

CESM Climate Variability Working Group

Co-Chairs: Clara Deser and Ben
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Journal of Climate Special Issue Collection on CCSM4

- **Extra-tropical modes of variability in the ocean and atmosphere (NAO, PDO, AMO, etc).**
Hurrell, J. W., C. Deser, and A. S. Phillips. [In preparation]
- **Tropical Atlantic Oceanic Variability in the CCSM4.**
Munoz, E., W. Weijer, I. Wainer, S. Grodsky, M. Goes, and S. C. Bates.
[Submitted]
- **ENSO and Pacific Decadal Variability in Community Climate System Model Version 4.**
Deser, C., A. S. Phillips, R. A. Tomas, Y. Okumura, M. A. Alexander, A. Capotondi, J. D. Scott, Y. -O. Kwon, and M. Ohba. [Submitted]
- **Will there be a Significant Change to El Nino in the 21st Century?**
Stevenson, S., B. Fox-Kemper, M. Jochum, R. Neale, C. Deser, and G. Meehl.
[Submitted]
- **The Madden Julian Oscillation in CCSM4.**
Subramanian, A. C., M. Jochum, A. J. Miller, R. B. Neale, and D. E. Waliser.
[Accepted]

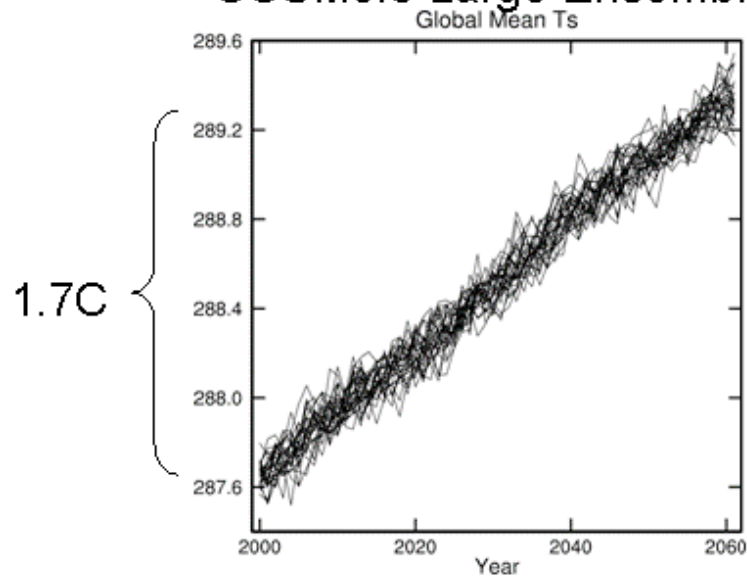
CCSM CVWG Experiments: 21st Century CCSM3 Large Ensemble Project

- **CCSM3 40** member ensemble from 2000-2061 forced using IPCC sres-a1b scenario conditions and stratospheric ozone recovery
- Data for the Large Ensemble Experiment is accessible through the Earth System Grid website
- **CESM1** Large Ensemble Proposed

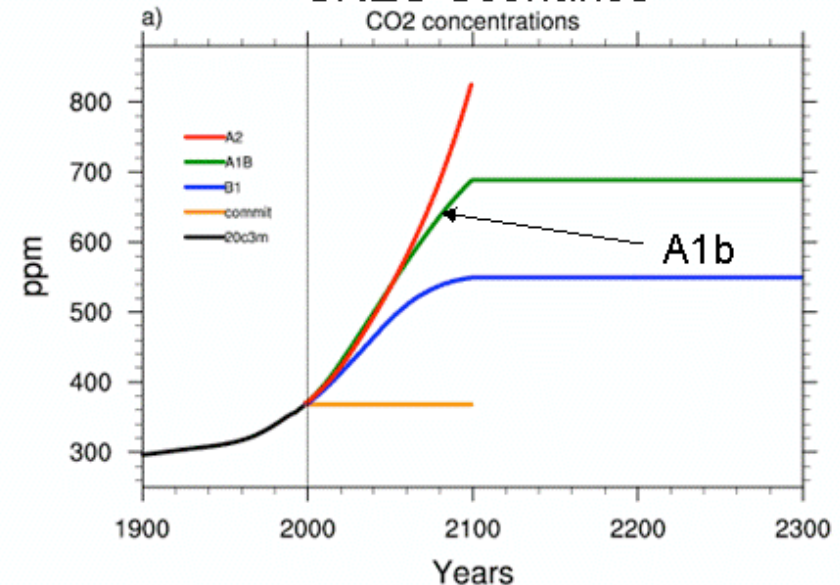
CVWG/CCWG Large Ensemble Experiment

- SRES A1b
- CCSM3.0 T42 1x
- 30 members
- 2000-2061
- Only vary initial atmospheric state

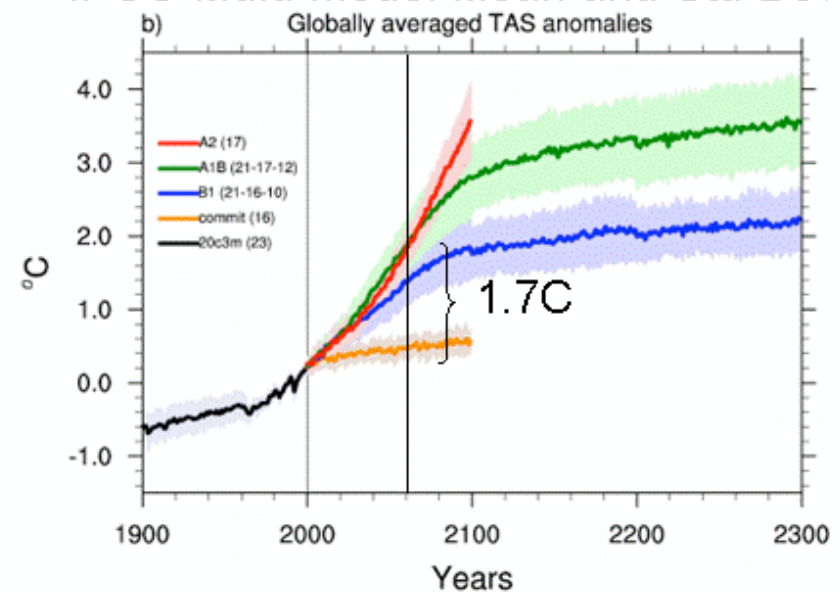
CCSM3.0 Large Ensemble



SRES Scenarios



IPCC Multi-model Mean and Std Dev



CVWG Simulations

Table 1 List of Proposed Experiments for CVWG CSL Proposal

Experiments	# of Runs	Model Config	# of Years per run (total simulation years)	GA U/yr	Total GAUs
<i>AMIP Observed SSTs</i> 1900-present; five member ensemble	5	CAM4 (1 deg)	110 (550 yrs)	401	220550
<i>AMIP CCSM4 SSTs</i> 1900-present; five member ensemble	5	CAM4 (1 deg)	110 (550 yrs)	401	220550
<i>Pacemaker Observed SSTs</i> 1900-present; five member ensemble	5	CAM4 (1 deg)	110 (550 years)	401	220550
<i>Pacemaker CCSM4 SSTs</i> 1900-present; five member ensemble	5	CAM4 (1 deg)	110 (550 years)	401	220550
<i>Global MXL</i>	1	CAM4 (1 deg)	500 years	401	200500

TOTAL 15-month Request: 1083K GAUs (target is 900K GAUs)

Per month Request: 72K GAUs/month (target is 60K GAUs/month)

Additional CVWG Numerical Experiments?