We thank the reviewer for generally positive comments. The reviewer comments are in italics and our responses are in normal font, the proposed text additions and modifications are in bold.

Please note that in the following, "P", "L" and "SM" stand for page number, line number and Supplementary Materials, respectively.

#Reviewer 3:

This paper reconstructed historical, and projected future discharge and water temperature data with high spatial resolution for 52,278 reaches over the Loire River basin. This dataset will be useful for further researches in this area, and the method for the dataset generation might be able to be applied in more regions in the future. Overall, this manuscript is reasonably organized and I think this manuscript is acceptable for publication with minor revision.

For all figures, if you want to describe the subfigures, please numbering each subfigure. For example, using a), b), c). And then using the numbers/letters refer to subfigures, instead of using the words like "top", "left" to locate them.

We agree. We labeled panels with brackets around letters being lower case in this new manuscript.

Line 65-69: Do you have validation period, if yes, please specify it.

We agree. We added the period of validation data for both hyrological (1963-2019) and thermal models (2010-2014) in the new manuscript. We also added more information on calibration and validation of each model in the new manuscript.

Line 71: "(see http://www.drias-climat.fr/", the bracket not closed.

Thank you !

Line 103: "the Nash-Sutcliffe efficiency of simulated daily Q is > 0.7 for Q, ln(Q), and √Q", do you mean the NSEs of Q, ln(Q), and √Q are all >0.7? Since you already have the NSE of daily Q, why the NSE of ln(Q), and √Q still should be considered?

Yes, the NSEs of all Q, ln(Q), and √Q is > 0.7.

Maximizing the NSE criteria on the untransformed streamflow (*ln(Q), and √Q*) favors the goodness of fit of the hydrograph for high flows. Using the NSE criterion on the square roots

of the flows provides an estimate of model performance without favoring either high or low flows *Line 105: What would be the possible reason for the underestimation of Q in winter and spring?*

Using the square root of NSE does not favor neither high flows nor low flows. The underestimation of Q cannot be explained by this calibration choice.