A Big Earth Data Platform for Three Poles

**Water index in the Qilian Mountain Area in 2020**

1、Description

This dataset contains the ground surface water (including liquid water, glacier and perennial snow) distribution in Qilian Mountain Area in 2020. The dataset was produced based on classical Normalized Difference Water Index (NDWI) extraction criterion and manual editing. Landsat images collected in 2020 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 2020, and can be used for quantitative estimation of water resource.

2、Keywords

Theme：Marine Remote Sensing,Water index  
Discipline：Ocean  
Places：Qilian Mountains  
Time：2020

3、Data details

1.Scale：None

2.Projection：WGS84

3.Filesize：46.0MB

4.Data format：None

4、Space scope

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

5、Time frame:2020-06-30 16:00:00+00:00--2020-09-29 16:00:00+00:00

6、Reference method

References to data:

LI Xin, LIU Shaomin, Li Jia, LI Jia, LI Jianjiang. Water index in the Qilian Mountain Area in 2020. A Big Earth Data Platform for Three Poles, doi:10.11888/Hydro.tpdc.2715362021

References to articles:

7、Supporting project information

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

8、Data resource provider

name: Li Jia  
unit: Central South University  
email: lijia20050710@csu.edu.cn  
  
name: Li Jia  
unit:   
email: lijia20050710@csu.edu.cn  
  
name: LI Jianjiang  
unit: Central South University  
email: ljj1450941816@gmail.com  
  
name: LI Xin  
unit:   
email: xinli@itpcas.ac.cn  
  
name: LIU Shaomin  
unit: Beijing Normal University  
email: smliu@bnu.edu.cn  
  
name: LI Jia  
unit:   
email: lijia20050710@csu.edu.cn  
  
name: LI Jia  
unit: Central South University  
email: lijia20050710@csu.edu.cn