

# Arctic Observing Summit 2026

Arctic Science Summit Week  
Aarhus, Denmark  
March 30 - April 1

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## Summit Agenda

The Arctic Observing Summit (AOS) is a high-level, biennial international forum. Its primary goal is to provide community-driven guidance for the design, implementation, and sustained, long-term operation of the international network of Arctic observing systems.

The summit brings together a diverse community, including researchers, Indigenous Peoples, government agencies, and others, to foster international communication and coordination. This collaboration aims to optimize resource allocation, minimize duplication and gaps, and address the urgent needs of Arctic observing, including the human component. The recommendations generated at the AOS inform the work of the Sustaining Arctic Observing Networks (SAON) and global initiatives, ultimately improving our understanding and response to rapid, system-scale Arctic change.

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### Summit schedule

Monday, March 30

Start	End	Room	Session
8:00	9:30	Aula	Opening plenary; Panel on Indigenous-led observing efforts
9:30	10:00		Coffee break
10:00	12:00	Mogens Zieler Stuen	Shifting Perspectives: Reconsidering measures of success for Arctic observing
10:00	12:00	Preben Hornung Stuen	Enhancing Research Quality and Societal Relevance Through Indigenous Knowledge, Co-Production, and Equitable Community Engagement
10:00	12:00	Richard Mortensen Stuen	SAV Permafrost: discussion of status and future development
12:00	13:30		Lunch
13:30	15:30	Preben Hornung Stuen	Enhancing Research Quality and Societal Relevance Through Indigenous Knowledge, Co-Production, and Equitable Community Engagement
13:30	15:30	Richard Mortensen Stuen	Building and Sharing Inventories of Observational Capacities for Discovery and Integration across a Spectrum of Arctic Observing Systems
13:30	15:30	Mogens Zieler Stuen	Improving Arctic Observations: Wildfire Shared Arctic Variable & Terrain Trafficability
15:30	16:00		Coffee break
16:00	18:00	Preben Hornung Stuen	Enhancing Research Quality and Societal Relevance Through Indigenous Knowledge, Co-Production, and Equitable Community Engagement
16:00	18:00	Richard Mortensen Stuen	ROADS Phase IV Implementation
16:00	18:00	Mogens Zieler Stuen	Career Development

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Tuesday, March 31

Start	End	Room	Session
8:00	9:30	Preben Hornung Stuen	Data systems
8:00	9:30	Richard Mortensen Stuen	SAV Permafrost: discussion of status and future development
8:00	9:30	Mogens Zieler Stuen	Technology - drones
9:30	10:00		Coffee Break
10:00	12:00	Richard Mortensen Stuen	Expert Panels in Practice - what is needed to put the ROADS process in practice
10:00	12:00	Preben Hornung Stuen	Birgehallat: The Saami Way of Understanding and Adapting to a Changing World
10:00	12:00	Mogens Zieler Stuen	Technology - AI and ML
12:00	13:30		Lunch
13:30	15:30	Richard Mortensen Stuen	Strengthening Arctic Observing Through Indigenous-Led and Community-Based Monitoring Initiatives
13:30	15:30	Preben Hornung Stuen	ROADS Phase IV Implementation
13:30	15:30	Mogens Zieler Stuen	Technology - emerging technologies
15:30	16:00		Coffee Break
16:00	18:00	Poster hall	Poster session

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Wednesday, April 1

Start	End	Room	Session
9:00	10:30	Preben Hornung Stuen	ROADS Phase IV Implementation
9:00	10:30	Mogens Zieler Stuen	Shifting Perspectives: Reconsidering measures of success for Arctic observing
9:00	10:30	Richard Mortensen Stuen	Centering Indigenous Observations in Arctic Marine Wildlife Management and Conservation
10:30	11:00		Coffee Break
11:00	12:30	Richard Mortensen Stuen	Data systems
11:00	12:30	Preben Hornung Stuen	ROADS Phase IV Implementation
11:00	12:30	Mogens Zieler Stuen	Investing in Salmon Observing for Arctic Resilience: Bridging Research, Funding, and Community Needs
11:00	12:30	Conference room 1	Indigenous observing working group writing session
12:30	14:00		Lunch
14:00	16:00	Aula	Closing plenary

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### Permafrost Shared Arctic Variables: discussion on current status and future developments

#### Chairs:

Zoé Brasseur, Svalbard Integrated Observing System [zoe.brasseur@sios-svalbard.org](mailto:zoe.brasseur@sios-svalbard.org)

#### Description:

Climate change is accelerating permafrost thaw across the Arctic, driving rapid landscape changes, affecting infrastructure and increasing risks associated with ground instability and coastal erosion. Addressing these challenges requires spatially detailed information and more coordinated observing systems. Yet, the Arctic lacks a unified set of observables to support decision-making at local, regional, and pan-Arctic scales.

In this session, we will introduce the current work and suggested further approach developed by the expert panel on Permafrost Shared Arctic Variables. This was established as part of the Arctic PASSION EU project, and is a part of the SAON roadmap. We look forward to discussing ideas, ambitions, and ways to obtain a good process forward for developing the Permafrost SAV.

#### Goals:

1. Present the current status of the Permafrost Shared Arctic Variables.
2. Engage the audience in identifying gaps and priorities on developing Permafrost SAV across the Arctic.

#### Times and meeting rooms:

Day	Time	Room	Topic
Monday	10:00 - 12:00	Richard Mortensen Stuen	Permafrost SAVs
Tuesday	8:00 - 9:30	Richard Mortensen Stuen	Permafrost SAVs

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## Building and Sharing Inventories of Observational Capacities for Discovery and Integration across a Spectrum of Arctic Observing Systems

### Chairs:

William Manley (University of Colorado Boulder, [william.manley@colorado.edu](mailto:william.manley@colorado.edu))

Alice Bradley (Williams College, [alice.c.bradley@williams.edu](mailto:alice.c.bradley@williams.edu))

Hazel Shapiro (IARPC Secretariat and US AON, [hazel@iarpccollaborations.org](mailto:hazel@iarpccollaborations.org))

### Description:

Numerous organizations have called for a more integrated “Arctic Observing System”. However, the fragmented and distributed nature of countless observing efforts makes it difficult to identify gaps, build connections, optimize resources, or clarify future directions. This session will explore strategies for discovery and integration through coordinated efforts to create and share inventories of observational capacities. What are the benefits of tracking or cataloging observing infrastructure and activities (such as research and monitoring sites, stations, facilities, platforms, projects, cruises, networks, etc.)? How can we make structured information (i.e., metadata) about observing assets more Findable, Accessible, Interoperable, and Reusable? How can we assist or incentivize organizations to build and share such inventories? Discussion will focus on use cases, best practices, and actionable steps. Some initiatives are underway – through SAON and US AON, for example – but more can be done to link and foster progress on a path to better meet observing goals.

### Goals:

1. Collectively assess the rationale for building and sharing inventories of observational capacities.
2. Review lessons learned and best practices for the creation and interoperability of observing-related catalogs.
3. Identify practical steps forward to help organizations build, share, and utilize inventories effectively.

### Times and meeting rooms:

Day	Time	Room	Topic
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Monday	13:30 - 15:30	Richard Mortensen Stuen	Inventories
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## Enhancing Research Quality and Societal Relevance Through Indigenous Knowledge, Co-Production, and Equitable Community Engagement

### Chairs:

Claudine Hauri, University of Alaska Fairbanks, [chauri@alaska.edu](mailto:chauri@alaska.edu)  
Emily Lescak (IARC, RNACoobs, [elescak@alaska.edu](mailto:elescak@alaska.edu))  
Daniela Walch (Université du Québec à Rimouski, IASC MWG Fellow 2024, [DanielaMarianneRegina.Walch@uqar.ca](mailto:DanielaMarianneRegina.Walch@uqar.ca))  
Jihoon Jeong (KOPRI, IASC Social and Human WG, [jj@kopri.re.kr](mailto:jj@kopri.re.kr))  
Cana Itchuaqiyag (Virginia Tech, ICARP IV Indigenous Peoples' Coordination Group, [cana@vt.edu](mailto:cana@vt.edu))  
Cansu Culha (University of Columbia, permafrost, [cansu.culha@gmail.com](mailto:cansu.culha@gmail.com))  
Julia Andreasen (IARC, [jrandreasen@alaska.edu](mailto:jrandreasen@alaska.edu))  
Anna Heiða Olafsdóttir (GRO, IASC MWG chair, [anna.olafsdottir@hafogvatn.is](mailto:anna.olafsdottir@hafogvatn.is))  
Laura Ghigliotti (IAS, IASC MWG co-chair, [laura.ghigliotti@cnr.it](mailto:laura.ghigliotti@cnr.it))  
Jakob Assmann (UZH, IASC TWG, [jakob.assmann@uzh.ch](mailto:jakob.assmann@uzh.ch))  
Myrah Graham (Northern Research Liaison, Amundsen Science, [myrah.graham@as.ulaval.ca](mailto:myrah.graham@as.ulaval.ca))  
Noor Johnson (NSIDC, [noor.johnson@colorado.edu](mailto:noor.johnson@colorado.edu))  
Roberta Glenn (IARC, AAOKH, [rjglenn@alaska.edu](mailto:rjglenn@alaska.edu))  
Donna Hauser (IARC, AAOKH, [dhauser2@alaska.edu](mailto:dhauser2@alaska.edu))

### Description:

This session welcomes participants from all disciplines, including those new to co-production, to explore how Indigenous Knowledge and equitable community engagement can strengthen research quality and increase societal outcomes. We invite the wider Arctic research community to submit two-page case studies that highlight successes of using multiple knowledge systems, co-production of knowledge and equitable engagement of communities, as well as challenges, and lessons



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transferable across fields. These will be shared online and read in advance. The session will begin with brief summaries, followed by guided discussion, targeted at the development of a manuscript that reflects on how the co-produced research presented in these case studies enhances both the quality and the societal relevance of Arctic research.

### Goals:

1. Share and reflect on case studies – Highlight examples of co-production with Indigenous Knowledge and community engagement in Arctic research, including successes, challenges, and lessons that can inform the design of and approach to future research.
2. Foster cross-disciplinary learning – Provide space for participants, including those new to co-production, to explore how these approaches can strengthen the scientific quality of research and its societal relevance. Create linkages among IASC working groups. Share and reflect on case studies – Highlight examples of co-production with Indigenous Knowledge and community engagement in Arctic research, including successes, challenges, and lessons that can inform the design of and approach to future research.
3. Co-develop a publication – Collaboratively synthesize the case studies and session discussions into a manuscript showcasing how co-production enhances research quality and societal outcomes across disciplines.

### Times and meeting rooms:

Day	Time	Room	Topic
Monday	10:00 - 12:00	Preben Hornung Stuen	Research Quality and Societal Relevance
Monday	13:30 - 15:30	Preben Hornung Stuen	Research Quality and Societal Relevance
Monday	16:00 - 18:00	Preben Hornung Stuen	Research Quality and Societal Relevance

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### Career Development

#### Chairs:

Christina Goethel, University of Maryland Center for Environmental Science,  
cgoethel@umces.edu

#### Description:

A central priority of many observing networks and systems is to foster meaningful Early Career Researcher/Participants, not only as contributors, but as leaders of new scientific initiatives. Formation of different working groups within some of these frameworks is working to realize these visions, but also tend to be program specific.

The main goal of this session is to bring together ECRs from across different networks and systems and learn how we can best support each other in career development. Oftentimes, due to funding limitations, cycles, and variations, maintenance in these long-term observatories can be challenging, leading to a loss of training and institutional knowledge from the next generation. As an example, the Synoptic Arctic Survey effort has recently formed an ECR working group and can serve as a case study of the challenges, efforts, and solutions to maintain this important training and institutional knowledge of varying programs. Their goal is to build from the success of the initial SAS effort to retain applied expertise, strengthen international networks, collaborate towards common scientific aims, and ensure the goals of SAS2 are realized. The overall mission of SAS ECR is to retain an international knowledge base and leverage efforts towards a comprehensive pan-Arctic survey spanning marine, atmospheric, and cryospheric components to effectively record and understand changes in the Arctic system. This goal is central across the Arctic observing systems, so how do we get there?

#### Goals:

1. Define a centralized list of the biggest hurdles in career development across the Arctic
2. Define early career
3. Identify solutions for maintenance of early careers through career development strategies across different observing frameworks

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### Times and meeting rooms:

Day	Time	Room	Topic
Monday	16:00 - 18:00	Mogens Zieler Stuen	Career Development

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## Birgehallat: The Saami Way of Understanding and Adapting to a Changing World

### Chairs:

Evie Morin, Research Institute for Sustainability, [evie.morin@rifs-potsdam.de](mailto:evie.morin@rifs-potsdam.de)

Jan-Erik Henriksen, The Arctic University of Norway, [jan.e.henriksen@uit.no](mailto:jan.e.henriksen@uit.no)

Gunn-Britt Retter, Saami Council, [gbr@saamicouncil.net](mailto:gbr@saamicouncil.net)

### Description:

Birgehallat is the Northern Saami word for reading and understanding nature—a way of knowing that reflects generations of close relationships between the Saami and their homelands, built through continuous observation and adaptation to environmental changes. Today, this knowledge and practice continues to offer vital insights for Arctic observation and biodiversity conservation. This session explores how recent multilateral Arctic biodiversity agreements consider Indigenous knowledge. Then, we share examples of Sea Saami ways of observing and responding to environmental changes. We conclude with recommendations for strengthening equitable partnerships and ensuring Saami leadership in Arctic decision-making and observation.

### Goals:

1. Assess how Indigenous Knowledge is reflected in recent Arctic biodiversity agreements.
2. Share Sea Saami approaches to observing and adapting to environmental change
3. Identify pathways for stronger Saami participation and leadership in decision-making.

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### Times and meeting rooms:

Day	Time	Room	Topic
Tuesday	10:00-12:00	Preben Hornung Stuen	Saami knowledge and nature

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### Improving Arctic Observations: Wildfire Shared Arctic Variable & Terrain Trafficability

#### Chairs:

Katriina Veijola, Finnish Meteorological Institute, [Katriina.Veijola@fmi.fi](mailto:Katriina.Veijola@fmi.fi)

Anni Kröger, Finnish Meteorological Institute, [anni.kroger@fmi.fi](mailto:anni.kroger@fmi.fi)

Mikko Strahlendorff, Finnish Meteorological Institute, [Mikko.Strahlendorff@fmi.fi](mailto:Mikko.Strahlendorff@fmi.fi)

#### Description:

This Wildfire session Improving Arctic Observations: Wildfire Shared Arctic Variable & Terrain Trafficability is concentrating on discussion of technical solutions for observing wildfire related information. It explores the latest developments from Finnish IBA Arctic Wildfire, Arctic PASSION and CryoSCOPE projects, that are focusing on wildfire risk and terrain trafficability in the Arctic.

This session introduces ongoing efforts to implement the Wildfire Shared Arctic Variable (SAV) in Finland and Arctic Countries and showcases the practical use of the "Water in Your Boots?" mobile tool for in-situ observations that support smart routing in wet and wildfire awareness in dry conditions.

#### Goals:

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1. To build a network of relevant actors across the Nordic countries and North America supporting the implementation of an Ignition Identification (Wildfire) SAV and trafficability services.
2. Discuss about technical solutions and e.g. using machine learning to improve and refine satellite observations by using local observations.
3. Get feedback of the technical solutions and what kind of information the mobile tool could display and how, and ideas for the next steps.

### Times and meeting rooms:

Day	Time	Room	Topic
Monday	13:30-15:30	Richard Mortensen Stuen	Wildfire

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## Shifting Perspectives: Reconsidering measures of success for Arctic observing

### Chairs:

Hazel Shapiro, Interagency Arctic Research Policy Committee (IARPC),  
[hazel@iarpccollaborations.org](mailto:hazel@iarpccollaborations.org)

Vanessa Raymond, University of Alaska Fairbanks, [vraymond@alaska.edu](mailto:vraymond@alaska.edu)

Tahnee Prior, Women of the Arctic, [tahnee@genderisnotplanb.com](mailto:tahnee@genderisnotplanb.com)

Casey Brayton, Columbia University, [cbrayton@ldeo.columbia.edu](mailto:cbrayton@ldeo.columbia.edu)

Ravi Darwin Sankar, Longwood University, [sankarrd@longwood.edu](mailto:sankarrd@longwood.edu)

Sandy Starkweather, University of Colorado, CIRES,  
[sandra.starkweather@colorado.edu](mailto:sandra.starkweather@colorado.edu)

### Description:

This session will discuss Arctic observing planning and assessment tools to build a shared understanding of why Arctic observing assessment matters and how societal benefits are described. It will also feature a discussion of efforts to revisit the International Arctic Observing Assessment Framework (IAOAF) - developed to improve environmental data in the region through the lens of societal benefits like disaster



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preparedness and food security. The IAOAF outlines more than 160 societally relevant key objectives, but has identified shortcomings that would benefit from broader community review and discussion.

### Times and meeting rooms:

Day	Time	Room	Topic
Monday	10:00 - 12:00	Mogens Zieler Stuen	Planning tool for Arctic Observing
Wednesday	8:00 - 9:30	Mogens Zieler Stuen	Planning tool for Arctic Observing

### Expert Panels in Practice - what is needed to put the ROADS process in practice

#### Chairs:

Chris Waigl, University of Alaska Fairbanks, [cwaigl@alaska.edu](mailto:cwaigl@alaska.edu)

#### Description:

Session to provide a forum for exchange between teams who work in the Expert Panel or related paradigms to work on co-production with Arctic Indigenous communities.

#### Goals:

1. Knowledge exchange "what works"
2. Work towards a toolkit-style document laying out how to design and run an EP
3. Feedback on ROADS process

### Times and meeting rooms:

Day	Time	Room	Topic
Tuesday	10:00-12:00	Richard Mortensen Stuen	Expert Panels

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## Strengthening Arctic Observing Through Indigenous-Led and Community-Based Monitoring Initiatives

### Chairs:

Natasha Haycock-Chavez, University of Colorado Boulder, [naha6486@colorado.edu](mailto:naha6486@colorado.edu)  
Noor Johnson, ELOKA/CU Boulder, [noor.johnson@colorado.edu](mailto:noor.johnson@colorado.edu)

### Description:

Documenting and sharing Indigenous and local observations of a changing Arctic is critical for effective decision-making, transmission of Indigenous Knowledge, community safety, and research. As climate change intensifies, it is increasingly vital to center Indigenous and local communities in policy discussions and ensure that community-based observations inform these decisions. This session will share examples of programs from across the Arctic that are Indigenous-led and grounded in principles of Indigenous data sovereignty. It will also showcase the newly updated Atlas of Community-Based Monitoring in a Changing Arctic, which contains entries from projects across the circumpolar region with a focus on North America. The Atlas was launched in 2013 by the Inuit Circumpolar Council and the Exchange for Local Observations and Knowledge of the Arctic and has been updated to include new programs and features. Through shared dialogue, the session will explore opportunities for collaboration, cross-training, and respectful data stewardship across CBM initiatives. Together, we will discuss how coordinated practices can strengthen sustained Arctic observing systems, amplify Indigenous expertise and leadership, and advance equitable representation of Indigenous knowledge in regional and international contexts.

### Goals:

1. Discuss strategies for ensuring that Indigenous and community-based observation data inform local, regional, and national policy and decision-making processes.
2. Examine how coordinated Indigenous-led monitoring programs contribute to long-term, sustainable observing networks that reflect community priorities and values.

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3. Discuss how principles of Indigenous data sovereignty guide the governance, management, and sharing of observation data within and across these programs.

### Times and meeting rooms:

Day	Time	Room	Topic
Tuesday	13:30-15:30	Richard Mortensen Stuen	Indigenous and local observations

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### Investing in Salmon Observing for Arctic Resilience: Bridging Research, Funding, and Community Needs

#### Chairs:

Jamie O'Connor, Intertidal Consulting for the International Arctic Research Center,  
[jamie@intertidalconsulting.com](mailto:jamie@intertidalconsulting.com)  
Harmony Wayner, Alaska Conservation Foundation

#### Description:

This dialogue-centered session aims to bring together funders, salmon community members, and research leaders to explore how sustained, co-produced salmon observing can strengthen Arctic resilience. The Salmon Expert Panel, convened under the ResearchNetworking Activities for Sustained Coordinated Observations of Arctic Change (RNA CoObs) and the Sustained Arctic Observing Networks (SAON) Roadmap for Observing and Data Systems (ROADS) initiative, is advancing equitable and community-driven salmon observing systems in the Bristol Bay watershed of Alaska. Co-created by Indigenous leaders, local knowledge holders, fisheries managers, and researchers, the panel integrates ecological, social, and cultural knowledge to identify critical observing gaps from river to sea.

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The session will include a presentation from Salmon EP co-leads on the work of the panel, followed by an open discussion on strategies for long-term investment, integration, and alignment across observing networks.

### Goals:

1. Create a shared space for funders and implementers to identify collaboration pathways.
2. Prioritize funding strategies that center community well-being.
3. Generate actionable recommendations for the AOS closing plenary.

### Times and meeting rooms:

Day	Time	Room	Topic
Wednes day	11:00-12:30	Mogens Zieler Stuen	Salmon Observing for Arctic Resilience

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## Arctic ROADS: Preparing for Action — Arctic ROADS as a Path for Inclusive, IPY-Scale Collaboration

### Chairs:

Sandy Starkweather, University of Colorado, CIRES, [sandy.starkweather@noaa.gov](mailto:sandy.starkweather@noaa.gov)

Heikki Lihavainen, SIOS, [director@sios-svalbard.org](mailto:director@sios-svalbard.org)

TBD

### Description:

Envisioning Implementation as an Inclusive Pathway: Co-Creating an Implementation-Minded Storyline for ROADS that resonates with key partners and serves as an inspiration/mechanism for preparing IPY-scale collaborations.

### Readiness for Collaboration: How ROADS Can Enable PY-Scale Action

What did we learn from the last IPY about leaving a legacy of observational programs, partnerships, and networks? What succeeded? What opportunities were missed? How

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can these successes inform SAON, AOS, ROADS and the next IPY? This presentation will be followed by a panel discussion led by large national, multi-national funding programs and organizations to better understand how we can support/position ROADS in the context of large international cooperations. What do organizations and funders need to know/understand or see in evidence about ROADS to consider it as a framework for their efforts? What does the process itself need to reflect and look like in terms of maturity, legitimacy, and inclusivity to succeed as a pathway to prepare for IPY?

### Designing an Inclusive ROADS: Community Hubs, Benefit Frameworks, and Co-Produced Observing

Partner with Co-Production + Engagement leads and other relevant sessions to hear from them about what is needed in ROADS to best support. Propose a more interaction session where we do some visioning around the concept of Community Hubs, Applied Improv work. What is needed to better support Co-Production & Engagement throughout ROADS? What is the role of success metrics, benefit frameworks? How can ROADS help to shape understanding about the need for Community-led organization/coordinating hubs for efforts and support Indigenous-led monitoring?

### Theme: "The present and future of ROADS engagement"

The present: Report out from Expert Panels/SAV sessions/Advisory panel

The future: Beyond Arctic PASSION, Extreme Weather (ISAR-8), CAVSI, OA, Greenland(Fjords and/or Marine Sound/Quannaq) and other potential expert panel concepts.

Reports outs from relevant sessions. "Pitch" meetings from prospective EPs. Something fun and interactive. "Getting your EP off the ground" mock coaching session for groups considering EP work.

### Wrap ups and recommendations

Informing the Workplan for ROADS AP for 26/27

Recommendations to Funders related to IPY, Community Hubs

Understanding Success Metrics in the Context of ROADS & its implementation

### Goals:

1. Advance the ROADS concepts through dialog, with an emphasis on better defining what needs to be done in Phase IV: Implementation of the process
2. Foster dialog around needed capacities related to Indigenous community empowerment within the process



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3. Communicate and engage about the role of ROADS in future efforts, including IPY

### Times and meeting rooms:

There is a ROADS Open Partnership meeting on Sunday, March 29 during ASSW. An introduction to ROADS and updates on the different expert panels will be presented during that time.

Day	Time	Room	Topic
Monday	16:00-18:00	Richard Mortensen Stuen	Readiness for Collaboration: How ROADS Can Enable IPY-Scale Action
Tuesday	13:30-15:30	Preben Hornung Stuen	Designing an Inclusive ROADS: Community Hubs, Benefit Frameworks, and Co-Produced Observing
Wednes day	9:00-10:30	Preben Hornung Stuen	The present and future of ROADS engagement
Wednes day	11:00-12:30	Preben Hornung Stuen	Wrap ups and recommendations for the ROADS process and key partners

## Data Systems

### Chairs:

Chantelle Verhey, Carleton University, [cverhey@gcrc.carleton.ca](mailto:cverhey@gcrc.carleton.ca)

Jan Rene Larsen, [jan.rene.larsen@amap.no](mailto:jan.rene.larsen@amap.no)

Vanessa Raymond, [vraymond@alaska.edu](mailto:vraymond@alaska.edu)

Oystein Godoy, [o.godoy@met.no](mailto:o.godoy@met.no)

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The polar research data community has been actively looking to engage with other groups to better understand how we can support their data gaps and needs. This group is not just for data experts but anyone who interacts with data and wants to increase its impact. The goal of this working group is to set actionable priorities for the next 2-8 years as the polar community prepares for the upcoming International Polar Year. The data working group has historically shared initiatives and developments related to data systems, Indigenous data sovereignty, and data management. Are you interested in what observing assets currently exist? How to better utilize existing data systems for data sharing and consumption? Enhance the impact of your/ your organization's data through interoperability? How to practically enable data sovereignty principles? Then engaging with the data working group is a great opportunity to achieve a better understanding of the polar data ecosystem.

### Goals:

1. Engage with other Working groups at the AOS
2. Set actionable goals to be carried out by the next AOS
- 3.

### Times and meeting rooms:

Day	Time	Room	Topic
Tuesday	8:00-9:30	Preben Hornung Stuen	Data Systems
Wednesday	11:00-12:30	Richard Mortensen Stuen	Data Systems

## Technology

### Chairs:

Maribeth Murray, University of Calgary, Canada, [murraym@ucalgary.ca](mailto:murraym@ucalgary.ca)

Øystein Godøy, Norwegian Meteorological Institute, [steingod@met.no](mailto:steingod@met.no)

# Arctic Observing Summit 2026

Arctic Science Summit Week

Aarhus, Denmark

March 30 - April 1



## DRAFT PROGRAM

Craig Tweedie, University of Texas at El Paso, USA, [ctweedie@utep.edu](mailto:ctweedie@utep.edu)

### Description:

Advances in both our understanding and capacity to observe the Arctic are often coupled to the development and/or application of novel technologies. The harsh conditions are challenging for sustained observing necessary to advance our understanding. In this session, which will utilize expert panels, short presentations, open discussion, and flash talks, we will showcase successes, limitations, and challenges associated with the technological advancement of Arctic Observing. Specifically, we will explore innovations in Artificial Intelligence, and monitoring technologies like drones, remote sensing in general, and in situ. Through case studies performances in various aspects of scale, cost, disciplinary focus, operational perspectives and stage of development are addressed. We welcome participation from an international audience and representation from a wide range of interest groups spanning communities, researchers, agencies, innovators, industry, policy makers, educators and others.

### Goals:

1. Celebrate the novelty of discovery and observation using innovations in technology.
2. Derive common drivers of success, limitation, and failure associated with the development and application of novel technologies for enhanced Arctic Observing and Discovery.
3. Identify 'pinch points' that could be addressed with attention from specific interest groups.

### Times and meeting rooms:

Day	Time	Room	Topic
Tuesday	9:00 - 10:30	Mogens Zieler Stuen	AI and Machine Learning
Tuesday	10:00 - 12:00	Mogens Zieler Stuen	Drones and remote sensing

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## DRAFT PROGRAM

Tuesday	13:30 - 15:30	Mogens Zieler Stuen	Drones and remote sensing
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**DRAFT PROGRAM**

## Poster Abstracts

The call for posters is currently open. Please submit your poster abstract by January 30 via the AOS website.