

Response to Prof. Rabe

Dear Dr. Ren and coauthors,

thank you for the revised submission. Most aspects have been satisfactorily addressed.

However, you state "Both data products have been added to the reference list following the Copernicus Marine product citation format." Yet, I cannot find any of the data DOI in the reference list, except for the Ren data citation (mooring data). Please cite all the data doi in the reference list (you can still list the doi in the Data Availability, in addition to the citation of author (year), referring to the reference list. Please also provide a data citation for the CTD profile data. You also did not cite the Ren Qiang (2026) reference, though it appears in the reference list -- that needs to be added to the text somewhere, as well.

After those minor issues are addressed I will be happy to recommend publication and initiate the production process.

Kind Regards, Benjamin Rabe

Response:

Dear Prof. Rabe,

Thank you very much for your positive assessment of our revised manuscript. We are sincerely grateful for your careful handling of our submission and for your constructive comments throughout the review process. From the first submitted version to the present revision, the manuscript has gone through two submissions and several rounds of review and revision. During this process, your comments are very valuable, especially those from an observational perspective. They have helped us substantially improve the logical structure, scientific clarity, and reproducibility of the manuscript. In the revised version, we have carefully checked the Data Availability section and the reference list again. All data products with DOIs have now been formally cited in the text and included in the reference list following the Ocean Science requirements for data citations.

Specifically, we have added formal reference-list entries for the Copernicus Marine data products used in this study, including the sea level anomaly and derived geostrophic current product and the multi-observation three-dimensional temperature, salinity, height, geostrophic current, and mixed layer depth product. The corresponding DOIs are now included in the reference list. We have also clarified that the shipboard CTD profile data used to support the interpolation and uncertainty assessment are included in the same public dataset as the mooring temperature and salinity data. This dataset is cited as Ren Qiang (2026) in the Data Availability section and listed in the reference list with the DOI <https://doi.org/10.12157/IOCAS.20260710.001>.

Once again, thank you very much for your time, careful consideration, and continued guidance.

Kind regards,

Qiang Ren and co-authors