

Designing a Pan-Arctic System for Sustainable Observing

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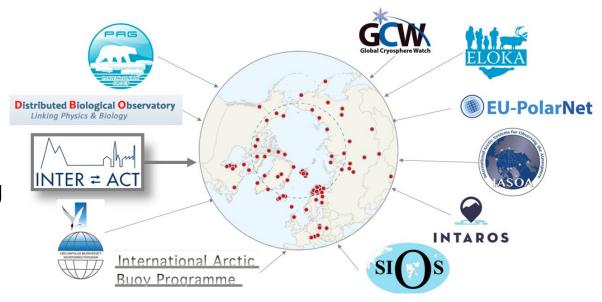
SAON Secretary
ASSW/FARO May 2019





Vision

A connected, collaborative, and comprehensive, long-term, pan-Arctic observing system that serves societal needs





Goals

The SAON Strategy and Implementation Plan were approved in 2018 and are organized around three key goals:

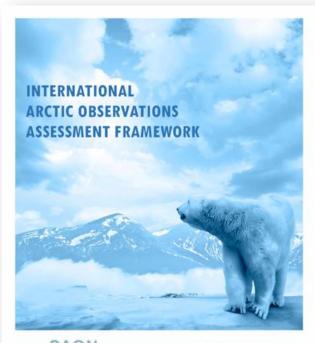
- Create a roadmap to a well-integrated Arctic Observing System (Committee on Observations and Networks, CON)
- 2. Promote free and ethically open access to all Arctic observational data (Arctic Data Committee, ADC)
- 3. Ensure sustainability of Arctic Observing





The first Arctic Science Ministerial launched a keystone effort in identifying 12 Arcticspecific Societal Benefit Areas to support collective international action on observing.

https://www.arcticobserving.org/images/pdf/misc/STPI-SAON-International-Arctic-Observations-Framework-Report-2017.pdf



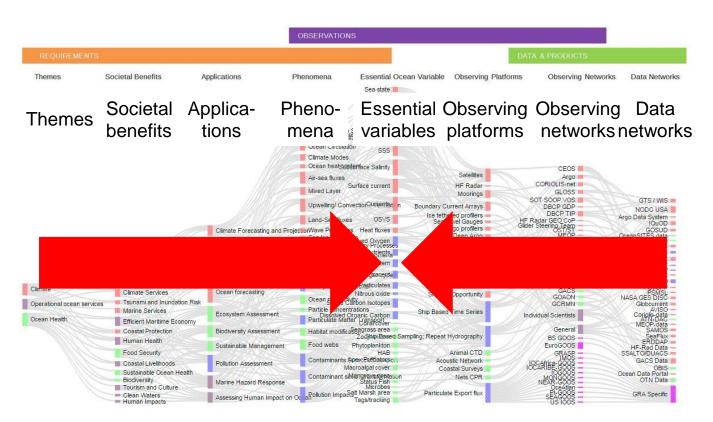




- 1. Disaster Preparedness
- 2. Environmental Quality
- 3. Food Security
- Fundamental Understanding of Arctic Systems
- 5. Human Health
- 6. Infrastructure and Operations
- 7. Marine and Coastal Ecosystems and Processes
- 8. Natural Resources
- 9. Resilient Communities
- 10. Sociocultural Services
- 11.Terrestrial and Freshwater Ecosystems and Processes
- 12. Weather and Climate



Roadmap: From benefits to networks



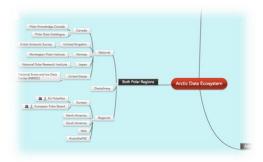


SAON Goal: Free and ethically open access to all Arctic observational data

Main objectives:

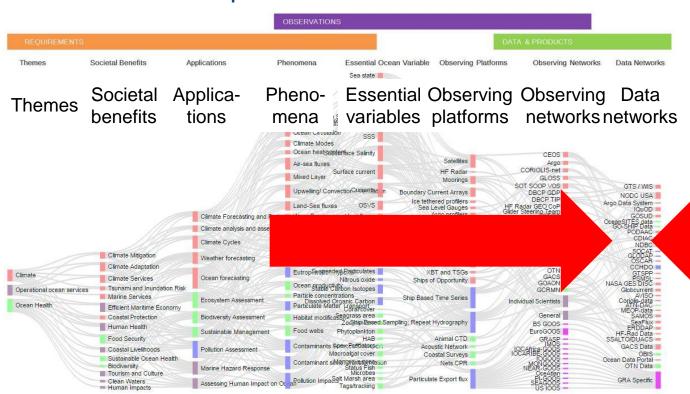
- A road map outlining a world-wide system that will provide researchers and others with access to all Arctic observational data
- A world-wide system for access to all Arctic data.
- Establish a Persistent Consortium of Organisations to Oversee the Development of a a world-wide system for access to all Arctic data







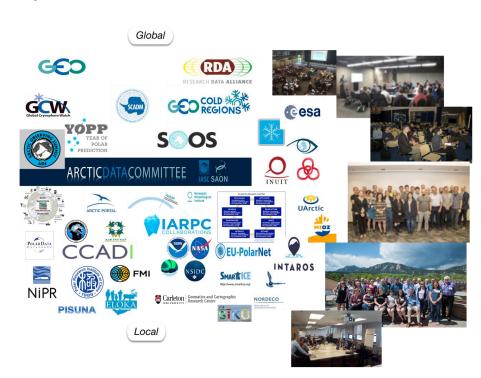
Roadmap: From benefits to networks





Data Sharing: Cooperation from Local to Global

- Significant progress made since International Polar Year
- Framework for cooperation exists
- Recent collaboration being leveraged to establish concrete "architecture"





The Polar Data Project

The Polar Data Community (including Arctic Data Committee) is establishing the "*Polar Data Project*", focusing on linking together existing and new resources to develop the system:

- Leverages existing entities (e.g. GCW, ASDI, Arctic Portal, CCADI, NSF ADC, INTAROS, GEO CRI and many others)
- Focus on concrete proposals to achieve workplan (e.g. ASM2 Deliverable, T-MOSAIC)
- Plan to work with funding agencies to enhance alignment, reduce fragmentation, promote effective governance and establish co-funding mechanisms
- In close collaboration with Arctic communities and Indigenous organizations, observing community, science community, private sector, and others



Indigenous Knowledge, Community Based Monitoring (CBM) and Information Systems

- Growing group actively working to share Indigenous Knowledge, information and data
- Progress needed on bridging worldviews, concepts and semantics represented in information systems
- Indigenous Peoples must lead engagement and work with their knowledge





Third Polar Data Forum

- Week of 18 November 2019, FMI HQ, Helsinki, Finland
- 2 days plenary; 3 days "hackathon"
- Convened by ADC, SOOS, SCADM, WDS, GCW, others
- Hosted by FMI, INTAROS, NIOZ, EPB, others
- General knowledge sharing +
- Concrete activity/progress on:
 - Federated search
 - Semantics
 - Data interoperability
- Several planning activities; committees forming
- Aiming for detailed materials for ASSW

Polar Data Forum III

Following conversations at the Polar Data Planning Summit in Boulder, and the Polar Data and Systems and Architecture Workshop in Geneva in 2018, we are placed to amonome that the Philip Polar Data Sorum (PDF III) will be honted by the Employ, highesticated polar Department campus in Helitalist from November 18th to 2.2nd, 2019. PDF III will be co-organized with regional partners including the IEEE/ABCS president on the IEEE ACCULATE, the Polar Michaelands Isathank or San Beasanch, and other Unsepare organizations. The Forum will be co-convened by the IASC SADN Accist Data Committee. Southern Ocean Observior Svissen. Standing Committee on Antarctic Data

PDIF III will be a two day conference style meeting in support of information exchange, with the remainder of the week using a "hackatho approach that will build on the development work done in Boulder, Geneya and other related meetings.







Temporary URL: http://bit.ly/PDFIIISite



SAON Membership

- All eight Arctic Council nations
- Non-AC countries: China, Germany, Italy, Japan, Korea, Poland, Spain, UK
- Indigenous organisations, mainly ICC, Saami Council
- Partners (institutions, organizations, networks), including European Commission, ESA, GEO, and WMO)

SAON is a joint effort of the **Arctic Council** (through AMAP) and the **International Arctic Science Committee**



The Arctic Observing Summit is SAON's oureach event

- The theme for AOS 2018 was The Business Case for a Comprehensive Pan-Arctic Observing System
- AOS 2020 will be held with ASSW in Akureyri, Iceland. The theme will be Observing For Action
- http://www.arcticobservingsummit.org/





More information: www.arcticobserving.org

