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1, C2179-C2180, 2014

Interactive Comment

## Interactive comment on "Ejection mechanism of the Donghekou landslide triggered by the 2008 Wenchuan Earthquake revealed by discrete element modeling" by R.-M. Yuan et al.

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Dear editor, I read this manuscript that can be considered of very high quality. I have just a very few annotations :

7669L17 : not 'rock slope susceptibility to earthquakes' but ... 'rock slope failure due to seismic shaking'. 7669L19 : ... and to define trigger mechanisms 7670L19 : ... towards ...

Fig 9. The site before the earthquake is hidden by clouds. Therefore, figure 9b could be dropped and fig9a could be enlarged.





However, I have a comment on the title ...and the systematic use of the word 'ejection': Actually, I think that the word 'ejection' could be misleading. The reader could expect that the seismic shaking ejected the rocks – but this is not the case (and physically not possible): the seismic shaking initiated sliding in the upper part. And then, rather than being ejected, the rock mass jumped over some distance due to the specific imposed geometry of the sliding surface (a strong change between slope angle and dip of the sliding surface) – that acts as a spring board for the sliding mass. So, maybe a word like 'jumping' would better characterize the sliding mechanism.

sincerely Hans-Balder Havenith

Interactive comment on Nat. Hazards Earth Syst. Sci. Discuss., 1, 7667, 2013.

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