 in

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the revision.

Q3: About introducing the CF method, I suggest to fit the Weibull curve as Jibson et al. (2000). R3: Yes, we have modified Weibull function form developed by Jaeger and Cook (1969) to $CF=2m[1-\exp(-aD^b)]^{-1}$, where CF is the certainty factor, m is the maximum CF-value represented by the data, D is predicated displacement, and a and b are regression constants. The CF-value of Newmark displacement was plotted as a dot. The regression curve based on data from the Ludian earthquake is $CF=1.837[1-\exp(-0.073D^{0.821})]^{-1}$. With this function, we could obtain hazard estimates different from the one used in the present study through following the same procedure described here. Changes were made in the revision, see Line 280-298.

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