

DE-SC0007842

Conference papers/proceedings:

Web materials for all lectures and practical sessions available from:

<http://www.cesm.ucar.edu/events/tutorials/073012/>

Name of conference: 2012 CESM Tutorial

Location of conference: National Center for Atmospheric Research, Boulder, CO

Agenda:

Day 1

Welcome, Intro, Logistics, David Bailey [[PDF](#)]

Lecture 1: Introduction to the coupled system, Marika Holland [[PDF](#)]

Lecture 2: Atmosphere Modeling I: Intro & Dynamics, Peter Hjort Lauritzen [[PDF](#)]

Practical Session 1: Intro: Introduction to NCAR computing environment, Si Liu [[PDF](#)]

Practical Session 1: Intro: Run CESM, Sean Santos [[PDF](#)]

Practical Lab 1: Including computer setup

Day 2

Lecture 3: Atmosphere Modeling II: Physics, Cecile Hannay [[PDF](#)]

Lecture 4: Atmos. Modeling III: Chemistry, Aerosols and WACCM, Simone Tilmes and Mike Mills [[Chemistry-Climate Modeling PDF](#)] [[WACCM PDF](#)]

Lecture 5: Land modeling I: Biogeophysics, Keith Oleson [[PDF](#)]

Practical Session 2: Intro: Run CESM 2: Simple Modifications, Christine Shields [[CESM1 Tutorial: Basic Modifications](#)] [[Example 3 cheat sheet](#)] [[Example 6 cheat sheet](#)] [[Example 7 cheat sheet](#)]

Day 3

Lecture 6: Land Modeling II: Ecosystem Modeling, Sam Levis [[PDF](#)]

Lecture 7: Ocean Modeling I, Susan Bates [[PDF](#)]

Lecture 8: Ocean Modeling II, Gokhan Danabasoglu [[PDF](#)]

Practical Session 3: Intro: Diagnostics and Output , Adam Phillips [[PDF](#)]

Practical Lab 3

Day 4

Lecture 9: Sea Ice Modeling, David Bailey [[PDF](#)]

Lecture 10: Biogeochemistry, Keith Lindsay [[PDF](#)]

Lecture 11: Applications: Climate Change, Clara Deser [[PDF](#)]

Practical Session 4: Intro: Namelist and Code Modifications, Cecile Hannay [[Namelist and Code Modifications](#)]

Practical Lab 4

Day 5

Lecture 12: Land Ice Modeling, Bill Lipscomb [[PDF](#)]

Lecture 13: Applications: Paleoclimate Modeling, Bette Otto-Bliesner [[PDF](#)]

Practical Session 5:

Intro Breakouts: Ocean/Sea Ice/Land Ice, Land/BGC, Atmosphere/Chem/WACCM

Ocean/Sea Ice/Land Ice, David Bailey, Susan Bates, Kate Evans, Bill Sacks [[Ocean/Sea Ice](#)] [[Land Ice](#)] [[CESM CISM](#)] [[Land Ice](#)] [[Glimmer CISM](#)]

Land/BGC, Sam Levis, Keith Lindsay [[BGC](#)] [[CLM](#)]

Atmosphere/Chem/CAM, Cecile Hannay, Michael Mills, Simone Tilmes [[Atmosphere](#)] [[CESM CAM4 with Chemistry](#)] [[WACCM and CAM-Chem](#)] [[WACCM Quickstart](#)]

Practical Lab 5

Participants:

The following individuals provided lectures and administrative and computer support for the tutorial:

<u>First Name</u>	<u>MI</u>	<u>Last Name</u>	<u>Project Role</u>	<u>Institution</u>
Marika	M	Holland	PI/Lecturer	NCAR
David	A	Bailey	Organizer/Lecturer	NCAR
Barbara	A	Ballard	Administrator	NCAR
Susan		Bates	Lecturer	NCAR
Gokhan		Danabasoglu	Lecturer	NCAR
Clara		Deser	Lecturer	NCAR
Katherine		Evans	Lecturer	ORNL
Cecile		Hannay	Lecturer	NCAR
Peter		Lauritzen	Lecturer	NCAR
Samuel		Levis	Lecturer	NCAR
Keith		Lindsay	Lecturer	NCAR
William		Lipscomb	Lecturer	LANL
Si		Liu	Lecturer	NCAR
Michael		Mills	Lecturer	NCAR
Mark		Moore	Systems setup	NCAR
Keith		Oleson	Lecturer	NCAR
Bette		Otto-Bliesner	Lecturer	NCAR
Adam		Phillips	Lecturer	NCAR
Bill		Sacks	Lecturer	NCAR
Sean		Santos	Lecturer	NCAR
Christine		Shields	Lecturer	NCAR
Simone		Tilmes	Lecturer	NCAR

The following attendees participated in the tutorial:

Badger, Andrew	George Mason University
Barton, Neil	Lawrence Livermore National Laboratory
Bellomo, Katinka	University of Miami
Bernstein, Diana	University of California Los Angeles
Bourdages, Line	McGill University, Canada
Buzan, Jonathan	Purdue University
Campbell, Patrick	University of Wyoming
Chen, Liang	Texas A&M University
Coletti, Anthony	University of Massachusetts - Amherst

Davi, Nicole	Lamont-Doherty Earth Observatory
Delman, Andrew	University of California - San Diego
DiMiceli, Charlene	University of Maryland
Dwyer, John	Columbia University
Erler, Andre	University of Toronto, Canada
Fyke, Jeremy	Los Alamos National Laboratory
Garuba, Oluwayemi	George Mason University
Glotfelty, Timothy	North Carolina State University
Gotuzzo, Ricardo Acosta	Federal University of Rio Grande, Brazil
He, Jie	University of Miami
Hryniw, Natalia	University of Washington
Hsu, Juno (Chia Hui)	University of California - Irvine
Hu, Ning	Pacific Northwest National Laboratory
Hughlett, Taylor	University of Texas at Arlington
Infanti, Johnna	University of Miami
Jeevanjee, Nadir	University of California - Berkeley
Jones, Matthew	University of Montana
Kang, Do Hyuk	University of Northern British Columbia, Canada
Kanu, Amadu	University of California - Berkeley
Karamperidou, Christina	Columbia University
Keppel-Aleks, Gretchen	University of California - Irvine
Koh, Ara	Asia-Pacific Economic Cooperation (APEC) Climate Center, South Korea
Konecky, Bronwen	Brown University
Koplitz, Shannon	Harvard University
Lapo, Karl	University of Washington
Lee, Lance	University of California - Berkeley
Lei, Hang	University of Maryland
Leung, Kimberly	San Diego State University
Liu, Yuwei	University of California - Berkeley
Mankin, Justin	Stanford University
Matus, Alexander	University of Wisconsin - Madison
Mishra, Subhashree	Cooperative Institute for Mesoscale Meteorological Studies
Nauels, Alexander	Intergovernmental Panel on Climate Change, Switzerland
Palipane, Erol	George Mason University
Peng, Wei	Princeton University
Po-Chedley, Stephen	University of Washington
Ren, Tong	The University of Texas at Austin
Ricke, Katharine	Carnegie Institution for Science
Schneider, Adam	University of Michigan
Semenov, Alexander	University of Alaska Fairbanks, International Arctic Research Center
Sharma, Priya	The University of the South Pacific, Fiji
Sheyko, Benjamin	Georgia Institute of Technology
Shi, Zheng	University of Oklahoma
Soares, Saulo	University of Hawaii at Manoa
Song, Yang	University of Illinois, Urbana-Champaign
Stuecker, Malte	University of Hawaii at Manoa
Sun, Tianye	University of Illinois, Urbana-Champaign
Sun, Shanshan	University of Connecticut

Tabor, Clay	University of Michigan
Talento, Stefanie	Universidad de la Repùblica, Uruguay
Toure, Ally	NASA Goddard Space Flight Center
Trenary, Laurie	University of Colorado at Boulder
Valenzuela, Raul	University of Colorado at Boulder
Veres, Michael	University of Nebraska - Lincoln
Walston, Joshua	University of Alaska Fairbanks
Wang, Weijie	University of Virginia
Wang, Li-Chiao	National Taiwan Normal University, Taiwan
Weller, Evan	Commonwealth Scientific and Industrial Research Organisation, Australia
Wrenn, Christopher	University of Hawaii at Manoa
Xu, Li	University of Michigan
Xu, Xiaofeng	Oak Ridge National Laboratory
Yan, Binyan	The University of Texas at Austin
Yoo, Jinwoong	University of South Florida
Zhang, Lin	University of Rhode Island
Zhang, Yongjun	University of Nebraska - Lincoln
Zhu, Jiang	University of Wisconsin - Madison
Zou, Yuhao	University of California - Irvine