

# AMWG-WAWG Joint Session

- Wireless instructions on flip-board
- Calling in instructions are on agenda
- Please do not put the meeting on hold! (music)
- Breaks are 20 minutes, lunch in cafeteria
- Upload talks on laptop before your session (webcasting)
- Sign release form for webcasting
- Reception at 5:00 pm in cafeteria

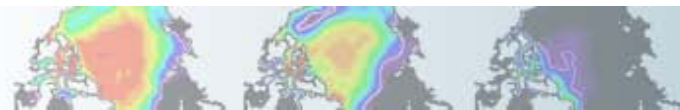


**WACCM**

*Whole Atmosphere  
Community Climate Model*

Community Earth System Model

**CESM**



# Agenda

- 1:00 Co-chairs welcome and logistics
- 1:10 Dan Marsh – Comparing WACCM/CCSM4 20th century simulations
- 1:30 Hanli Liu – Evaluation of an internally generated Quasi Biennial Oscillation in WACCM
- 1:50 Chuck Bardeen – Cirrus Simulations Using Sectional Microphysics (CAM/CARMA)
- 2:05 Bo Tan – New parameterization for correcting the "Cold Pole" problem
- 2:20 Chihoko Yamashita – Gravity waves and high-resolution modeling (using T799 ECMWF)
- 2:35 Simone Tilmes – The impact of climate engineering on temperatures and precipitation using an idealized solar dimming experiment
- 2:50 *Break*
- 3:10 Charles Jackson – Control climate impacts and the response to greenhouse gas forcings: Small differences, big impacts
- 3:30 Rich Loft – NCAR computing outlook: Yellowstone and beyond
- 3:50 Mariana Vertenstein– New component grid capability in CESM
- 4:10 Peter Lauritzen – Transport schemes and orography datasets in CAM
- 4:30 AMWG Discussion/WAWG wrap-up
- 5:00 *Reception – ML Cafeteria*

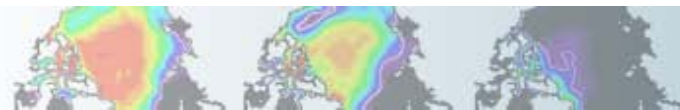


# CESM Tutorial: July 30 – August 3, 2012

## NCAR, Boulder, CO

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- Lectures on simulating the climate system
- Practical sessions on running CESM, modifying components, and analyzing data
- Targeted at graduate student level
  - Max 80 students with financial support for up to 40 students
  - Acceptance criteria:
    - Preference given to early career graduate students, though we will aim for a mix of graduate students, postdocs, and early career research scientists and faculty
    - Project descriptions and their fit with broader CESM goals and activities
    - Balance attendees across institutions
- How to Apply:
  - Application website online at:  
<http://www.cesm.ucar.edu/events/tutorials/073012/announcement.html>
  - Application deadline: **March 23, 2012**
  - Accepted students informed by late April
  - Questions should be directed to **Dave Bailey** ([dbailey@ucar.edu](mailto:dbailey@ucar.edu))



# Discussion

- ✓ Specifying orography: resolved and sub-grid scale
  - ✓ Should we ultimately go for as unsmoothed as we can tolerate?
  - ✓ This will give high-res. low-level flow/rainfall features at low-res.
  - ✓ Impact of sub-grid scales on TMS and GWD?
- ✓ Supporting model versions (released or otherwise)
  - ✓ WACCM and CAM low-resolution models (fv4x5, fv2.5x3.3, T31, se\_ne15)
  - ✓ Do we want to continue support the existing CAM-FV core?
  - ✓ What will be the cheap dy-core where throughput matters and scaling is 2<sup>nd</sup> ary?
  - ✓ Functionality of re-gridding and re-mapping
- ✓ Computing resources
  - ✓ Are we ready to exploit Yellowstone?
  - ✓ Do we need to think about GPU required parallelism; physics

