



## **On the new GPCC gridded reference data sets of observed (daily) monthly land-surface precipitation since (1988) 1901 published in 2014 including an all seasons open source test product**

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Since 1989 the Global Precipitation Climatology Centre (GPCC) collects world-wide observational in-situ data from rain gauges in order to provide gridded high quality and resolution land surface precipitation analyses as mandated by WMO's World Climate Research Program and the Global Climate Observing System (GCOS).

In doing so a thorough quality control (QC) is performed on the original data prior to its entrance into the ever growing GPCC data archive being the world-wide largest with monthly totals for more than 90000 stations. Since 2012 also daily data is processed and the archive already holds daily data for more than 30000 stations with the aim to reach at least the same scope as for monthly data, ultimately. All archived data stems from various sources, e.g. national meteorological and hydrological services and regional or global data collections and is thus stored in source specific slots, allowing cross-checks on redundant records and subsequent QC at different sophistication levels depending on the timeliness demand on each product. All data products are referenced by digital object identifiers (DOIs all starting with "10.5676/DWD\_GPCC/") and thus published in public domain ([ftp://ftp-anon.dwd.de/pub/data/gpcc/html/download\\_gate.html](ftp://ftp-anon.dwd.de/pub/data/gpcc/html/download_gate.html)) for minimum 10 years per product and version.

In 2014 the monthly Full Data Reanalysis and the Climatology product releases of December 2011 are due for update. As the new Climatology product is also used as background climatology for all other data products, the Monitoring Product shall be re-processed for all years since 1986. Moreover the First Guess Products (daily and monthly) will benefit from the improved climatology. Finally, GPCC will release its first Full Data Daily Reanalysis product comprising the land-surface precipitation for every day since 1 January 1988. It will be extended backward in course of GPCC's participation in the ERA\_CLIM2 re-analysis project.

The double to triple size of the GPCC data archive compared to other data sets like CRU or GHCN is based on the fact, that GPCC does not claim copyrights for its supplied data. Therefore GPCC cannot make public the original data of its analysis products. Still to allow the user to check GPCC's methods in re-processing and interpolation, a new Interpolation Test Dataset (ITD) will be released. The ITD will be based on a sub-set of public available station data and cover only one year. The gridded as well as underlying copyright free station data will be provided with the ITD addressing open source demands.