A Big Earth Data Platform for Three Poles

**The lake ice phenology dataset of the Northern Hemisphere (1978-2018)**

1、Description

Lake ice phenology is a seasonal cyclical feature that describes lake ice coverage. The change of lake ice phenology is an important part of carbon, water and energy process study, and one of the sensitive factors of climate change. This dataset is a lake ice phenology based on passive microwave inversion, including lake ice phenology of 200 lakes in the Tibetan Plateau and high latitudes area of the Northern Hemisphere from 2002 to 2018 (including freeze-up start date, freeze-up end date, break-up start date, and break-up end date of the lakes), data of some lakes can date back to 1978. This data is basically consistent with the MODIS monitoring results from the same time with an interpretation error of 2-4 days. Users can use this data to conduct climate change study in the Northern Hemisphere.

2、Keywords

Theme：Lake ice,Lake ice phenology,Lake ice
Discipline：Cryosphere
Places：Northern Hemisphere
Time：1978-2018

3、Data details

1.Scale：None

2.Projection：None

3.Filesize：0.26MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：90.0 | - |
| west：0.0 | - | east：180.0 |
| - | south：26.0 | - |

5、Time frame:1978-11-09 08:00:00+00:00--2018-05-08 08:00:00+00:00

6、Reference method

References to data:

QIU Yubao. The lake ice phenology dataset of the Northern Hemisphere (1978-2018). A Big Earth Data Platform for Three Poles, doi:10.11888/Meteoro.tpdc.2709812019

References to articles:

7、Supporting project information

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

8、Data resource provider

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