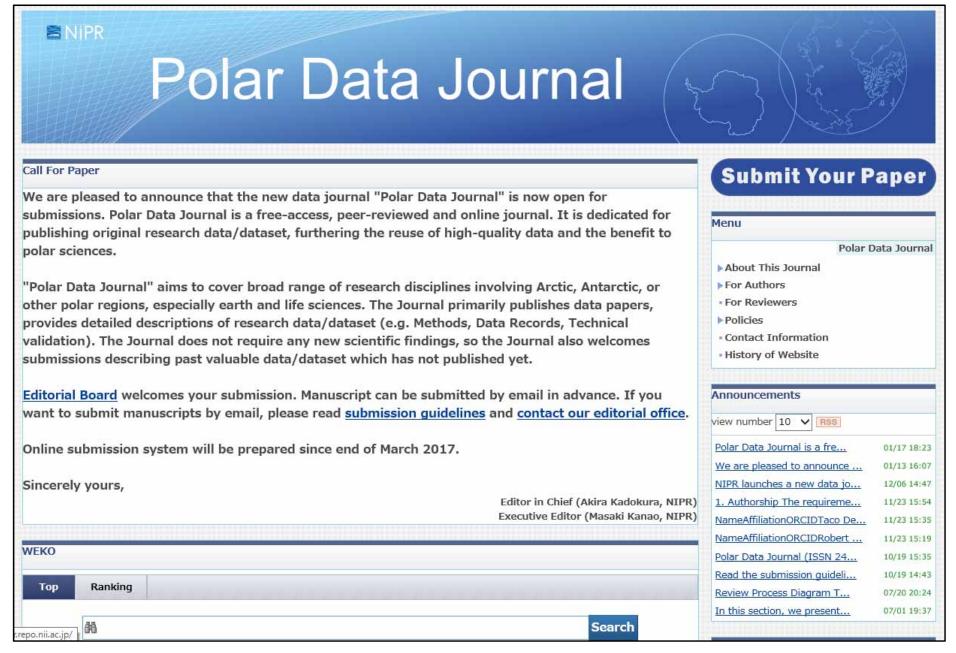
"Polar Data Journal": A new publication platform for polar science data

Akira Kadokura^{1,2}, Yasuyuki Minamiyama², Masaki Kanao^{1,2}, Takeshi Terui², Hironori Yabuki^{1,2}, and Kazutsuna Yamaji³

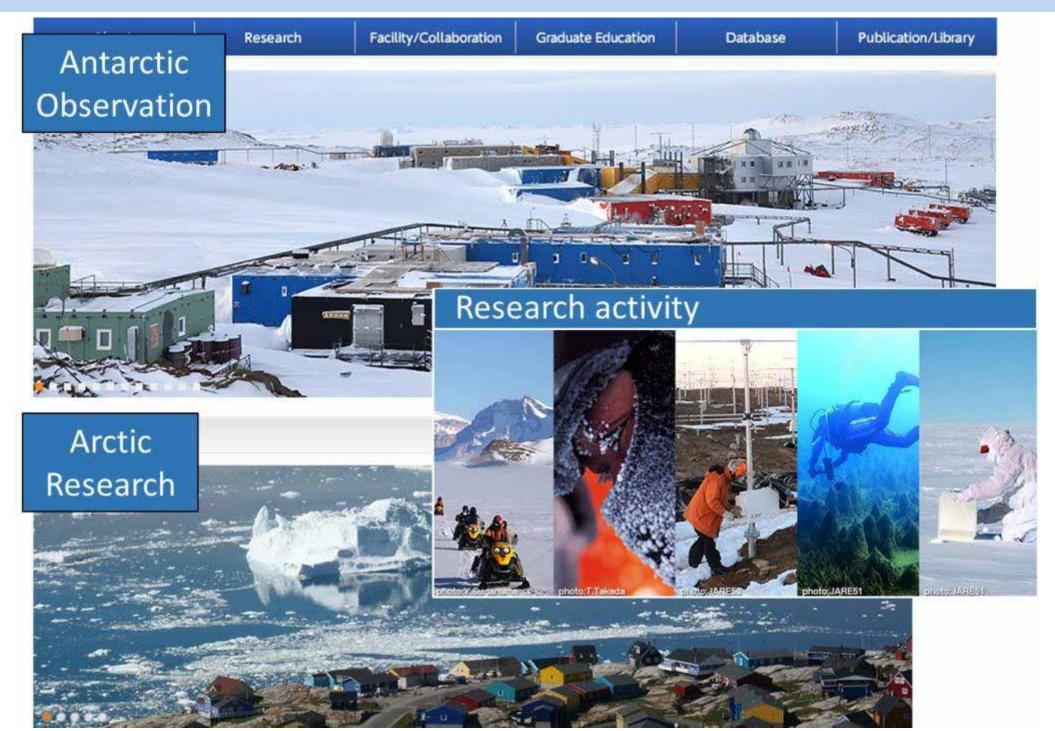
- ¹ Polar Environment Data Science Center, Joint Support-Center for Data Science Research, Research Organization of Information and Systems,
- ² National Institute of Polar Research
- ³ National Institute of Informatics

A new data journal has been launched on 19 January, 2017 by the National Institute of Polar Research (NIPR) https://pdr.repo.nii.ac.jp/





National Institute of Polar Research



Data obtained by activities in polar region



Publication in NIPR

for Research paper

Periodical publication

- 1. Antarctic Record (lists)
- 2. Polar Science
- Journal (formerly: Proceedings of the NIPR Symposium)
 - Advances in Polar Upper Atmosphere Research
 - Polar Meteorology and Glaciology
 - · Polar Geoscience
 - Antarctic Meteorite Research
 - Polar Bioscience

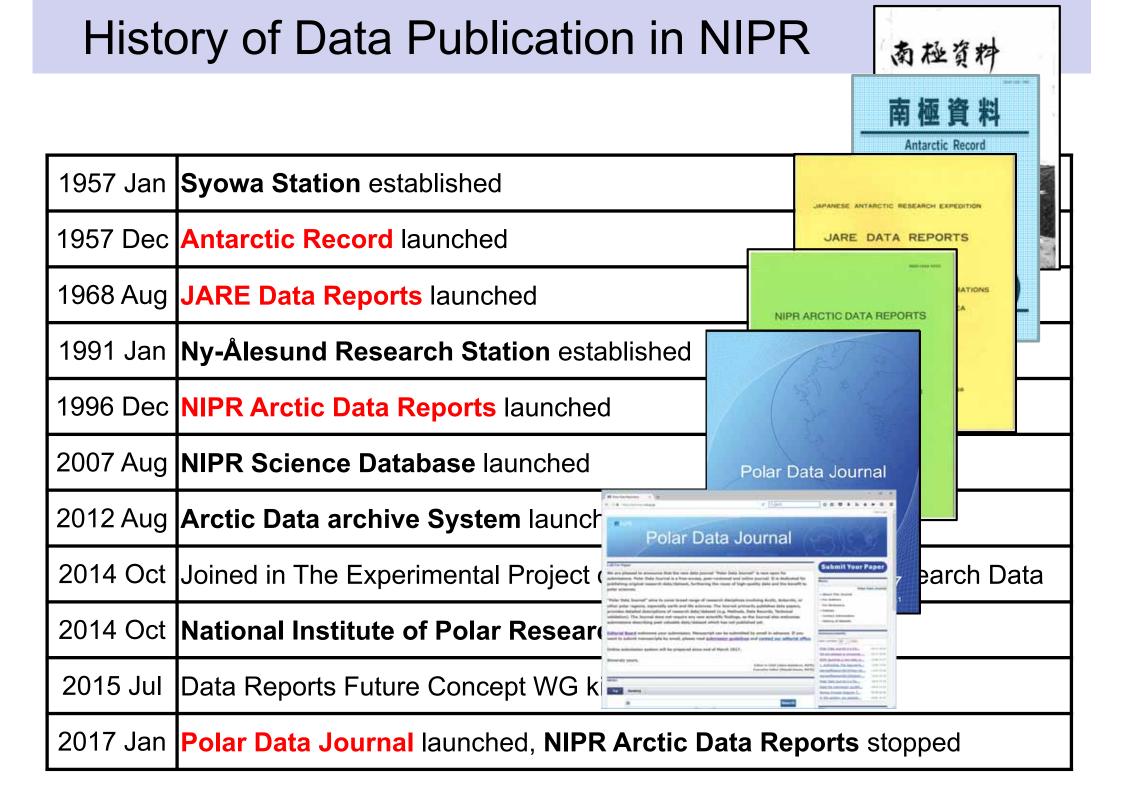
for Data

Casual publication

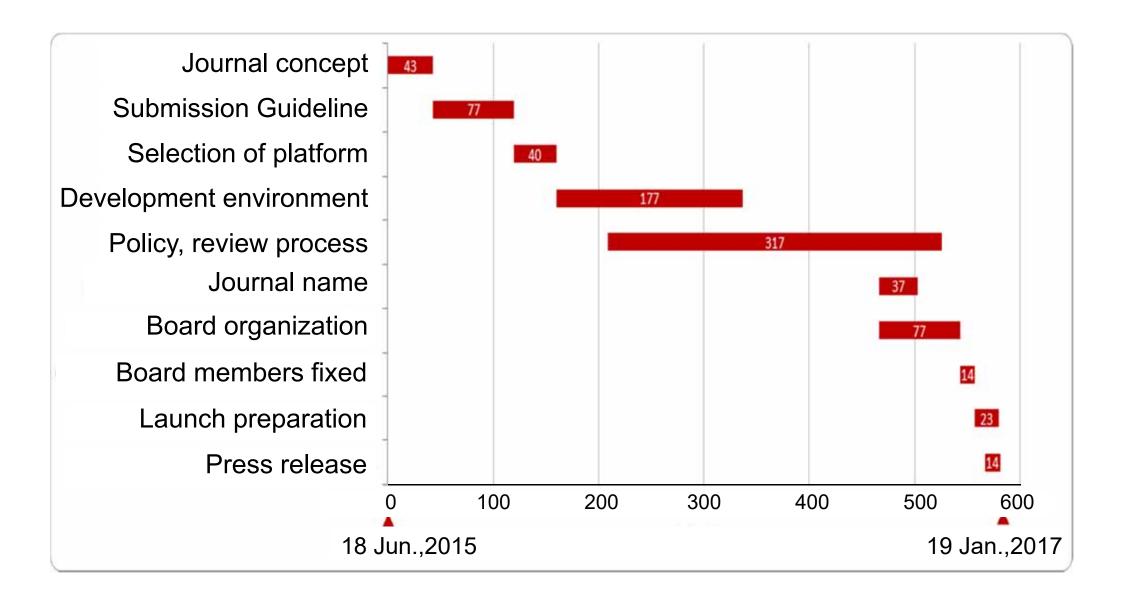
- 1. Memoirs of National Institute of Polar Research (lists)
- 2. JARE Data Reports

[For authors: The format of the report is available here.]

- Aurora
- Upper Atmosphere Physics
- · Ionosphere
- Meteorology
- Earth Science
- Glaciology
- Seismology
- Geochemistry
- Oceanography
- Marine Biology
- Terrestrial Biology
- 3. NIPR Arctic Data Reports
- 4. Antarctic Geological Map Series (lists)
- 5. Special Map Series
- 6. Catalog (Meteorites, Moss Specimens, etc.)
- 7. Books



Gantt Chart of the Polar Data Journal Preparation



Polar Data Journal: free-access online journal



Polar Data Journal: Editorial Board

#	Name	Affiliation
1	Taco DeBruin	NIOZ Royal Netherlands Institute for Sea Research
2	Shannon Vossepoel	University of Calgary
3	Yasuhiro Murayama	National Institute of Information and Communications Technology
4	Shinya Nakano	The Institute of Statistical Mathematics
5	Asanobu Kitamoto	National Institute of Informatics
6	Akira Kadokura	National Institute of Polar Research
7	Masaki Kanao	National Institute of Polar Research
8	Tsuneo Odate	National Institute of Polar Research
9	Hironori Yabuki	National Institute of Polar Research
10	Gen Hashida	National Institute of Polar Research
11	Masayuki Kikuchi	National Institute of Polar Research
12	Akira Yamaguchi	National Institute of Polar Research

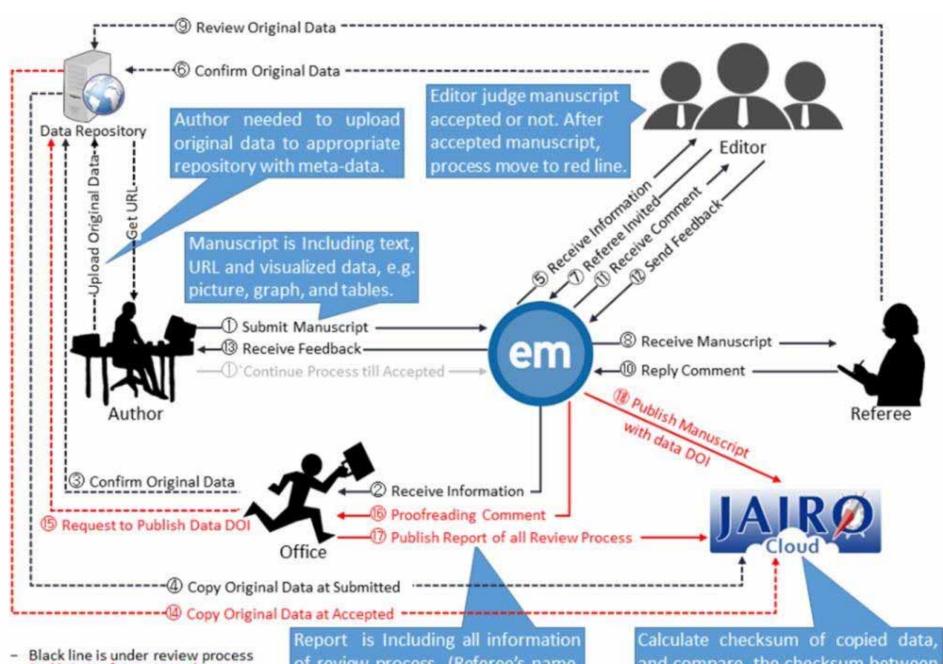
Polar Data Journal: Advisory Board

#	Name	Affiliation
1	Robert Arko	Columbia University
2	Phillippa Bricher	Southern Ocean Observing System
3	Julie Friddell	University of Waterloo
4	Øystein Godøy	Norwegian Meteorological Institute
5	Mark Parsons	Research Data Alliance/Rensselaer Polytechnic Institute
6	Peter Pulsifer	University of Colorado
7	Anton Van de Putte	Royal Belgian Institute for Natural Science
8	Mustapha Mokrane	World Data System-International Programme Office
9	Hideaki Takeda	National Institute of Informatics
10	Seiji Tsuboi	Japan Agency for Marine-Earth Science and Technology

Polar Data Journal: Aims and Scope

- Free-access, peer-reviewed and online journal.
- ➤ Dedicated for publishing original research data/dataset, furthering the reuse of high-quality data and the benefit to polar sciences.
- ➤ Aims to cover broad range of research disciplines involving Arctic, Antarctic, or other polar regions, especially earth and life sciences.
- Primarily publishes data papers, that provides detailed descriptions of research data/dataset (e.g. Methods, Data Records, Technical validation).
- Does not require any new scientific findings.
- Welcomes submissions describing past valuable data/dataset which has not been published yet.
- Requires to be passed our peer-review process.
- Before submitting manuscript, authors should deposit their data/dataset to <u>trustworthy data repository</u>.
- Data authenticity is guaranteed by publishing report of all review process, which will be published with author's manuscript at the same time.

Polar Data Journal: Review Process



- Red line is after accepted process

of review process (Referee's name, Comment, Objection, and Feedback) and compare the checksum between and to validate authenticity.

Polar Data Journal: Appropriate Repositories

To promote the creation of reusable, high-quality data/dataset, the following criteria are required for the data repository:

A persistent identifier:

The data/dataset must have a persistent identifier (such as a digital object identifier, DOI).

Free access:

The data/dataset must be available free of charge and without any barriers except for a standard registration to get a login free of charge.

Liberal copyright:

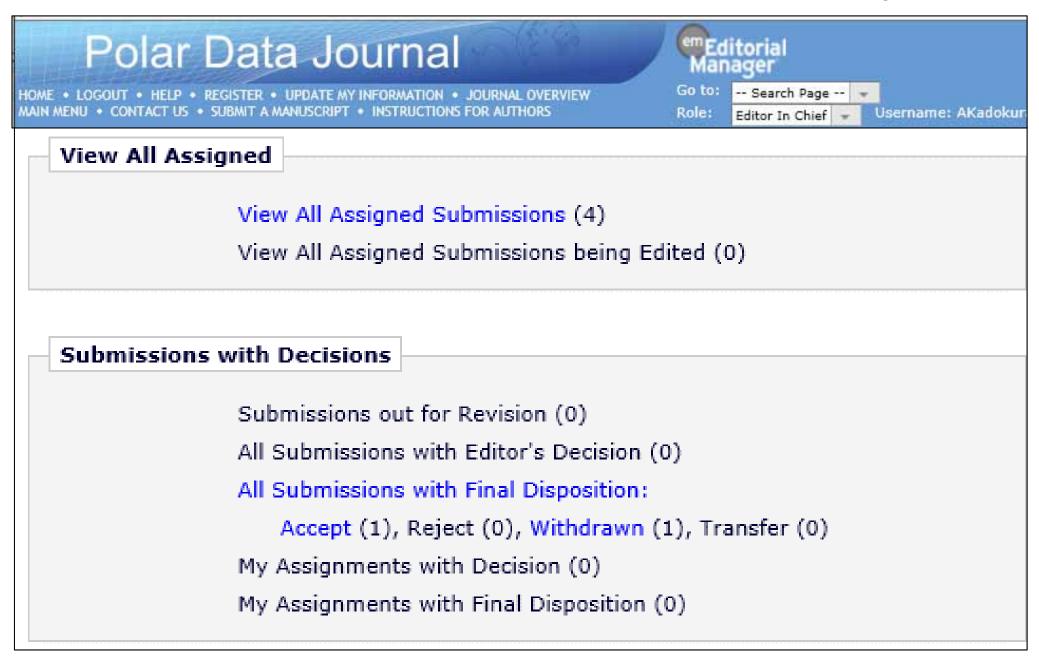
Anyone must be free to copy, distribute, transmit, and adapt the datasets as long as they give credit to the original authors.

Polar Data Journal: Submission Guidelines

Item	Explanation
Title	256 characters maximum, including spaces
Authors	First name Last name1, First name Last name2
Affiliations	1. Institution, 2. Institution, Corresponding author(s): Given name FAMILY name (e-mail@address)
Abstract	Contain a concise summary and note the acquired and prepared datasets as well as possibilities
Abstract	for reusing those datasets.
	Explain the research background that served as the basis for the prepared data and explain the
Background and Summary	composition of that research with citations, where necessary. In addition, discuss the motivation
	and purpose for preparing the data as well as the data's value.
Location (or Observation)	Using maps, describe the locations where data were acquired or observations were made.
Methods	Describe the processing technique used when preparing data, such as the methods used to acquire data and/or conduct observations, with citations as necessary.
Data Records	Explain data records that pertain to this report. Describe the data files and their formats so that other researchers can reuse them by reading this section.
	Provide the method used to support the technical quality of the datasets, with accompanying
Technical Validation	figures and tables when necessary. This is a required section; authors must provide information
	that legitimizes the reliability of their data.
Usage Notes (optional)	Describe any points that should be kept in mind when using the data.
Acknowledgements	Include contributions from people who are not listed among the authors, as well as projects that
Acknowledgements	gathered data and sources of funding.
Author Contributions	Describe the contributions made by each author.
Competing Interests	Data management plans designated by funding sources may be provided here.
Figures (optional)	Include a maximum of four figures that present the main data points of the published data in a
l igures (optional)	"quick look" format.
Tables	Include the main data points of the published data.
References	Provide bibliographic information for any works cited in the above sections, using the standard
References	Nature referencing style.
Data Citations	This section is for notation of bibliographic information that was provided in the data report. For this
Data Citations	section, data repositories involving polar science will provide digital object identifiers (DOIs).

Polar Data Journal: current status

Submitted: 6: published:1, under review:4, reject:1



Polar Data Journal: future plan

Planning several Special issues:
IPY (International Polar Year) 2007-2008 Data

> Recruit and support for submission:

For the data obtained in the JARE (Japanese Antarctic Research Expedition) activities
For the data obtained in the Japanese arctic projects
For the data obtained in the international programs of
SCAR (Scientific Committee on Antarctic Research),
IASC (International Arctic Science Committee), etc.

➤ Advertise to community:

Summary

- ✓ Polar Data Journal (PDJ) is a free-access, peer-reviewed online journal for publishing original research data/dataset, covering broad range of research disciplines including Arctic, Antarctic, or other polar regions.
- ✓ PDJ was newly born in January, 2017.
- ✓ The first data paper of PDJ was published in October, 2017.
- ✓ It is important to invite more submissions of data papers to raise the value of the PDJ as the first data journal in our community. How?