A Big Earth Data Platform for Three Poles

**Permafrost Distribution of the circum-Arctic (2000-2015)**

1、Description

Firstly, the freeze thaw index is calculated by using the resampled crunep data, and then the permafrost area of circum-Arctic is predicted by the frozen number model after snow depth correction. The simulated pan Arctic permafrost area from 2000 to 2015 is 19.96 × 106 km2。 Places inconsistent with the distribution of Pan Arctic permafrost provided by the existing international snow and Ice Data Center are mainly located in island permafrost areas.

2、Keywords

Theme：Others,Frozen Ground  
Discipline：Cryosphere  
Places：circum-Arctic  
Time：2000-2015

3、Data details

1.Scale：None

2.Projection：Lambert\_Azimuthal\_Equal\_Area

3.Filesize：7.0MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：90.0 | - |
| west：180.0 | - | east：180.0 |
| - | south：25.0 | - |

5、Time frame:1999-12-31 16:00:00+00:00--2015-12-30 16:00:00+00:00

6、Reference method

References to data:

NIU Fujun. Permafrost Distribution of the circum-Arctic (2000-2015). A Big Earth Data Platform for Three Poles, doi:10.11888/Cryos.tpdc.2727442022

References to articles:

Shi, Y., Niu, F., & Lin, Z., et al. (2019). Freezing/thawing index variations over the circum-Arctic from 1901 to 2015 and the permafrost extent. Science of The Total Environment, 660(APR.10), 1294-1305.

7、Supporting project information

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

8、Data resource provider

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