REVIEW of the paper

The benefit of seamless forecasts for hydrological predictions over Europe

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This paper evaluates the performance of the hydrological forecast by merging sub-seasonal and seasonal rainfall forecasts. As expected authors found that the hydrological forecasts with merged rainfall forecasts are better than with the seasonal rainfall forecasts for first few weeks. Given that this is revised submission, I had opportunity to read the responses from the authors to address the comments given by the referees from initial submission. The authors have addressed most of those comments and revised the paper accordingly. However there are still some minor issues and errors which needs to be addressed.

The authors have compared hydrological forecasts forcing by merged rainfall forecasts with the seasonal forecasts (SYS4). I wonder whether they have also compared merged rainfall forecast with the SYS4?

Page 3, Line 60-65: These sentences are misleading and confusing. How simple concatenation of the best forecast can be complex in the simplification, then the concatenation is technically difficult?

P 3 Line 69: Can authors explain what the bias characteristics are?

Page 3, Line 91: delete “such as”

Figure 1 is not needed. It does not show anything more than the text in caption.

Page 5, Line 130: I suggest authors to explain in one sentence or two “mass-conserving interpolation”.

Page 5, Line 137-138: “full hydro-meteorological integrations”, but never see this term for the rest of the paper.

Page 5, Line 140-145: What is the actual period of forecast evaluation? Is it 2015-05-14 to 2016-06-02 or 1995 to 2015. I remembered this was raised by referees in earlier submission, but still it is not clear in the paper.

Page 5, line 147: Authors mentioned ENS-ER issued Monday and Thursday not Wednesday?

Page 5, Line 161: “modeled discharge”, did not authors define this as WB runs. I suggest to use consistent terminology throughout the paper.

Page 6, Line 168: replace “*tof*N” to “*n*, *N*”

Page 6, Line 169: Define “RPS”

Page 6, Line 185: By definition forecast error is difference between observation and forecast, so need to say “against observations”. It is better to give formula for mean relative error as some people define error as forecast – observation.

Figure 3: Legends for black solid lines should be median seasonal (not 10/90 percentiles) in c) and d). I can assume that 10 and 90 percentiles are computed from CRPSS of all river gauges, but never mentioned in the paper.

Page 7, Line 193: In figure 3a, the CRPSS at week six is less than 0.1 (not 0.2).

Page 7, Line 193: All river point? Do authors mean all river gauges?

Figure 3a: I think it is not fair comparison between SYS4 and SEAM when all start dates in SEAM are considered. Firstly, the sample sizes of both forecasts are not same, then more importantly the target dates of given lead time are not same.

Page 7, Line 215-219: Not sure what the authors want to say “An explanation can …. driving forecast is used.”

Figure 4 is hard to understand. “The dimension of the circles is proportional to the number of days while the color scale refers to progressive weeks”. Number of days of what?

Page 8, Line 228: effect?

Page 8, Line 236-240: Please rephrase this paragraph. What do authors mean by recent “development of the precipitation forecast?”

Figure 5 caption: replace “functionality” with “function”

Figure 5: Legend for SYS4 is wrong (see previous comments)

Figure 7: In the previous figures, authors have shown 10 and 90 percentile, why they chose 25 and 75 percentiles. How are the percentiles computed for reliability diagrams?

Page 8, Line 252: “Both forecast systems are over-confident”. How? For forecast probability less than 0.5, it is lower than the observed frequency, while for higher than 0.5, it is higher than the observed frequency.