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RESEARCH
INFRASTRUCTURE
NETWORK

WP5, VA1 – Provision of Virtual Access

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SIOS

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Svalbard Integrated Arctic Earth Observing System (SIOS)

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The Mission

- Coordination, development and optimisation of the distributed RI in and around Svalbard – owned by the member institutions
- Building an efficient observing system
- Sharing technology, experience, and data
- Decreasing the environmental footprint of science

- **A consortium** of institutions with research infrastructure in & around Svalbard

Independent organisation

28 institutions from 10 countries

- **PROVIDE ACCESS TO RELEVANT DATA**
- **HARMONIZATION OF DATA AND OBSERVATIONS**
- **FACILITATE INTERDISCIPLINARY RESEARCH COLLABORATION**
- **EU Horizon projects:**
  - **POLARIN, Blue-Cloud 2026, Arctic PASSION**

SIOS Data Management System

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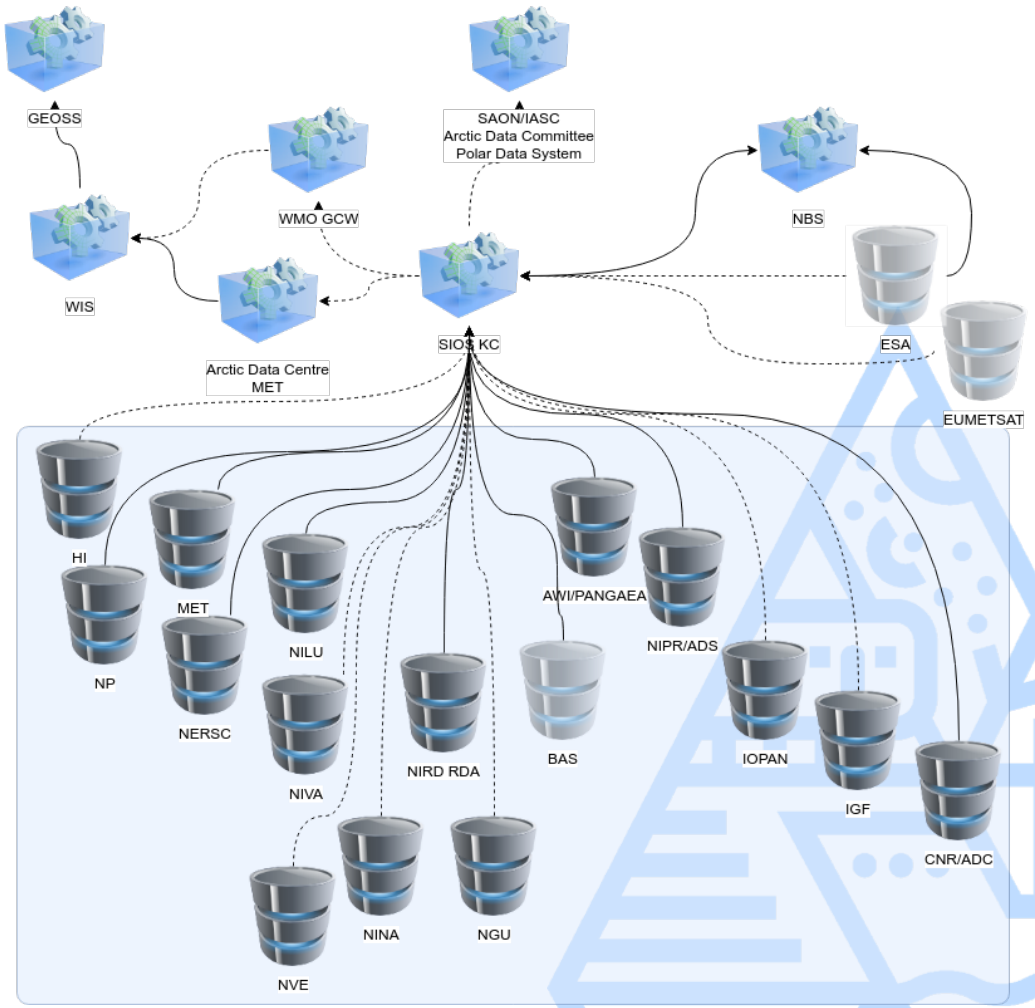
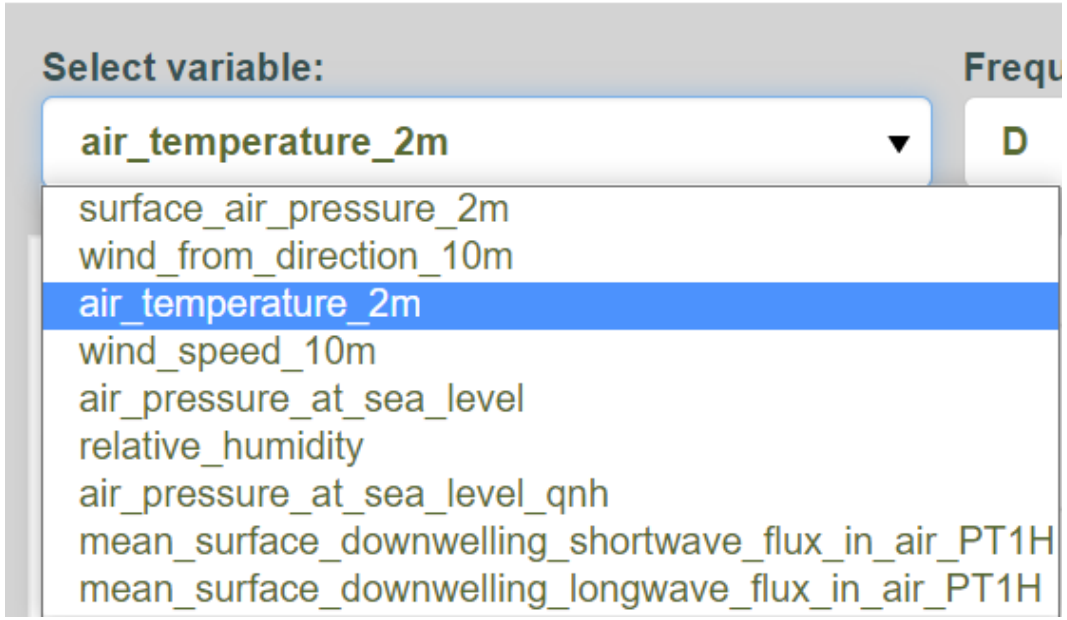
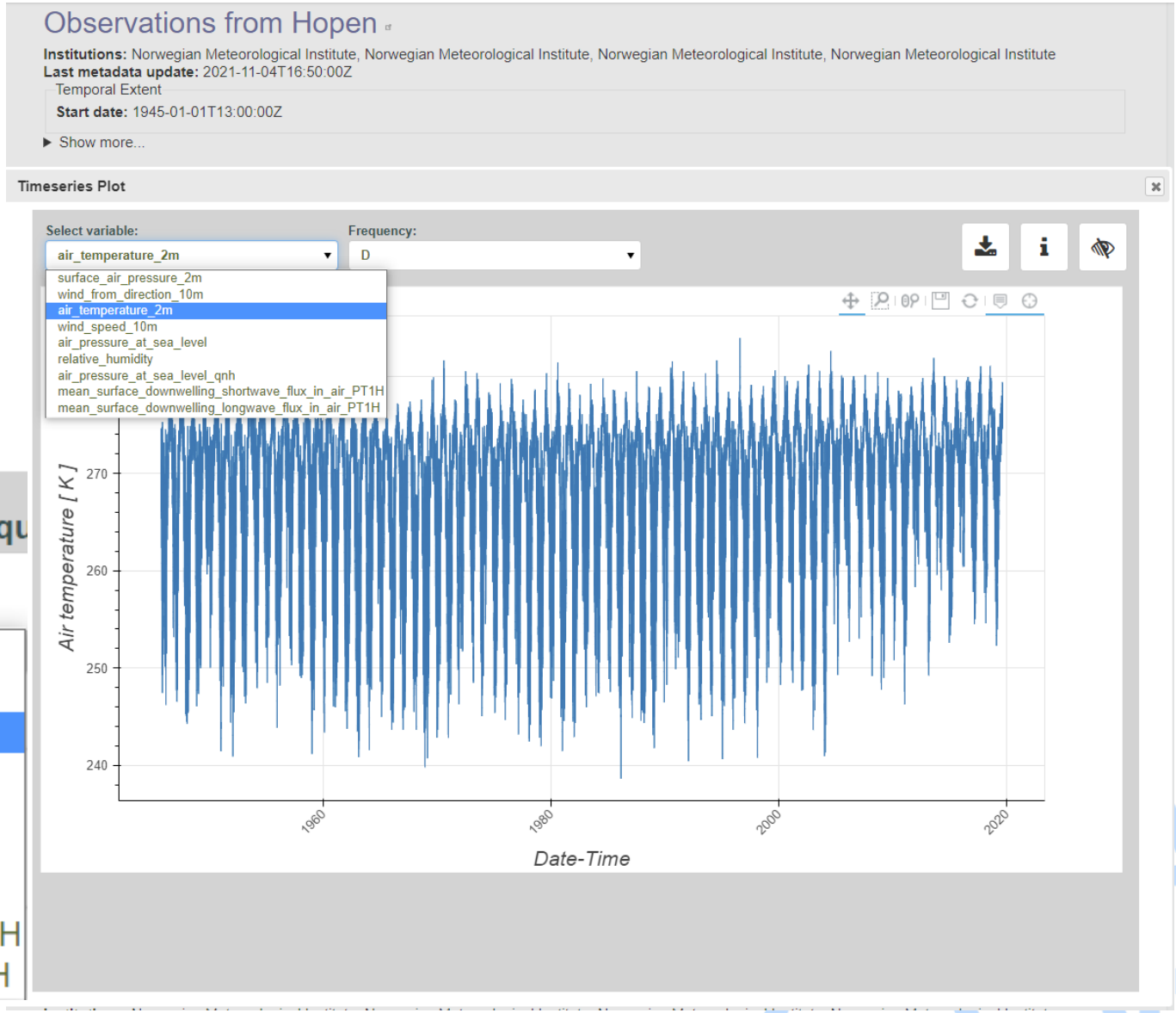
- Virtual data centre
- Harvest metadata from collaborating data centres into metadata catalogue
- Make SIOS data available through Data Access Portal
- Provide cross-disciplinary services and products on top of data



Example: Dynamic visualisation of time series

Met data from Hopen





WP5 - Objectives

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	POLAR RI SERVICES		
	Integration	Implementation	Assessment
WP5. VA1: Provision of Virtual Access	Development of joint access portal for VA (T5.1)	Development of joint access portal for VA (T5.1)	Monitoring and evaluation of VA with an external Board (T5.1)

- WP5 will manage and support VA to infrastructures
- Provide a web portal for VA with machine interfaces
- Monitor and evaluate VA provided by POLARIN RIs
- VA permanently open, users not selected for access

WP5 tasks

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- T5.1 Developing a Virtual Access portal (M1-M24)
  - Connect existing data catalogues of polar RIs
  - Collaboration and links with WP4
  - Based on metadata brokering approaches available in the consortium (SIOS, INTERACT)

dataportal.eu-interact.org/dataset

DATASETS ORGANIZATIONS STATIONS COLLABORATORS TOPICS ABOUT Interact Website

Interact Data Portal
INTER ⇄ ACT Virtual Access Single Entrypoint

Search from 1864 datasets

Datasets

Filter by location Clear

Map data © OpenStreetMap contributors
Tiles by Stamen Design (CC BY 3.0)

Organizations

- Swedish University of Agricultural Sciences (SLU - Partner 23) (557)
- Alfred Wegener Institute for Polar and Marine Research (AWI - Partner 7) (360)
- Aarhus University (AU - Partner 5) (209)
- Zentralanstalt für Meteorologie und Geodynamik (ZAMG - Partner 24) (170)
- University of Innsbruck (ACINN - Partner 25) (137)
- Swedish Polar Research Secretariat (SPRS - Partner 12) (118)
- Stockholm University (SU - Partner 14) (89)
- Greenland Institute of Natural Resources (GINR - Partner 16) (84)
- Centre d'études Nordiques (CEN: Centre for Northern Studies) (59)
- University of Copenhagen (UCPH - Partner 3) (43)

Show More Organizations

Topics

Search datasets...

1,864 datasets found

ORDER BY: Relevance

Calm data at station Samoylov (2022)

Understanding permafrost processes and changes requires long-term observational datasets. This dataset is a continuation of the dataset available from the long-term...

0 recent views on 11-01-2024 Station: Research Station Samoylov Island Collaborator: PANGAEA

Calm data at station Samoylov (2021)

Understanding permafrost processes and changes requires long-term observational datasets. This dataset is a continuation of the dataset available from the long-term...

0 recent views on 11-01-2024 Station: Research Station Samoylov Island Collaborator: PANGAEA

Below-ground carbon stocks and soil properties in the central Lena River Delt...

Arctic warming increases the degradation of permafrost soils but little is known about floodplain soils and other permafrost soils in the permafrost region. This dataset present...

0 recent views on 11-01-2024 Station: Research Station Samoylov Island Collaborator: PANGAEA

Potential CO2 and CH4 production in the central Lena River Delta, Kurungnakh ...

Arctic warming increases the degradation of permafrost soils but little is known about floodplain soils and other permafrost soils in the permafrost region. This dataset present...

0 recent views on 11-01-2024 Station: Research Station Samoylov Island Collaborator: PANGAEA

Literature synthesis data of surface energy fluxes and environmental drivers ...

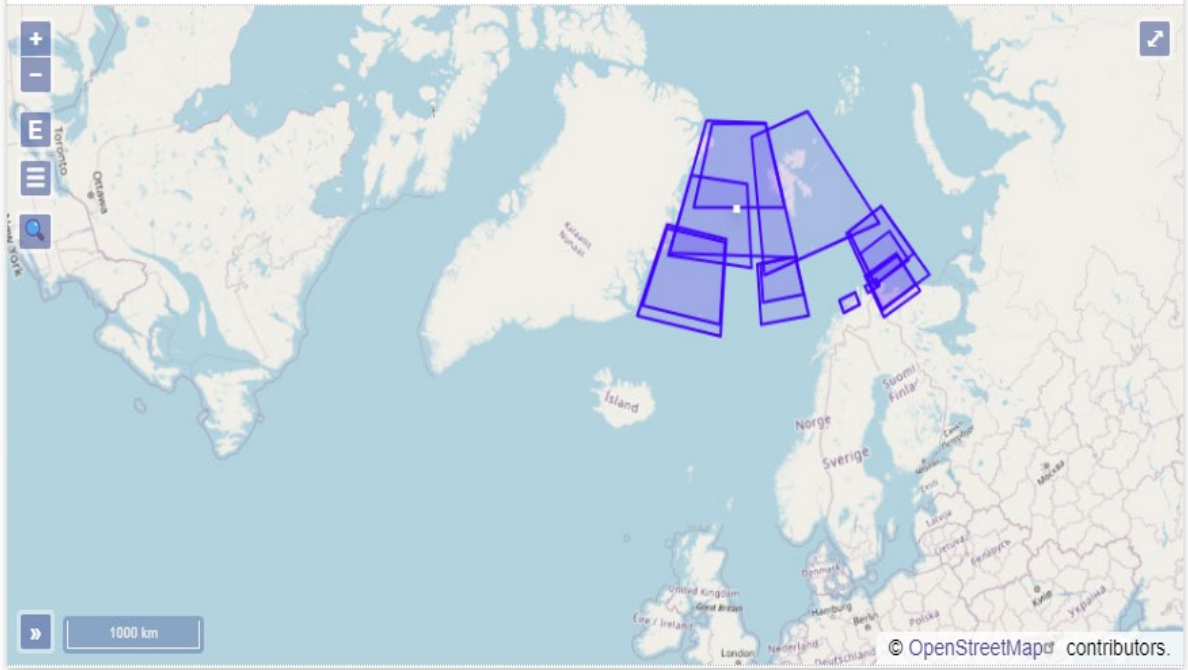
Despite the importance of surface energy budgets (SEBs) for land-climate interactions in the Arctic, uncertainties in their prediction persist. In situ observational data of SEB...

0 recent views on 11-01-2024 Station: Research Station Samoylov Island Collaborator: PANGAEA

Calm data at station Samoylov (2020)

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



552294 datasets found. Showing datasets 1 - 15 on page 1 of 36820 pages.

CTD-data from Akvaplan-niva surveys in Finnmark 2011

Last metadata update: 2024-04-17T01:47:16Z

Temporal Extent

Start date: 2024-04-17T12:00:00Z

▶ Show more...

WP5 tasks

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- T5.1 Developing a Virtual Access portal (M1-M24)
  - Connect existing data catalogues of polar RIs
  - Collaboration and links with WP4
  - Based on metadata brokering approaches available in the consortium (SIOS, INTERACT)
- T5.2 Monitor and evaluate Virtual Access (M13-M60)
  - Continuous monitoring and evaluation of the connected research infrastructures
  - Progress reports three times during the project

WP5 participants

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Roles in the WP:

T5.1 – SIOS, ETT and inkode lead the VA portal development with support from others

T5.2 - CNR, SIOS and INPA lead the monitoring and evaluation of POLARIN VA use

UNIVERSITY OF OULU

INTERACT

Consiglio Nazionale delle Ricerche

inkode

SIOS

WP5 deliverables

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- D5.1 (m12): A unified semantically consistent virtual data catalogue with machine interfaces
  - M10 (m14): Machine interfaces to catalogue established

- D5.2 (m18): A web portal providing guidance documentation and a Graphical User Interface to the virtual data catalogue
  - M11 (m18): Virtual Access portal established

- D5.3-5.5 (m24-m40-m55): VA Assessment Reports I, II and III

What's next?

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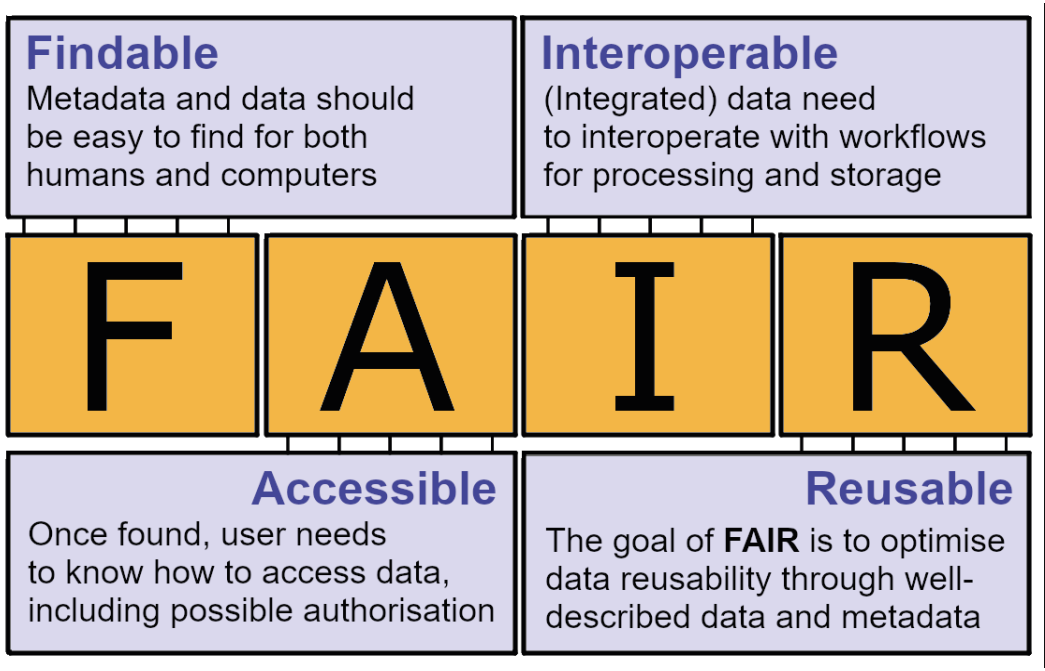
- D4.1 (m6): Full (data) management plan for the WP4/WP5 work
  - Get going with regular WP meetings to plan how we will achieve our goals

- D5.1 (m12): A unified semantically consistent virtual data catalogue with machine interfaces
  - M10 (m14): Machine interfaces to catalogue established

Guidelines for data providers / RIs

- Harmonise approaches at access and use levels for data (FA in FAIR)
  - Use interoperable data formats (e.g. CF-NetCDF or DwCA)
- Follow open science practices
  - Open sharing of research
  - Ensure reproducilibity
  - Open access to outputs
- For research data producers
  - Manage data in line with FAIR guiding principles
  - Deposit / make (meta)data available early



Key partner WPs in POLARIN

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- WP4 – Improvement of data services and customized data products
  - Providing backend functionality for WP4
  - Develop and share the web portal solution with WP4

- WP6 – RIs offered for virtual access
  - Collaborate with the Research Infrastructures to be connected

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- WP2 – Contributions to both deliverables

Expected results

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- Catalogue that is connected to -, and hosts metadata from all relevant data from polar Research Infrastructures

- Efficient portal - allows users fulfil their polar data needs
  - Easy to use and navigate
  - Datasets in harmonized formats

Questions or comments?

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