A Big Earth Data Platform for Three Poles

**Reconstruction data set of mass balance of seven glaciers in Qinghai Tibet Plateau (1975-2013)**

1、Description

The data set includes the mass balances of Hailuogou Glacier, Parlung No.94 Glacier, Qiyi glacier, Xiaodongkemadi Glacier, Muztagh No.15 Glacier, Meikuang Glacier and NM551 Glacier in the Qinghai Tibet Plateau from 1975 to 2013. Based on several mass balance observations collected from World Glacier Inventory (https://nsidc.org/data/g10002/versions/1) and The Third Pole Environment Database (http://en.tpedatabase.cn/, doi:10.11888/GlaciologyGeocryology.tpe.96.db) by Tandong Yao and the meteorological data obtained from Global Land Assimilation System (GLDAS) (meteorological variables, including precipitation, air temperature, net radiation, evaporation on snow surface, and snow depth, in the central grid of each glacier are extracted from GLDAS data set shown in meteo.xlsx), the mass balances of the above seven glaciers from 1975 to 2013 are reconstructed by using the glacier material balance calculation formula. This reconstruction data is based on the published glacier material balance data to calibrate the parameters in the glacier material balance formula, and to reconstruct the long-time series material balance by using the glacier material balance formula, in which the parameter calibration results and the reconstruction results of the long-time series data are compared with the relevant research results, demonstrating the rationality of the data results Please refer to the following papers. The data can be used to study the change of water resources in the glacial region, expand the data set of Glacier Mass Balance in the Qinghai Tibet Plateau, and provide reference for the future research of Glacier Mass Balance reconstruction.

2、Keywords

Theme：Mass balance,Glacier(Ice Sheet)  
Discipline：Cryosphere  
Places：Tibetan Plateau  
Time：1975-2013

3、Data details

1.Scale：None

2.Projection：

3.Filesize：0.0117MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：39.23 | - |
| west：75.06 | - | east：101.93 |
| - | south：29.58 | - |

5、Time frame:1975-01-01 00:00:00+00:00--2013-12-31 00:00:00+00:00

6、Reference method

References to data:

Reconstruction data set of mass balance of seven glaciers in Qinghai Tibet Plateau (1975-2013). A Big Earth Data Platform for Three Poles, doi:10.11888/Glacio.tpdc.2703822020

References to articles:

7、Supporting project information

National Natural Science of China

8、Data resource provider

name: LIU Xiaowan  
unit:   
email: xiaowan@mail.bnu.edu.cn