

## What is your affiliation?

| V2   |
|--|
| National Institute of Polar Research   |
| AMAP Secretariat   |
| Alaska Ocean Observing System  |
| Aleut Community of St. Paul Island/ Aleut International Association                  |
| Alfred Wegener Institute, Germany  |
| Alfred Wegener Institute, Germany  |
| CNR-ISP  |
| CNR-ISP  |
| Centre National de la Recherche Scientifique   |
| Environment and Climate Change Canada  |
| Finnish Meteorological Institute   |
| GEUS - Geological Survey of Denmark and Greenland                                    |
| INTERACT (personal affiliation: Aarhus University, Institute of Bioscience, Denmark) |
| International Arctic Research Center, University of Alaska Fairbanks                 |
| International Council for the Exploration of the Sea (ICES)                          |
| NCPOR, Goa   |
| NILU - Norwegian Institute for Air Research  |
| NOAA, GOMO/ARP   |
| Nansen Environmental and Remote Sensing Center,                                      |
| National Centre for Polar and Ocean Research (NCPOR)                                 |
| National Institute of Polar Research   |
| National Oceanic and Atmospheric Administration NOAA, U.S.                           |
| Norwegian Meteorological Institute   |
| Norwegian Meteorological Institute   |
| Norwegian Polar Institute  |
| Polar Knowledge Canada, Canada   |
| Polar View   |
| SPRS   |
| Svalbard Integrated Arctic Earth Observing System (SIOS)                             |
| Swedish Polar Research Secretariat   |
| Swedish Polar Research Secretariat   |
| TAG LLC  |
| The Geological Survey of Denmark and Greenland                                       |
| US National Oceanic and Atmospheric Administration (NOAA) / NESDIS                   |
| University of Alaska Anchorage   |
| University of California, Santa Barbara  |
| University of Helsinki   |
| World Meteorological Organization  |
| World meteorological Organization  |

## What is your working relationship with observation data in your organisation?

### The FREQ Procedure

| DuVa5                                   | Frequency |
|---|-----------|
| <b>Managing observation data</b>        | 26        |
| <b>Producing observation data</b>       | 25        |
| <b>Using/consuming observation data</b> | 25        |

### Where are you located (continent)?

The FREQ Procedure

| V4            |           |
|---------------|-----------|
| V4            | Frequency |
| Asia          | 4         |
| Europe        | 24        |
| North America | 12        |

### Are you or your institution engaged in one or more of the following international activities/organisations?

The FREQ Procedure

| DuVa6  | Frequency |
|--|-----------|
| Arctic Council (or one of its subsidiaries, i.e. Expert or Working Groups)                           | 23        |
| EU-PolarNet  | 13        |
| European Polar Board   | 10        |
| Other EU-funded programmes, like Arctic PASSION, INTERACT or other EU Polar Cluster members          | 24        |
| Scientific Committee on Antarctic Research (SCAR) / SCAR Standing Committee on Antarctic Data Manage | 19        |
| Southern Ocean Observing System (SOOS)   | 11        |
| Sustaining Arctic Observing Networks (SAON) (or one of its Committees: ADC or CON)                   | 40        |

### Is the interest/scope of your work?

The FREQ Procedure

| V6        |           |
|-----------|-----------|
| V6        | Frequency |
| Antarctic | 1         |
| Arctic    | 20        |
| Polar     | 19        |

### Within your institution: Do you compile and organise information about observing assets in polar regions?

The FREQ Procedure

| V7                    |           |
|-----------------------|-----------|
| V7                    | Frequency |
| No                    | 4         |
| Yes                   | 35        |
| Frequency Missing = 1 |           |

### If yes, what kind of observing assets does your institution organise information about?

The FREQ Procedure

| DuVa14            | Frequency |
|-------------------|-----------|
| Networks          | 21        |
| Observatories     | 26        |
| Observing systems | 22        |
| Programs          | 23        |
| Projects          | 23        |
| Sites             | 29        |
| Stations          | 29        |
| Transects         | 15        |

If yes, what is the technical framework or structure that your institution use for the organisation of this information?

The FREQ Procedure

| DuVa22  | Frequency |
|---|-----------|
| Catalogues, databases or online portals                 | 30        |
| Simple information structures (spreadsheet, text files) | 17        |

If your answer above included "Catalogues, databases or online portals", which?

| V10  |
|--|
| AMAP Project Directory: <a href="http://projects.amap.no/directory/amap">http://projects.amap.no/directory/amap</a> ; Study of Environmental Arctic Change (SEARCH): <a href="http://projects.amap.no/directory/search">http://projects.amap.no/directory/search</a> ; ENVINET Activities Catalog: <a href="http://projects.amap.no/directory/envinet/">http://projects.amap.no/directory/envinet/</a> |
| All  |
| All of these   |
| Arctic Observing Viewer (AOV); Arctic Research Mapping Application (ARMAP)   |
| Data Catalogues and Online Portals   |
| DataONE, Metacat, MetacatUI, schema.org  |
| GEUS dataverse <a href="http://dataverse01.geus.dk/">dataverse01.geus.dk/</a> moving soon to <a href="http://dataverse.geus.dk/">dataverse.geus.dk/</a>  |
| Global Cryosphere Watch Data Portal  |
| Indigenous Sentinels Network, BeringWatch Database   |
| Inhouse systems and contributions to SIOS Observation Facility Catalogue and WMO Integrated Global Observing System (WIGOS)..  |
| No polar dedicated database or catalogue   |
| PANGAEA  |
| Polar.se, sites, snd   |
| Printed catalogue, online portals  |
| SAON, NRDD, Arctic Data Portal, NCEI   |
| SIOS observation facility catalogue ( <a href="https://sios-svalbard.org/sios-ri-catalogue">https://sios-svalbard.org/sios-ri-catalogue</a> )  |
| SITES, ICOS, SND, INTERACT   |
| Several: OGC catalogs, Smartmetserver metadata, online portals like <a href="http://litdb.fmi.fi">litdb.fmi.fi</a>   |
| We have many databases dealing with observing systems.   |
| Yes for polar datasets   |
| both - online and catalogues   |
| databases  |
| databases  |
| <a href="http://ebas.nilu.no">http://ebas.nilu.no</a>  |
| <a href="https://arcmap.nersc.no/">https://arcmap.nersc.no/</a>  |
| <a href="https://oscar.wmo.int/surface">https://oscar.wmo.int/surface</a>  |
| <a href="https://snd.gu.se/en">https://snd.gu.se/en</a> ; <a href="https://data.fieldsites.se/portal/">https://data.fieldsites.se/portal/</a> ; <a href="https://www.icos-cp.eu/">https://www.icos-cp.eu/</a> ; <a href="https://www.smhi.se/en/services/open-data/search-smhi-s-open-data-1.81004">https://www.smhi.se/en/services/open-data/search-smhi-s-open-data-1.81004</a>                      |

<https://uaf-snap.org/>; <https://uaf-iarc.org/nabos/>; <https://uaf-snap.org/project/ardac/>; and others in-house and elsewhere (specifically arcticdata.io, Dept of Energy data repositories & others)

<https://www.awi.de/en/science/long-term-observations.html>

<https://www.ices.dk/data/dataset-collections/Pages/default.aspx>

[promice.org](http://www.promice.org), <http://www.greenmin.gl/>

**If your answer above included "Catalogues, databases or online portals", do they have an Application Programming Interface (API) or other machine-readable endpoint for access (such as OGC CSW, OAI-PMH, or a web accessible folder)?**

The FREQ Procedure

| V11                   |           |
|-----------------------|-----------|
| V11                   | Frequency |
| Don't know            | 8         |
| No                    | 3         |
| Yes                   | 20        |
| Frequency Missing = 9 |           |

**Is the information stored in this/these system(s) accessible for people outside your institution**

The FREQ Procedure

| V12                              |           |
|----------------------------------|-----------|
| V12                              | Frequency |
| Openly                           | 28        |
| There are restrictions on access | 8         |
| Frequency Missing = 4            |           |

**If restrictions on the access apply, please specify**

| V13  |
|--|
| Data are restricted only during preparation for public access  |
| Information not yet accessible to people outside   |
| Note: I did not select restrictions above, but they are currently in development and not available, yet. |
| Only available internally, but external access is possible through SIOS and WIGOS (OSCAR)..              |
| Part of the data can be accessible upon request  |
| Registration   |
| Summary and statistical information is open; details (including contact information) is restricted.      |
| This is a longer conversation between government in exchange of data                                     |
| must partner with or contact our org for data permissions  |
| some data are not part of an open licence  |

**If restrictions on the access apply, is your institution currently considering or already implementing developments that will relax the restrictions?**

| V14   |
|---|
| No  |
| No  |
| Not discussed currently, more focus on feeding WIGOS. |

|  |
|--|
| Not yet  |
| Yes, once preparation is complete, data are made public.   |
| unclear  |
| we are revising out open access policy, our restricted data licences and always endeavour to make as much data openly accessible as possible but we are also bound by the data providers to respect their wishes on the use of these data i.e. economic data may be restricted |
| yes  |

**If your institution does not already organise or make the information available, would your institution have the capacity and be interested in making this information available to externals?**

The FREQ Procedure

| V15                    |           |
|------------------------|-----------|
| V15                    | Frequency |
| No                     | 2         |
| Yes                    | 18        |
| Frequency Missing = 20 |           |

**If you answered 'No' to the first question in this section, what could motivate you or your institution?**

V16

The question should also have a maybe. But once again, this requires more than a simple google form to discuss access to datasets.

**If you answered 'Yes' to the first question in this section, how would you or your institution technically want to make the information available?**

The FREQ Procedure

| DuVa25  | Frequency |
|---|-----------|
| Enter the information into an external system through a web entry interface   | 11        |
| Organise the information in structured files (spreadsheet, .csv-files), following an agreed format and make it available to externals | 7         |
| Through an existing technical framework or structure within your institution and expect this to make it available to externals        | 19        |

**Would you be willing to update the information provided regularly, say on a yearly basis?**

The FREQ Procedure

| V18                    |           |
|------------------------|-----------|
| V18                    | Frequency |
| Maybe                  | 8         |
| No                     | 1         |
| Yes                    | 21        |
| Frequency Missing = 10 |           |

**Please feel free to provide any additional information that you believe is important in this context. This could be, for example, links to databases available online that you would like to point us to or any other feedback that you would like to provide, etc.**

**V19**

AOOS Website with access to data portal: <https://aoot.org/> Research ASSETS Map (though might not be current for 2021): <https://portal.aoot.org/old/#module-metadata/bf53e8c9-eb91-4b44-839c-16d28a6b6a67/3f3b0c7b-8577-4953-8aaa-818df34883fc> Data Catalogue: [https://portal.aoot.org/#search?type\\_group=all](https://portal.aoot.org/#search?type_group=all)

I answered the questions based on the data we collect, Indigenous data need special considerations about how "easily" they are made available and some organizations may not have the capacity or skills to organize and maintain csv files following standard formatting on a regular basis

Schedule of updates and technical development of metadata exchange services depend on project funding.

This needs to be discuss in a different forum.

WMO is discussing with its members a Unified Data Policy to provide a mechanism for free international data exchange for Earth system data

We do have a clear picture on our observing assets, yet not available in an open database. What we do not have is a polar version of this information. Although we are interested in making the information openly available we currently do not have the resources.

We have our own open data portal, as well as access via obrs.ca, and submit YOPP data to the WMO YOPP portal as well (managed by MetNorway)

We operate the DataONE Federation of data repositories that spans both Arctic and Antarctic polar data holdings. We also provide services to operate several data repositories containing the authoritative archive for Arctic and Antarctic data sets, including the Arctic Data Center, the KNB Data Repository, the ESS-DIVE repository for the Department of Energy, and others. We have a federated search with data spanning > 26 Arctic repositories globally here: <https://search.dataone.org/portals/polderdemo/>

We would this automatically, too costly to do this manually. Preferably at a point by letting catalogues harvest a portion of the information (some information won't be shared for security reasons).

at the moment we aim to use Antarctic ([www.pnra.aq](http://www.pnra.aq)) and Arctic (under development) portals to provide catalogues and tools to distribute information openly and give the possibility to regularly update and adjour them. These information will complement information accessible through data centers (NADC for Antarctica and IADC for the Arctic) on projects and datasets released

<https://ads.nipr.ac.jp/>

<https://en.ilmatieenlaitos.fi/open-data>

<https://interact-gis.org/>

<https://psl.noaa.gov/iasoa/dataataglance> (not currently maintained but may be in the future)

<https://www.ocean-ops.org/board> for Arctic ocean observations

yes, [npdc.ncpor.res.in](http://npdc.ncpor.res.in)