

Using expert knowledge to increase realism in environmental system models can dramatically reduce the need for calibration

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Authors' response:

- 1- As the referees pointed out, we considered a longer calibration and validation period of 4 years each instead of previously used 2 years. However, the general conclusions did not change.
- 2- The figures and tables have been changed accordingly based on the new result for the 4-year period. To better visualize the modeled hydrographs we only show two years of the 4-year calibration or validation periods.
- 3- We tried to make introduction and conclusion clearer and included more references.
- 4- We more clearly identified the constraints applied to FLEX^A, FLEX^B and FLEX^C.