A Big Earth Data Platform for Three Poles

**Water index in the Qilian Mountain Area (2021)**

1、Description

This dataset contains the ground surface water (including liquid water, glacier and perennial snow) distribution in Qilian Mountain Area in 2021. The dataset was produced based on classical Normalized Difference Water Index (NDWI) extraction criterion and manual editing. Landsat images collected in 2021 were used as basic data for water index extraction. Sentinel-2 images and Google images were employed as reference data for adjusting the extraction threshold. The dataset was stored in SHP format and attached with the attributions of coordinates and water area. Consisting of 1 season, the dataset has a temporal resolution of 1 year and a spatial resolution of 30 meters. The accuracy is about 1 pixel (±30 meter). The dataset directly reflects the distribution of water bodies within the Qilian Mountain in 2021, and can be used for quantitative estimation of water resource.

2、Keywords

Theme：Surface Water,Hydrology  
Discipline：Terrestrial Surface  
Places：Qilian Mountain Area  
Time：2021

3、Data details

1.Scale：None

2.Projection：WGS84

3.Filesize：70.8MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：45.0 | - |
| west：89.0 | - | east：107.0 |
| - | south：34.0 | - |

5、Time frame:None--None

6、Reference method

References to data:

Li Jia, LI Jia. Water index in the Qilian Mountain Area (2021). A Big Earth Data Platform for Three Poles, doi:10.11888/Terre.tpdc.2724622022

References to articles:

李佳，顾云杨，李新，刘绍民. 祁连山地区2021年水体指数. (2022). 国家青藏高原科学数据中心(http://data.tpdc.ac.cn/zh-hans/) [Li Jia, Gu Yunyang, Li Xin, Liu Shaomin. Water index in the Qilian mountains in 2021. (2022). National Tibetan Plateau Data Center (http://data.tpdc.ac.cn/zh-hans/)].

7、Supporting project information

Pan-Third Pole Environment Study for a Green Silk Road-A CAS Strategic Priority A Program

8、Data resource provider

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