

Data Paper

Ryosuke Makabe and Kunio T. Takahashi. Chlorophyll *a*, macronutrient concentrations, and photosynthetically active radiation measured during the Umitaka-maru cruise of the 61st Japanese Antarctic Research Expedition, January 2020. *Polar Data Journal*. 2022, 6, p. 9–16. <https://doi.org/10.20575/00000035>.

(Received 4/6/2021; Accepted 3/30/2022)

1st submission

Editor Start Date: 2/27/2022

Editor Stop Date: 3/22/2022

Reviewer #1 (3/2/2022–3/2/2022)

Reviewer #2 (3/3/2022–3/18/2022)

Reviewer #1: Anonymous

Makabe and Takahashi made a dataset of temperature, salinity, chl.a, nutrients and PAR during TV Umitaka-Maru JARE-61 cruise and described on the details of the data. The dataset has good format and the documentation on the data is well written. Therefore, I recommend to publish this submission in *Polar Data Journal* after a few very minor revisions.

1. "N, N" of N, N-dimethylformamide is better to be italic.
2. Please check journal name and abbreviation in references.

Journal: J. (*Polar Data J.*?)

In 1989, "BBA-Bioenergetics" was not issued. It was just "Biochimica et Biophysica Acta" (*Biochim Biophys. Acta*?)

Jpn.: Japan?

Reviewer #2: Anonymous

The manuscript reports data of chlorophyll *a*, macronutrient concentrations and photosynthetically active radiation collected from the Southern Ocean during the T/V Umitaka-maru cruise of the 61st JARE. The manuscript is worth publishing, but I have a few minor comments.

1. Line 101: Change SBE9plus to SBE 9plus
2. Line 107: It would be better to indicate temperature conditions of the extraction.
3. Line 149, 157, 162: Indentation
4. Line 12 of the data file UM19_Ch1&Nuts_Station.csv: Cells of CHL BULK, CHL 10UM, CHL 2UM and GHL GF/F are empty. Does it indicate that those data could not be collected?

Authors Response:

Response to reviewer #1;

Makabe and Takahashi made a dataset of temperature, salinity, chl.a, nutrients and PAR during TV Umitaka-Marui JARE-61 cruise and described on the details of the data. The dataset has good format and the documentation on the data is well written. Therefore, I recommend to publish this submission in Polar Data Journal after a few very minor revisions.

1. "N, N" of N, N-dimethylformamide is better to be italic.

Reply: Corrected accordingly.

2. Please check journal name and abbreviation in references.

Journal: J. (Polar Data J.?)

In 1989, "BBA-Bioenergetics" was not issued. It was just "Biochimica et Biophysica Acta" (Biochim Biophys. Acta?)

Jpn.: Japan?

Reply: I have confirmed both are correct.

Response to reviewer #2;

The manuscript reports data of chlorophyll a, macronutrient concentrations and photosynthetically active radiation collected from the Southern Ocean during the T/V Umitaka-maru cruise of the 61st JARE. The manuscript is worth publishing, but I have a few minor comments.

1. Line 101: Change SBE9plus to SBE 9plus

Reply: Corrected accordingly.

2. Line 107: It would be better to indicate temperature conditions of the extraction.

Reply: We have inserted "at -20°C" after "were extracted".

3. Line 149, 157, 162: Indentation

Reply: Corrected accordingly.

4. Line 12 of the data file UM19_Ch1&Nuts_Station.csv: Cells of CHL BULK, CHL 10UM, CHL 2UM and GHL GF/F are empty. Does it indicate that those data could not be collected?

Reply: The was not collected due to the leak of Niskin bottle.

2nd submission

Editor Start Date: 3/23/2022

Editor Stop Date: 3/29/2022

Editor Comments to the Author: Sakae Kudoh

Present revised MS was almost acceptable, however, please add explanations that pointed out by Reviewer #2 in 4. Data Record section. Missing data should be clearly explained.

Line 12 of the data file UM19_Ch1&Nuts_Station.csv: Cells of CHL BULK, CHL 10UM, CHL 2UM and GHL GF/F are empty. Does it indicate that those data could not be collected?

Your Reply: The was not collected due to the leak of Niskin bottle.

Authors Response:

Response to the editor;

Line 12 of the data file UM19_Ch1&Nuts_Station.csv: Cells of CHL BULK, CHL 10UM, CHL 2UM and GHL GF/F are empty. Does it indicate that those data could not be collected?

Your Reply: The was not collected due to the leak of Niskin bottle.

Reply: The water sample was not collected due to the leak of Niskin bottle. We have added “No chl. a measurement was obtained at 25 m depth at KC2 due to leak of the Niskin bottle.” to the Section 2 (Study sites).

Editorial Office's note

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