

Pacific Arctic Group: Arctic Observing Summit Briefing

NSIDC.org
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Sea Ice Extent

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MARCH 11, 2016
Still no sea ice
Tolook Bay, Alaska, USA

ICE AND SNOW

ANTHC-LEO Network
leonetwork.org

Arctic Observing Summit: Goals

- Provide **community-driven, science-based** guidance for the **design, implementation, coordination** and **sustained** long-term (decades) **operation** of an international network of Arctic observing systems that serves a wide spectrum of needs
- Create a **forum** for coordination and exchange between **academia, government agencies, local communities, industry, non-governmental organizations and other Arctic stakeholders** involved in or in need of long-term observations

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PAG & AOS

- How can PAG activities benefit from involvement with AOS and vice versa?
- PAG has made great strides in communicating & planning of research cruises, identifying gaps, establishment of repeat stations (DBO) and serving as a forum for exchange
- Pacific Arctic sector is a region of rapid change & rapidly evolving issues & interests that cut across disciplinary foci

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A patchwork response to rapid Arctic change?

- 46 different programs generate between 1 and >20 datasets each (2012 season)
- Data availability varies: NSF-AON data most accessible; data from 22 out of 46 programs for 2012 not directly available
- Limited responsiveness to UNCLOS MSR data sharing guidance (Art. 76, 240ff.)
- Diverse mix of different entities that conduct observations

(Source: AOS.org; Lee et al., *Arctic*, v 68 suppl 1; 2015) ARCTICOBSERVINGSUMMIT.ORG

Source	Percentage
Academic	30%
Federal Government	20%
Industry/Private	20%
Foreign	17%
Local Government	6%
State Government	7%

Data & information pathways

Stakeholder desired outcomes → Problem definition → Synthesis & modeling → Research community Data & observations → Information products → Stakeholder desired outcomes

- Stakeholder
- Government
- Data owner
- Contractor
- Local expert
- Researcher


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Products & Outcomes

- Arctic Observing **system definition & implementation document**
- **Findings and recommendations** aimed at policy- and decision makers including goals, implementation pathways, points of engagement
- Comprehensive report for community use, incl. 6 thematic **synthesis documents**
- **Peer-reviewed publications** from white papers and summit findings; close to 100 white papers & short statements available for review @ AOS website
- Response to AOS recommendations - coordination, opportunities, **proposals, policy development**

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Thematic Working Groups



- Theme 1: International and national **strategies for sustained support** of long-term Arctic observing (Co-leads: A. Tilche, EU; J. Mathis, NOAA)
- Theme 2: **Technology and Innovation** for sustained Arctic observations (Co-leads: C. Sweatte, ICAO; R. Storvold, Norut)
- Theme 3: **Contributions of the Private Sector and Industry** to sustained Arctic observations (Co-leads: P. Holthus, WOC; D. Arthurs, PolarView)

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Thematic Working Groups



- Theme 4: **Actor and Stakeholder engagement and needs** in sustained Arctic observations (Co-leads: C. Fleener, State of Alaska; M. Sommerkorn, WWF)
- Theme 5: **Arctic Observations in the Context of Global Observing Initiatives** (Co-leads: D. Berod, WMO/GEO; H. Enomoto, NIPR)
- Theme 6: **Interfacing Indigenous Knowledge, Community-based Monitoring and Scientific Methods** for sustained Arctic observations (Co-leads: R. Daniel, Pew, L. Kielsen Holm, Greenland Env. Inst., R. Laing, Nunatsiavut Gov't)

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Thematic Working Groups



- **Theme 3: Contributions of the Private Sector and Industry** to sustained Arctic observations (Co-leads: P. Holthus, WOC; D. Arthurs, PolarView)
- Focus on **platforms of opportunity & private-public partnerships, and data sharing agreements**
- **Vessels of opportunity** (Smart Vessels - Smart Oceans Initiative of the World Ocean Council): Best practices, protocols, interoperability standards
- Submission of white papers particularly relevant for US with high vessel activity in US waters
- **Terrestrial platforms** - Oil & gas infrastructure

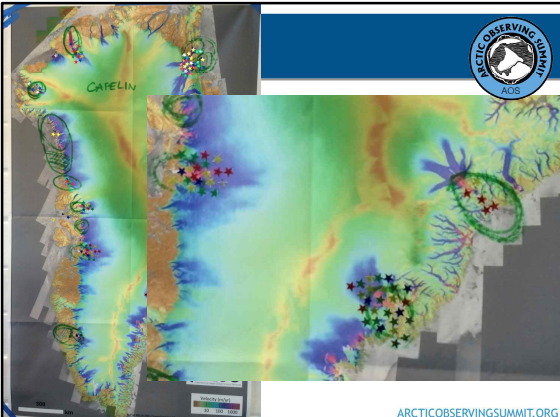
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Thematic Working Groups




- **Theme 4: Actor and Stakeholder engagement and needs** in sustained Arctic observations (Co-leads: C. Fleener, State of Alaska; M. Sommerkorn, WWF)
- How to prioritize and guide observations
- Community **emergency action plans**: Leveraging patchwork of observations in the Arctic to inform community response; best practices
- Increasing **interest of non-Arctic nations** to engage with permanent participants and Arctic communities

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Thematic Working Groups



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- **Theme 6: Interfacing Indigenous Knowledge, Community-based Monitoring and Scientific Methods** for sustained Arctic observations (Co-leads: R. Daniel, L. Kielsen Holm, R. Laing)
- **Bridging** between indigenous communities and decision-makers, brief review of Indigenous Knowledge, community-based observations etc.
- Defining success for **community-based monitoring**
- Recommendations & action plan, incl. education, capacity building and co-production of knowledge

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The AOS Process & PAG



- AOS generates thematic & cross-cutting recommendations & action plans
- How are plans implemented, tracked & adapted?
- To be discussed - linking Communities of Practice to move from review & information sharing to actual co-development of strategies & implementation under the auspices of an appropriate international body
- Lessons & guidance from PAG?

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