

The Sustaining Arctic Observing Networks (SAON) Process

A Report to Senior Arctic Officials

Copenhagen, Denmark

November 12, 2009

History

In November 2006, the Arctic Council urged all member nations to maintain and extend long-term monitoring of change in the Arctic, with a view to building a lasting legacy of the International Polar Year. Further, the AC requested that the Arctic Monitoring and Assessment Program work with other AC working groups, the International Arctic Science Committee (IASC) and other partners in this effort, to meet identified societal needs. The goal of developing an Arctic Observing Network as a legacy of IPY was also endorsed by the WMO XV Congress in May 2007.

The SAON Initiating Group (SAON-IG) was established in January 2007 to fulfill the Arctic Council request. The SAON-IG, composed mostly of representatives of international science organizations, agreed that:

The SAON vision is that users should have access to free, open and high quality data that will realize pan-Arctic and global value-added services and provide societal benefits.

To attain the vision, SAON's goal is to enhance Arctic-wide observing activities through coordination and integration and to promote sharing and synthesis of data and information.

After holding several stakeholder workshops, the SAON-IG reported its findings to the Arctic Council. (See full report at www.arcticobserving.org) The report contained four recommendations, the first of which was:

1: *The Arctic Council (including permanent participants and observers) should lead the facilitation of international collaboration among government agencies, researchers, and northern residents, especially indigenous people at community level, to ensure a sustainable pan-Arctic observing system.*



In response to this recommendation, the Arctic Council agreed in April 2009:

Decide to take the lead in cooperation with IASC and other relevant partners in the continuation of the SAON process, including to consider ways to develop an institutional framework to support circum-Arctic observing, and the preparation and implementation of a workplan for the next two years to initiate work on priority issues including sustained funding and data management.

With composition defined by the Arctic Council Senior Arctic Officials, a new SAON Steering Group (SAON-SG) was established consisting of representatives from: each of the 8 Arctic Council member states; AC Permanent Participants; AC Working Groups; IASC; and WMO. AMAP and IASC are to provide a co-chair and secretariat support.

The SAON-SG is presently comprised of:

Co-chairs

John A. Calder (AMAP) and David Hik (IASC)

National Representatives

Helen Joseph (Canada); Anne B. Klitgaard (Denmark); Jouni Pulliainen (Finland); Lone Nukaaraq Moller (Greenland); Halldor Johannsson (Iceland); Helgi Jensson (Iceland – alternate); Ola Glesne (Norway); Igor Ashik (Russia); Anders Clarhall (Sweden); Martin Jeffries (USA); Peter S. Murdoch (USA - alternate).

SAON Secretariat

Volker Rachold (IASC); Lars-Otto Reiersen (AMAP); Odd Rogne (AMAP).

Arctic Council Permanent Participants

Victoria Gofman (AIA); Andrea Grant-Friedman (AIA – alternate); Bridget Larocque (GCI); Eva Kruemmel (ICC); Rodion Sulyandziga (RAIPON); *vacant* (Saami Council); *vacant* (AAC).

Arctic Council Working Groups (other than AMAP)

Aevar Petersen (CAFF); Tom Barry (CAFF); Mike Gill (CBMP- CAFF); Maria Holleran Rivera (EPPR); Marianne Lykke Thomsen (SDWG); Bernard Funston (SDWG).

World Meteorological Organization

David Grimes

Priority Focus Areas

The SAON-SG retains the Vision defined by the SAON-IG and adheres to the priorities established in the Arctic Council Declaration of 2009. The SAON-SG will identify and implement steps to improve coordination and integration, and to promote sharing and synthesis of data and information.

Priority activities were agreed as:

1. Identify needs, gaps, and opportunities for improving data access and data sharing;
2. Facilitate coordination and integration among observing and data management activities supported by national agencies;
3. Improve the linkage between community-based monitoring and science-based monitoring.

Communication

The SAON-SG has held three teleconferences and two ad hoc meetings. The teleconferences established the priorities and tasks for SAON-SG members. The ad hoc meetings were used to explore details and procedures for meeting the priority tasks.

Actions Assigned

Discussions during the first teleconference resulted in several actions being assigned to members of the SAON-SG. The Co-Chairs and Secretariat were tasked with defining specific actions in regard to priority 1 above and with developing a plan for meeting priority 2. A subgroup of the SAON-SG composed of the PP representatives and under the coordination of the CAFF Secretariat, was charged with developing an approach to priority 3.

A significant role was developed for the eight country representatives. They are to identify existing national observing networks, data bases and data archives and report the information to the SAON-SG Secretariat. The Secretariat developed an inventory template that is to be used.

The national representatives also are to identify key agency officials who should be engaged in efforts to address priority 2 above. A list of agency officials and their contact information is to be sent to the SAON-SG Secretariat.

Results to Date

As of mid-October, the following has been accomplished. In response to priority 1, the SAON-SG Co-Chairs and a few of the members attended a data management meeting in Ottawa organized by the IPY Data Management Committee. A presentation was given on SAON and the SAON-SG members participated in brainstorming sessions aimed at identifying gaps and priorities associated with data management activities. The Co-Chairs of the SAON-SG and of the IPY Data Management Committee agreed that the two groups had many common interests.

The IPY Data Management Committee has proposed creation of the IPY “union catalog” of all IPY data sets, and creation of the “Polar Information Commons” (PIC). The catalog is intended to define the full set of IPY accomplishments and is to be completed by a firm date yet to be established. The PIC is a

means of promoting wide distribution and innovative use of data sets, while maintaining the identity of the original data provider. These concepts need to be further developed and explained to the science community, and the observing networks identified by SAON are seen as important early participants in advancing these concepts.

Both groups agree on the importance of developing ways to integrate different types of data to improve analysis and development of novel products. The main categories of data types are: gridded or graphed data from observations or models; geo-spatial data; and traditional or community-based knowledge.

The four Co-Chairs agreed that a joint SAON/IPY workshop should be held, consisting of representatives from selected observing networks and key data management experts. Objectives of the workshop would include: discussion of current status of DM as practiced by the networks; discussion of desired DM practices from the view of the DM experts; and discussion of the “union catalog” and “PIC” concepts to get reaction from the network representatives. A date in May or June 2010 is preferred.

Completion of the national inventories of networks would be very helpful in determining the appropriate networks to be involved in this workshop.

For priority 2, the Co-Chairs and Secretariat have started planning for a workshop of key agency officials. One of the most important steps toward realization of sustained Arctic observations is to obtain the views and support of the many funding and implementing organizations that deal with observations of the Arctic region. The SAON-SG intends to sponsor a workshop focused on defining benefits from and means to accomplish improved coordination and collaboration in funding and performing Arctic observations. This meeting is tentatively scheduled to be held on March 18-19, 2010 during the **State of the Arctic Conference** in Miami. A draft letter of invitation has been prepared and distribution is planned for November 2009. Officials from the eight Arctic countries and other countries having significant Arctic observing activities will be invited, along with representatives of the European Union.

The SAON-SG national representatives have been asked to identify the key agency officials from their country who should participate in this workshop. Timely submission of this information is critical to a successful workshop.

For priority 3, a subgroup of SAON-SG members, under the coordination of the CAFF Secretariat, are currently compiling a list of organizations, programs, and networks implementing or making use of Traditional and Local Knowledge. Plans are being developed to conduct a workshop aimed at improving integration of local and indigenous knowledge with scientific knowledge and increasing engagement of local and indigenous people in Arctic observing networks. This workshop should be small and focused on developing a workplan for how to achieve the two objectives.

SAON Website

Agreement has been reached to transfer the SAON website (www.arcticobserving.org) from Sweden to the Arctic Portal in Iceland. This transfer should be complete in November, 2009. The SAON-SG will be responsible for the website content.

Requests to SAOs

The SAON-SG requests SAOs to review the priority actions proposed and offer any feedback. Most importantly, the SAOs are asked to consult with their national representatives and provide any needed encouragement and support to them for completing the tasks of identifying existing networks and key agency officials. Without this information the work of the SAON-SG will be slowed. Once invitations to the workshop for agency officials are distributed, SAOs are asked to work nationally to ensure that key officials attend the workshop. It is likely that the ultimate success of the SAON process will be determined by the views and actions of these officials.

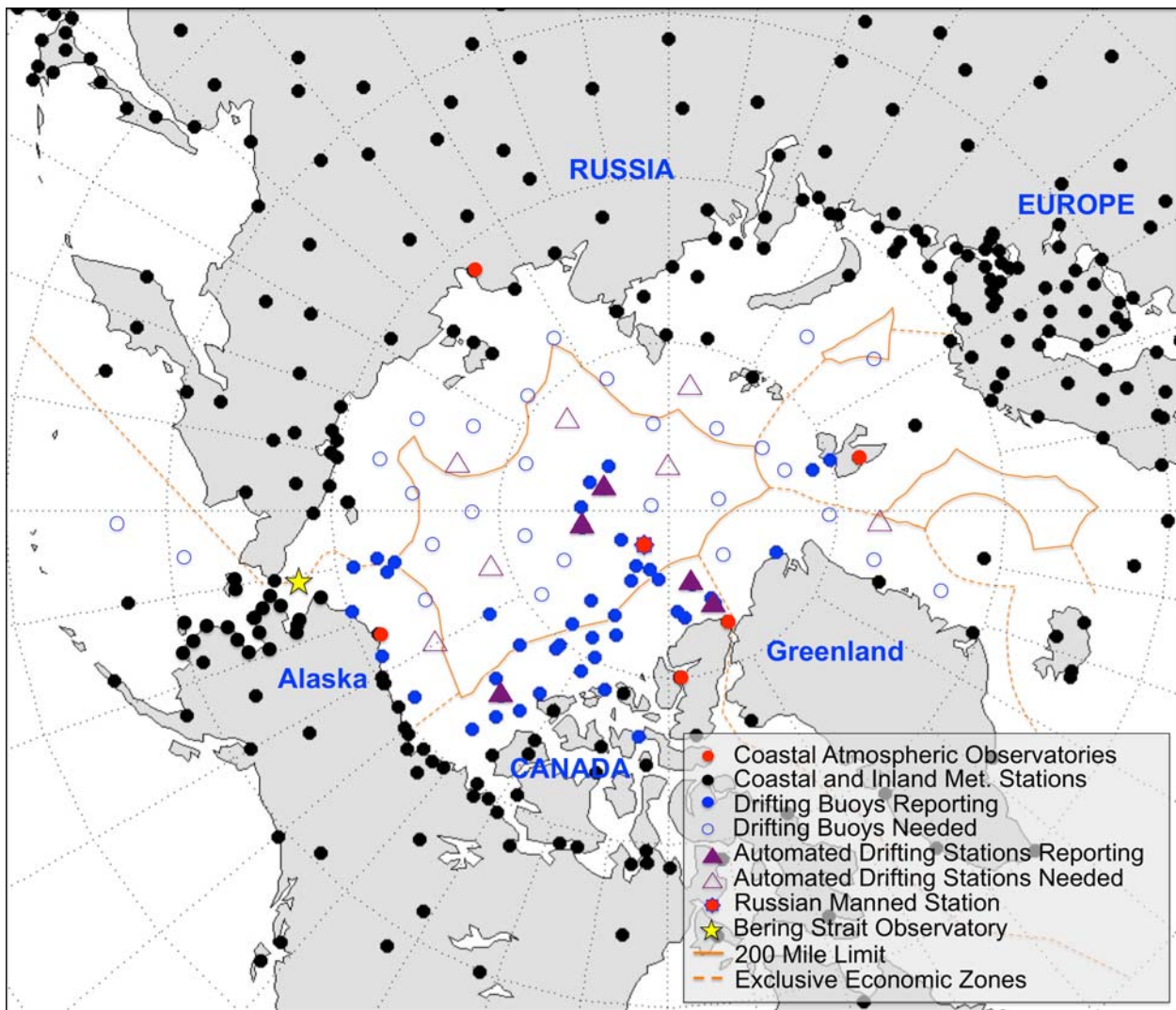


Figure 1: Meteorological Observing Networks for the Arctic.

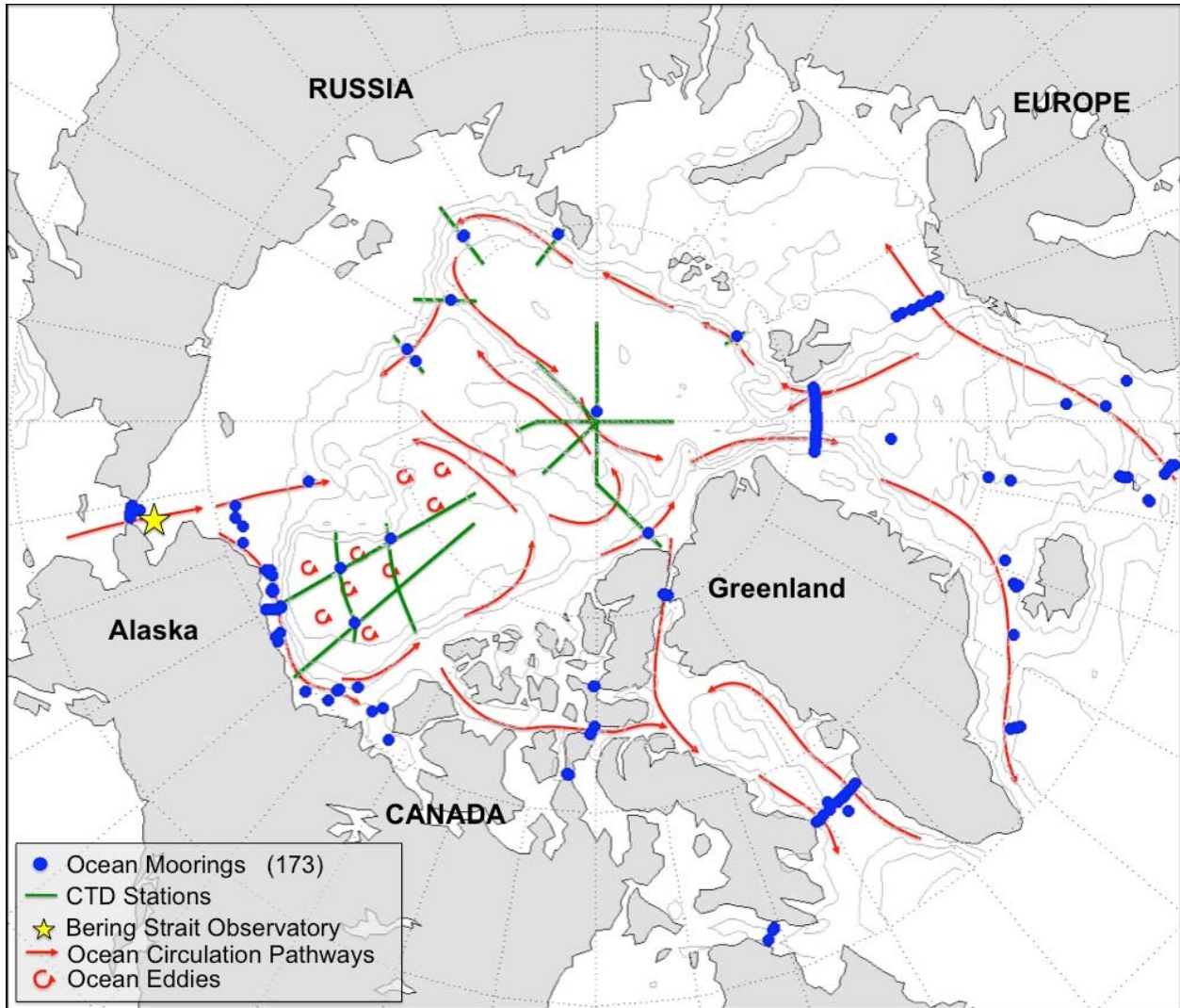


Figure 2. (above) Map of moorings deployed during the IPY at locations that were determined to be critical through a variety of review and decision processes. Locations of CTD sections conducted in August-September 2008 (green lines) are shown to demonstrate activities associated with ship-based and airborne observations.