

CESM Polar Climate Working Group Meeting
3 – 4 February 2015
National Center for Atmospheric Research –Mesa Lab
Boulder, Colorado

TUESDAY, 3 February – Main Seminar Room

Webcast: >>>> Webcast: www.fin.ucar.edu/it/mms/ml-live.htm <<<<

- 11:00 CGD Seminar – Ed Blanchard – Wrigglesworth – Model skill and sensitivity to initial conditions in an operational sea ice prediction system (or how to be smart about winning ice cream)
- 12:00 Lunch (*on your own*)

Joint Session with Land Ice Working Group

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|------|---|----------------------------------|
| 1:00 | Late Pleistocene ice sheet-ice shelf-ocean interactions and abrupt climate and sea level change | Peter Clark |
| 1:20 | Progress and challenges in ice-sheet/climate coupling in CESM | Jeremy Fyke |
| 1:40 | Evaluation of present-day surface energy and mass balances of the Greenland ice sheet with CESM (CAM5) | Leo van Kampenhout |
| 2:00 | 1850-2200 surface mass balance of the Greenland Ice Sheet as simulated with CESM (CAM5) | Miren Vizcaino |
| 2:20 | Intensification of the Antarctic hydrological cycle in a warming climate: A study with CESM | Jan Lenaerts |
| 2:40 | Discussion | |
| 3:00 | <i>Break</i> | |
| 3:30 | Toward high-resolution circum-Antarctic simulations using the POPSICLES coupled ice sheet–ocean model | Dan Martin |
| 3:50 | Assessing the impact of Arctic sea ice variability on the Greenland Ice Sheet surface mass and energy balance | Julienne Stroeve |
| 4:10 | Clouds, inversions, and radiation at Summit, Greenland | Nate Miller |
| 4:30 | CESM workflow refactor project | Alice Bertini
Sheri Mickelson |
| 5:00 | <i>Adjourn</i> | |

WEDNESDAY, 4 February – Damon Room

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**

8:30 *Coffee*

9:00 Welcome and logistics

Co-chairs

Polar Science: Trends, Predictability, Teleconnections

9:10 CESM simulations of Bering Sea climate and marine production

John Walsh

9:30 Length of the open water season along the Arctic coast using the CESM Large Ensemble

Katy Barnhart

9:50 How does sea ice loss affect clouds? A story about stability in a warming Arctic

Ariel Morrison

10:10 Process-based evaluation of Arctic inversions

Line Bourdages

10:30 *Break*

11:00 Use of CESM to quantify aerosol forcing from the Eyjafjallajökull volcanic eruptions

Mark Flanner

11:20 Recent Antarctic Atmospheric Warming and Climate Feedbacks

Cecilia Bitz

11:40 Antarctic sea ice in the CESM Large Ensemble

Marika Holland

12:00 Discussion (polar science opportunities in CESM, current and future CSL resources)

12:20 Lunch (*on your own*)

Polar Climate Model Evaluation and Development

1:30 Update on CICE5 simulations and physics options for CESM2

Dave Bailey

1:50 CICE5 physics in RASM with implications for CESM

Andrew Roberts

2:10 Discussion (CICE5 physics decisions for CESM2)

2:30 *Break*

3:00 Sea ice sensitivity to snow parameters in CICE5

Jorge Urrego-Blanco

3:20 Update on developments in CICE ice biogeochemistry

Nicole Jeffery

3:40 Comparison of data analysis and modeling results

Ute Herzfeld and

Lukas Goetz Weiss

4:00 Discussion (CICE_x/CESM_x – what processes are we missing? Looking towards the future...)

4:20 Arctic Radiative Fluxes: Present-day biases and future projections in CMIP5 models

Jason English

4:40 Plans for CliC /Sea Ice MIP for CMIP6

Alexandra Jahn

5:00 Discussion (Coordinating research and development for CMIP6/CESM2)