

ICARP III Activity - Reporting Template:

Arctic Observing Summit, ISAC International Program Office

(Contact: Gabriela Iburguchi - gabriela.ibarguchi@ucalgary.ca)

Title of activity International Study of Arctic Change - Arctic Observing Summit (AOS)		
Type of activity Arctic Observing System Planning	Date AOS 2013 Vancouver, CA AOS 2014 Helsinki, FI AOS 2016 Fairbanks, USA and ongoing biennially	Place ISAC International Program Office, Arctic Institute of North America, University of Calgary, 2500 University Dr. N.W., ES-1040, Calgary, Alberta, Canada, T2N 1N4
Main organizer(s) (name and/or organization) and additional partners <i>ISAC International Program Office, Arctic Institute of North America (AINA), University of Calgary</i> <i>ISAC website: http://www.arcticchange.org/</i> Maribeth Murray, University of Calgary; ISAC Executive Director Peter Schlosser, Columbia University; ISAC SSG co-chair Gaby Iburguchi, University of Calgary, ISAC Associate Director Vinay Rajdev, University of Calgary, AINA Research Assistant <i>Arctic Observing Summit (AOS) website: http://www.arcticobservingsummit.org/</i> <i>AOS - Executive Committee Members (2014-2016):</i> Peter Schlosser (ISAC) Maribeth Murray (ISAC) Hajo Eicken (SEARCH) Larry Hinzman (IARC) Jan René Larsen (AMAP/SAON) Eva Kruemmel (ICC Canada/SAON) Volker Rachold (IASC) Hiroyuki Enomoto (AERC-NIPR)		
Abstract ^[1] The International Study of Arctic Change (ISAC) is a long-term, international, multi-disciplinary Arctic environmental change program established in 2003 by the International Arctic Science Committee (IASC) and the Arctic Ocean Science Board (http://www.arcticchange.org/). ISAC is the lead organization for the SAON task Arctic Observing Summit (http://www.arcticobservingsummit.org/). The AOS is planned as a biennial event in conjunction with the Arctic Science Summit Week (ASSW). The Summit is a forum and workspace that brings together representatives of a cross-section of the Arctic community to deliberate on community-driven, science-based guidance for the design, implementation, coordination and sustained operation of an international network of Arctic observing systems.		

The AOS contributes to the SAON process through the synthesis of Arctic knowledge, development of the vision for an integrated Arctic observing system design, engagement in dialogue, solutions development, and the identification of gaps and priorities.

The inaugural Arctic Observing Summit was held in April 2013 in Vancouver, Canada; the second AOS (April 5-11, 2014) was held in conjunction with the Arctic Science Summit Week (ASSW) in Helsinki, Finland. Future summits will continue to be a key platform and forum for SAON and the Arctic community to address the observational needs of stakeholders, and to foster international communication and the coordination of long-term observations for improving understanding and responding to system-scale Arctic change. The third Summit, AOS 2016 will be held (March 15 - 18) in Fairbanks, USA.

The AOS contributes to the SAON process and by extension to the ICARP process through the synthesis of Arctic knowledge, development of the vision for an integrated Arctic observing system design, engagement in dialogue, solutions development, and the identification of gaps and priorities. The Summit includes representatives from all sectors, and diverse academic disciplines, including participation from academic, government, public and private sectors, and representatives of Arctic communities, Indigenous organizations, and policy and decision making groups.

Main contributions to ICARP III^[2] in terms of the ICARP III priorities^[3]

The Arctic Observing Summit objectives and outcomes directly link to ICARP III priorities. Progress has been made on identifying Arctic observing needs, capacity, priorities, and on building international consensus and strengthening partnerships. The AOS addresses ICARP III priorities in the following ways:

(1) Identify Arctic science priorities for the next decade: The AOS enables identification of emerging issues in Arctic research, particularly as related to the observational needs. The Summits focus on the development and implementation of a collaborative and integrated Arctic observing system of systems (network) that can address science priorities and diverse needs for observational information, including Traditional Knowledge. The success of such a collaborative effort requires in-depth discussion of international scientific agendas and priorities on a long time scales, and from local to global spatial scales.

(2) Coordinate various Arctic research agendas: The AOS is in and of itself a coordinating activity. The AOS serves as a forum and solutions-oriented workspace to engage all sectors and stakeholders with diverse background and expertise in system design, implementation, and operation. Themes are identified for each AOS based on community engagement and feedback. White papers facilitate research coordination, identification of observing priorities and inform Summit themes, which serve to highlight key priorities, gaps, emerging needs, and opportunities. The AOS has its foundation on engagement and dialogue among international members and every attempt is made to create linkages among local and global entities to improve coordination in the development of a collaborative Arctic observing system. This includes coordination of the observing activities in the context of national scientific and stakeholder driven agendas.

(3) Inform policy makers, people who live in or near the Arctic and the global community:

AOS products include peer-reviewed publications, white papers, Summit reports, public presentations, posters, policy briefs, and reports to agencies. The AOS Organizing Committees engage diverse sectors in the Summit and in activities related to the Summit. Sharing results and recommendations from the AOS is a key activity for the Committees and for ISAC Members and the ISAC International Program Office. While challenges remain to facilitate the participation of members in remote communities, in under-represented Arctic sectors (e.g. Asian Arctic), and in the direct communication (face-to-face or on-site visits) with Arctic communities, progress has been made to incorporate the perspectives of stakeholders around the circumpolar North. Changing the geographic location of each of the AOS Summits has facilitated knowledge-sharing and the engagement of representatives from the American, European/Scandinavian, and Asian Arctic sectors at various times.

(4) Build constructive relationships between producers and users of knowledge:

The AOS brings together diverse members of the Arctic community including knowledge producers and knowledge users. Already it has led to improved communication among these groups and productive dialogue about ways to collect, share and utilize data for multiple purposes and including knowledge translation for decision making. Through thematic organization, pre-Summit events and preparations, and participant led working groups, the AOS engages diverse expertise and perspectives to provide input and analysis on some high priority aspect of the development and implementation of the Arctic observing system.

Proposed Themes – AOS 2016

Resources/Funding: international framework and national strategies for supporting the Arctic observing system.

New and Emerging Technologies: appropriate spatial and temporal resolutions, interoperability, sensors, accurate and continuous data records, drones, remote sensing, tech for community-based observing, etc.

Global Links: synchronization with existing and emerging global observing systems (for example GEOSS), linkages in sensor tech, observing platforms, observation frequency, spatial resolution, data repositories, etc.

Stakeholder Engagement and Needs: dual function observing providing information to stakeholders and supporting scientific research, models of stakeholder engagement, evaluation of data and information transfer approaches, public/private partnerships, coordination, common standards, etc.

Interfacing traditional Knowledge and Environmental Science: development of concrete activities and demonstration projects, new frameworks for exchange of ideas, expertise, best practices for joint planning.

[1] Provide a short summary of the activity

[2] List a few key statements (findings, priorities, recommendations) that you would like to see reflected in the overarching ICARP III products

[3] ICARP III priorities:

- identify Arctic science priorities for the next decade
- coordinate various Arctic research agendas
- inform policy makers, people who live in or near the Arctic and the global community
- build constructive relationships between producers and users of knowledge