CSM Paleoclimate WG - Updates

• **Earth System Grid**
  • **TraCE-21**: complete set of decadal-mean files, including now dynamic vegetation results.
  • **TraCE-21 single-forcing** (orbital, GHG, ice sheet, meltwater) results.

• **Production simulations** *Release after paper(s) completed by Principal Scientists*
  • **Last Millennium Ensemble**: (1) additional 850CE control with 6-hourly CAM data, (2) three additional ‘All-forcing’ simulations, (3) two ‘medium’ solar variability simulations*, (4) ocean radiocarbon and abiotic $^{13}$C*. [CESM-CAM5.1]
  • **Glacial-Interglacial idealized forcing** (obliquity, precession, CO$_2$) simulations*. [CESM-CAM5.1]
  • **Pliocene sensitivity** (orbital, GHGs, gateways) simulations*. [CESM-CAM4]

• **PaleoCESM GitHub Resource**
  • FAQ, Code, and User Contributions
  • https://github.com/CESM-Development/paleoToolkit/wiki
CESM Paleoclimate WG - Plans

- **Isotopes (for CESM2 release)**
  - **Water isotopes.** Development branch of CESM1.3. Incorporated into CAM5.5 (MG2, CLUBB) and CLM5-BETR by this summer.
  - **Carbon isotopes.** Ocean (POP2, POP2-BGC) released. CLM5 needs testing. CAM5.5 by this summer.

- **CESM1.5**
  - **Paleo testing.** Over next months, use CMIP6 time periods to assess CESM1.5 developments.

- **CMIP6**
  - **CESM2 experiments.** Same configuration and resolution as historical and future scenarios.
  - **CMIP6/PMIP4.** Pliocene, Last Interglacial, Last Glacial Maximum, Holocene, Last Millennium. Plus additional sensitivity simulations for science.
  - **VOLMIP** – Tambora simulations. **ISMIP6** – Last Interglacial Greenland Ice Sheet simulations.