

Hydrol. Earth Syst. Sci. Discuss., referee comment RC2
<https://doi.org/10.5194/hess-2021-13-RC2>, 2021
© Author(s) 2021. This work is distributed under
the Creative Commons Attribution 4.0 License.



Comment on hess-2021-13

Anonymous Referee #2

Referee comment on "The benefits of pre- and postprocessing streamflow forecasts for an operational flood-forecasting system of 119 Norwegian catchments" by Trine J. Hegdahl et al., Hydrol. Earth Syst. Sci. Discuss., <https://doi.org/10.5194/hess-2021-13-RC2>, 2021

This review is for Manuscript No.: hess-2021-13, entitled "The benefits of pre- and postprocessing streamflow forecasts for an operational flood-forecasting system of 119 Norwegian catchments", authored by Trine J. Hegdahl, Kolbjørn Engeland, Ingelin Steinsland, and Andrew Singleton. With this manuscript, the authors examine the benefits of preprocessing meteorological forcing and/or postprocessing streamflow forecast in improving the quality of ensemble streamflow forecasts. I believe the topic is of interest to the hydrometeorological community. However, I have major comments that needs to be addressed before this manuscript is ready for publication.

- Abstract is quite long. For one, third statement (First Paragraph) convey the same message as the First and Second statements. Results in the Abstract Section need to be well summarized (focus on important findings, rather than mentioning all of your results).
- The authors are using different training period (2014, 2006-2011, 45 previous days) for different preprocessing schemes. To ensure a fair comparison of methods, they need to each be assessed using an equivalent systematic method to determine the optimal training set for each method.
- The authors are preprocessing and/or postprocessing the flood events. How realistic is it to preprocess (postprocess) large and rare precipitation events (flood events) by using just 45 previous days of training period? For flood events, it seems like the longer training period (multiple years, if available) is generally advantageous.
- The authors use cubed root transformation in their BMA model for precipitation. How were this transformation chosen? Did the authors choose cubed root without testing alternative transformations?
- Most of the Figures (Figure 5 - Figure 14; and Appendix-Figures) are difficult to follow. This really creates difficulty in reading the Result Section. Please make all the Figures simple and easy to follow.