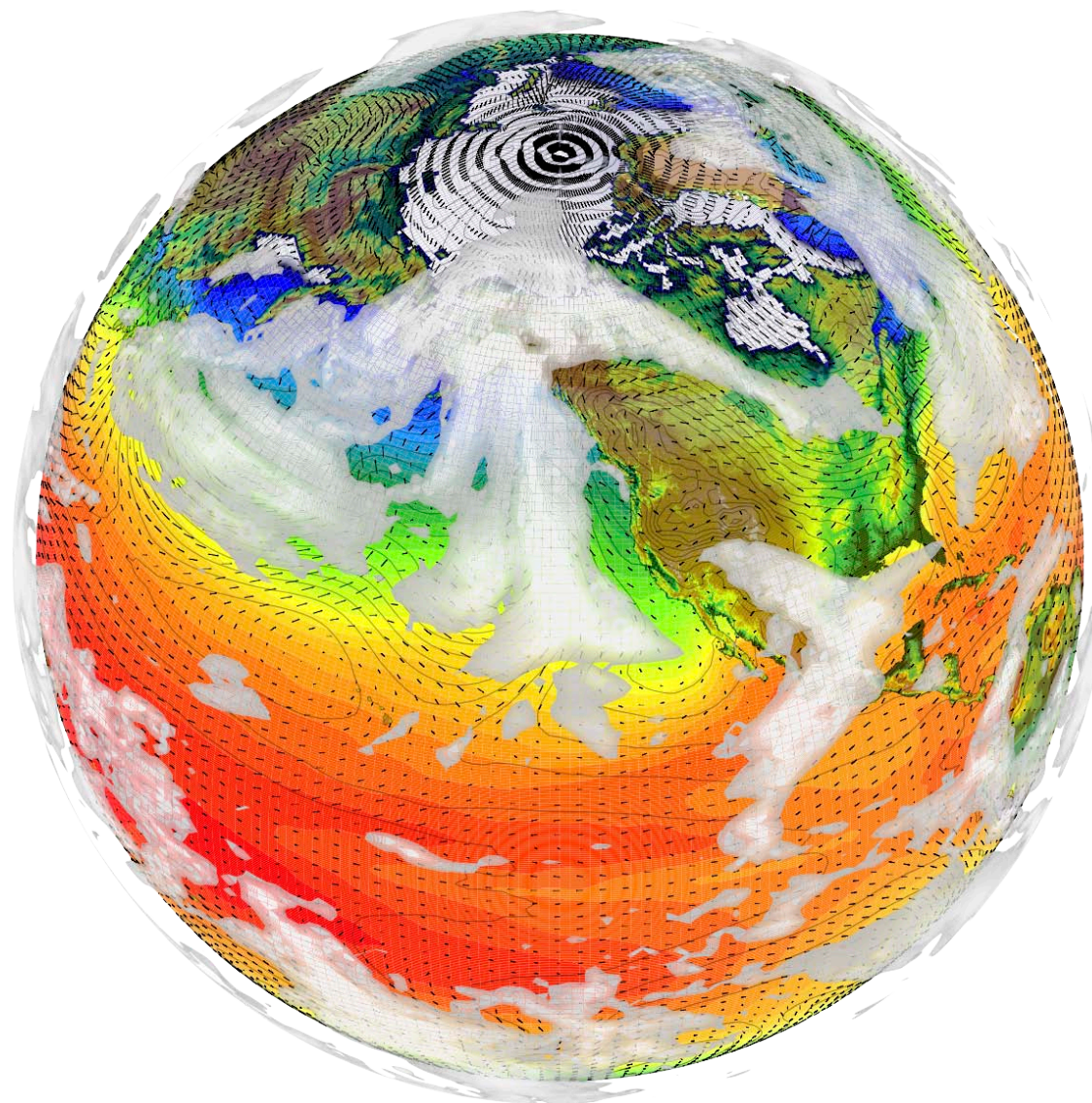




Future Plans CVCWG



CVCWG - 22 June 2012



Climate Variability and Change Working Group

Co-Chairs:

Clara Deser, Ben Kirtman (U. Miami), Jerry Meehl,
Karl Taylor (LLNL), Warren Washington

Liasons:

Adam Phillips and Gary Strand

http://www.cesm.ucar.edu/working_groups/Climate/

CVCWG Goals

To investigate mechanisms of climate variability and change, as well as to detect and attribute past climate changes, and to project and predict future changes.

To encourage analyses of model runs completed with CCSM4 and CESM1/CAM5.

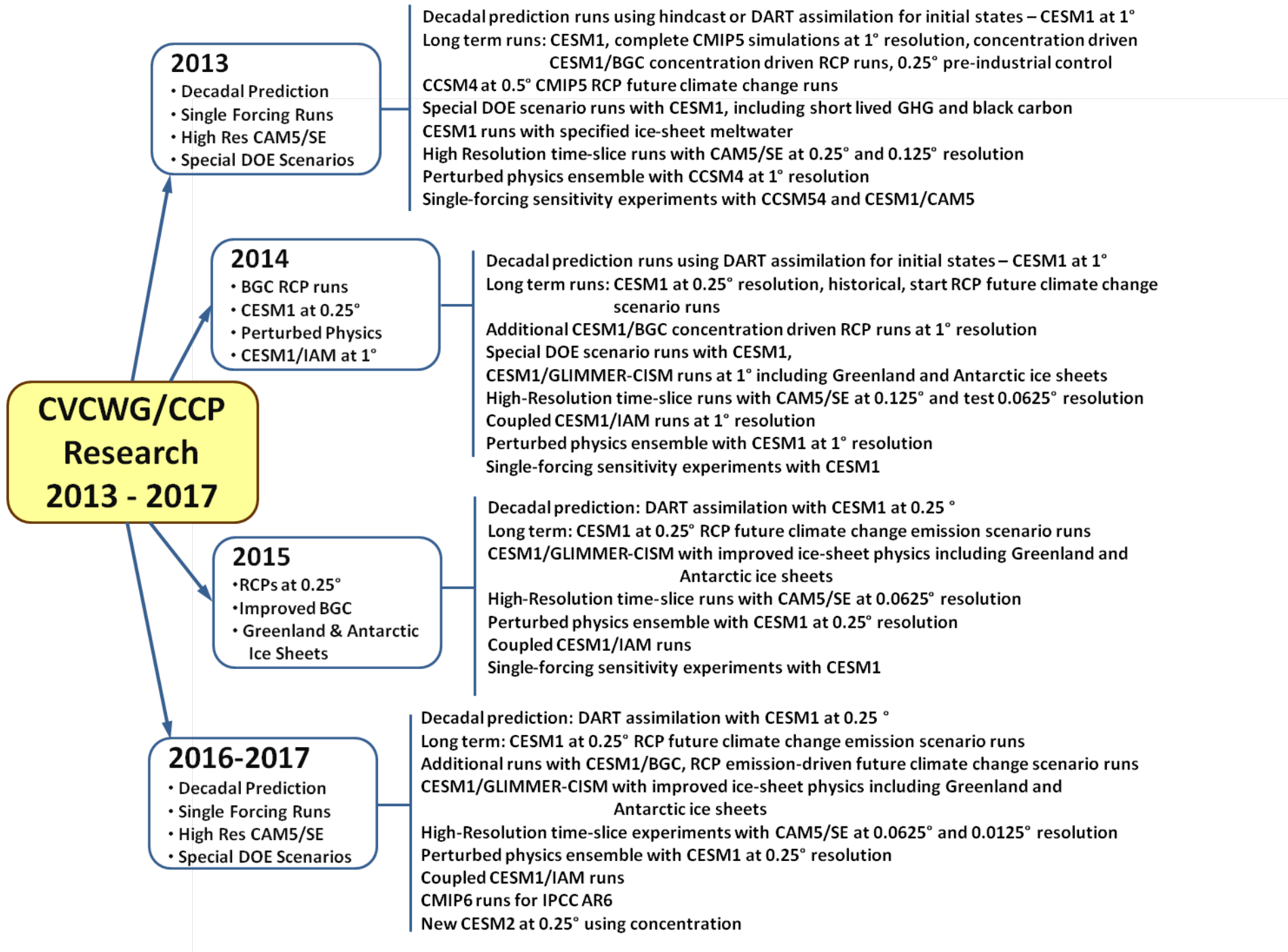
Completed Model Simulations with CAM3/4, CCSM3/4, and CESM1 :

[http://www.cesm.ucar.edu/working_group
s/Climate/](http://www.cesm.ucar.edu/working_groups/Climate/)

Proposed Model Simulations (July 2012-2015)

- 1) Long control simulations and large ensembles of 20th-century simulations with a hierarchy of model configurations (fully coupled, atmosphere-only, atmosphere/slab ocean) to explore patterns, time scales and mechanisms of climate variability and change.
- 2) Single-forcing and modified-forcing experiments for the 20th and 21st century to assess attribution of climate variability and change.
- 3) Overlapping series of decadal simulations to investigate decadal predictability.
(This requires a relatively large ensemble!)

Priority List of Simulations Planned for 2013 to 2017



Types of Future Simulations (many coordinated by CMIP)

- 1. Decadal prediction with improved data assimilation methods**
- 2. Higher resolution simulations: time slices and fully coupled**
- 3. Special energy related simulations: testing effects of different energy strategies**
- 4. Single forcing, combined, and perturbed forcings**
- 5. Coupled ice sheet (Greenland and Antarctic)**
- 6. CLD (hydrological, urban, permafrost, etc) sensitivity experiments**
- 7. Coupling to Integrated Assessment Models**

What other types of research and simulations should would be useful for this working group?

Questions?