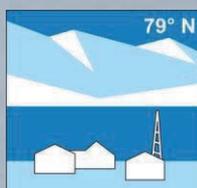


# 11<sup>th</sup> Ny-Ålesund Science Managers Committee Seminar

National Research Council of Italy

*Rome, 9-11 October 2013*



The 11<sup>th</sup> Ny-Ålesund Science Managers Committee take place on 9-11 October 2013 at the CNR-National Research Council of Italy Headquarters in Rome, Italy.

### **Seminar description**

The seminar brings together scientists who have Svalbard and Ny-Ålesund (78° 55' N, 11° 56' E) in particular as a base for their research and monitoring activities.

The aim of the meeting is to exchange scientific results, advancements, ideas and experiences to inspire each other and develop Ny-Ålesund further.

The seminar wants to foster the following topics:

- Flagship programs
- SSF funded projects
- Implementation of Ny-Ålesund monitoring activities
- NySMAC and SIOS: Status and future developments

### **Scientific programme committee**

Stefano Aliani - CNR, Institute of Marine Science (Italy)

Karoline Bælum - Svalbard Science Forum, The Research Council of Norway (Norway)

Steve Coulson UNIS - The University Centre in Svalbard (Norway)

Geir Wing Gabrielsen - Norwegian Polar Institute (Norway)

Nalan Koc - Norwegian Polar Institute (Norway)

Jack Kohler - Norwegian Polar Institute (Norway)

Maarten Loonen - University of Groningen (The Netherlands)

Roland Neuber - Alfred Wegener Institute (Germany)

Jon Børre Ørbæk - The Research Council of Norway (Norway)

Masaki Uchida - National Institute of Polar Research (Japan)

Vito Vitale - CNR, Institute of Atmospheric Science and Climate (Italy)

### **Organizing committee**

#### **NySMAC Secretariat**

Ingrid Halsebø Storhaug

#### **CNR - Department of Earth System Science and Environmental Technologies**

Ruggero Casacchia

Daniela Beatrici

Roberto Bellucci

Paolo Braico

Angela Campagnoli

Tiziana Ciciotti

Emiliano Liberatori

Luigi Mazari Villanova

Francesca Nuccetelli

Tiziana Pugliatti

Roberto Sparapani

Cover image courtesy of Vittorio Tulli, CNR

*The seminar is financially supported by the CNR-National Research Council of Italy*

11<sup>th</sup> NySMAC Seminar  
PROGRAMME  
CNR-Aula Convegna  
Wednesday, 9<sup>th</sup> October 2013

8:00 - 9:00	Registration and logistic information	
9:00 - 9:30	Welcome	Luigi Nicolais - President of CNR Enrico Brugnoli - Director of Dept. Earth System Science and Environmental Technologies of CNR Representative of the Italian Minister of Foreign Affairs Nick Cox - NySMAC Chair
9:30-10:00	Geir W. Gabrielsen	Implementation of Ny-Ålesund monitoring activities
<b>Ny-Ålesund monitoring activities (marine) Chair: Geir Wing Gabrielsen</b>		
10:00-10:20	<b>Seaweed Biology in Kongsfjorden: from genes to communities</b> Kai Bischof	
10:20-10:30	<b>Sea glacier interface in inner Kongsfjorden</b> Stefano Aliani, Federico Giglio, Leonardo Langone and Stefano Miserocchi	
10:30-11:00	Coffee Break	
<b>Ny-Ålesund monitoring activities (terrestrial) Chair: Maarten J.J.E. Loonen</b>		
11:00-11:20	<b>Relationships between biosphere and cryosphere in a Climate Change Frame at Ny-Ålesund - CCT</b> Nicoletta Cannone, Francesco Malfasi, Roberto Gambillara and Mauro Guglielmin	
11:20-11:30	<b>Carrying capacity of Arctic tundra for geese</b> Maarten J.J.E. Loonen	
11:30-11:40	<b>Towards an international Arctic snow ecosystem monitoring station</b> Catherine Larose, Aurélien Dommergue, Hans-Werner Jacobi, Jean-Luc Jaffrezo, Jean Martins, Joël Savarino, Didier Voisin and Timothy M. Vogel	
11:40-11:50	<b>Long-term monitoring of tundra herbivores and the arctic fox: Ny-Ålesund as a platform for studying species interactions and responses to climate change</b> Åshild Ønvik Pedersen and Eva Fuglei	
11:50-12:00	<b>Carbon fluxes in Arctic plant species: photosynthetic performances, isotopic signature and VOCs emission</b> Angela Augusti, Nicoletta Cannone, Francesco Malfasi, Emanuele Pallozzi, Enrico Brugnoli and Carlo Calfapietra	
12:00-12:10	<b>Vegetation quadrats in Ny-Ålesund: the response of vegetation succession to the environment changes in ecosystem</b> Cheng-Sen Li, Yi-Feng Yao, Fang Peng and Shu-Nan Cao	
12:10-13:30	Lunch	
<b>Ny-Ålesund monitoring activities (atmosphere I) Chair: Roland Neuber</b>		
13:40-14:00	<b>Long-term monitoring of clouds and aerosols by ground-based remote sensing instruments operated by NIPR in Ny-Alesund</b> Masataka Shiobara, Makoto Kuji, Masanori Yabuki, Hiroshi Kobayashi, Kazuma Aoki, Toshiaki Takano, Hajime Okamoto, Makoto Koike and Jinro Ukita	
14:00-14:10	<b>Methanesulfonate and sulfate concentration in the Arctic aerosol sampled at NyÅlesund: role of sea ice and hemispheric circulation mode on their temporal evolution</b> Silvia Becagli, Daniele Frosini, Christian Lanconelli, Angelo Lupi, Mauro Mazzola, Mirko Severi, Rita Traversi, Vito Vitale and Roberto Udisti	
14:10-14:20	<b>The vertical structure of turbulence in the stable atmospheric boundary layer: observations and novel interpretations</b> Taejin Choi, Christian Lanconelli, Angelo Lupi, Mauro Mazzola, Armando Pelliccioni, Francesco Tampieri and Angelo Viola	

14:20-14:30	<b>Photochemically reactive compounds in atmospheric aerosol at Ny-Ålesund</b> Rita Traversi, Silvia Becagli, Maurizio Busetto, Giulia Calzolari, Daniele Frosini, Christian Lanconelli, F. Lucarelli, Angelo Lupi, Mauro Mazzola, Boyan Petkov, Mirko Severi, Vito Vitale, Riccardo Zanini and Roberto Udisti
14:30-14:40	<b>WindLiDAR measurements in the Arctic boundary layer</b> Sonja Burgemeister, Christoph Ritter, Marion Maturilli, Roland Neuber and Alexander Schulz
14:40-14:50	<b>Sources and properties of aerosol particles upon Ny-Ålesund: results of integrated vertical profile measurements and electron microscopy analyses</b> Beatrice Moroni, Silvia Becagli, Ezio Bolzacchini, Maurizio Busetto, Silvia Castellini, Luca Ferrero, Daniele Frosini, Christian Lanconelli, Angelo Lupi, Mauro Mazzola, Rita Traversi, Roberto Udisti, Vito Vitale and Davide Cappelletti
14:50-15:00	<b>Changes in Temperature and Radiation at the Arctic BSRN Station Ny-Ålesund</b> Marion Maturilli and Andreas Herber
15:00-15:10	<b>Broadband radiation measurements at Ny-Ålesund (1993-2013): from data to products</b> Christian Lanconelli, Marion Maturilli, Masataka Shiobara, Mauro Mazzola, Angelo Lupi, Rosamaria Salvatori and Vito Vitale

15:10-15:45 Coffee Break

**The Svalbard Integrated Arctic Earth Observing System (SIOS): Status and future developments**  
Chair: Vito Vitale

15:45-16:15	<b>Svalbard Integrated Earth Observing System (SIOS)</b> Jon Børre Ørbæk, Kine Stenersen, Bo Andersen, Nicole Biebow, Cynan Ellis-Evans, Piotr Glowacki, Kim Holmén, Sergey Priamikov, Ragnhild Rønneberg, Hyoung Chul Shin and Vito Vitale
16:15-16:30	<b>The Svalbard Integrated Arctic Earth Observing System (SIOS) - Towards a Governance and Observatory Model</b> Georg Hansen, Christine Daae Olseng, Halvard Ranestad Pedersen, Vito Vitale, Hans-Christen Hansson, Nicole Biebow and Jon Børre Ørbæk
16:30-16:45	<b>Towards a SIOS observational integration plan</b> Roland Neuber, Karoline Baelum, Ragnhild Rønneberg, Christine Daae Olseng, Jon Børre Ørbæk and Georg Hansen
16:45-17:00	<b>Russian research activities on Spitsbergen archipelago and its future developments</b> Sergei Priamikov and Irina Solovyanova
17:00-17:15	<b>Discussion</b>

**Svalbard Science Forum (SSF) activities and SSF - Ny-Ålesund cooperation** Chair: Kim Holmén

17:15-17:45	<b>Added value through cooperation. News and information from Svalbard Science Forum (SSF) and the Research in Svalbard (RiS) database</b> Karoline Baelum, Halvard R. Pedersen and Kirsten Broch Mathisen
17:45-18:00	<b>Data exchange between SSF and national Arctic research websites</b> Sogtao Ai, Zemin Wang, Hong Geng and Changyun Zhao
18:00-18:15	<b>Discussion on the role of SSF to reinforce cooperation</b>

Ny-Ålesund monitoring activities (ice) Chair: Steve Coulson		
08:30-08:50	<b>Measuring Ny-Ålesund glaciers using remotely piloted aircrafts</b> Stian Solbø and Rune Storvold	
08:50-09:00	<b>The Austre Lovénbreen basin: a small valley glacier observatory monitored since 2006</b> Florian Tolle, Eric Bernard, Jean-Michel Friedt, Albane Saintenoy, Christelle Marlin and Madeleine Griselin	
09:00-09:10	<b>Precise glacial volume estimation for polythermal glaciers in Svalbard</b> Songtao Ai, Zemin Wang, Hong Geng and Changyun Zhao	
09:10-09:20	<b>Nitrate Dynamics in the Arctic Winter Snowpack</b> Mats P. Björkman	
09:20-09:30	<b>How old is the youngest tectonics in Svalbard?</b> Paola Cianfarra and Francesco Salvini	
Monitoring the Marine - Terrestrial Environment of Kongsfjorden Chair: Karoline Bælum		
09:30-09:50	<b>Birdmap: tracking the migration and wintering areas of arctic birds with new technology and large scale research cooperation</b> Børge Moe and Sveinn Are Hanssen	
09:50-10:00	<b>A natural anti-predation experiment: predator control and reduced sea ice increases colony size in a long-lived duck</b> Sveinn Are Hanssen, Børge Moe, Bård-Jørgen Bårdsen, Frank Hanssen and Geir Wing Gabrielsen	
10:00-10:10	<b>Endocrine disruption by persistent organic pollutants and heavy metals in Arctic seabirds</b> Olivier Chastel, Paco Bustamante, Jan Ove Bustnes and Geir W. Gabrielsen	
10:10-10:20	<b>Migratory connectivity and the role of parasites</b> Cecilia A.M. Sandström and Maarten J.J.E. Loonen	
10:20-10:50	Coffee Break	
Ny-Ålesund monitoring activities (space/atmosphere II) Chair: Marion Maturilli		
10:50-11:10	<b>ISACCO-Ionospheric Scintillations Arctic and Antarctic Campaign Coordinated Observations</b> Giorgiana De Franceschi, Vincenzo Romano, Lucilla Alfonsi and Luca Spogli	
11:10-11:20	<b>Building a state-of-the-art space geodetic observatory in Ny-Ålesund: A fundament needed to detect minute changes in the Earth system over time</b> Oddgeir Kristiansen	
11:20-11:30	<b>Measurement of Cosmic Radiation with Emphasis on Neutrons at High Geomagnetic Latitudes</b> Vladimir Mares, Ferdinand Bergmeier, Gerhard Donth and Werner Rühm	
11:30-11:40	<b>New insights for multimedia distribution of PAHs and PCBs at Ny-Ålesund of the Arctic</b> Linke Ge, Hui Gao, Peng Zhang, Xindong Ma, Zhen Wang, Ziwei Yao and Guangshui Na	
11:40-11:50	<b>Source apportionment of individual soot particles by electron microscopy</b> Stephan Weinbruch, Nathalie Benker, Konrad Kandler, Martin Ebert and Roland Kallenborn	
11:50-12:00	<b>Seasonal variability of ice nuclei at Svalbard</b> Heinz Bingemer, Joachim Curtius, Martin Ebert and Stephan Weinbruch	
12:00-12:10	<b>Size distribution, chemical composition and source apportionment of aerosol collected at Ny Alesund (Svalbard Islands) in 2010 and 2011 summer campaigns</b> Roberto Udisti, Silvia Becagli, Maurizio Busetto, Giulia Calzolari, Davide Cappelletti, Daniele Frosini, F. Lucarelli, Angelo Lupi, Miriam Marconi, Mauro Mazzola, Beatrice Moroni, Mirko Severi, Rita Traversi, Angelo Viola and Vito Vitale	
12:10-13:30	Lunch	

13:30-15:30 POSTER SESSION	
1	<b>Permafrost Monitoring at Bayelva site close to Ny-Ålesund</b> Conrad Kopsch and Julia Boike
2	<b>Introduction of a new project: Study of carbon cycling at moss tundra</b> Masaki Uchida, Ayaka Mo Kishimoto, Noriko Oura, Mitsuru Hirota, Yasuo Imura and Takayuki Nakatsubo
3	<b>Sympagic-pelagic connectivity: The role of acrylate and DMSP in sea ice and pelagic organisms</b> Martin Græve
4	<b>Arctic cloud detection by means of hyperspectral infrared interferometry: validation with ground-based observations</b> Domenico Cimini, Filomena Romano, Mariassunta Viggiano, Elisabetta Ricciardelli, Francesco Di Paola, Christoph Ritter and Marion Maturilli
5	<b>Perfluoroalkyl substances in air, snow and surface water of the Arctic</b> Zhiyong Xie, Wenying Mi, Zhen Zhao, Renate Sturm and Ralf Ebinghaus
6	<b>Basal topography of Kronebreen, NW Svalbard</b> Jack Kohler, Kirsty Langley, Kenichi Matsuoka and Megan O'Sadnick
7	<b>Distribution characteristic of dechloranes in multi-matrices of Ny-Ålesund of the Arctic</b> Na Guangshui, Wei Wei, Ma Xindong, Qiu Lina, Gao Hui, Ge Linke, Wang Zhen and Yao Ziwei
8	<b>On the spatial-temporal distribution of icequakes observed on the GSN station KBS, Ny-Ålesund</b> Andrea Kohles, Christopher Nuth, Joannes Schweitzer and Christian Weidle
9	<b>THE GCOS Reference Upper-Air Network (GRUAN) in Ny-Ålesund</b> Marion Maturilli, Galina Dick and Markus Ramatschi
10	<b>Arctic Research Collaboration form Radiosonde Observing System Experiment (ARCROSE)</b> Marion Maturilli, Markus Kayser, Roland Neuber, Klaus Dethloff, Annette Rinke, Jun Inoue and Alexander Makshtas
11	<b>A Digital Glacier Database for Svalbard</b> Max König, Christopher Nuth, Jack Kohler, Geir Moholdt, Rickard Pettersen and Angela Von Deschwanden
12	<b>Persistent toxic substances in Kongfjorden sea water and coastal sediments (Svalbard, Norwegian Arctic): levels and fluxes</b> Stefania Giannarelli, Sandro Francesconi, S. Vignali and Beatrice Muscatello
13	<b>Sensitivity of trace and rare earth elements as dust source prozie in Svalbard glaciers</b> Jacopo Gabrieli, Andrea Spolaor, Tonu Martma, Jack Kohler, Mats Bjorkman, Elisabeth Isaksson and Carlo Barbante
14	<b>Cultivable alginate lyase-excreting bacteria associated with the Arctic brown alga <i>Laminaria</i></b> Yu-Zhong Zhang
15	<b>Photosynthetic characteristics of vascular plants under primary succession stages in a High Arctic glacier foreland, Svalbard</b> Yukiko Tanabe and Masaki Uchida
16	<b>Halogens and biological component in Spitsbergen snow: understanding the role of sea ice</b> Andrea Spolaor, Jacopo Gabrieli, Antonella Penna, Silvia Casabianca, Olga Mangoni, Maria Saggiomo, Tonu Martma, Jack Kohler, Mats Bjorkman, Elisabeth Isaksson, Paul Vallelonga, John M.C. Plane and Carlo Barbante
17	<b>Snowpack characteristics of Broggerhalvoya</b> Mauro Valt, Rosamaria Salvatori and Jacopo Gabrieli
18	<b>Recent measurements and trend of 6 halocarbons measured at the Zeppelin Observatory at Ny-Ålesund in Svalbard, Norway</b> Ann Mari Fjaeraa, Cathrine Lund Myhre, Ove Hermansen, Chris René Lunder and Norbert Schmidbauer
19	<b>SnowTerm: a thesaurus on snow and ice</b> Paolo Plini, Rosamaria Salvatori, Mauro Valt, Valentina De Santis and Sabina Di Franco
20	<b>Three years of atmospheric observations at the Amundsen-Nobile Climate Change Tower in Ny-Ålesund - Svalbard</b> Angelo Viola, Mauro Mazzola, Francesco Tampieri, Christian Lanconelli, Alessandro Conidi, Ilaria Pietroni, Stefania Argentini and Vito Vitale

21	<b>Sources and fate of snow nitrate in the European high Arctic</b> Francesca Spataro, Antonietta Ianniello, Rosamaria Salvatori, Alessandro Mei, Giulio Esposito, Mauro Valt and Mauro Montagnoli
22	<b>Snow spectral library: six springs at Ny-Ålesund</b> Rosamaria Salvatori, Mauro Valt, Paolo Plini, Valentina De Santis and Alessandro Mei
23	<b>The influence of cruise ship emissions on air pollution in Svalbard</b> Sabine Eckhardt, Ove Hermansen, Henrik Grythe, Markus Fiebig, Kerstin Stebel, Massimo Cassiani, Are Baecklund and Andreas Stohl
24	<b>Monitoring Arctic Phytoplankton (MAP)</b> Willem van de Poll, Anita G.J. Buma, Else N. Hegseth, Klaas Timmermans, Philipp Fischer, and Christian Wiencke
25	<b>Italian Arctic Data Center: a digital infrastructure to manage the data acquired in the Arctic region</b> Simona Longo, Corrado Leone, C. Elefante, Stefano Nativi, Vito Vitale and Angelo Viola
26	<b>Svalbard Integrated Earth Observing System (SIOS)</b> Jon Børre Ørbæk, Kine Stenersen, Bo Andersen, Nicole Biebow, Cynan Ellis-Evans, Piotr Glowacki, Kim Holmén, Sergey Priamikov, Ragnhild Rønneberg, Hyoung Chul Shin and Vito Vitale
27	<b>The AWIPEV Underwater Observatory, a forward looking technology for longterm monitoring studies in Ny-Ålesund</b> Philipp Fischer, Christian Wiencke, Max Schwanitz, Ragnhild Asmus, Markus Brand, Burkard Baschek, Friedhelm Schröder, Maik Grunwald, Reiner Loth, Jakon Klaus-Stöhner, Michael Boer, Tobias Boehme

15:30-16:00

Coffee Break

<b>Ny-Ålesund monitoring activities (space/atmosphere III) Chair: Christoph Ritter</b>		
16:00-16:10	<b>Major, trace and Rare Earth (REEs) elements in aerosol samples collected at Ny-Ålesund (Svalbard Islands) during the 2010 sampling campaign</b> Mirko Severi, Ornella Abollino, Silvia Becagli, Giulia Calzolari, David Cappelletti, Daniele Frosini, Agnese Giacomino, Franco Lucarelli, Mary Malandrino, Miriam Marconi, Beatrice Moroni, Silvia Nava, Rita Traversi and Roberto Udisti	
16:10-16:20	<b>Investigating the atmospheric relationship between Carbonyl Sulfide and CO<sub>2</sub> using solar FTIR spectroscopy and a Chemical Transport Model</b> Yuting Wang, Mathias Palm, Nicholas Deutscher, Thorsten Warneke, Justus Notholt, Ian Baker, Joe Berry, Parvatha Suntharalingam, Elliott Campbell and Adam Wolf	
16:20-16:30	<b>Atmospheric Mercury Measurements in the Arctic Troposphere</b> Francesca Sprovieri, Ivano Ammoscato, Giulio Esposito and Nicola Pirrone	
16:30-16:40	<b>Measurements of Optical properties of Atmospheric Aerosols within Atmospheric Boundary Layer at Ny-Ålesund</b> S. Suresh Babu, Jai Prakash Chaubey, K. Krishna Moorthy, Mukunda Gogoi, Manoj M. R., Sobhan Kumar Kompalli, Anoop Tiwari and S. Rajan	
16:40-16:50	<b>Chemical size distributions from size-segregated samples collected at the Gruebadet laboratory</b> Giulia Calzolari, Silvia Becagli, Massimo Chiari, Daniele Frosini, Costanza Ghedini, M. Giannoni, Franco Lucarelli, Silvia Nava, Francesco Rugi, Rita Traversi, Roberto Udisti, Riccardo Zanini, P. Sartori, M. Masiol and Daniele Ceccato	
16:50-17:00	<b>Aerosol profiles and Ship plumes over Ny-Ålesund during 2011-2012 field campaigns</b> Luca Ferrero, Davide Cappelletti, Beatrice Moroni, Vito Vitale, Roberto Udisti, Maurizio Busetto, Christian Lanconelli, Mauro Mazzola, Angelo Lupi, Silvia Becagli, Rita Traversi, Daniele Frosini, Giorgia Sangiorgi, Maria Grazia Perrone and Ezio Bolzacchini	

Friday, 11<sup>th</sup> October 2013

<b>Flagship activities (atmosphere)</b>		<b>Chair: Christian Lanconelli</b>
08:40-09:00	<b>Remote sensing measurements at AWIPEV for an aerosol closure experiment</b> Christoph Ritter, Roland Neuber and Andreas Herber	
09:00-09:10	<b>Intercomparison of ultrafine aerosol measurements at the Zeppelin Station</b> Angelo Lupi, Maurizio Busetto, Hans-Christen Hansson, Radovan Krejci, Peter Tunved, Johan Ström, Mauro Mazzola, Christian Lanconelli, Roberto Udisti, Silvia Becagli, Rita Traversi and Vito Vitale	
09:10-09:20	<b>Current and future boundary layer measurements at AWIPEV</b> Alexander Schulz, Georg Jocher, Christoph Ritter, Marion Maturilli, Sonja Burgemeister, and Roland Neuber	
09:20-09:30	<b>Mean profiles of wind at CCT: similarity laws and the boundary layer height</b> Christian Lanconelli, Angelo Lupi, Marion Maturilli, Mauro Mazzola, Armando Pelliccioni, Francesco Tampieri and Angelo Viola	
09:30-09:40	<b>Short-term variations in the ozone column over Ny-Ålesund</b> Boyan Petkov, Vito Vitale, Mauro Mazzola, Kerstin Stebel, Christian Lanconelli, Angelo Lupi and Angelo Viola	
09:40-09:50	<b>Chemical composition of PM10 marine aerosol collected from Tromsø to Svalbard Islands during the AREX 2011 cruise</b> Roberto Udisti, Silvia Becagli, Ezio Bolzacchini, Massimo Chiari, Luca Ferrero, Daniele Frosini, Miriam Marconi, Silvia Nava, Maria Grazia Perrone, Giorgia Sangiorgi, Mirko Severi, Rita Traversi, Waldemar Walczowski, Riccardo Zanini and Tymon Zielinski	

09:50-10:30 Coffee Break

<b>Flagship activities (terrestrial/marine)</b>		<b>Chair: Masaki Uchida</b>
10:30-10:50	<b>Structure and function of terrestrial microbial communities in the High Arctic</b> Stefano Ventura, Luigi P. D'Acqui, Roberto De Philippis, Ondrej Komarek and Katja Sterflinger	
10:50-11:00	<b><i>Warnstorfia exannulata</i>, an aquatic moss in Ny-Ålesund and its seasonal growth responses</b> Cheng-Sen Li, Cai-Qing Guo, Ryszard Ochyra, Peng-Cheng Wu, Rodney D. Seppelt, Yi-Feng Yao, Lin-Gen Bian and Su-Ping Li	
11:00-11:10	<b>Measurements of Greenhouse gas fluxes over permafrost at Ny-Ålesund, the Arctic</b> Taejin Choi, Jaeill Yoo, Bang Yong Lee, Young Jun Yoon, Angelo Viola, Mauro Mazzola, Francesco Tampieri and Vito Vitale	
11:10-11:20	<b>Springtime phytoplankton dynamics in the Arctic Krossfjorden and Kongsfjorden (Spitsbergen) as a function of glacier vicinity</b> A.M.-T. Piquet, W.H. van de Poll, R.J.W. Visser, C. Wiencke, H. Bolhuis and Anita G.J. Buma	
11:20-11:30	<b>Oxygen isotope - salinity relationship in Kongsfjorden: implications to freshwater variability</b> Manish Tiwari, K.P. Krishnan and S. Rajan	

<b>Roundup for a basic core monitoring programme</b>		<b>Chair: Geir Wing Gabrielsen</b>
11:30-11:45	<b>Monitoring activities at Dirigibile Italia</b> Vito Vitale	
11:45-12:00	<b>Overview of Monitoring activities at AWIPEV Base</b> Roland Neuber <i>et al.</i>	

	12:00-12:15	<b>Monitoring at Sverdrup and Zeppelin Station</b> Christiane Hübner
	12:00-13:00	<b>General discussion on how to increase cooperation and conclusion</b>

**13:00**      **End of the 11<sup>th</sup> NySMAC seminar**

	14:30 - 17:00	<b>Side meeting on needs and scopes of a core Ny-Ålesund monitoring programme and future actions to implement</b>
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