A Big Earth Data Platform for Three Poles

**Monthly Temperature and radiation data in Central Asia (2000-2015)**

1、Description

The temporal resolution of temperature and radiation data in Central Asia is monthly scale, and the spatial resolution is 0.5 degree and 0.05 degree, respectively. The GCS\_WGS\_1984 projection coordinate system was used. Among them, the downward short wave radiation, air temperature and vapor pressure data of GLDAS, surface temperature / emissivity data of MOD11C3, surface albedo data of MCD43C3 and ASTER\_GEDv4.1 are used for radiation data calculation; the temperature data was calculated by MOD06\_ L2 cloud products and MOD07\_ L2 atmospheric profile data was calculated. This data is based on the advanced remote sensing algorithm and makes full use of the current high-precision remote sensing data and products, which is different from the traditional climate model for the estimation of climate elements. The data can be used to analyze the spatial and temporal variation characteristics of water resources in Central Asia, analyze the supply-demand relationship of agricultural water resources and evaluate the development potential of water resources.

2、Keywords

Theme：Radiation,Temperature,Mean temperature,Solar radiation
Discipline：Atmosphere
Places：Central Asia
Time：2000-2015

3、Data details

1.Scale：None

2.Projection：WGS84

3.Filesize：64.9MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：55.0 | - |
| west：45.0 | - | east：90.0 |
| - | south：35.0 | - |

5、Time frame:2000-01-09 16:00:00+00:00--2016-01-08 16:00:00+00:00

6、Reference method

References to data:

JIANG Xiaohui, SONG Jinxi. Monthly Temperature and radiation data in Central Asia (2000-2015). A Big Earth Data Platform for Three Poles, doi:10.11888/Meteoro.tpdc.2709012020

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

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