

Interactive comment on “HESS Opinions “Ensembles, uncertainty and flood prediction”” by S. L. Dance and Q. P. Zou

S. L. Dance and Q. P. Zou

s.l.dance@reading.ac.uk

Received and published: 8 November 2010

Response to Jan Verkade

We thank the Jan Verkade for his comments on our paper. We are glad that he believes that we met the objectives we laid out in our paper, e.g. “to point at a few key issues, and encourage debate about the most important future directions for research”. We believe that this is the essence of an opinion paper. As the referee notes, the article provides a report on a highly interdisciplinary workshop. Our original intention was to write an *opinion* article, instead of a review article. Although the ensemble prediction methods have gained wide spread applications in NWP in the past decade, they are new to other areas such as oceanography and coastal engineering. Thus, the

C3394

main thrust of our paper is to identify common research challenges and questions that transcend the individual disciplines using ensembles in flood prediction, seeking areas where we may learn from one another and understand better the propagation of uncertainty through chains of coupled models in meteorology, oceanography, hydrology and coastal engineering .

Since the paper addresses several disciplines and considers many aspects of ensemble prediction, we believe the scope is too broad for us to revise the paper as a full review article of a sensible length. Also review papers on ensemble methods already exist for some disciplines. Following the referee's suggestion, we have revised the paper considerably by including additional review material and references. We have also added some new opinions and suggestions that would promote an interdisciplinary exchange between hydrology and other fields. We believe this is a new direction for future development .

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., 7, 3591, 2010.