

# EOSC FESTIVAL 2023 National Tripartite Event Poland

# FAIR data and services in the context of a distributed data management system on the example of the international SIOS consortium

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# The Svalbard Integrated Arctic Earth Observing System (SIOS)

A consortium of institutions with research infrastructure in & around Svalbard.

Independent organisation

29 institutions from 10 countries



# The Polish Polar Consortium (Polskie Konsorcjum Polarne, PKPoI)

A national platform dedicated to promote and support close cooperation of universities, research institutes and other institutions involved in studies of polar regions.

Currently, consists of 15 institutions involved in polar research:

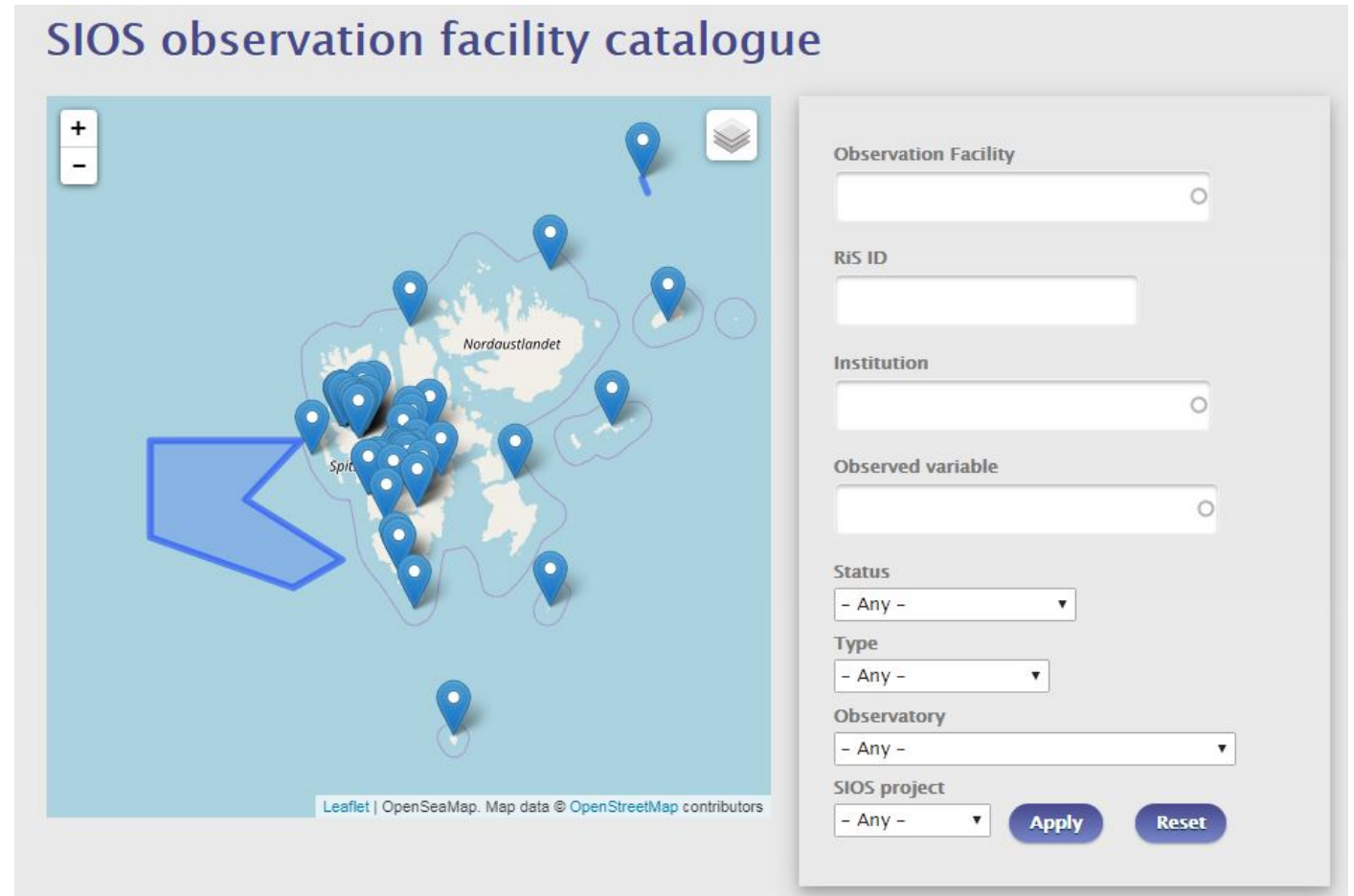


# Observation Facilities Catalogue

Nearly 300 entries

<https://sios-svalbard.org/sios-ri-catalogue>

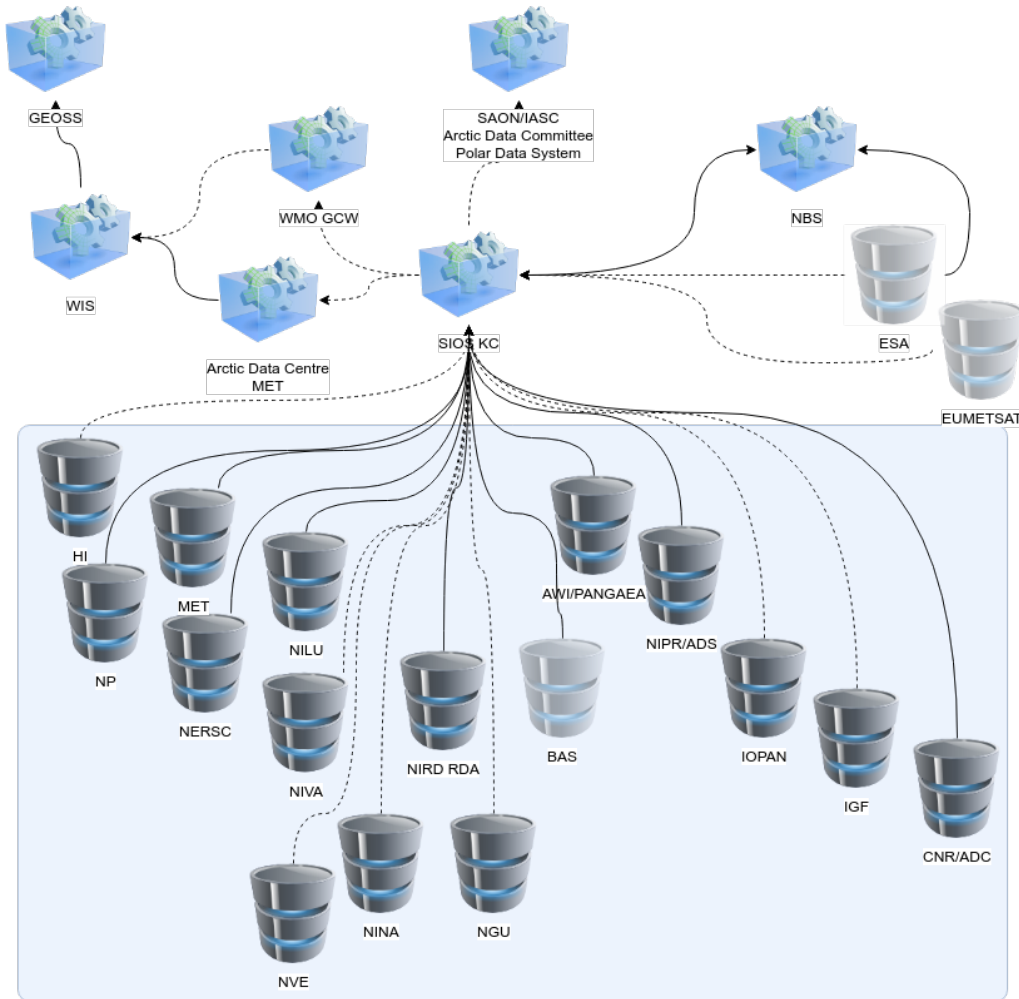
This catalogue has been developed to provide an overview of the observation facilities which collect SIOS data. The annotation is standardised following the WMO standards as far as possible, in order to make entries unambiguous and interoperable internationally.



# Data Management Service

## Main principles

- Open and free data sharing
- FAIR data
- Harmonisation of the data (SIOS Core Data)
- Cross-disciplinary combinations of data and products
- Workshops/trainings/tutorials/tools



# Data Management Service

## Documents

- SIOS Data Policy
- SIOS Data Management Plan
- SDMS Interoperability Guidelines

## Alignment of Polar Data Policies

Report by a working group under:  
Arctic Data Committee  
Arctic Spatial Data Infrastructure  
Southern Ocean Observing System  
Standing Committee on Antarctic Data Management



Tronstad, Stein, Bricher, Pip, Kool, Johnathan, Pulsifer, Peter, Van de Putte, Anton, Larsen, Jan Rene, Peat, Helen, Rayner, David, De Bruin, Taco, Tacoma, Marten, Thomas, Jen, Nitsche, Frank, Samy, Ignatiuk, Dariusz, Buch, Erik, Treasure, Anne, Persäter, Fredrik, Riopel, Simon, Pouplier, Peter, & Eicken, Hajo. (2021). Alignment of Polar Data Policies - Recommended Principles. Zenodo. <https://doi.org/10.5281/zenodo.5734900>

# SIOS Data Access Portal



**Search**

Contains all of these words

Enter your search here

Start Date: dd.mm.rrrr | End Date: dd.mm.rrrr

Has children  
Select whether datasets are parents with children (i.e. records of the same type)

▶ Advanced options

Search | Reset

**Dataset Level**

Parent (506173)

**Iso Topic Category**

- climatologyMeteorologyAtmosphere (504139)
- oceans (502675)
- imageryBaseMapsEarthCover (502516)
- biota (103)
- environment (85)
- geoscientificInformation (73)
- boundaries (13)
- location (6)
- health (5)
- economy (3)

Show more

**Keywords**

- Land cover (502513)

About the Data Access Portal

Citation of data and service

SIOS Core Data

Nansen Legacy Data

Brief user guide

Select projection:  EPSG:4326  UPS North  UPS South | Select spatial filter:  Within  Intersects

Create bounding box filter | Visualise all Sentinel products in Map | Reset search | Reset map

506173 datasets found. Showing datasets 1 - 15 on page 1 of 33745 pages.

**Project**

- NBS (502509)
- Nansen Legacy (1197)
- APPLICATE (450)
- SIOS (450)
- YOPP (450)

Show more

**Collection**

- SIOS (506104)
- NBS (502509)
- ADC (3636)
- NSDN (3036)
- AeN (1252)

Show more

**Personnel**

- NBS Helpdesk (502509)
- NBS team (462350)
- Arnfinn Morvik (1468)
- Øystein Godøy (475)
- Cathrine Lund Myhre (371)

Show more

**Organisation**

- Norwegian Meteorological Institute (503004)
- NO01L, Norwegian Institute for Air Research, NILU, Instituttveien 18, 2007, Kjeller, Norway (778)
- DK01L, National Environmental Research Institute, NERI, P.O.Box 358, Fredriksborgvei 399, DK-4000 Roskilde, Denmark (148)
- NO01L, Norwegian Institute for Air Research, NILU, Atmosphere and Climate Department, Instituttveien 18, 2007, Kjeller, Norway (94)
- Norwegian Meteorological Institute / Arctic Data Centre (62)

Show more

**Data Center**

# Services

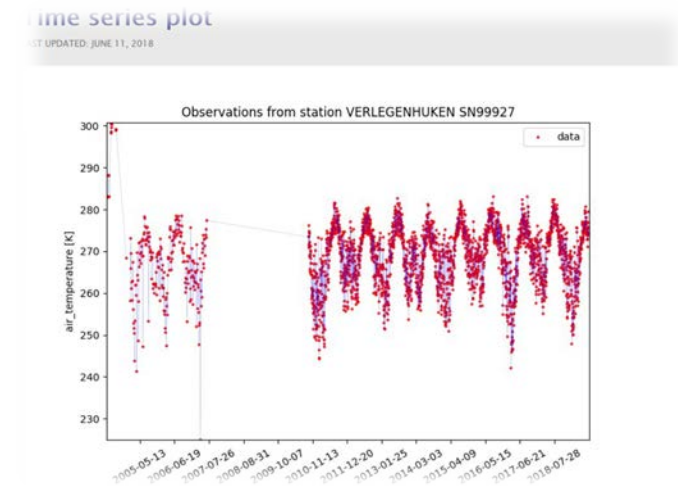
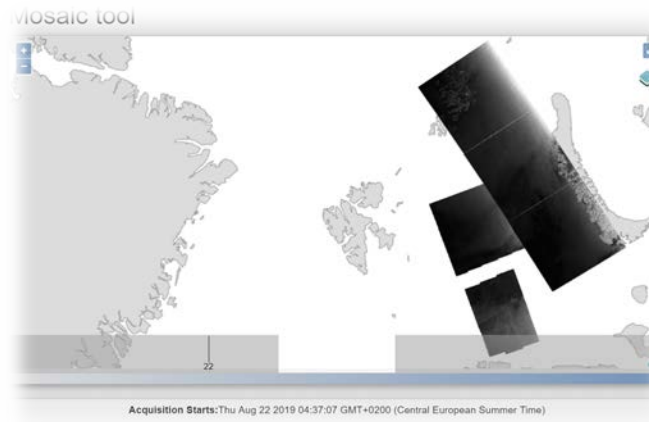
- Services: Time Series plotting
- Services: Visualization
- Services: Data transformation

## Remote Sensing tools:

- Sentinel acquisition plan tool
- Mosaic tool
- Sentinel product comparison tool

## Other services:

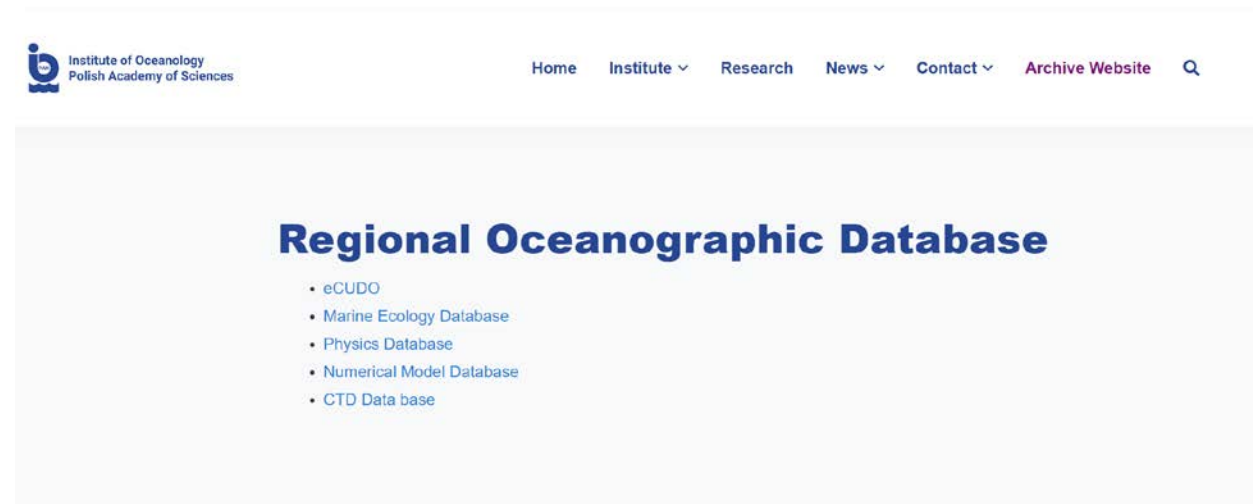
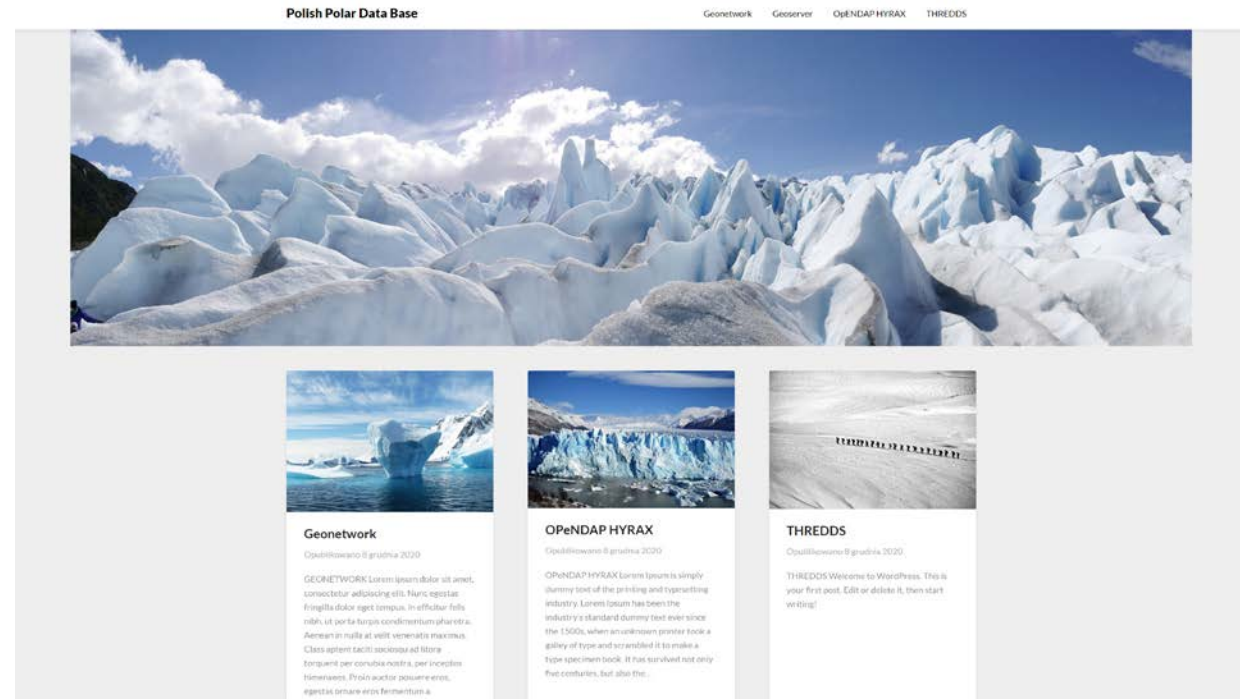
- Rosetta
- NetCDF validation
- Excel Template Generator





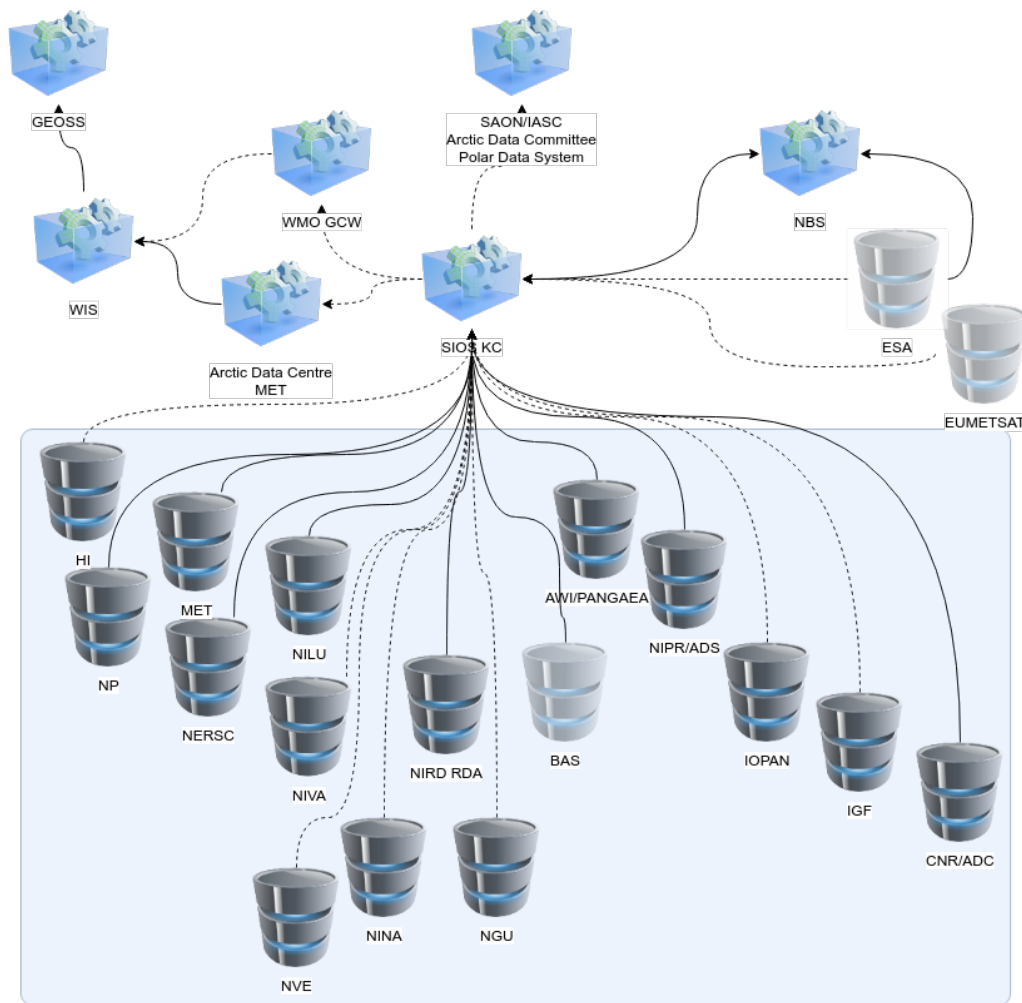
# Repositories

- Polish Polar DataBase
- Regional Oceanographic Database
- IG PAS Data Portal



# Goals for the future

- Distributed data management system
- Polish Polar Data Policy
- FAIR principles
- Training
- Support for researchers



# Bilateral initiative aiming at harmonisation of the Svalbard cooperation (HarSval)

Planned activities:

1. Design and development of the fundamental components for the Central Geospatial Services Server for the Polish Polar DataBase:
  - Development of tools for integration with other thematic data services (e.g. international GNSS services, EUREF, EUPOS etc.)
  - Configuration of basic tools and applications for data geovisualization
  - Configuration of basic tools and applications for data analysis, including the use of big data and artificial intelligence
2. Supporting data sharing by qualified data stewards.
3. Training and workshops.

Thank you  
for your attention

