

Interactive comment on “Teaching hydrological modeling with a user-friendly catchment-runoff-model software package” by J. Seibert and M. J. P. Vis

K. Schneider (Referee)

schneider@alps-gmbh.com

Received and published: 9 July 2012

The paper “Teaching hydrological modeling with a user-friendly catchment-runoff-model software package” presents the HBV light model as a useful tool which can be applied in hydrology classes. The manuscript explains the general model structure and provides examples for modelling exercises. The paper is well-structured and provides an overview over the model components and the potential of HBV light to introducing students to hydrological model applications and their constraints.

General comments: The paper provides a well-structured introduction and general

C2810

description of the HBV light model. However, given that it is part of a special issue on teaching in hydrology, I suggest to include more information on hands-on issues that student will face when using HBV light. The manuscript seems to address the teachers, but it should rather address students. In this current version it fails to include the information students need when starting to use a hydrological model (for the first time). The paper could be a good starting point for any student who works with HBV light and could be used as introductory literature in hydrology courses where HBV light is applied. Although the description of the model is fine, my main concern is that the paper could be much more useful for hydrology education if the students would be the addressees instead of teachers with modeling experience, which seems to be the case at this stage. With respect to this I would like to encourage the authors to add more information and make it more comprehensible for students:

1.A schematic overview of the model components should be included in Section 2: “HBV model structure” which can be followed throughout the explanation of the model equations. The equations can then, step by step, refer to the model scheme and should be easily identified there. I believe that including a model scheme will make the explanation of the model components more descriptive.

2.More information on required input data (soil, vegetation, digital elevation model,...) and the preparation of these data should be included in an additional section. For instance, the minimum of input data required for a model run should be specified, and a further information on how to set up the model should be given (e.g. how to best define subcatchments, elevation zones, etc.).

Specific comments: - p. 5907, l. 16: “Here we present. . .”: make a new paragraph here to indicate the objectives of the paper

- p. 5911, ll 10-15: cab you gives examples when you would use a certain degree of distribution?

- p. 5913, l. 13: is it “Additional exercises. . .” or “Additionally, exercises. . .”?

C2811

- a link to where the software can be downloaded and where further information can be obtained should be added

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., 9, 5905, 2012.

C2812