IPY Data Management

Archival and Data Access Status
Catalogue Interoperability Status
WIS-relation

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Topics

- Constraints
- Metadata exchange
- IPY International Data Management Meeting
- DAMOCLES Symposium
- Data collection/transformation
- WIS
Constraints

▸ Limited funding requires prioritising

▸ IPY Operational Data Coordination did not receive the funding expected, implied a change in time plan/ambitions
Exchange of metadata

Various technologies

▷ OAI-PMH
  ▷ IPY, CEOS WGISS

▷ CSW 2.0.2/ISO23950
  ▷ INSPIRE, WIS, GEOSS, CEOS WGISS CIP
  ▷ EUMETSAT

▷ OAI-PMH
  ▷ Low cost/easy to implement
  ▷ Recommended for harvesting metadata by CEOS WGISS Interoperability Handbook 1.1
Implemented

▶ Supporting GCMD DIF for exchange
  ▶ Dublin Core
  ▶ Need to update mapping between GCMD and CF

▶ Experience gained with 1 year exchange of interdisciplinary metadata
  ▶ Run time rules and best practise required
    ▶ Who can update metadata?
  ▶ All standards can be interpreted different

▶ GCMD harvest DOKIPY once weekly
▶ Regular (daily) export/import at 3 sites, to be extended
CSW

- TBI through other funding
- ISO19115 adaptation of metadata
- Will be tested against EUMETSAT catalogue
IPY International Data Management Meeting

➤ Ottawa September 29-October 1

➤ Lessons learned
  ▶ Keep it simple the most important
  ▶ Show benefit for scientists

➤ Important to utilise existing frameworks

➤ Drafting State of Polar Data Report
  ▶ Recommendations for various groups

➤ Decided to establish a demonstration for exchange of metadata
Demonstration

▶ OAI-PMH/GCMD DIF

▶ NSIDC
▶ Polar Data Catalogue
▶ BAS
▶ DOKIPY
▶ CADIS
▶ DAMOCLES
▶ GCMD
Symposium involving SEARCH scientists
- Brussel November 10-12
Session on operational forecasting
- Huge need for data, gaps identified
- Increasing understanding of the data problem in the observational community
  - “My data are not useful in an operational context”
Need to coordinate experimental and operational data streams in the Polar regions
- Expensive observations
Remote Sensing data sets

- Useful dialogue with CEOSS WGISS since last meeting
  - CIP is CSW, web site updated...

- Metadata exchange
  - EUMETSAT has established a CSW interface
    - Documentation received
    - Transformations of metadata required

- Metadata added
  - Several STG relevant datasets added at generic metadata level
GTS data

- Working on cataloguing WMO distributed data
  - SYNOP, TEMP, DRIBU, ...
  - Data stored in offline archive
  - Transformation and addition of proper metadata in preparation
    - NetCDF/CF for access through THREDDS (OpeNDAP and HTTP)
  - Limited online access to come when transformed
    - Several models possible
Ad hoc data streams

▶ IMBB
▶ Stored
▶ Not being handled currently

▶ ITP
▶ NOAA preparing GTS distribution
▶ Mirroring and reformatting WHOI streams
  ▶ More comprehensive than GTS streams according to WHOI
ECMWF

▶ ERA Interim available offline
▶ Rolling archive of forecast data online available
  ▶ NetCDF
  ▶ OpeNDAP/WMS
▶ ECMWF long term archive
METNO

▶ HIRLAM NWP
  ▶ Rolling archive online
  ▶ Offline long term archive

▶ Arctic OM
  ▶ Rolling archive online
  ▶ Offline long term archive

▶ SYNOP
  ▶ Quality controlled data streams
EUMETSAT Ocean and Sea Ice SAF

- Products online available
- Sea Ice products catalogued
- All High Latitude products to be catalogued in 2010
Experimental data sets for 2008 experiment available

Lidar on way
IPY Operational Data Coordination Technology

➤ [http://ipycoord.met.no/](http://ipycoord.met.no/)

➤ METAMOD 2.x DAR -> WIS DCPC
  - To integrate IPY or scientific needs more seamless with the WMO community
  - Better support of operational data streams
  - OAI-PMH (adding CSW/SRU)
  - Shopping basket in 2010

➤ THREDDS Data Server
  - HTTP/OpeNDAP
  - Better support for WMO formats
  - Although trouble experienced with the BUFR format used

➤ OGC WMS (focusing at high latitudes)
METNO continues work to establish an Arctic DCPC

- Focus on metadata and shopping basket/push in 2010

VGISC as a discussion forum still exist and is used continuously

- It is also used for exchange of software/ideas
  - e.g. metadata generation
    - Meteo-France Volume C etc representations
    - DWD metadata generators