

CVCWG Update & Plans

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Simulations

Completed and Published

- Tropical Pacific “Pacemaker” Ensemble
 - 1920-2013 CESM1-CAM5 1°
 - SST anomalies [8°N-8°S,180-80°W] nudged to ERSSTv3b observations + radiative forcing
 - 10 members
 - 2006-2013 uses RCP8.5 radiative forcing
- TOGA AMIP
 - 10-member ensemble CAM5-1°
 - 1880-2014 (ERSSTv3b)
- Large Ensemble
 - 35 members (NCAR), 7 members (U. Toronto)
 - CAM5-SOM 1° Control (900 years)

Simulations

Completed and Published

- 1° CCSM4 CAM-SOM – 1% CO₂ increase
- 1° CCSM4 Abrupt climate change – Greenland ice sheet melting
- CCSM4 fully coupled 0.5° atm – 1° ocn
 - 1850 pre-industrial control, 20th Century historical, RCP2.6, RCP8.5, 1xCO₂ and 2xCO₂ SOM
- CESM-CAM5-BGC RCP8.5 with fixed 2005 aerosols

Simulations Underway

- Fully coupled CESM 1/4° Atmos - 1° Ocean
 - 1850 PI control, 20th Century, 1% CO₂
 - RCP2.6, 4.5, 6.0, 8.5
- “All but one” single forcing (1850-2005)
 - GHGs, aerosols, land use, ozone, solar, volcano
 - 3 members each
- AMIP forced with LENS control SST – 100yrs
- CAM5 decadal prediction hindcasts
 - 61 start dates (1954–2014)
 - 10 members for each start date
 - 10 years in length
 - Data release: by Feb. 2017

Useful Webpages

- CVCWG Website <http://www2.cesm.ucar.edu/working-groups/cvcwg>
- CVCWG published simulations
<https://www2.cesm.ucar.edu/working-groups/cvcwg/cvcwg-simulations-finished-and-published>
- Climate Variability Diagnostics Package (CVDP)
<http://www2.cesm.ucar.edu/working-groups/cvcwg/cvdp>
- Large Ensemble simulations
<http://www.cesm.ucar.edu/experiments/cesm1.1/LE/>
- Last Millennium Ensemble
<https://www2.cesm.ucar.edu/models/experiments/LM>



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Discussion/Input from you!

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