

Dear Editor,

We sincerely thank you for handling our manuscript. All the comments from you and the two reviewers are valuable and very helpful for revising and improving our paper. In the following we provide responses to the technical concerns you mentioned.

1. Certainly, the adjustment of "Dynamically" is indeed accurate and essential. Therefore, our revised title is now "Dynamically weighted ensemble of geoscientific models via automated machine learning-based classification".

2. Two additional references for the Kling-Gupta Efficiency (KGE) metric are provided: Gupta, H. V., Kling, H., Yilmaz, K. K., and Martinez, G. F.: Decomposition of the mean squared error and NSE performance criteria: Implications for improving hydrological modelling, *Journal of Hydrology*, 377(1), 80-91, <https://doi.org/10.1016/j.jhydrol.2009.08.003>, 2009.

Kling, H., Fuchs, M., and Paulin, M.: Runoff conditions in the upper Danube basin under an ensemble of climate change scenarios, *Journal of Hydrology*, 424-425, 264-277, <https://doi.org/10.1016/j.jhydrol.2012.01.011>, 2012.

3. Fig.2, Fig.3, Fig. S1, and Fig.7 have all been appropriately revised in the current version of the manuscript (supplement).

4. Regarding the code and data availability:

We sincerely apologize for any prior oversights. We have taken steps to enhance the Readme.md file by providing detailed information for each script, directory, and file involved in a new repository (<https://doi.org/10.6084/m9.figshare.21547134.v3>). Additionally, concerning the differences between the two versions (v1 and v2/v3), notably the absence of certain files in v2/v3, this pertains primarily to the model files generated during the training phase of our classifiers. However, it's important to acknowledge that the models constructed using different versions of the H2O-AutoML platform may not be directly transferable between versions due to ongoing updates. As a result, we suggest that readers execute the code in their individually configured environments and the primary results of the evaluation are not expected to undergo significant changes. And this shouldn't take a lot of time (under a couple hours). Moreover, this approach will facilitate readers in developing their own applications within the context of AutoML-Ens.

5. The references Ke et al., 2017 and Akiba et al., 2019 are now provided in the bibliography.

Once again, we appreciate your hard work earnestly and hope that the explanations and modifications will meet with approval. If you have any other questions about this paper, please don't hesitate to let us know.

In the name of all co-authors, with kind regards.