

Interactive comment on “Identifying uncertainties in simulated streamflow from hydrologic model components for climate change impact assessments” by Dongmei Feng and Edward Beighley

Dongmei Feng and Edward Beighley

dmei.feng@gmail.com

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We thank the suggestions and comments from this reviewer, which have significantly improved this work. We have followed the suggestions, and addressed all comments to the extent possible. Please find the detailed response in the attached supplement file.

To deepen this study, we have expanded the analysis by adding metrics about the volume and composite of runoff (i.e., monthly surface, subsurface and total runoff), as well

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as the hydrologic seasonality (duration and onset timing of wet season), considering these quantities are of great importance for the study region (Myers et al., 2019; Feng et al., 2019).

We have modified the parameter sets analysis by implementing more sophisticated parameter selection criteria and selecting more parameter sets. We first selected 4 parameter sets with highest NSE as we did originally, and then we selected another 6 sets of parameters following the procedures: (1) rank the rest parameter sets based on their performance (assessed by NSE); (2) randomly select 6 sets of parameters from the top 20

We have updated the associated text and figures in the manuscript. Please refer to the supplement file for the details.

Please also note the supplement to this comment:

<https://www.hydrol-earth-syst-sci-discuss.net/hess-2019-328/hess-2019-328-AC1-supplement.pdf>

Interactive comment on Hydrol. Earth Syst. Sci. Discuss., <https://doi.org/10.5194/hess-2019-328>, 2019.

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