

SEARCH Open Science Meeting | Meeting Agenda

Sunday, 26 October 2003

06:30 pm - 09:30 pm Icebreaker Reception and Registration
(International Promenade)

Day 1 - Monday, 27 October 2003

Theme: Changes and Impacts (Plenary Sessions in Bay Auditorium)

07:30 am - 08:30 am Registration (Entry Lobby)

08:00 am Continental breakfast (Kiosks)

08:30 am Welcome and Introductions

James Overland

Session Chair

Chair, Open Science Meeting Organizing Committee

National Oceanic and Atmospheric Administration

08:50 am

Findings of the Recent Arctic Climate Impact Assessment

Robert Corell

Senior Fellow

Harvard University and American Meteorological Society

09:20 am

Regional View: Perceptions and Concerns About Change

Caleb Pungowiyi

President, Robert Aqqaluk Newlin, Sr. Memorial Trust

09:50 am

Inuit and Climate Change: Influencing the Global Agenda

Sheila Watt-Cloutier

Chair, Inuit Circumpolar Conference

10:20 am

BREAK

10:50 am

Introduction to Parallel Science Sessions

Craig Nicolson

University of Massachusetts

11:10 am

Plenary Discussion

11:30 am

LUNCH (Harbor Dining Room)

01:00 pm

Parallel Science Sessions: Changes and Impacts

SEARCH has been motivated by observations in recent years of a complex of seemingly interrelated, decadal scale, pan-Arctic changes. These have been seen on land, in the sea, and in the atmosphere and appear connected to changes at lower latitudes. Each parallel session will begin with a set of contributed papers and then will open for discussion aimed towards updating our understanding of previously observed changes, exploring new changes, and evaluating their consequences.

I. Changes on Land (Bay Auditorium)

Topics such as, but not limited to, snow cover; permafrost; glaciers; hydrology; species composition, distribution, and abundance; subsistence harvesting; carbon (CO₂ and methane)

Co-chairs: Matthew Sturm, Cold Regions Research and Engineering Laboratory

Bruce Forbes, University of Lapland

II. Changes in the Sea (Sound Room)

Topics such as, but not limited to, salinity, temperature, currents, nutrients, sea ice, marine ecosystems (including people, marine mammals and fisheries)

Co-chairs: George Hunt, University of California Irvine

Motoyoshi Ikeda, Hokkaido University

III. Changes in the Atmosphere (Cove Room)

Topics such as, but not limited to, atmospheric pressure and circulation; temperature; cloudiness; precipitation and evaporation

Co-chairs: Hans von Storch, GKSS Research Centre

Richard Moritz, University of Washington

IV. Coastal Processes (Marina Room)

Topics such as, but not limited to, fate and transport of materials, erosion, effects on human communities

Co-chairs: Volker Rachold, Alfred Wegener Institute

Steven Solomon, Natural Resources Canada

04:30 pm Poster Session/Reception with cash bar (International Promenade)
 06:30 pm Buffet DINNER and Sea Level Rise Beach Party - **LIVE MUSIC** (Odyssey Maritime Discovery Center)

Day 2 - Tuesday, 28 October 2003**Theme: Feedbacks** (Plenary Sessions in Bay Auditorium)**08:00 am** Continental breakfast (Kiosks)

08:30 am SEARCH Vision and Core Hypotheses
James Morison
 Session Chair
 Chair, SEARCH Science Steering Committee
 University of Washington

09:00 am The Nature, Measurement, and Modeling of Feedbacks
Judith Curry
 Georgia Institute of Technology

09:30 am Arctic Climate Simulations by Coupled Models
Annette Rinke
 Alfred Wegener Institute for Polar and Marine Research

09:50 am Terrestrial Feedbacks: Vegetation, Carbon, and Heat
F. Stuart Chapin
 University of Alaska Fairbanks

10:10 am BREAK

10:40 am The Freshwater Cycle and its Role in the Pan-Arctic System
Charles Vörösmarty
 University of New Hampshire

11:00 am **Sea Ice: Two Perspectives**
 Was Sea Ice Quite Thin in the 1990's? Yes
D. Andrew Rothrock
 University of Washington

Inter-Annual Variability in Arctic Sea Ice Thickness from Space
Seymour Laxon
 University College London

11:40 am Human-Environment Relations: Responding to the Challenges and Opportunities of Arctic Environmental Change
Mark Nuttall
 University of Alberta

12:00 pm LUNCH (Harbor Dining Room)**01:30 pm** Parallel Science Sessions: Feedbacks

An important working hypothesis of SEARCH is that the complex of pan-Arctic changes is driven by a change in the atmospheric circulation of the Northern Hemisphere. To put this in perspective, it is also hypothesized that feedbacks within the arctic system are important in the complex of change, and that some of these feedbacks, along with other linkages to lower latitudes, are important to changes on a global scale. Each parallel session will begin with a set of contributed papers and then will open for discussion of feedbacks and linkages such as, but not limited to, ice-albedo feedback, vegetation-carbon feedback, effect of the freshwater cycle on global thermohaline circulation, and the nonlinear combined effects of environmental change and human activity on the ecosystem.

I. Social Feedbacks (Marina Room)

Co-chairs: *Stewart Cohen, University of British Columbia and Environment Canada*
Matthew Berman, University of Alaska Anchorage

II. Biological Feedbacks (Sound Room)

Co-chairs: *Sue Moore, National Oceanic and Atmospheric Administration*
Joshua Schimel, University of California Santa Barbara

III. Physical Feedbacks (Bay Auditorium)

Co-chairs: *Michael Steele, University of Washington*
Stephen Vavrus, University of Wisconsin

IV. Drivers and Causes (This session relates to Day 3 plenary) (Cove Room)

Co-chairs: *James Overland, National Oceanic and Atmospheric Administration*
Mark Serreze, University of Colorado

04:30 pm	BREAK
05:00 pm	<p>Panel Discussion: Connections and Key Scientific Issues (Bay Auditorium) <i>This plenary session will provide an opportunity to further develop and integrate the ideas and discussions from the first two days of Keynote presentations and the "Changes and Impacts" and "Feedbacks" parallel sessions. The panel discussion will begin with an overview by the moderator, followed by several questions posed to the panelists. Each panelist will have an opportunity to address the questions from the perspective of his or her expertise. The brief panel presentations will be followed by an open moderated discussion that includes comments and questions from all panelists and members of the audience.</i></p> <p style="text-align: right;">Moderator: Ron Clarke, Marine Conservation Alliance</p> <p style="text-align: right;">Panelists: Mark Dyurgerov, University of Colorado Jennifer Francis, Rutgers University Jack Kruse, University of Massachusetts Glen MacDonald, University of California Los Angeles Peter Schlosser, Columbia University Gaius Shaver, Marine Biological Laboratory</p>
06:30 pm	Poster Session/Reception with hors d'oeuvres and cash bar (International Promenade)
08:00 pm	Bering Ecosystem Study (BEST) Open Meeting (Sound Room) <i>George Hunt, Chair</i>
Day 3 - Wednesday, 29 October 2003	
Morning Theme: Drivers/Causes (Plenary Sessions in Bay Auditorium)	
08:00 am	Continental breakfast (Kiosks)
08:30 am	Drivers and Causes of Arctic Environmental Change <i>Mark Serreze</i> <i>Session Chair</i> <i>University of Colorado</i>
08:50 am	Natural and Anthropogenic Drivers of Arctic Climate Change <i>Gavin Schmidt</i> <i>NASA Goddard Institute for Space Studies</i>
09:20 am	Interannual Variations of Polar Climate: Relationship to Annual Modes <i>Murry Salby</i> <i>University of Colorado</i>
09:50 am	BREAK
10:20 am	Spatial and Temporal Modes of Arctic Climate Variability Over the Past 600 Years <i>Konrad Hughen</i> <i>Woods Hole Oceanographic Institution</i>
10:50 am	The Early 20th Century Warming in the Arctic: A Possible Mechanism <i>Lennart Bengtsson</i> <i>Max Planck Institute for Meteorology</i>
11:20 am	Arctic System Synthesis: Is the Arctic Headed Toward a New State? <i>Jonathan Overpeck</i> <i>University of Arizona</i>
11:50 am	Student Presentation
12:15 pm	LUNCH (Harbor Dining Room)
Afternoon Theme: Understanding and Predicting Change (Bay Auditorium)	
01:45 pm	How Does SEARCH Fit into the Larger Scheme of U.S. Climate Change Science? <i>James Mahoney</i> <i>Director, U.S. Climate Change Science Program</i> <i>National Oceanic and Atmospheric Administration</i>
02:15 pm	How Do the Arctic and Subarctic Processes Interconnect? What Have We Learned? <i>Robert Dickson</i> <i>The Centre for Environment, Fisheries and Aquaculture Science</i>
03:05 pm	BREAK

03:30 pm

Panel Discussion: Understanding and Predicting Change in the Arctic System

This session will provide an opportunity to summarize and integrate the ideas and discussions from the three days of keynote presentations, parallel science sessions, and informal discussions. The panel discussion will begin with an overview by the moderator, followed by several questions posed to the panelists. Each panelist will have an opportunity to address the questions from the perspective of his or her expertise. The brief panel presentations will be followed by an open moderated discussion that includes comments and questions from all panelists and members of the audience.

Moderator: Andrew Revkin, New York Times

Panelists: Lawson Brigham, U.S. Arctic Research Commission

F. Stuart Chapin, University of Alaska Fairbanks

Robert Dickson, The Centre for Environment, Fisheries and Aquaculture Science

Jonathon Overpeck, Institute for the Study of Planet Earth, University of Arizona

Elaine Abraham, Alaska Native Science Commission

05:10 pm

SEARCH Implementation: What is Being Done and Where Are the Gaps?

James Morison

Chair, SEARCH Science Steering Committee

University of Washington

05:30 pm

Adjournment

Day 4 - Thursday, 30 October 2003

SEARCH International Implementation Forum (International Promenade)

09:00 am - 12:00 pm: *An open forum to provide the international Arctic research community an opportunity to exchange ideas on participation in SEARCH implementation.*