

Interactive comment on “Estimation of debris flow critical rainfall thresholds by a physically-based model” by M. N. Papa et al.

T.A. Bogaard (Editor)

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Dear authors and reviewers,

thanks a lot for the reviews and for the replies to the reviews. Reading this and the manuscript (ms) I agree with the reviewers that the ms fits in the SI and can be of interest to the hydrology and earth science community. But the indicated (and agreed on) weaknesses of the ms show major revisions are needed, both in focus and structure of the paper and justification.

I especially want to stress that the authors should explicitly address the novelty and applicability/limitations of their approach. This is key for the final decision of the ms.

C7053

I can agree that the authors do not do a full DF modelling but the justification of only looking at shallow landslide triggering and debris avalanches for DF early warning use should be solidly based in literature and discussed thoroughly.

This brings me to the point that a more complete literature review and discussion of the method proposed in this research compared to existing, published work on especially physically-based modelling for shallow landslide initiation is needed (and authors indicated in their reply that was planned)

I also feel the title does not fully reflect the work and ask the authors to think of more precise formulation (also keeping in mind the novelty of the work).

I look forward to the revised ms addressing the reviewers comments and hope to receive the resubmission in due time.

Kind regards, Thom Bogaard guest editor

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., 9, 12797, 2012.

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