

**CESM Ocean Model Working Group Meeting**  
15 – 16 January 2015  
Mesa Lab – Main Seminar Room  
National Center for Atmospheric Research – Boulder, Colorado

>>>> Webcast: [www.fin.ucar.edu/it/mms/ml-live.htm](http://www.fin.ucar.edu/it/mms/ml-live.htm) <<<<

**Thursday, 15 January**

08:00 Coffee  
08:30 Welcome

Co-chairs

***DEVELOPMENTS IN POP2***

08:40 Path to CESM2  
09:00 Context and Updates  
09:15 New Grids for POP  
09:40 A scalable Barotropic Solver for POP  
10:05 CESM and POP Workflow

Jean-Francois Lamarque  
Gokhan Danabasoglu  
Steve Yeager  
Yong Hu  
Alice Bertini & Sheri Mickelson

10:30 *Break*

11:00 Langmuir Mixing Parameterization  
11:25 Anisotropic Mesoscale Mixing Parameterization  
11:50 Tidal Mixing Parameterizations

Baylor Fox-Kemper  
Scott Reckinger  
Gokhan Danabasoglu

12:15 *Lunch (on your own)*

13:30 Physically-Based Parameterization of Terrestrial  
Fluxes in POP  
13:55 New Sea-Ice Model in CESM  
14:20 Discussion: Developments on POP2

Michael Whitney & Qiang Sun  
David Bailey

15:00 *Break*

***MISCELLANEOUS***

15:30 Atlantic Layer, AABW, and Connection between Southern  
Ocean Winds and AMOC  
15:55 Comparison of AMOC in ocean synthesis products from  
1960-present  
16:20 Coastal Upwelling in CESM  
16:45 Discussion: MIPs, Future CPTs, and New Ocean-Initialized Large Ensemble Simulations  
17:30 *Working Group Information Exchange –Damon Room*

Markus Jochum  
Alicia Karspeck  
Justin Small

## Friday, 16 January

08:00 Coffee

### **BIOGEOCHEMISTRY**

|       |  |                 |
|-------|--|-----------------|
| 08:30 | Ocean BGC Plans for CESM2  | Keith Lindsay   |
| 08:55 | Biogeochemistry of Oxygen Minimum Zones  | Keith Moore     |
| 09:20 | Coupling ROMS and BEC: Application to the North Pacific  | Kazuhiro Misumi |
| 09:45 | Using a Limited-Domain Transport Matrix Technique to Study the Oxygen Concentrations in the Indian Ocean | Ann Bardin      |
| 10:10 | Discussion   |                 |

10:30 *Break*

### **MISCELLANEOUS**

|       |   |              |
|-------|---|--------------|
| 11:00 | Isohaline Salinity Budget of the North Atlantic Salinity Maximum                                | Frank Bryan  |
| 11:25 | Warm Deep Water and Changes in Heat Content in the Weddell Sea in CMIP5 and Reanalysis Products | Ilana Wainer |

### **MPAS-O**

|       |   |  |
|-------|---|--|
| 11:50 | A Comparison of GM to a Residual Mean Approach                        | Juan Saenz                                   |
| 12:15 | <i>Lunch (on your own)</i>  |  |
| 13:15 | Computing Tensor Diffusivity from a Well-Resolved, Eddying Simulation | Phillip Wolfram                              |
| 13:40 | CORE-II and MPAS-O  | Mark Peterson, Todd Ringler, & Doug Jacobsen |
| 14:05 | MPAS-O Plans  | Todd Ringler                                 |
| 14:30 | General Discussion and Wrap-up  |  |
| 15:30 | <i>Adjourn</i>  |  |