ARCSS Program | Message from the ARCSS Committee

ARCSS Note #10 (29 June 2007): ARCSS Committee Meeting Notes

The ARCSS Committee (AC) met in Washington, D.C. at the Washington Plaza Hotel 2–4 May 2007 for their semi-annual meeting (see the meeting webpage (http://www.arcus.org/ARCSS/2007 may dc/index.html) for agenda and participant list). The meeting began with programmatic updates from NSF and updates on ARCSS research activities from AC members. Other discussion topics included ARCSS data management, ARCSS research activities, and community planning priorities. The ARCSS Committee welcomes your input on any aspect of ARCSS Program planning; please contact any member of the committee (http://www.arcus.org/ARCSS/committee.html) with your thoughts.

News from the National Science Foundation (NSF):

- Neil Swanberg, ARCSS Program Director, briefed the AC on recent events at NSF:
 - International Polar Year (IPY) 2007 Announcement of Opportunity (AO) (NSF 07-536) submissions are being processed, with 132 projects proposed.
 - Several NSF proposal review panels were scheduled for June 2007, including the International Polar Year (IPY), Western Arctic Shelf-Basin Interactions Phase III (SBI III), and Bering Ecosystem Study (BEST).
 - Janet Intrieri announced that she would be leaving the ARCSS Program position at NSF on 4 May 2007 and has accepted a
 position at the National Oceanic and Atmospheric Administration (NOAA) Earth System Research Laboratory.
- Martin Jeffries, Arctic Observing Network (AON) Program Director, reviewed the status of AON implementation:
 - 18 projects have been funded for ~\$26M over three years.
 - An AON PI meeting was held 28–30 March 2007 in Boulder, with a report expected July 2007.
 - Other news included NOAA's interest in participating in AON leadership with NSF, as was discussed at an Interagency Arctic Research Policy Committee (IARPC) meeting. A draft document is in the works on plans and requirements to move forward.
 - More information about the AON projects can be found on the Cooperative Arctic Data and Information Service (CADIS) website.
- The start of IPY has provided an opportunity to launch the Antarctic Integrated and System Science (AISS) effort. Kelly Falkner, AISS
 Director at NSF, reviewed program milestones and plans for the future:
 - A planning workshop for AISS was scheduled for 13–15 June 2007 at NSF in Washington, D.C. More information about the workshop is available on the <u>AISS workshop webpage</u>.
 - Input to AISS is sought from the arctic community on development of integration and synthesis; suggestions from the ARCSS community are welcomed.
 - The ARCŚS Committee was invited to send a representative to the AISS workshop to provide perspective and background on the development of the ARCSS Program. (Josh Schimel, AC chair, gave a presentation about ARCSS, discussing its history, successes, challenges, and lessons we've learned about managing initiative-driven research; the presentation is available here.)

ARCSS Data Management:

NSF Developments:

- Neil Swanberg reported that as the current ARCSS Data Coordination Center (ADCC) award expires this year, NSF is exploring
 possibilities for an interim data center that can serve until a longer-term permanent data center is in place. A longer-term solution will be
 put in place only after discussion with the user community.
- NSF will be developing text for the 2009 budget request in June 2007, and the Office of Cyberinfrastructure (OCI) may release AO(s) relevant to ARCSS data coordination effort. (The Cyberinfrastructure Training, Education, Advancement, and Mentoring for Our 21st Century Workforce AO was released in May, with a due date of Monday, 27 August 2007.)

Report on "Arctic System Synthesis Workshop: New Perspectives through Data Discovery and Modeling":

- Charlie Vörösmarty, workshop Organizing Committee (OC) chair, briefed the AC and NSF (Simon Stephenson, Neil Swanberg, Janet Intrieri, and Martin Jeffries) on this recent, successful workshop. More than 50 invited and self-nominated community participants attended, representing broad expertise and a variety of disciplines, including perspectives on: natural, social, and physical sciences; field-based, remote sensing, and modeling approaches; science-policy linkages; education and outreach; and data management. In addition, nearly 35 community members joined the workshop via webcast and an online bulletin board.
- Vörösmarty summarized community discussions on data management that have taken place since the 1996 ARCSS All-Hands
 Workshop and presented an outline of the outcome desired from this workshop—a community-reviewed report on key issues,
 opportunities, challenges, lessons-learned, and ideas for steps forward, with specific recommendations to NSF regarding new data
 management approaches.
- A summary of workshop discussions was sent to the ARCSS community via the ARCSS Listserve and ArcticInfo on 8 May 2007 and is
 available online as <u>ARCSS Note #9</u>; a workshop summary article based on the ARCSS Note was accepted by EOS for publication.
- A draft of the workshop report is expected to be available for community review this fall.
- More information about the workshop, including the agenda, participant list, and presentation powerpoints, is available on the workshop webpage.

Surface Transformations in the Arctic Environment (STATE) Community of Practice (Co-oP) Implementation:

has developed its planning to the point that the AC believes it is ready to move toward becoming a funded initiative. The AC is working with the Co-oP to make this transition.

- A small writing group met following the December 2006 AGU meeting and drafted the "Surface Transformations in the Arctic
 Environment (STATE)" Implementation Prospectus (STATE documents and membership are available via the <u>Co-oP webpage</u>). As it is
 currently envisioned, the key points that drive STATE are:
 - The most pronounced changes in the Arctic are happening at the surface: sea ice loss, glacial melt, thermokarst formation, and vegetation change.
 - Those changes are occurring faster than anticipated.
 - Observed changes are linked and are driven by similar feedback mechanisms.
 - They directly affect and are influenced by human life and activity in the Arctic and elsewhere.
- A STATE community workshop is tentatively planned for fall 2007 to gather broad community input, refine the science goals and
 objectives, and further develop an implementation strategy. The AC is developing a description of the workshop and will post additional
 STATE background materials on the ARCSS website for the community to access, including a short document distilling the basic themes
 and science goals of STATE.
- The research community is encouraged to send STATE-relevant proposals to the general <u>Arctic Division announcement</u> (proposals
 due 10 November 2007). Proposals demonstrating STATE science in action could enhance understanding and support for STATE
 research themes at NSF.

Recent Communities of Practice Submissions:

Two Co-oP concept papers were recently submitted and are available through the **Co-oP webpage** (http://www.arcus.org/ARCSS/cop.html):

- Ocean-Atmosphere-Sea Ice-Snowpack (OASIS) Interactions. Co-oP lead is Patricia Matrai, Bigelow Laboratory for Ocean Sciences; Don Perovich will serve as the AC liaison.
- Arctic TRACE: Tracking Routes of Atmospheric Components in the Environment. Co-oP lead is Thomas Douglas, Cold Regions Research and Engineering Laboratory; Joe McFadden will serve as the AC liaison.

Communities of Practice (Co-oP) Process:

- The Co-oP process for developing ARCSS science priorities was discussed at the AC meeting.
- Short and long-term ARCSS science goals are under discussion and are being evaluated in context of current agency and community priorities as well as expected results from a future ARCSS All-Hands Workshop (tentatively planned for fall 2008).
- The AC is exploring approaches to make community-driven planning as effective as possible and evaluating what has worked in the past, what is (and is not) working in the present, and how the Co-oP process can be more effective. Although STATE is a Co-oP that is likely developing into an initiative, thus demonstrating one community planning process that has advanced through this system, we believe that the process needs improvement to better integrate a broader community into the planning process. The ARCSS Committee is seeking community input on how to improve or change the planning process.

ARCSS Research: Review of Status and Progress:

Fresh Water Integration (FWI):

- Charlie Vörösmarty presented a status report of FWI. As the original 18 projects near completion, there have been over 100 peer-reviewed publications, more than 100 PI and co-PI presentations at national and international meetings, 24 graduate and undergraduate FWI students participating in research, and numerous outreach activities. FWI research on sea ice, river flows, precipitation/evaporation, and ocean dynamics provides evidence that the freshwater cycle has intensified.
- The final annual All-Hands FWI meeting was set for 6–8 June 2007 at Bodega Bay, CA.
- Planned activities include an Arctic-CHAMP Capstone Synthesis Workshop in 2008 and several interdisciplinary publications.
- More information on FWI activities can be found through the Arctic-CHAMP website.

Study of the Northern Alaska Coastal System (SNACS):

- An upcoming small synthesis retreat is planned for late July in Sante Fe, NM, the goal of which is to produce an EOS or Scientific American-type paper. Tom Douglas (CRREL) is the contact for workshop planning.
- More information on SNACS is available through the **SNACS website**.

Human Dimensions of the Arctic System (HARC):

- Maribeth Murray (UAF), HARC Core Office director, is reviewing existing ARCSS research (projects and groups of projects) to assess
 the state of human dimensions research in ARCSS.
- An open meeting on "Human Dimensions Research in the Context of IPY" was planned for 24 May 2007 in conjunction with the Arctic Forum in Washington D.C. to solicit input on HARC planning activities. (The HARC meeting on 24 May was attended by 19 people. A summary of the meeting discussions and planned HARC activities will be available soon on ArcticInfo and posted on the <u>HARC</u> <u>website</u>.)

Western Arctic Shelf-Basin Interactions Phase III (SBI III):

- An SBI-focused <u>NSF Announcement of Opportunity</u> to support the final phase of SBI was released in fall 2006, focused on data
 integration, synthesis, and modeling activities. The solicitation resulted in 24 proposals for ten projects. The NSF proposal review panel
 convenes in June 2007.
 - More information on SBI is available through the <u>SBI website</u>.

SBI data are available through the <u>NCAR Earth Observing Laboratory (EOL) website</u>.

Synthesis of Arctic System Science (SASS) Projects:

- Two NSF Announcements of Opportunity for Synthesis of Arctic System Science (SASS) have resulted in the funding of a total of 17
 projects.
- Further information on the funded SASS projects is available here.
- Planning of a joint SASS I and II face-to-face PI meeting is underway for early fall 2007.

ARCSS All-Hands Workshop Planning:

An initial planning committee met and discussed the timing and focus for the next ARCSS All-Hands Workshop. The AC is discussing the
possibility of a combined ARCSS All-Hands Workshop and SEARCH State of the Arctic meeting in fall 2008.

Study of Environmental Arctic Change (SEARCH):

- A SEARCH update was given at the AC meeting; Peter Schlosser was unable to attend but sent a document outlining SEARCH developments, including:
 - SEARCH Implementation over 18 projects funded through the first NSF IPY AO (the Arctic Observing Network component) support the "Observing" component of SEARCH. The second NSF IPY AO also will contribute to SEARCH implementation.
 - Planning is ongoing for an update of the SEARCH Science Plan as well as a State of the Arctic Conference for 2008.
 - SEARCH international developments include continuing coordination activities with the EU program DAMOCLES (Developing Arctic Modelling and Observing Capabilities for Long-term Environmental Studies), the International Study of Arctic Change (ISAC), and international observing system planning.
 - More information about SEARCH is available through the <u>SEARCH website</u>.

International Arctic Research Center (IARC):

 Proposed IARC synthesis activities offer interesting opportunities for ARCSS program linkages. The AC will be working with IARC to develop ideas for collaborative activities.

ARCSS Calendar Items:

June 2007

- NSF review panels: International Polar Year (IPY) 2007 (not including "Humans in Polar Regions" subtopic that has proposal deadline of 14 September 2007), Western Arctic Shelf-Basin Interactions Phase III (SBI III), and Bering Ecosystem Study (BEST)
- FWI All-Hands Meeting: 6–8 June, Bodega Bay, CA
- ARCSS presentation at Antarctic Integrated and System Science (AISS) Program meeting: 13–15 June 2007 at NSF in Arlington, VA.

July 2007

- SNACS synthesis workshop, 31 July– 2 August 2007 in Sante Fe, NM.
- Tentative ARCSS eTown Meeting (Date TBD)

August 2007

Tentative ARCSS eTown Meeting (Date TBD)

Fall 2007

- Synthesis of Arctic System Science I & II (SASS) Workshop (Location and Dates TBD)
- · HARC Synthesis Workshop (Location and Dates TBD)
- Surface Transformations in the Arctic Environment (STATE) Community Workshop (Location and Dates TBD)
- ARCSS Committee Meeting (Location and Dates TBD)
- Community review of draft report, "New Perspectives through Data Discovery and Modeling"
- 2007 AAAS Arctic Science Conference: 24–26 September 2007 in Anchorage, AK

November 2007

Proposals in response to the <u>NSF Arctic Research Opportunities AO</u> are due 10 November 2007

December 2007

AGU Fall Meeting: 10–14 December 2007 in San Francisco, CA