



## **World Data Center for Climate: Data Support for Earth System Modelling**

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The World Data Center for Climate (WDC-Climate, [www.wdc-climate.de](http://www.wdc-climate.de)) is hosted by the Model & Data Group (M&D) of the Max Planck Institute for Meteorology. The M&D department is financed by the German government and uses the computers and mass storage facilities of the German Climate Computing Centre (Deutsches Klimarechenzentrum, DKRZ).

The WDC-Climate provides web access to about 220 Terabytes of climate data; the total mass storage archive contains nearly 5 Petabytes. Although the majority of the datasets concern model output data, some satellite and observational data are accessible as well.

- Which data is available?

The WDC-Climate is one of the data distribution centres for model data of the emission scenarios defined by the Intergovernmental Panel on Climate Change (IPCC-DDC, [www.ipcc.ch](http://www.ipcc.ch)). Model data of different assessment reports (AR2, AR3, AR4) and various scenario runs (A2, A1B, B1, and other) are available, carried out by more than a dozen different climate research institutes, such as BCC (CN), BCCR (NO), CCCma(CA), CNRM (FR), CSIRO (AU), GFDL/NOAA (US), GISS/NASA (US), INM (RU), IPSL (FR), MPI (DE), MRI (JP), NCAR (US), NIES (JP), and UKMO (UK). Besides the monthly model data of the IPCC-DDC, other IPCC scenario data are available as 6 hourly model output ([ipcc.wdc-climate.de](http://ipcc.wdc-climate.de)).

Furthermore, the WDC-Climate distributes data of the ERA-40 re-analysis project of the European Centre for Medium-Range Weather Forecasts (ECMWF) to German and British scientists ([era40.wdc-climate.de](http://era40.wdc-climate.de)). High resolution (10km) data of Germany (REMO-UBA) are available for scientists, data of Europe (CLM, 20km) will follow

soon ([sga.wdc-climate.de](http://sga.wdc-climate.de)). They have been computed by the Climate Local Model (CLM) and by the Max-Planck-Regional Model in collaboration with the Umweltbundesamt and were forced by different IPCC scenarios. Additionally, some observational data are available from projects like "The Baltic Sea Experiment" (BALTEX) and "Civil Aircraft for Regular Investigation of the Atmosphere Based on an Instrumentation Container" (CARIBIC), where the WDC-Climate was cooperating partner for data handling, too.

- How to get the data?

The most common form of data access is by browsing in the open metadata catalogue CERA ([cera.wdc-climate.de](http://cera.wdc-climate.de)) which gives access to download of most of the data. Additionally, xml access to the metadata and a scripting tool for data download is available. For a detailed description of the different access types to the data of WDC-Climate see our Poster "WDC-Climate: Web Based Data Access" in session GI10.