

## **File Validation Comment by Mario Ebel**

Your reference list includes works “in review”. Such works can be cited upon submission if being available to the reviewers. They should not be cited in the final, accepted manuscript, unless published, accepted for publication, or available as preprint with a DOI.

Fu et al. (2025) reference has been published, and it is now updated with its full information.

## **Response to Reviewer #1**

Thank you to the authors for addressing my previous comments. I have a couple of very minor additional comments (see below) and do not need to review the paper once these have been looked at.

We thank the reviewer for their second review of the manuscript. In the following, the reviewer’s comments are in black, and our responses are in red.

Line 628 and 646 - these refer to magnitudes of transports. I assume these are referring to the transports in the boundary currents. This should be clarified

Indeed, these are boundary current transports. This has been clarified in both places.

Line 635 My original assumption was that the better representation in HR is because there is better resolution of the boundary currents. Are you able to comment on that?

We agree with your comment. We have added “likely due to better representation of boundary currents in HR with its higher resolution.” to the end of the sentence.