A Big Earth Data Platform for Three Poles

**Dataset of typical glacier changes on Tibetan Plateau and Its surrounding areas (2005-2016)**

1、Description

This is the data set of typical glacier changes on the Tibetan Plateau and its surrounding areas, which includes the Qiangyong Glacier near Yamdrog Yumtso, the Palong Glacier in the Palongzangbu River Basin, the Xiaodongkemadi Glacier on Tanggula Mountain in the central Tibetan Plateau, the No. 2 Anglong Glacier in the Ngari Prefecture in the western Tibetan Plateau, the Aerqieteke Glacier in the Muztagata region, the No. 15 Glacier, the Qiaodumake Glacier, and the Qiyi Glacier in the Qilian Mountains on the northeastern Tibetan Plateau.
It can be used to study the response of typical glaciers in typical areas of the plateau to climate change. On the ice surface of a typical glacier in a typical area, a steam drill is used to set a length rod. The height of the rod is measured at a fixed time every year and combined with snow pit observations to observe the glacier mass balance. Marks are set on the ground near the terminus of the glacier, and the distance between the marker and the terminus of the glacier is measured to observe changes in the position of the terminus of the glacier. Among the glaciers, there are terminus change data for the Qiaodumake Glacier and No. 94 Palong Glacier.
In the data set processing method, a continuous sequence of time and space is formed after the quality control of the original data. It conforms to the accuracy of conventional glacier monitoring and research in China and the world, and it meets the requirements of the comparative study of glacier changes and related climate change records.

2、Keywords

Theme：Glaciers,Mass balance,Glacier(Ice Sheet)
Discipline：Cryosphere
Places：Tibetan Plateau , Ngari, Qilian Mountains, Muztagh Ata, Palongzangbu, Namco, Yamdrog Yumtso, Tanggula Mountain
Time：

3、Data details

1.Scale：None

2.Projection：

3.Filesize：10.36MB

4.Data format：EXCEL

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：38.0 | - |
| west：73.0 | - | east：104.0 |
| - | south：28.0 | - |

5、Time frame:2005-01-19 00:00:00+00:00--2017-01-18 00:00:00+00:00

6、Reference method

References to data:

Dataset of typical glacier changes on Tibetan Plateau and Its surrounding areas (2005-2016). A Big Earth Data Platform for Three Poles, doi:10.11888/GlaciologyGeocryology.tpe.96.db2018

References to articles:

Yao, T.D., Thompson, L., & Yang, W. (2012). Different glacier status with atmospheric circulations in tibetan plateau and surroundings. Nature Climate Change, 1580, 1-5.

7、Supporting project information

8、Data resource provider