

We thank the reviewer for the useful comments and are very grateful about his positive feedback.

RC: GENERAL COMMENTS Overall well written, sound methodology, and useful results. Language could be improved, generally try to avoid colloquial terms such as “nowadays” and subjective terms such as “unbelievably” and “rather” in a scientific paper.

AC: We will improve the language and correct the subjective and colloquial terms.

RC: SPECIFIC COMMENTS P2, L2: please provide a reference for snow gliding as a modifier of terrain.

AC: We will add the following reference:

Peitzsch, Erich H., Jordy Hendrikx, and Daniel B. Fagre. "Terrain parameters of glide snow avalanches and a simple spatial glide snow avalanche model." *Cold Regions Science and Technology* 120 (2015): 237-250.

RC: TECHNICAL CORRECTIONS P2, L32: typo “amean” P2, L32: typo “rather” P4, L10: reword “. . . α and β are the coefficients that determine the quadratic surface (Evans, 1980) and are used as a basis for computation of slope and aspect.” P7, L7: reword “Experiments, where only very small avalanches occurred due to the direct effect of the explosion, were neglected.”

AC: We will correct the typos. We will reword the sentence to: “ Very small avalanches that did not show any fracture propagation after the initial explosion were not considered in the analysis.