# CVCWG Update & Plans

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#### Simulations Completed and Published

- CESM1-CAM5 decadal prediction hindcasts (Steve Yeager leading, <u>yeager@ucar.edu</u>)
  - 61 start dates (1954-2014) 10 years in length
  - 40 members completed
- CESM1 CAM-Chem (2º atm/lnd x 1º ocn/ice) (3 members ea.)
  - RCP6.0 anthro. ozone precursors globally decrease
  - RCP6.0 anthro. ozone precursors held at 2005 value
- CESM1 (LENS tag) Low warming scenarios (2006-2100)
  - Stabilize at 1.5° warming (11 members)
  - Stabilize at 2<sup>o</sup> warming (11 members)
  - Overshoot 1.5° and then stabilize (6 members)
- CESM1 1º (LENS tag) TOGA Ensemble 10 members
  - ERSSTv3b, 1880-2016

#### Simulations Underway

- CESM1.3 fully coupled 1/4° atm/lnd coupled to 1° ocn/ice
  - 1850 PI control, 20<sup>th</sup> Century, RCP2.6, RCP8.5, and climate sensitivity runs
- Pacemaker simulations (CESM1.1)
  - Relax SST to idealized +/-/neutral states
  - Relax to time varying observations
- CESM1.1 (LENS tag) single forcing simulations (all-but-one)
  - 1920-2005, 2006-2080 following RCP8.5
  - All forcings except GHGs (20 members)
  - All forcings except anthropogenic aerosols (20 members)

## **Upcoming Simulations**

- CESM1 high resolution atm/ocn (0.25° atm/lnd x 0.1° ocn/ice)
  - Long PI control
  - LENS-style 20<sup>th</sup> 21<sup>st</sup> Century
- CMIP6 with CESM2
  - Flux Anomaly MIP (FAFMIP)
  - Detection/Attribution MIP (DAMIP)
  - Decadal Climate Prediction Project (DCPP)

### **Useful Webpages**

CVCWG Website

http://www.cesm.ucar.edu/working\_groups/CVC/

- CVCWG published simulations
   <u>http://www.cesm.ucar.edu/working\_groups/CVC/simulations/cvcwg-simulations-finished-and-published.html</u>
- Climate Variability Diagnostics Package (CVDP)
   <u>http://www.cesm.ucar.edu/working\_groups/CVC/cvdp/</u>
- Large Ensemble Project Page
   <u>http://www.cesm.ucar.edu/projects/community-projects/LENS/</u>
- Last Millennium Ensemble Project Page
   <u>http://www.cesm.ucar.edu/projects/community-projects/LME/</u>
- Low Warming Ensemble Project Page <u>http://www.cesm.ucar.edu/experiments/1.5-2.0-targets.html</u>

## Discussion/Input from you!

- Simulations?
- Additions to the Climate Variability
   Diagnostics Package?
- Additions to the Climate Data Guide?