

Dear reviewer,

On behalf of my co-authors, we appreciate for your attention in our paper and the valuable suggestions that very helpful to enhance our manuscript. You will find below the answer according to reviewers' comments.

Reviewer's specific comments:

There are several parameters that may need to be calibrated in VIC, but I didn't found descriptions of parameter calibration for the VIC hydrological model. Did the authors just use the default parameters in VIC model?

This is a good point. We used the default parameters for the VIC model. Nevertheless, also in response to a reviewer #1 comment, we evaluated the correlation coefficient of monthly discharge between gauging stations and WFDE5-driven simulation. You will find the figure below and we will add the figure to the supplement, or combine it with figure 12. Generally, the result presents a good correlation coefficient.

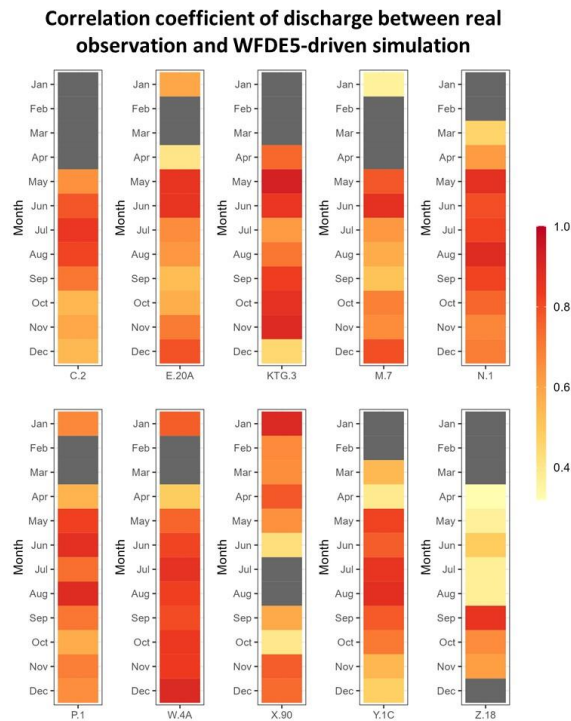


Figure S: Monthly correlation coefficient R ($p < 0.05$) for water discharge generated from VIC model driven by WFDE5 hindcast (reference simulation) against the observation at gauging stations.

The authors sometimes use the term “subseasonal” to describe SEAS5 forecasts, e.g. “ECMWF system 5 (SEAS5) sub–seasonal–to–seasonal (S2S) forecasts”. However, from my point of view, SEAS5 mainly provides monthly forecasts and is a seasonal forecast product. Subseasonal forecasts usually refer to daily weather forecasts with lead times between 15-60 days. I suggest the authors to check the use of term “subseasonal” in the manuscript.

Thank you for the comment. We agree that you state the right point. We will substitute and emphasize in our manuscript that we use the seasonal forecast instead of the sub-seasonal forecast.

Reviewer’s Language and technical issues:

There are too many lines in Fig. 3 and Fig. 5, which makes the figure difficult to understand. The authors may consider improve those figures.

Thank you for the suggestion, We understand that there are many lines in these graphs. Our aim is to present the SESS5 skill of each month from lead-0 to lead-2. We used different colours for each initialization month. However, the forecast skills are different for each initial month and lead times, resulting in these complicated graphs. The fact that the different (black) lines are hard to discern from each other, basically is a good thing: it means that skill, for e.g. temperature, does not decrease much between the first 3 lead months.

We will consider replacing figures 3 and 5 by figures similar to figure 7, so omitting the colored lines.

The language needs to be thoroughly improved. For example, Line 205, “to forecasts” should be “forecast”; Line 227, “skilful” should be “skill” or “skills” in my opinion.

Thank you for the language suggestions. We will revise the language used in our manuscript, assisted by a native speaker.