

Nat. Hazards Earth Syst. Sci. Discuss., referee comment RC2
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Comment on nhess-2022-97

Anonymous Referee #2

Referee comment on "The impact of terrain model source and resolution on snow avalanche modeling" by Aubrey Miller et al., Nat. Hazards Earth Syst. Sci. Discuss., <https://doi.org/10.5194/nhess-2022-97-RC2>, 2022

The manuscript aims at providing insights into the DEM generation process by various approaches and the effect of DEM resolution on the subsequent numerical modeling. The manuscript is well written and well organized, and the methods are well explained. The work is interesting; however, some minor parts have to be improved.

- Page 11, Line 285: "Holes were filled consistently by applying a max hole-filling threshold of 100 m²,.....". It is a little bit unclear to me. What is the smallest and largest size encountered? What does it mean by "max hole filling threshold of 100 m²", is this the largest hole size that can be filled? What technique is used? What are the advantages and drawbacks of the hole filling technique used? What impact did the hole-filling have on the modeling results? Also, any reference to available literature will be sufficient.
- Page 11, Line 272: In reference to comment #1, if there were holes encountered in the DEMs then how can be classified as "State of the art DEMs"?
- 2: demarcate the release zone and show the runout direction.
- Page 14, Line 354: Please provide the respective DOD and corresponding information.
- 4: it would be better to replace the figure with the time-lapse for the complete runout.
- Please provide the RAMMS input parameters in a tabulated form.