

Public justification (visible to the public if the article is accepted and published): Thank you for responding carefully to the suggestions of both reviewers. I am happy to accept the paper subject to some minor technical changes:

Thank you very much for your time and your swift answer.

First, as noted by the production team, please use one of the online colour-blind-friendly figure checkers to ensure that your figures will be accessible to all readers.

Thank you. We modified colors in Figure 2, Figure 3, Figure 5, Figure 7 and Figure A1. We carefully checked with the color-blind simulator that figures are accessible to all readers.

Second, your figure 4 correctly has no units for salinity as you are (presumably) using EOS-80 rather than TEOS-10? Please could you add in the methods section that your salinities will be presented on the practical salinity scale, to avoid confusion for future readers? I note that there are a few instances where the unit "psu" has been included, which is not approved by EOS-80. Please could you remove these psu units?

Thank you, we remove "psu" in all figures and in the manuscript and stated in the method section that salinities are presented on the practical salinity scale.