

# October 2007 ARCSS Synthesis Workshop| Agenda

The ARCSS Synthesis Workshop will be streamed via webcast.

## 10:30 a.m.–12:30 p.m. ARCSS Committee Meeting Open Community Session (Salon A/B)

### Tuesday, 2 October 2007 (Salon A/B, Lobby Level)

- 2:00 p.m. Welcome and Introductions  
*Don Perovich, ARCSS Committee Member, SASS PI*
- 2:15 p.m. NSF ARCSS Program Goals and Expectations for ARCSS Synthesis  
*Neil Swanberg, ARCSS Program Director*
- 2:30 p.m. An Overview of ARCSS: Past, Present, and Future  
*Josh Schimel, ARCSS Committee Chair*

### THE STATE OF ARCSS SYNTHESIS: CONTEXT FOR THE WORKSHOP

- 2:50 p.m. Overview of SASS and SASS I Ideas for Synthesis Approaches  
*Don Perovich, ARCSS Committee Member, SASS PI*

### 3:15 p.m. BREAK

### Upcoming Science Planning Activities

- 3:35 p.m. A Synthesis of the Last 2000 Years of Climatic Variability from Arctic Lakes: ARCSS "2 kyr" Project  
*Raymond Bradley, University of Massachusetts*
- 4:00 p.m. Freshwater Integration (FWI) Synthesis  
*Larry Hinzman, International Arctic Research Center (IARC)*
- 4:25 p.m. Study of the Northern Alaska Coastal System (SNACS)  
*Matthew Sturm, Cold Regions Research and Engineering Laboratory (CRREL)*
- 4:50 p.m. Human Dimensions in ARCSS Synthesis: Overview of HARC Workshop  
*Maribeth Murray, University of Alaska Fairbanks, HARC Core Office Director*
- 5:15 p.m. Shelf-Basin Interactions (SBI) Synthesis  
*Robert Campbell, University of Rhode Island*
- 5:40 p.m. Group Discussion: ARCSS Synthesis and Goals for the Workshop
- 6:00 p.m. Poster Session and Reception (Atrium and Carter Room)

### Wednesday, 3 October Wednesday, 3 October 2007 (Salon A/B, Lobby Level)

Full complimentary hotel breakfast available 7:00 a.m. (Breakfast Area, Lobby Level)

### 8:00 a.m. Continental breakfast available outside meeting room

- 8:30 a.m. Review of Day 1 and Day's Goal

### SASS I: SHORT PROJECT PRESENTATIONS (9 PROJECTS)

- 8:45 a.m. A Heat Budget Analysis of the Arctic Climate System  
*Mike Steele, University of Washington*
- 8:55 a.m. Sunlight and the Arctic Atmosphere-Ice-Ocean System  
*Don Perovich, Cold Regions Research and Engineering Laboratory (CRREL)*
- 9:05 a.m. Synthesis of Modes of Ocean-Ice-Atmosphere Covariability in the Arctic System from Multivariate Century-Scale Observations  
*Martin Miles, Environmental Systems Analysis Research Center (ESARC)*
- 9:15 a.m. Arctic Surface Air Temperatures for the Past 100 years: Analysis and Reconstruction of an Integrated Data Set for Arctic System Science  
*Harry Stern, University of Washington*
- 9:25 a.m. Synthesis of Arctic System Carbon Cycle Research Through Model-Data Fusion Studies Using Atmospheric Inversion and Process-Based Approaches  
*A. David McGuire, University of Alaska Fairbanks*
- 9:35 a.m. Greening of the Arctic-Synthesis and Models to Examine the Effects of Climate, Sea-Ice, and Terrain on Circumpolar Vegetation Changes  
*Skip Walker, University of Alaska Fairbanks*

9:45 a.m.	A Synthesis of Rapid Meltwater and Ice Discharge Changes: Large Forcings from the Ice with Impacts on Global Sea Level and North Atlantic Freshwater Budgets <i>Mark Fahnestock, University of New Hampshire</i>
9:55 a.m.	Humans and Hydrology at High Latitudes <i>Richard Lammers, University of New Hampshire</i>
10:05 a.m.	Heterogeneity and Resilience of Human-Rangifer Systems: A Circumpolar Social-Ecological Synthesis <i>Gary Kofinas, University of Alaska Fairbanks</i>
10:15 a.m.	Brief Discussion on SASS I Projects

<b>10:25 a.m.</b>	<b>BREAK</b>
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<b>SASS II: SHORT PROJECT PRESENTATIONS (8 PROJECTS)</b>	
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10:45 a.m.	The Roles of Clouds and their Accomplices in Modulating the Trajectory of the Arctic System <i>Jennifer Francis, Rutgers University</i>
10:55 a.m.	Toward Reanalysis of the Arctic Climate System - Sea Ice and Ocean Reconstruction with Data Assimilation <i>Andrey Proshutinsky, Woods Hole Oceanographic Institution</i>
11:05 a.m.	Producing an Updated Synthesis of the Arctic's Marine Primary Production Regime and Its Controls <i>Patricia Matrai, Bigelow Laboratory for Ocean Sciences</i>
11:15 a.m.	The Impact of Changes in Arctic Sea Ice on the Marine Planktonic Ecosystem - Synthesis and Modeling of Retrospective and Future Conditions <i>Jinlun Zhang, University of Washington</i>
11:25 a.m.	Climate Response to Future Changes in Arctic Snow Cover and Sea Ice: A New Perspective from the High-Resolution NCAR CCSM3 <i>Clara Deser, National Center for Atmospheric Research</i>
11:35 a.m.	The White Arctic: A Snow-Impacts Synthesis for the Terrestrial Arctic <i>Christopher Hiemstra, Colorado State University</i>
11:45 a.m.	Understanding Change in the Climate and Hydrology of the Arctic Land Region: Synthesizing the Results of the ARCSS Fresh Water Initiative Projects <i>Eric Wood, Princeton University</i>
11:55 a.m.	Synthesis of Sea Ice, Climate, and Human Systems in the Arctic and Subarctic (SYNICE) <i>Astrid Ogilvie, University of Colorado</i>

<b>12:05 p.m.</b>	<b>LUNCH Buffet (Salon A/B Atrium)</b>
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<b>CROSS-PROJECT COORDINATION AND SYNTHESIS</b>	
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1:00 p.m.	Group Discussion <ul style="list-style-type: none"> <li>• Ideas for Cross-project Coordination and Synthesis</li> <li>• Ideas for Break-out Group Topics</li> </ul>
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<b>2:00 p.m.</b>	<b>BREAK</b>
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2:30 p.m.	Break-out Groups
4:00 p.m.	Break-out Group Reports and Plenary Discussion
5:30 p.m.	Meeting Adjourns for Day

<b>Thursday, 4 October 2007 (Salon A/B, Lobby Level)</b>	
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*Full complimentary hotel breakfast available 7:00 a.m. (Breakfast Area, Lobby Level)*

<b>8:00 a.m.</b>	<b>Continental breakfast available outside meeting room</b>
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8:30 a.m.	Plenary Discussion: Review of Day 2, Day's Goal, and Break-out Group Charge
8:45 a.m.	Break-out Groups

<b>10:00 a.m.</b>	<b>BREAK</b>
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10:30 a.m..	Break-out Groups (Continued)
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<b>12:30 p.m.</b>	<b>LUNCH Buffet (Salon A/B Atrium)</b>
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1:30 p.m.	Plenary Discussion: Reports from Break-out Groups, Discussion on Final Break-out Group Topics on Approaches to Coordination
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2:00 p.m. Break-out Groups

**3:00 p.m. BREAK**

4:00 p.m. Plenary Discussion on Approaches to Coordination and Next Steps

5:00 p.m. Meeting Adjourns

***Friday, 5 October***

***Human Dimensions of the Arctic System (HARC) Synthesis Workshop (Salon A/B)***