Updates on Italian Arctic Activities

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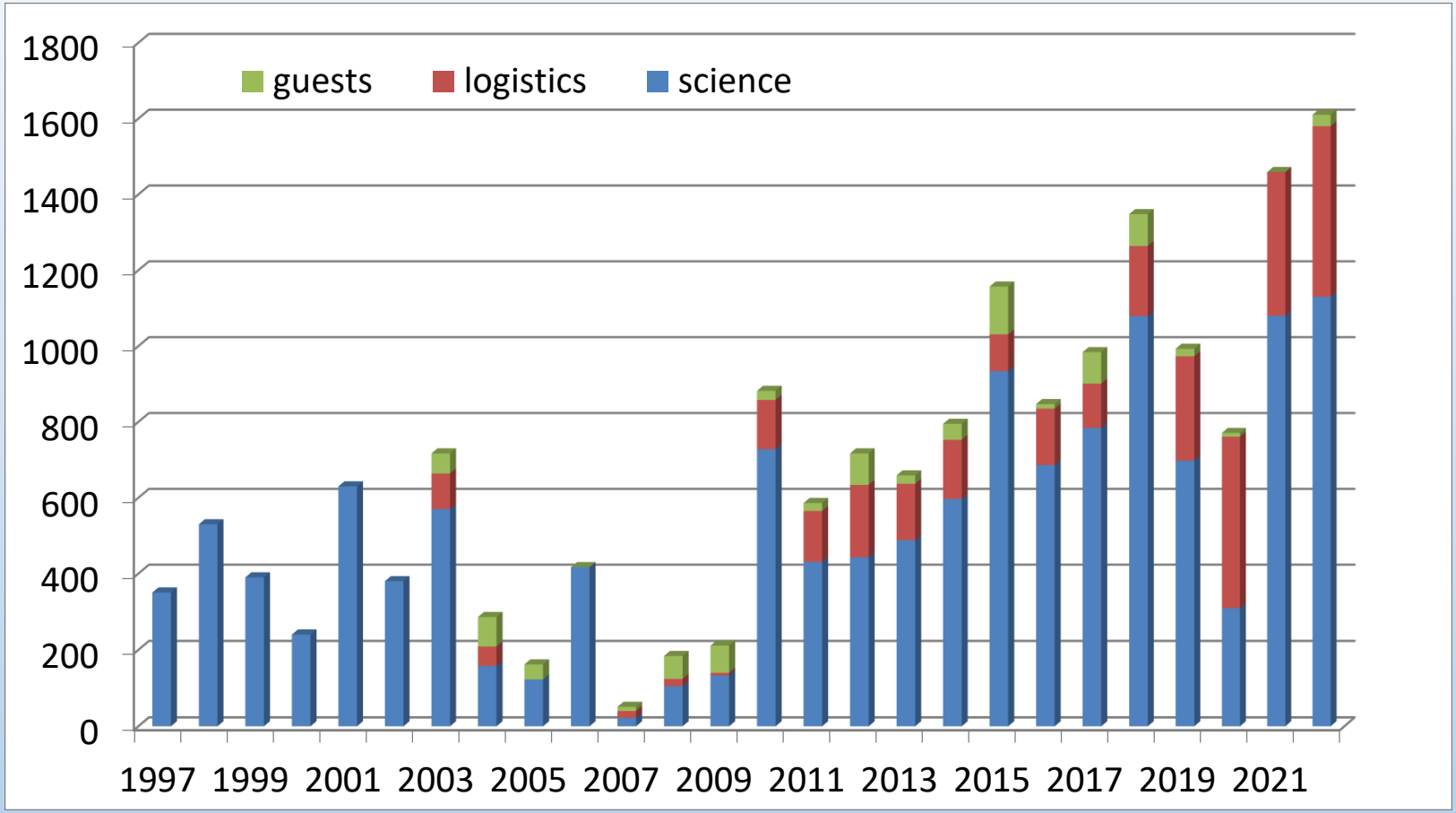
Arctic Station “Dirigibile Italia”, Ny-Ålesund Research Station (Svalbard)

- Opened in **1997**
- Managed by **CNR-ISP**, but hosts researchers from other institutions and universities
- Surface 330 m^2 with sleeping rooms, offices and laboratories
- Can host up to 7 researchers
- Since 2018 runs **all year round**
- Access through a national call and a peer-review process.
- Participates to **INTERACT** and **SIOS** access programs

Man-days at Dirigibile Italia



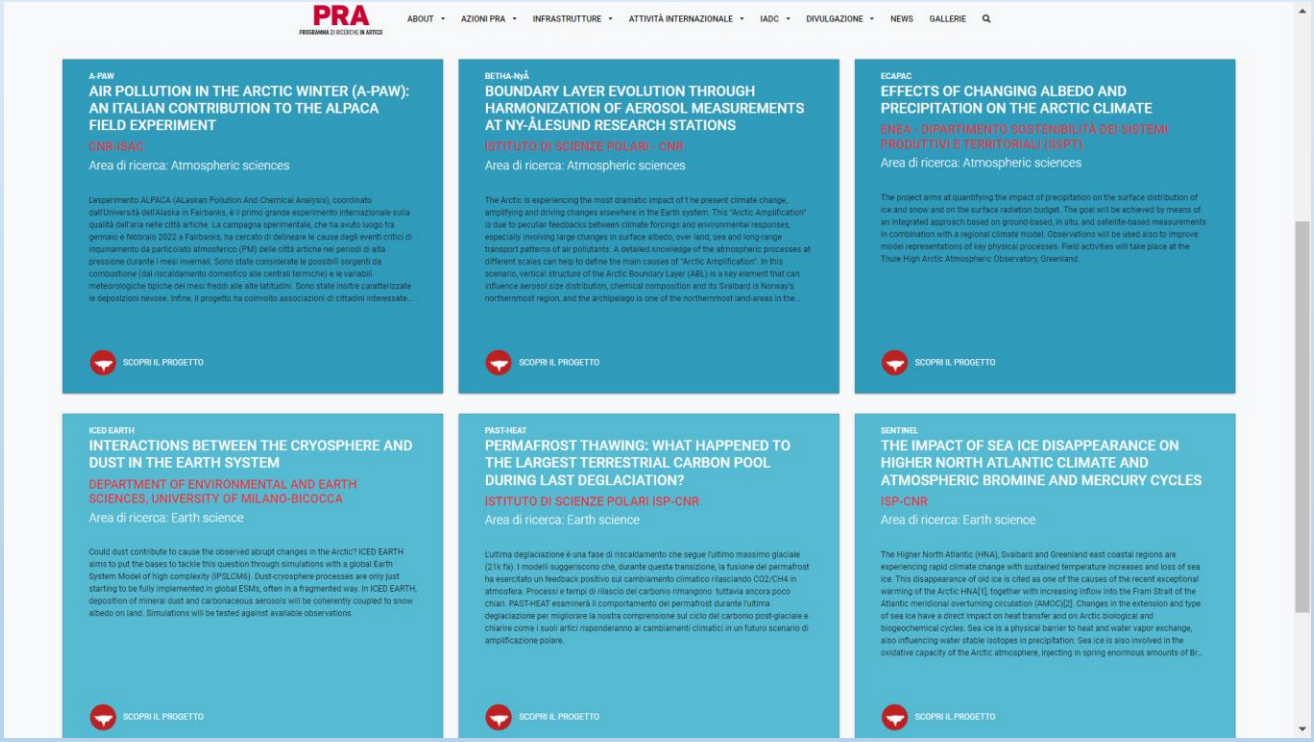
More than 30 projects submitted for 2023, **including INTERACT and SIOS access projects**. We expect a similar number of attendances as in 2022.

Large future projects and investments

PRA (**Arctic Research Programme**) funded by Italian Ministry for University and Research for studies over the Arctic (3 calls for projects up to now), **has been renewed for two more years (1 M€/y)**.

PRA

PROGRAMMA DI RICERCHE IN ARTICO



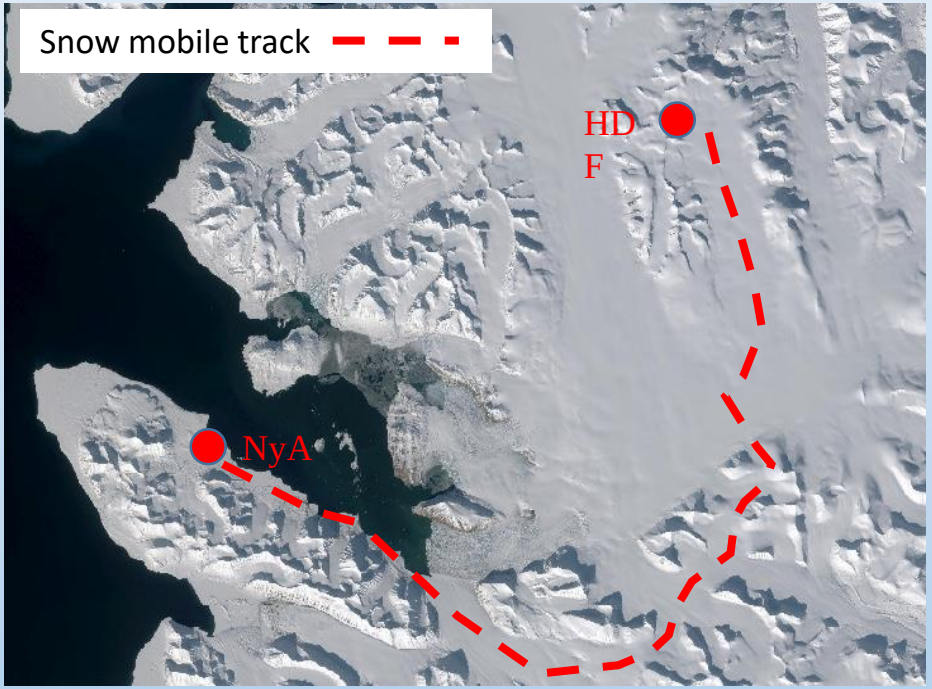
https://www.programmaricercaartico.it/index-projects

SENTINEL
Holthedalfonna ice drilling campaign
Svalbard

Proposed for April 2023

Logistic planning

- Campaign will take place in April 2023
- The headquarter will be located in Ny-Alesund with the support of the Italian Arctic Station Dirigibile Italia
- Installation of a remote camp at the summit of Holthedalfonna able to host 8 personnel (5 researchers, 1 driller, 1 drill support, 1 mountain guide)
- Equipment transportation from Ny-Alesund to HDF summit by snow mobile.
- Possibility for personnel and material exchange during the field operation.



- Ice core will be transported back to Ny-Alesund by snow mobile. This approach has already been succesfully carried out in previous campaigns.
- Cores will be store in Ny-Alesund in a freezing container until transportation to Europe by IPEV.

MAIN GOALS

- Collect a deep ice core from Holtedahlfonna (HDF) Glacier summit.
- Reconstruct the atmospheric composition of the last 300 years
- Reconstruct the sea ice change of the last 300 year north of Svalbard
- Investigate the degradation (or not) of the climate signal compared to the 2005 core
- Investigate the role of sea ice dynamics on Svalbard biogeochemical cycles
- Investigate the impact of Arctic amplification on the Svalbard environment
- Reconstruct the history of microbial colonization and evolution in relation to past climate

Efforts to reduce environmental impacts

From this year the station will have an **electric car** for moving people and weights in and around the Ny-Ålesund.

Availability/opportunities for international infrastructure access in the next 2 years

The **INTERACT** Access program is at its last year (2023), waiting to receive the applications.

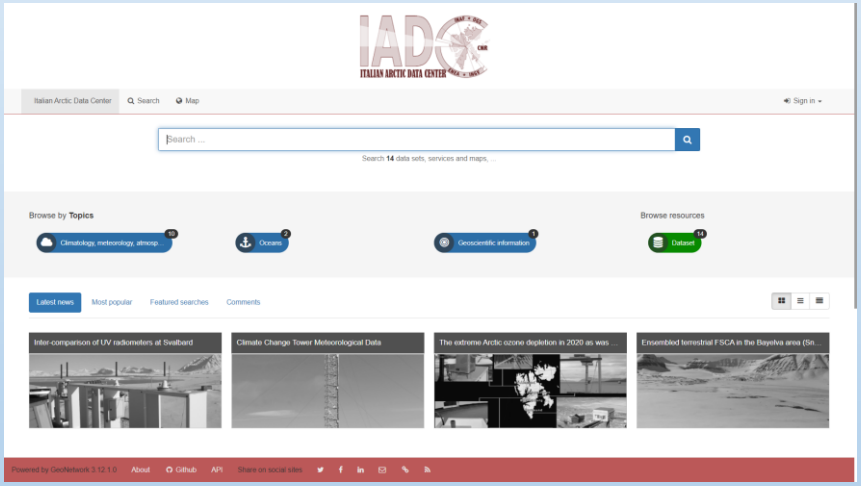
SIOS Access program will be operative for 2023, we got 3 request of access (https://sios-svalbard.org).

The station is applying for **new access programs** (physical, remote, virtual) in the frame of European initiatives.

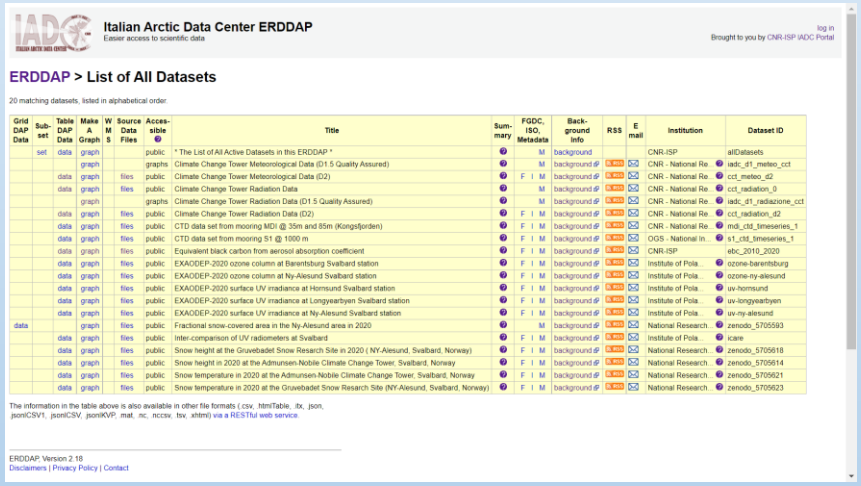
Access is possible through **collaborations with Italian research institutions and universities**.

New version of the **Italian Arctic Data Center** is available and slowly populating https://iadc.cnr.it

Metadata via Geonetwork



Data via ERDDAP



Next Generation EU -> funds for improving (NRT) availability and sharing of polar data