A Big Earth Data Platform for Three Poles

**The dataset of spatio-temporal water resources distribution in the source regions of Yangtze River and Yellow River (1998-2017)**

1、Description

This data is a simulated output data set of 5km monthly hydrological data obtained by establishing the WEB-DHM distributed hydrological model of the source regions of Yangtze River and Yellow River, using temperature, precipitation and pressure as input data, and GAME-TIBET data as verification data. The dataset includes grid runoff and evaporation (if the evaporation is less than 0, it means deposition; if the runoff is less than 0, it means that the precipitation in the month is less than evaporation). This data is a model based on the WEB-DHM distributed hydrological model, and established by using temperature, and precipitation (from itp-forcing and CMA) as input data, GLASS, MODIA, AVHRR as vegetation data, and SOILGRID and FAO as soil parameters. And by the calibration and verification of runoff，soil temperature and soil humidity, the 5 km monthly grid runoff and evaporation in the source regions of Yangtze River and Yellow River from 1998 to 2017 was obtained. If asc can't open normally in arcmap, please delete the blacks space of the top 5 lines of the asc file.

2、Keywords

Theme：Monsoons,Temperature,Runoff,Precipitation,Snow,Rainfall rate,Glaciers,Hydrologic characteristic value,Meteorological Disaster,Surface pressure,Freeze thawing,Snowpack,Hydrology,Glacier(Ice Sheet),Frozen Ground,Pressure  
Discipline：Atmosphere,Terrestrial Surface,Cryosphere  
Places：Yellow River Source Region, Yangtze River Source Region  
Time：1998-2017

3、Data details

1.Scale：None

2.Projection：UTM

3.Filesize：19.1MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：38.0 | - |
| west：90.0 | - | east：104.0 |
| - | south：30.0 | - |

5、Time frame:1997-12-31 16:00:00+00:00--2017-12-30 16:00:00+00:00

6、Reference method

References to data:

WANG Lei. The dataset of spatio-temporal water resources distribution in the source regions of Yangtze River and Yellow River (1998-2017). A Big Earth Data Platform for Three Poles, doi:10.11888/Hydro.tpdc.2709572019

References to articles:

7、Supporting project information

CASEarth:Big Earth Data for Three Poles（grant No. XDA19070000）"Spatial–temporal changes in the polar water and ecosystem" subproject (subproject No: XDA19070301)

8、Data resource provider

name: WANG Lei  
unit: Institute of Tibetan Plateau Research,Chinese Academy of Sciences  
email: wanglei@itpcas.ac.cn