Deutscher Wetterdienst
Wetter und Klima aus einer Hand

DATA SET DESCRIPTION

Recent monthly 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 monthly 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 freely available monthly degree days according to VDI 3807, also known as heating degree days, calculated from station data (daily mean air temperature) of the DWD Climate Data Center (CDC). The monthly degree days (e.g. Jan 2019) and the mean value of the monthly degree days of the last ten years (excluded the actual year: e.g. Jan 2009, Jan 2010, ... Jan 2018) are calculated.
The degree days refer to a room temperature of 20 degrees. Degree days are calculated as temperature difference between room temperature and daily mean air temperature (in degree Celsius). Only days with daily mean temperatures lower than 15 deg Celsius (heating day) are considered. To minimize time delay, the version 'recent' is calculated with station data which have not passed the full quality control yet.

POINT OF CONTACT

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DATA DESCRIPTION

Spatial coverage stations in Germany

Temporal coverage 2019-01-01 until last month

Temporal resolution monthly

Format(s) One file per months, rows correspond to stations.

Units The parameters of the degree day list:

ID	Station ID	
geogr. Breite	latitude	degree
geogr. Laenge	longitude	degree
Station	name of the station	
Monat	Year and month	yyyymm
Anzahl Tage	number of available values of mean daily air temperatures per month	
Monatsgradtage	sum of degree days over a month	Kelvin * day
Anzahl Heiztage	number of days with daily mean air temperature less than 15 degree Celsius	

	Mittelwert	mean value of the monthly degree day of the last ten years (excluded actual year); missing value: -999.9	Kelvin * day
Uncertainties	The stations are nowadays selected and operated according to WMO guidelines.		

DATA ORIGIN

The monthly 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. If daily temperature valus at a station are missing, no monthly degree days are calculated. 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

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REVISION HISTORY

The data in this directory are updated monthly.
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