

DATA SET DESCRIPTION

Hourly station observations of index whether precipitation has fallen for Germany

Version v19.3 & recent

Cite data set as: DWD Climate Data Center (CDC): Hourly station observations of index whether precipitation has fallen for

Germany, version v19.3, last accessed: <date>.

INTENT OF THE DATASET

This data are from DWD stations operated for climatological and climate related applications (partner stations not included).

POINT OF CONTACT

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DATA DESCRIPTION

Spatial coverage	Germany
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Temporal coverage 1995-09-01 until - yesterday

Temporal resolution hourly

Units GEOM Die Geometrie des Spatial Data OGC WKT

Objektes (SDO)

STATION_ID ID des Spatial Data Objektes (SDO), so wie es beim DWD

definiert ist, z.B. Stationsld, ..
STATION_NAME Name des Spatial Data Objektes

(SDO), so wie es beim DWD

definiert ist

ZEITSTEMPEL Referenz Datum/Zeit des YYYY-MM-DD hh:mi:ss(.ff6)

Wertes (!= Messzeit), in der Regel der Startzeitpunkt des Referenzintervalls.

ZEITINTERVALL Länge des Referenzintervalls

WERT Stündliche Stationsmessungen

des Indikators ob Niederschlag

ISO_8601#Zeitspannen

numerical code

numerical code

-999,0..7

gefallen

EINHEIT Einheit in der die Werte vorliegen QUALITAET_BYTE QUALITAET_BYTE (QB) zeigt an,

ob der Wert beanstandet und/oder korrigiert wurde (siehe Qualitaet).

QUALITAET_NIVEAU QUALITAET_NIVEAU (QN) 1..10

beschreibt das Verfahren der Qualitätsprüfung und bezieht sich auf einen vollständigen Satz von Parametern zu einem bestimmten

Termin. (siehe Qualitaet).



Quality information

The QUALITAETS_BYTE (QB) denotes whether the value was objected to and/or corrected. The QUALITAETS_NIVEAU (QN) shows the quality control procedure applied for a data report (of several parameters) for a certain reporting time. Explanation for QB:

QB=0 denotes not flagged,

QB=1 had no objections (either checked and not objected, or not checked and not objected, this can be interpreted only when considering QN);

QB=2 corrected:

QB=3 confirmed with objection rejected;

QB=4 added or calculated:

QB=5 objected:

QB=6 only formally checked;

QB=7 formal objection;

QB=-999 quality flag does not exist.

Explanation for QN:

QN=1 only formal control;

QN=2 controlled with individually defined criteria;

QN=3 automatic control and correction; QN=5 historic, subjective procedures;

QN=7 second control done, before correction;

QN=8 quality control outside ROUTINE;

QN=9 not all parameters corrected;

QN=10 quality control finished, all corrections finished.

Data before and including 1980 can reach as best quality check level QN=5. Data after 1980 can reach

QN=10 as best quality check level.

DATA ORIGIN

These climate data are from the station networks of Deutschen Wetterdienst which are regularly updated with recent data, and with recovered historical data. From 1997 onwards, the data are 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). Note that when going back to historical times, guidelines on observation procedure, instruments and observation times were issued by the authority in charge (see, e.g., Freydank, 2014), and might be incompletely recorded in the metadata. As explained in Kaspar et al., 2013 in the early years numerous meteorological agencies were active in the area of todays Germany. After establishment of the der International Meteorological Organization (IMO) in 1873, the various standards were gradually harmonized, resulting in a single standard 1936. After 1945, the standards in East and West Germany developed differently, and were harmonized again after re-unification in 1990. Between the end of the nineties and 2009 many stations were changed from manual to automated.

VALIDATION AND UNCERTAINTY ESTIMATE

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REVISION HISTORY

This document is maintained by the Climate Data Centre of the DWD, last edited at 2019-07-25.