

Response to Editor's Comments on Manuscript gmd-2018-327

We would like to express our sincere gratitude to Dr. David Topping for his suggestions. All comments have been addressed in the revised manuscript. Below is an item-by-item response to the comments.

Comments to the Author:

Many thanks for taking the time to respond to all comments made. I am happy that this paper deserves a place in GMD, demonstrating new methodologies for complex simulations of large scale models using machine learning techniques. Given this has a broad remit, I encourage further studies around a family of methods.

Response:

We appreciate the editor for his positive evaluation. We are currently developing new machine learning methods to further improve predictive performance of terrestrial ecosystem models. We got some promising results and hopefully will submit a manuscript to GMD soon.

Non-public comments to the Author:

Hi guys. many thanks for responding to the reviews. I am happy for this to be published subject to a few minor corrections.

Please change 'It is an open use..' to 'open source..' in code availability. Also, on line 372 I would suggest changing 'The TPE algorithm has great improvement over the classic hyperparameter optimization' to 'The TPE algorithm exhibits significant improvement over the classic hyperparameter optimization..' Thanks!

Response:

We appreciate the editor for the positive evaluation. The suggested changes have been made in the revised manuscript.