A Big Earth Data Platform for Three Poles

**Water and energy balance dataset in the Yellow River source region and Qilian Mountains in the past 40 years (1981-2020)**

1、Description

This data set is the data set of water balance (precipitation, evapotranspiration, runoff, liquid soil moisture) and energy balance (short wave radiation, sensible heat, latent heat and surface soil temperature) for the source of the Yellow River and the Qilian Mountains over the past 40 years. The initial data source is ERA5 Land monthly average data, which is accumulated/averaged to the annual scale through time aggregation. The time range of the data is 1981-2020, the spatial range is 88.5 ° E – 104.5 ° E, 32 ° N – 43 ° N, and the spatial resolution is 0.1 °. The data set can be further used to study the ecological hydrological processes in the source area of the Yellow River and the Qilian Mountains, and provide scientific basis for the optimal allocation of the "mountains, rivers, forests, fields, lakes and grasses" system.

2、Keywords

Theme：Earth SurFace Processes,Hydrology
Discipline：Terrestrial Surface
Places：Tibet Plateau, Qilian Mountain, the source region of the Yellow River
Time：1981 - 2020

3、Data details

1.Scale：None

2.Projection：WGS84

3.Filesize：50.0MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：43.0 | - |
| west：88.5 | - | east：104.5 |
| - | south：32.0 | - |

5、Time frame:None--None

6、Reference method

References to data:

ZHENG Donghai. Water and energy balance dataset in the Yellow River source region and Qilian Mountains in the past 40 years (1981-2020). A Big Earth Data Platform for Three Poles, doi:10.11888/Terre.tpdc.2728442022

References to articles:

7、Supporting project information

Pan-Third Pole Environment Study for a Green Silk Road-A CAS Strategic Priority A Program

8、Data resource provider

name: ZHENG Donghai
unit:
email: zhengd@itpcas.ac.cn