

October 2007 ARCSS Synthesis Workshop | Agenda

ARCSS Synthesis Workshop
2-4 October 2007 (Tuesday-Thursday)
Embassy Suites Old Town Hotel
Alexandria, VA

Final Agenda ([PDF](#)) - Last updated: 10/11/2007

Portions of this workshop were videotaped and are available through links to our Internet Media Archive. Videos of each talk are available by clicking the icon to the left of each powerpoint.

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 Welcome and Introductions
p.m. *Don Perovich, ARCSS Committee Member, SASS PI*
(<http://media.arcus.org/displayimage.php?pos=-26592>) Video ([downloads/1_Tuesday_PM_SynthesisBackground/1_Perovich_Welcome_100207.ppt](#))(Presentation: [520K - PPT \(downloads/1_Tuesday_PM_SynthesisBackground/1_Perovich_Welcome_100207.ppt\)](#))
- 2:15 NSF ARCSS Program Goals and Expectations for ARCSS Synthesis
p.m. (Oral presentation only)*Neil Swanberg, ARCSS Program Director*
- 2:30 An Overview of ARCSS: Past, Present, and Future
p.m. *Josh Schimel, ARCSS Committee Chair*
(<http://media.arcus.org/displayimage.php?pos=-26609>) Video 1
(<http://media.arcus.org/displayimage.php?pos=-26580>) Video 2
([downloads/1_Tuesday_PM_SynthesisBackground/3_Schimel_Overview_100207.ppt](#))(Presentation: [4.1MB - PPT \(downloads/1_Tuesday_PM_SynthesisBackground/3_Schimel_Overview_100207.ppt\)](#))

THE STATE OF ARCSS SYNTHESIS: CONTEXT FOR THE WORKSHOP

- 2:50 Overview of SASS and SASS I Ideas for Synthesis Approaches
p.m. *Don Perovich, ARCSS Committee Member, SASS PI*
(<http://media.arcus.org/displayimage.php?pos=-26583>) Video ([downloads/1_Tuesday_PM_SynthesisBackground/4_Perovich_SASS_100207.ppt](#))(Presentation: [1.1MB - PPT \(downloads/1_Tuesday_PM_SynthesisBackground/4_Perovich_SASS_100207.ppt\)](#))

3:15 BREAK p.m.

Upcoming Science Planning Activities Quicktimes available under times for each section.

- 3:35 A Synthesis of the Last 2000 Years of Climatic Variability from Arctic Lakes:
p.m. ARCSS "2 kyr" Project
Raymond Bradley, University of Massachusetts
(<http://media.arcus.org/displayimage.php?pos=-26600>) Video ([downloads/1_Tuesday_PM_SynthesisBackground/5_Bradley_Lakes100207.ppt](#))(Presentation: [15.2MB - PPT \(downloads/1_Tuesday_PM_SynthesisBackground/5_Bradley_Lakes100207.ppt\)](#))
- 4:00 Freshwater Integration (FWI) Synthesis
p.m. *Larry Hinzman, International Arctic Research Center (IARC)*
(<http://media.arcus.org/displayimage.php?pos=-26584>) Video ([downloads/1_Tuesday_PM_SynthesisBackground/6_Hinzman_FWI_100207.ppt](#))(Presentation: [7.2MB - PPT \(downloads/1_Tuesday_PM_SynthesisBackground/6_Hinzman_FWI_100207.ppt\)](#))
- 4:25 Study of the Northern Alaska Coastal System (SNACS)
p.m. *Matthew Sturm, Cold Regions Research and Engineering Laboratory (CRREL)*
(<http://media.arcus.org/displayimage.php?pos=-26594>) Video ([downloads/1_Tuesday_PM_SynthesisBackground/7_Sturm_SNACS_100207.ppt](#))(Presentation: [19.6MB - PPT \(downloads/1_Tuesday_PM_SynthesisBackground/7_Sturm_SNACS_100207.ppt\)](#))
- 4:50 Human Dimensions in ARCSS Synthesis: Overview of HARC Workshop
p.m. *Maribeth Murray, University of Alaska Fairbanks, HARC Core Office Director*
(<http://media.arcus.org/displayimage.php?pos=-26608>) Video ([downloads/1_Tuesday_PM_SynthesisBackground/8_Murray_HARC_100207.ppt](#))(Presentation: [7.2MB - PPT \(downloads/1_Tuesday_PM_SynthesisBackground/8_Murray_HARC_100207.ppt\)](#))
- 5:15 Shelf-Basin Interactions (SBI) Synthesis
p.m. *Robert Campbell, University of Rhode Island*
(<http://media.arcus.org/displayimage.php?pos=-26572>) Video ([downloads/1_Tuesday_PM_SynthesisBackground/9_Campbell_SBI_100207.ppt](#))(Presentation: [11.6MB - PPT \(downloads/1_Tuesday_PM_SynthesisBackground/9_Campbell_SBI_100207.ppt\)](#))
- 5:40 Group Discussion: ARCSS Synthesis and Goals for the Workshop
p.m. Video
- 6:00 Poster Session and Reception (Atrium and Carter Room)
p.m.

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 Continental breakfast available outside meeting room a.m.

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

SASS I: SHORT PROJECT PRESENTATIONS (9 PROJECTS)

- 8:45 A Heat Budget Analysis of the Arctic Climate System
a.m. *Mike Steele, University of Washington*
(<http://media.arcus.org/displayimage.php?pos=-26575>) Video (downloads/2_Wed_AM_ProjectPresentations/1_NEW_Steele_SASS_Wed.ppt)(Presentation: **7.6MB - PPT** (downloads/2_Wed_AM_ProjectPresentations/1_NEW_Steele_SASS_Wed.ppt))
- 8:55 Sunlight and the Arctic Atmosphere-Ice-Ocean System
a.m. *Don Perovich, Cold Regions Research and Engineering Laboratory (CRREL)*
(<http://media.arcus.org/displayimage.php?pos=-26586>) Video (downloads/2_Wed_AM_ProjectPresentations/2_Perovich_SASS_100307.ppt)(Presentation: **10.3MB - PPT** (downloads/2_Wed_AM_ProjectPresentations/2_Perovich_SASS_100307.ppt))
- 9:05 Synthesis of Modes of Ocean-Ice-Atmosphere Covariability in the Arctic System from Multivariate Century-Scale Observations
a.m. *Martin Miles, Environmental Systems Analysis Research Center (ESARC)*
(<http://media.arcus.org/displayimage.php?pos=-26591>) Video (downloads/2_Wed_AM_ProjectPresentations/3_Miles_SASS_100307.ppt)(Presentation: **3.2MB - PPT** (downloads/2_Wed_AM_ProjectPresentations/3_Miles_SASS_100307.ppt))
- 9:15 Arctic Surface Air Temperatures for the Past 100 years: Analysis and Reconstruction of an Integrated Data Set for Arctic System Science
a.m. *Harry Stern, University of Washington*
(<http://media.arcus.org/displayimage.php?pos=-26610>) Video (downloads/2_Wed_AM_ProjectPresentations/4_Stern_SASS_100307.ppt)(Presentation: **8.7MB - PPT** (downloads/2_Wed_AM_ProjectPresentations/4_Stern_SASS_100307.ppt))
- 9:25 Synthesis of Arctic System Carbon Cycle Research Through Model-Data Fusion Studies Using Atmospheric Inversion and Process-Based Approaches
a.m. *A. David McGuire, University of Alaska Fairbanks*
(<http://media.arcus.org/displayimage.php?pos=-26613>) Video (downloads/2_Wed_AM_ProjectPresentations/5_McGuire_SASS_100307/5_McGuire_SASS_100307.ppt)(Presentation: **4.1MB - PPT** (downloads/2_Wed_AM_ProjectPresentations/5_McGuire_SASS_100307/5_McGuire_SASS_100307.ppt))
- Accompanying file for powerpoint.
(downloads/2_Wed_AM_ProjectPresentations/5_McGuire_SASS_100307/5_McGuire_Rivers_doc_movie.gif)(gif: **1.8MB** (downloads/2_Wed_AM_ProjectPresentations/5_McGuire_SASS_100307/5_McGuire_Rivers_doc_movie.gif))
- 9:35 Greening of the Arctic-Synthesis and Models to Examine the Effects of Climate, Sea-Ice, and Terrain on Circumpolar Vegetation Changes
a.m. *Skip Walker, University of Alaska Fairbanks*
(<http://media.arcus.org/displayimage.php?pos=-26607>) Video (downloads/2_Wed_AM_ProjectPresentations/6_Walker_SASS_100307.ppt)(Presentation: **18MB - PPT** (downloads/2_Wed_AM_ProjectPresentations/6_Walker_SASS_100307.ppt))
- 9:45 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
a.m. *Mark Fahnestock, University of New Hampshire*
(<http://media.arcus.org/displayimage.php?pos=-26615>) Video (Presentation Not Available)
- 9:55 Humans and Hydrology at High Latitudes
a.m. *Richard Lammers, University of New Hampshire*
(<http://media.arcus.org/displayimage.php?pos=-26611>) Video (downloads/2_Wed_AM_ProjectPresentations/8_Lammers_SASS_100307.ppt)(Presentation: **4.6MB - PPT** (downloads/2_Wed_AM_ProjectPresentations/8_Lammers_SASS_100307.ppt))
- 10:05 Heterogeneity and Resilience of Human-Rangifer Systems: A Circumpolar Social-Ecological Synthesis
a.m. *Gary Kofinas, University of Alaska Fairbanks*
(<http://media.arcus.org/displayimage.php?pos=-26602>) Video (downloads/2_Wed_AM_ProjectPresentations/9_Kofinas_SASS_100307_web.pdf)(Presentation: (downloads/Schlosser_SEARCH_10_01_07.pdf)1.5MB - PDF (downloads/2_Wed_AM_ProjectPresentations/9_Kofinas_SASS_100307_web.pdf))
- 10:15 Brief Discussion on SASS I Projects
a.m. Video

10:25 BREAK
a.m.

SASS II: SHORT PROJECT PRESENTATIONS (8 PROJECTS)

- 10:45 The Roles of Clouds and their Accomplices in Modulating the Trajectory of the Arctic System
a.m. *Jennifer Francis, Rutgers University*
(<http://media.arcus.org/displayimage.php?pos=-26578>) Video (downloads/2_Wed_AM_ProjectPresentations/10_Francis_SASSII_100307.ppt)(Presentation: **2.8MB - PPT** (downloads/2_Wed_AM_ProjectPresentations/10_Francis_SASSII_100307.ppt))
- 10:55 Toward Reanalysis of the Arctic Climate System - Sea Ice and Ocean Reconstruction with Data Assimilation
a.m. *Andrey Proshutinsky, Woods Hole Oceanographic Institution*
(<http://media.arcus.org/displayimage.php?pos=-26571>) Video (downloads/2_Wed_AM_ProjectPresentations/11_Proshutinsky_SASSII_100307/11_Proshutinsky_Reconstruction_SASSII_2007.ppt)(Presentation: **2.6MB - PPT** (downloads/2_Wed_AM_ProjectPresentations/11_Proshutinsky_SASSII_100307/11_Proshutinsky_Reconstruction_SASSII_2007.ppt))
- Accompanying files for powerpoint.
(s:/sass/meetings/2007_oct/downloads/2_Wed_AM_ProjectPresentations/11_Proshutinsky_SASSII_100307/ch_90jn_u_35m_90daysRAW.avi)(avi: **120.1MB** (s:/sass/meetings/2007_oct/downloads/2_Wed_AM_ProjectPresentations/11_Proshutinsky_SASSII_100307/ch_90jn_u_35m_90daysRAW.avi))
(s:/sass/meetings/2007_oct/downloads/2_Wed_AM_ProjectPresentations/11_Proshutinsky_SASSII_100307/ch_90_u_35m_90daysRAW.avi)(avi: **119.7MB** (s:/sass/meetings/2007_oct/downloads/2_Wed_AM_ProjectPresentations/11_Proshutinsky_SASSII_100307/ch_90_u_35m_90daysRAW.avi))
- 11:05 Producing an Updated Synthesis of the Arctic's Marine Primary Production Regime and Its Controls
a.m. *Patricia Matrai, Bigelow Laboratory for Ocean Sciences*
(<http://media.arcus.org/displayimage.php?pos=-26601>) Video (downloads/2_Wed_AM_ProjectPresentations/12_Matrai_SASSII_100307/12_Matrai_SASSII_100307.ppt)(Presentation: **7.7MB - PPT** (downloads/2_Wed_AM_ProjectPresentations/12_Matrai_SASSII_100307/12_Matrai_SASSII_100307.ppt))
- Accompanying file for powerpoint.
(s:/sass/meetings/2007_oct/downloads/2_Wed_AM_ProjectPresentations/12_Matrai_SASSII_100307/ArcticPPmovie_MUST%20GO%20WITH%20MATRAI.mpg)(mpeg: **2.1MB** (s:/sass/meetings/2007_oct/downloads/2_Wed_AM_ProjectPresentations/12_Matrai_SASSII_100307/ArcticPPmovie_MUST%20GO%20WITH%20MATRAI.mpg))

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
Jinlun Zhang, University of Washington
(<http://media.arcus.org/displayimage.php?pos=-26582>) Video (downloads/2_Wed_AM_ProjectPresentations/13_ZhangJ_SASSII_100307.ppt)(Presentation: **988K - PPT** (downloads/2_Wed_AM_ProjectPresentations/13_ZhangJ_SASSII_100307.ppt))
- 11:25 Climate Response to Future Changes in Arctic Snow Cover and Sea Ice: A New Perspective from the High-Resolution NCAR CCSM3
a.m. *Clara Deser, National Center for Atmospheric Research*
(<http://media.arcus.org/displayimage.php?pos=-26606>) Video (downloads/2_Wed_AM_ProjectPresentations/14_Deser_SASSII_100307.ppt)(Presentation: **1.9MB - PPT** (downloads/2_Wed_AM_ProjectPresentations/14_Deser_SASSII_100307.ppt))
- 11:35 The White Arctic: A Snow-Impacts Synthesis for the Terrestrial Arctic
a.m. *Christopher Hiemstra, Colorado State University*
(<http://media.arcus.org/displayimage.php?pos=-26617>) Video (downloads/2_Wed_AM_ProjectPresentations/15_Sturm_SASSII_100307.ppt)(Presentation: **11.6MB - PPT** (downloads/2_Wed_AM_ProjectPresentations/15_Sturm_SASSII_100307.ppt))
- 11:45 Understanding Change in the Climate and Hydrology of the Arctic Land Region: Synthesizing the Results of the ARCSS Fresh Water Initiative Projects
a.m. *Eric Wood, Princeton University*
(<http://media.arcus.org/displayimage.php?pos=-26596>) Video (downloads/2_Wed_AM_ProjectPresentations/16_Wood_SASSII_100307.ppt)(Presentation: **1.3MB - PPT** (downloads/2_Wed_AM_ProjectPresentations/16_Wood_SASSII_100307.ppt))
- 11:55 Synthesis of Sea Ice, Climate, and Human Systems in the Arctic and Subarctic (SYNICE)
a.m. *Astrid Ogilvie, University of Colorado*
(<http://media.arcus.org/displayimage.php?pos=-26581>) Video (downloads/2_Wed_AM_ProjectPresentations/17_Ogilvie_SASSII_SYNICE_100307.ppt)(Presentation: **28.5MB - PPT** (downloads/2_Wed_AM_ProjectPresentations/17_Ogilvie_SASSII_SYNICE_100307.ppt))

12:05 LUNCH Buffet (Salon A/B Atrium)
p.m.

CROSS-PROJECT COORDINATION AND SYNTHESIS

- 1:00 Plenary Discussion
p.m. (<http://media.arcus.org/displayimage.php?pos=-26595>) Video 1 (downloads/3_Wed_PM_WorkingGroups/0_Wed_PM_BreakoutCharge.ppt)(Perovich Presentation: **52K - PPT** (downloads/3_Wed_PM_WorkingGroups/0_Wed_PM_BreakoutCharge.ppt))
(<http://media.arcus.org/displayimage.php?pos=-26599>) Video 2 (downloads/3_Wed_PM_WorkingGroups/0b_Wed_Hinzman_Milankovich_Idea.ppt)(Hinzman Presentation: **780K - PPT** (downloads/3_Wed_PM_WorkingGroups/0b_Wed_Hinzman_Milankovich_Idea.ppt))
- Ideas for Cross-project Coordination and Synthesis
 - Ideas for Break-out Group Topics

2:00 BREAK
p.m.

2:30 Break-out Groups
p.m.

- 4:00 Break-out Group Reports and Plenary Discussion
p.m.
- Group 1 Report: Impacts of Snow and Ice Change
(<http://media.arcus.org/displayimage.php?pos=-26588>) Video (downloads/3_Wed_PM_WorkingGroups/Group1_SnowIce.ppt)(Presentation: **448K - PPT** (downloads/3_Wed_PM_WorkingGroups/Group1_SnowIce.ppt))
 - Group 2 Report: What Does an Ice Diminished Arctic Look Like?
(<http://media.arcus.org/displayimage.php?pos=-26604>) Video (downloads/3_Wed_PM_WorkingGroups/Group2_IceDiminished.ppt)(Presentation: **36K - PPT** (downloads/3_Wed_PM_WorkingGroups/Group2_IceDiminished.ppt))
 - Group 3 Report: What are the Impacts of a Warmer Arctic, and What/ Where Are the Tipping Points?
(<http://media.arcus.org/displayimage.php?pos=-26605>) Video (downloads/3_Wed_PM_WorkingGroups/Group3_WarmerArctic.ppt)(Presentation: **32K - PPT** (downloads/3_Wed_PM_WorkingGroups/Group3_WarmerArctic.ppt))
 - Group 4 Report: What Would an Ice-Free Arctic Be Like, and What Would It's Implications Be?
(<http://media.arcus.org/displayimage.php?pos=-26593>) Video (downloads/3_Wed_PM_WorkingGroups/Group4_IceFree.ppt)(Presentation: **2.3MB - PPT** (downloads/3_Wed_PM_WorkingGroups/Group4_IceFree.ppt))
 - Group 5 Report: Arctic Warming: Causes, Consequences, and Connections
(<http://media.arcus.org/displayimage.php?pos=-26577>) Video (downloads/3_Wed_PM_WorkingGroups/Group5_WarmingCauses.ppt)(Presentation: **28K - PPT** (downloads/3_Wed_PM_WorkingGroups/Group5_WarmingCauses.ppt))
 - Plenary Discussion: Group Reports
(<http://media.arcus.org/displayimage.php?pos=-26579>) Video

5:30 Meeting Adjourns for Day
p.m.

Thursday, 4 October 2007 (Salon A/B, Lobby Level)

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

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

- 8:30 Plenary Discussion: Review of Day 2, Day's Goal, and Break-out Group Charge
a.m. (<http://media.arcus.org/displayimage.php?pos=-26570>) Video (downloads/4_Thursday/1_Thursday_AMCharge.ppt)(Break-out Charge: **40K - PPT** (downloads/4_Thursday/1_Thursday_AMCharge.ppt))

8:45 Break-out Groups
a.m.

10:00 BREAK

a.m.

10:30 Break-out Groups (Continued)
a.m..

12:30 LUNCH Buffet (Salon A/B Atrium)
p.m.

- 1:30 Plenary Discussion: Reports from Break-out Groups, Discussion on Final Break-out Group Topics on Approaches to Coordination
p.m.
- Group 1 Report: Summer of 2007
(<http://media.arcus.org/displayimage.php?pos=-26576>) Video ([downloads/4_Thursday/2_Thurs_PM_BreakoutReports/Group1_2007.ppt](#))(Presentation: **2.5MB - PPT** ([downloads/4_Thursday/2_Thurs_PM_BreakoutReports/Group1_2007.ppt](#)))
 - Group 2 Report: Broken Clockwork
(<http://media.arcus.org/displayimage.php?pos=-26612>) Video ([downloads/4_Thursday/2_Thurs_PM_BreakoutReports/Group2_Broken_Clockwork.ppt](#)) (Presentation: **2.1MB - PPT** ([downloads/4_Thursday/2_Thurs_PM_BreakoutReports/Group2_Broken_Clockwork.ppt](#)))
 - Group 3 Report: Primary Production
(<http://media.arcus.org/displayimage.php?pos=-26614>) Video ([downloads/4_Thursday/2_Thurs_PM_BreakoutReports/Group3_Primary_Production.ppt](#)) (Presentation: **56K - PPT** ([downloads/4_Thursday/2_Thurs_PM_BreakoutReports/Group3_Primary_Production.ppt](#)))
 - Group 4 Report: Data Tools
(<http://media.arcus.org/displayimage.php?pos=-26597>) Video ([downloads/4_Thursday/2_Thurs_PM_BreakoutReports/Group4_Data_Tools.ppt](#)) (Presentation: **712K - PPT** ([downloads/4_Thursday/2_Thurs_PM_BreakoutReports/Group4_Data_Tools.ppt](#)))
 - Group 5 Report: Rates of Change/ Feedback
(<http://media.arcus.org/displayimage.php?pos=-26590>) Video ([downloads/4_Thursday/2_Thurs_PM_BreakoutReports/Group5_Rate_Change_Feedback.ppt](#)) (Presentation: **3MB - PPT** ([downloads/4_Thursday/2_Thurs_PM_BreakoutReports/Group5_Rate_Change_Feedback.ppt](#)))
 - Group 6 Report: Human-Rangifer Vegetation
(<http://media.arcus.org/displayimage.php?pos=-26616>) Video ({})(Presentation coming soon..{}))
- 2:00 Break-out Groups
p.m. (<http://media.arcus.org/displayimage.php?pos=-26589>) Video ([downloads/4_Thursday/3_Thurs_PM_FinalCharge.ppt](#))(Final Charge: **42K - PPT** ([downloads/4_Thursday/3_Thurs_PM_FinalCharge.ppt](#)))

3:00 BREAK
p.m.

- 4:00 Plenary Discussion on Approaches to Coordination and Next Steps
p.m. (<http://media.arcus.org/displayimage.php?pos=-26603>) Video ([downloads/4_Thursday/4_Thurs_PM_SupportNeeded.ppt](#))(Coordination and Next Steps: **32K - PPT** ([downloads/4_Thursday/4_Thurs_PM_SupportNeeded.ppt](#)))
- 5:00 Meeting Adjourns
p.m.

Friday, 5 October
Human Dimensions of the Arctic System (HARC) Synthesis Workshop (Salon A/B)