Earth Syst. Sci. Data Discuss., referee comment RC2
https://doi.org/10.5194/essd-2021-245-RC2, 2021

Comment on essd-2021-245

Anonymous Referee #2

Referee comment on "Water masses distribution offshore the Sabrina Coast (East Antarctica)" by Manuel Bensi et al., Earth Syst. Sci. Data Discuss., https://doi.org/10.5194/essd-2021-245-RC2, 2021

Bensi et al., present an interesting oceanographic dataset collected along the Sabrina Coast, nearby the Totten Glacier.

This dataset can contribute to future oceanographic studies in this specific area as well as to basin scale studies.

In my opinion this data description paper is well written and easy to read. Data acquisition methodology is well described, and data are easily accessible through the provided link.

The authors also provide some analysis of the data, offering hypothesis and discussion points.

As one of the strengths of this dataset is the scarcity of previous oceanographic data in the area, I suggest adding a new figure where the spatial distribution of the previously available data is compared to this new dataset.

I have some minor comments that are reported below.

Line 15 “The main water masses of the area”

Line 19 Please resentence in order to simplify

Line 33 depends

Line 60 Use the acronym for Sea-level equivalent

Line 119 is the CTD equipped with a pump?

Line 125 Did you apply the standard CTD data treatment procedures?

Line 125 "Particular attention" I think this is a repetition of what previously stated

Line 131 Is the 0.002 psu an arbitrary target? Is it based on some bibliography?

Line 147 Please describe how MODIS images are used in the manuscript

Line 166 Please check symbols

Line 182 Is the mixing the only possible process for this?

Figure 3 Please consider to use bigger dots for data

Line 194 "a wide range of temperature and salinity"

Line 195 use acronym for Winter Water

Figgs 4,5,6,7,8 Consider to add a map of the station to these figures

Fig	4	Why are you not using longitude for the x axis?

Data Availability The direct link to the data, as reported in the text would be useful here