

## ARCSS Program | Message from the ARCSS Committee

### ARCSS Note #7 (16 November 2006): ARCSS Committee Meeting Notes

#### What's New with the ARCSS Committee? Notes on the November 2006 ARCSS Committee Meeting

The **ARCSS Committee** (<http://www.arcus.org/ARCSS/committee.html>) (AC) met in Seattle, WA at the Red Lion Hotel November 1-3, 2006 for their semi-annual meeting (see the **meeting webpage** ([http://www.arcus.org/ARCSS/2006\\_Nov\\_Seattle/](http://www.arcus.org/ARCSS/2006_Nov_Seattle/)) for agenda and participant list). It was a busy three days as we discussed the transition of the ARCSS Program from a focus on synthesis to targeted thematic efforts addressing arctic system issues. In short, the AC feels that past efforts related to synthesis, data and modeling, and community interactions are poised to bear fruit, but will only do so if the community is engaged. We seek feedback from the community on all of the news and issues discussed below; please do not hesitate to communicate your opinions! Without community input the ARCSS Program cannot function. A series of meetings and activities is in the works that we hope will keep ARCSS science at the cutting edge of arctic research during IPY and beyond.

#### News from the National Science Foundation (NSF) ARCSS Program

Neil Swanberg (ARCSS Program Director) and Janet Intrieri (ARCSS Associate Program Manager) briefed the AC on recent events at NSF:

- **Martin Jeffries** (UAF) will be coming to NSF as an Intergovernmental Personnel Act (IPA) Assignment and will be the new **Arctic Observing Network** (AON) activity program director. One of his key efforts will be to coordinate AON development across agencies.
- The results of the **first NSF IPY competition** should be announced by the end of November 2006. Forty-eight separate project proposals requesting \$67M were submitted to the call. Awards will total approximately \$20-25M.
- A second IPY announcement of opportunity (AO) is planned, with an announcement possible by January 2007. Part of the AO will focus on environmental change, giving opportunities for projects that (i) fill important gaps in AON and (ii) address SEARCH activities related to "understanding" and "responding" to change (see **SEARCH Implementation Plan**). In the draft NSF budget before Congress there is about \$18M for arctic IPY science and logistics. In an election year, however, budgets are uncertain and could change.
- A **Shelf-Basin Interactions** (SBI) Synthesis AO is under discussion at NSF. An announcement by December 2006 is possible.

#### News from Ongoing ARCSS Program Research Activities

**SASS** = Synthesis of Arctic System Science:

- This ARCSS synthesis activity has been underway about 1 year (funded in late 2005) and the **SASS projects** are starting to produce results. PIs from projects funded under the **first AO** met several times electronically and then in **March 2006 for a face-to-face meeting** that was very productive.
- Results from SASS will be presented as part of a special Union session at fall AGU entitled "Polar Regions: Past, Present, and Future Changes and Synthesis of Their Role in the Modern Earth System."
- Projects funded under the **second AO** have recently been announced.
- The ARCSS Committee discussed the merits of a joint meeting of all SASS PIs (from first and second AOs) and a meeting in March or April 2007 was recommended.
- There was a consensus that it would be optimal if at least part of the joint meeting could be open to all interested parties, not just funded SASS projects, in order to continue to foster arctic system synthesis both within and outside of ARCSS.

**SNACS** = **Study of the Northern Alaska Coastal System** (<http://www.arcus.org/arcss/snacs/>):

- SNACS projects are entering their 3rd and final year. A workshop was held in March 2006 at which cross-linkages between projects were explored.
- This workshop led to a number of collaborative papers that are in preparation as well as a special session that will be held on Thursday and Friday (Dec. 14-15) at AGU (San Francisco December 2006). One theme that links several SNACS projects relates to sediment plumes, freshwater delivery, and near-shore productivity.
- More information is available at the **SNACS Website**.

**FWI** = **Fresh Water Integration Study**:

- This program is now entering its 5th year.
- A special issue of JGR-Biogeosciences is in preparation (papers in review); the group organized a Union session at AGU '05.
- The Swedish Embassy in Washington, DC has expressed interest in hosting an event related to climate change and the Arctic, with a focus on water and the environment, and is working with ARCUS on the possibility of co-sponsoring the Arctic Forum in May 2007. The AC discussed the possibility of using the opportunity to showcase the results of FWI. ARCUS will keep the AC apprised of discussions with the Swedish Embassy regarding the Arctic Forum, and the AC will explore the possibility of participation with the FWI community. The event would be in April or May 2007 and would give both ARCSS and FWI excellent visibility.
- The second IPY Arctic-HYDRA International Planning meeting took place in St. Petersburg, Russia on 2-3, November 2006. The meeting was coordinated by the NSF-ARCSS Arctic-CHAMP Office and involved 20 participants from the US and other Nordic countries. The Arctic-HYDRA concept builds on many of the ideas developed through the Fresh Water Integration study and takes these into the international realm. The meeting was devoted to further developing the Arctic-HYDRA science plan, which is built around establishing four components: a Monitoring Network; Long-term Hydrological Observatories at a series of individual watersheds; Synthesis through integration, modeling and assessment; and Outreach to policy experts and the public.
- If you have ideas on this or other ways to publicize FWI research, please contact Jonathan Pundsack, Arctic-CHAMP Office [jonathan.pundsack@unh.edu](mailto:jonathan.pundsack@unh.edu)

**HARC** = **Human Dimensions of the Arctic** (<http://www.arcus.org/harc/index.html>)

- A stimulating HARC session was held at the AAAS State of the Arctic meeting in Fairbanks in October 2006. One of the most intriguing aspects of that session was the comparison of human dimensions research in the Arctic and in Africa.

- Other upcoming activities include sponsoring a travel award for student research presentation(s) at appropriate meeting(s) during IPY, planning for a HARC presence at several national-level social science meetings to further capacity building, and a HARC information and networking session in the **Arctic Community Meeting Space** at the AGU Fall meeting.
- The AC discussed their continued desire to see HARC-type research well integrated into ARCSS projects and proposals. Progress has been slow but steady, with the HARC project office, now at UAF, an important catalyst in the process. The AC agreed that we want to encourage this integration through a number of activities, including continuing to work closely with the HARC project office. The AC recommended that the ARCSS Program support the HARC project office for at least an additional year.
- The HARC Steering Committee will meet via teleconference in December to plan future activities. Community input can be directed to Maribeth Murray ([ffmsm@uaf.edu](mailto:ffmsm@uaf.edu)) or any one of the HARC SC members listed online at <http://www.arcus.org/harc/management.html>. More information on HARC activities can be found at <http://www.arcus.org/harc/index.html>.

### Discussion of Future ARCSS Activities

**Data and Synthesis (message 112006.html):** The AC believes strongly that fostering more creative and extensive synthesis across ARCSS programs and projects will require new modes of dealing with data, modeling output, and integration of real-time output from observing systems like AON. Discussions at the meeting centered on new modes of data ingestion, archiving, cyber-structure for data sharing, and so on. The AC reiterated the importance of engaging a broad community (not just arctic researchers) in exploring what types of augmentation and improvements will be needed to meet the challenges of IPY and beyond.

- The AC has held several community discussions on data coordination and management needs, including an **eTown Meeting in March 2006**.
- To bring focused expertise to bear on the challenges, the AC is conducting a workshop on arctic data needs, with a focus on data infrastructures to support synthesis and modeling. The workshop is scheduled for 8–10 January 2007 in Santa Barbara, CA and will be co-chaired by **Charles Vörösmarty** and **David McGuire**.
- **The primary goal for this small workshop** is to bring together representatives of the data provider, data user, and information technology communities to identify innovative approaches for uniting data management and assimilation, recent developments in technology, and modeling that will advance synthesis studies of the arctic system.
- We regret that the workshop size is limited by funding and space, so the AC plans to hold several online "streamed" sessions during and after the workshop to allow for broad community participation through electronic means. The workshop agenda will be available in December 2006. Persons interested in participating in the electronic sessions will be able to register online. More information will be forthcoming through the **ARCSS Listserve**.
- The AC also will sponsor an open Town Meeting at the AGU Fall Meeting in San Francisco to discuss arctic data needs and challenges. This open meeting is scheduled for Thursday, 14 December starting at 6:30 p.m. More information will be distributed on the ARCSS Listserve in a few days.

**Programs:** The AC continues to encourage groups to submit ideas as the basis for **Communities of Practice** (<http://www.arcus.org/ARCSS/cop.html>). This is the method the AC has developed through which science ideas that may ultimately form the basis of programs in ARCSS, can be submitted, vetted, and improved. The process is designed to be open, transparent, and collaborative. Once ideas are submitted, the AC works with the groups to improve and facilitate the maturation of the idea until a project or program is possible. Both mature and nascent ideas are welcome.

Currently, three (3) Communities of Practice are interacting with the AC. The most mature of these is the Near Surface Processes Co-oP, chaired by **Andrea Lloyd** (<http://community.middlebury.edu/~lloyd/>). This Co-oP has submitted an exciting cross-cutting, thematic-based prospectus that focuses on exploring how changing surface conditions (ice, snow, vegetation, infra-structure, human patterns of population) affect the linkages between arctic system components. A draft prospectus is available through the **Co-oP webpage** (<http://www.arcus.org/ARCSS/cop.html>). This group has worked with the AC over the past several years to develop the plan and has also held a **community eTown Meeting** ([http://www.arcus.org/ARCSS/ETM/January\\_06/surface\\_dynamics/index.html](http://www.arcus.org/ARCSS/ETM/January_06/surface_dynamics/index.html)) during the development process. The ARCSS Committee will be working to develop the prospectus into a set of recommendations to NSF for one or more announcements of opportunity. Community input on the prospectus is requested. Interested persons should contact Andrea Lloyd at [lloyd@middlebury.edu](mailto:lloyd@middlebury.edu) (<mailto:lloyd@middlebury.edu>).

There was discussion of why the community response to the Co-oP method of developing ARCSS ideas has not been more enthusiastic. Possible reasons ranged from confusion about the process, too much on people's plates during the run-up to IPY, failure by the AC to get the word out sufficiently, or the possibility that this is not a functional approach. The AC plans to greatly increase its efforts to communicate how the process can benefit the community, while at the same time making the process of submitting ideas easier. The AC is also working on a number of other ways to support community science planning and encourage the continued development of arctic system science.

Several ideas were explored that might improve communication and participation. These included face-to-face workshops, teleconferences, reserved workrooms at AGU and other major arctic meetings, and Co-oP brainstorming sessions at ARCSS-related meetings. It was noted that there is no obvious mechanism to fund medium-sized programs that fall between a single proposal and a large, coordinated, multi-year/multi-phase program. In the end, it was recognized that increased communication between the AC and the community was essential. *Please take the time to talk to us about this issue as the system will not work without you.*

During the open community session of the **March 2006 AC Meeting** ([http://www.arcus.org/ARCSS/2006\\_Seattle/index.html](http://www.arcus.org/ARCSS/2006_Seattle/index.html)) there was a strong recommendation from researchers present that the third ARCSS All-Hands Meeting be held in the near future. The AC discussed this recommendation and the trajectories of the various funded ARCSS activities and developing programs and agreed to plan for a Fall 2007 All-Hands Workshop. The AC felt that this would be the appropriate time with IPY well underway and a number of ARCSS projects showing results. Venue and format for the meeting were discussed and an initial planning group was formed. Participation in the planning committee will be broadened after the initial discussions.

The ARCSS Committee also discussed rotation off the committee and the recruitment of new members. **Mike Steele** (<http://psc.apl.washington.edu/pscweb2002/Staff/steele/steele.html>), **Maribeth Murray** (<http://www.uaf.edu/anthro/FacultyPages/MSM.html>), and **Joe McFadden** (<http://www.cbs.umn.edu/eeb/faculty/McFaddenJoseph/>) are new members who joined the committee in mid-summer 2006. This was their first face-to-face meeting with the AC. One seat remains vacant, for which the AC hopes to recruit a policy researcher. If you have

recommendations, please contact AC chair **Josh Schimel** (<http://www.lifesci.ucsb.edu/eemb/faculty/schimel/>) at [schimel@lifesci.ucsb.edu](mailto:schimel@lifesci.ucsb.edu) (<mailto:schimel@lifesci.ucsb.edu>). Several members are expected to rotate off the committee in late 2007 and the AC will be identifying expertise and important areas for ARCSS development for recruitment of new members.

#### **ARCSS Calendar December 2006**

- AGU Fall Meeting: San Francisco, CA, 11–15 December 2006
  - ARCUS has meeting space available for groups working on arctic research science planning activities during AGU. Schedule information is available at <http://www.arcus.org/communitymeetings/AGU2006/index.html>
  - Town Meeting on Arctic Data Coordination Needs and Priorities (Thursday, December 14, 2006; 6:30 p.m.; agenda forthcoming)
- Possible surface processes working group meeting (San Francisco, CA.; 17-18 December 2006; participants TBA)
- A **Shelf-Basin Interactions** (SBI) Synthesis AO is under discussion at NSF. An announcement by December 2006 is possible.

#### **January 2007**

- Data/modeling/synthesis workshop 8–10 January 2007 in Santa Barbara, CA. The workshop website will be announced soon.
- Organizing committee co-chairs are **Charles Vörösmarty** and **David McGuire**.
- A second NSF IPY announcement of opportunity (AO) is planned, with an announcement possible by January 2007.

#### **April 2007**

- SASS I & II meeting (Location and Dates TBD)
- AC meeting immediately before or after; the AC meeting will include an open community session.

#### **October or November 2007**

- ARCSS All-Hands Meeting plus AC meeting (Location and Dates TBD).

#### **Fall/Winter 2007**

- Possible Surface Processes AO; the AC will forward recommendations to NSF, which may or may not be influential in NSF decisions about an ARCSS Program AO.