

Author's response to "bg-2022-117-referee-report-1"

Thank you for the feedback on our manuscript. It has helped us to improve the manuscript. In order to respond appropriately to the feedback, we decided to copy all comments from the report into the document with visible track-changes and placed our responses below them (point-by-point response). The following points are particularly important, so we decided to discuss them in this separate document:

(1) You have wondered about the absence of the unit for salinity. We have followed the work of Millero, F.J. 1993, (What is PSU? *Oceanography* 6(3):67) and Millero, F.J. 2015 (History of the Equation of State of Seawater, <https://doi.org/10.5670/oceanog.2010.21>), and a summary exists here (<http://www.coastalwiki.org/wiki/Salinity>). It was stated: "The practical salinity *scale* was defined as conductivity ratio with no units" and "This definition is adopted by all national and international oceanographic organizations."

On this basis, and after consultation with the co-authors, we would like to keep salinity without units.

(2) The conclusions section was commented as having "rather speculative suggestions, rather than conclusions". It is right that we speculated about future developments in the last paragraph of this section. However, we would like to keep the last paragraph because we want to highlight the importance of our study for future rewetting measures as it was the first study on this specific measure.

We therefore propose to rename this section to "5. Conclusions and Outlook". If this is not possible, we suggest to open a new section "6. Outlook" and include the marked text beginning in line 840 into the new section. If none of the options apply, it is ok to delete named/marked section.