

ARCTIC COUNCIL

SUSTAINING ARCTIC OBSERVING NETWORKS (SAON) DATA MANAGEMENT IN SUPPORT OF ASSESSMENTS

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AMAP

Mandate:

"to monitor the levels of, and assess the effects of, anthropogenic pollutants in all components of the Arctic environment."

Established in 1991, Working group of the Arctic Council from 1996

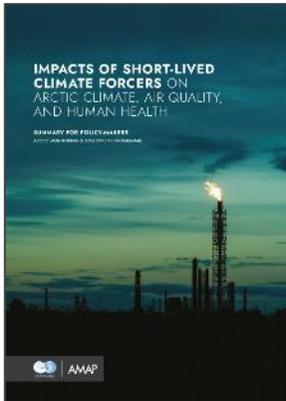
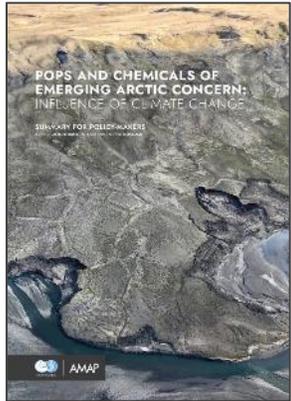
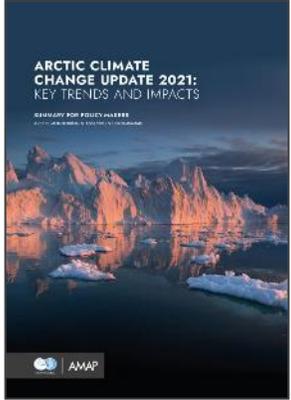
AMAP

Examples of current AMAP activities:

- Air quality and climate modelling
- Chemicals of Emerging Arctic concern
- Emissions from wildfires
- Plastics and microplastics
- Methane release from permafrost
- Societal impacts of climate change
- Contaminants and their effects on wildlife and human health



AMAP



Science to inform policy-making

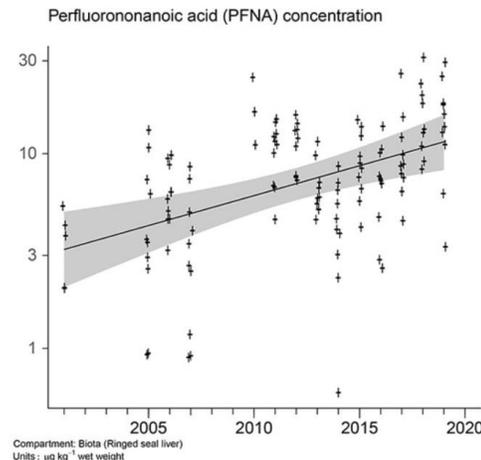
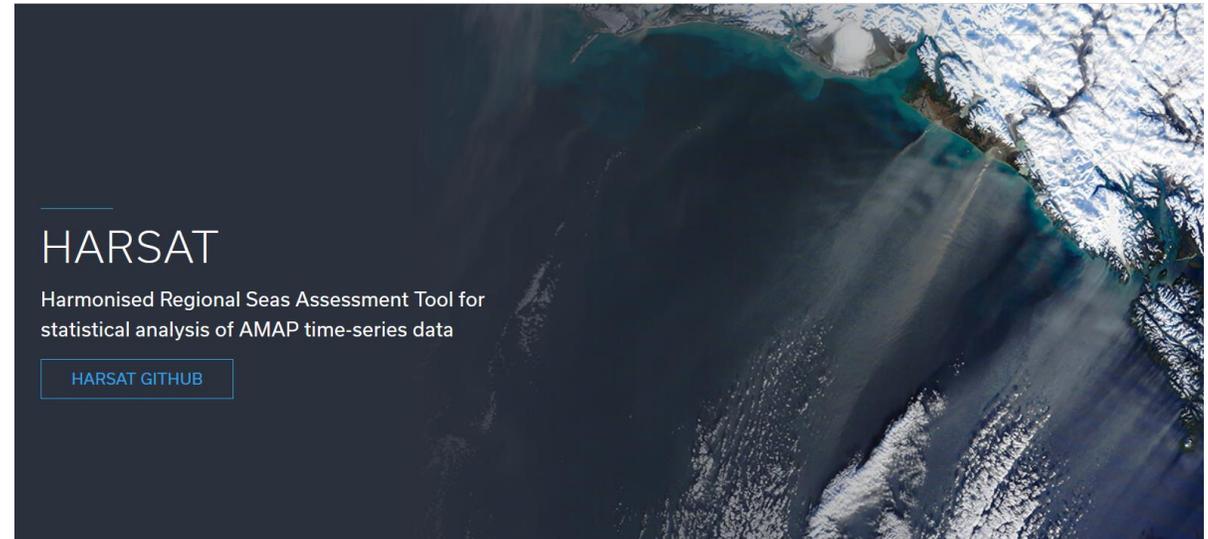
Example: 'Harmonized analysis'

HARSAT

HARSAT: Harmonized Regional Seas Assessment Tool for statistical analysis of AMAP time-series data on contaminants in the Arctic environment

Produces standardized analysis, based on data flows from a number of national institutions in Europe

A prerequisite is that data are collected, analyzed and reported in an agreed, standardized format. This is similar to the processes for meteorological services and based on agreed commitments among nations (OSPAR convention)



Another example: Categorizing litter and microplastics from environmental sampling

Litter:

- Small pieces of rubbish that have been left lying on the ground in public places
- A group of animals that are born at the same time and have the same mother
- The substance, especially straw, that is used for farm animals to sleep on

Aggregated name for litter types	NOAA litter types	OSPAR litter types
plastic/polystyrene pieces (> 2.5 cm)	N1a, 1b, 1c – plastic fragments (hard, foamed, film)	45 - foam sponge 46 - plastic/polystyrene pieces 2.5-50 cm 47 - plastic/polystyrene > 50 cm
drinks (bottles, containers, and drums)	N3 – beverage bottles	4 - drinks (bottles, containers, and drums)
food package and assorted jugs and containers	N2 - food wrappers, N4 - other jugs or containers	5 - cleaner (bottles, containers, and drums) 6 - food containers incl. fast food containers 8 - engine oil containers and drums < 50 cm 9 - engine oil containers and drums > 50 cm 10 - jerry cans (square plastic container with handle) 11 - injection gun containers 12 - other bottles, containers, and drums 13 - crates 34 - fish boxes 38 – buckets 19 - crisps/sweet packets and lolly sticks
		27 - octopus pots



Sustaining Arctic Observing Networks (SAON)

Goals

1. Create a roadmap to a well-integrated Arctic Observing System;
2. Promote free and ethically open access to all Arctic observational data; and
3. Ensure sustainability of Arctic observing

Partnership

The eight Arctic states, Arctic Indigenous organizations, non-Arctic states, global (WMO) and regional organizations

Governance

A joint initiative of the Arctic Council (2011) and the International Arctic Science Committee (IASC)

Committees

- Arctic Data Committee
- Committee on Observations and Networks (CON)



Promoting semantics

Open Letter: Promoting effective use of semantics in Polar science and operations

Buttigieg, Pier Luigi^{1, 2} ; Christoffersen, Shannon^{3, 4} ; Ingram, Rebekah^{5, 6} ;
Manley, William^{7, 8} ; Godøy, Øystein^{9, 10, 11, 12} ; Verhey, Chantelle^{13, 14, 15} ; Duerr, Ruth¹⁶ ;
Jones, Matthew B.^{17, 18} ; Pulsifer, Peter^{19, 6} ; Stone, Adam^{19, 6} ; ten Hoopen, Petra^{20, 21} ;
Gaylord, Allison²² ; Canino, Adrienne²³ ; Singh Khalsa, SiriJodha⁷; Schildhauer, Mark^{18, 17} 

Show affiliations

In this letter, we introduce [The Polar Vocabularies and Semantics Working Group](#), originally established as a joint effort between the joint [SAON/IASC Arctic Data Committee](#) and the [Data Management Collaboration Team of the Interagency Arctic Research Policy Committee](#). We Invite, communities of practice to actively engage with us in our activities (described below), to advance the state of semantics-based applications in polar activities (and to increase interoperability between stakeholders and rights holders within existing and emerging digital ecosystems).



SAON Data Portal



Click on the map to draw a selection box. Boxes in UPS are transformed into 4-edge polygons

Select Projection: EPSG:4326
UPS North UPS South

How to write data from a NetCDF file to CSV or XLSX using R programming
By lukem | Mon, 09/02/2024 - 10:11
New video out showing you how to write data from a NetCDF file to a CSV or XLSX file using R programming.
<https://youtu.be/9-EDaRQ8Aps>
Read more Log in or register to post comments

How to plot data from a NetCDF file in R
By lukem | Mon, 05/27/2024 - 09:03
In this new video tutorial, Luke shows you how to plot data from a NetCDF in R. Learn how to create a line or scatter plot or to overlay data on a map.

Transform your data to harmonised form
While the FAIR guiding principles have become known to many scientists, there is still a strong focus on FAIR in the context of discovery metadata and less on FAIR in the context of data documentation. Harmonisation of data documentation across data providers is a very efficient measure to ensure and improve reuse of data. When data are published in a harmonised form by different data providers, the data consumer does not have to align data from different sources, computers can help us do that much more efficiently.
Read more

Service disruption due to backend maintenance on May 27th from 8:00 AM to 10:00 PM
By laraf | Fri, 05/24/2024 - 13:27
Due to maintenance on our storage, some datasets will be unavailable from 8:00 AM to 2:00 PM on May 27th. Also the



Search

Contains all of these words

Enter your search here

Start Date: dd/mm/yyyy End Date: dd/mm/yyyy

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

Advanced options

Search Reset

Dataset Level

Parent (41836)

Iso Topic Category

Citation of data and service
Brief user guide

Select project: CEPSG:4326 UPS North UPS South Select spatial filter: Within Intersects

Create bounding box filter Reset search Reset map

Project

- Hansen Legacy (1283)
- APPLICATE (510)
- NYOPP (452)
- SIOS (450)
- Not provided (279)

Collection

- ADC (41836)
- GCW (20357)
- NSON (20268)
- SIOS (4097)
- AMN (1359)

Personnel

- Arntfinn Morvik (1891)
- NSOC User Services (892)
- Elke Bieber (46)
- Ann Kristin Ostrem (763)
- Wenche Aas (646)

Organisation

- Mørk Christian Mørknesen Service University of

2000 km

© OpenStreetMap contributors

614 datasets found. Showing datasets 1 - 15 on page 1 of 41 pages.

Mercury at Niembro

institutions: ES04L, Ministerio de Medio Ambiente, DG de Calidad / Evaluación Ambiental, Plaza de San Juan de la Cruz, s/n, 28071, Madrid, Spain; ES04L, Ministerio de Medio Ambiente, DG de Calidad y Evaluación Ambiental, Plaza de San Juan de la Cruz, s/n, 28071, Madrid, Spain

last metadata update: 2024-06-19T00:00:00Z

Temporal Extent

Start date: 2022-01-20T00:00:00Z
End date: 2022-12-29T00:00:00Z

Mercury at Niembro. These measurements are gathered as a part of the ... in the EBAS database (<http://ebas.nilu.no/>). Parameters measured are: **mercury** in precip ('mass_concentration_of_mercury_in_precipitation') ... José Antonio Fernandez Monistrol ... José Antonio ...

Show more...

Dataset Landing Page

Data access:

Add to Basket Show extended metadata Download data

OpenIDAP Export Metadata

License: <https://creativecommons.org/licenses/by/4.0/>

Organisation

- NO01L, Norwegian Institute for Air Research, NILU, Atmosphere and Climate Department, Instituttveien 18, 2007, Kjeller, Norway (234)
- DE03L, Umweltbundesamt, UBA-LA, Langen, Paul-Ehrlich-Str. 29, 63225, Langen, Germany (65)
- SE01L, Swedish Environmental Research Institute, IVL, P.O. Box 47086, S-402 58 GÖTEBORG, Sweden (46)
- GB03L, CEH Edinburgh (33)
- NO01L, Norwegian Institute for Air Research, NILU, Instituttveien 18, 2007, Kjeller, Norway (31)

Show more...

Data Center

- Institute of Marine Research, Norwegian Marine Data Centre, Norway (4)
- Norwegian University of Science and Technology (4)
- Norwegian Polar Institute (3)
- FROD (1)

Metadata Details

Mercury at Niembro

Datcenter: NILU - Norwegian Institute for Air Research, ATMOS, EBAS
Collection: ADC , NSDN
Iso topic category: climatologyMeteorologyAtmosphere

Show Abstract

Show Keywords

Metadata Information

Metadata identifier:
EBAS:ES0008R.20220117000000.20230724000000.wet_only_sampler.mercury.precip.11mo.1w.E501L_E50008R_MCV_CL002.E501L_C_V_AFS.lev2.nc

Last metadata update: 2024-06-19T02:00:00Z
Last indexed: 2024-09-05T03:56:46Z

Alternate identifier:
1.

Metadata status: Active
Use constraint: Not provided

Metadata update history

Related resources

Dataset Citation

<https://data.arcticobserving.org>



Mapping the Polar Data Ecosystem

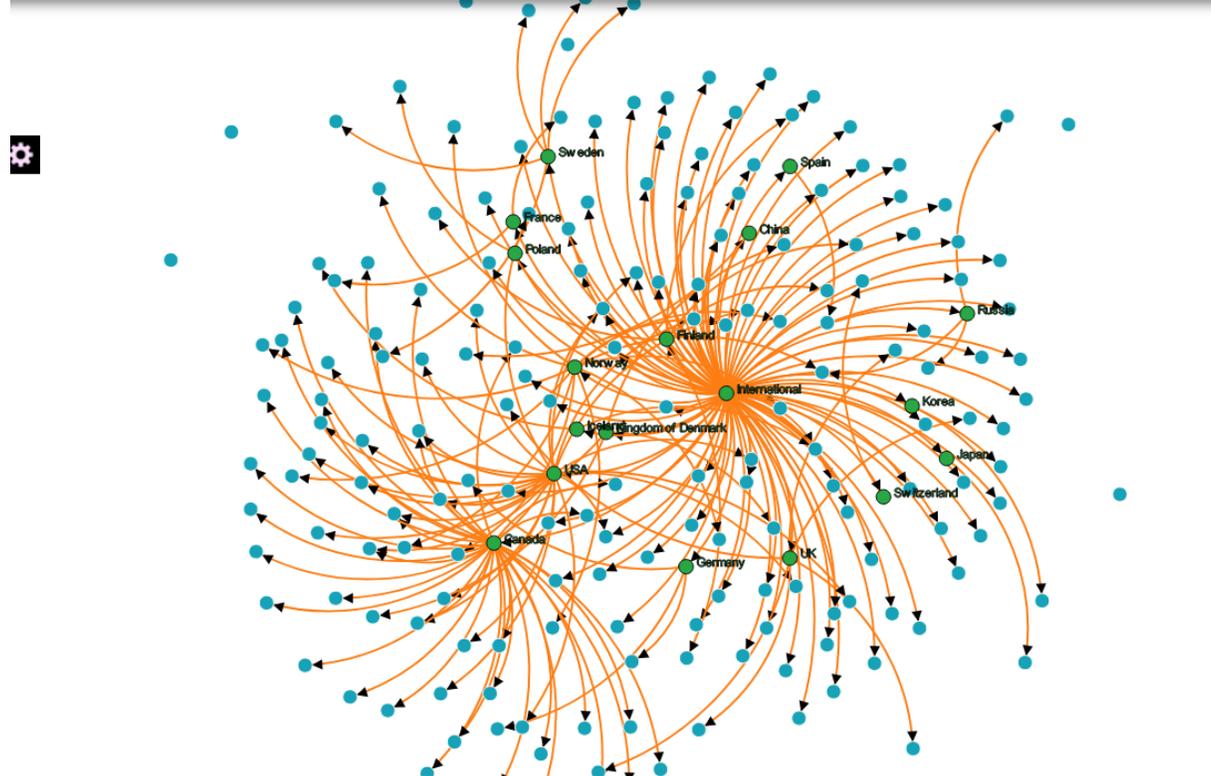
Mapping the Polar Data Ecosystem

POLDER International

Welcome Login

Nationality Graph Filter Organizations Filter Countries

Language



Nationality Graph



Get involved!

More information:

- Polar Semantics:
 - Working Group: <https://arcticdc.org/activities/core-projects/vocabularies-and-semantic-wg>
 - Open letter: <https://doi.org/10.5281/zenodo.10780541>
- SAON Data Portal: <https://data.arcticobserving.org/>
- Mapping the Polar Data Ecosystem: <https://mpde.gcrc.carleton.ca/index.html>
- Sustaining Arctic Observing Networks (SAON): arcticobserving.org
- Email: jan.rene.Larsen@amap.no

