What is your affiliation?

What is your affiliation?
V2
National Institute of Polar Research
AMAP Secretariat
Alaska Native Tribal Health Consortium
Alaska Ocean Observing System
Aleut Community of St. Paul Island/ Aleut International Association
Alfred Wegener Institute, Germany
Alfred Wegener Institute, Germany
British Antarctic Survey
CNR-ISP
CNR-ISP
Ca' Foscari University and Polar institute, Italy
Capitol Technology University
Centre National de la Recherche Scientifique
Centre for Polar Studies, University of Silesia in Katowice, Poland
ConsejerÃa de Educación y Ciencia. Junta de AndalucÃa. España.
Copenhagen Business School
Department of Biology University of Padua
Environment and Climate Change Canada
Finnish Meteorological Institute
Finnish Meteorological Institute, Space and Earth Observation Centre, Finland
GEUS - Geological Survey of Denmark and Greenland
GFZ German Research Centre for Geosciences
GRID Arendal
INTERACT (personal affiliation: Aarhus University, Institute of Bioscience, Denmark)
Institute of Geography and Spatial Planing, University of Lisbon, Portugal
International Arctic Research Center, University of Alaska Fairbanks
International Council for the Exploration of the Sea (ICES)
Interreg Northern Periphery and Arctic Programme
Istanbul Technical University Polar Research Center / TUBITAK Polar Research Institute
Istituto Nazionale di Geofisica e Vulcanologia (INGV)
Kiel University, Germany
Lamont-doherty Earth Observatory of Columbia University
Lund University, Sweden
NCPOR, Goa
NCSR Demokritos, Greece
NILU - Norwegian Institute for Air Research
NOAA, GOMO/ARP
NOAA/National Environmental Satellite Data and Information Service
Nansen Environmental and Remote Sensing Center,
National Centre for Polar and Ocean Research
National Centre for Polar and Ocean Research (NCPOR)
National Institute of Polar Research
National Oceanic and Atmspheric Administration NOAA, U.S.
National Snow and Ice Cata Center
Natural History Musuem, Spanish Research Council
Norwegian Meteorological Institute
Norwegian Meteorological Institute
- <u> </u>

Norwegian Polar Institute

	ies, AOV Development Team
Nuna Technolog	ies, Arctic Research Mapping Application (ARMAP) Development Team
Old Dominion Ur	niversity, Norfolk, VA
Polar Knowledge	e Canada, Canada
Polar View	
Portuguese Pola	r Program (PROPOLAR), IGOT, University of Lisbon
Red Mountain Co	onsulting LLC
SAON Secretaria	at
SMHI, the Swedi	ish Meteorological and Hydrological Institute
SPRS	
Southern Ocean	Observing System
Stockholm unive	rsity
Svalbard Integra	ted Arctic Earth Observing System (SIOS)
Swedish Polar R	esearch Secretariat
Swedish Polar R	esearch Secretariat
TAG LLC	
The ARM Data C	Center, Oak Ridge National Laboratory
The Aerospace I	nformation Research Institute (AIR) , the Chinese Academy of Sciences (CAS
The Geological S	Survey of Denmark and Greenland
Turkish Armed F	orces
US National Oce	anic and Atmospheric Administration (NOAA) / NESDIS
USGIN Foundati	on Inc
University of Alas	ska Anchorage
University of Bris	stol
University of Cali	ifornia, Santa Barbara
University of Edi	nburgh, UK
University of Got	henburg
University of Gro	ningen, Arctic Centre, The Netherlands
University of Hel	sinki
University of Lee	ds
University of Live	erpool, UK
University of Mor	ntana, Missoula, Montana USA
University of Was	shington
VLIZ- Flanders N	Marine Institute
Westfjord Univer	sity Center
World Meteorolo	gical Organization
World meteorolo	gical Organization
istitute of polar se	ciences-National Research Council, Italy

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

The FREQ Procedure

DuVa5	Frequency
Managing observation data	52
Producing observation data	53
Using/consuming observation data	55

Where are you located (continent)?

The FREQ Procedure

V4	
V4	Frequency
Asia	6
Europe	56
North America	26
Oceania	1

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	35
EU-PolarNet	26
European Polar Board	22
Other EU-funded programmes, like Arctic PASSION, INTERACT or other EU Polar Cluster members	44
Scientific Committee on Antarctic Research (SCAR) / SCAR Standing Committee on Antarctic Data Manage	36
Southern Ocean Observing System (SOOS)	20
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	6
Arctic	38
Polar	44
Frequency Missing = 1	

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

The FREQ Procedure

V7	
V7	Frequency
No	15
Yes	71
Frequency Missing = 3	

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

The FREQ Procedure

DuVa14	Frequency
Networks	37

Observatories	39
Observing systems	42
Programs	40
Projects	40
Sites	46
Stations	42
Transects	26

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	56
Simple information structures (spreadsheet, text files)	34

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

V10	
1) INGV node of the Italian NADC (National Antarctic Data Center) - http://antarcticdatacenter.ingv.it 2) INGV node for the IADC (Italian Arctic Data Center), under realization 3) eSWua database of the INGV network of ionospheric monitoring (it includes Arctic and Antarctic observatories) - www.eswua.ingv.it	er
AMAP Project Directory: http://projects.amap.no/directory/amap; Study of Environmental Arctic Change (SEARCH): http://projects.amap.no/directory/search; EN Activities Catalog: http://projects.amap.no/directory/envinet/	VINET
All	
All of these	
Arctic Observing Viewer	
Arctic Observing Viewer (AOV); Arctic Research Mapping Application (ARMAP)	
Arctic Research Mapping Application (armap.org)	
Data Catalogues and Online Portals	
DataONE, Metacat, MetacatUI, schema.org	
Database and online portal	
Databases	
Fluxnet, Pangaea, GFZ Data Services	
GEUS dataverse dataverse01.geus.dk/ moving soon to dataverse.geus.dk/	
Glacier surface flow velocities, elevation change of glaciers	
Global Cryosphere Watch Data Portal	
ICOS carbon portal, GTN-P	
IOOS and regional associations thereof	
In-house systems: catalogue= IMIS, online portals= EMODnet Biology/EurOBIS portals	
Indigenous Sentinels Network, BeringWatch Database	
Information are available in Institute website	
Inhouse systems and contributions to SIOS Observation Facility Catalogue and WMO Integrated Global Observing System (WIGOS)	
Local Environmental Observer (LEO) Network	
MEOP, Glider	
MGDS, USAP-DC, R2R	
NSIDC Data Search	
No polar dedicated database or catalogue	
Online portal/ data base	
PANGAEA	_
Polar.se, sites, snd	

Printed catalogue, online portals

Project website, project online database, data submitted to National Archives

SAON Inventory: http://projects.amap.no/directory/saon/; EU-PolarNet deliverable - Inventory of polar observational/monitoring and modelling programmes: https://www.arcticobserving.org/2-uncategorised/245-eu-polarnet-inventory-of-polar-observational-monitoring-and-modelling-programmes

SAON, NRDD, Arctic Data Portal, NCEI

SIOS observation facility catalogue (https://sios-svalbard.org/sios-ri-catalogue)

SITES, ICOS, SND, INTERACT

SOOSmap and DueSouth, both provided by the Southern Ocean Observing System (SOOS)

Several: OGC catalogs, Smartmetserver metadata, online portals like litdb.fmi.fi

The Bolin Centre data base

We have a variety of all three: see https://www.bas.ac.uk/data/our-data/

We have many databases dealing with observing systems.

Yes for polar datasets

both - online and catelogues

databases

databases

http://ebas.nilu.no

https://arcmap.nersc.no/

https://duesouth.europeanpolarboard.org/ and http://staging.arctic-data-ecosystem.apps.nsidc.org/

https://oscar.wmo.int/surface

https://ppdb.us.edu.pl/

https://snd.gu.se/en; https://data.fieldsites.se/portal/; https://www.icos-cp.eu/; https://www.smhi.se/en/services/open-data/search-smhi-s-open-data-1.81004

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.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	12
No	6
Yes 39	
Frequency Missing = 32	

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

The FREQ Procedure

V12	
V12	Frequency
Openly	52
There are restrictions on access	17
Frequency Missing = 20	

If restrictions on the access apply, please specify

V13
Access requires email address
Accessible via NATO documents
As open as we can without having a general structure
Data are restricted only during preparation for public access
Data is open after publication
Industry permission sometimes required
Information not yet accessible to people outside
Most open, but can be restrictions due to embargoes etc.
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
Raw telemetry
Registration
Some data sets require contacting the PI to assess possibilities for collaboration
Summary and statistical information is open; details (including contact information) is restricted.
This is a longer conversation between government in exchange of data
Time limited embargo for a few data sets
endpoints are internal only to developers
must partner with or contact our org for data permissions
non commercial and scientific purposes only
simple registration, then open for scientific use
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
Accessible via NATO documents
No No
No No
Not applicable
Not discussed currently, more focus on feeding WIGOS.
Not yet
Restriction is very relaxed already
We aim for data to be as open as possible
Yes
Yes, once preparation is complete, data are made public.
Yes. Publishing the results faster in data journals
in the future
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	7
Yes	40
Frequency Missing = 42	

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

V16	
-	
Capacity to do so.	
More researchers doing polar research at my institution	
Quicker and less frustrating access to IT help personell at the university!	
The question should also have a maybe. But once again, this requires more than a simple google form to discuss access to datasets.	
We would need a mandate from the European Commission.	
access to resources to develop end-user applications	
maintaining is costly, as a univ. our activities are project based. We cannot sustain suhc service for long wthout third party funds	

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	
Organise the information in structured files (spreadsheet, .csv-files), following an agreed format and make it available to externals	
Through an existing technical framework or structure within your institution and expect this to make it available to externals	35

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

The FREQ Procedure

V18	
V18	Frequency
Maybe	22
No	1
Yes	41
Frequency Missing = 25	

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

A lot of the information that you are looking for for the Southern Ocean is already compiled and available through SOOS' DueSouth directory of forthcoming Southern Ocean cruises and fieldwork (https://duesouth.europeanpolarboard.org/) and SOOSmap data portal (https://www.soos.aq/data/soosmap)

AOOS Website with access to data portal: https://aoos.org/ Research ASSETS Map (though might not be current for 2021): https://portal.aoos.org/old/#module-

metadata/bf53e8c9-eb91-4b44-839c-16d28a6b6a67/3f3b0c7b-8577-4953-8aaa-818df34883fc Data Catalogue: https://portal.aoos.org/#search?type_group=all

Database website: litdb.fmi.fi . In addition, Finnish Meteorological Institute has database for operational weather data but it is not managed by Space and Earth Observation Centre

Documentation on our guidelines available at https://arcticobservingviewer.org/interoperability We desire to improve the AOV database through adoption of PIDs and a standard vocabulary for measured variable.

DueSouth (https://duesouth.europeanpolarboard.org/expedition/) captures information on future expeditions for the Southern Ocean, could this be extended for all polar regions?

HiMAC Data Category (http://115.29.142.79/)

I am currently an independent contractor; I've worked on geology projects in Antarctica, as well as the USAP repository managed out of Lamont-Doherty at that time.

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

Metada are openly available in the Spanish National Center of Polar Data

NSIDC and the NSIDC DAAC are WDS nodes.

National polar data centre of NCPOR https:/npdc.ncaor.gov.in

Open web services available via https://armap.org/web-services/

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

The ARM Data Center process, archive, and distribute the data using FAIR data principles (CoreTrust Seal certified), the data are available via data discovery portal as well as web service. ARM Data Center provides robust metadata in community developed standards for broader metadata sharing.

There are several databases and agreements on storing data. We have no capacity to do it more.

This needs to be discuss in a different forum.

Via EMODnet Biology/EurOBIS projects we occasionally receive polar data. All our metadata is openly available and the data as well, so none of the above questions really apply to us

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) ansd 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 pojects and datasets released

http://permantar.weebly.com (PERMANTAR - Western Antarctic Peninsula Permafrost Observatories) - the data will be made available online around the end of the year, and we are contributing to GTN-P.

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

https://en.ilmatieteenlaitos.fi/open-data

https://interact-gis.org/

https://ppdb.us.edu.pl/

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

https://www.avl.class.noaa.gov/saa/products/welcome

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

psc.apl.washington.edu/HLD; psc.apl.washington.edu/BeringStrait.html; NODC, Arcticdata.io,

we process data automatically and continuously

www.leonetwork.org Must be member (free) to have access to all content.

yes, npdc.ncpor.res.in