

Interactive comment on “HESS Opinions “Classification of hydrological models for flood management”” by E. J. Plate

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I enjoyed reading this paper which makes clear, in a classical and engineeristic perspective, the main problems related to flood forecasting. I generally like the classical approach to hydrology, which aims to identify design variables (in this case flood forecasts) with the support of advanced theory.

I decided to write this short comment because I am missing a more dedicated treatment of uncertainty assessment in flood forecasting. The author rightly points out that uncertainty assessment is very important (page 4677, lines 25-30) in order to provide end users with a complete information, but the recent developments about forecast uncertainty estimation are not mentioned. Actually, the literature proposed

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many studies in the last years such as, for instance, Todini (2003), Krzysztofowicz (2002), Mantovan and Todini (2006), Beven et al. (2008). Other interesting references can be found in a recently published special section of Water Resources Research (http://www.agu.org/journals/wr/special_sections.shtml?collectionCode=ASSESS1).

I understand the author cannot deal in detail with any open research problem linked to flood forecasting. However, I have the feeling that a mention to some recent developments could help the reader to obtain a better picture of this interesting issue.

References

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Interactive comment on *Hydrol. Earth Syst. Sci. Discuss.*, 6, 4671, 2009.

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