

Thanks for addressing the comments and improving the presentation of the manuscript. However, there are still some issues that are unclear. I appreciate that the authors put extra effort into evaluating the performance of over/under-sampling techniques, e.g., SMOGN, which is still not widely used. Here are my comments and questions.

- 5 1. In the MR methods, can you explain how the model predictor variables, and the number of the variables were determined?
2. Please check the line number in the author's response, for example, I cannot find the sentences in the author's response in line 94.
3. Suggest deleting citations in the conclusion and rephrasing it as something like "Importantly, our study further confirmed the accuracy of the Random Forest model can be significantly improved by using..."
- 10 4. Consider shortening and focusing the abstract, for example, in line 13: "Therefore, the main goal of this study is to identify a suitable modeling solution for the prediction of river water temperature given the scarcity of the forcing datasets." could be modified to "Therefore, identifying a suitable modeling solution for the prediction of river water temperature with a large scarcity of the forcing datasets is of great importance." Also, consider shortening the description of the methods and results in the abstract.

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