

# C01-O02

## DEVELOPMENT OF ARCTIC DATA ARCHIVE SYSTEM (ADS)

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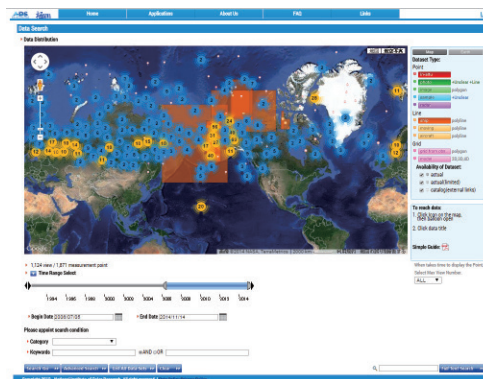
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Of all the regions on the planet, the Arctic currently shows the biggest rise in average temperature due to global warming, and is one of the regions expected to become most affected by climate change on the Earth in the future. The change in the Arctic area brings a profound impact to the global climate system through changes in interactions between the atmosphere, ocean circulation, and the cryosphere. These climate changes not only impact upon human activities, but also the Arctic flora and fauna ecosystem. Large parts of the observations and mechanisms of the environmental change, including the climate of the Arctic region, are still not well understood. In order to further our understanding of these complex systems, an integrated study carried out with continuous observations in the Arctic is proposed.

On the other hand, arctic research by Japanese researchers has been carried out all the time from the last century. The result of their research includes many irreplaceable data, such as observation time series, sample, and its analysis, which each researcher got in the field. Since researcher and organization have had those data in their keeping by their way, many data has not managed and kept systematically.

The purpose of the Arctic Data archive System is to archive and distribute multiple observational (atmosphere, ocean, terrestrial, and ecology) and model simulation datasets, and promote utilization of these datasets. ADS is the central repository of archived data on Arctic research in Japan.



Top image of Arctic Data archive System(ADS): URL :[https:// ads.nipr.ac.jp/](https://ads.nipr.ac.jp/)