

Svalbard Science Conference

28-29 October 2025, Quality hotel Expo, Fornebu

Monday 27 October	
From 16:00 Possible to set up posters in the poster area	
Tuesday 28 October	
08:00 – 09:00 Registration	
09:00 – 09:40	Opening Session
	Welcome + practical info
	<u>Opening speeches:</u> Minister of Research and Higher education Sigrun Aasland Director Mari Sundli Tveit, Research Council of Norway Director Camilla Brekke, Norwegian Polar Institute
09:45 – 10:45	Session 1: Strategies for the next International Polar Year (IPY-5) Moderator: Maria Philippa Rossi
Keynote	Henry Burgess, BAS
Per Erik Opseth, Norwegian mapping authority	Integrating Geodesy into Polar Science: Enhancing Collaboration for the 5th International Polar Year
Jørn Kristiansen, Met.no	Exploring Services, Risk and Observation and Model Improvement with the Polar Coupled Analysis and Prediction for Services (PCAPS) project
Åshild Ønvik Pedersen, NPI	COAT: A system for long-term, ecosystem-based monitoring of the Svalbard tundra
Harald Steen, NPI and Jon Børre Ørbæk, RCN	Short announcement from IPY-Norway
	15 minutes Questions - debate
10:45 – 11:15 Coffee break	
11:15 – 12:15	Session 2: Svalbard in a pan-Arctic context Moderator: Maria Philippa Rossi
Keynote	Giuliana Panieri, CNR-ISP
Stein Haaland, UNIS	On the motion of the magnetic pole
Britta Schäfer, U. Oslo	Changes in Arctic mixed-phase clouds with global warming – insights from case studies and perturbed climate simulations
Björn-Martin Sinnhuber, Karlsruhe Institute of Technology	Historical meteorological data from Svalbard to better understand today's Arctic warming
	20 minutes Questions - debate
12:15 – 13:45 Lunch	
13:45 – 14:45	Session 3: Managing risks in a changing Arctic Moderator: Maria Philippa Rossi

Keynote	Gunhild Sætren, UNIS
Igor Eulaers, NPI	A geospatial tool to support Cumulative Risk Management of the Svalbard Archipelago
Anatoly Sinitsyn, SINTEF	Polar Climate and Cultural Heritage: results of the PCCH
Maaïke Weerdesteijn, UNIS	Developing a Permafrost & Climate Change Response System
	20 minutes Questions - debate
14:45 – 15:30 Coffee break	
15:30 – 16:45	Session 4: Science-to-policy: Challenges and opportunities for Arctic science Moderator: Maria Philippa Rossi
	Panel discussion Participants: Franziska Hasenburger, Arctic Climate Action group Svalbard Agata Goździk, Polish Academy of Sciences Nina Jensen, Rev Ocean Øyvind Paasche, NORCE
16:45 -17:30	Glacier Lamentation audio visual performance Introduction to polar arts
17:30 – 19:00	Polar arts + Posters + Mingling
19:00 Conference Dinner at the hotel SIOS: SIOS Innovation Award (during dinner)	

Wednesday 29 October	
09:00 – 10:10	Session 5: Parallel sessions
09:00 – 10:10	Session 5a: New technologies and methods: how can they benefit polar science? I Chair: Maria Philippa Rossi
Richard Hann, NTNU	Glaciers from above and below: applying the observational pyramid in Svalbard
Kerstin Ebell, U. Koeln	Long-term Analysis of Vertically Resolved Cloud Observations at Ny-Ålesund (Svalbard) using Self-Supervised Deep Learning
Davide Di Blasi, CNR	Svalbard at the Forefront of Global Change: The Role of Marine Robotics in Polar Observations
Lekhraj Saini, Indian Institute of Technology	A Ground-Based Technique for Virga Detection over Ny-Ålesund, Svalbard
Angelo Odetti, CNR	Innovative Marine Robotic Platforms for High-Resolution Monitoring of Arctic Fjords
William Harcourt, U. Aberdeen	A digital twin of Svalbard's cryosphere (SvalbardDT)
Cyril Palerme, Met.no	MET-AICE: an operational data-driven sea ice prediction system for the European Arctic
09:00 – 10:00	Session 5b: Coast and fjords as systems in change I Chair: Arunima Sen, UNIS
Sophie ten Hietbrink, U. Stockholm	Constraining offshore groundwater flow and porewater freshening mechanisms in Svalbard fjords

Sarah Tingey, U. Tromsø	From bedrock to biosphere: Mercury mobilisation in a changing Arctic
Piotr Kuklinski, IOPAN-PL	Will calcifiers survive rapidly progressing changes in the Svalbard marine system?
Phillipp Assmy, NPI	Extensive summer blooms in fjords of West Spitsbergen triggered by run-off from land
Janne E. Søreide, UNIS	Towards the borealisation of Isfjorden: Seasonal, interannual and decadal changes in zooplankton biodiversity and community composition
Zuzanna Swirad, IGF-PL	Fjord ice conditions in Hornsund, Svalbard from synthetic aperture radar imagery over 23 seasons
10:00 – 11.30 Coffee break - Posters	
11:30 – 12:30	Session 6: Parallel sessions
11:30-12:40	Session 6a: New technologies and methods: how can they benefit polar science? II Chair: Maria Philippa Rossi
Malte Müller, Met.no	The Svalbard Marginal Ice Zone Campaigns 2024/2025 - distributed networks of wave, sea-ice drift, and temperature observations
Kharis Schrage, MIT	CATAIN: Exploring Fine-Resolution Dynamics of Newly Settled Invertebrates Using a Prototype Camera
Aleksey Marchenko, UNIS	Electromagnetic emission in ice bending failure tests
Kim Holmén, NPI	Sampling Strategies in Data-Scarce Regions: An Adaptive, Quantum-Inspired Approach
Dyre Dammann, NGI	IceView – Operational mapping of landfast sea ice around Svalbard
Federico Scoto, UNIVE	A comprehensive snow observing system to monitor the seasonal evolution of the snowpack and the impacts of warm spells in Ny-Ålesund
Tuomo Saloranta, Norwegian Energy Regulatory Authority	Snow map services for estimating seasonal snow conditions over Svalbard in real-time
11:30 – 12:30	Session 6b: Coast and fjords as systems in change II Chair: Gijs Breedveld, UNIS
Kit M. Kovacs, NPI	ARK - Arctic marine mammals & their prey in a time of climate change: a Kongsfjorden Case Study
Morten Køltzow, Met.no	The Copernicus Arctic Regional ReAnalysis (CARRA): Strength and weaknesses
Jörg Haarpaintner, NORCE	A decade of summer ice mélange distribution observed by Sentinel-1 and glacier frontal ablation and in Kongs- and Krossfjorden, Svalbard.
Marianna Pinzone, NPI	Tracing mercury sources in the Arctic marine ecosystem of Kongsfjorden, Svalbard
Dhruv Maniktala, IGF-PL	Studying spatio-temporal variability of glacier calving in Hornsund Fjord, Svalbard
Maria Ansine Jensen, UNIS	The first high-resolution dataset for Svalbard coastal landforms and processes - a tool for remote assessment of coastal change
12:30 – 13:30 Lunch	
13:30 – 14:45	Session 7: Parallel sessions
13:30-14:45	Session 7a: Climate resilience of Arctic settlements and the footprint of anthropogenic activities Chair: Maria Philippa Rossi

Heli Routti, NPI	Temporal trends of per- and polyfluoroalkyl substances (PFAS) in top predators from Svalbard over two decades
Kristine Westergaard, NTNU	Horizon scanning for alien species and their potential distribution in a warming Arctic: a panarctic and a Svalbard case study of vascular plant species
Håkon Sandven, U. Bergen	Taking Off The Lid: The changing lightscape of the Arctic Ocean and Barents Sea under sea ice decline
Zhiyong Xie, Helmholtz-Zentrum Hereon, Inst of Coastal Environmental Chemistry	Challenge of emerging organic contaminants in the changing Arctic
France Collard, NIVA	Human exposure to microplastic and UV stabilisers through Atlantic cod consumption: a focus on Norway
Elena Barbaro, CNR	Which chemical species are deposited during rain-on-snow events in the Arctic?
Paloma Guzman, NIKU	Wilderness or Witness: Shifting Values and the Governance of Arctic Remain
13:30 – 14:45	Session 7b: Svalbard in transformation: from seasonal variability to long-term trends Chair: Oskar Landgren, Met.no
Willem van der Bilt, U. Bergen	Biogeochemical scans capture 7000 years of abrupt and extreme winter climate change on Svalbard
Rúna Magnússon, Wageningen U.	The Tundra Rainfall Experiment; Legacy and Seasonal Effects of Heavy Rainfall Events on Svalbard Ecosystem Functioning
Manuel Bensi, OGS	A decade of oceanographic mooring data offshore southwest of Svalbard
Andrew Hodson, UNIS	Changes in Svalbard's nitrogen cycle: seasonal to multi-decadal perspectives based upon studies of riverine biogeochemistry
Rasmus Benestad, Met.no	Downscaled climate scenarios for Svalbard and the Barents Sea region
Thomas V Schuler, U. Oslo	Svalbard's 2024 Record Summer: A Window into Future Arctic Glacier Meltdown?
Mikko Sipilä, U. Helsinki	How marine life affects clouds and climate: Methane sulphononic acid - a new piece in the puzzle
14:45 – 15:15 Coffee break	
15:15 – 16:30	Session 8: Plenary Chair: Maria Philippa Rossi
15:15-16:10	<u>Svalbard in the future</u> Invited keynotes Jack Kohler, NPI and Larissa Beumer, UNIS: The future of research in Svalbard Information: Svalbard Research Office (from 2026), RCN and NPI Upcoming polar research calls, RCN
16:10-16:30	<u>Prize and concluding remarks</u> APECS Norway: APECS poster prize Harald Steen, NPI: Concluding remarks
16:30 End of Conference	