

Understanding Arctic Change Task Force

Background and Planned Activities

30 November 2009

Background and Summary of Discussions To-Date

Over the past few years, the SEARCH and ARCSS communities have discussed the increasing need for improved integration and coordination between SEARCH and ARCSS and their respective planning processes, as there is considerable overlap in scientific focus and goals. There is now particular overlap between ARCSS synthesis efforts and the “Understanding Change” component of SEARCH, although there are also potential connections between ARCSS and SEARCH’s “Observing Change” and “Responding to Change” components.

After discussion at the 2008 SEARCH Science Steering Committee (SSC) meeting, which included representatives from the ARCSS Committee, the SEARCH SSC and ARCSS Committee agreed to move forward with a joint planning process to align efforts for more efficient scientific planning and implementation and to explore scientific synergies. Discussions amongst the SEARCH SSC, the ARCSS Committee, and NSF have continued since then and culminated in a small face-to-face meeting at NSF in Arlington, Virginia on 15–16 September 2009. This meeting included NSF program directors and representatives of the SEARCH SSC and ARCSS Committee. The discussion ended with consensus recommendations for a series of activities over the next year to join the two efforts to accelerate our understanding of the arctic system and rapid environmental change.

There was broad agreement that we need to restructure the current planning processes to make them more nimble, able to respond to the scientific challenges of rapid arctic change, and incorporate multiple and concurrent approaches to addressing research needs. An approach is required that facilitates a broader array of responses to challenges, from individual proposals, to synthetic workshops, to comprehensive research programs.

The transition to a new model of integrated planning will be charted and guided by an ad hoc task force, comprised of members from the SEARCH, ARCSS, and other relevant communities. With the formation of the task force, the existing ARCSS Committee will cease to exist, and ARCSS-relevant science planning activities will be addressed in the short term by the ad hoc task force. The longer term structure and activities will be developed as the task force activities are completed, with guidance from the broader science community.

Recommendations: SEARCH-ARCSS Effort to Advance Understanding of the Arctic

1. Convene an ad hoc SEARCH-ARCSS “Understanding” Task Force – An ad hoc task force will be convened to lead community activities to establish a long-term vision and provide the scientific framework of a modern effort for understanding the arctic system. This group, with input and review from the broader community, will identify needs for accelerated community capacity-building and understanding of the rapidly changing arctic system.

- Task force membership will be drawn from the ARCSS Committee, the SEARCH Understanding Change Panel, and others as needed. It would be convened by the SEARCH SSC, and chaired jointly by Josh Schimel, Chair of the ARCSS Committee, and John Walsh, Chair of the SEARCH Understanding Change Panel.
- The task force will have a term of one year.

2. Product: White Paper on a Vision of “Understanding Arctic System Change”

A community white paper report will be developed to: (1) Identify key unknowns and key science questions for understanding arctic system change, and (2) Identify the next steps in synthesis activities, methodologies, mechanisms, and approaches to address the identified key science questions.

- The white paper will be developed through a series of community activities, including two meetings and open community comment and review. The final white paper will be completed in December 2010.
- The white paper will include clear linkages to “Observing Change” and “Responding to Change” activities and priorities.
- The audience for the white paper will include the arctic science community, agencies, and stakeholders, perhaps framed as a “multi-layered” document to address different audiences. The SEARCH Science Steering Committee will draw upon the white paper to guide specific activities.

3. General Timeline:

Fall 2009: Convene SEARCH-ARCSS “Understanding” ad hoc task force, establish charge, specific timeline, and activities.

January–February 2010: Initial meeting of task force.

March 2010: Report on initial framework at the State of the Arctic Conference.

Summer 2010: Larger workshop to develop draft white paper.

Early Fall 2010: Draft white paper released and open community input review.

December 2010: Final white paper released.

These activities will result in improved integration between the current SEARCH and ARCSS efforts, advance SEARCH “Understanding Change” activities, and improve our understanding of the arctic system. The process is designed to allow ideas and vision to grow from the scientific community and inform viable research programs. The result will include identification of key scientific and structural needs, with a range of activities emerging to address those needs and a focus on nimble and decentralized structures.