

Ocean Climate Model Development Meeting

GFDL, Princeton, NJ

Wednesday agenda

9:00 Welcome to GFDL

Coupled ocean modeling session

9:10 Introduction - Gokhan Danabasoglu

9:25 Overview of NCAR activities - Peter Gent

9:50 Overview of GFDL activities - Robert Hallberg

10:15 *Coffee break*

10:45 Overview of Hadley Centre activities - Malcolm Roberts

11:10 Overview of MPI activities - Johann Jungclaus

11:35 Discussion - Gokhan Danabasoglu

12:00 *Break for lunch*

Sea Level and Ice-Shelf-Ocean session

1:30 Overview of ice-ocean interaction and its relation to ocean modeling - David Holland

1:50 Response of the Antarctic Ice Sheet to increased ice-shelf oceanic melting - David Pollard

2:10 Shelf Calving and Ablation: an ice-shelf modelers perspective on ocean-ice coupling - Todd Dupont

2:30 Grounding lines: a boundary to ice-sheet modeling - Daniel Goldberg

2:50 Heat and salt exchange at an ice-seawater interface - Miles McPhee

3:10 Coupled ice-sheet ocean modeling: status, key findings, ongoing challenges - Chris Little

3:30 *Coffee break*

4:00 Lessons from fully coupled ocean-ice shelf process models - Ryan Walker

4:20 Current state of the Community Ice Sheet Model - Matthew Hecht

4:40 Nansen Center activities - Helge Drange

4:45 NASA GISS activities - Gavin Schmidt?

4:50 NOAA GFDL activities - Daniel Goldberg/Olga Sergienko

4:55 Discussion - David Holland

5:30 **Shuttle departs to reception**

6:00-8:00 **Reception (at Jadwin Hall, Princeton University)**

The reception is on the fourth floor of Jadwin Hall which is on Princeton Main Campus. For the return trip, the shuttles will depart Jadwin Hall at 8pm, stopping at GFDL to drop people off and then continuing on to The Holiday Inn.

Thursday agenda

High resolution modeling session

9:00 Introduction - Matthew Hecht

9:10-10:50 Contributors: Chris Hill, Thierry Penduff, Tony Rosati, Riccardo Farneti, Rym Msadek, Bob Hallberg, Matthew Hecht

10:50 *Coffee break*

Mesoscale & sub-mesoscale parameterization session

11:10 Review of mesoscale and sub-mesoscale parameterizations - Baylor Fox-Kemper

Contributors: Ross Tulloch, Shafer Smith, Matthew Hecht, Gokhan Danabasoglu, Steve Griffies, Brian Arbic, Alistair Adcroft

12:40 *Break for lunch*

Mixing and small scale parameterization session

2:00 Introduction - Steve Jayne

Contributors: Steve Jayne, Maxim Nikurashin, Robert Hallberg, Jennifer MacKinnon, Sonya Legg

4:00 *Coffee break*

Formulation and numerical methods

4:30 Overview of formulations and numerical issues - Robert Hallberg

5:00 The HOME prototype project - Alistair Adcroft

Friday agenda

Sea-ice modeling session (note early start)

8:00 Overview Cecilia Bitz

8:10 Putting the physics into sea-ice parameterizations - Danny Feltham

8:30 Parameterizing sea-ice physics - Chris Petrich

8:50 Advances in sea-ice dynamics; the elastic-decohesive approach - Deborah Sulsky

9:10 High-frequency (hourly to daily) ice-ocean boundary layer interactions - Andrew Roberts

9:30 Icebergs and other innovations and plans in the CICE model - Elizabeth Hunke

9:50 *Coffee break*

10:20 The Louvain-la-Neuve sea-ice model: status and developments - Thierry Fichefet

10:40 Innovations and plans in the GFDL model (SIS) - Michael Winton

11:55 Sea-ice state estimation in ECCO2 - Jean-Michel Campin

11:00 Discussion - Cecilia Bitz

COREs and datasets session

11:20 CORE overview and history Steve Griffies

11:50 Data and NCAR experiences Bill Large

12:20 CORE at CSIRO Simon Marsland

12:35 Ocean-ice modeling at Bergen Mats Bentsen

12:50 Discussion

1:00 *Break for lunch*