A Big Earth Data Platform for Three Poles

**Dataset of gridded daily precipitation in China (Version 2.0) (1961-2013)**

1、Description

The National Meteorological Information Center Meteorological Data Room has detected, controlled and corrected the quality of 2474 national-level ground stations' basic meteorological data and formed a set of high-quality, national and provincial ground-based basic data files. On the basis of the basic ground data of the precipitation data files, the thin-plate spline method is used, introducing the digital elevation data to eliminate the influence of the elevation on the precipitation precision under the unique terrain conditions in China. A dataset of 0.5°×0.5° grid values for the surface precipitation in China since 1961 is established. It provides a data basis for accurately describing the trends and magnitudes of precipitation changes in China.
One of two data sources for the development of “Dataset of Gridded Daily Precipitation in China (Version 2.0)” was 1) the monthly and daily precipitation data of 2474 national-level stations in the country archived by the Meteorological Data Room for nearly 50 years. The information comes from the monthly information of the “Monthly Report of the Surface Meteorological Record” reported by the climate data processing departments of all the provinces, municipalities and autonomous regions. That information is collected, organized and strictly checked and reviewed by the National Meteorological Information Center. Since the establishment of the station, many stations in the country have undergone historical changes such as business reform and station migration. In 1961, the total number of stations had stabilized above 2,000, and the number of backstage stations in the late 1970s reached 2,400. 2) The second data source was a Chinese range of 0.5°×0.5° digital elevation model data DEMs generated by GTOP030 data (resolution 30′′×30′′) resampling.
For the quantitative analysis and evaluation of the data, please see the Dataset of Gridded Daily Precipitation in China - Data Specification.

2、Keywords

Theme：Precipitation,Precipitation amount
Discipline：Atmosphere
Places：China
Time：

3、Data details

1.Scale：None

2.Projection：

3.Filesize：689.0MB

4.Data format：PDF

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：54.0 | - |
| west：72.0 | - | east：136.0 |
| - | south：18.0 | - |

5、Time frame:1961-01-30 00:00:00+00:00--2014-01-29 00:00:00+00:00

6、Reference method

References to data:

National Meteorological Information Center. Dataset of gridded daily precipitation in China (Version 2.0) (1961-2013). A Big Earth Data Platform for Three Poles, 2018

References to articles:

沈艳, 冯明农, 张洪政, 高峰. (2010). 我国逐日降水量格点化方法[J]. 应用气象学报, 21(3), 279-286.

7、Supporting project information

CASEarth:Big Earth Data for Three Poles（grant No. XDA19070000）

8、Data resource provider

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