

**CESM Ocean Model Working Group Meeting**  
**14 – 15 December 2011**  
**Mesa Lab, Main Seminar Room**  
**National Center for Atmospheric Research – Boulder, Colorado**

**Wednesday, 14 December**

08:00 *Coffee*

08:20 [Welcome and Meeting Overview](#)

Co-chairs

**MODEL DEVELOPMENTS**

08:30 [Update on GFDL MOM Developments](#)

Steve Griffies

08:50 [CSLAM Advection Scheme and Testing](#)

Peter Lauritzen

09:10 Summary of MPAS-O Progress

Mark Petersen

09:30 [Status and Development Plan for MPAS-O](#)

Todd Ringler

09:50 Discussion

10:00 *Break*

**MODEL DEVELOPMENTS: WORK IN PROGRESS WITH POP2**

10:20 [Mixing CPT: A New Near-Inertial Wave Mixing Parameterization](#)

Markus Jochum

10:40 [Sea-ice CPT](#)

Bruce Briegleb

11:00 [Topographic Control of Gulf Stream](#)

Susan Bates

11:10 [MOBY](#)

Nancy Norton

[Modeling Ocean Variability and Biogeochemical Cycles](#)

Matt Long

11:30 POP2 Development Plans

Co-Chairs

- Science Requirements Document

- [Options for Vertical Coordinates](#)

Matthew Hecht

- Discussion

12:20 *Lunch*

**HIGH RESOLUTION MODELING**

13:30 [Development of a 1/16 Degree Eddy-resolving Global Ocean Simulation](#)

Yu-heng Tseng

Within an Earth System Model Framework

13:50 Initializing Fine Resolution CESM

Mathew Maltrud

Julie McClean

14:10 [Ocean Heat Uptake in Eddy- and Non-eddy-resolving Transient](#)

Frank Bryan

Climate Change Simulations

14:30 [Anisotropy and Tracer Diagnosis](#)

Baylor Fox-Kemper

14:50 [NRCM Update](#)

Justin Small

15:10 Discussion

Co-Chairs

- High Resolution Modeling

- Continue POP2 Development Discussion, if needed

- CSL Working Group Proposal

## Thursday, 15 December

08:00 *Coffee*

### **DIAGNOSTICS**

08:30 [Ocean Diagnostics with NCL](#)

Dave Brown

08:50 [Estimation of GM Diffusivity via UQ](#)

Matthew Hecht

### **OCEAN MIXING AND VENTILATION**

09:10 [North Pacific Mixing Processes and Ventilation in the CESM x3 Ocean Model](#)

Keith Moore

09:30 [Ocean Carbon Uptake](#)

Matthew Long

09:50 [Exploratory Experiments](#)

Gokhan Danabasoglu

10:00 [Many core disruptive technologies are coming](#)

Rich Loft

10:10 Discussion

10:20 *Break*

### **MISCELLANEOUS SCIENCE TALKS**

10:40 [Thoughts about CINDY](#)

Kelvin Richards

11:00 [Does GM Work Well in the Southern Ocean?](#)

Peter Gent

11:20 [A Decadal Prediction Case Study: Late 20<sup>th</sup> Century North Atlantic](#)

Steve Yeager

Ocean Heat Content

11:40 [Tropical Atlantic Variability](#)

Ernesto Munoz

12:00 General Discussion

- POP2 Development
- CSL Working Group Proposal
- Any Other Topics

12:40 Adjourn