A Big Earth Data Platform for Three Poles

**Radiometer and scatterometer data for Antarctica and the Arctic ice sheet (1978-2015)**

1、Description

The microwave radiometer data set comprises brightness temperature data from SMMR (1978-1987), SSM/I (1987-2009) and SSMIS (2009-2015), with temporal coverage from 1978 to 2015 and a spatial resolution of 25 km. Each Antarctic data file consists of 316\*332 grids, and each Arctic freeze-thaw data file consists of 304\*448 grids. The microwave scatterometer data set comprises backscattering data from QScat (2000-2009) and ASCAT (2009-2015), with a temporal coverage from 2000 to 2015 and a spatial resolution of 4.45 km. Each Antarctic data file consists of 1940\*1940 grids, and each Arctic data file consists of 810\*680 grids. The temporal resolution of the data set is one day, and the data cover both Antarctica and Arctic ice sheets.

2、Keywords

Theme：Microwave remote sensing,Cryosphere remote sensing products,Surface Freeze-thaw Cycle/state Remote Sensing,Glacier(Ice Sheet)  
Discipline：Cryosphere  
Places：Antarctic, Arctic  
Time：1978-2015

3、Data details

1.Scale：250000

2.Projection：

3.Filesize：37000.0MB

4.Data format：bin

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：-60.0 | - |
| west：None | - | east：360.0 |
| - | south：-90.0 | - |

5、Time frame:1978-01-08 16:00:00+00:00--2016-01-07 16:00:00+00:00

6、Reference method

References to data:

Li Xinwu. Radiometer and scatterometer data for Antarctica and the Arctic ice sheet (1978-2015). A Big Earth Data Platform for Three Poles, doi:10.11888/GlaciolGeocryol.tpe.00000033.file2018

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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