

INTERPOLATED DAILY CUMULATIVE PRECIPITATION PRODUCT DESCRIPTION

1. Identification

1.1. *Product description*

1.1.1. Abstract

This dataset contains interpolated cumulative precipitation covering the Netherlands. The source data is precipitation measured by the voluntary network from 08-08 UT. The interpolation method is ordinary kriging. Observations are square root transformed and back-transformed after interpolation using quantiles calculation. For every day a variogram is automatically fitted. The nugget is zero and the variogram model is spherical or exponential, depending on the best fit.

1.1.2. Purpose

Monitoring daily precipitation

1.1.3. Application

Interpolated daily precipitation maps can be used in a.o. climatology, meteorology and hydrology.

1.2. *Time period of content*

1.2.1. Time period of content

01-01- 1961 – 31-12-2009.

1.2.2. Currentness reference

Not applicable

1.3. *Status*

1.3.1. Progress

Complete

1.3.2. Maintenance and update frequency

Static, irregular version updates.

1.4. *Spatial Domain*

1.4.1. Bounding coordinates

Netherlands: Longitude [3.18,7.30], latitude [50.70,53.59]

1.5. Keywords

1.5.1. Theme

Climatology, Meteorology.

1.5.2. Place

Netherlands

1.5.3. Stratum

Ground

1.5.4. Temporal

01-01-1961 – 31-12-2009

1.6. Access constraints

None.

1.7. Use constraints

This dataset is for research purposes only. The values between stations are calculated using interpolation. Therefore the map is an approximation of the precipitation pattern which is often more irregular in nature. Values may not be interpreted absolutely. Predicted values in areas outside the Netherlands are the result of extrapolation and may be erroneous.

1.8. Point of contact

Klimaatdesk KNMI, klimaatdesk@knmi.nl

1.9 Citation

1.9.1. Originator

Royal Netherlands Meteorological Institute (KNMI)

1.9.2. Publication date

June, 2010

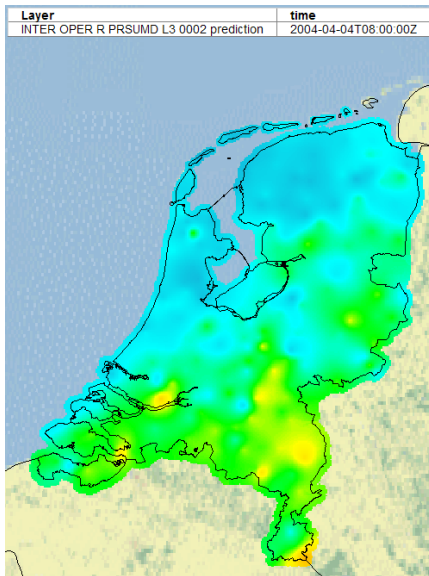
1.9.3. Title

Daily precipitation sum

1.9.4. Edition

Version 0002

1.10 Preview



1.11 Unique identifiers

Source data unique identifier:

iso_dataset:uid = "73e04ca4-ef4a-4a80-8eb6-cee782ae8577"

Metadata identifier:

iso_dataset:metadata_id = "fcfae6cc-c229-41fd-9d13-13b21c6bb057"

1.12. Data set credit

Sluiter, R. (KNMI), Plieger, M., (KNMI).

1.13. Cross reference

Interpolated daily cumulative precipitation - KNMI

1.14. Literature

Soenario, I., R. Sluiter & M. Plieger (2010). Optimization of Rainfall Interpolation. De Bilt, Royal Netherlands Meteorological Institute (KNMI). <http://www.knmi.nl/bibliotheek/knmipubIR/IR2010-01.pdf>

2. Data Quality

2.1 Lineage

2.1.1. Source information

The dataset contains interpolated daily cumulative precipitation measured by the voluntary network from 08-08 UT.

2.1.2. Processing steps

2.1.2.1. Processing description

The interpolation method is ordinary kriging. Observations are square root transformed and back-transformed after interpolation using quantiles calculation.

2.1.2.2. Algorithms used

R GSTAT – ordinary Kriging

2.1.2.3. Ancillary data

none

2.1.2.4. Processing date

2010-06-17

2.1.2.5. Data validation

Data validation by cross validation and interpolation variance. See Soenario (2010) for details.

3. Spatial Data Organization

3.1. Indirect Spatial Reference

Map covers the Netherlands.

3.2. Direct Spatial Reference Method

Raster data in a regular grid on 1000 m. resolution

3.3. Point and vector object information

N/A

3.4. Raster object information

Raster data in a regular grid on 1000 m. resolution

3.4.1. Row count

319

3.4.2. Column count

273

3.4.3. Vertical count

1

4. Spatial Reference

4.1. Coordinate System

4.1.1. Geographic coordinate units

meters

4.1.2. Map projection

Rijksdriehoekstelsel.

4.1.3. Datum

WGS84

4.1.4. EPSG Code

EPSG:28992

4.1.5. PROJ4 parameters

+proj=sterea +lat_0=52.15616055555555 +lon_0=5.38763888888889 +k=0.9999079
+x_0=155000 +y_0=463000 +ellps=bessel +units=m +no_defs +<>

5. Product Description Reference Information

5.1. Product Description Date

2010-07-04.

5.2. Product Description Review Date

2010-07-04.

5.3. Product Description Contact

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