

## ***Interactive comment on “Assessment of rockfall hazard on the steep-high slopes: Ermenek (Karaman, Turkey)” by Hidayet Taga and Kivanç Zorlu***

**Anonymous Referee #1**

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This paper presents a case study of rockfall analysis. The content of the paper should be considered as a technical report for a given case study not as a research paper. The authors did not succeed in exposing novel modelling techniques, field investigations, or hazard zonation and management techniques. For that reason, I do not recommend publication of the paper despite it is a rather well presented case study done following rather state of the art techniques

Specific comments: 1) From line 146 to line 199, detailed field investigations are done by authors using “state of the art” techniques. These investigations may be interesting. However, in the context of the study, they are only used to determine the location of the potential release zone. I have the feeling that was not worth doing such detailed

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investigations. The authors should absolutely clarify the aim of these investigations. 2) The rockfall analysis presented is very classical. The modelling approach used is based on 2D numerical classical models. The values of the different parameters of the model used are generally not well justified. In particular, the authors use restitution coefficients calibrated from back-analysis that is not detailed at all (what was the experimental or survey protocol? is it relevant for all materials, rock size, topographical configurations . . .?). 3) The results from the rockfall analysis are used to build a hazard map considering “maximum runout distance”. The methodology for the building of the hazard map from the simulation results is not detailed and seems to be very rough (what does the maximum runout distance mean? why not combining rock energy with passing frequency? how do the authors used results along profiles to build a 3D map?) 4) The results from the analysis are also used to derive recommendations. The authors state that the hazard level is too high for protection measures to be efficient. This conclusion is not proven and not discussed.

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