

I have copied the major comments of the reviewer in black, along with my responses in blue.

Reviewer 1:

Thank you to the authors for their work addressing comments raised by myself and another reviewer. The changes to the text and figures help the paper read more clearly and help better emphasize the study's main hypotheses and conclusions. I have just a couple of (very) minor suggestions to address prior to publication:

Thank you for your careful review and kind words. We appreciate your suggestions and will address the minor points you've noted prior to publication.

L337, L364: Should “transient eddies strength” be “transient eddy strength” or “strength of transient eddies”?

Thanks for pointing this out. We've changed all the “transient eddies strength” to “transient eddy strength” now.

L389: Can remove “FDR” acronym since it's not used elsewhere in the paper.

We've removed the abbreviation.

L392: Remove “shows” between “with” and “limited”.

Thanks for pointing this out. We've removed the “shows” now.

Fig. 8: This figure is a bit hard to read as the geographical boundaries are largely masked by the stippling and contours. A couple of suggestions to try: (1) use dots for $p < 0.05$ significance and omit $p < 0.1$ stippling (or include in the appendix), (2) decrease weight of QSW strength contours.

Thank you for your suggestion. We have updated Fig. 8 and Fig. A10 to use dots for $p < 0.05$ significance, omit stippling for $p < 0.1$, and reduce the line weight of the QSW strength contours. Using dots rather than hatched lines is very helpful.

Reviewer 2:

This revised version of the paper has improved significantly the presentation of the results, making the authors aims and methods clear. The topic and results of the paper I think will be of interest to the community.

Thank you for your positive feedback. We appreciate your comments and are glad that the revisions have clarified our aims and methods.

A few minor corrections:

Title: temperatures should be temperature

Thanks for pointing it out. The plural form in title and abstract have been removed.

Equation 1 has no left-hand side.

Thanks for pointing this out. We've added the left-hand side and included a brief description below.