A Big Earth Data Platform for Three Poles

**Carbon flux post-processing ensemble products for the Three Pole permafrost region under different RCP scenarios from 2046-2065**

1、Description

The original data of carbon flux in the three pole permafrost region 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 include parameters representing carbon flux such as NPP and GPP in the permafrost region of 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, the NPP and GPP data in permafrost region in netcdf4 format are generated. The spatial resolution is 0.1 °, the time resolution is years, the time range is 2046-2065, and the data unit is gc/m2yr.

2、Keywords

Theme：Carbon Flux,Permafrost,Frozen Ground  
Discipline：Cryosphere  
Places：Tibetan Plateau  
Time：2046-2065

3、Data details

1.Scale：None

2.Projection：WGS84

3.Filesize：26.9MB

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. Carbon flux post-processing ensemble products for the Three Pole permafrost region under different RCP scenarios from 2046-2065. A Big Earth Data Platform for Three Poles, doi:10.11888/Cryos.tpdc.2727172022

References to articles:

Yi, S., Wang, X., Qin, Y., Xiang, B., & Ding, Y. (2014). Responses of alpine grassland on Qinghai-Tibetan Plateau to climate warming and permafrost degradation: a modeling perspective. Environmental Research Letters, 9, 074014, doi:10.1088/1748-9326/9/7/074014.

7、Supporting project information

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

8、Data resource provider

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