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Natural Hazards and Earth System Sciences
Discussions

Interactive comment on "Quantitative spatial analysis of rockfalls from road inventories: a combined statistical and physical susceptibility model" *by* M. Böhme et al.

M. Böhme et al.

martina.bohme@ngu.no

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We thank Andrée Blais-Stevens for her review and comments that will help to improve the quality of the paper. All the technical corrections suggested will be integrated into the final manuscript version. Please find some more detailed replies to the reviewers general comments below:

General comment 1: The relation in between posterior probability and susceptibility is described in section 3.1 within the description of the Weigths-of-Evidence method. However, we can add a comment about this to chapter 7 and Figure 6 to make it more

clear.

General comment 2: We think that this method is so often used and additionally not of major importance for the results of this paper, so that we decided to not present it in detail and just use the results within the discussion.

General comment 3: The main characteristics of the method for the physical susceptibility map are briefly described in chapter 3.3. However, we did not go into detail here since the method is already published in detail by Loye et al. (2009).

General comment 4: This is not requested by the journal and there are different ways used in literature.

General comment 5: Yes, we agree with this and this will be changed.

General comment 6: Yes, we agree with this and this could be done.

General comment 7: Regarding the geological map: We can add more about this to the discussion. However, we think that this is not so important since we anyway do not use the original geological map, but a regrouping of it, which makes it even more general. This would be the same for a more detailed map. The influence of possible inaccurate geological borders has been tested and was found to have no influence on the results. Regarding problems with DEM: This is mentioned in the results chapter 6.5. Model evaluation: We can add some comments for this on the discussion. regarding prior vs. posterior probability: We can clarify this in the text.

General comment 8: We agree with those comments and it will be changed.

General comment 9: The size of the figures is a problem with the discussion paper format. The originally submitted pdf-file, which I prepared after the defined format from NHESS, has larger figures.

Interactive comment on Nat. Hazards Earth Syst. Sci. Discuss., 2, 81, 2014.