

General Circulation Model Output IPCC 4th Assessment Future 50km Global dataset

The following is taken directly from The University of Santa Clara *Statistically Downscaled WCRP CMIP3 Climate Projections* project website located at http://www.engr.scu.edu/~emaurer/global_data/

Data Summary

Downscaled 50km translations of contemporary climate projections over the entire globe. The original projections are from the [World Climate Research Programme's \(WCRP's\) Coupled Model Intercomparison Project phase 3 \(CMIP3\)](#) multi-model dataset, which was referenced in the Intergovernmental Panel on Climate Change Fourth Assessment Report.

Source Data Description

Resolution: 50 kilometer (Geographic, WGS84)
Spatial Extent: Global
Temporal Extent: 1950 - 2099 monthly time-series
http://www.engr.scu.edu/~emaurer/global_data/

Climate Variables: Precipitation
Average Temperature

Purpose

The archive was developed to provide planning analysts access to climate projections "downscaled" to a finer spatial resolution. Such access permits development of decision-support information and associated regional and local adaptive strategies under potential climate change. Several types of analyses are supported by this archive, including:

- regionally distributed assessments of projection frequency.
- location-specific assessments of projection frequency.
- climate change impacts assessments for social and natural systems.
- risk-based exploration of planning and policy responses.

Terms of Use

These data are being distributed to interested users for consideration in research and planning applications. Such applications may include any project carried out by an individual or organized by a university, a scientific institute, public agency, or private sector entity for research or planning purposes. Any decision to use these data is at the interested user's discretion and subject to the Disclaimer provided below.

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Acknowledgements and Citation of these Data

Whenever you publish research based on data from this archive, please include the following acknowledgements

Global climate model output, from the World Climate Research Programme's (WCRP's) Coupled Model Intercomparison Project phase 3 (CMIP3) multi-model dataset (Meehl et al., 2007), were downscaled as described by Maurer et al. (2009) using the bias-correction/spatial downscaling method (Wood et al., 2004) to a 0.5 degree grid, based on the 1950-1999 gridded observations of Adam and Lettenmaier (2003).

References

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Meehl, G. A., C. Covey, T. Delworth, M. Latif, B. McAvaney, J. F. B. Mitchell, R. J. Stouffer, and K. E. Taylor: The WCRP CMIP3 multi-model dataset: A new era in climate change research, *Bulletin of the American Meteorological Society*, 88, 1383-1394, 2007.

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