

Interactive comment on “Soil erosion by snow gliding – a first quantification attempt in a sub-alpine area, Switzerland” by K. Meusburger et al.

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Dear authors

your research received two clear reviews, however, with contrasting final decisions. I do think you point to an interesting process within soil erosion studies in (winter) snow covered areas. And I do appreciate the difficulty to quantify its contribution to the total soil erosion. Your method is novel, creative but also very sensitive to methodological errors and uncertainty. You present a diverse set of measurements and model results which seems to indicate the contribution of snow gliding in soil erosion. Also the un-

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certainty associated with this reserach is honestly mentioned and presented in your paper. Lastly, the methods can be repeated by other research groups and as such verified/falsified.

However, I agree with the first reviewer that the RUSLE-137-Cs approach needs more elaboration: the methodological assumptions strongly influence your outcome. Even to such degree that frankly said your conclusions could not appear that strongly or even disappear. Reviewer 1 challenges you to give some more 'support-proof' which I think are worthwhile to follow-up or discuss in the paper.

In that respect, I also suggest the authors to think of rephrasing the clear and quite strong conclusions such as: "Snow gliding is a key process" to less decisive wording in which the methodological uncertainty also shows (your title shows this with the wording: a first quantification attempt).

I look forward receiving a revised version of your paper.

Kind regards, Thom

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