Firstly, we'd like to thank the reviewer for the very constructive review. In the following, we respond in detail to each comment.

R.C.: Comment on chapter 1.1: What are the exact shortcomings of the mentioned methods? This point is not clear to me? The presentation of advantages of the proposed model in comparison to other methods has to be improved.

AC: We will extend the shortcomings of existing methods in section 1.1. Beside the already mentioned limited application to extreme avalanches due to the often low DTM resolutions we will add the following limitations:

- Terrain is smoothed out with increasing snow accumulation which can change potential size and location of avalanche release areas. However, the influence of snow depth on terrain morphology is not taken into account by existing methods.
- Release area locations often vary depending on wind directions and its corresponding loading patterns. However, existing applications do not account for varying accumulation patterns due to variable wind/ storm directions.

Further, we will extend the last paragraph of the introduction to details the novelty of the algorithm (c.f. response to Referee One).

RC: Figures: Figure 8: the topographic maps are too small. Labels can't be read.

AC: These are raster basemap data which we can't modify. We will create new topographic maps showing terrain, forest, and important features (e.g. villages, roads and cliffs) with legible labels.

RC: North arrows for maps facing north is not necessary from a cartographic viewpoint. Just use north arrows for maps not facing north! Change the colour of the avalanche perimeter.

AC: We will remove the north arrows and change the colour of the avalanche perimeter.

RC: Figure 9: Please use a better foto, the foto is not sharp!

AC: We will replace the picture with a better quality one.

RC: Language: Please revise the sometimes very long, convoluted sentences. Consider a general linguistic revision.

AC: We agree, before final submission we will work through the manuscript and deal with this issue.

RC: Code: can the mentioned R Code be revised?

AC: We can include the R-Code used as supplementary materials, along with other necessary scripts for our model.