

Svalbard Science Forum

Svalbard - a platform for international & interdisciplinary research in the European High-Arctic

Geographical position (76-81°N)

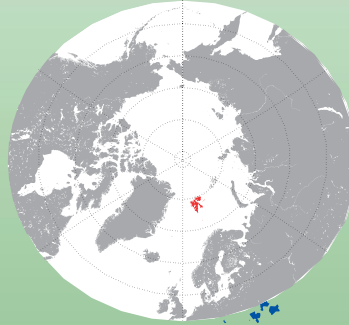
Svalbard provides excellent opportunities for studies of ecosystem changes following global environmental changes.

The strong oceanic and atmospheric transport patterns that prevail in the Svalbard region allow for studies of environmental pollution as well as its effects on the food chain.

Svalbard is well positioned to observe and analyse the changing Arctic ice cover as well as its albedo.

Svalbard's position underneath the magnetospheric cusp allows for unique studies of the energy balance between the layers of the atmosphere, from the borders of space to the surface.

The location of Svalbard allows for dense satellite monitoring.



Extensive infrastructure

Svalbard is accessible all year round due to its advanced public infrastructure & its relatively mild climate.

Svalbard has the highest available data bandwidth in the High Arctic.

Research organizations from 20 countries are present on a regular basis, operating a wide variety of advanced facilities, ranging from large scale radars to numerous field stations and a variety of research vessels.

Norway has established an international university in Longyearbyen (UNIS) with students and staff from 26 countries.

Ny-Ålesund has been developed into an international, high standard research village focusing on environmental and climate research.



Ny-Ålesund (Norway)

An international research base with main focus on environmental & climate research. Here, 15 permanent stations from 11 nations are established. This opens for strong collaboration on international & interdisciplinary level. There is a mountain station for atmospheric studies and an advanced marine lab available.



Barentsburg (Russia)

A coal mining town. A broad variety of research is conducted by the Russian Academy of Science, Arctic and Antarctic Research Institute AARI, Polar Marine Geological Research Expedition PMGRE & the Russian State Committee for Hydrometeorology (Murmansk).

Hornsund station (Poland)

Established during the International Geophysical Year 1957 & owned by the Institute of Geophysics, Polish Academy of Sciences. Main research focus: Geophysics, geology, biology, climate change processes. Many international guest researchers.



Longyearbyen (Norway)

The gateway to Svalbard with airport and family community of 2000 inhabitants. Here the Svalbard Science Centre is situated.



The University Centre in Svalbard (UNIS) is an international university since 1993 with education in Arctic Biology, Geophysics, Geology & Technology and strong emphasis on field activities. Staff & students from 26 nations.

The Norwegian Polar Institute (NPI) has branches in Longyearbyen & Ny-Ålesund. NPI's tasks are monitoring & research in polar areas, mapping of Svalbard and logistical support for national and international scientists.



European Incoherent Scatter Scientific Association (EISCAT): Remote sensing of the polar ionosphere & atmosphere since 1996. Owned by Norway, Sweden, Finland, Germany, United Kingdom, Japan & China.



Kongsberg Satellite Services AS, Avd. SvalSat: World's largest polar ground station for commercial data acquisition from satellites (Earth observation & meteorology).

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INTERNATIONAL 2007-2008 POLAR YEAR

SIAEOS - Svalbard Integrated Arctic Earth Observing System

A forum to promote Svalbard as international research platform.

Board: The Research Council of Norway (chair) and all established players in national & international research in Svalbard. The Secretariat is located in the Svalbard Science Center, Longyearbyen.

Information

Field work related information (logistics, applications) and news about projects, events & research bases.

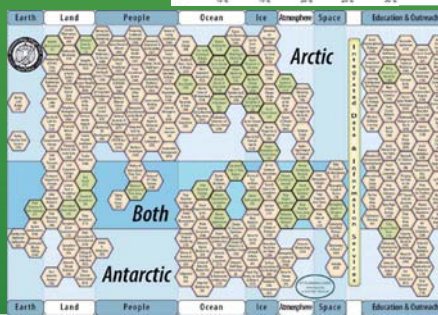
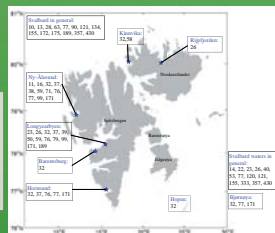
Facilitation

Scientific coordination & networking, scholarships & workshop organisation.

Research in Svalbard Database

An archive for all research activities in Svalbard since 1998, including projects, data sets and publications.

35 IPY cluster with activities in all disciplines conduct field work in Svalbard



A proposal to the European Strategy Forum on Research Infrastructures



Research will be organised in four observation platforms which will feed information to a Knowledge Centre that will provide education & outreach, cooperative efforts, data assessment, storage & delivery and secure the heritage of IPY.