A Big Earth Data Platform for Three Poles

**High temporal and spatial resolution precipitation data of Upper Brahmaputra River Basin (1981-2016)**

1、Description

This data set describes the temporal and spatial distribution of precipitation in the Upper Brahmaputra River Basin. We integrate (CMA, GLDAS, ITP-Forcing, MERRA2, TRMM) five sets of reanalysis precipitation products and satellite precipitation products, and combine the observation precipitation of 9 national meteorological stations from China Meteorological Administration (CMA) and 166 rain gauges of the Ministry of Water Resources (MWR) in the basin. The time range is 1981-2016, the time resolution is 3 hours, the spatial resolution is 5 km, and the unit is mm/h. The data will provide better data support for the study of Upper Brahmaputra River Basin, and can be used to study the response of hydrological process to climate change. Please refer to the instruction document uploaded with the data for specific usage information.

2、Keywords

Theme：Precipitation,Precipitation,Precipitation rate,Hydrology  
Discipline：Atmosphere,Terrestrial Surface  
Places：Upper Brahmaputra  
Time：1981-2016

3、Data details

1.Scale：None

2.Projection：UTM

3.Filesize：27750.0MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：32.0 | - |
| west：81.0 | - | east：98.0 |
| - | south：27.0 | - |

5、Time frame:1981-01-17 08:00:00+00:00--2017-01-17 07:59:59+00:00

6、Reference method

References to data:

LI Xiuping, WANG Yuanwei, WANG Lei, ZHOU Jing. High temporal and spatial resolution precipitation data of Upper Brahmaputra River Basin (1981-2016). A Big Earth Data Platform for Three Poles, doi:10.5281/zenodo.37111552020

References to articles:

Yuanwei Wang, Lei Wang\*, Xiuping Li, Jing Zhou, Zhidan Hu (2020), An integration of gauge, satellite and reanalysis precipitation datasets for the largest river basin of the Tibetan Plateau, Earth System Science Data, 12, 1789–1803, https://doi.org/10.5194/essd-12-1789-2020.

7、Supporting project information

CASEarth:Big Earth Data for Three Poles（grant No. XDA19070000）  
Pan-Third Pole Environment Study for a Green Silk Road-A CAS Strategic Priority A Program  
Synergistic change and runoff effect of vegetation, glacier and permafrost in the Upper Brahmaputra driven by climate change

8、Data resource provider

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