

Interactive comment on “Development of a monthly to seasonal forecast framework tailored to inland waterway transport in Central Europe” by Dennis Meißner et al.

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We thank Massimiliano Zappa for his extensive review and his fruitful comments, which helped to improve the paper and to strengthen our findings.

Regarding the general comments we revised the paper in several respects:

We extended the description of the hydrological model used in our study (LARSIM_ME) giving more details regarding the model-setup, the regionalization and model calibration / validation.

We totally agree that deviations between model results and observations don't solely

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result from snow. We described the snow modelling of the hydrological model in more detail, but we also pick up other influencing aspects as mentioned by Mr. Zappa, e.g. human activities.

So far, we haven't tested to include snow as additional predictor of the statistical approach, because most of the stations relevant for navigation along Rhine, Upper Danube and Elbe are dominated by snow pack just a limited time of the year. But we will pick up this suggestion and test the explicit use of snow information as additional predictor source (it is implicitly accounted for by the precipitation and temperature data during winter months) in the future (added to the outlook section).

We added a new section 5 “discussion” in order to relate our findings to previous studies, in particular to the work of Olsson et al. 2016, Demirel et al. 2015 and Fundel et al. 2013 as well as EFAS

We answered to the specific comments point-by-point in a supplement document.

Please also note the supplement to this comment:

<https://www.hydrol-earth-syst-sci-discuss.net/hess-2017-293/hess-2017-293-AC2-supplement.pdf>

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