Hydrol. Earth Syst. Sci. Discuss., doi:10.5194/hess-2016-101-AC1, 2016 © Author(s) 2016. CC-BY 3.0 License.



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Interactive comment

## Interactive comment on "An experimental seasonal hydrological forecasting system over the Yellow River basin – Part I: Understanding the role of initial hydrological conditions" by Xing Yuan et al.

## Xing Yuan et al.

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We would like to thank Dr. Moreydo for the compliment and recognizing the value of our work. The thoughtful comments have helped improve the manuscript. The reviewer's comments are italicized and our responses immediately follow.

One of the issues the reviewer would like to address concerning the experiment is that the naturalized streamflow may contain errors concerning the precipitation and streamflow measurements. Reaching up to 10% of the measured value, the errors, when combined, might introduce uncertainties in the naturalized streamflow time-series. The



Discussion paper



uncertainties may be transferred forward to the hydrological model by calibrating it against these time-series which may result in unrealistic parameters.

Response: Thanks for this important comment. We will incorporate it into the revised manuscript as follows: "It should be noted that the naturalized streamflow may contain errors from the measurement of precipitation and/or streamflow, and the errors may result in uncertainty in the calibrated parameters and the hydrological model. In the future, multisource (e.g., satellite and ground) observations combined with data assimilation techniques are needed to quantify such uncertainty."

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., doi:10.5194/hess-2016-101, 2016.

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