

WP5 Task 5.6: iAOS portal and the data catalogue

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Objective: Provide: (1) **access to all data generated with support from INTAROS** in the other workpackages (WP2-6); (2) **a common entry point for selected datasets** collected or generated as part of other project and relevant datasets from other Arctic data systems; (3) **links to services** from INTAROS and spin-off projects.

Major results 2020

iAOS Portal



The iAOS Portal focus on in situ datasets and selected products from remote sensing and models

Start searching for datasets or the systems that observe the Arctic

[INTAROS Data Catalog](#)

[Other Arctic Data](#)

[Arctic Mapping Survey](#)

[INTAROS Web Site](#)

<https://portal-intaros.nersc.no/>

INTAROS Data Catalog



Search data

Popular tags: CBM citizen science ocean temperature

INTAROS Data Catalogue statistics

129 datasets 36 organizations 0 themes

Community Based Monitoring datasets and programs

INTAROS is working closely with several local communities and citizen science programs across the Arctic. In one of these programs, INTAROS partner GEUS is collaborating with the municipality in Qeqertalik, Greenland, to collect information on seismic activity. A pilot program with seismic stations operated by local community members have been established, and the data collected feeds into the Raspberry Shake Community and the GEUS' earthquake bulletin. A data portal shown in image below gives access to the seismic data from this community. This and other CBM datasets can be found here.

A screenshot of a seismic data portal. It shows a map of Greenland with several colored triangles representing seismic stations. A window titled 'AM.R2310' is open, displaying a seismic waveform plot and metadata including 'Ground motion', 'Ampl. 2.0 (200.0) pm/s', 'Velocity 0.4 (0.4) pm/s', and 'Displacement 0.1 (0.1) μm'.

Welcome to the INTAROS data catalogue

INTAROS collects data within key regions of the Arctic, and provides access to these datasets and other datasets of relevance to our targeted stakeholders. This Data Catalog contains descriptions of collected, derived and estimated datasets that are generated within the project.

A map of the Arctic region with several key areas highlighted by colored circles and labels. A large red circle encompasses the entire Arctic region, labeled 'Land and atmosphere'. A blue circle covers the central Arctic Ocean, labeled 'Ocean and sea ice'. Within this, a dark blue circle is labeled 'Canadian Basin', a purple circle 'Eurasian Basin', a green circle 'Coastal Greenland', a pink circle 'North of Svalbard', and a yellow circle 'Fram Strait'. The map also shows the surrounding landmasses of North America (USA, Canada), Europe (Russia, Norway), and Greenland, along with various straits and seas like the Bering, Laptev, Kara, Barents, and Norwegian Seas.

INTAROS Data Catalog



INTAROS

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Finnish Meteorologi... 6

NORDECO 6

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Themes

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Tags

CBM 16

citizen science 12

ocean temperature 10

environment 9

sound speed 9

atmosphere 8

Svalbard 8

Search datasets...



129 datasets found

Order by: Relevance



CTD data collected with R/V Helmer Hanssen

CTD data from R/V Helmer Hanssen collected on regular IMR cruises in Norwegian waters

NetCDF

CTD data collected with R/V Johan Hjort

CTD data from R/V Johan Hjort collected on regular IMR cruises in Norwegian waters. Data from the University of Bergen or other institutes using the ship may also be included in...

NetCDF

CTD data collected with R/V G.O.Sars

CTD data from R/V G.O.Sars collected on regular IMR cruises in Norwegian waters. Data from the University of Bergen or other institutes using the ship may also be included in...

NetCDF

CTD data collected with R/V Kristine Bonnevie

The dataset contains all CTD data collected by IMR with R/V Kristine Bonnevie. Data from the University of Bergen or other institutes using the ship may also be included in the...

NetCDF

Inventory of tidewater glaciers of Svalbard

Inventory of tidewater glaciers delineated from archival satellite images (Aster, Landsat) acquired in the period 1999-2006. Shapefiles have basic information in the attribute...

ZIP

Seasonal fluctuations of Hansbreen terminus position

The position of the terminus of Hansbreen is derived with very high frequency in the period 1991-2015. Over 160 multispectral



INTAROS



INTAROS Data Catalog

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License not specified 19

Other (Open) 7

Other (Attribution) 4

Other (Non-Commercial) 3

Creative Commons At... 2

Open Data Commons A... 1

Open Data Commons O... 1

Other (Public Domain) 1

NetCDF

NORWECOM.E2E simulation, blue whiting distribution 2010-2069

Climate change represents a potential threat for sustainable growth in aquaculture and fisheries worldwide. In ClimeFish www.climefish.eu, the growth of the most important and...

NetCDF

NORWECOM.E2E simulation, mackerel distribution 2010-2069

Climate change represents a potential threat for sustainable growth in aquaculture and fisheries worldwide. In ClimeFish www.climefish.eu, the growth of the most important and...

NetCDF

NORWECOM.E2E simulation, herring distribution 2010-2069

Climate change represents a potential threat for sustainable growth in aquaculture and fisheries worldwide. In ClimeFish www.climefish.eu, the growth of the most important and...

NetCDF TAR

Mooring data from the Barents Sea Opening – Atlantic Water inflow

Temperature and current time series data from the Barents Sea Opening for the period August 1997 to April 2017. The mooring array were deployed by Institute of Marine Research...

NetCDF

Spotter Pro Marine Mammal Records

Spotter Pro is a global citizen science program using an app for recording marine mammals from ships of opportunity. The dataset can enable a better understanding of whale...

Sea Ice for Walrus Outlook

The Sea Ice for Walrus Outlook (SIWO) is a resource for Alaska Native subsistence hunters, coastal communities, and others interested in sea ice and walrus. The SIWO provides...



iAOS Portal

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Organizations

PANGAEA **209**

Alaska Geobotany Ce... **131**

CMEMS **31**

RIHMI-WDC **23**

ECDS **14**

Nansen Center **9**

PerSys **9**

Institute of Marine... **8**

Stockholm Universit... **7**

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Themes

There are no Themes that match this search

Tags

Permafrost **242**

Landsat **83**

NDVI **68**

NDMI **67**

NDWI **67**

Tasseled Cap **67**



503 datasets found

Order by: Name Ascending

ACOBAR travel times - Fram Strait 2010-2012

The ACOBAR ocean acoustic tomography system consisted of three moorings with low frequency, broadband transceivers (A, B, and C) forming a triangle in the central, deep-water...

JPEG

ASI sea ice concentrations

These sea ice concentration data are retrieved with the ARTIST Sea Ice (ASI) algorithm (Spren et al., 2008) which is applied to microwave radiometer data of the sensors AMSR-E...

AVA-AK: ATLAS-1 (Atqasuk, Barrow, Ivotuk, Oumalik) Vegetation Studies (Edward...

Arctic Vegetation Archive-Alaska: ATLAS-1. Vegetation from 15 releves within 8 different grids at Barrow, Atqasuk, Ivotuk and Oumalik were described as part of the NSF-funded...

PDF ZIP JPEG PNG

AVA-AK: ATLAS-2 Vegetation Studies (Raynolds et al. 2002)

Arctic Vegetation Archive - Alaska: ATLAS-2 The ATLAS-2 dataset is part of larger NSF-funded Arctic Transition in Land-Atmosphere System (ATLAS) project. ATLAS-2 contains the...

PDF ZIP JPEG PNG

AVA-AK: Arctic Network (Jorgenson et al. 2009)

Arctic Vegetation Archive - Alaska: Arctic Network. Vegetation sampling for an ecological land survey classification and landcover map was completed for the over 19.5 million...

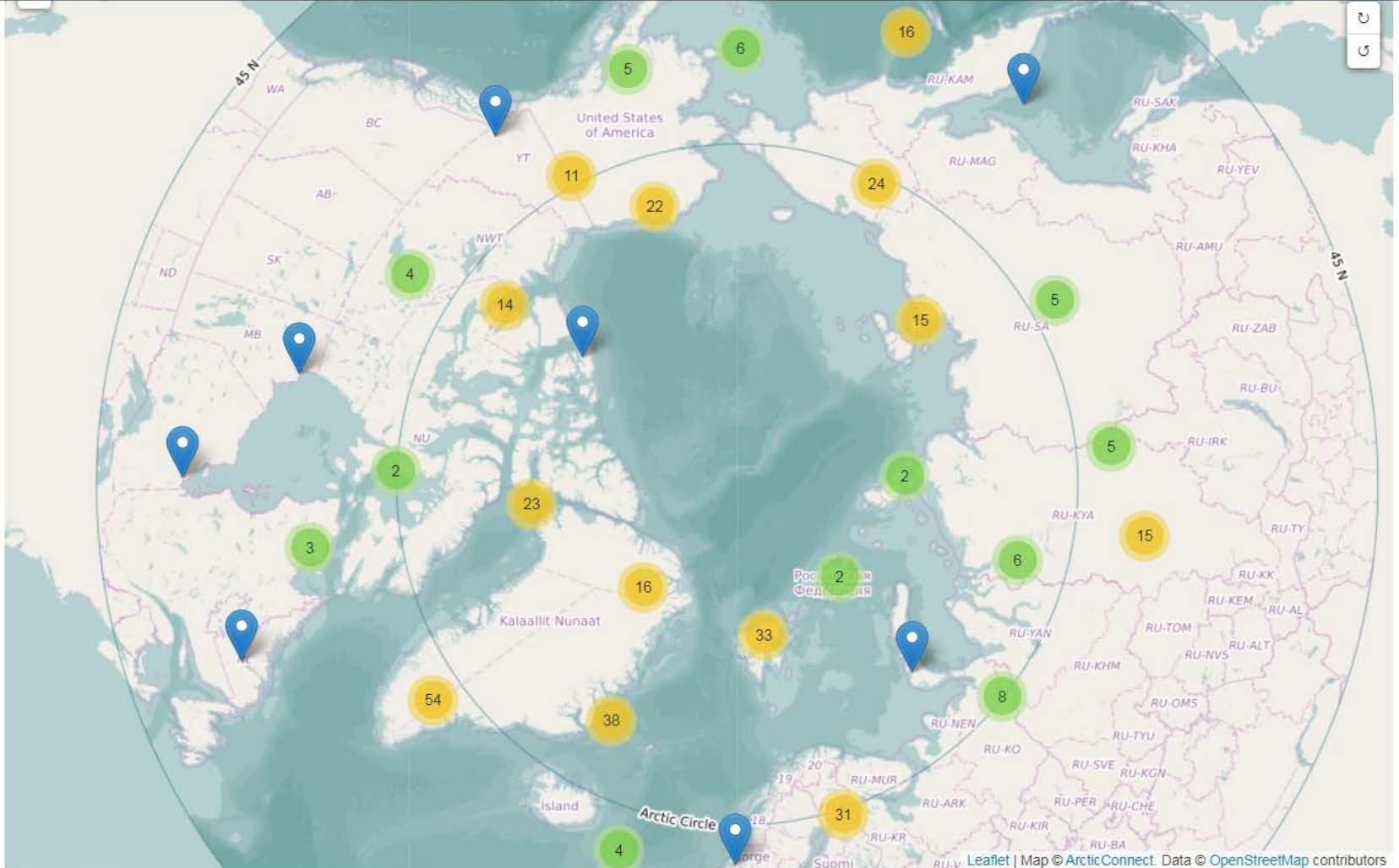
PDF ZIP JPEG

AVA-AK: Arrigetch Peaks (Cooper 1983)



ARCMAP

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Delays and mitigation measures

Delays and mitigation measures

- Portal development
 - Build on same framework as the data catalog
 - Integrate INTAROS Data Catalog and ARCMAP
 - Focus effort on metadata harvesting
- Increasing number of datasets in the catalog
 - Continue contact and support of data providers in INTAROS
- Spin-off project Arctic Mapping
 - Intensified development (usability, plots, maps)
 - Registration of >50 new obs.systems (Non-EU partners)
 - Engage new communities (ocean acoustics)

Data registration and access

Data registration and access

- Statistics for INTAROS Data Catalog:
 - 129 datasets registered (vs 48 at GA 2020)
 - Data access: 113 datasets
 - DOI assigned: 27 datasets
 - In progress (metadata private): 7 datasets
- Some recent datasets:
 - Long time series of CTD data from IMR's research vessels
 - Glacier data from Svalbard (Univ.Slaski)
 - Mooring data from Barents Sea Opening (IMR)
 - NORWECOM model results for fisheries in WP6 (IMR)
 - CBM datasets from WP4 (NORDECO, GEUS, FMI)
 - UAK 2020 Summer school and INTAROS 2018 CTD data (NERSC, IOPAN)
 - Atmospheric data from Oden Arctic expeditions (MISU)

Exploitation of the results

Exploitation of results

- iAOS Portal and INTAROS Data Catalog
 - Promotion of partners' and collaborators' datasets
 - New formats for ocean mooring data
 - Interoperability between (selected) data repositories
 - Spin-off and new projects (e.g. ARCMAP, Digital Arctic Shipping)
- Datasets generated by INTAROS, e.g.
 - UHAM's Ocean-Sea Ice Synthesis from 2007-2016 (T6.3)
 - IMR's CTD sections from RVs (T5.4, T5.5, WP6)
- Datasets from external providers, e.g.
 - CMEMS SIC (T5.5, T6.3)

Plan for completion of work

Work plan 2021 (Task 5.6)

- Workshops (online) for marine ocean mooring data
 - Start with existing data formats (e.g. IMR's NetCDF for Barents Sea Opening mooring data)
 - Engage partners working with ocean mooring data
 - Help with formatting and selection of repositories assigning DOIs
- Registration of new datasets in the INTAROS catalog
 - Follow up data providers and support registration
- Implementation of themes (groups) in data catalog and portal
- Integrate & visualise more external data (harvest metadata)
- Link to services in iAOS Cloud Platform or Jupyter Hub
- D5.12 iAOS portal with user manual V2 (due 31 May)