A Big Earth Data Platform for Three Poles

**Spatial distribution data set of surface freezing and melting indexes of external dynamic environmental factors in Sanjiang Basin (average from 2003 to 2015)**

1、Description

Freezing (thawing) index refers to the sum of all temperatures less than (greater than) 0 ℃ in a year. Surface freezing (thawing) index is an important parameter to measure the time and capacity of surface freezing (thawing), which can reflect the characteristics of regional freezing and thawing environment. Based on the modis-lst data product, which comes from the national Qinghai Tibet Plateau science data center, the data in the Sanjiang River Basin are read by MATLAB language, and combined with the calculation of freezing (thawing index) formula, the spatial distribution data set of surface freezing and thawing index of dynamic environmental factors outside the Sanjiang River basin (average from 2003 to 2015) is obtained. This data set can better reflect the ability of surface freezing and thawing in the Sanjiang River Basin, so as to reflect the characteristics of regional freezing and thawing environment, It provides important external dynamic environmental factors for the development of freeze-thaw landslide.

2、Keywords

Theme：Surface Freeze-thaw Cycle/State,Freezing and thawing indices,soil freeze/thaw,Frozen Ground  
Discipline：Cryosphere  
Places：Sanjiang Rive Basin  
Time：Average 2003-2015

3、Data details

1.Scale：2000000

2.Projection：

3.Filesize：13.7MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：35.9 | - |
| west：89.67 | - | east：101.09 |
| - | south：25.38 | - |

5、Time frame:None--None

6、Reference method

References to data:

LIU Minghao . Spatial distribution data set of surface freezing and melting indexes of external dynamic environmental factors in Sanjiang Basin (average from 2003 to 2015). A Big Earth Data Platform for Three Poles, doi:10.11888/Cryos.tpdc.2721782022

References to articles:

7、Supporting project information

Catastrophic mechanisms and risk control of disastrous landslides in the Tibetan Plateau

8、Data resource provider

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