

Interactive comment on “An evaluation of influential factors on landslide mobility during the 2008 Wenchuan earthquake” by D. P. Guo et al.

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Dear Dr. Xu, Thank you very much for your kind comments. I will reply one by one, as follows (C=Comment, R=Reply) C=(1) In the northeast part of the earthquake struck area, co-seismic landslides, especial the largest landslides, such as the Donghekou landslide and the Woqian landslide triggered by the earthquake often occurred along the northeast section of the Yingxiu-Beichuan fault. However, in the Figure 1 of the paper, there was an obvious gap between the landslides distribution area and the co-seismic surface rupture area. Why? I suggest the author check the Figure 1 carefully. R= In line 21~24, it defined what kind of landslides have been used to analyze, as follows: “In this paper, collected landslides travelled over a relatively open slope or

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partly confined by lateral gentle slope, it is means that those landslides were excluded, which was obstructed by river, valley and relatively large infrastructures or confined by lateral steep slope or travelled over a large deflection path.” Donghekou and Woqian landslides travelled along a large deflection path, so they are not collected. As the same reason, lots of landslides along the northeast section of the Yingxiu-Beichuan fault have been excluded. All of the landslides were located by longitude and latitude. C=(2) The reference of “Xu, C., Xu, X. W., Yao, X., and Dai, F. C.: Three (nearly) complete inventories of landslides triggered by the 12 May 2008 Wenchuan Mw 7.9 earthquake of China and their spatial distribution statistical analysis, Landslides, doi:10.1007/s10346-013-0404-6, 2013b.” should be “Three (nearly) complete inventories of landslides triggered by the May 12, 2008 Wenchuan Mw 7.9 earthquake of China and their spatial distribution statistical analysis” R= the reference has been revised in attached PDF (supplement PDF) C= (3) Does “Xu and Xu, 2012” should be “Xu, C., Xu, X.W. Comment on “Spatial distribution analysis of landslides triggered by 2008.5. 12 Wenchuan Earthquake, China” by Shengwen Qi, Qiang Xu, Hengxing Lan, Bing Zhang, Jianyou Liu [Engineering Geology 116 (2010) 95–108]. Engineering Geology, 2012, 133-134: 40-42.” ? R=the reference has been added. C=(4) “Fan and Qiao, 2010” in the main text but I can not find it in the reference list? R=the reference has been added. C= (5) In addition, I suggest the authors check the paper carefully once more to avoid some mistakes. R=The paper has been carefully checked, some part has been revised and noted in the manuscript as attached PDF (supplement PDF).

Please also note the supplement to this comment:

<http://www.nat-hazards-earth-syst-sci-discuss.net/2/C183/2014/nhessd-2-C183-2014-supplement.pdf>

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