

CCSM Climate Change Working Group Report
10th Annual CCSM Workshop
23 June 2005
Breckenridge, CO

Several oral presentations showed various results from the multi-model analysis activity to which CCSM3 made major contributions. This was followed by a discussion of future plans of the CCWG. The major conclusions are summarized below:

CCWG Plans, 2005-2006:

Further analysis of the 20th century and future climate change simulations from CCSM3, as well as the IPCC multi-model dataset (e.g., climate variability and change, vertical structure of temperature change, detection/attribution studies)

Simulations with new mitigation/adaptation scenarios to be supplied by IPCC WG3 this fall

Analyses of climate sensitivity

Large ensembles and climate change signals (collaborate with CVWG)

Address role of aerosols in 20th century and future climate change (e.g., black carbon, sulfate indirect)

Determine respective roles of natural forcing (solar and volcanic) and anthropogenic forcing (changes in GHGs, aerosols; also land use/land cover change (LULCC)—collaborate with LMWG)

Quantify geographic representations of probabilistic climate change (single model with multi-member ensembles and multi-model ensembles)

Common forcings for 20th century climate

Perform test CCSM3 simulations with higher atmospheric model resolution (T170 and T360 or equivalent)

Longer term plans, 2006-2008:

Quantify possible sea level rise scenarios based on hypotheses of ice sheet destabilization (include dynamic ice sheet model)

Perform targeted climate change mitigation/adaptation simulations with CCSM3 with coupled carbon cycle (collaborate with BGCWG and LMWG) (initial use of WG3 scenarios to be run later this year in advance of fully coupled carbon cycle)

Attendees:

David Adamec	NASA
Ernest Afiesimama	Nigerian Meteorological Agency
Paula Agudelo	Georgia Institute of Technology
Richard Anyah	North Carolina State University
Julie Arblaster	NCAR/BMRC
James Bradbury	University of Massachusetts
Marcia Branstetter	Oak Ridge National Laboratory
Bruce Briegleb	NCAR
Lawrence Buja	NCAR
Antoinietta Capotondi	NOAA/CIRES Climate Diagnostics Center
Wei Cheng	University of Washington
Irene Cionni	University of L'Aquila
Gabriel Clauzet	University of Sao Paulo
Noah Diffenbaugh	Purdue University
Amit Ghosh	University of Toronto
Arthur Greene	Prediction (IRI)
Andrea Hahmann	NCAR
Charles Hakkarinen	Retired
Cecile Hannay	NCAR
Carlos Hoyos	Georgia Institute of Technology
Aixue Hu	NCAR
Elizabeth Hunke	Los Alamos National Laboratory
Detelina Ivanova	Naval Postgraduate School
Steven Jayne	Woods Hole Oceanographic Institution
Renu Josphe	University of Maryland
Daniel Kirk-Davidoff	University of Maryland
Hideyuki Kitabata	CRIEPI
Reto Knutti	NCAR
Benjamin Lamptey	The Pennsylvania State University
David Lawrence	NCAR
Jicheng Liu	Boston University
Jolene Loving	Naval Oceanographic Office
Paulo Lucio	Center of Geophysics of Evora
Andrew Marshall	Monash University
Gerald Meehl	NCAR
Francis Mugabe	Midlands State University
Raimund Muscheler	NCAR
David Noone	University of Colorado
Xiaohua Pan	George Mason University/COLA
Mark Petersen	Los Alamos National Laboratory
Susanne Pfeifer	Max Planck Institute for Meteorology
Johannes Quaas	Max Planck Institute for Meteorology
Marilyn Raphael	UCLA
Michele Rienecker	GMAO

Clinton Rowe	University of Nebraska
Benjamin Santer	Lawrence Livermore National Laboratory
Edwin Schneider	George Mason University/COLA
Albert Semtner	Naval Postgraduate School
Willis Shem	Georgia Institute of Technology
Michael Sobczak	Boulder
Ying Sun	NOAA
Bin Tan	Boston University
Robert Tomas	NCAR
Yu-Heng Tseng	Lawrence Berkeley National Laboratory
Junichi Tsutsui	CRIEPI
Illana Wainer	University of Sao Paulo
Warren Washington	NCAR
Michael Wehner	Lawrence Berkeley National Laboratory
Wanli Wu	NCAR
Shaocheng Xie	Lawrence Livermore National Laboratory
Stephen Yeager	NCAR
Jeffrey Yin	NCAR
Masaru Yoshioka	NCAR/UCSB
Xuejin Zhang	NC State University
Mi Zhou	Georgia Institute of Technology
Ping Zhu	NCAR