



Monitoring of Climate Change in Germany

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Germany's meteorological service (Deutscher Wetterdienst, DWD) is responsible for monitoring climate change in Germany. The section "National Climate Monitoring" is responsible for operating the National Climate Data Centre ("Nationales KlimaDatenZentrum NKDZ") and for provision of statistical data derived from these observations.

The NKDZ database mainly comprises 'conventional' in-situ observations that are observed within the station network of DWD, but also other categories of data, e.g. phenological observations. The main aim of the NKDZ is the sustained development of a comprehensive data base of high quality, which provides basic information for climate research and applied climatology. A major focus of the activity is to guarantee a defined data quality by means of validation and correction of the data (or at least a description of errors), as well as a detailed description of the data base. The main focus of these quality assurance tasks has been shifted to the quality control of previously insufficiently verified historical data.

The data base is used to analyse the climate in Germany over a period of more than 100 years. DWD's National Climate Data Centre is thus the reference for climate data from stations in Germany and acts as data supplier especially for national climate research, but data and products are also used in international projects.

In order to complete the data base for historic periods (esp. the first half of the 20th century), original paper documents are currently digitized and integrated into the data base.

External customers may obtain data and products directly via Internet-based access tools. DWD currently starts to provide access to its climate data based on standards of the Open Geospatial Consortium (OGC), e.g. Web Mapping Services (WMS) to provide access to the derived gridded data products of NKDZ.

The presentation gives an overview over the database, the progress of the digitization activity, the derived products and the access tools.