

## **Response letter to the Editor**

You have archived your code (the MITgcm model) on GitHub and MIT servers. However, these are not acceptable repositories. You must store the code used in your manuscript in other long-term archival alternatives, such as Zenodo, PANGAEA, etc.

Therefore, you must reply to this comment with the relevant information (link and DOI) for the new repositories, as we request that you make it already available before submission and, of course, before the Discussions stage.

Moreover, you must include in a potentially revised version of your manuscript the modified 'Code and Data Availability' section, with the DOI of the code.

### ***Response:***

We appreciate your comments on our code repository. According to your suggestion, we have read the code and data policy of GMD in detail, and have added all model code on the Zenodo repository with the DOI number <https://doi.org/10.5281/zenodo.6792999>.

Therefore, the “Code and data availability” is now rewritten as “The MODIS remote-sensing images are derived from the NASA Worldview application (<https://worldview.earthdata.nasa.gov>). The input files (including initial and boundary conditions) and relevant output data files of the 3D realistic Massachusetts Institute of Technology general circulation model in the northern South China Sea are available at a free, open access, data repository via <https://doi.org/10.5281/zenodo.6792999>”.