A Big Earth Data Platform for Three Poles

**Spatial distribution of global mean annual temperature simulated by multi-model ensemble under different climate scenarios (2006-2100)**

1、Description

According to the data of three future scenarios of CMIP5 (RCP2.6、RCP4.5、RCP8.5), the spatial variation characteristics and temporal variation trend of the global mean annual air temperature from 2006 to 2100 are analyzed. Under rcp2.6 scenario, the mean annual air temperature shows an increasing trend, with the growth rate ranging from 0.0 ° c/decade to 0.2 ° c/decade (P<0.05), the growth in high latitude regions is faster, ranging from 0.1 ° c/decade to 0.2 ° C / decade. Based on the spatial and temporal characteristics of the mean annual air temperature in the northern hemisphere in the 21st century, under different scenarios, the mean annual air temperature shows a warming trend, and the high latitudes show a more sensitive and rapid growth.

2、Keywords

Theme：Temperature,Mean temperature,Other
Discipline：Atmosphere
Places：Global
Time：2006-2100

3、Data details

1.Scale：None

2.Projection：

3.Filesize：436.0MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：90.0 | - |
| west：-180.0 | - | east：180.0 |
| - | south：-90.0 | - |

5、Time frame:2005-12-31 16:00:00+00:00--2100-12-30 16:00:00+00:00

6、Reference method

References to data:

NIU Fujun. Spatial distribution of global mean annual temperature simulated by multi-model ensemble under different climate scenarios (2006-2100). A Big Earth Data Platform for Three Poles, doi:10.11888/Atmos.tpdc.2727422022

References to articles:

7、Supporting project information

CASEarth:Big Earth Data for Three Poles（grant No. XDA19070000）

8、Data resource provider

name: NIU Fujun
unit: Northeast Institute of Ecology and Environmental Resources,Chinese Academy of Sciences
email: niufujun@lzb.ac.cn