Arctic Observing Summit 2014

2nd Biennial Arctic Observing Summit Helsinki, Finland University of Helsinki 9 – 11 April 2014

Day 1 – Wednesday, 9 April 2014

Introduction

8:15 *Welcome and Opening Comments*

Keynote 1: AOS Overview and Rationale

Keynote 2: Observing Systems: Arctic to Global perspectives

Session 1. Stakeholders and Arctic Observation

The session will explore stakeholder needs for and experiences with Arctic observing activities including: observing system design, implementation and operation, knowledge transfer and dissemination of information. Views from an array of communities, including research, government agencies, indigenous peoples and industry will be presented in keynote talks and through panel discussion. There will be a Focus Presentation with discussions on observing experiences and perspectives from European indigenous peoples, including co-production of knowledge (traditional and scientific) for purpose of salmon management in northern/arctic Europe.

10:45 *Keynote 3*: Indigenous perspectives on integration in arctic observing activities.

Focus Presentation: Best practices and community-based observing.

Focus Dialogue: Knowledge co-production and salmon management.

12:00-13:00 *Lunch Break*

Session 1. (Continued)

13:00 *Panel*: Engagement of a Broad Stakeholder Community in Arctic Observing

How can stakeholder knowledge be utilized for observing system design, implementation of observing infrastructure and observing programs, and and to facilitate long-term operation, including dissemination and use of collected information and data?

Session 2: Science Coordination for Improved Arctic Observing

The session will focus on major coordination efforts to support Arctic observing from international and national perspectives. It will include an introductory keynote, highlighting the need for better coordination and efficiencies, followed by short presentations by panelists and a moderated panel discussion.

15:15 *Keynote 4*: Science coordination for an Arctic Observing System *Panel*: Approaches to coordination

Day 2 - Thursday, 10 April 2014

Session 3. Technology and Innovation

This session will address ways to improve and promote dialogue and cooperation between the arctic research community and those engaged in the innovation and development of environmental observing technologies.

8:15 *Introduction:* 'Current Issues and the Future of Polar Technology'

Topics for coverage include:

- 1. New frontiers for remote operated and unmanned aerial vehicles (drones, robotics);
- 2. Reducing the environmental footprint of data collection in the field;
- 3. State-of-the-art in Deep Field communications

Panel: Discussion will address the barriers sharing technology in arctic research and the technologies that need to be developed to advance knowledge.

12:00 Lunch and Poster Session

Lunch will co-occur with a poster and display session to allow participants and attendees to highlight their work in any area related to polar and observing technologies. There will an opportunity to mingle with other participants.

Session 4. Remote Sensing

12:45 *Keynote*: Topic TBA

Panel: Panel discussion will focus on key issues of remote sensing for arctic observation including:

- 1. Readiness for operational use of arctic satellite data;
- 2. Co-financing of missions;
- 3. Ways in which space-based observing may serve the people on the ground;
- 4. Identification of the most pressing observing requirements of the scientific community.

Session 5: Data Panel

Improved data management to facilitate maximal access and use remains high on the arctic research agenda highlighted recently during both the International Polar Year, and throughout Arctic Observing Summit 2013. Data management is a cross-cutting issue and as such panelists will consider matters raised during both the AOS 2013 and the preceding sessions of the AOS 2014. Panelists will present various perspectives and insights on established or emerging solutions to the challenges of mobilizing data, information and knowledge derived from global, and arctic/polar observing systems.

15:30 *Panel:* Topics range from innovative policy solutions, to emerging coordination networks, to relevant advances in technology and knowledge sharing and transfer.

Day 3 - Friday, 11 April 2014

Session 6. Engaging with Policy Makers and Implementation Agencies

9:00 Recommendations
Results from the AOS 2014

Panel: Panelists representing upper levels of governments and governing bodies will address the question "Why do we need an Arctic Observing System?"

Panelists are asked to consider five key needs identified during the AOS 2014 and presented during the prior Conclusion and Recommendations discussion. Specifically they will reflect on:

- 1. Challenges in addressing identified needs; and
- 2. How to improve the situation so as to address the needs raised:

Panelists' Pledges: What will you do to improve arctic observation?

12:00 *Conclusion*