A Big Earth Data Platform for Three Poles

**Remote sensing products of snow depth in Sanjiangyuan (1980-2020)**

1、Description

This dataset was derived from long-term daily snow depth in China based on the boundary of the three-river-source area. The snow depth ranges from 0 to 100 cm, and the temporal coverage is from January 1 1980 to December 31 2020. The spatial and temporal resolutions are 0.25o and daily, respectively. Snow depth was produced from satellite passive microwave remote sensing data which came from three different sensors that are SMMR, SSM/I and SSMI/S. Considering the systematic bias among these sensors, the inter-sensor calibrations were performed to obtain temporal consistent passive microwave remote sensing data. And the long-term daily snow depth in China were produced from this consistent data based on the spectral gradient method.For header file information, refer to the data set header.txt.

2、Keywords

Theme：Microwave remote sensing,Snow depth,Snow,Surface Freeze-thaw Cycle/state Remote Sensing
Discipline：Cryosphere
Places：Three-River-Source National Park, Three Rivers Source, Tibetan Plateau
Time：2020, 1980

3、Data details

1.Scale：None

2.Projection：

3.Filesize：111.0MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：37.38 | - |
| west：89.15 | - | east：102.58 |
| - | south：30.79 | - |

5、Time frame:1980-01-18 08:00:00+00:00--2020-12-31 08:00:00+00:00

6、Reference method

References to data:

DAI Liyun. Remote sensing products of snow depth in Sanjiangyuan (1980-2020). A Big Earth Data Platform for Three Poles, doi:10.11888/Snow.tpdc.2712312019

References to articles:

7、Supporting project information

the National Natural Science Foundation of China
In situ investigation on snow characteristics in the typical snow regions in China

8、Data resource provider

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