A Big Earth Data Platform for Three Poles

**High temporal and spatial resolution precipitation data of Upper Brahmaputra River Basin (1981-2019)**

1、Description

This data set is the version 2 of "High temporal and spatial resolution precipitation data of Upper Brahmaputra River Basin (1981-2016) ", with additional data from 2017 to 2019.
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 1981-2019, 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 rate,Hydrology
Discipline：Atmosphere,Terrestrial Surface
Places：Yarlung Tsangpo River
Time：1981-2019

3、Data details

1.Scale：None

2.Projection：

3.Filesize：2735.45MB

4.Data format：None

4、Space scope

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

5、Time frame:1980-12-31 16:00:00+00:00--2019-12-30 16:00:00+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 (1981-2019). A Big Earth Data Platform for Three Poles, doi:10.5281/zenodo.46742892021

References to articles:

Wang, Y., Wang, L., Zhou, J., Yao, T., Yang, W., Zhong, X., Liu, R., Hu, Z., Luo, L., Ye, Q., Chen, N., & Ding, H. (2021). Vanishing Glaciers at Southeast Tibetan Plateau Have Not Offset the Declining Runoff at Yarlung Zangbo. Geophysical Research Letters, 48(21), e2021GL094651. https://doi.org/10.1029/2021GL094651

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

8、Data resource provider

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