SEARCH Science Steering Committee Meeting



5-6 November 2009 Washington Plaza Hotel Franklin Room, Lobby Level 10 Thomas Circle, NW Washington, DC

Summary Notes and Action Items

A SEARCH Science Steering Committee (SSC) Meeting was held 5–6 November 2009 in Washington, DC. Participants included SEARCH SSC members, IPMC members, and invited guests. The final agenda and PowerPoints are available through the meeting pages at: http://www.arcus.org/search/meetings/2009/ssc nov/index.php (background documents available shortly).

Welcome, Introductions, and Overview of SEARCH Activities and Status

Peter Schlosser, SEARCH SSC Chair

[Will link to PPT and background document]

- The meeting started with a welcome and participant introductions
- Peter provided an overview of SEARCH, including its structure and objectives, the evolution of SEARCH, implementation status, international collaborations, challenges, and immediate SEARCH needs
- Summarized with three points:
 - o SEARCH is still in transition to an operational program
 - The special nature of the program (long-term, cross-domain, pan-arctic, international, multi-agency, socioeconomic focus) presents new challenges
 - New models for running fully implemented SEARCH in an operational mode are required for science community, agencies and support structure
- The most important decisions for this SSC meeting are for decisions to move forward the Understanding and Responding components of SEARCH
- What SEARCH is doing building an integrated, cross-disciplinary research program is inherently difficult; also need to build the depth of the talent pool for leadership in system-wide studies, bridging physical and natural and social sciences.
- Specifically need more encouragement and effort to bring in social scientists and human dimensions experts, and those with expertise in 'responding to change' elements.

Observing Change

Hajo Eicken, Observing Change Panel (OCP) Chair

[will link to PPT, ADI Project Plan, ADI Task Force Members, AON Awards, ADI and CADIS webpages]

 Hajo reviewed current Observing Change Panel activities, including: SEARCH Data Advisory Group, interagency coordination of observing programs, participation in the Sea Ice Outlook, planning for the AON PI meeting (30 November-2 December), AON Design and Implementation (ADI) activities, and assessment of AON implementation status and priorities by the UCP. Summarized ADI status, design considerations, and plan for the ADI task force activities and timeline

- Regarding OCP membership, since Hajo will move to the position of SSC chair, Taneil Uttal and Craig Lee will take over as OCP co-chairs (with approval by SSC).
- Interagency Coordination of Observing: Issues for consideration for SSC include how to get a handle on the interagency coordination aspect.
 - Hajo within the agencies, need people who have time and resources to develop integration /coordination. Basically people on detail to bring the parts together. Also could have more agency involvement in AON PI or ADI meetings
 - Wanda Ferrell (DOE) discussion on how to better engage ARM/DOE.
 Should talk about this more, but for now can include ARM on CADIS site, and Hajo and Wanda to talk more perhaps more SEARCH feedback into ARM data user meetings.
 - Discussion of what defines success for AON. Hajo discussed two two different kinds of success. 1. Project level Each project has own metrics of success, projects were asked to give 3-pagers to summarize projects' recent successes, 2. Putting things together to get more than the sum of its parts not a lot of this kind of activity. For example, how are the observing activities actually linking up in the field? Document from the UCP reported that there is still duplication, etc., and that people are not thinking about more cross-project linkages
 - Another definition of success might be the extent to which information and knowledge is used by people and entities that are responding to change
 - Also discussion of whether SSC could be more of a coordinating, hands-on entity, rather than focusing on higher-level strategic planning. For example, defining products that the SSC would assist in developing (model products, etc.), or convening working groups on specific science questions. (e.g., how far in the future can we predict?, etc.)
 - Discussion came back to activities of ADI SSC agreed that ADI activities are useful, but suggested that there be more interaction/incorporation of responding to change.

ACTION ITEMS:

- Link to DOE ARM data through CADIS site (Hajo to relay)
- Consider other agencies to attend AON PI meeting to discuss interagency coordination (Hajo)
- Hajo and Wanda discuss further Observing linkages to ARM (Hajo)
- SSC agreed that ADI is a good direction, with more interaction with Responding to Change. Hajo to bring back to the ADI group (Hajo)

Understanding Change

(Peter Schlosser)

[Will link to background documents: SEARCH-ARCSS Understanding Integration, Understanding Change Panel document on AON, agency Understanding group]

- Over the past several months, Peter, Hajo, ARCUS, Josh Schimel (Chair of ARCSS Committee) have been working on a proposed plan to integrate ARCSS and SEARCH, as there is considerable overlap in scientific focus and goals
- This plan essentially consists of convening an ad hoc task force, chaired by Josh Schimel and John Walsh (Chair of the SEARCH UCP) to lead community activities to establish a long-term vision and provide the scientific framework of a modern effort for understanding the arctic system. 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. White paper would be finalized December 2010.
- The ARCSS Committee met to discuss the proposed plan before this SEARCH SSC meeting, and agreed that it should be moved forward.
- The SSC discussed the plan and agreed it should be moved forward.
- NSF reported that there are no immediate plans for an Understanding Change AO, and NSF will wait to decide future plans based no what emerges from this task force process.

- ARCUS to move forward the task force plan, beginning with discussions with Josh Schimel and John Walsh, co-chairs of the task force (ARCUS)
- Will report back to SSC when co-chairs at the point of recommendations for task force members goal for early December (ARCUS, Co-chairs)

Responding to Change

Peter Schlosser and Maribeth Murray

- Last SSC meeting, SSC had suggested a workshop should be planned to move forward Responding to Change component; this workshop was not planned within the SEARCH context, as ISAC was moving forward on similar plans for a Responding to change white paper and workshop.
- Maribeth Murray reported that ISAC held an SSG meeting at the end of September –
 plans are underway to draft a white paper for discussion purposes on Responding to
 Change. There will be a meeting at AGU on this, and ISAC hopes to release the paper
 at the State of the Arctic. A Responding to Change workshop, led by ISAC, will be
 planned for summer/fall 2010.
- It was noted by several members that one big challenge facing Responding to Change planning and implementation is lack of capacity (i.e., experts in the field), and this is a pan-arctic problem, not just U.S. or SEARCH. ISAC efforts are strongly directed towards bringing in people doing human dimensions work in other parts of the world, e.g., IHDP. Expanding capacity requires us to go to global community. Other regions are further ahead in doing applied and integrated work.
- Also a challenge is *defining* Responding to Change what we mean specifically as far as issues of adaptation and mitigation and human dimensions in the SEARCH context.
- Short discussion on the Responding to Change panel, which is not currently active, as the former chair (Jack Kruse) has stepped down. It was agreed that reconstitution

- of the panel would be put on hold until the ISAC Responding to Change white paper was complete, so that members could be chosen to fit the intellectual directions of the Responding planning activities
- SSC agreed to work with ISAC on developing an intellectual framework for Responding to Change with initial activities being contributions to the white paper and workshop planning.

- SEARCH to participate in ISAC white paper development and workshop planning Identify a few SEARCH people to work with Maribeth on the process to develop an intellectual framework and plan for Responding (Peter, Hajo, ARCUS)
- Create a one-page description of activities; Neil Swanberg (NSF) can use that to engage the IPMC, including request for travel support for US participants to the Responding to Change workshop in 2010 (Maribeth)

SEARCH Data Advisory Group

Steve Oberbauer, Data Group Chair (via phone) [will reference PPT]

- The SEARCH Data Advisory Group was reconstituted since the last SSC meeting (as an action item from the last SEARCH SSC meeting) to focus on data management/coordination with regard to AON.
- The Data Advisory Group expanded its membership to include a cyberinfrastructure expert and a data user (as per suggestions from last SSC meeting). The Data Group membership includes: Carin Ashjian, Dave McGuire, Don Perovich, R.M. Holmes, Steve Oberbauer, and new members: Judy Cushing (Evergreen State cyberinfrastructure), Julio Ibarra (Florida International University cyberinfrastructure), and John Kimball (University of Montana data user).
- The Data Group currently has a charge for the following activities:
 - 1. Provide use cases for CADIS
 - 2. Explore CADIS site
 - 3. Provide feedback on a series of issues/capabilities for CADIS
- The goal of the data group is to have feedback on the above ready to present at the AON PI meeting, 30 November–2 December.
- These data group activities will continue after the AON PI meeting
- [Steve 0. phone went out at this point]
- Hajo the data group is focused on observing/AON now because that is what is currently funded for actual projects
- The CADIS site is undergoing a change to its interface, so the data group will do thorough exploration and feedback once the new interface is launched.
- Discussion on improving the way data management serves people outside the scientific community, as well as serving the Understanding and Responding aspects of SEARCH science.
- Several members discussed specific directions that CADIS could consider, including incorporating expert systems research (suggestion from Caspar Amman) and

getting input from experts on decision-support tools (suggestion from Maribeth and Larry Hamilton).

ACTION ITEMS:

- Send information to the data group on expert systems (Caspar Amman)
- Send information/recommendations to the group regarding expertise on decisionsupport tools (Maribeth or Larry)
- Work with the Observing and Understanding panels (and ISAC for Responding to Change) to get input on issues of AON data needs, e.g., what level of AON data should be made available, what kinds of products, level of pre-processing; to including consideration of users outside of the scientific community (Steve)
- Post updated information on the data group on the SEARCH website (ARCUS)

State of the Arctic Conference (SoA)

Peter Schlosser

[See website at: http://soa.arcus.org/, also see internal program]

- SSC members discussed overall structure, program, and parallel session topics. Plenary speakers have been invited and many accepted. Parallel theme topics are being finalized by the Executive Committee, after input from the Organizing Committee (and from this SSC meeting).
- Peter Desired outcome of the conference is to help us think through what kind of research is needed compared to what is being done? What kind of research programs are needed? How do we need to refine, augment, and shape existing programs in the future to meet these needs? For example, how to design an arctic observing system, or how can we contribute to solutions in the Arctic.
- SSC members discussed incorporation of young investigators could be done in panel, as well as travel support. The SOA OC has already convened a small committee to discuss plans for student/young investigator involvement.
- Need funds to support young investigators have some through IASC. Would be good way for other IPMC agencies to support the conference. Also could design an award that focuses on the best "SEARCH" poster abstract, e.g. crosses disciplinary boundaries, incorporates human dimensions, etc.
- Discussed products it is expected that a set of papers in journals, perhaps a special issue of journal will be produced. Also a compilation of all the abstracts. Some discussion of a book, but several members expressed concern about the time and work that will be required for a book, also that online venues are more utilized now. Members agreed that products should provide a larger synthetic view. Also consider a way to publish posters.
- Discussed media/press involvement. ARCUS has asked for RFPs from Miami-local PR agencies to contract for this purpose. Media advisories should be done for selected sessions. AAAS has a program that we could model from.
- Discussed ways to engage IPMC and other agencies add language to website that encourages agency involvement; Neil offered to help through the IPMC.

- Send the latest internal program to the SSC (ARCUS)
- Parallel sessions/abstract call should be worded so that each session can incorporate human dimensions (ARCUS complete)
- Go forward with media plan, including media advisories and looking into AAAS program for ideas (ARCUS – Teleconference with NSF media liaison scheduled for 16 Nov).
- Further discussion needed on products, including a method to publish posters (SoA Organizing Committee)
- Further discuss student poster award program, including an award for best "SEARCH" abstract (SoA Organizing Committee)
- Engage agencies through: drafting language on website that encourages agency participation, letter/information to IPMC (through Neil) (ARCUS work with Neil)
- Engage global HD community into SoA (ARCUS work with Maribeth)
- ARCUS outreach into Alaska-based agency personnel (ARCUS)
- Plan to print/send panels available from the Smithsonian's Friend Acting Strangely exhibit (ARCUS work with Bill Fitzhugh)

SEARCH Sea Ice Outlook (SIO)

James Overland (Chair of SIO core group) (by phone) and Hajo Eicken (for Regional Outlook)

[will link to PPT and website at: http://www.arcus.org/search/seaiceoutlook/index.php]

- The 2009 Sea Ice Outlook was as a success. Over 15 groups participated
- Take home points for this year: while 2009 was 3rd lowest summer extent, fall freeze up was very late. Multi-year sea ice was very low. The Arctic is still behaving with extremes.
- Hajo One of recommendations from last year was to include a regional outlook so we did that this year. Eight (8) groups provided a regional outlook, and 5 out of the 8 were "right on" with outlooks. An interesting pattern with the outlooks this year was that for the pan-arctic scale, coupled ensemble predictions were best; at the regional scale, the coupled ensemble predictions did the worst. In order to make the regional outlooks more useful in the future, will have more guidance and rigor will be involving a post-doc working with Canadian Ice Center for next year's regional outlooks.
- Web presence for the Sea Ice Outlook has been a success. [ARCUS web stats: the SIO website (about 350 pages of content) has been viewed 45,276 times since Jan 1 of this year, with 34,916 of those as "unique" pageviews (i.e., taking out instances of a visitor going back to a page over again on one visit). Visitors were from all over the world 60.6% from Americas, 32.9% from Europe, and some from Oceania (3.5%), Asia (2.5%), and Africa (<1%)].
- IPY office considers SIO one of the main key activities that have happened in IPY. AWI, Stockholm group also views SIO as one of their major activities
- Plan to continue the SIO in 2010

- Priority for winter 2010: Work with other groups to define priority arctic
 observations that would help support the outlook goals, e.g., observations on ocean
 heat content, visual reconnaissance of ice types; develop recommendations from
 Outlook on priority AON observations/needs. The Outlook approach can be used to
 move forward issues such as uncoordinated ocean observations by using the
 Outlook (the gaps in observations for models) as a way to prioritize and highlight
 observation needs.
- Will have Sea Ice Outlook meeting at AGU in the ARCUS community meeting room.
- SSC members discussed ideas and recommendations for next year's Outlook, including expanding the Outlook to the cold season, an outlook for the sea ice maximum, and integration with real-time observations (e.g, from cruises)
- Also need to discuss further how for 2011, how to ensure this is a sustained activity in SEARCH, perhaps through a standing SEARCH working group or other means.

- Discuss SSC suggestions, as well as community suggestions, as move forward with planning for the 2010 Outlook.
- Further discuss stable support structure for the Outlook, including resources for lead contributors' time (e.g., 2 weeks-1 month of salary support).

Implementing SEARCH through Multi-Agency Cooperation

Neil Swanberg, National Science Foundation; Chair, SEARCH Interagency Program Management Committee (IPMC)

[Will request a short formal written statement (and PPT, if available) from each agency to post on website.]

Overview of Agency Activities:

- National Science Foundation (NSF) Neil Swanberg
 - Besides funding science, a major NSF SEARCH effort is the OPERA AO (http://www.nsf.gov/pubs/2009/nsf09599/nsf09599.htm, deadline of 11 December 2009), which is focused on infrastructural support for SEARCH, including science infrastructure. \$5m a year, about ½ to data.
 - AON PPT presentation from Martin Jeffries.
- National Oceanic and Atmospheric Administration (NOAA) John Calder
 - Many contributions to SEARCH through climate and atmospheric observing activities
- Department of Energy (DOE) Wanda Ferrell
 - o DOE contributes to the SEARCH program through climate modeling, ARM data, Barrow infrastructure/equipment, etc.
 - o With ARM, DOE would like to engage SEARCH on the user advisory group
- *Smithsonian Institution* Bill Fitzhugh
 - Smithsonian does not fund research, but focuses on collaboration and outreach.
 Several Smithsonian activities, including arctic exhibits to the Anchorage museum, and the "Arctic: A Friend Acting Strangely" exhibit.

- Discussion on including a traveling portion of the "Friend Acting Strangely" as exhibit at the State of the Arctic.
- National Aeronautics and Space Administration (NASA) Thomas Wagner
 - o [Will link to PPT]
 - NASA's goal in the polar regions is to understand how they are changing, especially how changes in ocean circulation are occurring and how it relates to sea ice cover and land based ice.
 - Several SEARCH relevant projects and investments include climate experiments, sensors, and quantifying changes in sea and ice sheets. Also interested in permafrost and arctic rivers.
- U.S. Department of Agriculture (USDA) No representative attended.
- Department of the Interior (DOI) No representative attended.
- Department of Defense (DOD) No representative attended.

IPMC as Interagency Coordination Body

- SSC members noted that the IPMC is now more important than ever, as SEARCH is moving from planning phase to implementation and coordination. This is especially important for launching Responding to Change activities.
- There is a need for outreach into the agencies about SEARCH, specifically about State of the Arctic.
- Discussion of challenges in multi-agency cooperation, including frustration by agency personnel in having too many meetings to attend, and the time needed for agency coordination.
- Need more IPMC interaction on a regular basis, also on an ad hoc basis for various topics, and discussions with SSC.
- Actual funds are needed for agency coordination.
- For State of the Arctic, can work with Neil to get into agencies, add a page or paragraph on website that will bring in agencies, etc. Specifically more topical issues; have agencies/IPMC reps translate parallel themes into bullets friendly to their agency.

Interagency Arctic Research Policy Committee (IARPC)

- See website at: http://www.nsf.gov/od/opp/arctic/iarpc/start.jsp
- There is an IARPC principals meeting in February. SSC discussed this as a good opportunity to present SEARCH interagency needs. Specifically SoA, as well as discussing a better process for interagency coordination.

SAON (John Calder)

- See website at: http://saon.arcticportal.org/
- SAON is an international process to find a way to continue and enhance observing activities. Focus on three items in the coming year 1. Improve data management, 2. Linking modern science and traditional knowledge, 3. Bring together officials of agencies who support or conduct observing (will have meeting at State of the Arctic). SAON is focused on cooperation, facilitation, and synergy, as well as thinking about the institutional framework.
- There is some confusion in the community about the purpose of SAON recommend that SAON communicate/update the community to clarify activities and goals.

- DOE engage SEARCH on ARM advisory group/activities (Hajo follow-up)
- SSC members recommended that SAON group clarify to the community the recent activities and goals of SAON (John Calder)
- Discuss possible need/recommendations from SSC for IPMC meeting/telecon as follow-up to SSC for SoA (Peter, Hajo)
- Ask NOAA to link Arctic Report Card/NOAA arctic webpages clearly with SEARCH (ARCUS)
- Work with Neil to get SEARCH on the next IARPC principals meeting, including State of the Arctic, and Responding to Change needs (Peter, Hajo)
- See State of the Arctic section, above, for agency-focused action items related to the conference.

Freshwater Integration study (FWI)

Charles Vörösmarty

[Will link to PPT]

- See website at: http://arcticchamp.sr.unh.edu/index.shtml
- Vörösmarty gave an informational presentation on results, activities, and plans in the FWI "sunset phase"
- Next steps in FWI include:
 - Produce strategic document on gaps/opportunities for new research and shorter "communique" (e.g. in AGU-Eos)
 - $\circ~$ Organizing team to meet in Victoria (BC), $10^{\text{th}}\text{-}11^{\text{th}}$ January to begin formal drafting process
 - o Publication target: mid-2010

ACTION ITEMS:

None.

Bering Ecosystem Study (BEST) / Bering Sea Integrated Ecosystem Research Program (BSIERP)

William Wiseman, NSF

- See website at: http://bsierp.nprb.org/
- The BEST/BSIERP program has about 100 investigators; 2 years of field work has been completed and modeling activities are progressing.
- With regard to linkages between SEARCH and BEST Bering Sea is arctic according to Congress... lots of linkages to arctic with science, environmental changes, etc. Good model of agency cooperation, really good collaboration between the PIs – whether NSF or NPRB funded

ACTION ITEMS:

- SEARCH talk to BEST/BSIERP to discuss possible mutual interest in stronger collaboration and synergies with SEARCH (Peter and Hajo)
- Approach BEST/BSIERP for participation at State of the Arctic (ARCUS)

Developing Arctic Modeling and Observing Capabilities for Long-term Environmental Studies (DAMOCLES)

Jean-Claude Gascard
[will link to PPT]

- See website at: http://www.damocles-eu.org/
- Informational presentation focused on the DAMOCLES symposium, "The Arctic Climate System, its Present Status, Future Evolution and Potential Impacts," organized by the Damocles Steering Committee in Brussels, on November 10-12, 2009. Craig Lee and Peter will be representing SEARCH.

ACTION ITEMS:

 Further discussion with DAMOCLES on future collaborations, extension of MOU, etc (Peter)

ArcticNet Activities and Plans

Martin Fortier (Via phone)
[will link to PPT]

- See website at: http://www.arcticnet.ulaval.ca/
- Presented ArcticNet objectives, activities, partnerships (specifically with industry)
- Discussed opportunities for collaboration between ArcticNet and SEARCH. Move forward on MOU (joint projects, student exchange, etc.) target to have draft MOU at SoA. Also Martin will send suggestions for ArcticNet person to go to ADI meeting (Martin cannot attend).

ACTION ITEMS:

- Convene a few SEARCH representatives from various disciplines and ArcticNet together to talk about concrete areas for collaboration (Peter, Hajo, ARCUS)
- Move forward on an MOU with Arctic (joint projects, student exchange, etc) target to have draft MOU at State of the Arctic (ARCUS)
- Martin will send suggestions for an ArcticNet person to go to ADI meeting (Martin)

International Study of Arctic Change (ISAC)

Maribeth Murray

[will link to PPT and ISAC Science Plan executive summary]

- See website at: http://www.arcticchange.org/
- Presentation on ISAC program history, and recent and planned activities
- Upcoming activities include:
 - o ISAC Open Science Discussion, AGU Annual Fall Meeting, 2009
 - State of the Arctic Meeting, 2010. Miami. Joint sponsorship with DAMOCLES and SEARCH and others.4th Day – International Cooperation in Arctic Science. White paper on Responding to Change to carry ISAC into the future
 - o Responding to Change Workshop (ca. 50 people), Summer/Fall 2010.

ISAC issues were discussed in the context of Responding to Change – see that section, above, for all action items

Discussion of SEARCH and "Organization of Projects on Environmental Research in the Arctic" (OPERA) NSF Announcement of Opportunity (AO)

- See A0 at: http://www.nsf.gov/pubs/2009/nsf09599/nsf09599.htm
- Neil Swanberg introduced the OPERA AO release by NSF, deadline for proposals is 11 December 2009. NSF laid down a challenge to IPMC in 2007 to help support SEARCH activities, but not enough support coming to SEARCH infrastructure, especially at the panel level (panel activities are currently all volunteer). Need dedicated scientific support and more activities. The AO was written to avoid being prescriptive.
- Not solely for SEARCH, but intended to serve SEARCH
- \$15M over 3 years, with large portion for data
- Peter posed question on whether the role of the SSC will substantially be changed, or rather will the OPERA projects be in support of the scientific directions laid out by the SSC
- Neil NSF tried to wordcraft that in the AO they still see SSC as planning and thinking center for SEARCH. They expect OPERA candidates to responsive to the SEARCH planning process. SEARCH will also have to be responsive to OPERA-funded groups.
- Hajo this will give us a new way of working, would like to see a lot of good ideas being tested and one or several emerge as most viable, then working with whatever group is funded. Mix of anxiety and enthusiasm. Anxiety related to some of the wording in the AO. What's going to be important is to maintain the SSC and panels let their ideas emerge to work with whatever is funded with OPERA.
- Hajo Question for NSF is if the SSC will have input into the review process.
- Neil it will depend on what comes in.
- Peter hope that proposals will help move things forward that SEARCH is already initiated (like ADI, Understanding Task Force, etc).
- Neil intent is to *add* to current 'volunteer' support.
- Neil may be office or some offices with post-docs, etc., to carry out some of the activities synthesis, etc, looking for imaginative ideas.
- Peter when transitioning into a new system under OPERA, will have transparency on what is underway with SEARCH and what is needed.
- Neil sometime next summer, OPERA funded people will come to SEARCH and will need to work together. So where will SEARCH be a year from now, a few years from now, what is the vision? Challenge to SSC to think about long-term vision.
- Peter Do we have to re-write our Science Plan? Or is the Science plan that ISAC is finalizing is that the vision that will hold for the next 5 years? We aren't lacking the grand vision
- Neil SEARCH should be changing is it going to be doing something with actual funded projects, etc? Work with other programs, etc?

- Hajo the challenge is, to be blunt about it, the way people have thought about SEARCH has evolved – there is a vision, but what is going to happen about it? Questions like joint research with industry remain.
- Peter past frustration as SEARCH SSC chair getting people to understand that responding to change is most important of three components
- Steve Vavrus that can be one of the starting points gives us an idea on where to go with this and a connection with OPERA.

• Continue to post as much information as possible on SEARCH activities to the website, to help in transition to OPERA-funded support (ARCUS).

SSC and Panel Membership

- Held off rotation last year to give Hajo, as incoming chair, room to shape the membership
- Discussion of how we need to develop SSC over the next months, and the capacity in which the SSC should work e.g., whether to move to a more hands-on approach, like synthesis, project coordination, etc.
- SSC needs to be more explicit about what they want in the social sciences and human dimensions. Young scientists from the interdisciplinary community would be useful for the social science aspect. One issue is avoiding any detrimental effects to young career scientist careers – need to go to administrative levels to help change this culture. Also could consider proposals, trainingships that would be beneficial to SEARCH.
- Hajo proposes Peter act as out-going chair for one year. Peter and Hajo will discuss this further.

ACTION ITEMS:

- Hajo will look at SSC member rotation schedules, etc, then further dialog. Peter to send rotation schedule. (Peter, Hajo)
- Peter to decide if he accepts position as outgoing chair for one year (Peter, Hajo)
- Move forward on appointing Craig Lee and Taneil Uttal as chairs of the OCP (Hajo, ARCUS)
- Hold on any appointments to the Understanding Panel, until task force activities are complete or produce guidance for that panel
- Hold on any appointments/reconstitution of the Responding panel, until ISAC activities (white paper, workshop) can help define the Responding component

Other Business

- SSC members expressed gratitude to Peter for his work and dedication to SEARCH
- Determine timeframe/venue for next SSC meeting (eMeeting and/or in person) (Hajo, ARCUS)