A Big Earth Data Platform for Three Poles

**Active Layer Thickness Data in Wudaoliang Region of Qinghai Tibet Plateau (2017-2020)**

1、Description

The active layer thickness in the Wudaoliang permafrost region of the Qinghai Tibet Plateau is retrieved based on the seasonal deformation obtained by SBAS-InSAR technology and ERA5-Land spatio-temporal multi-layer soil moisture data corrected by variational mode decomposition method. The time range of the is 2017-2020, and the spatial resolution is 1km. This data can be used to study the change of the active layer thickness in the permafrost region of the Qinghai Tibet Plateau and analyze its interaction with climate change, water cycle and energy cycle. It is significance to understand the permafrost degradation, environment evolution and the impact of permafrost degradation on ecology and climate.

2、Keywords

Theme：Active layer,Permafrost,Frozen Ground  
Discipline：Cryosphere  
Places：Wudaoliang Region, Qinghai–Tibet Plateau  
Time：2017-2020

3、Data details

1.Scale：None

2.Projection：

3.Filesize：100.0MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：35.61 | - |
| west：91.8 | - | east：94.04 |
| - | south：34.8 | - |

5、Time frame:2016-12-31 16:00:00+00:00--2020-01-31 03:59:59+00:00

6、Reference method

References to data:

LI Rongxing , HAO Tong , LU Ping . Active Layer Thickness Data in Wudaoliang Region of Qinghai Tibet Plateau (2017-2020). A Big Earth Data Platform for Three Poles, doi:10.11888/Cryos.tpdc.2728922022

References to articles:

7、Supporting project information

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

8、Data resource provider

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