

WG5: "Arctic Observations in the context of Global Observing Initiatives"

General information: [AOS Online Website](#) & resources: [About AOS](#) (key documents); [How to join](#) (guidance for WG leads, moderators & volunteers, & participants); [Agenda](#)

Session 1: Background

The ROADS process is multi-phase:

1. Essential Arctic Variables (have to be re-evaluated through an Arctic lens)
2. Requirements (have to be re-evaluated through an Arctic lens)
3. Implementation

The Goal of the Summit is to lay the foundation for a framework (SAON ROADS) within which different programs or teams of researchers and information users can work on the specifics of which variables to observe and how.

Asks for AOS:

SAON ROADS need further definition and tools to support its development

- Assessing Impactful EAVs: ROADS partner networks/activities should identify a relatively limited set of Essential Arctic Variables (<10) that are assessed to be highly impactful across a wide range of societal benefits and where rapid progress in observing or integration can be made.
- A **Schema** to Structure Collaboration/Coordination: EAVs need to be supported by a **structured model (schema)** for documenting collaboratively identified requirements (obs&data) and coordinated implementation strategies (obs&data). What would a useful schema for ROADS look like? Some networks already have (full/partial) schemas for this. **Can they use their own?** If so, how do we address interoperability?

The Asks for WG5:

- Provide guidance on the **process** for assessing EAVs, societal benefit areas, and generating observational requirements
- Input on what constitutes an **impactful** EAV
- Guidance on **global** EVs on EAVs
- Engagement process

Pre-reads:

- [SAON Roadmap for Arctic Observing and Data Systems \(ROADS\) Process at the 2020 Arctic Observing Summit](#)
- [Guidance for AOS Working Groups – Supporting the SAON Roadmap for Arctic Observing and Data Systems \(ROADS\) Process](#)
- [The draft ROADS process](#)

| |
|--|
| When: 31 st April, 2:30 pm - 5:30 pm |
| Goal: Introduce the ROADS framework/process. Present examples of how similar frameworks have been used in regional/international organisations |
| Agenda: <ul style="list-style-type: none">● Welcome and introductions (Jan Rene Larsen) |

● Presentations:

- Sandy Starkweather, NOAA, SAON chair: The ROADS process. The charge for WG5
- Erik Buch, EuroGOOS, INTAROS
- Heikki Lihavainen, SIOS
- Molly McCammon, AOOS
- Rodica Nito, WMO

Questions to speakers:

- To what extent do your initiative reach into the Arctic? (for session 2)
- What are the processes that you use to identify their high-priority variables? Have Societal Benefits Areas (SBAs) been a driver? (for session 2)
- How can we take advantage of what has already been done at your initiative? (for session 3)
- Did your review of the white papers identify additional relevant initiatives? (for session 2 and 3)

Chair: Jan Rene Larsen

Rapporteur: Ria Adams

Chat Monitor: Joao Filipe Alves Silva

Tech: Charlie Hewitt

Session 2: Identifying and assessing Essential Variables (EVs). The assessment processes

Pre-reads:

- [ROADS Strategy for Mobilisation](#)
- [The International Arctic Observations Assessment Framework](#)

High priority EVs should be evaluated through the lens of Arctic Societal Benefits Areas (SBAs). Overviews and associated documentation have been compiled during the WG preparatory work, and some new may emerge based on Arctic specific SBAs. The charge to the group is to consider the assessment process, perhaps including what may be the role of the UN SDGs

The process will be not to go through every single global variable – there are too many. Instead, the starting point will be the variables with the highest impact. The concept of bringing global variables through the Arctic lens is also about Arctic specific processes and phenomena. The Arctic has different expressions of certain processes, like ocean stratification. EAVs be seen in the context of Societal Benefits. An example is ocean heat content. We may not want to redefine the variable, but may want to review the requirements and specifically the implementation.

Questions:

The overall goal is a set of variables that characterise the main features of the Arctic system, across sectors. The working group will review connections to regional and global initiatives.

Questions to consider:

- What global networks already operating in the Arctic. Do these operate properly in the Arctic? Where are they trying to extend their global high-priority set of measurements into the Arctic? Which variables are easily integrated into global systems, and which are specific to the Arctic?
- Some initiatives are focused on essential variables, while some are focused on phenomena. How to identify the most critical components / the subset that have to be pursued?
- What is different among existing initiatives in terms of what would be considered as high priority variables, and how can we synthesise this? To what extent are Societal Benefit Areas part of the evaluation?

| |
|---|
| When: 1 st April 4:30 pm - 7:00 pm |
| Goal/agenda: Discuss the formulated questions |
| Chair: Peter Schlosser |
| Notes: Ria Adams |
| Chat monitor: Jan Jones |
| Tech: Roseanna Mayfield |

Session 3: Engagement Strategy

Background:

After the AOS, SAON will engage with other initiatives in order to establish Expert Panels and Advisory Board. This will require engagement/connectivity to existing regional/global initiatives. It should be noted that there are domain observing initiatives and there are integrating initiatives. Both types of efforts should be taken into account.

Questions:

- Should the ROADS process be exclusively driven by grass roots, or should the ROADS process actively engage with the regional/global networks around this. In the discussion, be aware that there are global perspectives, like GEO, IOC/GOOS, WMO and regional, more bottom-up perspectives, like AOOS and SIOS. How can the latter engage with the former??
- Would these existing regional/global initiatives be interested in engaging in the ROADS process? Who are the champions? What are the events?
- To what extent can the ROADS process engage with and make use of existing practical structures for assessing EAVs. Examples are the ongoing GCOS review and the roadmap efforts of INTAROS.
- There will be practical questions to be answered: To what extent do existing initiatives reach into the Arctic? What has to be added from an Arctic perspective in terms of sensors, coverage, process definitions, societal benefits, co-production? Is this information accessible in a machine-readable form?
- What should SAON do in terms of better fit into the global/regional landscape?
- What is (also) needed is a synchronisation of the mode of resourcing of what the global networks are doing and what is done in the Arctic. How can observing of the Arctic be sustainable through the operational agencies?
- Would this group see itself as having a role in this process? Can this WG convene/continue after this?

| |
|---|
| When: 1 st April 9:30 pm - 12:00 am |
| Goal/Agenda: Formulate the elements of the ROADS Engagement Strategy. |
| Chair: Peter Schlosser |
| Notes: Ria Adams |
| Chat monitor: Karl Newyear |
| Tech: Blaine Mirasty |

Session 4: Findings and Recommendations

| |
|---|
| When: 2 nd April 11:00 am - 1:00 pm |
| Goal: Formulate Findings and Recommendations. Input to Summit statement |
| Agenda: For the final session, each WG will be asked to provide brief reports and contribution to conference statement. The 3 rd Arctic Science Ministerial as well as institutions like IOC and WMO are the key audiences for the outcome of the summit and the SAON Roadmap, also in terms of funding. |
| Chair: Jan Rene Larsen |
| Notes: Ria Adams and Jan Rene Larsen |
| Chat monitor: Max Daniels |
| Tech: Purna Chandra Bhusal |