

CCSM Joint Polar Climate and Land Ice Working Group Meeting

17 February 2010

National Center for Atmospheric Research – Boulder, Colorado

Webcast Instructions:

AUDIO: Dial this access number: 1-866-740-1260 – Enter access code **4971358**

VIDEO: Go to www.readytalk.com; under "join a meeting" enter access code **4971358**

WEDNESDAY, 17 February – Main Seminar Room

8:00 *Coffee*

8:30 Marika Holland, Bill Lipscomb, Jesse Johnson – Welcome to the Joint Session, Announcements

8:45 Mariana Vertenstein – Update on CCSM4 Status

9:00 Tony Payne – Outline of the European Union's ice2sea Project: Predictions of the Cryosphere's Contribution to Sea Level over the Next 200 Years

9:15 Ed Andreas – The Physical and Aerodynamic Roughness of Sea Ice

9:30 Jean-Francois Lemieux – Improving the Numeral Convergence of Viscous-plastic Sea Ice Models with the Jacobian-free Newton-Krylov Method

9:45 David Holland – Long-term Ocean Observations at Jakobshavn and Helheim Fjords, Greenland

10:00 *Break*

10:30 Bill Lipscomb – Initial Results from CCSM4 Simulations with a Dynamic Greenland Ice Sheet

10:45 Flo Colleoni – On the Late Saalian Glaciation (160 – 140 ka): A Climate Modeling Study

11:00 Jeremy Fyke – Development, Spinup Procedure, and Initial Synchronous Multi-millennial Simulations of a Coupled Ice Sheet / Global Climate Model

11:15 Stephen Price – Application of a Higher-order Flow Model to Greenland Outlet Glacier Dynamics

11:30 Ed Bueler – Verification, Validation, and Basal Strength in Models for the Present State of Ice Sheets

11:45 Jesse Johnson – Metrics for Assessing Ice Sheet Model Performance

12:00 *Lunch*

ISICLES

1:00 Kate Evans – Overview of the ISICLES Projects

1:15 Omar Ghattas – Advanced Computational Methods for Large-scale Forward and Inverse Ice Sheet Dynamics

1:30 Jed Brown – Achieving Textbook Multigrid Efficiency for Hydrostatic Ice Flow

1:45 Haim Weisman / Ray Tuminaro – Initial Modeling Efforts of an Ice Shelf and Progress with AMG Applied to the Extended Finite Element Method

2:00 Erin Barker / Trey White – Progress on SEACISM; Initial Solver and Parallel Development

2:15 Ranis Ibragimov – Mathematics of Grounding Line Stability

2:30 *Break*

3:00 Ken Jezek – Melting Ice Sheets: Processes at the Surface and Base

3:15 Ute Herzfeld – Surface Roughness as Indicator of Geophysical Change in Greenland Glaciers and Ice Stream; Conclusions from ICESAT and ICEBRIDGE Data Analysis (and model implications?)

- 3:30 Sasha Carter – A Simple Parameterization for Subglacial Water Storage, Transport, and Episodicity Validated by Independent Geophysical Observations
- 3:45 Sebastian Mernild – Freshwater Flux from the Greenland Ice Sheet and the Jakobshavn and Helheim Glaciers
- 4:00 Xylar Asay-Davis – Coupling Glimmer-CISM to POP using an Immersed Boundary Method
- 4:15 Carl Gladish – Modeling Ice Shelf Basal Melt with Glimmer-CISM Coupled to a Meltwater Plume Model
- 4:30 Bill Lipscomb and Jesse Johnson – Open Discussion
- 5:00 *Adjourn*