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Interactive comment

## Interactive comment on "Geologic and geomorphic controls on rockfall hazard: how well do past rockfalls predict future distributions?" by Josh Borella et al.

## **Alexander Preh (Referee)**

alexander.preh@tuwien.ac.at

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This manuscript represents an important contribution to the development of methods for predicting rockfall based on previous (historical) events. The effort involved in the field work and in the preparation of the data is remarkable and without doubt worthy of publication. The fact that there are minor overlaps in content with previous publications has already been noted by the reviewer Mergili.

The conclusions contain clear statements about the possibilities and the quality of the prediction of pre-CES and CES rockfall runout using the shadow angle method (Statement of the authors: The shadow angle method is a reliable predictor). However, there

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is no clear statement on how far and in what form the analyses using numerical model RAMMS can be used for predicting of future events. e.g.: Can the Ramms\_3 model be used to develop a hazard map? How far is Ramms\_3 verified by the models Ramms\_2 and Ramms\_1? Or is the usefulness of the model calculations limited to the recognition of the effect of deforestation? The authors should supplement the conclusions in this respect, since chapter 5.8 does not contain any specific statements on model calculations either.

In Figures 9c and d, the regression lines are hardly recognizable due to the thick data points. Therefore, it is hardly recognizable to what extent CES and pre-CES differ from each other. This should be corrected.

with kind regrads, Alexander Preh

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