CESM Atmosphere Model Working Group Meeting
18 – 20 February 2015
Mesa Lab, Main Seminar Room
National Center for Atmospheric Research – Boulder, Colorado

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

WEDNESDAY, 18 February:

Recent CAM Parameterization Activities

8:30	*Coffee*	
9:00	Welcome and logistics	Co-chairs
9:15	A unified convection parameterization in CAM using CLUBB and SILHS sampled sub-columns	Kate Thayer-Calder
9:30	A new computational efficient sub-grid convective initiation scheme	Ahmed Tawfik
9:45	Anisotropic orography and surface drag in CAM	Julio Bacmeister
10:00	The impact of changes in parameterizations of surface drag and vertical diffusion on the large scale circulation and boundary layer wind turning in CAM5	Gunilla Svenson
10:15	Update on CAM5 microphysical improvements regarding ice particle mass and area-dimensional expressions	David Mitchell
10:30	*Break*	
11:00	An update on convective microphysics parameterization in Zhang-McFarlane scheme	Guang Zhang
11:15	Advancing the representation of cloud microphysical processes in a snow growth model	Ehsan Erfani
11:30	Aerosols in NorESM2	Alf Grini
11:45	Energy conservation and boundary fluxes in CAM	Thomas Toniazzo
12:00	*Lunch (on your own)*	

Joint session of atmosphere model, chemistry-climate and whole-atmosphere working groups

1:00	Understanding the importance of chemistry representation in CESM1-CAM5	Simone Tilmes
1:20	Radiative forcings of wildfire aerosols estimated with CAM5	Xiaohong Liu
1:40	Prognostic stratospheric aerosols in CESM	Mike Mills
2:00	A multi-model analysis of aerosol effects on clouds simulated by global climate models	Steve Ghan
2:20	Effects of increased model lid on the atmosphere simulation in CAM5	Yaga Richter
2:40	On the calculation of insolation in the CESM: A small surprise	Linjiong Zhou
3:00	*Break*	
3:30	CAM-SE dynamics update: Physics grid, tracers, …	Peter Lauritzen
3:50	Overview of the DOE-ACME project	Peter Caldwell
4:10	CESM workflow plans	Alice Bertini & Sheri Mickelson
4:30	Discussion	
5:00	*Working Group Information Exchange (ML Cafeteria)*	

THURSDAY, 19 February

High resolution, regional refinement and uncertainty studies

8:30	*Coffee*	
9:00	An Assessment of Variable-Resolution Climate Modeling in CAM	Paul Ullrich
9:15	Data Assimilation with a Refined Grid CAM-SE Applied to Hurricane Katrina	Kevin Raeder
9:30	CAM5 dynamical core impact on tropical cyclones	Kevin Reed
9:45	Why are tropical cyclones so intense in CAM5 at ultra-high resolutions?	Colin Zarzycki
10:00	A spectral-element vertical representation in CAM-SE	David Hall
10:15	Resolution and regional refinement sensitivity in CAM	Zhuxiao Li
10:30	*Break*	
10:45	The effects of vertical resolution in CAM-MPAS	Sang-Hun Park
11:00	An effective and efficient calibration strategy of uncertain physical parameters in the CAM physical parameterization package	Tao Zhang
11:15	An uncertainty quantification framework for Multiple Parameters: Case study and evaluating the sensitivities of AGCM-simulated tropical cyclones to initial conditions	Fei He
11:30	*Early Lunch (on your own) and CGD Research Reports*	

Assessment of the CAM5.5 candidate parameterization schemes

1:30	Overview of the process	
1:45	CLUBB: How it works	Vince Larson
2:00	Update of CAM-CLUBB simulations	Peter Bogenschutz
2:15	A Unified Convection Scheme (UNICON): Past, Present and Future	Sungsu Park
2:45	Global analyses of CAPT simulations on recent developed CAM parameterizations	Hsi-Yen Ma
3:00	An evaluation of candidate schemes for CAM5.5 in CAPT simulations with ground-based observations in the Azores	Xue Zheng
3:15	*Break*	
3:45	Assessment panel presentations and discussion	
5:00	*Adjourn*	

FRIDAY, 20 February

Diagnostic and CAM Application Activities

8:30	*Coffee*	
9:00	The AMWG climate variability package	Jack Chen
9:15	Simulating specific clouds in a Climate Model: Evaluating CAM6 Microphysics using in situ aircraft observations	Andrew Gettelman
9:30	Warm rain in marine stratocumulus: Should climate models parameterize self-collection or giant sea-salt aerosols as the autoconversion process	Jorgen Jensen
9:45	Tropical oceanic rainfall and sea surface temperature structure: A potential source of systematic errors in highly parameterized models	Rit Carbone
10:00	Climate Feedbacks and relationships between top-of-atmosphere radiation and temperatures on Earth: CESM vs. observations	Kevin Trenberth
10:15	Atmospheric Blocking in the CESM large ensemble – The curse of internal variability	Rich Neale
10:30	*Break*	
11:00	Discussion	
12:00	*Adjourn*	