

The authors thank the referees for their consideration of this work and helpful comments. In addition to the changes suggested, we have converted the former Table 1 to Figure 2 as the journal has advised us that coloured cells could not be printed within a table. Changes in the manuscript are indicated in red.

Report #1

Thank you for your review and suggestions for further improvements.

The manuscript has been effectively revised and improved in the previous round. However, the authors still focus the forecasting scheme exclusively on the period 1993–2016, leaving a considerable temporal gap of nearly 10 years up to the present. To update the research and enhance the timeliness of the findings, the authors are strongly suggested to extend the time span of the proposed forecasting scheme. Considering the inherent non-stationarity of hydrological time series, this decade-long data gap may substantially weaken the applicability and practical value of the proposed method.

We have updated the manuscript to acknowledge that the decade since the end of the hindcast period is not included in our work (lines 544-548). However, following your suggestion, we have introduced a discussion and assessment of our operational forecasts (2022-2026) to the supplementary material (sect. S2). This demonstrates that the conclusions drawn from the hindcasts appear to hold to the present day.

In addition, numerous hydrological extreme events have occurred during 2016–2026. To fully validate the efficacy of the proposed method and enrich the supporting evidence, the authors are recommended to generate time series plots that visualize the forecast trajectories derived from different initialization times. Such graphical illustrations can help readers intuitively understand how the forecasting performance evolves over time.

Thank you for this suggestion. We have produced a time series showing a series of monthly forecasts and the corresponding simulated observed flows for the commonly studied Thames at Kingston catchment. This illustrates the variation in flows and forecast confidence over the year for both the hindcast (1993-2017) and more recent operational (2022-2026) periods. This figure is included in the Supplementary Material (Fig. S3).

Report #2

Dear authors. This version has some additional sharpening with respect to the previous version. As I understand, the effort of combining methods is part of further studies.

Thus, at this stage I have no further comments. I only ask that in case of publication you change the wording in Table 1.

- 7. Very high
- 6. High
- 5. Above normal
- 4. Normal
- 3. Below normal
- 2. Low
- 1. Very Low

Nothing exceptional in $P > .95$ and $P < .05$

Thank you for your helpful reviews and recommending acceptance.

The flow descriptors in Table 1 (now Fig. 2) have been used operationally since winter 2012/13 and are also used by the Environment Agency. They are thus familiar to the user community. We acknowledge your point that there is nothing 'exceptional' about a 1-in-20 year event over a long period of operations. A note has been added in line 191.