A Big Earth Data Platform for Three Poles

**Permafrost degradation increases risk and large future costs of infrastructure on the Third Pole**

1、Description

This is the predicted future permafrost hazard level data sets and the original data for Figure 2, 3, and 4 in Communications Earth & Environment publication (2022, 3, 238.doi: 10.1038/s43247-022-00568-6).

2、Keywords

Theme：Permafrost degradation;,freezing-thawing disaster,Permafrost,Frozen Ground  
Discipline：Cryosphere  
Places：Third Pole, Tibetan Plateau, High Mountain Asia  
Time：2090, 2050

3、Data details

1.Scale：None

2.Projection：

3.Filesize：2.5MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：40.0 | - |
| west：73.0 | - | east：105.0 |
| - | south：26.0 | - |

5、Time frame:2007-12-31 16:00:00+00:00--2090-12-31 03:59:59+00:00

6、Reference method

References to data:

LI Xin, RAN Youhua, DONG Yuanhong , CHENG Guodong. Permafrost degradation increases risk and large future costs of infrastructure on the Third Pole. A Big Earth Data Platform for Three Poles, doi:10.11888/Cryos.tpdc.2727472022

References to articles:

Ran, Y.H., Cheng, G.D., Dong, Y.H., Hjort, J., Lovecraft, A. L., Kang, S. C., Tan, M. B., & Li X. Permafrost degradation increases risk and large future costs of infrastructure on the Third Pole. Communications Earth & Environment, 2022, 3, 238. https://doi.org/10.1038/s43247-022-00568-6

7、Supporting project information

8、Data resource provider

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