A Big Earth Data Platform for Three Poles

**Standardized dataset on surface temperature for performance assessment of climate models in the great lakes region of central Asia (1850 --2014)**

1、Description

1) Data content: including the central Asian region, the regional scope: 30°N ~ 60°N, 40°E ~ 90°E;  
2) Data source: process the CMIP data set and use bilinear interpolation to interpolate the data of different resolution modes to 0.5°× 0.5°，CRU observation data from 1901 to 2014;;  
3) Data quality: the time length is long, the data quality is good, and the missing values are marked by 999;  
3) Prospect of data application achievement set: the data has been used to evaluate the simulation capability of temperature in central Asia, and the capability of climate system model to simulate historical climate change in central Asia has been evaluated through calculation and analysis of regional mean, relative error, root-mean-square error, Taylor diagram, EOF.  
4) data reliability: by comparing and analyzing the annual changes of the observed and simulated data, the data results show a significant warming trend. By carrying out correlation test on the data results, they all pass the 99% reliability test.At the same time, CMIP plan data and CRU data are also common data sets, which are often used in many studies on climate change.

2、Keywords

Theme：Temperature,Surface air temperature  
Discipline：Atmosphere  
Places：Central Asia  
Time：1850-2014

3、Data details

1.Scale：None

2.Projection：

3.Filesize：5120.0MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：55.0 | - |
| west：46.0 | - | east：87.0 |
| - | south：35.0 | - |

5、Time frame:1850-02-04 00:51:10+00:00--2015-01-03 00:00:00+00:00

6、Reference method

References to data:

Standardized dataset on surface temperature for performance assessment of climate models in the great lakes region of central Asia (1850 --2014). A Big Earth Data Platform for Three Poles, doi:10.11888/Meteoro.tpdc.2704222020

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: Ma Jinyu  
unit:   
email: mjy0525@163.com