

CESM Atmosphere Model Working Group Meeting
12 – 14 February 2018
Mesa Lab, Main Seminar Room
National Center for Atmospheric Research – Boulder, Colorado

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

MONDAY, 12 February:

CESM2 Developments and Dynamical Cores

1:00	Overview of CAM/CESM2 developments	Julio Bacmeister
1:20	CESM2 coupled-climate simulations	Cecile Hannay
1:40	NorESM2 based on CESM2: Preliminary experience from running pre-industrial spin-up and historical simulations	Oeyvind Seland
2:00	Seasonal/sub-seasonal forecasting using CESM	Joe Tribbia
2:20	Dycore sensitivity of Hadley circulation changes under warming	Thomas Toniazzo
2:40	Improved model performance through parallel coupling of physics and dynamics	Aaron Donohue
3:00	<i>Break</i>	
3:30	Updated results from the 2016 Dynamical Core Model Intercomparison Project (DCMIP-2016)	Christiane Jablonowski
3:50	FV3-powered models at GFDL: From climate-scale to convective-scale	Xi Chen
4:10	What can real-time weather forecasts using SE and MPAS teach us about CESM?	Colin Zarzycki
4:30	Physics-dynamics coupling with element based high-order Galerkin methods: Quasi equal-area physics grid	Adam Herrington
4:50	Dynamical core requirements for CAM moving forward	Peter Lauritzen
5:10	Discussion	
5:30	<i>Adjourn</i>	

TUESDAY, 13 February:

Biases/Model diagnoses

8:00	<i>Coffee</i>	
8:30	U.S. summertime surface warm bias in models: A summary from the CAUSES project	Hsi-Yen Ma
8:50	Evolution of the double-ITCZ and cold tongue biases from CESM1 to CESM2	Matt Woelfle
9:10	Resolution or physics? Improving tropical skill in CAM hindcasts	Richard Neale
9:30	Impacts of atmospheric processes on ENSO asymmetry: A comparison between CESM1 and CCSM4	Tao Zhang
9:50	Investigating the role of wind and precipitation biases on the equatorial Pacific cold tongue bias in CESM through a hindcast approach	Angela C. Siongco
10:10	<i>Break</i>	
10:30	Forcing and feedbacks in CESM	Andrew Gettelman
11:00	CGD Seminar: Organized Convection Parameterization for GCMs	Mitch Moncrieff
12:00	<i>Lunch (on your own)</i>	

Joint Session of Atmosphere Model, Chemistry Climate and Whole Atmosphere Working Groups

1:00	Assess the effect of Nitrate aerosols on indirect forcing as modeled by CAM with MOSAIC	Zheng Lu
1:20	Impacts of dust emission on the trans-Pacific transport of Asian dust in the CESM	Mingxuan Wu
1:40	Stratospheric aerosol derived from volcanic and non-volcanic emissions in CESM2	Mike Mills
2:00	Stratosphere impacts on climate change projections	Isla Simpson
2:20	Discussion of unified chemistry	Louisa Emmons
3:00	<i>Break</i>	
3:30	Vertical resolution in next generation CAM	Yaga Richter
3:50	Introduction to “Singletrack”: Unified atmosphere model efforts at NCAR	Andrew Gettelman
4:00	Plans for infrastructure development in CESM	Steve Goldhaber
4:20	Discussion of unified atmospheric modeling	
5:15	<i>Adjourn</i>	
5:30	<i>Reception (Damon Room)</i>	

WEDNESDAY, 14 February:

Parameterization/Physics development

8:00	<i>Coffee</i>	
8:30	Timestep sensitivity in MG2 microphysics	Peter Caldwell
8:50	Modernization of the E3SM single-column model	Peter Bogenschutz
9:10	Prospective for new CAM developments on ice microphysics	Xiaohong Liu
9:30	Comparing standard CAM5 against “CALIPSO Cirrus CAM5” and the need for a better parameterization of cirrus clouds	David Mitchell
9:50	Quasi-3-D multiscale modeling framework as a physics option in CAM-SE	Joon-Hee Jung
10:10	<i>Break</i>	
10:40	CLUBB's momentum fluxes	Vincent Larson
11:00	A new and improved analytic double Gaussian PDF	Brian Griffin
11:20	Using DART tools for CAM development	Kevin Raeder
11:40	Discussion of future directions: dynamics, physics, coupling, tools & infrastructure, community engagement (in breakout groups, might be continued over the lunch break)	
12:15	<i>Lunch (on your own)</i>	
1:15	Breakout reports with recommendations, wrap-up	
1:45	<i>Adjourn</i>	