A Big Earth Data Platform for Three Poles

**A monthly surface water dataset of China derived from optical and radar remote sensing (2018-2020)**

1、Description

Satellite remote sensing provides an efficient pathway to map inland surface water extent across different spatial and temporal scales. However, how to monitor the surface water distribution and its spatiotemporal variability via combining optical and radar remote sensing datasets still faces substantial challenges. A monthyly surface water data set of China derived from optical and radar remote sensing (2018-2020) is provided. The dataset was generated by Seamless Surface Water Mapping Framework (SSWMF) proposed by Yang et al. (2022). The validity of this dataset was further proved over China with an overall accuracy of 92.39% and Kappa coefficient of 0.83. With seamless surface water monitoring, the changes of surface water area can be potentially used to characterize the drought/flood process and evaluate the natural hazard impact.

2、Keywords

Theme：Surface Water,Galactic System
Discipline：Terrestrial Surface,Solar-Terrestrial Physics and Astronomy
Places：surface water, surface watersurface water,
Time：2018-2020

3、Data details

1.Scale：None

2.Projection：WGS84

3.Filesize：9000.0MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：53.55 | - |
| west：73.4 | - | east：135.08 |
| - | south：16.99 | - |

5、Time frame:2017-12-31 16:00:00+00:00--2020-12-30 16:00:00+00:00

6、Reference method

References to data:

YANG Yongmin. A monthly surface water dataset of China derived from optical and radar remote sensing (2018-2020). A Big Earth Data Platform for Three Poles, doi:10.11888/Hydro.tpdc.2717612021

References to articles:

7、Supporting project information

8、Data resource provider

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