

Data Paper

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Infrasound observation at Japanese Antarctic Station "Syowa": 11 years observations and results.

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1st submission

Editor Start Date: 8/1/2019

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Reviewer #1 (8/13/2019 – 8/28/2019)

Reviewer #2 (8/28/2019 – 10/24/2019)

Editor Comments to the Author:

Thank you very much for submitting to PDJ. Comments from two reviewers arrived, as described below. Please respond to them and send a revised manuscript.

Reviewer #1 : Anonymous

General comments

This paper describes the infrasound data observed from 2008 through 2018 at Japanese Antarctic station, Syowa. The topic is valuable and within the scope of Polar Data Journal. The authors describe their methods briefly. They explain the data files and their formats so that other researchers can reuse them by reading this paper. They also provide information that legitimates the reliability of their data.

Specific comments

2.Observation Site

2nd line: "69.0S, 39.6E"

A unit falls out. "69.0°S, 39.6°E"

5th line: "(IPY20072008)"

Unify notation with abstract such as (IPY2007 - 2008).

3.1. Infrasound Observation System

1st line: "The observation system is slightly different between each observation period."

It is hard to know when it is. The authors would say each observation period in detail.

13th line: "DATA mark LS7000-XT"

It is as follows definitely. "DATAMARK LS-7000XT"

7. Figures

Figure 3: "Datamark LS7000-XT"

It is as follows definitely. "DATAMARK LS-7000XT"

8. Tables

Table: "39.584256 -69.006875" etc.

Add a unit to Latitude Longitude of Table 1.

Reviewer #2 : Anonymous

Some comments to authors

Chapter 5

First line of the paragraph some space (indent) is needed as others.

Figure 1

There is no explanation for the mark of C1, C2 and C3 in the figure.

Figure 4

There is no explanation for the figure 4 in the text.

Authors Response:

Response to reviewers

We thank the reviewers for their thoughtful comments. In the following, we reply to their comments. Their comments are in blue, and our reply is in black.

Response to reviewer #1;

Specific comments

2. Observation Site

2nd line: "69.0S, 39.6E"

A unit falls out. "69.0°S, 39.6°E"

We add degree symbol as follows "... at Syowa Station (SYO, 69.0 °S, 39.6 °E, WGS-84) ...".

5th line: "(IPY20072008)"

Unify notation with abstract such as (IPY2007-2008).

We unify the notation as follows "... International Polar Year (IPY2007-2008)...".

3.1. Infrasound Observation System

1st line: "The observation system is slightly different between each observation period."

It is hard to know when it is. The authors would say each observation period in detail.

We added following sentence for describing the two periods. "The first period was from April 2008 to December 2012 as the pilot observation and the second period was from January 2013 to the present as an array observation."

13th line: "DATA mark LS7000-XT"

It is as follows definitely. "DATAMARK LS-7000XT"

We corrected to "DATAMARK LS-7000XT", as recommended.

7. Figures

Figure 3: "Datamark LS7000-XT"

It is as follows definitely. "DATAMARK LS-7000XT"

We corrected to "DATAMARK LS-7000XT".

8. Tables

Table: "39.584256 -69.006875" etc.

Add a unit to Latitude Longitude of Table 1.

We added degree symbols.

Response to reviewer #2;

Chapter 5

First line of the paragraph some space (indent) is needed as others.

We corrected it.

Figure 1

There is no explanation for the mark of C1, C2 and C3 in the figure.

We added following sentence to caption. "C1, C2, C3 indicate location of each array component."

Figure 4

There is no explanation for the figure 4 in the text.

We added figure reference in 1. Background & Summary sections as follows. "Spectrograms of the infrasound recordings indicate continuously arriving of microbaroms, and weak annual variation of its energy as well (Figure 1).", and figure number was remapped.

2nd submission

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Editorial Office's note

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Original Data

Yoshiaki, I., Takahiko, M., Masa-yuki, Y., Takeshi, M., Masaki, K. Infrasound observation at Japanese Antarctic Station "Syowa": 11 years observations and results. 1.00, Arctic Data archive System (ADS), Japan, 2019. <https://doi.org/10.17592/001.2019070501>

Because of the limitation of the disk capacity of the archive site, PSD files are provided separately upon e-mail requests.