

Interactive comment on “Technical Note: Combining Quantile Forecasts and Predictive Distributions of Stream-flows” by Konrad Bogner et al.

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The authors want to thank Referee #1 for the very helpful comments and we will try to incorporate them in an updated version in more detail! Beforehand we want to answer the questions in order to give some clarifications and missing essential information.

Combination methods

How to convert quantile forecasts into predictive distributions? On page 6, line 16 - 20 it is outlined that there have been two different approaches tested: a. Fitting a lognormal distribution to the quantiles (Bogner, et al., 2016) b. Linear interpolation

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and exponential tails (Candela, 2006) We will try to include more information about these proposed methods.

Regarding the BMA and the NGR approach: for all cases (based on quantiles and on predictive distributions) the 0.5 quantiles have been used as a point forecast for BMA and NGR. In case of quantile forecasts the 0.5 quantile has been estimated from the lognormal approximations – see above.

The Normal distribution has been used as a kernel for the BMA. Thus, all the data (observed and forecast) have been transformed into the Gaussian space before applying the BMA and the NGR (see also page 7 line 5-8).

Combination weights

Fig. 1 covers the period from 2010/08 – 2016/04 with hourly resolution – we will add the time information on the x-axis on the left side. Whereas on the left the example of the $\tau=0.05$ is shown, on the right the 9 different τ 's are shown, thus the second bar corresponds to the left panel averaged over the whole time period.

Suggested reorganization

We will re-write the paper according to the suggested reorganization.

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