Natural Hazards
and Earth System
Sciences

Discussions

Interactive comment on "Global detection of rainfall triggered landslide clusters" *by* Susanne A. Benz and Philipp Blum

Anonymous Referee #1

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The submitted paper deals with the identification of clusters in the Global Landslide Catalogue (GLC) in relation to individual rainfall events extracted from CHIRPS precipitation data. It is therefore also related to the investigation of biasing effects in small-scale (global) landslide catalogues that are not compiled through landslides inventorying but rather based on media or governmental reports. In this respect, the paper is timely, interesting and well suited to NHESS. The presentation is clearly structured and the language of the article is fluent, the Figures are of good quality. The clustering algorithm proposed by the authors to relate reported landslides to individual rainfall events is interesting and may be worth to be published. However, the validity of the constraints of the clustering algorithm is not discussed in detail by the authors. In this respect, a sensitivity analysis is missing in such that different time span thresholds in precipitation

may be tested in order to investigate the behavior of the identified clusters. Also, the effect of different values for the spearman coefficient to discriminate clusters may be investigated. Another issue is that the only constraint applied for landslide clustering is precipitation. Environmental information like e.g. climatic setting, subsoil lithology or relief parameters are not introduced into the clustering algorithm and the effect of introducing those is not investigated or discussed.

Interactive comment on Nat. Hazards Earth Syst. Sci. Discuss., https://doi.org/10.5194/nhess-2018-391, 2019.