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Hydrology and Earth System Sciences Discussions

Interactive comment on "Snow Accumulation-Melting Model (SAMM) for integrated use in regional scale landslide early warning systems" *by* G. Martelloni et al.

Anonymous Referee #3

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General Comments

I overall enjoyed the paper and I believe that it can be accepted after minor revisions. The main issue is that the paper is extremely short, particularly in the results and discussion section.

I agree with reviewer number one that this is not an "intermediate" model. I think it's a fully physical-based model; thus I would remove that part that does not add any importance to the paper. In the abstract I suggest to make the conclusions much less specific to the main results of this paper. The abstract should capture the attention of

the reader and starting from the beginning to the end I feel I loose my curiosity despite the interesting model presented.

As for the methods I wonder if the author can address also in the discussion how easy is to get the 13 empirical parameters. That is not clear and it is related to the immediate applicability of the model. A detailed presentation of the parameters would be also very appreciated. The conclusions section should be shorter and the discussion should be more extended. My same considerations for the conclusions of the abstract apply to the conclusion section. Results are really too short and the reader cannot appreciate the findings of the model. I am surprised by the number of figures and such short results and discussion section. Overall, the paper is reasonably well written, but it might gain if revised by a native English speaker that is not expert in this field. This can give that broader perspective and communication ability that the paper lacks.

Specific Comments

My only advice is to present Fig. 11 much earlier in the text. It does not make sense to have the figure of the model at the end of the paper. As for the other figures, I suggest the authors to increase the size of the fonts of labels. They are a bit small to read.

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., 9, 9391, 2012.