

Geosci. Model Dev. Discuss., author comment AC1
<https://doi.org/10.5194/gmd-2021-222-AC1>, 2021
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Reply on CEC1

Marcus Falls et al.

Author comment on "Use of Genetic Algorithms for Ocean Model Parameter Optimisation"
by Marcus Falls et al., Geosci. Model Dev. Discuss.,
<https://doi.org/10.5194/gmd-2021-222-AC1>, 2021

Dear GMD Executive Editor,

Thanks for calling our attention to the issues with the GMD Code and Data Policy. We addressed them as follows:

- Made the title more specific: "Use of Genetic Algorithms for Ocean Model Parameter Optimisation: A Case Study using PISCES-v2 for North Atlantic POC".
- Specified using Nemo 4.0.1 in the manuscript and included citations to the corresponding Zenodo, and included its DOI in the Code Availability section.
- Uploaded the Genetic Algorithm code and the Autosubmit configuration files to the following public Zenodo repository: <https://doi.org/10.5281/zenodo.5205760>.
- Uploaded the PISCES-v2 1D code to the following public Zenodo repository: <https://doi.org/10.5281/zenodo.5243343>
- Added the Apache Licence 2.0 to the Genetic Algorithm and PISCES-v2 1D configuration code.
- Changed the data availability so that it contains the DOI pointing to these repositories instead of Gitlab.
- In addition, we added a reference to another repository that contains processed BGC-Argo data and matching PISCES 1D simulations, titled "Datasets for the comparison between POC estimated from BGC-Argo floats and PISCES model simulations" (<https://doi.org/10.5281/zenodo.5139602>). This repository is linked to the Biogesociences preprint <https://bg.copernicus.org/preprints/bg-2021-201/>, which is a companion paper to the current GMD preprint.

These changes will appear in the revised version of the manuscript if we are invited to resubmit one after the open discussion phase.

With best regards,

Marcus Falls, on behalf of all coauthors