Comment on gmd-2021-139
Anonymous Referee #2

Referee comment on "AI4Water v1.0: An open-source python package for modeling hydrological time series using data-driven methods" by Ather Abbas et al., Geosci. Model Dev. Discuss., https://doi.org/10.5194/gmd-2021-139-RC2, 2021

The manuscript presents a new framework for fast and rapid experimentation to develop data-driven hydrological models. The manuscript provides an important tool for hydrologic community to utilize machine learning models without expert knowledge. However, there are some minor details missing or not clear in the manuscript.

- Methods section is not easy to follow. It is not clear how the python library is developed, which dependencies are required, underlying methods and protocols for data transfer, processing and visualization.
- A visual architecture diagram of all classes and third-party libraries will be helpful.
- Technical details of data integration and API is not provided in detail.
- Which machine learning framework and version is used in the framework? Does system allow changing or updating the underlying ML library? They are briefly mentioned at the end but they are the most critical components of the framework.
- How does the framework keep up with updates in third-party libraries and dependencies used in the framework?
- Does the library allow adding new data transformation, resampling, imputation or other functions?