Data Management Plan

The CESM-LE and CESM-ME outputs are publicly available via the Earth System Grid (https://www.earthsystemgrid.org) as single variable time series in self documenting lossless compressed netCDF-4 format. All saved outputs - including variable names, units, and frequency - are detailed on the CESM website (http://www2.cesm.ucar.edu/models/experiments/LENS). The code base and the associated external forcing files are also available on the Earth System Grid (*Kay et al.*, 2014). The CMIP5/6 outputs are/will be made publicly available via the Earth System Grid (*Taylor et al.*, 2011; *Meehl et al.*, 2014).

The observational data planned for use in this project is freely available. References will be provided in publications. Other data will have been collected by collaborators and so will not be ours to distribute. Global Biome maps (*Fay and McKinley*, 2014) are freely available for download at PANGAEA (doi: 828650) and updates will be released at http://oceancarbon.aos.wisc.edu/biomes/.

References

Fay, A. R., and G. A. McKinley (2014), Global open-ocean biomes: mean and temporal variability, *Earth Syst. Sci. Data*, *6*(2), 273–284, doi:10.5194/essd-6-273-2014.

Kay, J. E., C. Deser, A. Phillips, A. Mai, C. Hannay, G. Strand, J. M. Arblaster, S. C. Bates, G. Danabasoglu, J. Edwards, M. Holland, P. Kushner, J. F. Lamarque, D. Lawrence, K. Lindsay, A. Middleton, E. Munoz, R. Neale, K. Oleson, L. Polvani, and M. Vertenstein (2014), The Community Earth System Model (CESM) Large Ensemble Project: A community resource for studying climate change in the presence of internal climate variability, *B. Am. Meteorol. Soc.*, doi: 10.1175/BAMS-D-13-00255.1.

Meehl, G. A., R. Moss, K. E. Taylor, V. Eyring, R. J. Stouffer, S. Bony, and B. Stevens (2014), Climate model intercomparisons: Preparing for the next phase, *Eos, Transactions American Geophysical Union*, *95*(9), 77–78, doi:10.1002/2014EO090001.

Taylor, K. E., R. J. Stouffer, and G. A. Meehl (2011), An overview of CMIP5 and the experiment design, *B. Am. Meteorol. Soc.*, *93*(4), 485–498, doi:10.1175/BAMS-D-11-00094.1.