

ARCSS Program | Overview

ARCSS Note #11 (20 November 2007): ARCSS Committee Meeting Notes

The ARCSS Committee (AC) met in Alexandria, Virginia at the Embassy Suites Hotel on Monday and Tuesday, 1–2 October 2007 for their semi-annual meeting; see the [meeting website \(http://www.arcus.org/ARCSS/2007_oct_arcss/agenda.html\)](http://www.arcus.org/ARCSS/2007_oct_arcss/agenda.html) for the agenda, PowerPoint presentations, unedited video, and participant list. The meeting began with programmatic updates from National Science Foundation (NSF) Arctic Division staff and updates on ARCSS research activities from AC members. Other discussion topics included the status of new research efforts, planning for an arctic-wide science meeting, development of an Arctic Synthesis Collaboratory, status and priorities within Human Dimensions of the Arctic System (HARC), and community science planning needs. Reports on the [Study of Environmental Arctic Change \(http://www.arcus.org/search/index.php\)](http://www.arcus.org/search/index.php) (SEARCH), ARCSS data management activities, and International Arctic Research Center (IARC) strategic planning were presented by invited guests.

The AC meeting concluded on Tuesday, 2 October with an open community session focused on ARCSS science planning activities and long-term community needs. The open session included comments from NSF staff about the state of ARCSS research and an update from the AC on the vision and goals for the synthesis workshop, HARC synthesis, and community planning activities and developments. An archive of the open session webcast can be viewed on the [meeting website \(http://www.arcus.org/ARCSS/2007_oct_arcss/agenda.html\)](http://www.arcus.org/ARCSS/2007_oct_arcss/agenda.html).

Following the AC meeting, the ARCSS Synthesis Workshop was held from Tuesday through Thursday, 2–4 October with nearly 80 participants in attendance. The goal of the ARCSS Synthesis Workshop was to formulate approaches and plan activities to achieve coordination, integration, and synthesis among existing ARCSS synthesis projects and related efforts. Project presentations, reports from plenary sessions and breakout groups, and the archived webcast can be found through the [Synthesis Workshop agenda page \(2007 oct sass/agenda.html\)](http://www.arcus.org/ARCSS/2007_oct_sass/agenda.html).

The week ended with a HARC Synthesis Workshop on Friday, 5 October, designed to encourage and foster synthesis-focused communication and interaction among human dimensions researchers in ARCSS and other NSF programs. Project presentations, working group reports, the archived webcast, and other materials are available on the [HARC Synthesis Workshop website \(http://www.arcus.org/harc/2007_oct_harc/agenda.html\)](http://www.arcus.org/harc/2007_oct_harc/agenda.html).

Below is a summary of the discussions and decisions from the AC meeting. The ARCSS Committee encourages your input on any aspect of the ARCSS Program planning; please contact any member of the [committee \(http://www.arcus.org/ARCSS/committee.html\)](http://www.arcus.org/ARCSS/committee.html) with your thoughts and suggestions. Additional follow-up materials from the HARC and ARCSS Synthesis Workshops will be circulated to the ARCSS List in the coming weeks.

News from the National Science Foundation (NSF):

Neil Swanberg, ARCSS Program Director, briefed the AC on recent events at NSF:

- The continuing resolution in Congress creates difficulties in developing new programs and activities. NSF has indicated interest in the Seasonality/Surface Transformations of the Arctic (STATE) effort that has emerged from ARCSS Communities of Practice, but no decisions will be made until federal budget issues are resolved.
- Since the issue of arctic science data management reaches beyond the ARCSS Program, data coordination across projects, programs, and agencies needs to be addressed.
- NSF staff suggested the possibility of organizing the next ARCSS All-Hands meeting as a broader, NSF Arctic Division-wide meeting.
- The synthesis activities occurring as part of ARCSS are viewed as successful; the next steps for larger integration activities need to be defined.
- NSF as an agency is interested in moving forward with high profile, “transformative” science, see: <http://www.nsf.gov/pubs/2007/in130/in130.jsp> and http://www.nsf.gov/news/speeches/bement/07/alb070104_texas.jsp

Simon Stephenson, Arctic Sciences Division Director, reviewed the status of the NSF Arctic Division:

- The Arctic Division received an increase from \$70M in FY2006 to \$90M in FY2007, primarily because of IPY, and has requested \$96M for FY2008. The Arctic Natural Science (ANS) portion of the budget for '07 increased from \$13M to \$16M. Education also received an increase.
- The ARCSS budget did not increase; the ARCSS Program budget is being carefully managed in regards to out-year commitments to ensure future flexibility.
- The "Understanding Environmental Change in Polar Regions" projects of the NSF IPY 2007 solicitation were funded from the ARCSS Program budget.
- There is an increasing awareness that NSF should play a role in long-term monitoring of the Arctic.

ARCSS Research: Review of Status and Progress:

Freshwater Integration (FWI):

- Jennifer Francis presented a status report of FWI. Now in its fifth year with 22 funded projects, the FWI has resulted, to date, in 125 publications and high impact synthesis papers, hundreds of presentations, and has trained more than 24 graduate and undergraduate students. The hydrologic cycle links every major component of the arctic system and there is evidence that this cycle is intensifying.
- More information on FWI activities can be found at the [Arctic-CHAMP website](http://www.arcus.org/ARCSS/2007_fw_i/champ/).

Study of the Northern Alaska Coastal System (SNACS):

- Matthew Sturm presented the progress of SNACS. A small synthesis meeting was held in Santa Fe, NM at the end of July 2007. The group is working on a synthesis paper as a product of the workshop focused on changes in seasons and timing of events leading to changes in the arctic system.
- More information on SNACS is available through the [SNACS website](http://www.arcus.org/ARCSS/2007_snacs/).

Human Dimensions of the Arctic System (HARC):

- Maribeth Murray, HARC Core Office Director, discussed the need for better integration of human dimensions (HD) research into ARCSS projects. In addition, there are a large number of HD projects funded by other areas of NSF that would benefit from greater integration with OPP-funded projects. The [HARC Synthesis Workshop](#) on Friday, 5 October was planned to facilitate such integration.
- More information on HARC can be found on the [HARC website](#).

Shelf-Basin Interactions (SBI) Phase III:

- Don Perovich presented a brief update on SBI and the completion of Phase II activities. SBI projects have produced a substantial amount of publications and presentations.
- NSF noted that only 10 project proposals were submitted to the SBI Phase III Announcement of Opportunity; 5 projects were funded.
- More information on SBI is available through the [SBI website](#).
- SBI data are available through the [NCAR Earth Observing Laboratory \(EOL\) website](#).

Synthesis of Arctic System Science (SASS I and II):

- Mark Serreze discussed the current state of SASS. NSF has released two solicitations for projects focused on arctic system science. The first solicitation resulted in nine projects (SASS I), and the second solicitation resulted in eight projects (SASS II); all the funded projects focused on connections and synthesis of arctic system processes.
- The 2–4 October ARCSS Synthesis Workshop was planned to determine methods, approaches, and an organizational structure to advance cross-project integration and synthesis among the SASS projects as well as related synthesis efforts.
- More information about SASS and the Synthesis Workshop can be found at the [workshop website](#).

Related Programs and Activities:

Study for Environmental Arctic Change (SEARCH):

- An update on SEARCH activities was presented by Peter Schlosser, SEARCH Science Steering Committee (SSC) Chair.
- Thirty-two projects supporting the SEARCH Observing Change element (through the Arctic Observing Network) have been funded. Several "Understanding Change" projects were funded through the second NSF IPY solicitation focus area of "Understanding Environmental Change in the Polar Regions."
- The SEARCH science plan will be revised in 2008 and will be synchronized with the development of the International Study of Arctic Change (ISAC) science plan.
- Initial planning has begun for a "State of the Arctic" conference in early (January-February) 2009.
- The [SEARCH presentation](#) can be found on the agenda page for the ARCSS Committee Meeting; more information on SEARCH can be found through the [SEARCH website](#).

ARCSS Data Management:

- An update on ARCSS data management activities was presented by Jim Moore, NCAR/Earth Observing Laboratory.
- NCAR/EOL has been funded to provide ARCSS interim data management support, until a longer-term solution for arctic data management is in place.
- Interim data management plans by NCAR/EOL include:
 - Develop ARCSS data management web pages (simple extensions of existing formats) at EOL
 - Provide links to NSIDC and other ARCSS data locations
 - Prepare and distribute introductory letter to all ARCSS PIs introducing new approach and structure
 - Develop inventory of present and known future ARCSS projects in ARCSS, ANS, AON (if applicable) and possibly IPY and Arctic Social Sciences projects
 - Provide guidelines to PIs for metadata generation, documentation preparation, and dataset formatting
- The [data management presentation](#) can be found on the AC meeting webpages. More information on [EOL/NCAR](#) is available through their [website](#).

International Arctic Research Center (IARC):

- An update on IARC activities and strategic planning was presented by Larry Hinzman, IARC Director
- IARC's next phase (2007-2012) of activities will focus on a transition from a project-based center to international synthesis activities.
- IARC's scientific objective for the next phase is to reduce uncertainties in predictions of future climate, which will require:
 - improved understanding of processes and feedbacks, including attribution of change
 - integration and synthesis across disciplines and across nations
- Hinzman and the ARCSS Committee agreed to coordinate relevant synthesis-related activities and planning as appropriate
- The [IARC presentation](#) can be found on the AC meeting website. For more information on IARC, visit the [IARC website](#).

Science Planning Activities:

Surface Transformations in the Arctic Environment (STATE):

- The STATE Community of Practice that has developed over the last few years (formerly titled "Near-Surface Processes") has produced a draft Implementation Plan focused on understanding the trajectories and impacts of change on the Arctic's "surface"—i.e., the snow, ice, vegetation, and human components.
- The concept of "seasonality" has been recognized by the community as a key concept within the larger STATE framework. Subsequently, the ARCSS Committee has identified Seasonality as an emerging research priority in the ARCSS Program and has recommended to

NSF a future Announcement of Opportunity focused on "Changing Seasonality in the Arctic System."

- A community workshop to advance STATE implementation will be proposed to NSF for Spring 2008.
- More information on STATE can be found through the [Communities of Practice webpage](#).

Ocean-Atmosphere-Sea Ice-Snowpack (OASIS):

- The Ocean-Atmosphere-Sea Ice-Snowpack (OASIS) Interactions Community of Practice (Co-oP) is lead by Patricia Matrai, Bigelow Laboratory for Ocean Sciences.
- The Co-oP drafted a supplemental science plan that outlines topics through which OASIS science can be integrated with existing and emerging ARCSS efforts.
- OASIS representatives were invited to the Synthesis Workshop to facilitate integration and to plan next steps; the ARCSS Committee will continue to work with OASIS in this regard.
- More information about OASIS can be found on the OASIS [website](#).

Planning for an Arctic-wide Science Workshop:

- There has not been an ARCSS All-Hands workshop since 2002 and one is needed.
- This meeting should be combined with other Arctic research areas such as ANS, SEARCH, BEST. It should showcase the great science, but also produce more integration and synthesis among these groups to increase their overall impact, as well as to identify key gaps and emerging scientific priorities for arctic research.
- NSF will need to review a budget for this activity, but it will likely be funded from the ARCSS budget.
- Dates were discussed from late 2008 to spring 2009. No decision was made, except that more discussion is needed on this topic and soon.

Arctic Synthesis Collaboratory:

- Planning continues for creation of an Arctic Synthesis Collaboratory to foster interactions among arctic scientists and other stakeholders; integrated data analysis and modeling activities; outreach, education, and policy-relevant resources; and training and development of the arctic science community.
- Several events are being planned to gather input and expertise from the arctic research community for Collaboratory implementation, including:
 - An open eTown Meeting is scheduled for Wednesday, 5 December 2007, at 9:30 a.m. AKST
 - A Town Hall Meeting on Monday, 10 December 2007, at 7:30 p.m. at the Fall AGU Meeting in San Francisco.
- A community workshop on Collaboratory implementation is in the initial stages of planning for Spring 2008.
- Details on the upcoming events will be distributed via the ARCSS Listserve. More information on the Synthesis Collaboratory concept can be found in the [7 May 2007 Message](#) from the ARCSS Committee as well as the webpages for the April 2007 workshop on "[New Perspectives through Data Discovery and Modeling](#)".