CESM Atmosphere Model Working Group Meeting 8-10 February 2016

Mesa Lab, Main Seminar Room National Center for Atmospheric Research – Boulder, Colorado



MONDAY, 8 February:

12:00 Lunch (on your own)

1:00 Introduction and overview of recent and proposed developments	Rich Neale
1:20 The path to CESM2: Coupled-climate experiments	Cecile Hannay
1:40 Current state of cloud microphysics, forcing and feedbacks in CAM6 and CESM2	Andrew Gettelm

1:40 Current state of cloud microphysics, forcing and feedbacks in CAM6 and CESM2 Andrew Gettelman 2:00 Recent developments and experiments with CAM-CLUBB Pete Bogenschutz

2:20 An updated variant of CAM with unified clouds and unified microphysics Eric Raut

2:40 Break

3:10 Direct comparisons of ice cloud macro- and microphysical properties simulated by the Community Atmosphere Model CAM5.4 with HIPPO aircraft observations Xiaohong Liu

3:30 Progress on CAM5 microphysics using self-consistent ice particle mass- and areadimension expressions

3:50 A novel cirrus cloud retrieval method for GCM high cloud validations

4:10 Further development of orographic drag parameterizations for CAM

Introduction, CESM2, and Physical Parameterization Development

4:30 Relationships among top-of-atmosphere radiation and atmospheric state variables in observations and CESM

4:50 Adaptive mesh refinement

5:10 Discussion

5:30 Adjourn

Tridonong Ere

Ehsan Erfani
David Mitchell
Julio Bacmeister
Kevin Trenberth

Bill Collins

TUESDAY, 9 February:

Parameterization and Modeling Frameworks

8:30	Coffee	
9:00	Recent developments in HOMME dynamical core	Ram Nair
9:20	Current status of CAM-MPAS	Sang-Hun Park
9:40	Dissipation of angular momentum in CAM FV	Thomas Toniazzo
10:00	Continued efforts in reduced complexity modeling with CAM	Kevin Reed
10:20	Moist idealized CAM assessments with simplified physics	Christiane Jablonowski
10:40	Continental Breakfast	
11:10	Development and scientific simulations of the CAM aqua-planet configuration	Jim Benedict
11:30	Improving throughput of CAM-SE by parallel splitting atmospheric physics and dynamics	Peter Caldwell
11:50	A new CAM5 ensemble assimilation for forcing other CESM components and for	Kevin Raeder
	model evaluation	

12:10 Lunch (on your own)

Hydroclimate Applications

1:30	Preliminary changes in high-resolution tropical cyclone climatology in CAM5.5	Colin Zarzycki

1:50 Understanding hydroclimatic changes in western USA mountain ranges using the variable-resolution CESM (VR-CESM) multiscale method

Alan Rhoades

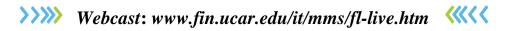
2:10 CESM variable-resolution modeling of impacts of absorbing aerosol deposition on snowpack and hydrologic cycle in the Rocky Mountain region

Chenglai Wu

2:30	Examining hydrologic model biases in CAM5 using stable water isotopes	Jesse Nusbaumer
2:50	Break	
3:20 3:40	A multi-year hindcast experiment for cloud and precipitation studies Assessments of marine boundary layer cloud simulations in CAM5 with CLUBB and MG2 using ground-based ARM observations in the Azores	Hsi-Yen Ma Xue Zheng
4:00	Options for NorESM2 for CMIP6	Trond Iversen
4:20	Discussion	
5:00	Adjourn	

WEDNESDAY, 10 February

MEETING MOVES TO FOOTHILLS LABORATORY



Joint Session of Atmosphere Model, Chemistry-Cimate and Whole Atmosphere Working Groups

8:30	Coffee	
9:00	Discussion of joint issues	
9:20	CAM dynamics update	Peter Lauritzen
9:40	New CAM-chem developments, prognostic fire injection and SOA schemes	L. Emmons / S. Tilmes
10:00	New prescribed and prognostic volcanic and stratospheric aerosol options in CESM	Mike Mills
10:20	Continental Breakfast	
10:50	Nudging timescales and vertical transport in CAMChem-SD and WACCM-SD	Jessica Neu
11:10	Comparing QBO and ENSO impacts on stratospheric transport in WACCM-SD and –FR	Sasha Glanville
11:40	Discussion	
12:00	Adjourn and Lunch (on your own)	

MEETING MOVES TO CENTER GREEN CAMPUS FOR AFTERNOON JOINT SESSION

1:20 Bus departs Foothills Laboratory for Center Green Campus