Data Citation Procedure on Science Database of Polar Research

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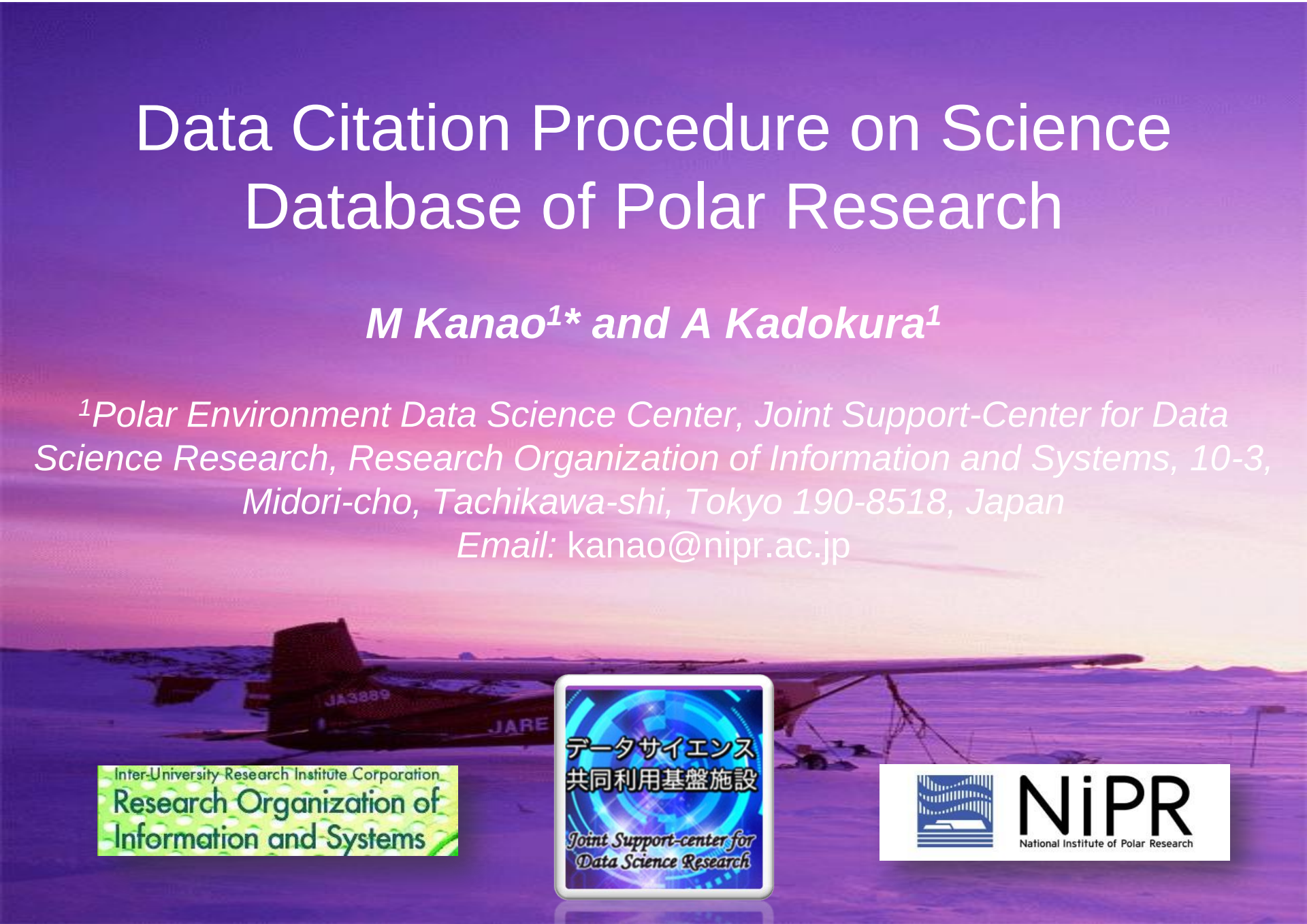

Inter-University Research Institute Corporation
Research Organization of Information and Systems

データサイエンス共同利用基盤施設
Joint Support-center for Data Science Research

NiPR
National Institute of Polar Research

Outline of my talk

- Metadata holding history
  - Present status on polar data management
    (Metadata Portal in NIPR/PEDSC-DS,
    collaboration with GCMD)

- Highlights of recent developments
  - Data Inter-operability between other organizations
    (Polar Data Catalogue, DIAS, ….)
  - Data publication & citation
    (DOI attribution to NIPR metadata portal)

National Institute of Polar Research

NiPR
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Home | Directions to NIPR | Japanese

About NIPR | NIPR Research | Data Base | Contact

Home > Data Base

Data Base

Gateway to Polar Data @ NIPR/DS-ROIS

- Data Base
  - Polar Data Center
  - Ice Core Research Center
  - Science Data Base
  - Data Center for Aurora in NIPR
  - EISCAT database in NIPR
  - Dome Fuji Ice Core
  - Collection of rocks and minerals
  - Antarctic Meteorite Research Center
  - Biological Specimen Archive

NIPR Metadata Portal

Top Page;

http://scidbase.nipr.ac.jp/

NIPR_MetaDB; N=380

Both English & Japanese pages

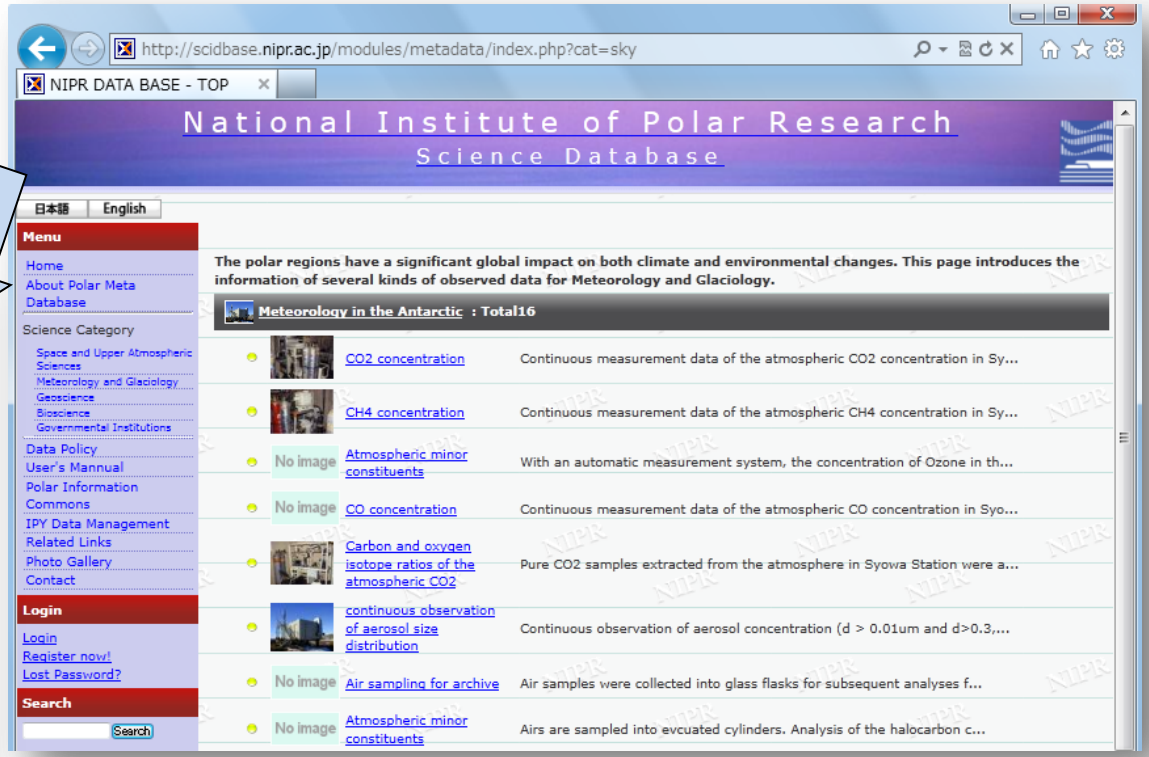
100,000 access from 2011. December

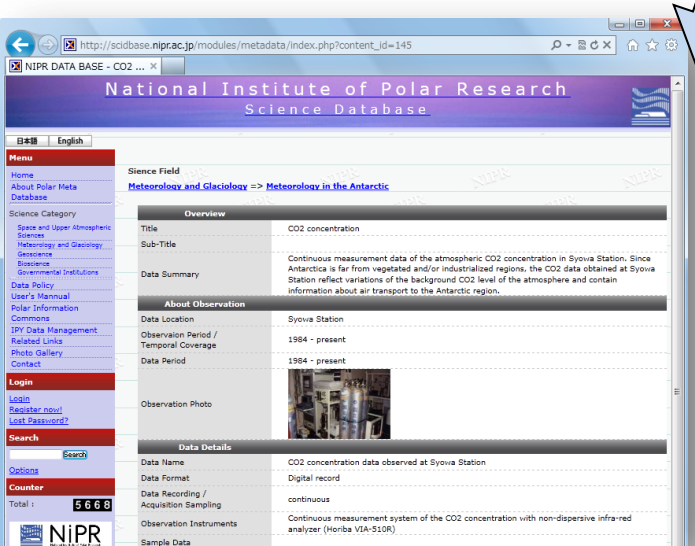
NIPR Metadata Portal

NIPR_MetaDB; N=380

To look the metadata;

http://scidbase.nipr.ac.jp/





NIPR metadata portal

(Japanese Page)

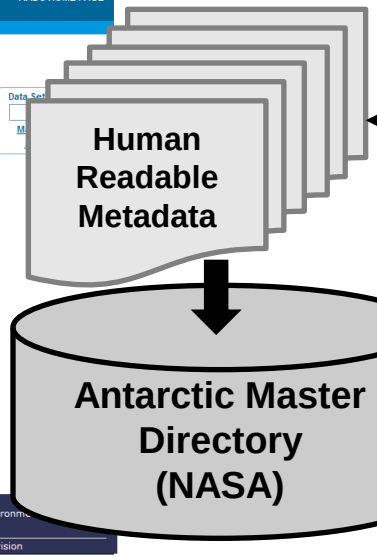
New sub-branches (Project, Monitoring, IPY, Arctic, UM)

http://scidbase.nipr.ac.jp/

Data Infrastructure of SCAR

(Scientific Committee on Antarctic Research / ICSU)

Antarctic Master Directory (AMD) / GCMD / NASA



registering metadata

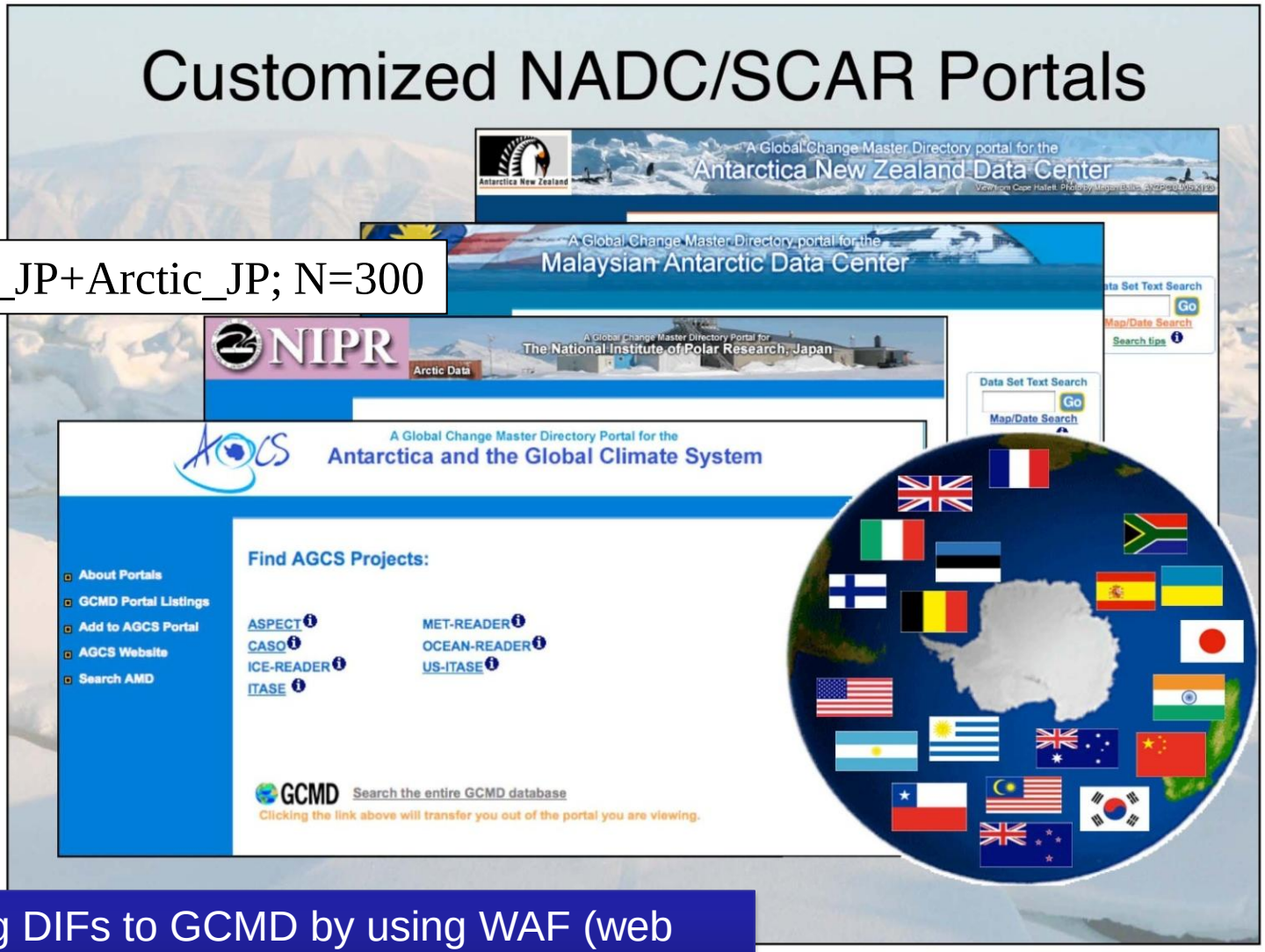
A user can search a metadata catalogue. Data might be linked ??

Antarctic Data Management System (ADMS) = AMD + NADCs

National Antarctic Data Centers (NADC)

GCMD; SCAR related portals

A Global Change Master Directory Portal

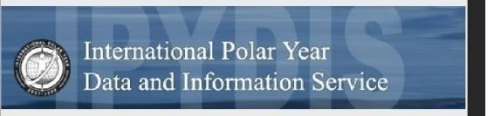


AMD_JP+Arctic_JP; N=300

Providing DIFs to GCMD by using WAF (web accessible folder) inside NIPR metadata portal

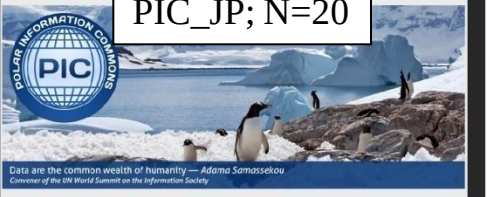
Flow Chart of Data Publication on Polar Science

Standing Committee on Antarctic Data Management /SCAR



IPY Data and Information Service / IPY-DIS

PIC_JP; N=20

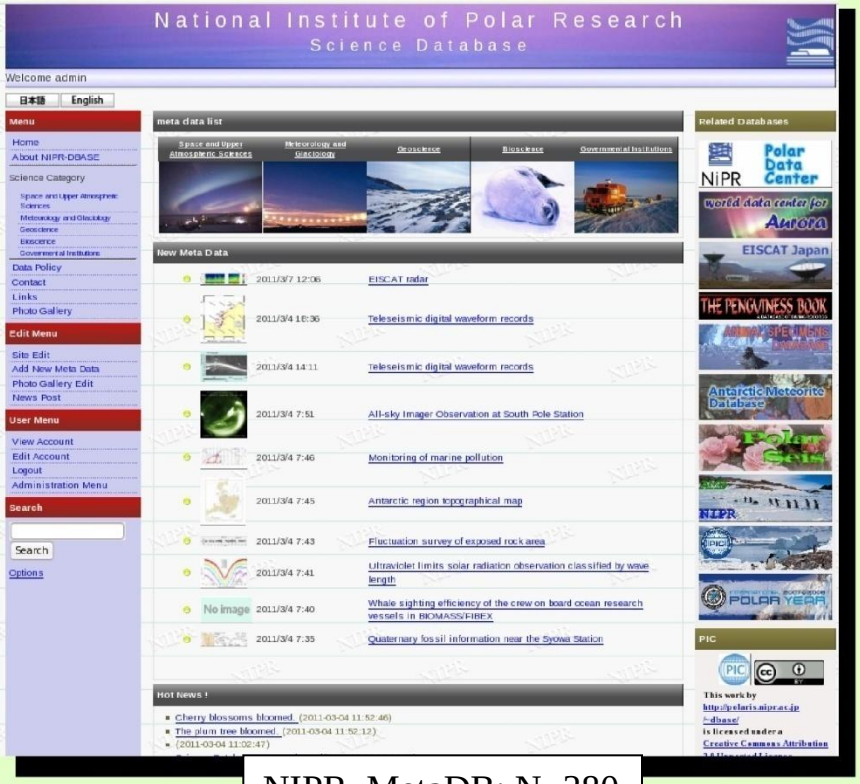


Polar Information Commons /CODATA

World Data System・ CODATA /ICSU

Science Metadata Base *(English & Japanese)*

http://scidbase.nipr.ac.jp/

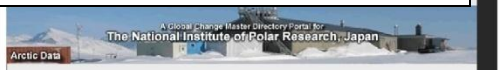


NIPR_MetaDB; N=380

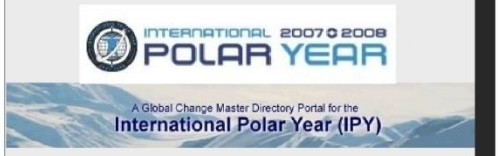
Antarctic Master Directory / GCMD

Japanese Antarctic Portal (AMD_JP)

AMD_JP+Arctic_JP; N=300



Japanese Arctic Portal (Arctic_JP)



IPY Portal in GCMD

IPY_JP; N=250

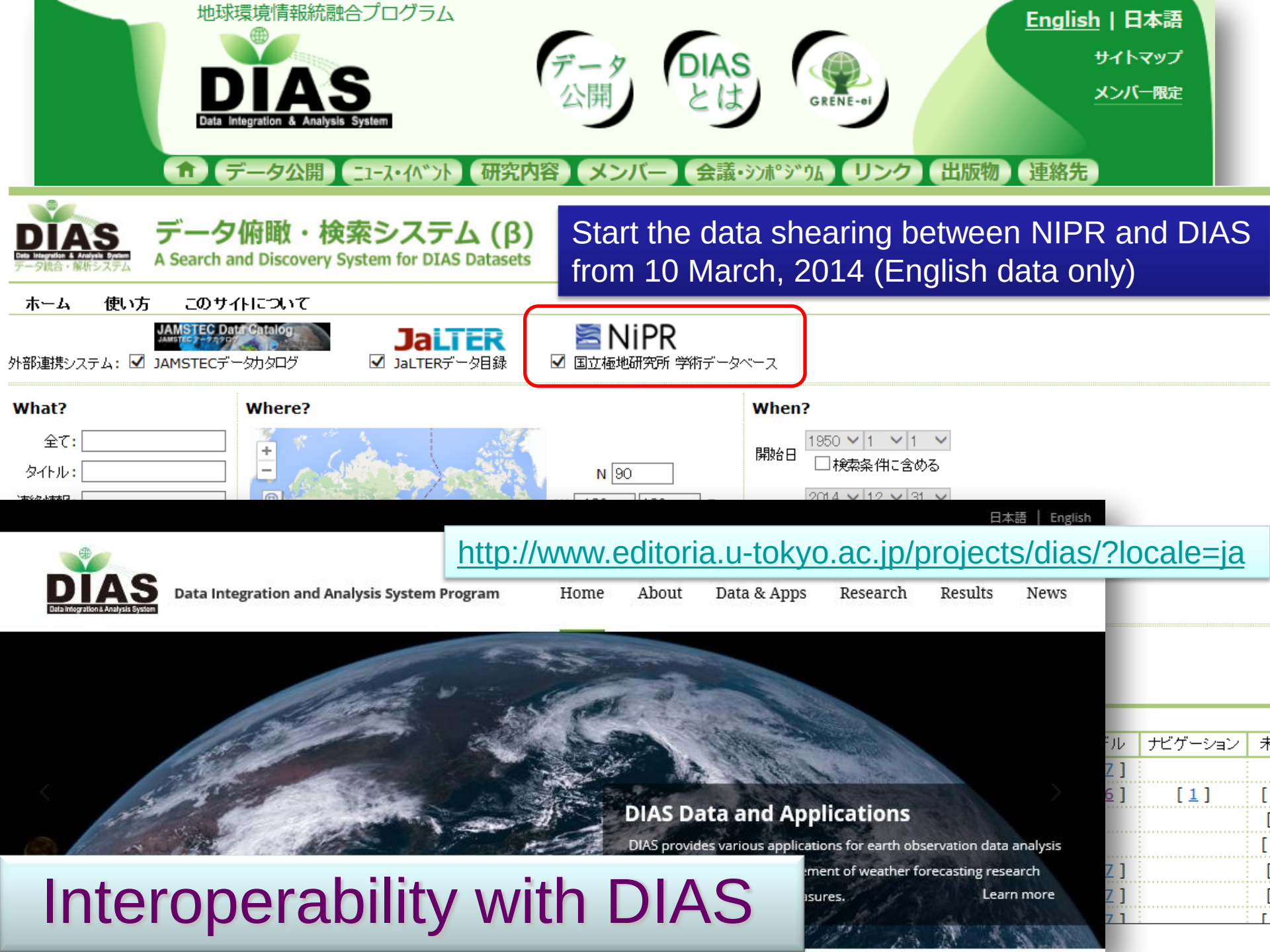
International Data Management Organization / Committee

Exchange of Data & Information

Science Database in Polar Data Center / NIPR

Exchange of Data & Information

NASA / GCMD / Antarctic Master Directory


地球環境情報統融合プログラム
DIAS
Data Integration & Analysis System
データ公開
DIASとは
GRENE-ei
English | 日本語
サイトマップ
メンバー限定
データ公開
ニュース・イベント
研究内容
メンバー
会議・シンポジウム
リンク
出版物
連絡先
DIAS
データ統合・解析システム
データ俯瞰・検索システム (β)
A Search and Discovery System for DIAS Datasets
Start the data shearing between NIPR and DIAS from 10 March, 2014 (English data only)
ホーム
使い方
このサイトについて
JAMSTEC Data Catalog
JaLTER
NiPR
外部連携システム:
JAMSTECデータカタログ
JaLTERデータ目録
国立極地研究所 学術データベース
What?
全て:
タイトル:
Where?
N 90
When?
開始日
1950 1 1
検索条件に含める
日本語 | English
http://www.editoria.u-tokyo.ac.jp/projects/dias/?locale=ja
DIAS
Data Integration & Analysis System
Data Integration and Analysis System Program
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DIAS Data and Applications
DIAS provides various applications for earth observation data analysis
ement of weather forecasting research
asures.
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ナビゲーション
Interoperability with DIAS

Interoperability with Polar Data Catalogue, Canada

POLAR DATA CATALOGUE

Polar Data Catalogue http://www.polardata.ca/

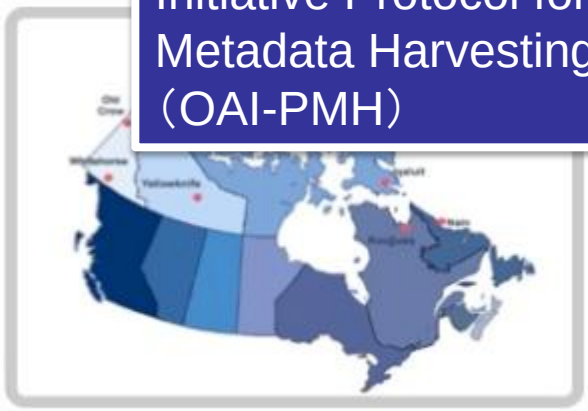
Welcome to the Polar Data Catalogue

The Polar Data Catalogue is a database of metadata and data that describes, indexes, and provides access to diverse data sets generated by Arctic and Antarctic researchers. The metadata records follow **ISO 19115** and **Federal Geographic Data Committee (FGDC)** standard formats to provide exchange with other data centres. The records cover a wide range of disciplines from natural sciences and policy, to health and social sciences. The PDC Geospatial Search tool is available to the public and researchers alike and allows searching data using a mapping interface and other parameters.

Please click on the **PDC Search map** below to start searching for datasets or **sign in to the PDC Input application** to contribute metadata or data to the Polar Data Catalogue.

The **PDC Lite Search** is also available for users with limited Internet speed.

Open Archives Initiative Protocol for Metadata Harvesting（OAI-PMH）



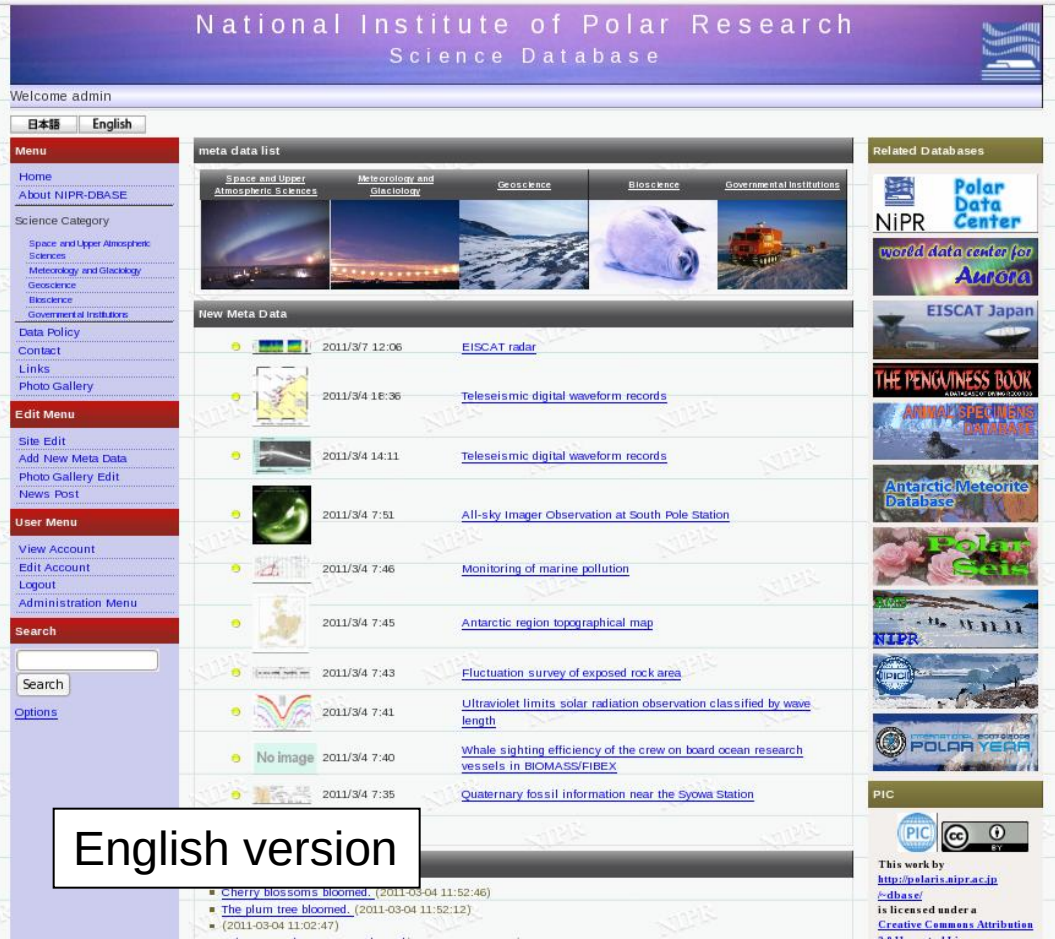
DOI attribution to the Metadata / NIPR

http://scidbase.nipr.ac.jp/
Provide DOI from DataCite via Japan Link Center (JaLK)

Digital Object Identifier

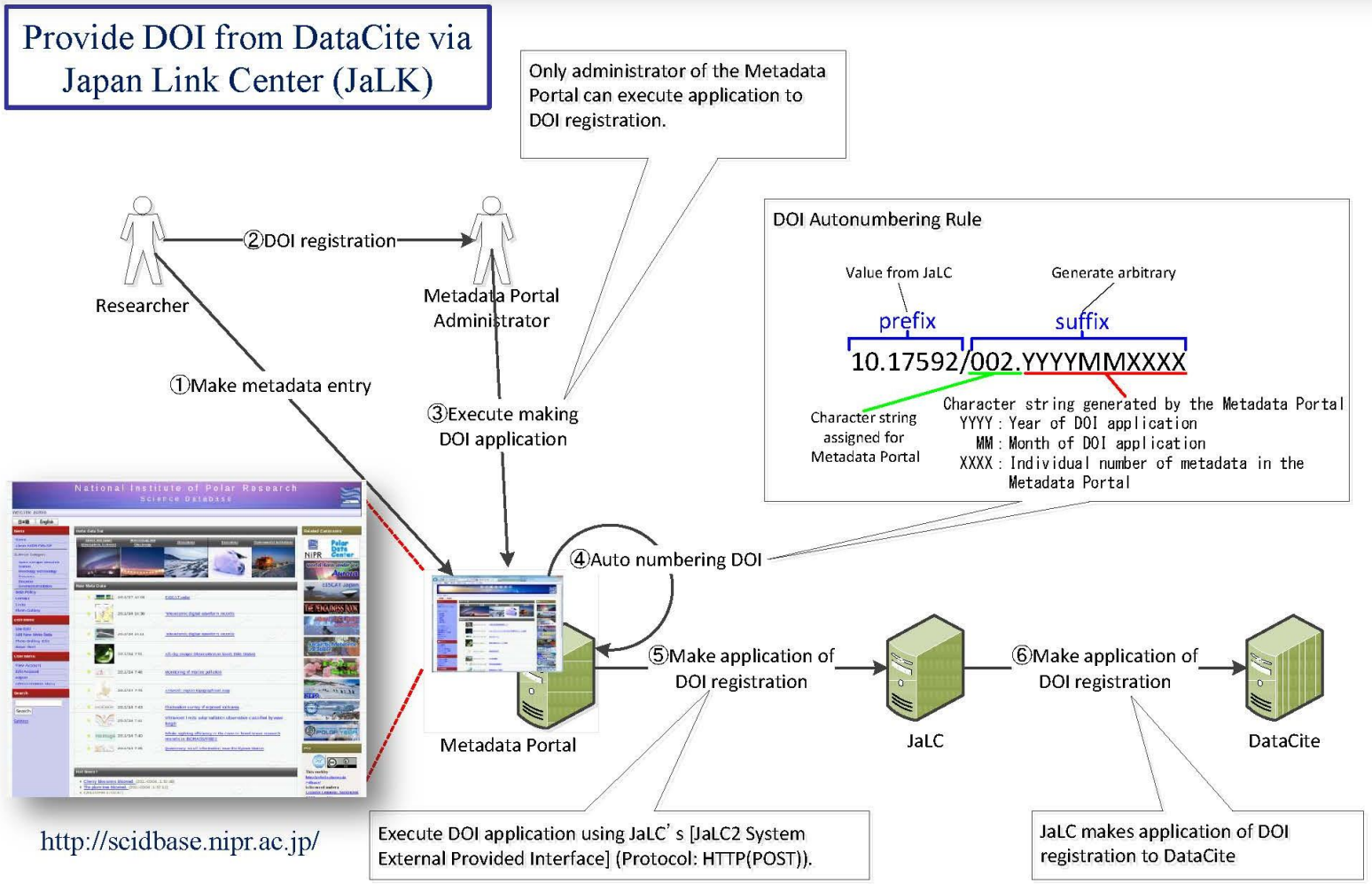
Japanese version

NIPR_MetaDB; N=380



English version

Data citation
(DOI attribution to PEDSC metadata portal)



A flow chart to obtain the DOI prefix from DataCite to the PEDSC metadata portal server (http://scidbase.nipr.ac.jp/) via the JaLC gateway interface.

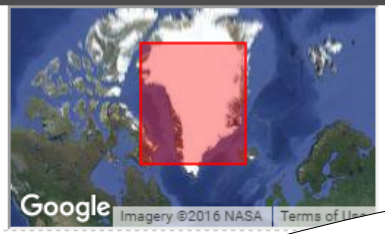
Data citation
(DOI attribution to NIPR metadata portal)

View GCMD Formatted XML

Overview

Title	Digital seismic waveform records by GLISN_Japan
Sub-Title	Broadband seismic observation on Greenland ice sheet
Data Summary	The GreenLand Ice Sheet monitoring Network (GLISN) is a new, international, broadband seismic capability for Greenland being implemented through the collaboration between Denmark, Canada, France, Germany, Italy, Japan, Norway, Poland, Switzerland, and the USA. It is designed to monitor glacier earthquakes, which occurrences are reported to increase in this century. Currently there are about 30 seismic observatories, designated as GLISN contributing stations, in and around Greenland. Broadband seismograms obtained from these stations are archived and opened to research community through the Data Management Center of Incorporated Research Institutions for Seismology (IRIS). The ICE-S station has been maintained by US and japanese team.

About Observation

Spatial Coverage	
Data Location	ICE-S, DY2G
	...oring Network, International Forum on "Polar Data ...ems", P12, 15-16 October, 2013, Ueno, Tokyo ...ol, K. Butler, K. Anderson, T. Dahl-Jensen, T. Larsen, M. Nettles, P. Voss, D. ...mus, J. Clinton, E. Stutzmann, T. Himeno, G. Toyokuni, S. Tanaka, Y. Tono, Greenland Ice Sheet Dynamics and Glacial Earthquake Activities, International Polar Year 2012 Conference in Montreal, 2A105-7, April 22-27, 2012, Montreal, Canada
DOI	10.17592/002.2016030321
Creator	Masaki Kanao
Publisher	National Institute of Polar Research

Copyright @ National Institute of Polar Research

Landing page =
English metadata URL

Flow chart of DOI assignment

◇申請から付与承認通知まで

【 National Institute of Polar Research Repository ;　http://scidbase.nipr.ac.jp 】

【Reviewer】
By member of data management committee
+ α

【DB Manager】
Database manager

【Data provider】

Form 1（Certification）

事前にメタデータポータルサーバにデータ登録

申請受付・
記載事項の確認

差し戻し・再申請
（申請書内容に不備がある場合）

チェック担当者（2名）を決定

ケース4., 5.

Form 2（Check sheet）

ケース3.

Evaluation of data

チェック依頼

ケース2.

チェック担当者による評価確認

データ修正

ケース2., 3.

ケース1.

付与承認を委員会へ打診・資料回付

審査結果通知＋様式2

【 Data Management Committee】
DOI assignment

ポータルサーバでのDOI付与作業

審査結果通知＋様式2

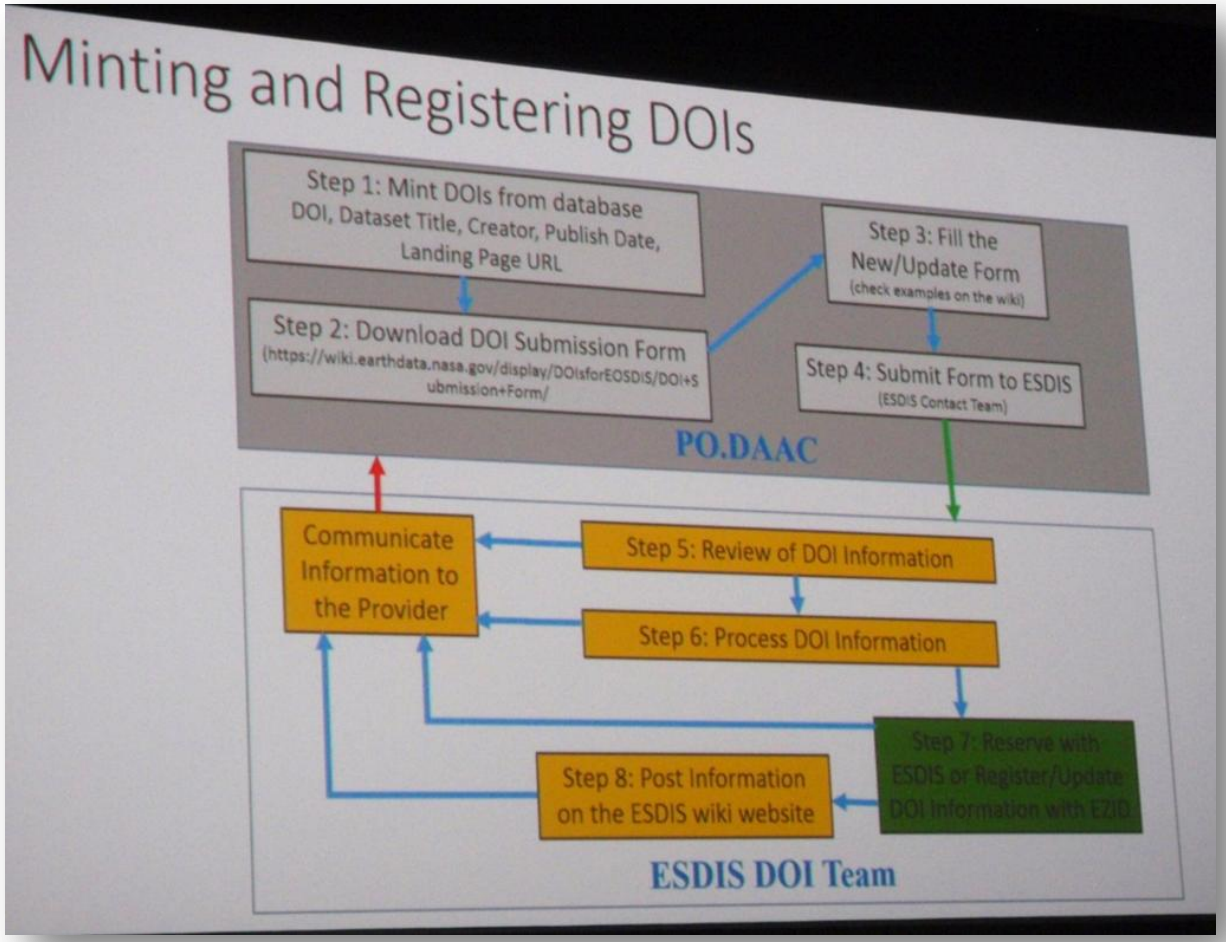
付与承認の連絡

【申請者】

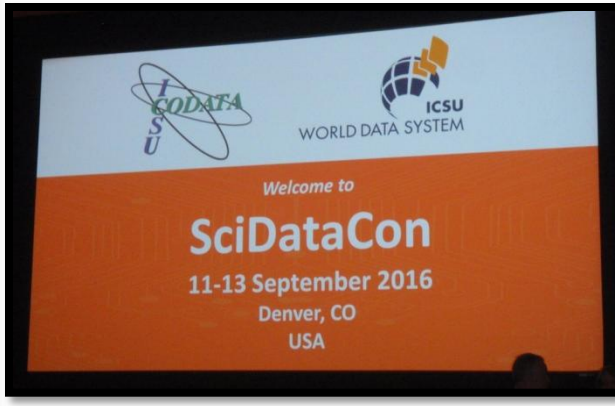
Evaluation rank

Rank 1.　このままDOI付与をしてよい。
Rank 2.　コメントまたはチェックシートに書き入れた問題点が解決されれば付与してよい。
Rank 3.　メタデータの該当項目について記載内容の修正を行った上で、再度確認作業が必要。
Rank 4.　「データ公開方法」のランクアップを行った上で、再申請すべきである。
Rank 5.　却下するべきである。

Australian National Data Service (ANDS)



SciDataCon 2016



SciDataCon-2016; Data Citation session, 12 September
Example of DOI attribution flow-chart to Australian Oceanographic data

Future perspectives

- Inter-disciplinary science
  - Promote (meta)data Interoperability with other organizations/communities
  - Data publication (DOI attribution to PEDSC portals)
  - Data Journal

    (Polar Data Journal = Data Journal from ROIS)

- International / social partnership
  - To be the WDS membership
  - Organize international workshop/symposium
  - Promote outreach activity, etc.

Inter-University Research Institute Corporation
Research Organization of Information and Systems

Summary

✓The Polar Environmental Data Science Center (PEDSC) of the Joint Support-Center for Data Science Research (DS), the Research Organization of Information and Systems (ROIS) has a responsibility to manage the data for Japan as a National Antarctic Data Center (NADC) during the last few decades.

✓At the International Polar Year (IPY2007-2008), a significant number of multi-disciplinary metadata/data have been compiled mainly from IPY- endorsed projects. These collected metadata have a tight collaboration with the Global Change Master Directory (GCMD), the Polar Information Commons (PIC), as well as several centers belonging to the World Data System (WDS).

✓The compiled metadata by PEDSC, moreover, are recently equipped an automatically attributing system of the Digital Object Identifier (DOI) by requesting to the DataCite through the Japan Link Center.