

Preregistration

# My preregistration for Global High-resolution Water Temperature Modelling

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*25. September 2024*

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**Data collection**      We have already collected global measured river temperature data and global air temperature data for validation and model inputs.

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**Dependent variable**

The dependent variable used in the model is the air temperature at the local watershed.

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**Analyses**

Global air temperature will be input into the model to estimate the river temperature of every river reach documented in HydroSHEDS. Hydrologic stations with the low upstream basin areas will be used for model calibration, the rest of the temperature observations will be used for validation.

**Outliers and  
exclusions**

Observations with unreasonable temperature values will be excluded. To simplify the approach, the observation will be defined as an outlier if all the twelve monthly temperatures are higher than the air temperature.

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**Study type**

Finally. For record keeping purposes, please tell us the type of study you are pre-registering.

- This study is a Master's research thesis.