Contact — *Julia Hargreaves 2013/04/26 06:53* to contribute to this page, or leave a comment in the discussion box.

How to find actual data to compare to model output

I am sure there is more than indicated below. Ask the authors of the Experimental description papers!

Last one or two millennia

There is a wealth of different reconstructions for the last millennium: both of climate fields and also climate modes. Some places to start would be:

- The PAGES2k consortium for temperature reconstructions
- Drought Atlases from tree-rings
- The Last Millennium Reanalysis for full fields.

mid-Holocene - 6ka

Land, pollen data. Continental climate reconstructions for mid-Holocene and Last Glacial Maximum (Bartlein et al, 2011)

The last deglaciation/termination

The Last Glacial Maximum

Indo-Pacific Last Glacial Maximum hydroclimate proxy synthesis (DiNezio and Tierney, 2013)

SST, multi proxy. Multiproxy Approach for the Reconstruction of the Glacial Ocean surface (MARGO)

Land, pollen data. Continental climate reconstructions for mid-Holocene and Last Glacial Maximum (Bartlein et al, 2011)

The Eemian

There is some SST data and terrestrial temperature data in digital form in the Supp Info of this paper: http://onlinelibrary.wiley.com/doi/10.1002/jqs.1423/abstract

BUT, it is as a pdf and a pain to get into a useful format. Dan Lunt has a digital version if you are interested.

The citation for the SST and land temperature data is "Turney and Jones, 2010"

Last update: 2022/11/03 09:24

The Pliocene

Harry Dowsett is working on the new Prism4 SST synthesis for the PlioMIP2 project. It will be published in a USGS publication - currently still in progress (as of February 2017).

There is also SST from PRISM3 (2010). The data for PRISM3 were drawn from various warm periods about 3Ma. Thus they do not present a single consistent climate snapshot of the kind that may be produced by a climate model. These data were used in PlioMIP1. See, for example, this paper comparing PRISM3 and the model HadCM3 and references therein.

http://www.sciencedirect.com/science/article/pii/S0031018211001404

The Eocene

There is some SST data and terrestrial temperature data in digital form in the Supp Info of this paper: http://www.clim-past.net/8/1717/2012/cp-8-1717-2012.html

The citation for the SST data is "Lunt et al, Climate of the Past, 2012".

The citation for the terrestrial data is "Huber and Caballero, Climate of the Past, 2011".

The very very old who knows what ocene

Accessing Data at UCL Geography

In preparation for the May workshop, some data was collected on a server at UCL Geography. It contains a curated replica of the ESGF database of the models participating in PMIP. It only has the variables used by the Climate Variability Diagnostics Package (namely monthly tas, ts, pr, psl, mst. CMIP5

UCL Geography can make this computer available for server-side compute. You need to contact Chris Brierley to set up a personal account on this cluster.

The directory structure is:

- Original monthly data is stored in /data/p2f/curated_ESGF_replica/ and it's subdirectories by GCM and then experiment name. [read-only]
- The summary data files (in netcdf) from running the Climate Variability Diagnostics Package are available from /data/p2f/cvdp_data/.
- The CMIP6 data donated prior to it being deposited on the ESFG is stored in /data/p2f/ under its model name.
- The CVDP summary data files for the CESM Last Millennium Ensemble is also stored in /data/p2f/
- All the images and analysis resulting from me having run the Climate Variability Diagnostics Package is stored in /data/p2f/cvdp_output. The most up-to-date of these are avaliable on the web at the PMIP Variability Database.
- Please use ~/DATA for the results of your own analysis.

The default version of python is 2.7 on this cluster, because that it required for teaching purposes. Please use conda to set up your own version. You can access an version of the Pangeo stack that

https://pmip4.lsce.ipsl.fr/ Printed on 2025/08/09 19:10

includes NCL using the following commands...

- conda create -f ~ucfaccb/python/environment.yml
- conda activate pangeo

[PMIP3 Wiki Home] - [Help!] - [Wiki syntax]

From:

https://pmip4.lsce.ipsl.fr/ - PMIP4

Permanent link:

https://pmip4.lsce.ipsl.fr/doku.php/wg:ptof:data

Last update: 2022/11/03 09:24

