AOS WG2 session

Co-chairs:

- Jari Haapala
- Lennart Gerke
- Machiel Lamers
- Toste Tanhua

Background readings:

- Arctic Observations Framework: STPI-SAON-International-Arctic-Observations-Framework-Report-2017.pdf (arcticobserving.org)
- UNDOS Arctic Plan: https://www.oceandecade.dk/decade-actions/arctic-action-plan
- Bradley, A., Eicken, H., Lee, O., Gebruk, A., Pirazzini, R. 2021. Shared Arctic Variable framework to link global and Arctic regional and local observing system priorities and requirements. Available via Williams College, 18 Hoxsey St., Williamstown, MA 01267 USA at https://drive.google.com/file/d/1bb-TgiT8-3b0ZhFLlBBndh951hQJQQTE/view?usp=sharing

	Speaker	Title/Question	Status
Day 1 (30th March)			
Theme: The UNDOS	S process		
Chair (all day eycen	ot where noted): Toste	a Tanhua	
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Session 14-15:30	Vladimir Ryabinin	Overview of Ocean Decade and the role of ocean observing in the decade	Recorded
	(IOC)		presentation
	Time: 14:00 –		
	14:15		
	Molly	How do we bring the outcome of the Arctic Plan UNDOS discussion (28th March)	Confirmed,
	McCammon	into recommendations for AOS	remotely
	(AOOS)		
	Time: 14:15 –		
	14:30		
	Doug Cripe (GEO Secretariat)	Short Statement (28): "GEO Knowledge Hub"	Confirmed
	 Time: 14:30 –		
	14:45		
	14.45		
	Carlo Buontempo	What are the key elements of the C3S program on the arctic and what ae the plans	Confirmed,
	(C3S)	for the future to ensure a better coverage of the Arctic region, including on	remotely
		high-resolution reanalysis and on prediction.	
	Time: 14:45 – 15:00		

	Carl Gouldmann	Regional aspects of GOOS	Confirmed,
	(NOAA, GRA		remotely
	chair)		
	Time: 15:00 –		
	15:15		
	Time: 15:15 – 15:30	Discussion	
	13.30		
Session 16-17 with		Question: Requirements for observations to support food security (coastal or	
WG1 (Food		marine foci?). From a user perspective? In the light of the UNDOS process? What	
Security)		do we want from the decade?	
WG2 chair:		Draft agenda for WG1 and WG2 cross session:	
Toste Tanhua			
		2 mins Welcome everyone, give Slido interactive poll details (one of the co-chairs?)	
WG1 chair:			
Margaret Rudolf		5 mins Provide context for group conversation from WG2 (WG2 Co-chairs)	
		Focus/question: What are requirements for observations to support food security	
		(coastal or marine foci) from a user perspective? In the light of the UNDOS	
		process?	
		5 mins Provide context for group conversation from WG1 (WG1 Co-chairs)	
		Focus/question: Checking the process: How are Indigenous and local communities	
		in the Arctic being included in distinguishing essential and shared variables utilized	
		by large Arctic observing networks? (e.g., Shared Arctic Variables, Essential	
		Variables, Essential Climate Variables)	

	38 mins Group discussion	
	8 mins Review key points of discussion	
	2 mins Review Slido poll/quiz results	
Session	Question(s):	
17:00-18:00 with		
WG5 (Utility and	What are the best links to stakeholders from the observing system? How can we	
Benefits)	evaluate the benefit and fitness for-purpose of the AOS?	
WG2 Chair:	Value chains in connecting observations with user value? How do observations	
Machiel Lamers	turn into data, transform to information and, in turn, into knowledge? Depending	
iviaciliei Lailleis	on where users find themselves across the value chain they attach different value	
WG5 chairs:	to data/information/knowledge (Jelmer)	
Maribeth Murray		
	How we can ensure the open and free access of stakeholders and users to the	
	observations to shape the societal relevance and benefits?	
<u>Session 18 – 18:30</u>	Wrap-up session	
<u>Session 18:30 –</u>	Executive Committee and chairs session	
19:30		
Session 20-22	Regional presentations, including a panel (including review short statements).	
(remotely)	Questions: New developments at the regional level in terms of Arctic observing	
	systems. Exploring opportunities for integration between the regional	
	developments within the global system. Scope, funding, future outlook.	

		The sequence of presentations is subject to change	
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	Craig Lee (USA) Time: 20:00 - 20:10	A conceptual framework of SAON ROADS and some specific developments in the marine sector	Confirmed
	Stein Sandven	INTAROS	Confirmed
	Time: 20:10 – 20:20		
	Inga Lips Time: 20:20 – 20:30	Regional and global cooperation for the in-situ Observing System in the Arctic - A EuroGOOS vision	Confirmed
	Tero Mustonen Time: 20:30 – 20:40	Arctic PASSION Brief introduction on their Pilot Services which are under development, as many of them have regional aspects	Confirmed
I I	Sandy Starkweather (USA) Time: 20:40 –	The SAON ROADS process	Confirmed
	20:50 Verónica Willmott (ARICE)	Short Statement (4): "The critical role of a coordinated polar research vessel fleet in the Arctic Observing System"	Confirmed

Time: 20:50 –		
21:00		
Igor Polyakov	Nansen Amundsen Observing System (NABOS)	Confirmed
Time: 21:00 – 21:10		
Bill Manley (USA)	Short Statement (16): "Optimizing Polar Observing with Asset-Level Metadata Interoperability Across Networks"	Confirmed
Time: 21:10 – 21:20		
Alice Bradley (USA)	Short Statement (20): "Mapping the organizations involved in Arctic Observing"	Confirmed
Time: 21:20 – 21:30		
Hiroyuki Enomoto (NIPR, Japan)	Asian/Japan point of view on developments at the regional level in Arctic Observing systems	Confirmed
Time: 21:30 – 21:40		
Q&A session	How to streamline and be more efficient among actors? Efficiency, inclusivity	
Time: 21:40 – 22:00		

	Speaker	Title/Question	Status: Invited/Contacted/Accepted
Day 2 (31st Marc	ch)	•	
Theme: Better co		anaging requirements for Arctic observations. Questions: Who doe	es it and how? (Requirements,
SAVs in the cont	ext of the global observing sys	tem: links and lessons learned from EOVs, ECVs, and the WMO obs	serving requirements
Chair (all day, ex	cept where noted): Jari Haapa	la	
Session 14-15:30 The process for formulating requirements and link to global processes.	Alice Bradley (USA) Time: 14:00 – 14:15	Pre-read: Bradley, A., Eicken, H., Lee, O., Gebruk, A., Pirazzini, R. 2021. Shared Arctic Variable framework to link global and Arctic regional and local observing system priorities and requirements. Available via Williams College, 18 Hoxsey St., Williamstown, MA 01267 USA at https://drive.google.com/file/d/1bb-TgjT8-3b0ZhFLlBBndh95 1hQJQQTE/view?usp=sharing	Confirmed
	Diego Fernandez (ESA) Time: 14:15 – 14:30	The ESA Polar Science Cluster	Confirmed, remotely
	Thomas Lavergne Time: 14:30 – 14:45	Short Statement (14): "On Essential and Shared Variables"	Confirmed
	Artur Palacz <i>Time: 14:45 – 15:00</i>	EOV Framework	Confirmed, remotely

	Ilkka Matero Time: 15:00 – 15:15	Short Statement (22): "Sea ice as a proposed theme to define a Shared Arctic Variable based on as part of Arctic PASSION" Link to Arctic PASSION service description: https://arcticpassion.eu/wp4/ps6	Confirmed
	Panel discussion Time: 15:15 - 15:30		
Session 16-17 with WG4 (System Integration (SAON ROADS)) WG4 chair: Alice Bradley		 Question: What are the synergies between SAVs, EOV, ECVs? WG4 Question(s): What can we learn from the EOV and ECV processes in terms of what worked well in the way to reach a useful result in the end? To make the process more effective (Michael Karcher) Spend 20 min on each of the following questions: What synergies exist between SAVs (that could be proposed) and existing EV structures (e.g., ECV, EOV)? How can SAVs most efficiently complement other EV systems without repeating work? What can lessons learned from EV systems tell us about SAVs? 	
Session 17-18 with WG6 (Capacity sharing)		0:00-0:05 Introduction + Purpose of the Capacity Sharing Working Group (WG 6)	

WG6 chair: Lisa	0:05-0:10 Introduction + Purpose of the Regional to Global
Grosfeld	Observing Working Group (WG2) - "regional to global"
	aspects of capacity sharing
	0:10 0:20 What wo'd like to accomplish in this discussion
	0:10-0:20 What we'd like to accomplish in this discussion (WG 6)
	1. Discuss the meaning and importance of the
	concept of capacity–from your own
	perspective—as it relates to research and
	monitoring in a Northern context;
	Identify gaps in our understanding and
	knowledge about the capacity needs of
	northern collaborators/rightsholders, end
	users and other stakeholders; and,
	3. Identify challenges and barriers that may be
	impeding effective capacity sharing.
	0:20-0:50 Exploring key questions 'around the room'
	How would you define capacity?
	What kinds of capacity do you think Arctic
	communities and external/"western"
	researchers need?
	How does one come to know what these needs are?
	needs are r
	Based on your understanding of what is
	needed, can you identify ways you and/or
	your work could contribute address these
	areas through capacity sharing?

		What do you think are the main challenges or barriers to capacity sharing? 0:50-1:00 Wrap Up	
<u>Session</u> <u>18-18:30</u>	Discussions/Panel/Brain-stor ming Including Slido	Wrap-up session	
<u>Session 18:30 –</u> <u>19:30</u>		Executive Committee and chairs session	
<u>Session</u> 21:30-23:30	Discussions on topics presented day 1 and 2. Prepare first draft of synthesis to be presented in plenary on day 3.		

	Speaker	Title/Question	Status: Invited/Contacted/Accepted
Day 3 (1st April)	•		
Theme: Synthesis			
Chair: Machiel Lame	rs		
9:30-10:30 BS: Summary of discussions. Writing synthesis		Refine recommendations	
Session 11-12 with WG3 (Data sharing) WG2 Chair: Toste Tanhua WG3 chair: Peter Pulsifer		1. Brief introduction (5 minutes), focusing on lessons learned from GBIF and WMO and the building a whole from pieces (Ø. Godøy) Coordinated observation efforts rely on harmonisation of data encoding as well as observation practises. Within the complex Arctic Observing System, standardised approaches for different observing capacities need to be identified along with mechanisms for conveying quality, attribution and provenance information. Approaches within the Arctic context should reuse or relate to existing global frameworks. Ways forward to establish coordinated observing capacities across communities should be discussed. 2. A 5 minute presentation on the OCG data mapping exercise (T. Tanhua) The goal of the OCG data mapping is to continue improving compliance with FAIR data principles for all of the ocean observing networks, to maximize discovery, exchange and use of OCG network data for near-real time as well as delayed mode data and other data products. It also aims to identify gaps and where enhancements can most improve data flows. A goal is higher compliance with FAIR principles which will ensure OCG data is embedded in future data workflows.	

	3. Questions for discussion:	
	How the polar data community can enhance connections to global initiatives such as RDA, CoData, DataONE, GEO, IODE etc.? For the observing systems to have value, data flows should be established. Data should be available. FAIR principles, and implementation of those could be a topic. How can this be achieved in the future?	
12-13	Finalise recommendations	
14-15:30	WG reports, meeting conclusion	