

Community Earth System Model (CESM) Tutorial 2016
NCAR Mesa Lab, Boulder, CO
August 8-12, 2016

Main Seminar Room – morning lectures & practical sessions
Damon Room / Library – afternoon practical labs

Monday, August 8

8:30-8:50 Welcome, Intro, Logistics (Phillips, Ballard)
8:50-9:50 Lecture 1: Introduction to the coupled system (Lamarque)
9:50-10:15 Break
10:15-11:05 Lecture 2: Atmosphere Modeling I: Intro & Physics (Neale)
11:05-11:35 Practical Session 1 Intro: Introduction to NCAR computing environment (Kelly)
11:35-1:00 Lunch (*on your own*)
1:00-2:15 Practical Session 1 Intro: Run CESM (Bertini)
2:15-2:30 Break
2:30-5:00 Practical Lab 1
5:00-6:30 Reception: *Mesa Lab Cafeteria*

Tuesday, August 9

8:30-9:20 Lecture 3: Atmosphere Modeling II: Dynamics (Lauritzen)
9:20-9:50 Lecture 4: Atmosphere Modeling III: WACCM (Mills)
9:50-10:10 Break
10:10-10:40 Lecture 5: Atmos. Modeling IV: Chemistry, Aerosols (Tilmes)
10:40-11:00 Break
11:00-11:50 Lecture 6: Land Modeling I: Biogeophysics (D. Lawrence)
11:50-1:00 Lunch (*on your own*)
1:00-1:30 Specialized Talks 1: Chemistry (Tilmes) *Chapman Room*
Simpler Models (Simpson) *Main Seminar Room*
1:30-2:30 Practical Session 2 Intro: Run CESM: Simple Modifications (Bates)
2:30-2:40 Break
2:40-5:00 Practical Lab 2

Wednesday, August 10

8:30-9:20 Lecture 7: Land Modeling II: Biogeochemistry: Ecosystem
Modeling and Land Use (P. Lawrence)
9:20-9:35 Break
9:35-10:25 Lecture 8: Ocean Modeling I (Danabasoglu)
10:25-10:40 Break
10:40-12:00 Applications 1: Short Talks: IAS, Building Energy Demand/CLM (van Ruijven),
Deep Time Paleo (Tabor), High Resolution Simulations (Rosenbloom),
Applying CLM in Site Level Simulations (Wieder)
12:00-1:30 Lunch (*on your own*)
12:45-1:05 Porting Session (Edwards)
1:05-1:30 CESM2: What to expect (Edwards)

1:30-2:30 Practical Session 3 Intro: Diagnostics and Output (Phillips)
2:30-2:40 Break
2:40-5:00 Practical Lab 3

Thursday, August 11

8:30-9:20 Lecture 9: Ocean Modeling II (Gent)
9:20-9:35 Break
9:35-10:25 Lecture 10: Ocean Biogeochemistry (Lindsay)
10:25-10:40 Break
10:40-11:30 Lecture 11: Sea Ice Modeling (Bailey)
11:35-12:05 Specialized Talks 2: Isotopes (Jahn) *Chapman Room*
Model Assessment and Tuning (Hannay) *Main Seminar Room*
12:05-1:30 Lunch
12:30-1:30 Meet a CESM Scientist (Peter Gent, Bette Otto-Bliesner, Marilyn Raphael,
Kevin Trenberth, Warren Washington)
1:30-2:30 Practical Session 4 Intro: Namelist and Code Modifications (Hannay)
2:30-2:40 Break
2:40-5:00 Practical Lab 4

Friday, August 12

8:30-9:20 Lecture 12: Land Ice Modeling (Hoffman)
9:20-9:35 Break
9:35-10:35 Applications 2: Interpreting model results (Deser)
10:35-10:45 Closing Remarks and Quiz Recap (Phillips/Hannay)
10:45 Photo (*meet outside Main Seminar Room*)
10:50-11:00 Break
11:00-12:00 Practical Session 5 Intro:
Breakouts: Ocean/Sea Ice/Land Ice (Truesdale, Bailey, Sacks) *Director's Conf Rm*
Land/BGC (Oleson, Kluzek, Lindsay) *Main Seminar Room*
Atmosphere/Chem/WACCM (Coleman, Tilmes, Mills) *Chapman Room*
12:00-1:00 Lunch
1:00-3:00 Practical Lab 5