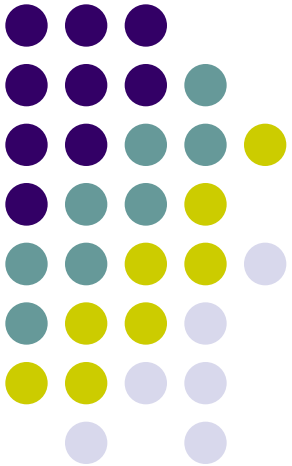
ARCSS Community Webconference

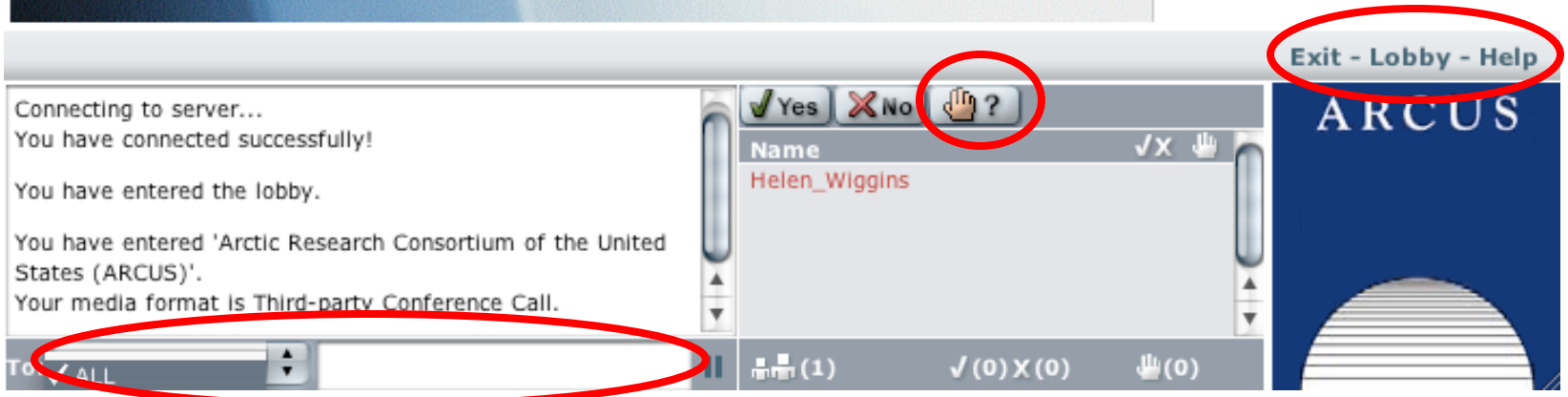
Friday, 4 March 2005



Webconference Outline

- Horizon Wimba Interface
- Introductions
- Welcome and Goal
- Background
- ARCSS Research Priorities
  - *Discussion*
- New ARCSS Structure
  - *Discussion*
- Community Input
  - *Discussion*
- Summary & Next Steps

Horizon Wimba Interface



Introductions

- ARCSS Committee
  - Jonathan Overpeck, Chair
  - Jennifer Francis
  - Marika Holland
  - Craig Nicolson
  - Don Perovich
  - Charles Vörösmarty
  - John Weatherly
  - *Not present:* Glen MacDonald, Mark Serreze, Matthew Sturm
- NSF
  - Neil Swanberg, ARCSS Program Manager
  - William Wiseman, Arctic Natural Sciences Program Manager
- ARCUS
- Community Participants

Community Participants

- Jennifer Adam
- Mary Albert
- Lilian Alessa
- Richard Alley
- Lee Cooper
- Dennis Darby
- Rudy Dichtl
- Mathieu Duvall
- Mary Edwards
- Hajo Eicken
- Jacqueline Grebmeier
- Rodger Harvey
- Larry Hinzman
- Feng Sheng Hu
- Gensuo (Jiong) Jia
- Eugene Karabanov
- Lloyd Keigwin
- Andy Kliskey
- James McClelland
- James Moore
- Richard Moritz
- Maribeth Murray
- Jonathan Pundsack
- Edward Rastetter
- Peter Rhines
- Vladimir Romanovsky
- Peter Schlosser
- Justin Sheffield
- Michael Steele
- Marc Stieglitz
- Daniel White
- Daqing Yang
- Any Others?

Welcome and Goal

Goal of webconference is to foster communication and gather input on ARCSS Program direction and planning

- Part of short-term plans for community discussions and input leading up to Fall 2005 community meeting
- This web conference will be the first of multiple opportunities for community discussion and input
- Our goal today is to hear from all who wish to speak, so please try hard to keep comments as concise and focused as possible

Background

- ARCSS All-Hands Workshop 2002
  - Recommendations emphasized system perspective, increased integration, prioritization of new research themes
  - Changes in ARCSS structure to accomplish those goals
- ARCSS Committee agreed to lead a number of tasks relating to this reassessment of ARCSS
  - Identify near-term ARCSS research priorities
  - Ensure synthesis of program-wide results
  - Develop a new ARCSS planning and oversight structure
  - Evaluate and revise the ARCSS science plan

ARCSS Goals

Achieve a better understanding of system behavior to:

- Improve predictions of change
- Determine role of the Arctic in global climate evolution
- Provide information to enable society to respond to expected change

Near-term ARCSS Research Priorities

Current field-oriented ARCSS activities

- **SBI: Western Shelf-Basin Interactions**
  - Investigate the impact of global change on physical, biological and geochemical process over the Chukchi and Beaufort Sea shelf basin region
  - Phase II (2002-2006)
- **Arctic Freshwater Cycle: Land/Upper-Ocean Linkages**
  - Twenty-two projects
  - Contribution to SEARCH
  - Is the Arctic Freshwater Cycle Intensifying? If So, Why? What are the Implications?
  - Synthesis activities

Near-term ARCSS Research Priorities

Current field-oriented ARCSS activities

- **SNACS: Study of the Northern Alaska Coastal System**
  - Six projects in FY 2005 and 2006
  - Contribution to SEARCH
  - How vulnerable are the natural, human, and living systems of the coastal zone to current and future environmental changes in the Arctic? How do biogeochemical and biogeophysical feedbacks in the coastal zone amplify or dampen change locally and at the pan-arctic and global levels?

Near-term ARCSS Research Priorities

System Synthesis

- In the fifteen years since its inception, ARCSS Program research has evolved toward an increasingly integrative, rather than disciplinary, approach to studying the arctic system
- Building on the solid foundation of more than a decade of observation, modeling, and process studies, the ARCSS Program has initiated a synthesis effort aimed at achieving system level understanding of the Arctic

Near-term ARCSS Research Priorities

System Synthesis

Targeted system-wide synthesis activities:

- 2003 Synthesis Workshop - Big Sky
  - Is the arctic system moving to a new state outside the envelope of the natural glacial-interglacial cycle?"
  - *EOS* paper submitted
  - Annotated bibliography, powerpoint presentations available on ARCUS' ARCSS website
- Early 2004 - SNACS Announcement of Opportunity
  - Drew largely on LSI and PACTS science plans
  - Focused on the northern Alaska coastal system (in the broadest sense) to address terrestrial, ocean, and atmospheric processes

Near-term ARCSS Research Priorities

System Synthesis

Targeted system-wide synthesis activities:

- 2004 Synthesis Workshop - Tahoe
  - "How realistic is a conceptual model of a two-state (modern and future seasonally ice free) arctic system, and how well do we understand the processes that may lead to a state change?"
  - One paper submitted to *Climatic Change*; three others in preparation
  - Annotated bibliography, powerpoint presentations available on ARCUS' ARCSS website

Near-term ARCSS Research Priorities

System Synthesis

Targeted system-wide synthesis activities:

- Current AO: Synthesis of Arctic System Science (Deadline March 18, 2005)
  - "…Build on and integrate the wealth of existing data and knowledge to advance our understanding of the behavior of the arctic system or key subsets of the system and to understand the role it plays in the global system and society."
  - Strong proposals will:
    - Incorporate elements from existing arctic data, information, and models
    - Focus on interdisciplinary, cross-cutting questions
    - Demonstrate clear relevance to the entire arctic system
    - Include specific plans for deposition of data and products

Longer-term ARCSS Research Priorities

Updated ARCSS 5-year Science Plan

- Estimated Completion date: Winter 2005
- Community input and community review - plan will be vetted in multiple ways with the community
- ARCSS Committee meets next week to create the process that will be followed to update the science plan
  - This web conference today is aimed at getting the next round of input that will help with this step

ARCSS Research Priorities

Questions/Discussion

Developing ARCSS Structure

Status of ARCSS 'Components'

- LAII office and Science Steering Committee (SSC) funding expired 31 December 2004
- OAII office and SSC funding expires 30 June 2005
- RAISE/LSI office funding expires 31 July 2005
- PARCS office and SSC funding expires 31 October 2005
- A HARC core office was recently created and funded for a limited period to help the social science community incorporate its research into the overall ARCSS agenda

Developing ARCSS Structure

- The vision is that ARCSS will continue to have key focused field-oriented programs, but that these will be complemented by stronger and more synthetic activities
- There is a need for closer coordination between all ARCSS efforts, including those related to data and information
- We also envision that the old model of many program offices will be replaced by a more coordinated model

Developing ARCSS Structure

ARCSS has been working to develop a well-integrated structure that will:

- Promote interdisciplinary research initiatives of all types while allowing disciplinary groups to maintain contacts within their communities
- Foster communication in the ARCSS community
- Allow flexibility and rapid response in a difficult budget environment
- Maximize the effectiveness of the ARCSS Program
- Enable ARCSS to work closely with other efforts, such as SEARCH and IPY

Developing ARCSS Structure

"Communities of Practice"

- Groups of investigators self-organize to lead topical aspects of science coordination and planning
- Not organized by formal infrastructure, membership, or duties, but will be able to receive a nominal level of support (as funding allows) to facilitate communications, such as teleconferences, website resources, and similar assistance from the ARCSS Science Management Office

Developing ARCSS Structure

Questions/Discussion

Community Input

Input into new ARCSS structure and priority needs

- Direct communication to AC members by email and phone
- Community Webconferences, online surveys, FAQ, etc
- Fall 2005 Community workshop, which will be face-to-face (about 50 participants) and electronically available (many more participants)

Community Input

Questions/Discussion

Summary & Next Steps

- ARCSS synthesis enterprise is an exciting scientific endeavor
- Community input critical
- Events, meeting information on website and ARCSS listserve
- Stay involved!

Thank you