

Interactive comment on “HESS Opinions “Crash tests for a standardized evaluation of hydrological models”” by V. Andréassian et al.

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I found this an interesting and well-written paper, although not totally convincing:

Is a car crash test a fitting analogy? I'm not sure that cars are tested up to and beyond both their capabilities and their requirements. (A concrete cube is – but not so colourful an analogy!).

There should be an explicit distinction between models and model structures. Transferring a model between catchments is more significant if the parameter values are not allowed to change.

Assessing adequacy and diagnosing reasons for inadequacy are big challenges even in single catchments, due to all the ways adequacy might be viewed, and because of

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all the sources of error. Use of large numbers of catchments leads to use of measures of adequacy without much information content (e.g. Fig. 1).

What was concluded from Figure 1, for example about which types of catchments/climates the model was inadequate for, and reasons for this?

The data quality issue is not treated convincingly. Data quality issues can lead to wrong conclusions about model errors. The authors have waived this issue.

The title implies more than just looking at large data sets. E.g. crash tests could involve assessing internal functioning, extrapolation to extremes, uncertainty/identifiability analysis.

Aside from these few issues, I enjoyed the paper, and hope it gets published after suitable improvements.

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