A Big Earth Data Platform for Three Poles

**DOM data of lakes on the Qinghai Tibet Plateau (2017)**

1、Description

The data source of this data set is the European Space Agency (ESA) multispectral satellite Sentinel-2. It includes the annual mean data of CDOM and DOC of Qinghai Tibet Plateau lakes in 2017. Method of use: Based on the CDOM data of the measured sample points, the image reflectance information is extracted, the best prediction variable is selected through Pearson correlation analysis, and a multiple stepwise regression CDOM prediction model is constructed to obtain the CDOM results of the Qinghai Tibet Plateau water body. Because CDOM has a good correlation with DOC, DOC prediction results are calculated by CDOM. Adjustment R of the CDOM model of the final Qinghai Tibet Plateau ² Up to 0.81.

2、Keywords

Theme：Remote Sensing Product,water quality parameter,Remote Sensing Technology,Satelite images,Water Environment,Terrestrial Surface Remote Sensing
Discipline：Terrestrial Surface,Remote Sensing Technology
Places：Qinghai Tibet Plateau
Time：2017

3、Data details

1.Scale：None

2.Projection：

3.Filesize：3145.0MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：39.78 | - |
| west：76.88 | - | east：103.23 |
| - | south：24.8 | - |

5、Time frame:2017-04-30 16:00:00+00:00--2017-09-30 16:00:00+00:00

6、Reference method

References to data:

SONG Kaishan. DOM data of lakes on the Qinghai Tibet Plateau (2017). A Big Earth Data Platform for Three Poles, doi:10.11888/Terre.tpdc.2729272022

References to articles:

Liu, G., Li, S., & Song, K., et al. (2021). Remote sensing of CDOM and DOC in alpine lakes across the Qinghai-Tibet Plateau using Sentinel-2A imagery data. Journal of Environmental Management, 286, 112231.

7、Supporting project information

CASEarth:Big Earth Data for Three Poles（grant No. XDA19070000）

8、Data resource provider

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