A Big Earth Data Platform for Three Poles

**Distribution data of freezing and thawing disasters in Qinghai Tibet project corridor (2019-2020)**

1、Description

Based on the data of Gaogao No. 1 and No. 2 in China from 2019 to 2020, the freeze-thaw disaster distribution data of Qinghai Tibet project corridor is produced by using the deep learning classification method and manual visual interpretation and correction. The geographical range of the data is 40km along the Xidatan Anduo section of Qinghai Tibet highway. The data include the distribution data of thermal melting lakes and ponds and the distribution data of thermal melting landslides. The data set can provide data basis for the research of freeze-thaw disaster and engineering disaster prevention and reduction in Qinghai Tibet engineering corridor.  
The spatial distribution of freezing and thawing disasters within 40km along the Xidatan Anduo section of Qinghai Tibet highway is self-made based on the domestic gaogao-2 image data. Firstly, the deep learning method is used to extract the mud flow terrace block from Gaogao No. 2 data; Then, ArcGIS is used for manual editing. During the production process, the operators are required to strictly abide by the operation specifications, and a special person is responsible for the quality review.

2、Keywords

Theme：表面冻融  
Discipline：Remote Sensing Technology  
Places：the Qinghai-Tibet Engineering Corridor  
Time：2019-2020

3、Data details

1.Scale：250000

2.Projection：GCS\_China\_Geodetic\_Coordinate\_System\_2000

3.Filesize：19.7MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：32.1 | - |
| west：91.5 | - | east：94.5 |
| - | south：35.9 | - |

5、Time frame:None--None

6、Reference method

References to data:

LUO Jing, NIU Fujun. Distribution data of freezing and thawing disasters in Qinghai Tibet project corridor (2019-2020). A Big Earth Data Platform for Three Poles, doi:10.11888/RemoteSen.tpdc.2718832021

References to articles:

7、Supporting project information

Second Tibetan Plateau Scientific Expedition Program

8、Data resource provider

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