

DATA SET DESCRIPTION

Recent daily degree days according to VDI 3807 for Germany, quality control not completed yet

Version recent

Cite data set as: DWD Climate Data Center (CDC): Recent daily degree days according to VDI 3807 for Germany, quality control not completed yet, version v19.3, last accessed: <date>.

INTENT OF THE DATASET

This document describes the data set "Current daily degree days according to VDI 3807, part 1, for Germany, quality control not yet fully completed", calculated from publicly available station data of the DWD Climate Data Center (CDC). The daily degree days for each day of each calendar month are listed. The degree days refer to the room temperature 20 degrees Celsius. Degree days are calculated as the temperature difference between the room temperature and the daily mean temperature (degrees Celsius), but only for those days when the average outdoor temperature is less than 15 degrees Celsius (heating day). Otherwise, the value is zero. The data in the directory "recent" are calculated degree days from current data, which have not yet fully passed the quality control. Values are only reported for stations for which all daily average values of the air temperature of the respective month are available. The data comes from DWD stations and legally and qualitatively equivalent partner network stations.

POINT OF CONTACT

Deutscher Wetterdienst
CDC - Vertrieb Klima und Umwelt
Frankfurter Straße 135
63067 Offenbach
Tel.: + 49 (0) 69 8062-4400
Fax.: + 49 (0) 69 8062-4499
Mail: klima.vertrieb@dwd.de

DATA DESCRIPTION

Spatial coverage	stations in Germany
Temporal coverage	2018-01-01 until - last month
Temporal resolution	daily
Format(s)	One file per month, each row corresponds to one station.
Units	The parameters of the degree day list: ID Station ID nB latitude degree oeL longitude degree Station name of the station 1, ...,n degree day (Kelvin x day) for each day of the month
Uncertainties	The stations are nowadays selected and operated according to WMO guidelines.

DATA ORIGIN

The daily degree days (VDI 3807 / Part 1: Characteristic consumption values for buildings - Fundamentals) are calculated for each month from daily means of air temperature (degree Celsius), and only in the case the all daily values are available. Values are only reported for stations for which all daily average values of the air temperature of the respective month are available. This climate data are from the station network of DWD, operationally collected in the central MIRAKEL data base and archived, see Behrendt et al., 2011, and Kaspar et al., 2013. For details on current measurement and observation procedures see VuB 3 Beobachterhandbuch (DWD, 2014a), VuB 3 Technikerhandbuch (DWD, 2014b) and VuB 2 Wetterschlüsselhandbuch (DWD, 2013).

VALIDATION AND UNCERTAINTY ESTIMATE

The quality of the monthly degree days depends on the quality of daily values of air temperature.

REFERENCES

Behrendt, J., et al.: Beschreibung der Datenbasis des NKDZ. Version 3.5, Offenbach, 15.02.2011.

DWD Vorschriften und Betriebsunterlagen Nr. 2 (VuB 2), Wetterschlüsselhandbuch Band D, Nov 2013.

DWD Vorschriften und Betriebsunterlagen Nr. 3 (VuB 3), Beobachterhandbuch (BHB) für Wettermeldestellen des synoptisch-klimatologischen Mess- und Beobachtungsnetzes, März 2014a .

DWD Vorschriften und Betriebsunterlagen Nr. 3 (VuB 3), Technikerhandbuch (THB) für Wettermeldestellen des synoptisch-klimatologischen Mess- und Beobachtungsnetzes, März 2014b.

Kaspar, F., et al.: Monitoring of climate change in Germany – data, products and services of Germany`s National Climate Data Centre. Adv. Sci. Res., 10, doi:10.5194/asr-10-99-2013, 99–106, 2013.

Spengler, R.: The new Quality Control- and Monitoring System of the Deutscher Wetterdienst. Proceedings of the WMO Technical Conference on Meteorological and Environmental Instruments and Methods of Observation, Bratislava, 2002.

VDI 3807, Part 1 (2013): Characteristic consumption value for buildings, Fundamentals. Verein Deutscher Ingenieure. Beuth-Verlag. Berlin

COPYRIGHT

The instructions in https://opendata.dwd.de/climate_environment/CDC/Terms_of_use.pdf should be followed. The DWD website provides comprehensive copyright information.

REVISION HISTORY

The data in this directory are updated monthly. This document is maintained by the DWD Regional Climate Office Essen, last edited 2019-11-11.