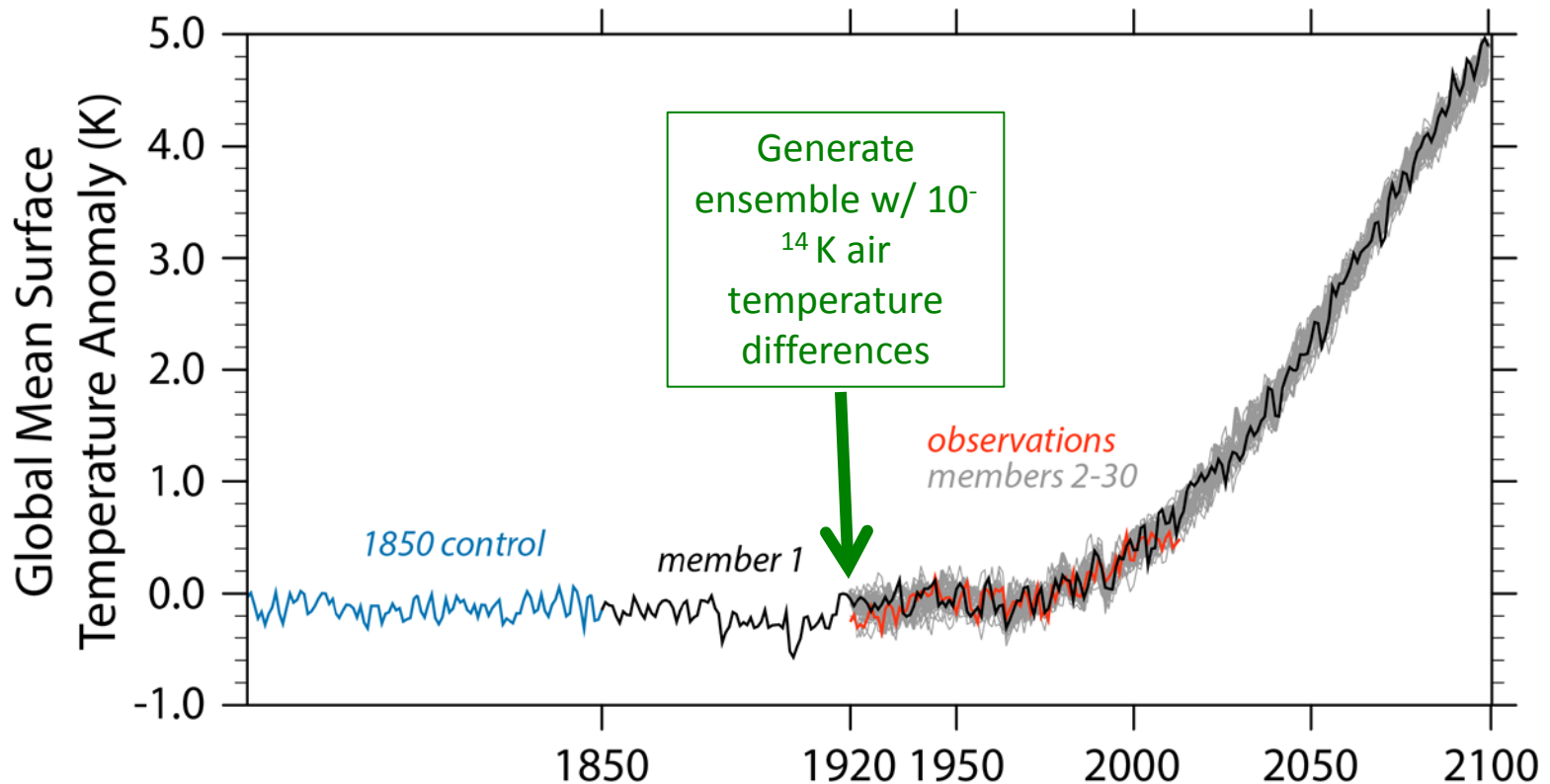


CESM1(CAM5) Large Ensemble Project

a community resource to study climate change in the presence of climate variability
<http://www2.cesm.ucar.edu/models/experiments/LENS>

Data available: /glade/p/cesmLE and ESG (<https://www.earthsystemgrid.org>)

Official reference: Kay et al. 2015 BAMS <http://dx.doi.org/10.1175/BAMS-D-13-00255.1>



CESM1(CAM5) Large Ensemble experimental design

Multi-century 1850 control runs (AMIP, SOM, Fully Coupled)

30+ members 1920-2100: same forcing, same model, small atmosphere initialization differences

CESM-LE Runs (and extensions)

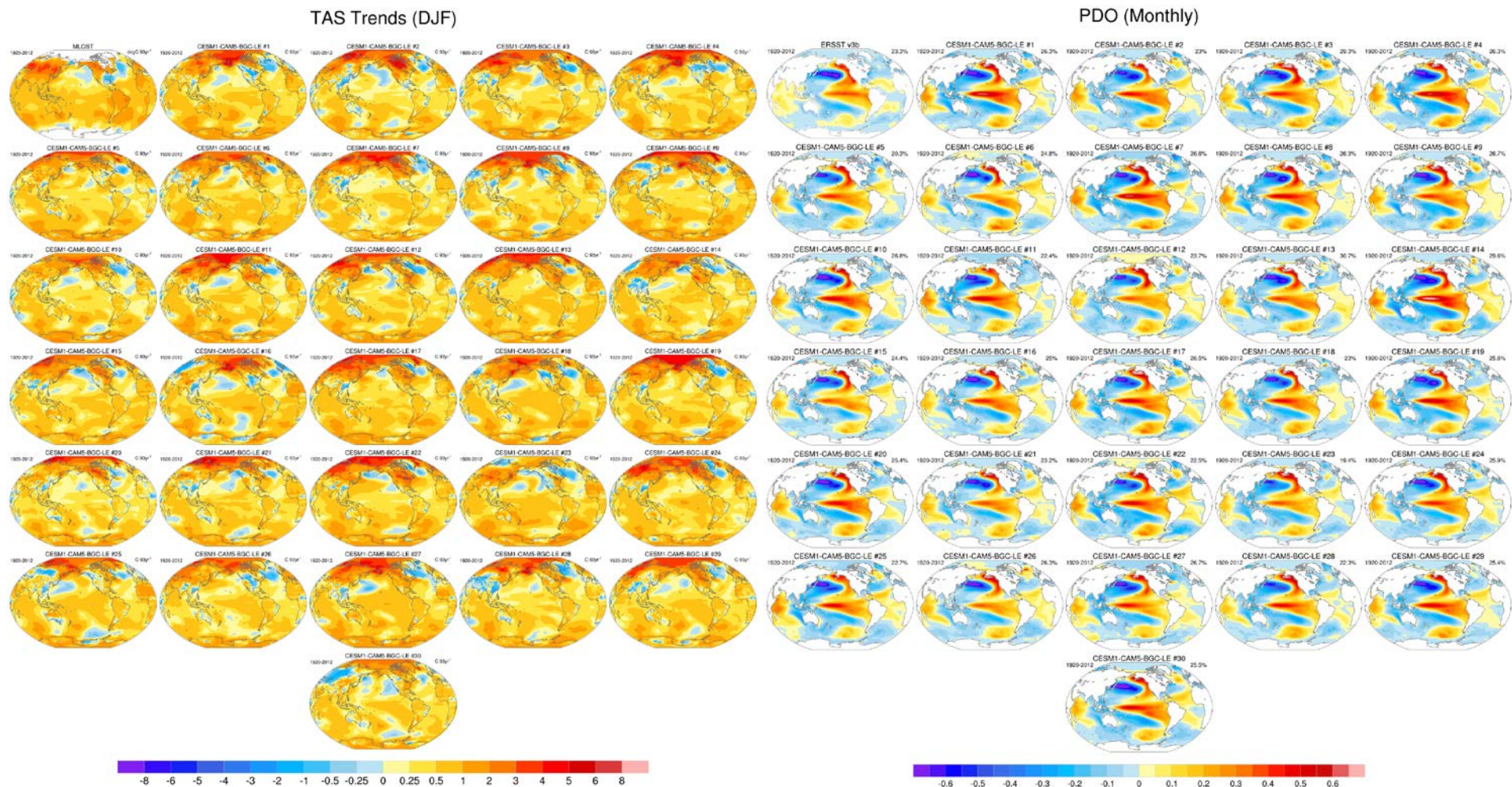
- Historical+RCP8.5 38x 1920-2100 (2x still running with COSP-lite + hourly precipitation)
- 1850 AMIP (1-2600)
- 1850 SOM (101-613, still running)
- 1850 FC (402-2200)
- RCP4.5 (BrACE) – 15x 2006-2100
- Ocean IC – 10x 1920-1999*
- Pacemaker runs – 10x (Pacific) 1920-2013*
- Pacemaker runs – 10x (Atlantic) 1920-2013*

*not yet on ESG, coming soon.

Tool: Climate Variability Diagnostics Package

(Adam Phillips, Clara Deser, John Fasullo)

http://webext.cgd.ucar.edu/Multi-Case/CVDP_ex/CESM-CAM5-BGC-LE_1920-2012/



Who to ask for help with the CESM-LE?

- Before you ask -- Check:
<http://www2.cesm.ucar.edu/models/experiments/LENS>
- Data: Gary Strand
- Diagnostics: Adam Phillips
- All other questions: Jen Kay, Clara Deser

Large Ensemble Discussion:

What went well? What needs improvement?

What additional projects could be done based on the CESM-LE?

