

Interactive comment on "HESS Opinions: Functional units: a novel framework to explore the link between spatial organization and hydrological functioning of intermediate scale catchments" by E. Zehe et al.

Anonymous Referee #2

Received and published: 21 April 2014

This is an interesting submission discussing some (possibly) new ideas about how to consider landscape heterogeneity. While the topic is very relevant, I nonetheless recommend rejection of the current submission. This is simply not an opinion paper. My main points are summarised below:

[1] The opinions expressed in this paper are interesting, but there are too many elements here that should not be part of such an opinion piece. This manuscript reads like a research proposal (which I assume it is) and not like an opinion paper. In order

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to make this an acceptable submission as an opinion paper, I suggest that the authors actually try to extract what the key opinion points are and delete all the superfluous material. I do not think that the extensive reference to a specific research project (CASO) have a place in such an opinion paper. So I strongly suggest to delete the whole section 4 since I really do not see how the detailed discussion of your experimental design constitutes an opinion.

[2] If section 4 is taken out, and some additional references to previous work are made for completeness (see Beven comments), then I think the authors need to clarify much better in how far their opinion constitutes a novel approach to this old problem. Currently, this is difficult to identify and shortening the material would help to enable the authors to communicate their new ideas more clearly.

[3] If the authors feel very strongly about including section 4, then they also need to include data and initial results. I do not think that the project outline by itself, without reference to some new insights due to the new data collected, should be part of a HESS paper (a normal submission and not an opinion paper I might add). I am looking forward to these results, which will likely be very interesting, though I think the discussion of the set-up should go hand in hand with results. SO maybe it is a bit early four submitting it. If the authors feel that their set-up is very different from others (e.g. the CZO activities in the US or TERENO in Germany), then I suggest that the authors write a paper with a comparative study of different experimental designs (which would be very interesting) and what they might be able to achieve. Simply expressing an opinion about the problem and then proposing their own approach as the only solution is maybe OK for a research proposal, but not for a journal paper (I think).

I therefore suggest that the manuscript is rejected at this stage and resubmitted - either as an opinion paper with serious shortening of the material included right now, or as a full paper with initial data or as a comparative study of approaches.

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., 11, 3249, 2014.