Hydrol. Earth Syst. Sci. Discuss., 8, C3137-C3138, 2011

www.hydrol-earth-syst-sci-discuss.net/8/C3137/2011/ © Author(s) 2011. This work is distributed under the Creative Commons Attribute 3.0 License.



Interactive comment on "A structure generator for modelling the initial sediment distribution of an artificial hydrologic catchment" by T. Maurer et al.

E. Zehe (Editor)

erwin.zehe@kit.edu

Received and published: 1 August 2011

Dear Mr. Maurer,

After reading your paper and reviewer comments in detail I am convinced that the proposed study will - after major revisions - become a very interesting contribution to HESS.

The proposed approach is without doubt technically sound. However, I aggree with one of the reviewers, that "eating is the proof of the pudding": which means that at least a brief comparison of the generated structures with observed data is cucial to evaluate the structure generator.

C3137

The ultimate goal should of cause be the test of these structures and evaluation in a simulation of soil water dynamics, which would surely provide valuable insights: for instance on capillary barriers at textural interfaces. From my own experience within the chicken creek model contest, I know that this is a major problem to model this site.

I also aggree with the reviewer comments, that not all the reference might be necessary for this paper, while relevant references on studies suggesting explicit treatment of structures when modelling flow and transport (Klaus and Zehe, HP 2010) are missing.

Best regards,

Erwin Zehe

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., 8, 4641, 2011.