A Big Earth Data Platform for Three Poles

**Multi-year permafrost range post-processing ensemble products across Three Pole under different RCP scenarios for 2046-2065**

1、Description

The original data of the three pole permafrost range are generated by GCM model simulation, and the original data are from http://www.cryosphere.csdb.cn/portal/metadata/5abef388-3f3f-4802-b3de-f4d233cb333b 。 This data set contains the prediction of future scenarios under different representative concentration paths (RCPs) in the next 2046-2065 years, including rcp2.6 scenario, rcp4.5 scenario and rcp8.5 scenario. The original data content is the spatial range of permafrost and seasonal frozen soil in the Qinghai Tibet Plateau. The data format is netcdf4 format, with a spatial resolution of 0.5 ° and a temporal resolution of years. Through data format conversion, spatial interpolation and other post-processing operations, this research work generates the permafrost range data in netcdf4 format, with a spatial resolution of 0.1 °, a time resolution of years, and a time range of 2046-2065. Permafrost is represented by 1, and seasonal permafrost is represented by 0.

2、Keywords

Theme：Frozen ground distribution,Permafrost,Frozen Ground  
Discipline：Cryosphere  
Places：Three poles  
Time：2046-2065

3、Data details

1.Scale：None

2.Projection：WGS84

3.Filesize：13.2MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：41.25 | - |
| west：74.25 | - | east：105.25 |
| - | south：25.25 | - |

5、Time frame:2045-12-31 16:00:00+00:00--2065-12-30 16:00:00+00:00

6、Reference method

References to data:

YE Aizhong. Multi-year permafrost range post-processing ensemble products across Three Pole under different RCP scenarios for 2046-2065. A Big Earth Data Platform for Three Poles, doi:10.11888/Cryos.tpdc.2727192022

References to articles:

7、Supporting project information

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

8、Data resource provider

name: YE Aizhong  
unit: Beijing Normal University  
email: azye@bnu.edu.cn