

# Ny-Ålesund as an international research platform

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In the Norwegian village of Ny-Ålesund on Spitsbergen/Svalbard, an international centre for arctic research has developed with observation facilities and infrastructure from 11 different countries: Norway, Germany, France, United Kingdom, Italy, The Netherlands, Sweden, China, South Korea, India and Japan. The presence of all these countries relates to the Spitsbergen Treaty of 1919, which gave citizens and companies from all signatory countries equal access to the area under Norwegian sovereignty. A Norwegian state-owned company named KingsBay AS maintains optimal accessibility with a port and airstrip and provides accommodation, village infrastructure and meals, while the Norwegian Polar Institute provides services to the development of optimal science on behalf of the Norwegian government.

Since 1990, NIPR is running the Japanese station, which for long was located at Rabben near the airfield, but which will soon move to the village center in a new building. The main focus for the station is on the Arctic environment with studies on atmosphere physics, terrestrial biology, oceanography, glaciology and meteorology. The station is not permanently occupied, as is also the case with the Netherlands Arctic Station run by the University of Groningen.

All organisations with permanent facilities in Ny-Ålesund are participating in NySMAC, the Ny-Ålesund Science Managers Committee, which aims to stimulate cooperation, to improve planning and to minimize conflicts. NySMAC meets twice every year. NySMAC has a webpage with a charter and a science plan and discusses science development, new infrastructure and large scientific project in meetings and a special designed web forum (PID forum). NySMAC has also become an important organization to advice and inform stake-holders and other science hubs on Svalbard.

NySMAC has set-up four flagships: thematic groups of researchers which meet regularly to discuss new developments, integration of science projects and cooperative action. These flagships are covering research on atmosphere, glaciology, marine environment and terrestrial ecosystems. The flagships manage an email list, have workshops and provide specific information on request. During this presentation, the most recent scientific accomplishments of each flagship will be shown as an example of these groups.

Ny-Ålesund wants to be a welcoming place for new and cutting edge science, which requires an undisturbed and pristine environment. But performing science in Ny-Ålesund is not always easy. Ny-Ålesund is a radio silent town with restrictions on the use of radio frequencies, especially wifi and blue tooth. This has severe impact on the ability to use e.g. remote controlled platforms like drones. In principal, active radio emitting devices cannot be placed in Ny-Ålesund but need to go to Longyearbyen. After approval of a new project by the national operator of a station, projects and field periods require registration in a special database RIS Research on Svalbard. This database also links to booking modules for meals, housing, safety courses and permissions. In an effort to minimize the footprint of research, environmental impacts require permission from the Governor of Svalbard, the local land owner KingsBay AS and NySMAC.

The high density of research infrastructure and projects and the involvement of so many countries, make Ny-Ålesund to a unique place for interaction between scientists from different background, which is probably its most unique and precious asset.



Figure 1. Ny-Ålesund in winter and summer.



## Relevant webpages

[nysmac.npolar.no](http://nysmac.npolar.no) with general information on NySMAC, the flagships and access to the PID forum

[www.kingsbay.no](http://www.kingsbay.no) with information on flights, safety, radio silence and drone restrictions

[www.researchinsvalbard.no](http://www.researchinsvalbard.no) with registration of science projects, bookings and some permits