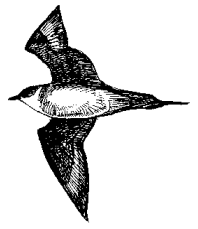


News

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Ny-Ålesund Newsletter

3rd edition
May 1998

CONTINUED SUCCESS FOR THE NY-ÅLESUND SEMINARS!

Hotel Rufolo in Ravello on the Amalfi coast south of Naples in Italy was the exquisite site for the eighth NySMAC committee meeting on March 4, 1998. As in previous years the winter meeting of the committee was followed by a Ny-Ålesund seminar which took place on March 5 and 6 in the same village. This was the fourth seminar and it was entitled "The Arctic and Global Change. Multidisciplinary approach and international efforts at Ny-Ålesund, Svalbard". Consiglio Nazionale delle Ricerche (CNR) made a great effort in hosting both the meeting and the seminar.

The committee meeting had, as always, a full agenda that covered many topics. It was attended by argument laden representatives from all NySMAC member organisations. The NySMAC founding articles declare the committee as a consensus organisation; when consensus is sought starting from different viewpoints the deliberations can at times become lengthy... However, in the friendly and constructive atmosphere that NySMAC is blessed with these discussions always lead forward towards useful decisions. Critics should note that once consensus is reached the process does achieve resolutions with tremendous strength through the unanimous support.

Some important agenda items at the committee meeting where the exchange of information between member institutions, the status reports of ongoing projects, the Environmental Impact Assessment, the issue of placement of the SOUSY Svalbard Radar, the "Svalbard Science Forum -SSF", and the election of a new NySMAC deputy chairman.

Among the status reports we note that the new power plant is functioning but a measurement program to determine the emissions rates will be ongoing during the spring of 1998 with the extended goal of making decisions regarding the cleaning module for the exhausts. The Ny-Ålesund land use plan has been distributed to 40 institutions for comments and will be finalised in May 1998 by the Norwegian Ministry of Environment. A new NP research station will be built during the later half of 1998. The final status report presented to the committee was regarding the launch

of the SvalRak rocket facility. NySMAC was pleased to hear about the scientifically very successful first campaign conducted in December 1997.

The Environmental Impact Assessment has been on the NySMAC agenda several times but this time a draft of the final report was discussed. Some minor changes in language were made; the EIA now moves into a stage of implementation by serving as a base for other decisions in Ny-Ålesund. An immediate use of the EIA is influencing the process that will finalise the above mentioned Land Use Plan.

The most controversial issue at the Ravello NySMAC meeting was regarding the possible placement of the SOUSY Svalbard Radar in Ny-Ålesund. In the end the needs of the SOUSY Svalbard Radar experiment and the desirability of preserving Ny-Ålesund as a radio quiet area lead to a mutual judgement that a placement in Longyearbyen during the coming three years was the most useful development.

The "Svalbard Science Forum - SSF" project was presented to the committee. SSF is meant to have a role in co-ordination of research activities in Svalbard. Some of the tasks will be to publish "Research in Svalbard", collect and distribute information about activities and be a contact point for visitors. NySMAC is looking forward to interacting with SSF to strengthen co-ordination and co-operation amongst researchers in Ny-Ålesund and the rest of Svalbard.

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The election of a new NySMAC deputy chairman was a joyous occasion where the extremely unanimous vote was for the NERC representative Nick Cox.

One of the final agenda items at the committee meeting was the initiation of a discussion regarding the form and frequency of Ny-Ålesund seminars. The issues raised are firstly whether we can retain the quality of the seminars with the current frequency (one every year) and secondly how the process of choosing seminar topics should be organised to maximise the quality and continued interest in our seminars. This debate is ongoing and will definitely be on the agenda again at the next NySMAC meeting (scheduled for September 18 in Stockholm, Sweden). There was, nevertheless, consensus regarding the very positive influence the seminars have had; the stimulating two seminar days that followed the committee meeting strongly reinforced this viewpoint.

The Ny-Ålesund seminar in Ravello had a large and lively attendance. There were 21 papers presented in the atmospheric sciences, 6 in geophysics and geodesy, 12 in biology and biodiversity and 6 in the marine sciences. The Ny-Ålesund seminars are a great success story for NySMAC made possible only by the contributions from all attendees and users of the unique scientific platform that we all share. The Ravello seminar was impressive in demonstrating the wide variety and quality of research that is being performed in Ny-Ålesund. To us that are active in Ny-Ålesund this is not a surprise, but products like the seminar proceedings are most important for disseminating awareness regarding the qualities of the Norwegian hosted Ny-Ålesund research platform. Exposing the scientific success of Ny-Ålesund is of paramount importance for the continued support of our research; both with our respective national funding agencies and internationally. NySMAC is most thankful for the collective efforts of everyone that contributed to the Ravello seminar.

As witnessed by everyone that attended these meetings the arrangements were superb. On behalf of NySMAC I wish to thank the Italian organisers wholeheartedly for these very successful and well organised meetings in a most inspiring location.

Kim Holmén

News

Ozone loss above the Arctic during this winter was less than in the three previous winters

Due to generally higher temperatures in the stratosphere compared with previous winters, ozone losses have been recorded only half as severe during this winter's "Match" campaign. "Match" is an international ozone sonde campaign co-ordinated by Alfred Wegener Institut (AWI).

The campaign took place for the fourth time in a row during the first months of 1998. Up to 20 ozone sonde stations placed in several countries within the polar region participated. Due to the concept of the campaign, hundreds of ozone sondes had to be launched on request even if ground station conditions were difficult. The launch time of each sonde was optimised by analysing meteorological forecast fields. Ny-Ålesund is one of the most important stations of this network since it is almost always inside of the so-called polar vortex. Consequently this is one of the stations with the highest launch frequency in the winter time. "Match" campaigns are run within the framework of the EU environment programmes. During the next campaign which will be run in the winter of 1998/99, up to 40 stations placed in about 20 countries on 4 continents will contribute. The outcome of such campaigns do not only monitor the ozone situation but in addition support model activities to improve our understanding of the development of the Arctic ozone layer and the underlying processes.

Ozone Intercomparison Campaign successfully completed

During January/February 1998 an international validation campaign within the Network for the Detection of Stratospheric Change (NDSC) was successfully carried out at the NDSC Observatory in Ny-Ålesund.

The travelling standard ozone lidar instrument, the STROZ-LITE from NASA/GSFC had been installed at the Koldewey-Station in fall 1997. During the intercomparison period in January/February data taken by this instrument, as well as by AWI's ozone lidar, the ozone microwave radiometer and the balloon borne ozone sondes was transferred via internet to an independent referee. The referee's results of the intercomparison will be published this summer. Preliminary data shows that all instruments compare

well and that their NDSC qualification can be prolonged. The results from this campaign can further be used to more qualitatively assess the different capabilities of the various instruments retrieving ozone profiles and to allow a composition of the measurements to yield an ozone profile from ground level up to 45 km altitude.

New storage facility for chemical solutions installed by AWI

During the Ny-Ålesund Environmental Impact Assessment EIA process, it was found that the storage of chemical solutions for laboratory purposes at some research stations is not optimal. The requirement is either not to store solutions at all or to create suitable facilities.

Accordingly, AWI has installed a new safe storage for chemical solutions in the laboratory in the "Gamle Vaskeriet" building. The cabinet is permanently ventilated to the outside so that diffusing gases from solutions do not enter the laboratory rooms.

Maintenance work

Andøya Rocket Range will do some maintenance work on the SvalRak facilities, and make the cable system between the different installations on a more permanent basis. A general clearance work after the rocket campaign in November/December will also take place.

BOS (balloon-borne optical ozone sensor) campaign continued

After successful campaigns in 1996 and 1997, the ozone project "BOS-Arctic" will be continued also in 1998. This project, which is run in co-operation between AWI and Japanese institutions (NIPR, Tohoku university, ISAS) investigates stratospheric ozone by launching optical ozone sensors with special plastic balloons which allow peak altitudes of 45 km and more.

This summer, a newly developed radiosonde with Differential GPS will improve the measurement of flight parameters such as the exact geometric altitude. The technical conditions for launching these balloons will be improved noticeable when the new balloon preparation house is erected this year.

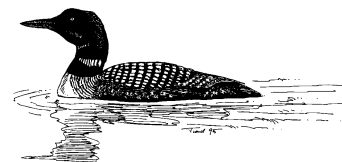
Extension of SODAR measurements

The triaxial SODAR instrument was operated within the international EU-funded project ARTIST, run by The National Research Council of Italy. After the end of the ARTIST campaign in the middle of April, NILU, NP and CNR agreed to support the SODAR measurements further until the end of June 1998.

These measurements are being made at Ny-Ålesund for the first time and they give information about the boundary layer stability and wind fields. In addition, the measurements can be used to identify transport of pollution from Ny-Ålesund to the station on Zeppelinfjellet. The three SODARs are located in a free area 200 m from the settlement.

Svalbard Science Forum

Per Kyrre Reimert started his three years appointment as Secretary for Svalbard Science Forum (SSF) on 11 May. SSF is established by The Norwegian Research Council and the main objective is to co-ordinate research facilities, development of plans and information about all ongoing research in Svalbard. The project has a preliminary timeframe of three years. SSF is located in Norwegian Polar Institute



Svalbard's premises in Longyearbyen.

Ny-Ålesund Diary

May 1998

- At KBKC's general meeting on 6 May change of name from Kings Bay Kull Compani A/S to **Kings Bay AS** was adopted.

June 1998

- A group of international journalists and delegates from the XXI Antarctic Treaty Consultative Meeting, which takes place in Tromsø 25 May - 5 June, will pay a one day visit to Ny-Ålesund

July 1998

- Start of the construction work for the new Norwegian research station.

August 1998

- Inauguration of Nordpolhotellet and Samfunnshuset (Community Hall) after the renovation will take place on 15 August by Minister of Cultural Affairs - Anne Enger Lahnstein

September 1998

- 9th NySMAC-meeting, Stockholm

Calendar of Arctic Meetings

The 22nd Antarctic Treaty Consultative Meeting - ATCMXXII

will take place in Tromsø, Norway 25 May - 5 June. For further information:
<http://www.tromso.npolar.no/atcm>

Polar Aspects of Global Change International symposium and field trip to Svalbard

The Norwegian Polar Institute and the Polar Environmental Centre in Tromsø will be the host of the symposium which will take place on 24-28 August 1998 in Tromsø. For further information:

E-mail: jaklin@tromso.npolar.no
<http://www.tromso.npolar.no/polaraspects/>

For a comprehensive listing of published meetings, look at the *International Survey of Arctic Meetings* at <http://www.npolar.no/iasc/sam.ht>

Staff News

Alfred Wegener Institut (AWI):

Dirk Römermann succeeded **Bodo Wichura** as Station Manager from 15 April.

Kings Bay AS (KB):

Monica Kristensen Solås has been appointed Director for 3 years from 24 August replacing **Hilmar Windstad**.

Norwegian Institute for Air Research (NILU):

Harry Beine has taken over from **Frode Stordal** as NILU's representative in NySMAC.

Norwegian Mapping Authority (NMA):

Hans-Peter Plag has replaced **Bjørn Ragnvald Pettersen** as NMA's representative in NySMAC. **David Holland** and **Helge Digre** at the Geodetic Observatory have been given new two year contracts until May 2000.

Norwegian Polar Institute Svalbard (NP):

Marit Raak Pettersen replaced **Elisabeth Stoltz Larsen** from 19 January and **Tor Ivan Karlsen** was appointed Station Manager from 9 February, replacing **Sverre Thon**.

Publications

The Arctic and Global Change - Multidisciplinary approach and international efforts at Ny-Ålesund, Svalbard

Proceedings from the 4th NySMAC seminar 5-6 March 1998, Italy.

The publication is available from CNR and the NySMAC Secretariat.

Research in Svalbard 1998

A yearly information bulletin based on contributions from scientists working in Svalbard. Available from the Norwegian Polar Institute and on <http://www.npolar.no/ris/>

Ny-Ålesund - International Research at 79°N

3rd revised edition. Published by the Norwegian Institute in co-operation with Kings Bay AS.

The Ny-Ålesund Safety Guide

By Nick Cox, NERC (2nd edition 1998)
 This NySMAC publication is an introduction to safety in Ny-Ålesund and its surroundings. The guide is obtainable in Ny-Ålesund from Kings Bay AS and the Norwegian Polar Institute's Research Station.

NySMAC Internet Homepage:

<http://www.lby.npolar.no/nysmac/>
 As well as a general introduction to Ny-Ålesund and to the work of NySMAC, this site contains the complete contents of the *Ny-Ålesund Newsletter*, links to the homepages of the NySMAC member institutions and a *Ny-Ålesund Publication List*.

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