

# Accessing research infrastructures in the polar regions

[www.eu-polarin.eu](http://www.eu-polarin.eu)

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FUNDED BY THE  
EUROPEAN UNION



# POLAR RESEARCH INFRASTRUCTURE NETWORK

[www.eu-polarin.eu](http://www.eu-polarin.eu)

**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:** 

**52 partners**

**Budget: M14,6€**

**March 2024 – February 2029**



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AMI

UNIVERSITY OF OULU

INTER=ACT

LUND UNIVERSITY

Consiglio Nazionale delle Ricerche

OGS

AARHUS UNIVERSITY

cnrs

CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE

inkode

UNIVERSITY OF COPENHAGEN

EUROPEAN POLAR BOARD

ETT

UiT Norges arktiske universitet

APECS

Association of Polar Early Career Scientists

SIOS

NILU

Norsk institutt for luftforskning

Norwegian Institute for Air Research

STATE INSTITUTION NATIONAL ANTARCTIC SCIENTIFIC CENTER

Ministry of Education and Science of Ukraine

IGOT

Instituto de Geografia e Ordenamento do Território

UNIVERSIDADE DE LISBOA

POLAR OPERATION

Ministerio de Relaciones Exteriores

Gobierno de Chile

GFZ

Helmholtz Centre POTSDAM

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Danmarks Meteorologiske Institut

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NORSK-POLARINSTITUTT

UNI GRAZ

TÍÓÐSAVNIÐ

CSIC

CONSEJO SUPERIOR DE INVESTIGACIONES CIENTÍFICAS

RIF Field Station

Stockholm University

UAM

AURORA COLLEGE

AURORA RESEARCH INSTITUTE

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UNIWERSYTET MIKOŁAJA KOPERNIKA W TORUNIU

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Many Traditions One Alaska

Foras na Mara Marine Institute

UK Research and Innovation

UNIVERSITY OF HELSINKI

FINNISH METEOROLOGICAL INSTITUTE

BULGARIAN ANTARCTIC INSTITUTE

UIC SCIENCE

CAFF

Conservation of Arctic Flora and Fauna

Fondation tara océan

explorer et partager

ACTRiS

Exploring the Atmosphere



# Background



2009-2023



2011-2024



2018-2022



2024-2028



2024-2029



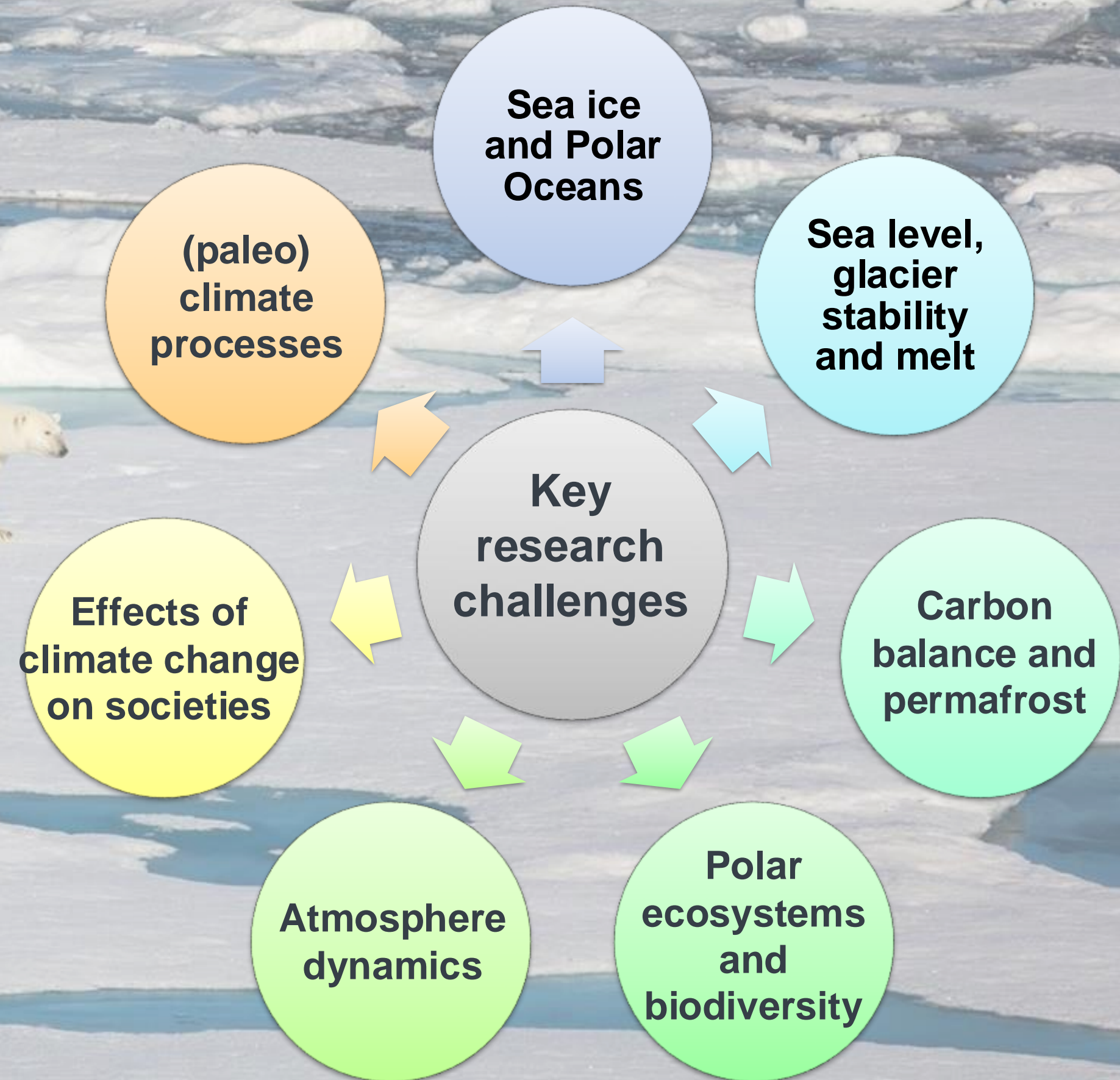
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# POLARIN

## 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

**POLARIN  
will**



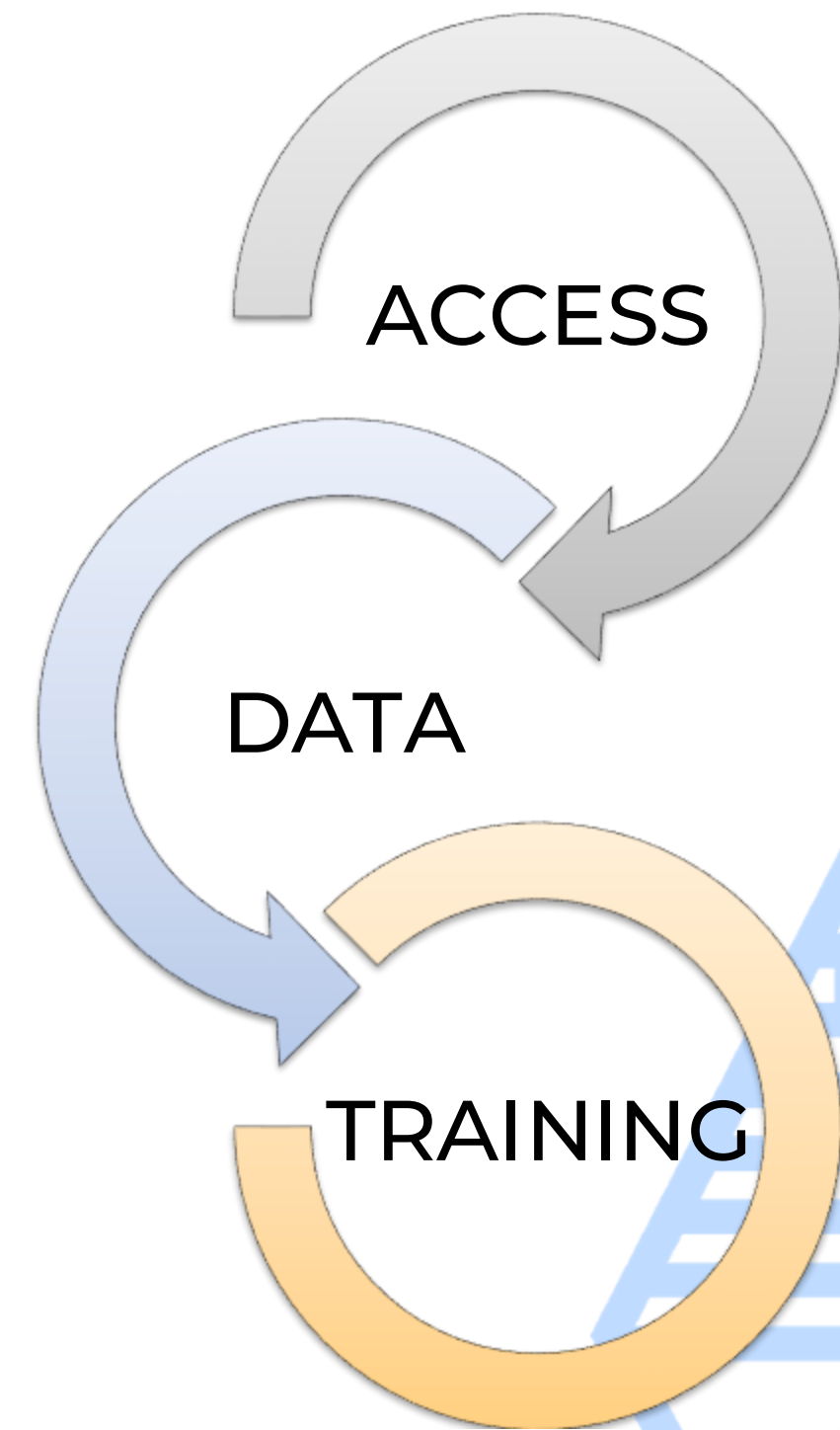
Integrate and combine the  
access to Arctic and  
Antarctic RI



Improve online services,  
data access and  
interoperability



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



# POLARIN RESEARCH INFRASTRUCTURE



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

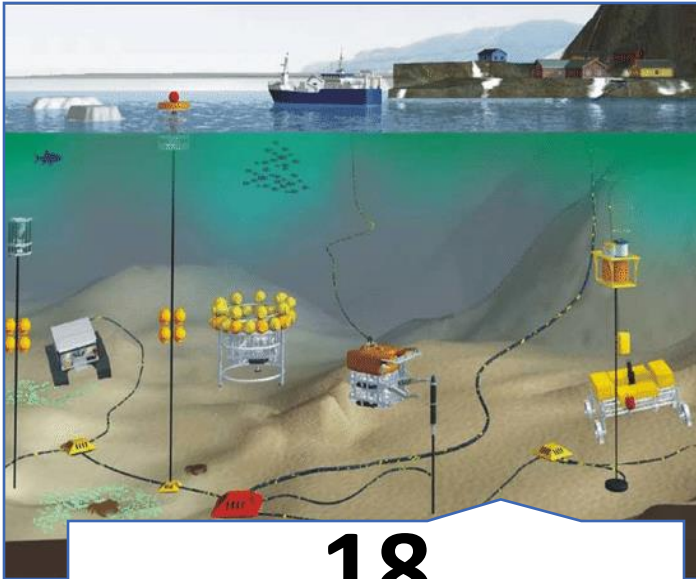
## TRANSNATIONAL ACCES



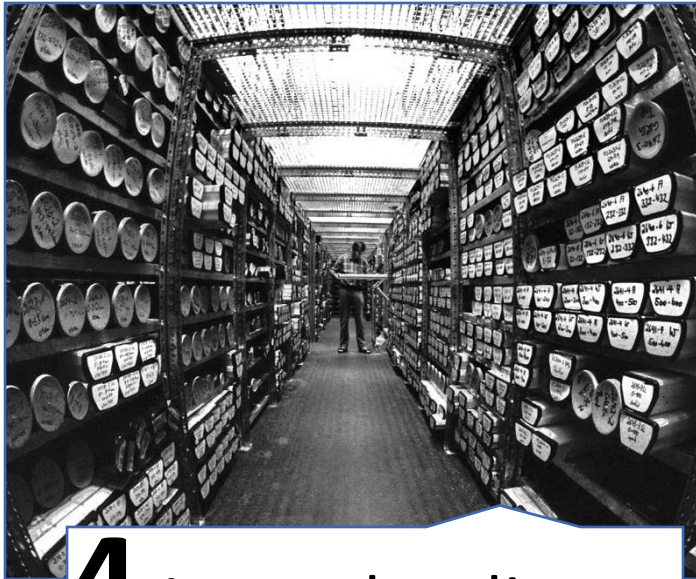
**38**  
Research stations



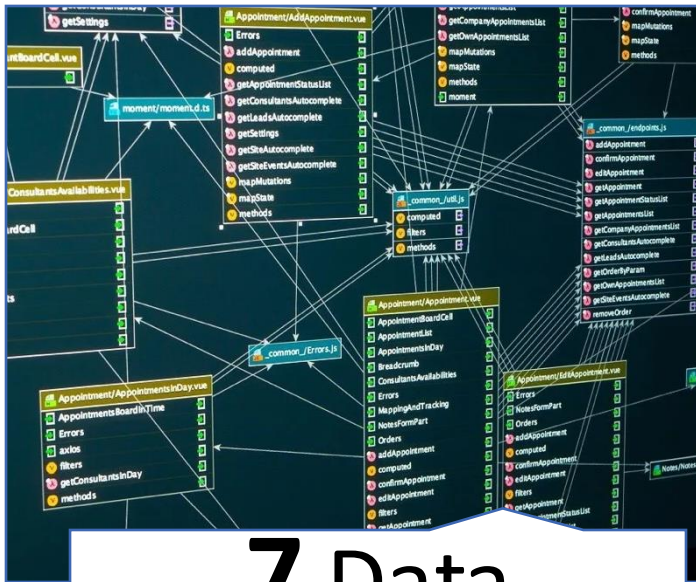
**12**  
Polar vessels



**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



# Transnational Access



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



# 1<sup>st</sup> POLARIN call for proposals for transnational access to RIs (Arctic and Antarctic) **IS NOW OPEN**

(And then annually for selected infrastructures)

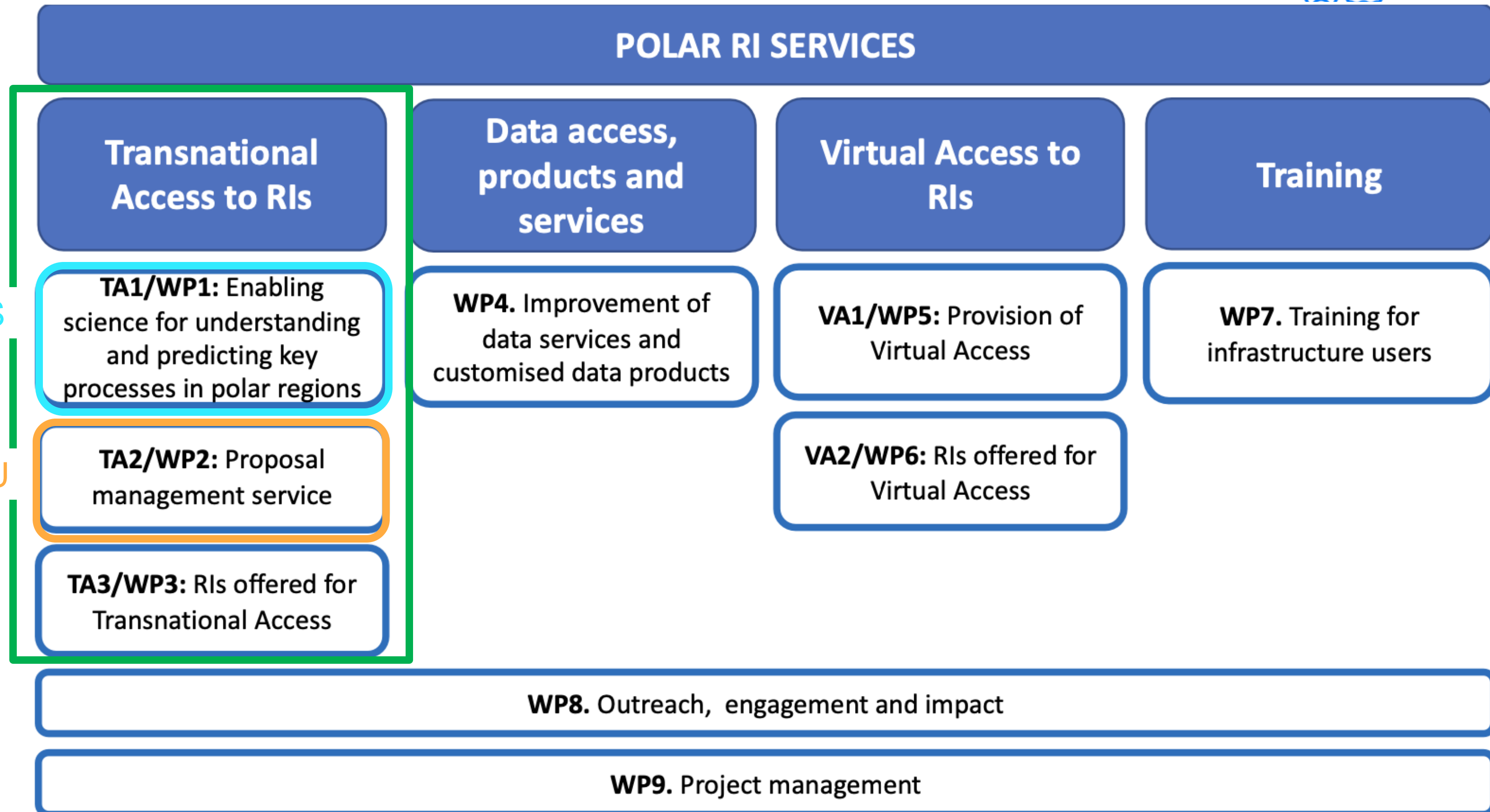


# Overall structure of the work plan



CNRS

UOULU





# Key actors – Scientific excellency



- **Scientific framework of the call for proposals (CNRS)**
  - Topic definition, identification of priority topics (CNRS, Aarhus University)
- **Scientific evaluation of proposals (OGS, U. OULU)**
  - **POLARIN Evaluation Secretariat (OGS)**
    - Coordinates the scientific evaluation of the call for proposals.
  - **POLARIN Scientific Liaison Panel**
    - To date 19 polar experts, more than 50% non consortium members
    - Supervises, ranks and recommends the implementation of scientifically excellent proposals



# Key actors – feasibility/implementation



- **Logistic Evaluation of proposals (OULU, CSIC)**
  - **POLARIN Infrastructure Operators Forum**
    - Operators of POLARIN Research Infrastructures, in charge of logistic/feasibility evaluation.





# POLARIN Call for proposals

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## Transnational Access Call 2024

The **EU funded project** [POLARIN](#) invites the scientific community to submit proposals to access **49 Research Infrastructures (RIs) in both polar regions**, contributing to addressing key research priorities.

+ 1. Call Description and Deadline

+ 2. Webinar for Applicants

+ 3. Call Topic: Research Priorities in Polar Regions

+ 4. Eligibility Criteria

+ 5. Access modalities



+ 6. Infrastructures offering access in POLARIN TA Call 2024

# POLARIN Call for proposals



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## – 3. Call Topic: Research Priorities in Polar Regions

Proposals must contribute to addressing at least one of the following key research challenges in the polar regions:

1. **Sea Ice and Polar Oceans in the Climate System:** Understanding the properties and dynamics of the sea ice covers and polar oceans and their mutual interaction, their variability at all time scales and their relations to the atmosphere and land is essential to evaluate their role in shaping regional and global climate and major biogeochemical cycles. This includes determining the conditions of occurrence of extreme events such as marine heat waves as drivers of sea ice retreat, the role of sea ice in the Earth's surface energy balance, the causes of changes in ocean bottom waters properties in relation to their source waters and their impact on the global overturning circulation, the biogeochemical ocean processes in relation to nutrient cycling, ocean carbon uptake, or the release of greenhouse gases from under-ice waters.
2. **Polar Ice Sheets, Glaciers and Sea Level:** Understanding the behavior of the polar ice sheets and glaciers is essential to narrow down the uncertainties on their contributions to global sea-level rise under current and future climate scenarios, including risks of possible collapse in the future. Focus should be put on understanding the dynamics of the Greenland and Antarctic ice sheets, including the impact of subglacial processes on the ice flow, the ice sheet mass balances, and the leading processes controlling their stability, and





# POLARIN Call for proposals



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✚ 4. Eligibility criteria

✚ 5. Access modalities

– 6. Infrastructures offering access in POLARIN TA Call 2024

Forty-nine (49) of the POLARIN RIs are offering Transnational Access in the 2024 Call for Proposals. Detailed information about the RIs and their conditions for access can be found on the [POLARIN website](#). Map-based information on the RIs can be found from [INTERACT GIS](#) (Arctic terrestrial RIs), [PolarDex](#) (Antarctic RIs and vessels), and individual websites of the RIs.

\* for simplification, in this table we use the terms TA as in person access, RA as remote access, TA/RA both in person and remote access.

Arctic Stations								
RI Name	Partner (acronym)	Operator country📍	Location	Access modality TA or/ RA*	Contribution to research priorities**	Total access offered in POLARIN	Typical duration of work	RI availability in TA Call 2024
<a href="#">Abisko Scientific Research Station</a>	SPRS	Sweden	Abisko, Sweden	TA/RA	2–7	100 user/days	13 days	From 1.05.2025 – 30.04.2026
<a href="#">Adam Mickiewicz University Polar Station</a>	AMU	Poland	Petunia Bay, Spitsbergen, Norway	TA	2–7	100 user/days	1-2 weeks	20.06.2025 – 10.09.2025
<a href="#">Arctic DTU Research</a>			Sisimiut,			100		<i>Not available in the TA</i>



# RI descriptions

## Abisko Scientific Research Station



### Abisko Scientific Research Station

The station is owned by the Swedish Polar Research Secretariat.

Abisko research station is an easily accessible, year-round station in the (sub)Arctic region with 80 guest beds. It is well equipped with different kinds of laboratories, workshops, greenhouses, and gardens. Cars, snowmobiles, and boats are available for the users. About 70-80 projects visit the station yearly, ranging from ecology, and climate, to physical geography, and space physics.

ABISKO has [observatory activities](#) for ICOS, SMHI, SITES-Water, and SITES-Spectral and provides observatory infrastructures for SMHI and SGU, Sweden, and SGO, Finland.

**Contribution to POLARIN key research challenges:** 2, 3, 4, 5, 6, 7



# RI description



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ABISKO has [observatory activities](#) for ICOS, SMHI, SITES-Water, and SITES-Spectral and provides observatory infrastructures for SMHI and SGU, Sweden, and SGO, Finland.

**Contribution to POLARIN key research challenges:**2, 3, 4, 5, 6, 7

**Contact:**Station manager Margareta Johansson: [margareta.johansson\[at\]polar.se](mailto:margareta.johansson@polar.se)

## Website🔗

<https://www.polar.se/en/research-support/abisko-scientific-research-station/>  
<https://eu-interact.org/field-sites/abisko-scientific-resarch-station/>

## Location

The station is located about 200 km north of the Arctic Circle and approximately 385 m a.s.l. on the south shore of the lake Torneträsk, in a 46-hectare nature reserve bordering the Abisko National Park, which covers 75 km<sup>2</sup>. The station is located in birch forest and the nearby area offers a great variety in topography, geomorphology, geology, and climate, as well as flora and fauna.

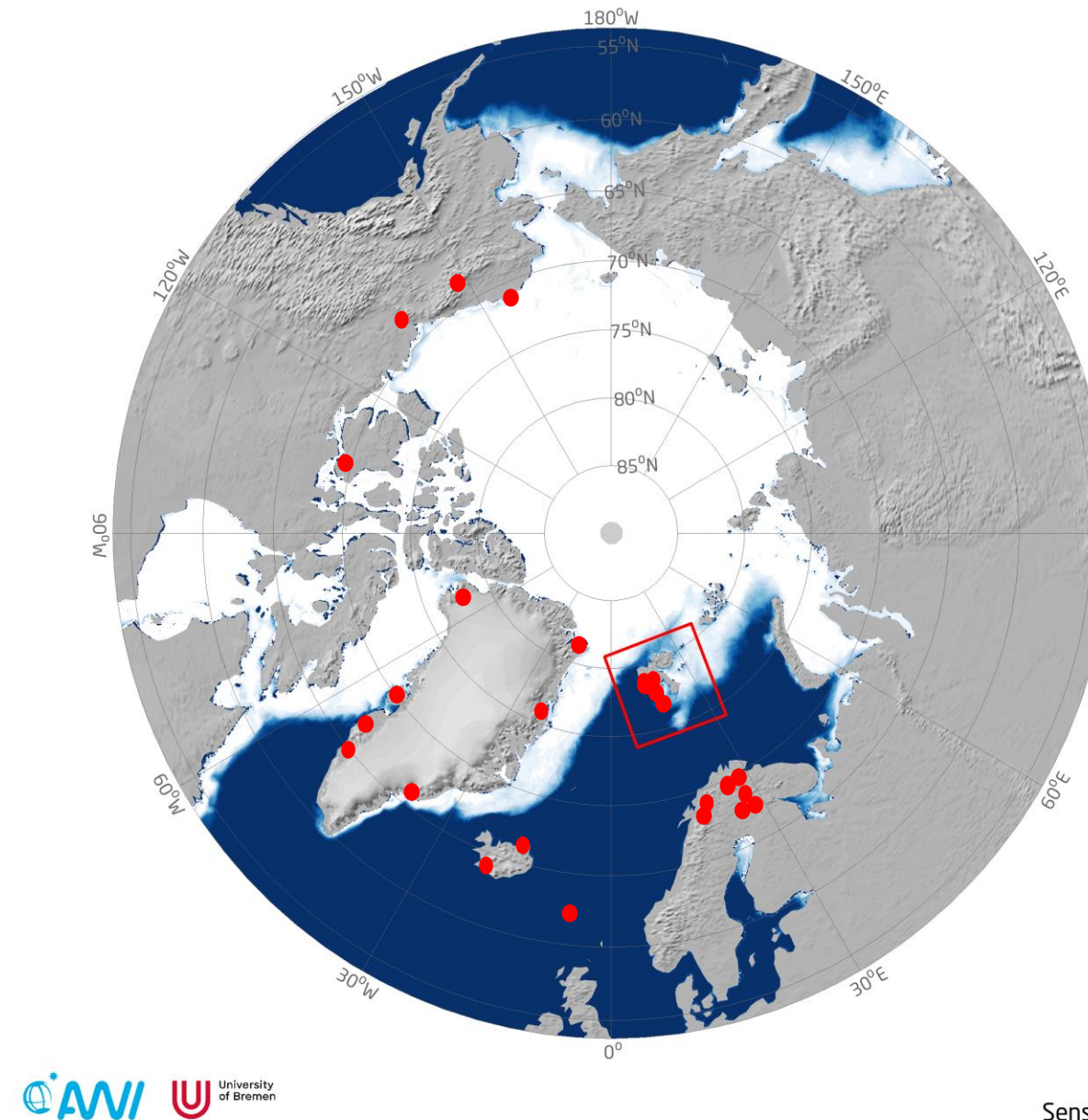
## Facilities

The station can host almost 80 visitors. Accommodation is available in 28 double rooms and seven 4-bedrooms. In addition, there are also laboratories, offices, workshops and lecture theaters. Meals are either prepared by the visiting scientists themselves in one of the self-catering kitchens available at the station or, during the tourist season, obtainable at tourist hotels and guest houses within 15 minutes' walk. There is a well-equipped grocery store in the nearby village of Abisko.

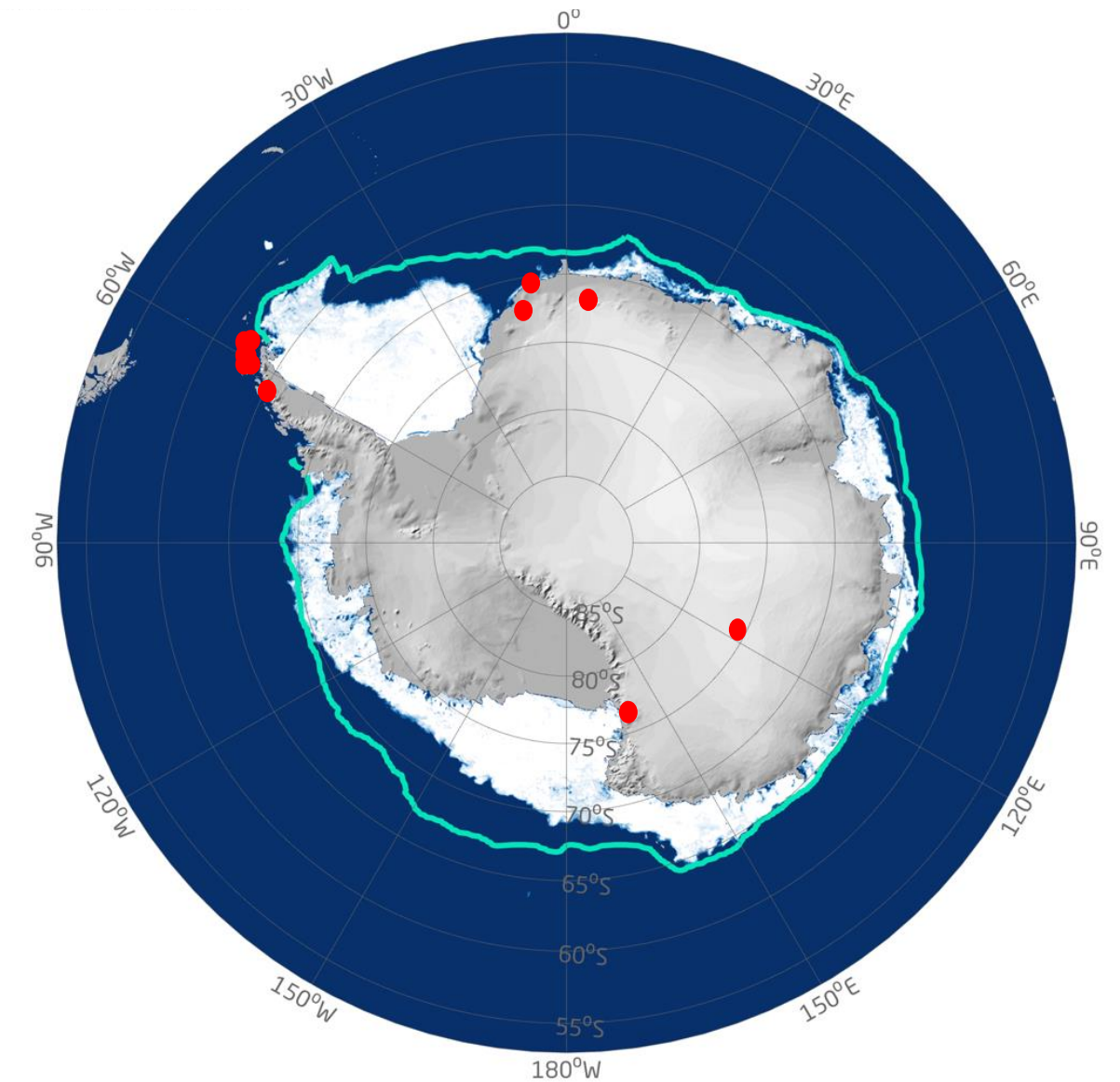
# POLARIN Infrastructure



**38**  
Research stations



27 Arctic stations



11 Antarctic stations

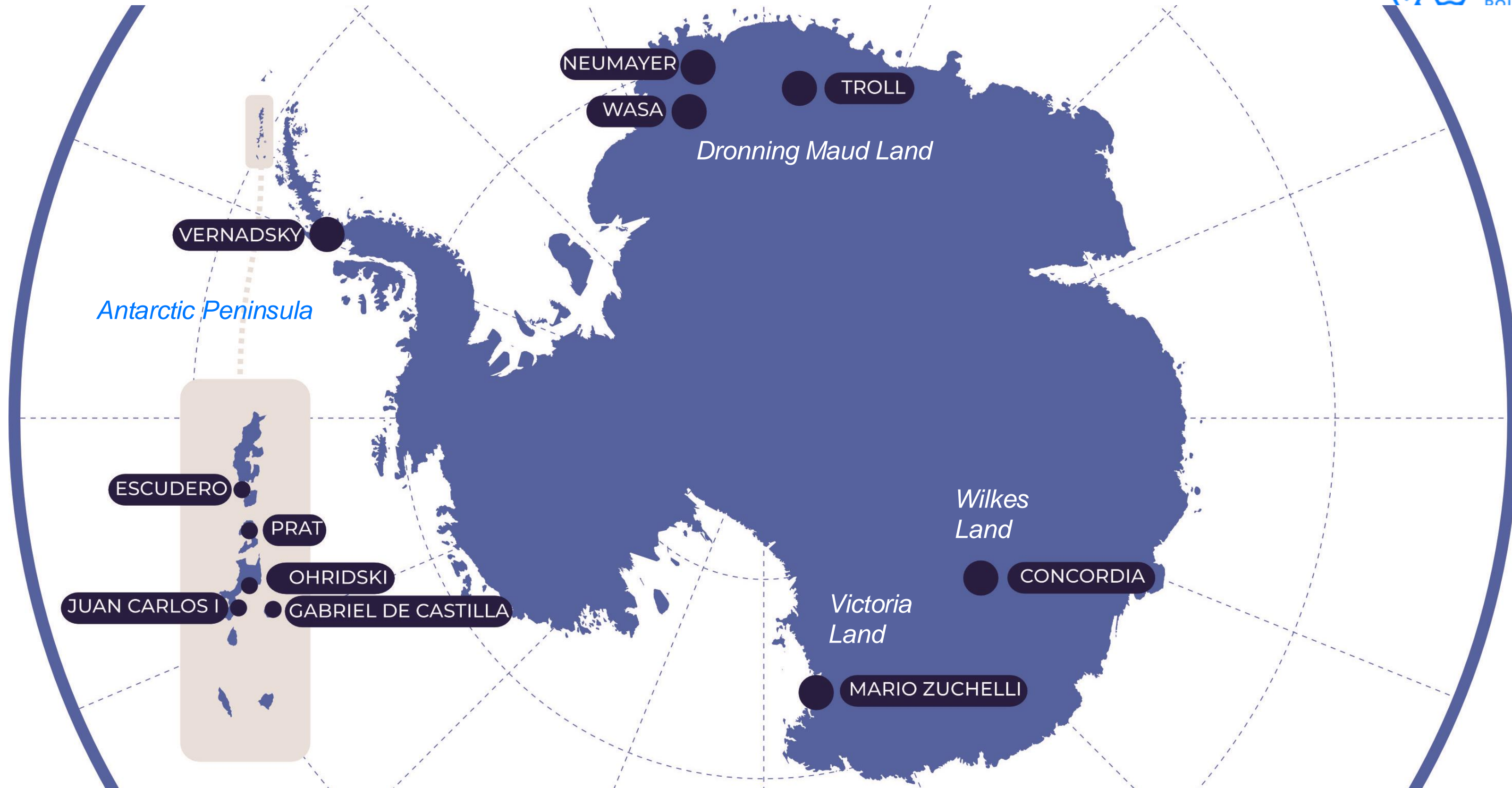


# POLARIN Arctic Research Stations





# POLARIN Antarctic Research Stations





# POLARIN Infrastructure



**12**  
**Polar vessels**

**CCGS Amundsen, CA**



**Arni Fridriksson, IS**



**RV Celtic Explorer, IR**



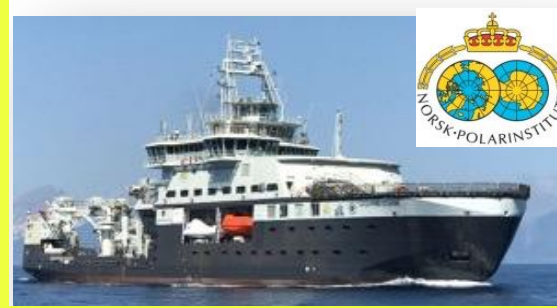
**MV Le Commandant Charcot, FR**



**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



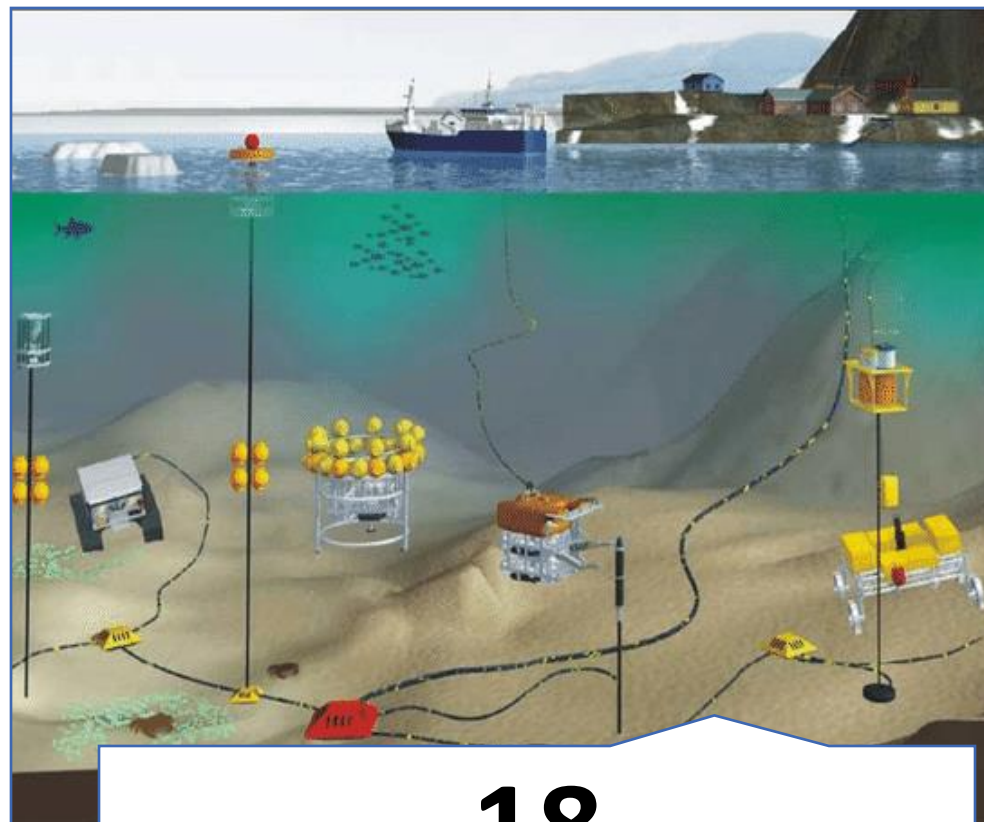
ANTARCTIC



TWO POLES



# POLARIN Infrastructure



**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)

# POLARIN Infrastructure



**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





# Contact Us

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