

Response to Handling Editor Bernadette Sloyan

The editor decision is pasted below; our responses are interspersed in blue font.

Dear authors

Thank you for submitting your work to Ocean Science. The open discussion of your manuscript is now closed, and I assume you have considered the two anonymous referee comments.

Response: We note that your decision was posted well before the closing of the author response period. Thus, you didn't have the opportunity to consider our responses to the reviewer comments. We kindly request that you consider them.

The referees are critical of the novelty and relevance of your study. It appears very unlikely that you will be able to fix these problems upon revision, so I discourage submission of a revised manuscript.

Response: We note that both reviewers made positive comments about our manuscript.

Reviewer 1 states in their summary that our main *“result is perhaps a bit obvious, but it is worthwhile to make this point explicitly as well as quantify the size of the bias. The manuscript is clearly written and thoroughly documented.”* They further state that of their two specific comments the *“second comment should be straightforward to address and it is possible the first can be addressed by providing additional motivation in the introduction.”* As we explain in our reviewer response, we believe we can address both comments satisfactorily.

Reviewer 2 states that the *“manuscript is well written and the language is clear. The overall framing of what current and future changes in the world’s western boundary current systems tell us about the overturning circulation and continental shelf environment is a very relevant one and it would be of interest to a large part of the community.”*

While this reviewer goes on the question the novelty and rigour of our study, we believe our response address these concerns. We further note that they didn't raise any specific flaws in our methodology and that their critical comments can either be addressed in a revision or are misunderstandings that can easily be clarified.

We believe we have clearly articulated in our responses, which we kindly request you consider, that their comments can be addressed.

Instead, I hope you can use some of the pointers and suggestions of the referees to reshape your manuscript and find another journal where this work may find a place.

Response: Please note our previous response.

Regards

Bernadette Sloyan