

CESM Atmosphere Model Working Group Meeting
14 – 16 February 2011
National Center for Atmospheric Research – Boulder, Colorado

MONDAY, 14 February:

Update and Progress on CAM

- 14:00 [Co-chairs](#) – Welcome, Logistics, and Introductory Remarks
- 14:15 [Rich Neale](#) – Status of CAM4 and CAM5 Modeling and Simulation Activities
- 14:30 [Cecile Hannay](#) – CESM1(CAM5) 1-Degree Coupled Simulations

CAM Current and Future Parameterization Updates

- 14:45 [Guang Zhang](#) – Inclusion of Microphysics in Convective Parameterization in CAM5
- 15:00 [Xiaohong Liu](#) – Testing Cloud Microphysics Parameterizations in CAM5
- 15:15 [Sungsu Park](#) – UNICON a Unified Convection Scheme for CAM
- 15:30 *Break*
- 16:00 [Peter Caldwell](#) – PDF-based Stratiform Physics for CAM
- 16:15 [Andrew Gettelman](#) – Sub-columns/SP-CAM Plans
- 16:30 [Bill Collins](#) – Future Directions for Radiative Transfer: Prospective Capabilities and Diagnostics
- 16:45 [Xiaoqing Wu](#) – Consistent Representation of Precipitation, Cloud, and Radiative Fluxes in GCMs
- 17:00 Discussion – Minghua Zhang
- 17:30 *Reception – Damon Room*

TUESDAY, 15 February:

8:30 *Coffee, pastries*

Climate, Climate Variability and Intercomparison Project Activities

8:45 [Minghua Zhang](#) – The CGILS Project 8

9:00 [Chris Bretherton](#) – Results from VOCAL Experiments

9:15 [Øyvind Seland](#) – CAM4 with Prognostic Aerosols and MICOM-BCM Ocean Model (NorESM)

9:30 [Andrew Gettelman](#) – Climate Sensitivity in CAM5

9:45 [Jen Kay](#) – Analysis of CAM4 and CAM5 Clouds using COSP

10:00 [Sungsu Park](#) – Estimation of Climate Sensitivity at Surface from CESM1, CCSM4, and Observation

10:15 [Minghuai Wang](#) – Multiscale Modeling of Cloud-aerosol Interactions in CAM

10:30 *Break*

Uncertainty Quantification Studies

11:00 [John Tannahill](#) – Computational Aspects of the UQ Project at LLNL

11:15 [Don Lucas](#) – Scientific Aspects of the Uncertainty Quantification (UQ) Project at LLNL

11:30 [Charles Jackson](#) – 3336-member Ensemble Representative of CAM3.1: Uncertainty to selecting values for 15 parameters important to clouds and radiation

11:45 [Yu-Heng Tseng](#) – Diagnosing Sahel Drought in the Ensemble CAM3.5 using Data Assimilation

12:00 Discussion

12:15 *Lunch*

Dynamical Core Development

13:15 [Art Mirin](#) – Integration of the MPAS Dynamical Core into the CESM

13:30 [Todd Ringler](#) – Analysis of the MPAS Hydrostatic Dynamical Core in Aqua-planet Mode

13:45 Bill Skamarock – Assessment of the MPAS Non-hydrostatic Dynamical Core

14:00 [Bill Gutowski](#) – Simulations of West African Climate with an Adaptive Grid Dynamics Core in CAM

14:15 [Kate Evans](#) – Configuration of a High-resolution Spectral and Spectral Element CAM

14:30 [Saroj Mishra](#) – CAM4/HOMME AMIP Results

14:45 Discussion

15:00 *Break*

WEDNESDAY, 16 February:

8:30 *Coffee, pastries*

Climate Processes

- 9:00 [David Mitchell](#) – Improving the Parameterization of the Ice Cloud Mass-weighted Fall-speed using in situ Data from Recent Field Campaigns.
- 9:15 [Gunilla Svenson](#) – The Effects of Turbulent Mountain Stress (TMS) on the Boundary Layer in CAM
- 9:30 [Chris Bretherton](#) – Stratocumulus Cumulus transition: A Climate Process Team (CPT)
- 9:40 Vince Larson/Andrew Gettelman – Cloud Macrophysical Parameterization and its Application to Aerosol Indirect Effects: A Climate Process Team (CPT)

High Resolution CAM Simulations

- 9:50 [Phil Rasch](#) – CAM Physics to WRF: Exploring CAM Parameterizations at High Resolution
- 10:10 [Julio Bacmeister](#) – CAM4 and CAM5 Quarter Degree Simulations
- 10:30 *Break*
- 11:00 Dave Williamson – Time Steps, Time Scales, and Grid Point Storms in CAM4

Meeting Summary

- 11:20 Co-chairs – Overview of talking points
- 11:30 General discussion
- 12:15 *Lunch*

CESM Joint Atmosphere Model and Whole Atmosphere Working Group Meetings

- 13:30 Co-chairs – Introduction and Motivation
- 13:45 [Dan Marsh](#) – Comparison of WACCM and CCSM4 CMIP5 Simulations
- 14:15 [Julio Bacmeister/Yaga Richter](#) – Development of a High-topped CAM
- 14:30 [Kevin Raeder](#) – The Data Assimilation Research Testbed (DART)
- 14:45 [Peter Lauritzen/Rich Neale](#) – A Compromise Low-resolution Version of FV-CAM
- 15:00 *Break*
- 15:30 [Francis Vitt](#) – New Capabilities in CESM 1.0 / WACCM4
- 15:45 [Doug Kinnison](#) – Status of SD-WACCM
- 16:05 [Andrew Conley](#) – Status of WACCM with RRTMG
- 16:25 [Hanli Liu](#) – Status of WACCM-X
- 16:45 Discussion
- 17:00 *Adjourn*