

Interactive comment on “From pole to pole: 33 years of physical oceanography on board of R/V POLARSTERN” by Amelie Driemel et al.

Amelie Driemel et al.

amelie.driemel@awi.de

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The review of Mr. Rickards was really thorough and extremely helpful. It definitely aided in improving the manuscript, so thanks a lot for your feedback. We are pleased to have received such a positive feedback from the BODC, which is indisputably THE most important data center for oceanographic data in the UK and beyond. Here are our answers and changes comment by comment:

General comments:

1) #Comment#: The data should be distributed in e.g. CCHDO, SeaDataNet etc.

#Answer#: SeaDataNet actually harvests PANGAEA which is why these datasets are

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also found in SeaDataNet. Also POLARSTERN CTD data are sent to CCHDO, although only the raw data is available there. Due to PANGAEA being a part of the ICSU World Data System it strongly supports interoperability and provides catalogue contents and access protocols based on international standards and protocols for geospatial data and metadata (e.g. ISO19115, DIF, DC, OGCWFS, OGCSOS, OAIPMH), which is why we feel the data is in good hands with PANGAEA.

2) #Comment#: It would be helpful to know if any calibration/processing/quality control has been carried out on the extra parameters (oxygen, chlorophyll etc.)

#Answer#: in doi: 10.1594/PANGAEA.860066 we provide an “Overview of additional parameters measured on POLARSTERN CTD casts” under “Further Details”, which give all available information on the extra parameters. This information was added to chapter 3.1. [quote: “We also added an overview in xls format of these additional measurements at <http://doi.pangaea.de/10.1594/PANGAEA.860066> (“Further details”) which contains information (where available) on whether or not these measurements were calibrated, and during which campaign which additional measurements were taken.”]

3) #Comment#: it would be convenient if the entire data set could be downloaded with one “click”, and/or the Antarctic or Arctic collections could be similarly accessed.

#Answer#: We created an interactive kmz file where one can zoom into the single sites and click on the one of interest, with a link to the dataset then opening up. The kmz has been linked in the manuscript and also in the data overview at doi:10.1594/PANGAEA.860066. Also, we added a sentence to chapter 3.1 where we explain, how to download several or all files in PANGAEA at once:

[quote: “To download several or all datasets at once, you can either use the Data Warehouse integrated into PANGAEA, or you can use a program especially designed for this purpose called PanGet. Data Warehouse: Log in to PANGAEA (or create an account) at www.pangaea.de, then search for ‘PSctd’ (or ‘PSctd +oxygen’ etc.). On the

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top right corner you can now click on Data Warehouse (above the google map), here you can choose which parameters you want to download, then click on "Start Data Warehouse Query". Please be aware that downloading all files creates a file >1.5 GB which might take a while to download. How to download files with PanGet is described at <https://wiki.pangaea.de/wiki/PanGet>.”]

4.) #Comment#: For maximum re-use it would be beneficial to offer the data set in additional formats (e.g. CF compliant netCDF, as used, for example, by the OceanSites and modelling communities).

#Answer#: Unfortunately, we are not able to create netCDF files, so this request cannot be met. However, I think as the data is in ISO Format, modellers will meet no difficulties in creating their own special formats needed for their particular purpose.

Specific comments in the supplementary file:

All suggestions in the supplementary file were met, some textual changes are mentioned below. One exception: Page 5 line 20, see below.

#Page 5, line 11-12: The sentence: [quote: “However, to compare the SBE35 temperature with the temperature from the CTD respectively the SBE3plus temperature sensors, the temperature variation has to be extremely low.”] was changed to [quote: “However, the comparison of the SBE35 temperature values to the CTD, respectively to the SBE3plus sensor temperature values, is only possible if the water temperature is relatively stable, i.e. if the values do not vary much.”]

#Page 5, line 20: “computer generation” – no change, as “generation of computer” sounds more like generating a computer, what we mean is the technology level of the computer.

#Page 7, line 23: [..“log sheets (notes with special occurrences)”] was changed to [..“log sheets (which basically contain descriptions of special occurrences)”]

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#Page 10, line 2: Reference Behrendt et al. (in prep.) not in reference list. => Tentative citation was added to Reference list.

#Subtitle of Figure 4: Kanzow et al. (in prep.) not in reference list. => The Kanzow et al. paper is not in a citable stage yet, so we changed this to “Torsten Kanzow, pers. comm.”.

Interactive comment on Earth Syst. Sci. Data Discuss., doi:10.5194/essd-2016-64, 2016.

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