

- *Special Issue of the "Polar Data Journal" -*

<https://pdr.repo.nii.ac.jp/>

Title of the volume:

"Data Rescue" for the International Polar Year (IPY2007-2008)

- Decadal Anniversary of the Intensive Campaign -

Scope :

The International Polar Year (IPY 2007-2008) was the world's most diverse international science program. It was conducted during the 50th anniversary of the International Geophysical Year (IGY 1957-1958), led jointly by the International Council for Science (ICSU) and the World Meteorological Organization (WMO). The initiative significantly enhanced the exchange of ideas across nations and scientific disciplines to unveil the status and changes of planet Earth as viewed from the polar regions. This kind of inter-disciplinary approach also helped us understand and address grand challenges such as rapid environmental change and its impact on human society. Multi-disciplinary approaches were beneficial in polar researches, moreover, is focusing on the interrelated perspectives which would be needed to understand and quantify their connections with the prediction of future changes in the Earth system.

A significant number of scientific results from IPY have been emerged out and published. However, it is clear that deep understanding will require creative use of variable data from many disciplines. Many of the involved projects provided well-coordinated observation platforms and many continue in the post-IPY era. The huge amount of data accumulating during IPY should be the most important legacy if it is well preserved and utilized. Many dedicated works for the data services have been conducted by individual National Antarctic and Arctic Data Centers (NADCs). Several different aspects of scientific data collected in the polar region have great significance for global environmental research in this century. To construct a practical framework for a long-term strategy of the polar data, data must be made available promptly and new network technologies such a repository service must be employed. Owing to the significant efforts to support reproducible research and credible scientific data, researchers may publish their data in the scientific media and publicize their data collection and data processing efforts.

Since a large number of scientific papers have already been published for a majority of the involved projects, in contrast, the relating retrieved/compiled dataset should also be published after few years from the big campaign. Consequently at the moment in 2018, as a decade of the

anniversary of the initiatives, a special issue on "Data Rescue" of the IPY projects has been proposed. This special issue covers the topics on the recent development of all disciplines of scientific data retrieved at the IPY era and beyond in and around the polar regions. Editors are willing to invite you to submit articles addressing the process of polar data collection, acquisition, processing, and management so that these data will be (re)used by other researchers and add value to the preliminary published results from them.

Editors do not focus only on the data behind publications, but are taking a broad view of data "rescue". While we certainly want to identify and surface closed, hidden, and at-risk data, we also want formalize, highlight, and better steward currently open data. This could include moving data from a project web site to a formal archive with a PID and rich description, etc.. It might also include detailed descriptions of ongoing data streams that make the data more useful and provide lessons learned for other data providers in how to make data more discoverable, open, linked, useful, and safe or FAIR.

The following "Keywords" include, but are not limited to them.

Keywords:

IPY data, endorsed projects, multi-disciplinary research, the strategy of data management, data sharing and interoperability, data publication and citation, data policy, preservation, coordination and governance

Guest Editors :

(Lead Editor)

Mark Parsons (Rensselaer Polytechnic Institute)

(Co-Editors)

Taco de Bruin (NIOZ Royal Netherlands Institute for Sea Research)

Shannon Christoffersen (University of Calgary)

Peter Pulsifer (University of Colorado)

Masaki Kanao (National Institute of Polar Research)

Submission Deadline :

1 May 2019