Accessing research infrastructures in the polar regions

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Funded under:

HORIZON-INFRA-2023-SERV-01-01: Research infrastructure services to enable R&I addressing main challenges and EU priorities

Topic: For RI services for sustainable Arctic/polar regions

Coordinator: AWI

52 partners
Budget: M14,6€

March 2024 – February 2029

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Background

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2009-2023

2011-2024

2018-2022

2024-2028

2024-2029

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Importance of accessing research infrastructures in the Polar Regions

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Climate Change Research

Understanding the Global Climate System

Biodiversity and Ecosystem Studies

Scientific Collaboration and Innovation

Cultural and Indigenous Knowledge

Education and Public Awareness

Photo: World Meteorological Organization

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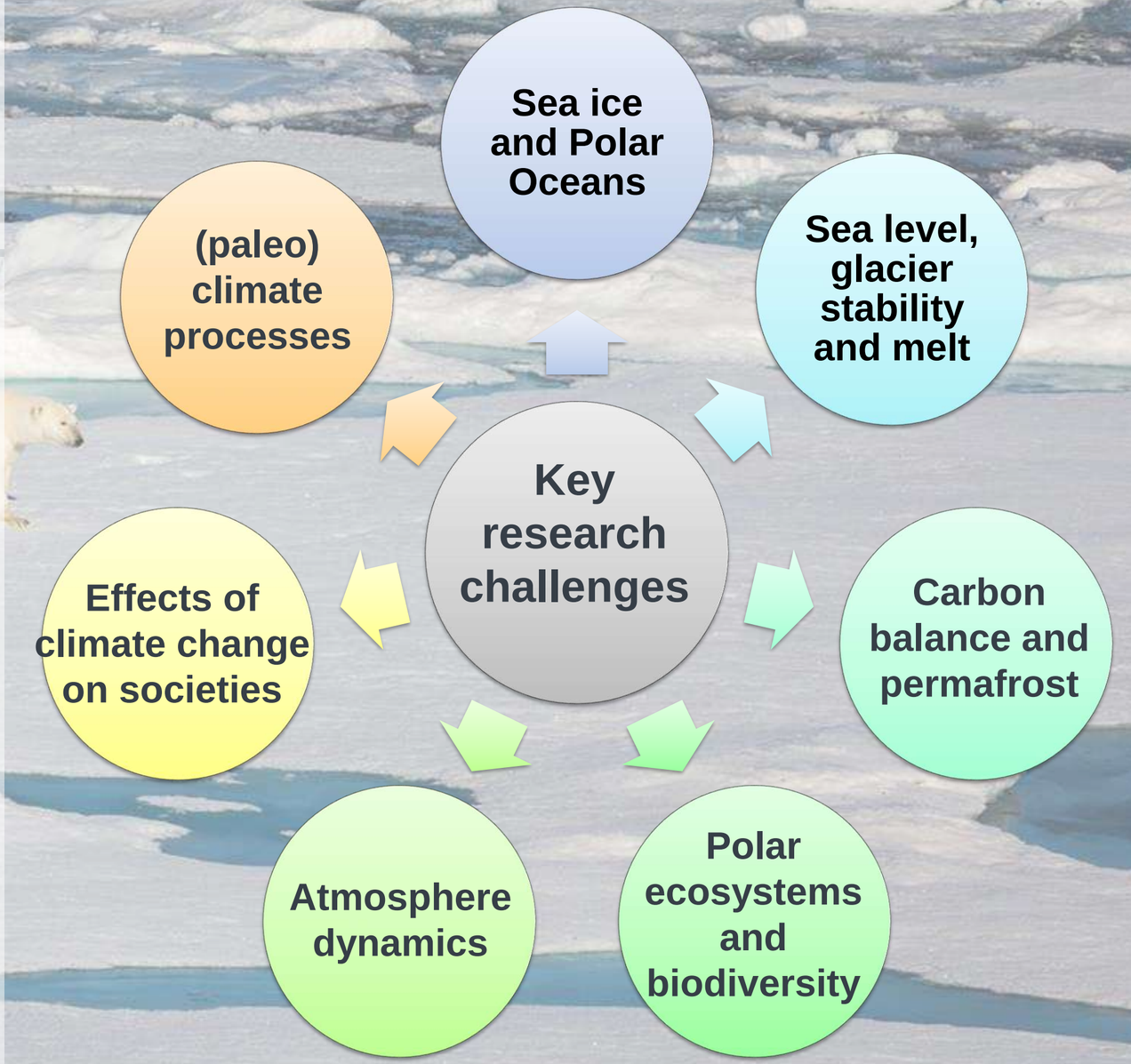
Overall aim

To provide **efficient and customised RI services** to address the scientific challenges of the polar regions, including **access to a wide portfolio of complementary and interdisciplinary top level RIs.**



Objectives

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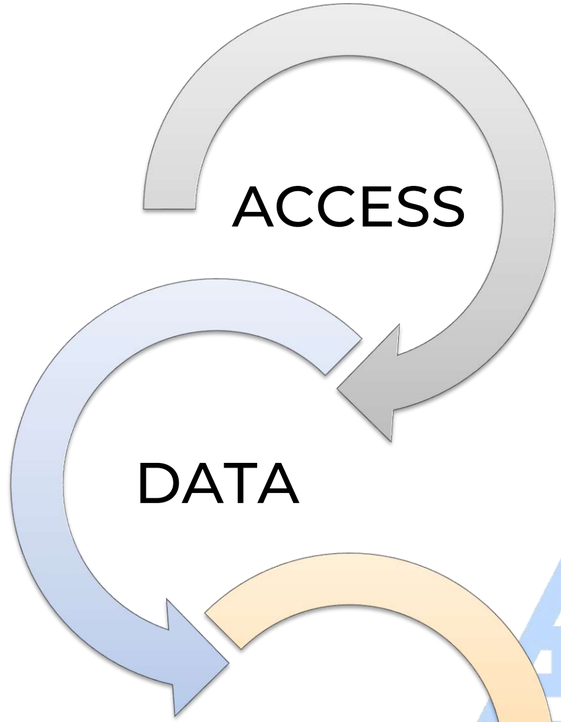
POLARIN will

Integrate and combine the access to Arctic and Antarctic RI

Improve online services, data access and interoperability

Ensure that the new generations are trained to exploit the leading edge RIs



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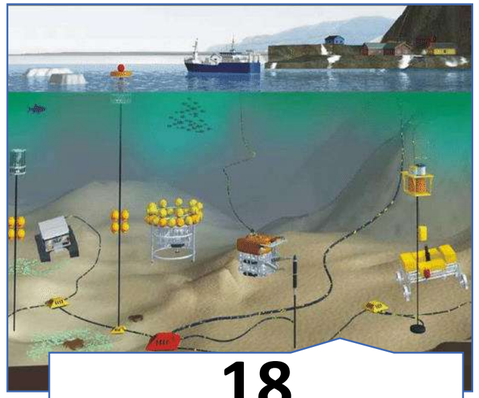
Access integration to **64** research infrastructures in **both poles**

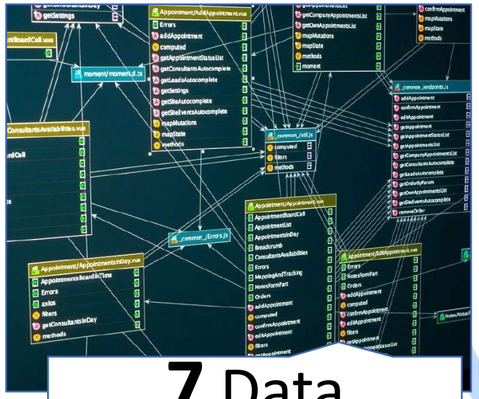
38
Research stations

12
Polar vessels



18
Observatories

4 Ice and sediment core repositories



7 Data infrastructures

FULLY FUNDED ACCESS TO RESEARCH INFRASTRUCTURES **FOR RESEARCH PROJECTS**
ADDRESSING THE **KEY RESEARCH QUESTIONS** IN THE POLAR REGIONS

20.09.2024

TYPES OF ACCESS TO RI

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Transnational Access

Virtual Access

Transnational Access

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- Proposal based, Challenge driven, in support of excellent science
- In support of international cooperation and large scale initiatives
- Access to RIs from other countries – Transnational Access
- Up to 20% of access units for non-EU users
- If granted, access to RI and travel expenses are covered by the project

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1st POLARIN call for proposals for transnational access to RIs (Arctic and Antarctic) to open

END OF SEPTEMBER 2024

(And then annually for selected infrastructures)

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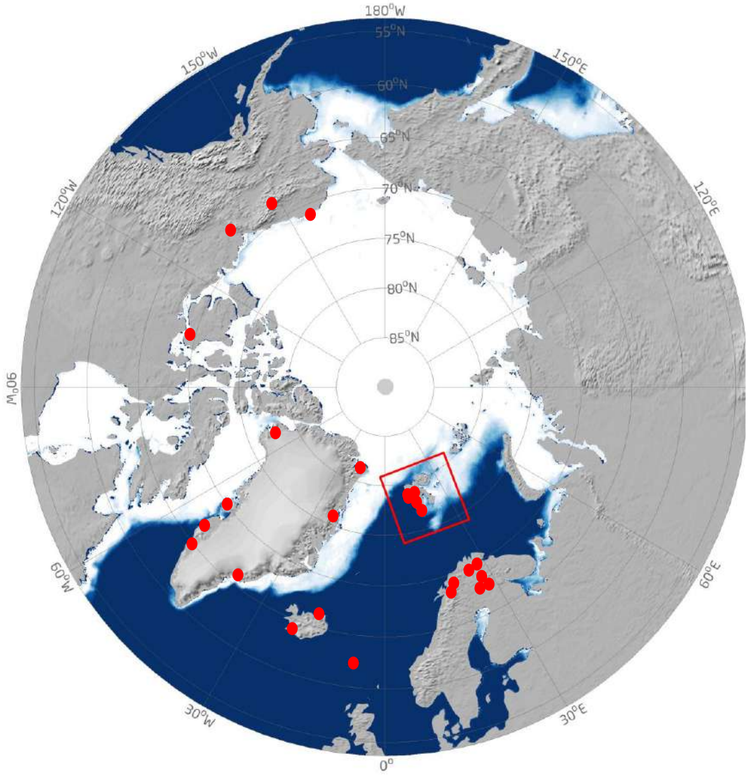
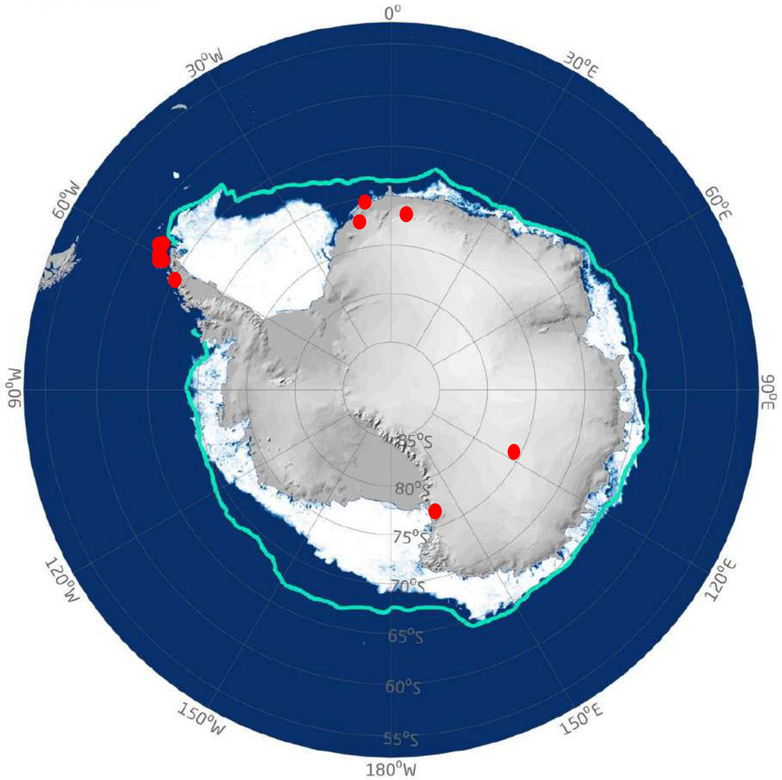
38
Research stations



AWI University of Bremen

Sensor: AMSR2

27 Arctic stations



11 Antarctic stations

20.09.2024

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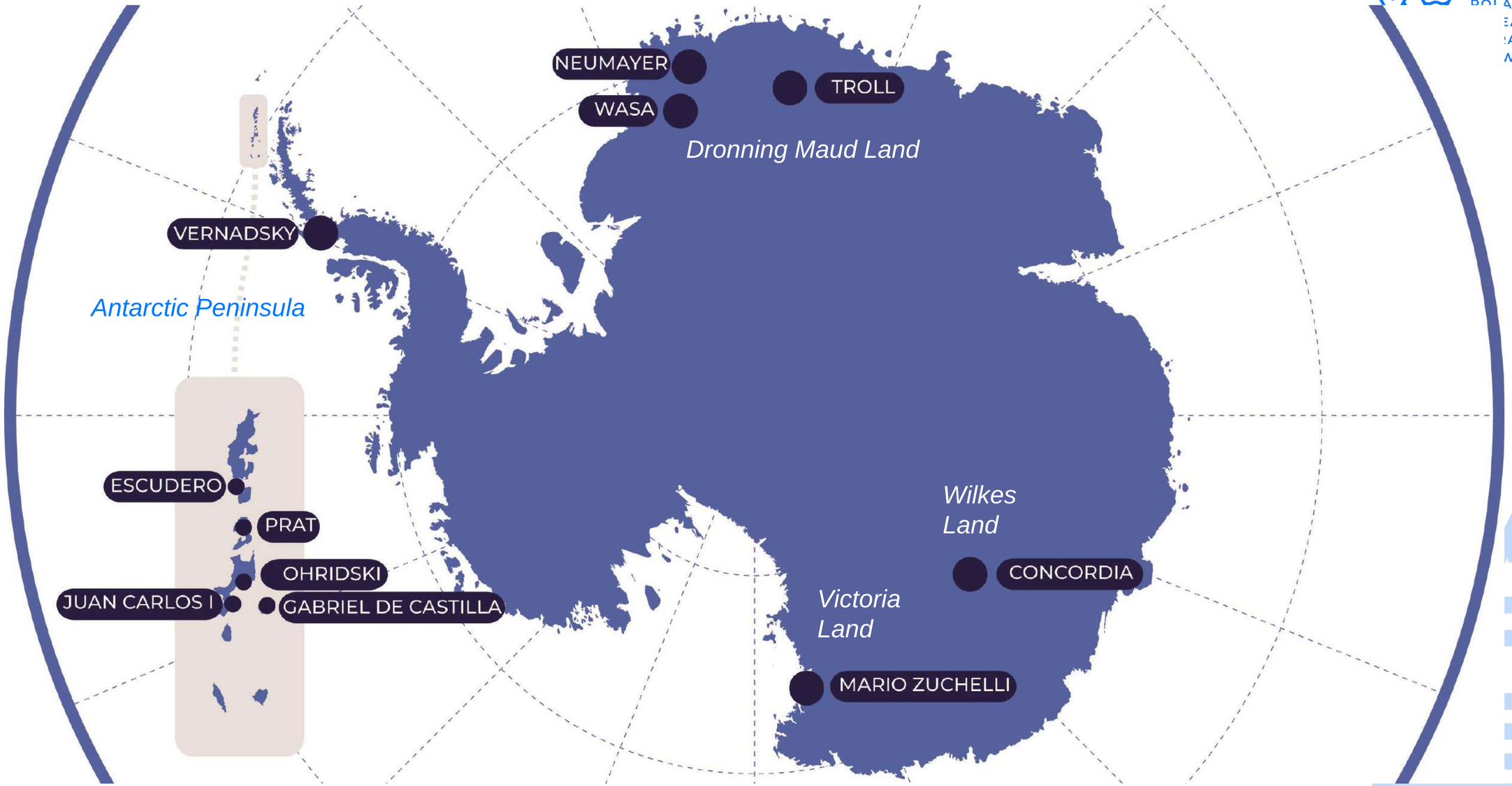
POLARIN Arctic Research Stations

POLARIN Antarctic Research Stations



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12
Polar vessels

CCGS Amundsen, CA

Arni Fridriksson, IS

RV Celtic Explorer, IR

MV Le Commandant Charcot, FR

RV Dana, DK

RV Kronprins Haakon, NO

BIO Hespérides, ES

RS Karpuj, CL

RVIB Laura Bassi, IT

Noosfera, UA

PRV Polarstern, DE

TARA polar station, FR

ARCTIC

ANTARCTIC

TWO POLES

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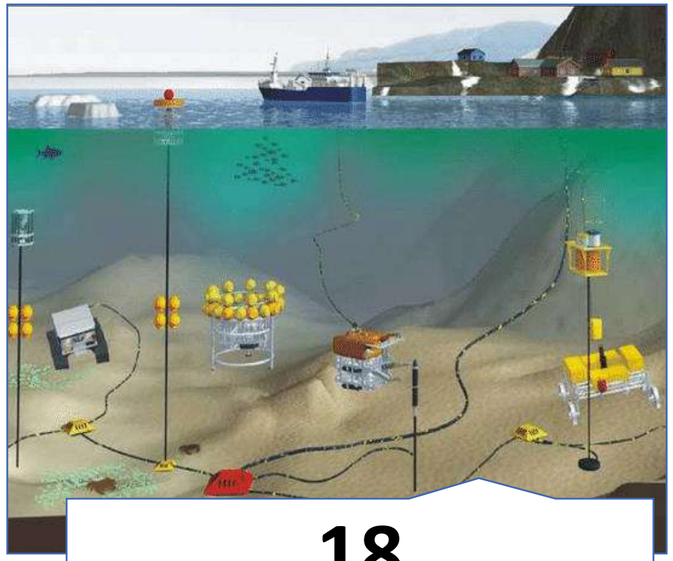

18

Observatories

- 1 deep-sea observatory (**FRAM**) (Arctic)
- 2 observational networks (**GIOS** and Greenland Ecosystem Monitoring) (Arctic)
- 15 key observatories associated to research stations (Arctic and Antarctic)

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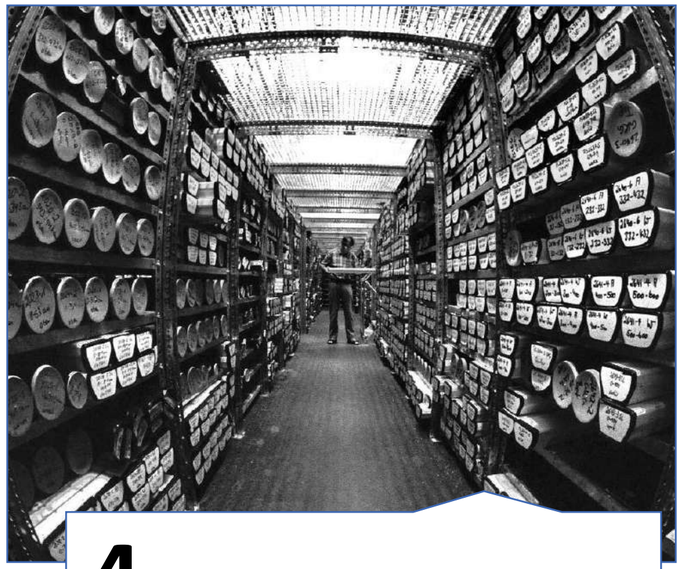

4 Ice and sediment core repositories

AWI: Ice core repository
AWI: Sediment core repository
BAS: Polar Sediment Core Facility
UiT: Core repository and geological laboratories

Data services and data products

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Improving the data landscape and the consumption of data

- **A single-entry portal**
- **VA to metadata, data and data services**
- **Coordinate, harmonise, and optimise** the implementation and integration of data services
- **Create data products** from environmental databases that can be directly used by researchers and decision makers.

Virtual access portal opening soon!

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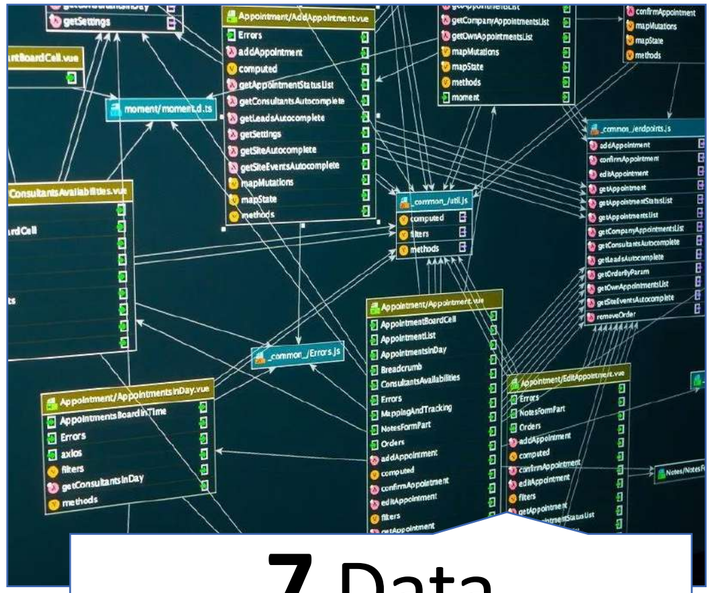

7 Data infrastructures

- Arctic Biodiversity Data Service (**CAFF**)
- ARICE Data infrastructure
- Italian Arctic Data Center (**CNR**)
- **INTERACT** data portal
- Italian National Antarctic Data Center (**CNR**)
- **POSEDA** (GFZ)
- **SIOS** Data Management System

Training for infrastructure users

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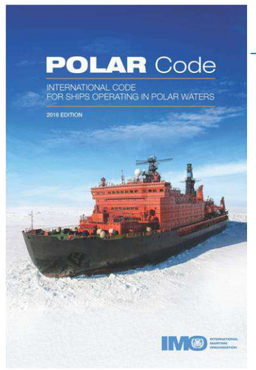
Training for early career scientists and professionals

Training on data stewardship



Safety training

POLARIN Consortium

Contact Us

Project Coordinator

Nicole Biebow:

Nicole.Biebow@awi.de

Project Manager

Verónica Willmott:

Veronica.Willmott@awi.de

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