A Big Earth Data Platform for Three Poles

**Inventory of glacial lakes in the Poqui Basin, Central Himalaya (1964-2017)**

1、Description

The data files include the extent of the Poqui watershed and multiple periods of glacial lake cataloguing. The glacial lake extent in 1964, was obtained using manual outlining methods based on geo-corrected KH-4 data; the glacial lake extent during 1976-2017, based on Landsat MSS/TM/ETM+/OLI imagery, used a semi-automatic water body classification method to distinguish between water body and non-water body information, and then extracted lake boundaries, and visually checked and manually edited by comparison with the original Landsat images.The relationship between glacial meltwater and glacial lake recharge was determined from RGI 6.0 glacier catalogues and Google Earth.

2、Keywords

Theme：Cryosphere remote sensing products,Surface Freeze-thaw Cycle/state Remote Sensing
Discipline：Cryosphere
Places：Himalayas, glacial lakes
Time：fifty years

3、Data details

1.Scale：None

2.Projection：UTM

3.Filesize：0.6MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：28.5 | - |
| west：85.6 | - | east：86.3 |
| - | south：27.8 | - |

5、Time frame:1963-12-31 16:00:00+00:00--2017-12-30 16:00:00+00:00

6、Reference method

References to data:

ZHANG Guoqing. Inventory of glacial lakes in the Poqui Basin, Central Himalaya (1964-2017). A Big Earth Data Platform for Three Poles, doi:10.11888/Cryos.tpdc.2729392022

References to articles:

Zhang, G., Bolch, T., Allen, S., Linsbauer, A., Chen, W., & Wang, W. (2019). Glacial lake evolution and glacier-lake interactions in the Poiqu River basin, central Himalaya, 1964−2017. Journal of Glaciology, 65(251), 347-365, doi: 10.1017/jog.2019.13

7、Supporting project information

Natural Science Foundation of China

8、Data resource provider

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