

The Ny-Ålesund Scientific Managers Committee NySMAC

NySMAC was established in 1994 to enhance cooperation and coordination amongst research activities in Ny-Ålesund.

NySMAC members are institutions, which perform continuously research in Ny-Ålesund, by running research stations and/or multi-year research programmes.

NySMAC ensures that ongoing and planned research of its members is not in conflict with the activities of other members, or environmental laws and regulations.

NySMAC provides advice and comments on issues such as research planning and coordination, infrastructure development, and environmental protection.

NySMAC is acknowledged by the Norwegian Government and the Governor of Svalbard.

NySMAC is a member of the board of the Svalbard Science Forum.

NySMAC currently has 16 members and 3 observers

11 Nations:

- Norway
- China
- France
- Germany
- Great Britain
- India
- Italy
- Japan
- Korea
- The Netherlands
- Sweden

16 institutions:

- Norwegian Polar Institute
- Norwegian Institute Air Research
- Norwegian Mapping Authority
- Norwegian Space Centre
- Kings Bay AS (Nor)
- Alfred Wegener Institute (Ger)
- GeoForschungsZentrum (Ger)
- Institut Francais Polaire (Fra)

- Natural Environmental Res. Council (UK)
- National Institute of Polar Research (Japan)
- Korea Polar Research Institute
- Chinese Arctic and Antarctic Admin.
- National Research Council (Italy)
- University of Groningen (NL)
- National Centre Antarctic & Ocean Res. (India)
- Stockholm University (Sweden)



Other actors / funding agencies:

- European Commission, DG XII
- Research Council of Norway
- University Center Svalbard (UNIS)
- University of Tromsø
- National Science Foundation (NSF)
- Scottish Association for Marine Science
- Svalbard Science Forum (SSF)

The Mission Statement for Ny-Ålesund:

1. serve as an international station for scientific research and monitoring;
2. encourage international scientific cooperation;
3. give priority to scientific research and monitoring that is dependent on the near pristine environment or unique qualities of the Ny-Ålesund area, in particular research related to long range pollution, climate change and polar ecology;
4. preserve the near pristine environment of the Brøgger Peninsula and the Kongsfjorden area, as well as the cultural heritage of Ny-Ålesund;
5. keep local human environmental impacts at the lowest possible level so as not to jeopardise scientific research and monitoring;
6. give scientific research and monitoring priority over other local human activities, such as tourism and commercial fishing;
7. be a prime example of the sustainable operation and development of a research station in the Polar Regions.

Research Activities in Ny-Ålesund:

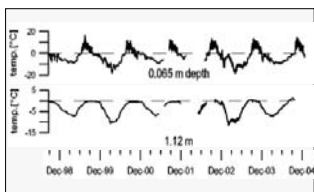
- Environmental Research & Monitoring
- Climate Change in air, ice, ocean
- Effects of Climate Change on living organisms
- Basic research depending on pristine & unique Arctic environment

Ny-Ålesund does not support:

- Proprietary research
- Industrial or commercial prospecting for potential resource exploitation
- Research activities that pollute or permanently disturb the local environment
- Activities that have negative impact on, and reduce the quality of existing research

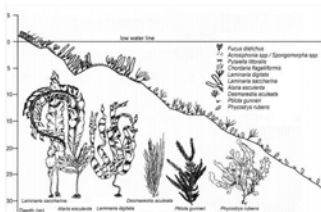
Environmental observing & monitoring:

Permafrost



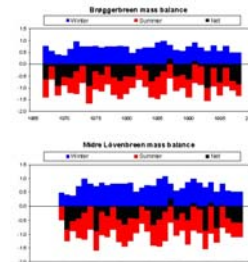
Soil temperature fluctuations are damped with depth. At 1.12 m depth, temperatures stay negative all year.

Ocean / fjord



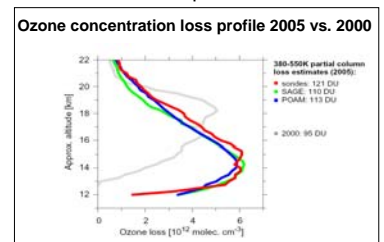
Svalbards submarine forest: Seaweed zonation in Kongsfjorden

Glaciers



Glaciers mass balance: Winter, summer and net balance record from Brøggerbreen, Midre Løvenbreen. Balances are almost exclusively negative during the whole measurement period. Source: jack.kohler@npolar.no

Atmosphere



Cumulated ozone loss from Jan. to March 2005, from a network of Arctic ozone stations (with Ny-Ålesund as the biggest contributor) and from SAGE III and POAM III satellite instruments. Source: Markus.Rex@awi.de

Facilities:

- National research stations
- Atmospheric observatory
- Radiation observatories
- Clean air observatories (Zeppelin Mt., Corbel)
- Kings Bay Marine Laboratory
- Space Geodetic Observatory
- Rocket Launch facility



- Harbor
- Airfield
- Radio quiet area
- High speed internet
- Central logistic facilities

Access:

- National funding sources
- National institutions
- European Trans National Access (ARCFAC) <http://arcfac.npolar.no>



Development of CO₂ content measured at Zeppelin Mountain station, Ny-Ålesund

