A Big Earth Data Platform for Three Poles

**A new map of permafrost distribution on the Tibetan Plateau (2017)**

1、Description

Qinghai Tibet Plateau is the largest permafrost area in the world. At present, some permafrost distribution maps have been compiled. However, due to the limited data sources, unclear standards, insufficient verification and lack of high-quality spatial data sets, there is great uncertainty in drawing Permafrost Distribution Maps on TP.
Based on the improved medium resolution imaging spectrometer (MODIS) surface temperature (LSTS) model of 1 km clear sky mod11a2 (Terra MODIS) and myd11a2 (Aqua MODIS) product (reprocessing version 5) in 2003-2012, the data set simulates the distribution of permafrost and generates the permafrost map of Qinghai Tibet Plateau. The map was verified by field observation, soil moisture content and bulk density.
Permafrost attributes mainly include: seasonally frozen ground, permafrost and unfrozen ground.
The data set provides more detailed data of Permafrost Distribution and basic data for the study of permafrost in the Qinghai Tibet Plateau.

2、Keywords

Theme：Seasonally frozen ground,Frozen Ground,Permafrost
Discipline：Cryosphere
Places：Tibetan Plateau
Time：2017

3、Data details

1.Scale：None

2.Projection：None

3.Filesize：15.1MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：50.0 | - |
| west：70.0 | - | east：110.0 |
| - | south：20.0 | - |

5、Time frame:None--None

6、Reference method

References to data:

ZHAO Lin. A new map of permafrost distribution on the Tibetan Plateau (2017). A Big Earth Data Platform for Three Poles, doi:10.11888/Geocry.tpdc.2704682019

References to articles:

Zou, D.F., Zhao, L., Sheng, Y., Chen, J., Wu, T.H., Wu, J.C., et al. (2016). A new map of permafrost distribution on the Tibetan Plateau. The Cryosphere, 11(6), 2527-2542.

7、Supporting project information

Pan-Third Pole Environment Study for a Green Silk Road-A CAS Strategic Priority A Program

8、Data resource provider

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