A Big Earth Data Platform for Three Poles

**Landsat normalized difference water index (NDWI) products over the Tibetan Plateau (1980s-2019)**

1、Description

The dataset is the normalized difference water index (NDWI) products from 1970s to 2020 over the Tibetan Plateau。The dataset is producted based on Landsat surface reflectance dataset. It is calculated by the NDWI equation which use the difference ratio between the green band and NIR band to enhance the water information, and then to weaken the information of vegetation, soil, buildings and other targets.And the corresponding production of quality identification documents (QA) is also generated to identify the cloud, ice and snow.NDWI is usually used to extract surface water information effectively, therefore it is widely used in water resoureces, hydrology, forestry and agriculture.

2、Keywords

Theme：Desert  
Discipline：Terrestrial Surface,Remote Sensing Technology  
Places：Qinghai-Tibet Plateau  
Time：1980s-2019

3、Data details

1.Scale：None

2.Projection：UTM

3.Filesize：5892997.12MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：40.4 | - |
| west：73.4 | - | east：106.7 |
| - | south：24.6 | - |

5、Time frame:None--None

6、Reference method

References to data:

PENG Yan. Landsat normalized difference water index (NDWI) products over the Tibetan Plateau (1980s-2019). A Big Earth Data Platform for Three Poles, doi:10.11888/Ecolo.tpdc.2717172021

References to articles:

MCFEETERS, S.K. (1996). The Use of Normalized Difference Water Index (NDWI) in the Delineation of Open Water Features [. International Journal of Remote Sensing, 17(7), 1425-1432.

7、Supporting project information

Second Tibetan Plateau Scientific Expedition Program

8、Data resource provider

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