A Big Earth Data Platform for Three Poles

**Long time series data set of extreme precipitation index in arid region of Central Asia**

1、Description

The long-time series data set of extreme precipitation index in the arid region of Central Asia contains 10 extreme precipitation index long-time series data of 49 stations. Based on the daily precipitation data of the global daily climate historical data network (ghcn-d), the data quality control and outlier elimination were used to select the stations that meet the extreme precipitation index calculation. Ten extreme precipitation indexes (prcptot, SDII, rx1day, rx5day, r95ptot, r99ptot, R10, R20) defined by the joint expert group on climate change detection and index (etccdi) were calculated 、CWD、CDD）。 Among them, there are 15 time series from 1925 to 2005. This data set can be used to detect and analyze the frequency and trend of extreme precipitation events in the arid region of Central Asia under global climate change, and can also be used as basic data to explore the impact of extreme precipitation events on agricultural production and life and property losses.

2、Keywords

Theme：Precipitation,Rainfall rate,Precipitation amount,Hydrology
Discipline：Atmosphere,Terrestrial Surface
Places：Central Asia
Time：1925-2005

3、Data details

1.Scale：None

2.Projection：

3.Filesize：1.65MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：55.0 | - |
| west：48.0 | - | east：85.0 |
| - | south：35.0 | - |

5、Time frame:None--None

6、Reference method

References to data:

CHEN Jing, YAO Junqiang, LI Jiangang. Long time series data set of extreme precipitation index in arid region of Central Asia. A Big Earth Data Platform for Three Poles, doi:10.11888/Meteoro.tpdc.2711382021

References to articles:

Yao, J., Chen, Y., Chen, J., Zhao, Y., & Mao, W. (2020). Intensification of extreme precipitation in arid central asia. Journal of Hydrology, 125760. doi.org/10.1016/j.jhydrol.2020.125760

7、Supporting project information

Second Tibetan Plateau Scientific Expedition Program
National Key Research and Development Program of China
National Natural Science Foundation of China

8、Data resource provider

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