## **Response to the Topical Editor**

Dear Editor,

- We are grateful to the topical Editor for his positive evaluation and decision regarding our manuscript. Below, we provide the point-by-point response to the topical editor's comment and the list of relevant changes including the lines and figure number. The editor's comment is shown in *black*, our responses are shown in *blue*. The track changes file is attached below the responses, where the modified parts are shown in *red*.
- line 22: datasets must be available in repository assuring the long term preservation and a persistent identifier. "goal.furg.br" is not having these two characteristics. Please delete this link.

We removed the link from the abstract.

Line 153: please delete this part of the sentence "given their distinct frequency sampling"

15 Done.

The figures are many and make reading of the text slow. I recommend moving figures 6, 7, 8, 9 in the supplement. In the text you could condense the four figures into one by showing the surface maps as an example and referring to the supplement for more details. Of course, the text must be changed accordingly.

Thank you for the suggestion. We merged figures 6, 7, 8 and 9 into 2 figures (new Figs. 6 and 7). Figure 6 shows the seasonal representation of conservative temperature and absolute salinity at 10 m depth. Figure 7 shows the seasonal representation of neutral density and dissolved oxygen at 10 m depth. We decided to merge the figures into 2 figures (instead of merging into only one, as suggested) to have panels with a good size and resolution for the final version of the manuscript. The new supplementary Figures S4-S7 show the seasonal surface maps of 500 m and 1000 m for summer (Fig. S4), autumn (Fig. S5), winter (Fig. S6) and spring (Fig. S7). All subsequent figures' numbers in the main manuscript and in the supplementary have been changed accordingly. Given the key oceanographic importance of the representation of the deeper regions in the

NAPv1.0, we left much of the original text. However, we have changed the order of presentation to make the text clear and

hopefully easier to read. See Lines 249-284 of the revised manuscript.