

Interactive comment on “Spatial prediction of earthquake-induced landslide probability” by Robert N. Parker et al.

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GENERAL COMMENTS

The paper by Parker et al., attempt at building and validating an empirical model of earthquake-induced landslide probability. The novelty and significance of the work comes from 3 important aspects:

- 1/ a very parsimonious model, only including essential widely available parameters : Shakemaps PGA and local slope gradient.
- 2/ the calibration and validation of the model with a relatively large number of earthquakes (9) in different context.

C1

3/ A proposed method to obtain absolute probability and not only relative as is often the case in other studies (Nowicki et al. 2014, Kritikos et al., 2015)

The paper is interesting, clearly written and as the potential to make a good contribution in NHESS. However I highlight below some concern about the method to account for censored landslides and thus obtain absolute probability. I also think the validation section could be a bit enlarged with some discussion about the spatial accuracy of the probability map.

My Specific and Line by Line comments are in the attached PDF.

Please also note the supplement to this comment:

<https://www.nat-hazards-earth-syst-sci-discuss.net/nhess-2017-193/nhess-2017-193-RC1-supplement.pdf>

Interactive comment on Nat. Hazards Earth Syst. Sci. Discuss., <https://doi.org/10.5194/nhess-2017-193>, 2017.

C2