A Big Earth Data Platform for Three Poles

**Glacial lakes and GLOF hazard levels in the Bhutan Himalaya (1960s-2020)**

1、Description

1. Glacial lake data sets (1960s−2020)  
This data set contains glacial lake data for the 1960s, 2016, 2017, 2018, 2019, and 2020, mapped from Korona KH-4, Sentinel-2, and Sentinel-1 imagery.  
2. Potential Outburst Flood Hazard level of Bhutanese glacial lakes  
This data contains the Potential Outburst Flood Hazard level of Bhutanese glacial lakes with an area greater than 0.05 km2 (n=278). The value for each hazard assessment criteria is also provided in the data attributes.

2、Keywords

Theme：Area,Surface Water,Cryosphere remote sensing products,Surface Freeze-thaw Cycle/state Remote Sensing,Hydrology  
Discipline：Terrestrial Surface,Cryosphere  
Places：The Bhutan Himalaya  
Time：1960s，2016-2020

3、Data details

1.Scale：None

2.Projection：

3.Filesize：9.26MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：28.56 | - |
| west：88.856 | - | east：92.446 |
| - | south：27.652 | - |

5、Time frame:None--None

6、Reference method

References to data:

ZHANG Guoqing, RINZIN Sonam. Glacial lakes and GLOF hazard levels in the Bhutan Himalaya (1960s-2020). A Big Earth Data Platform for Three Poles, doi:10.3389/feart.2021.7751952021

References to articles:

Sonam, R., Zhang, G., & Sonam, W. (2021). Glacial Lake Area Change and Potential Outburst Flood Hazard Assessment in the Bhutan Himalaya. Frontiers in Earth Science. 9, 1136. https://doi.org/10.3389/feart.2021.775195

7、Supporting project information

8、Data resource provider

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