Comment on bg-2021-224

Anonymous Referee #2

Referee comment on "Reconstruction of global surface ocean $p\text{CO}_2$ using region-specific predictors based on a stepwise FFNN regression algorithm" by Guorong Zhong et al., Biogeosciences Discuss., https://doi.org/10.5194/bg-2021-224-RC2, 2021

The stepwise FFNN looks like a innovative new approach to enhance the widely popular SOM-FFNN method. The stepwise method is tested using a very comprehensive list of predictors used elsewhere in the literature. The method building component looks thorough, congrats. The prediction of pCO2 based on region-specific predicators selected by the stepwise FFNN algorithm will be a valuable tool when moving to higher resolution, inside regional studies, or getting closer to shore. There are a number of grammatical errors that will need to be cleaned up by the authors or the journal team.

Please also note the supplement to this comment:
https://bg.copernicus.org/preprints/bg-2021-224/bg-2021-224-RC2-supplement.pdf