UN Decade of Ocean Science

Arctic Region Planning: Working Group 6 1st Workshop: October 23 Co-chairs: Molly McCammon and Nicole Biebow

Today's Agenda

1400

Welcome and introduction of co-chairs: Molly McCammon and Nicole Biebow

1400-1420

Two presentations

- Molly: WG agenda, purpose, other regional priorities, general Arctic and US data status
- Torill Hamre- INTAROS: general European data status

1420-1550

Brainstorming using Google Jamboard

- Results of Survey
- Challenges & activities

1550-1600

Next steps

- Put today's input into draft document & circulate to WG
- Nov. 5 meeting prioritize actions; incorporate input from other WGs
- Nov. 18 meet again?

UNDOS WG 6 Scope

- Inequalities in ocean science capacity & capabilities need to be eradicated
- Improve access to data, knowledge & technology
- Increase skills & opportunities to engage in data collection, knowledge generation & technological development
- Increase dissemination of ocean knowledge to stakeholders through products and thus
- Improve management, innovation & decision-making that will contribute to societal goals of sustainable development

North Pacific Regional Recommendations Tokyo, Japan August 2019

- Encompass an entire value chain from the translation of societal needs into ocean observing requirements, to the acquisition and archiving of ocean data, the scientific interpretation of data, and the delivery of ocean information and knowledge to societal stakeholders
- Growing ocean data volume is barrier to information transfer – need better access to relevant ocean data



 How to integratiee & convert to useful information products – develop & support regional data centers that can be integrated with each other

North Atlantic Regional Recommendations Halifax, Canada January 2020

- Establish partnerships with Indigenous communities, organizations, and Nations and ensure balanced integration of different knowledge systems;
- Democratize the ability to share and access knowledge, practices, low-cost technology and tools: build inclusive digital ecosystem
- increase access to real time data for decision making
- Develop use of AI to search and analyze or communicate data and data visualizations to support ocean literacy and education
- Provide resources to ensure coordination and inter-operation (at all scales) between existing capacities across regions

- Grow capacity and capability by "twinning" between communities across dimensions such as technical capability, disciplines or societal actors (e.g. small island states, marine and informatics communities, scientist and policy makers, research and education)
- Fully implement the FAIR (Findable, Accessible, Interoperable, and Reusable) principle and recognize the CARE (Collective benefit, Authority to control, Responsibility and Ethics) principles applying to Indigenous sourced data

Polar Data Ecosystem

- Evolving data community and data ecosystem
- Framework for cooperation exists, but lots of actors & perspectives all must be included, especially Indigenous traditional knowledge perspectives
- Multiple maps & databases of systems: need to build on these
- Observing systems & data systems are interwoven
- Data management & integration is underlying, overarching and cross-cutting: needs to be integral part of other WG outcomes

Polar Data Forum

Let polar data holders get together and make more use of data.

Third Polar Data Forum

Home

Program

Conference

Workshops & Hackathons

November 18 to 22, 2019 - Helsinki, Finland



https://polar-data-forum.org/

Photos PROGRAM

ARCTICDATACOMMITTEE

SCA



SOUTHERN OCEAN OBSERVING SYSTEM

Polar to Global Online Interoperability and Data Sharing Workshop/Hackathon 5th November 2020

Details ■ Published: 06 October 2020

5th November 13:00-15:30 UTC

During the Third Polar Data Forum (PDF) held in Helsinki in November of 2019, members of the Polar Data Community gathered to share information and knowledge and to make practical progress towards greater data sharing and interoperability. PDF III followed on a series of meetings that have resulted in continuing advancements in the areas of federated search, identification and development of shared vocabularies and formal semantics, data policy, community building and other topics. Since PDF III, the dialogue has continued. In March and early April, the Arctic data community met during the online Arctic Observing Summit (<u>https://aos2020agenda.org/</u>). The Standing Committee on Arctic Data Management (SCADM) and members of the Southern Ocean Observing System (SOOS) Program have met regularly. There is broad agreement between these groups and the IASC-SAON Arctic Data Committee (ADC) that meeting more frequently will help us to continue making practical progress on our shared goals.

During these challenging times, meeting in person is not feasible. However, recent online events have demonstrated that we can successfully collaborate using virtual tools.

We would like to invite you to join us online on **5th November September 13:00 - 15:30 UTC** to continue our efforts to enhance polar data sharing and interoperability. This is an online workshop in a planned series of bi-monthly online workshops convened by the ADC, SCADM, SOOS, the Arctic Observing Summit Working Group 4, the Global Cryosphere Watch, and the World Data System on behalf of the polar data community.

Due to the constraints of our virtual platform, participation is limited. Registration is required. Connection information for the virtual meeting will be provided to registered participants closer to the event time.

To register, please complete the form found here (link updated 6th October)

https://arcticdc.org/meetings/conference-calls-webinars/polar-to-global-onlineinteroperability-and-data-sharing-workshop-hackathon







Convergence on Societal Benefits as Drivers

- Ocean Obs'19
- GOOS
- US AON/SAON: adopted by US Arctic Council
- IOOS/AOOS, Canada IOOS (no Arctic component yet)
- Others

IOOS/AOOS Used Stakeholder Concerns as Drivers Since Inception (and now Canada IOOS) User-Driven





GOOS



3 proposed transformative Ocean Decade programs, united under the theme of **integration**:

- Integrated system design
- Connecting to local communities
- Integrating observations into the coast

ROADS Benefit Assessment: Value Tree Analysis



ROADS emerged from SAON's Strategic Plan

GOAL 1: Create a roadmap to a well-integrated Arctic Observing System;

- GOAL 2: Promote free and ethically open access to all Arctic observational data; and GOAL 3: Ensure the
- sustainability of Arctic observing.





Build on Other Data Integration Initiatives

- IOOS/Canada-IOOS
- US NSF ARCTIC Data Center
- IODE
- SAON Arctic Data committee
- EMOD-net
- GOOS, GOA-ON, Global HABS network, Global Cryosphere Watch

Up Next – using Google Jamboard

- Today is a brainstorming day: think transformative – big picture
- **First**, look at challenges for 20 minutes -These are the ones in our draft document. Are there others? Are these the right ones?
 - Optimizing transnational sharing of data and infrastructure relevant for Arctic marine communities, research and development
 - Developing enabling technologies capable of being used consistently in Arctic environments
 - Ensuring access to data, information and products across wide range of internet and bandwidth capacity

- **Second**, look at actions. These are the types of actions:
 - Identification of key data, with high demand across sectors
 - Development of a system for a higher degree of open access to Arctic data and infrastructure and sharing of best practices
 - Partnerships to develop key high demand technology needed in the Arctic for the Blue Economy
 - Development of a system capable of disseminating data products identified as key priorities in other working groups, including those of an integrated Arctic Observing System