No.	The comments	Our responses
1	The topic of this MS is related to landslides induced by earthquake, which is suitable for publication in NHESS. In the MS, an improved model based on the Newmark method is introduced by authors, it should be noticed that joints in rock mass are considered in the improved model, which probably makes the model more reasonable, maybe is more suitable for evaluating the shallow landslides. However, the contents including analysis and figures in the MS does not convince me of the advantages of improved model. I'm afraid more work is needed. Here are some specific comments you're your reference only.	We appreciate your valuable comments and suggestions. We have incorporated them in the revision as documented below.
Specific comments		
1	I would like to hope the authors to modify abstract to highlight the improved model and its evaluated results.	Thanks for this good suggestion. Yes, changes were made in the revision, see Line 18-32.
2	The results of the improved model need to be compared with the results of the original model to verify the improved effect of the model. The authors need to add some contents to compare.	Thanks for this good suggestion. Yes, changes were made in the revision, see Line 347-360.
3	For shake map (line185-196, also figure 12). This map is very different from that presented by China earthquake administration. Please make clear the source of the strong motion data. If you get the raw data, please let me know how to deal with it. Also please list the information including PGA data, position, soil or rock base of these 23 stations. If you refereed it,	Thanks for this suggestion. The data set is provided by China Earthquake Data Center. Each station record includes three components of the peak ground acceleration (PGA), in south-north direction, east-west direction and up-down direction respectively. We calculated the average PGA of the two horizontal components of each strong-motion recording, and then plotted a contour map. The

	please add the corresponding paper in the suitable position.	position of the 23 stations is shown in Fig. 12 in the revision, see Line 602-603, and the PGA data is listed in Table 2 in the revision, see Line 644-645.
4	For empirical estimation of Newmark displacement (line197-214). Some new empirical models suitable for the south-west region of China have been developed (such as paper in BSSA, 2018).	Thanks for this kind remind. The empirical model (Rathje and Saygili, 2009) we chose in this paper is carried out by the biggest dataset around the world till now. We would like to try some new empirical models and have a comparison in our further work.
5	For Figure 14, please enlarge the compare part of the figure to make the positions of landslides more clear. Otherwise, from the current comparison, we can't see what the comparison results are. More important, it seems this improved method overestimates the severity of the landslide hazards, although the mapped landslides induced by the Ludian earthquake based on images are almost in the area with over 0.6 CF.	Thanks for this good suggestion. Yes, changes were made in the revision, see Line 612-614. Shear strengths assigned to the geologic units were from results of hundreds of shear tests from the references. We assigned the original shear strengths to the geologic units other than increasing strengths to make statically unstable cells stable as Jibson et al. (1998, 200) did, which will change the statically stable level of the whole area, especially the slopes on the boundary at first. In addition, we considered size effect of the potential slide surface, this would yield lower F_S, which, in turn, yield higher displacement. However, the actual inventory of landslides was used to calibrate the predicted displacements, and the confidence levels indicated by certainty factors fit well of the spatial distribution of coseismic landslides as shown in the hazard map (Fig. 16), changes were made in the revision, see Line 336-346. On the other hand, for some steepest slopes (usually more than 60°), the shear resistance between the block and the sliding surface does not work anymore in Newmark's sliding block model. No block can stay on that steep sliding surface, and the calculated FS will be nearly zero in this case.

		Therefore, we assigned an angle (α) that the complementary of 45°-$\frac{\phi_b}{2}$ to those slopes more than 60° to avoid a too low FS from Newmark analysis in the revision, see Line 168-176.
Finally, we deeply appreciate the time devoted by the reviewer to the review process. Your constructive comments are invaluable to the improvement of our manuscript.		