



The Climate Data Centre of Deutscher Wetterdienst (DWD)

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In 2009 Germany's national meteorological service (Deutscher Wetterdienst, DWD) has started to set up a Climate Data Centre (CDC) in order to provide unified access to its variety of climate data especially to users from research, educational and public institutions. CDC acts as a central point of contact to various data collections of DWD.

These include observations from German weather stations and DWD's observatories, special data as e.g. from hydroclimatology, agro-climatology and medical climatology, but also from international activities of DWD, such as the Global Precipitation Climatology Centre (GPCC), EUMETSAT's Satellite Application Facility on Climate Monitoring (CM-SAF) or the collections of marine climatological data (ship and buoy observations) of the Global Collecting Centre for Marine Climatological Data.

Climatological datasets available from DWD are based on conventional surface observations over land and ocean as well as on various remote sensing methods, such as satellite observation. The major part consists of climate data from the past, but CDC will also include results from scenario calculations and projections for the future. In addition to pure observational data, DWD also provides derived statistical parameters and spatial analyses as gridded datasets.

As first step, a central data catalogue provides standardised descriptions and information on data access. It follows national and international rules for the description of geo-referenced data (GDI-DE; INSPIRE). The individual data providers within DWD can use the catalogue to easily edit and publish their metadata in a unified way. These metadata contain information on data policy, data quality, spatial and temporal coverage, responsible persons, data access, etc.

The catalogue is based on an open source software product (geonetwork-opensource) that is also used by a large number of international organizations. Metadata can be exchanged (harvested) between these catalogues. This will allow implementing a structure that provides search capabilities over institutions. The software also allows implementing web-based mapping services and group-specific data access policies.

Selected data products are accessible via the infrastructure of the DWD node (Global Information System Center, GISC) of the WMO Information System (e.g. predefined collections of data from the German station network, including relevant metadata on station history etc.). Others are provided under the responsibility of the specific data centers (e.g. GPCC, CMSAF). Users can now use the CDC portal as a unified search interface for all these products.