A Big Earth Data Platform for Three Poles

**Long-term sequence dataset of lake area on the Tibetan Plateau (1970-2013)**

1、Description

The long-term sequence data set of lake areas on the Tibetan Plateau contains area data of 364 lakes with areas greater than 10 square kilometers from 1970s to 2013. Based on Landsat images, Landsat data in October are mainly used, and one data is taken every three years to reduce seasonal variation and make the available data reach the maximum.
The data set is extracted by the NDWI Water Index, and each lake undergoes manual visual inspection and edition.
The data set can be used to study lake change, lake water balance and climate change on the Tibetan Plateau.
Data type: Vector data.
Projection: WGS84.

2、Keywords

Theme：Surface Water,Lakes
Discipline：Terrestrial Surface
Places：Tibetan Plateau
Time：1970-2013

3、Data details

1.Scale：None

2.Projection：WGS84

3.Filesize：39.5MB

4.Data format：shp

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：38.0 | - |
| west：73.0 | - | east：104.0 |
| - | south：28.0 | - |

5、Time frame:1970-03-05 00:00:00+00:00--2014-03-04 00:00:00+00:00

6、Reference method

References to data:

ZHANG Guoqing. Long-term sequence dataset of lake area on the Tibetan Plateau (1970-2013). A Big Earth Data Platform for Three Poles, doi:10.11888/Lake.tpe.249466.file2018

References to articles:

Zhang, G.Q., Yao, T.D., Piao, S.L., Bolch, T., Xie, H.J., Chen, D.L., Gao, Y.H., O'Reilly, C.M., Shum, C.K., Yang, K., Yi, S., Lei, Y.B., Wang, W.C., He, Y., Shang, K., Yang, X.K., &Zhang, H.B. (2017). Extensive and drastically different alpine lake changes on Asia's high plateaus during the past four decades. Geophysical Research Letters, 44(1), 252-260.

7、Supporting project information

8、Data resource provider

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