

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

**K. Meusburger et al.**

katrin.meusburger@unibas.ch

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We would like to acknowledge the reviewer for appreciating our efforts to highlight the uncertainties and his insight that also preliminary results may be of significant interest to HESS readership. Here a short reply to some of the minor comments is presented. A detailed list of changes will be provided after the closure of the discussion.

"Table 2: 137Cs values for pw1 and pw2 are probably interchanged (compared to table 3)."

The 137Cs values in table 3 will be corrected accordingly to this wise remark.

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"Fig 5: It is not clear if the data are plotted accurately. Within the data, there is no value found for 137 Cs-RUSLE at -7 and snow glide distance of A2N should be 28cm according to table 1. Regression lines should be described."

Due to the interchanged value in table 3 the -7 data point did not appear in Fig.5. We did not plot A2N in Figure 5 since we did not observe any snow glide event for this site in 2012/2013.

"Fig 8: It seems that winter precipitation of 2009/10 was used instead of using long-term average winter precipitation as mentioned. Using formula 8 the hayfields should reach distances longer than 300cm applying 430mm?"

We used the long-term winter precipitation for this graph and the map (Fig.7). Values illustrated in Fig. 8 do not refer to our experimental sites but to mean values ( $\pm$  SE) for the study site (Fig.7). Consequently, values in Fig.8 are incomparable to values in Fig.6 as minima and maxima are not shown.

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