A Big Earth Data Platform for Three Poles

**Antarctic and Actic sea ice data set (1979-2019)**

1、Description

The original data of the Arctic and Antarctic sea ice data set is generated by the National Snow and Ice Data Center (NSIDC) through remote sensing data. The data format is GeoTIFF format and image format. The spatial resolution of the data is 25km and the time resolution is day. The data content is the sea ice range and sea ice density of the north and south poles. In this study, NetCDF format products are generated by post-processing the extent and density of sea ice in the north and south poles. The product data includes the sea ice range and sea ice density data of the north and south poles from 1979 to 2019. The time resolution is day by day, the coverage range is the South Pole and the north pole, and the horizontal spatial resolution is 12.5km. The data value of 1 in the sea ice range matrix indicates that the grid is sea ice, and the sea ice density is expressed by 0-1000. The grid value divided by 10 is the sea ice density value of the grid.

2、Keywords

Theme：Sea Ice,Sea ice concentration,Sea ice extension
Discipline：Cryosphere
Places：Antarctica, Antarctican and Greenland
Time：1979-2019

3、Data details

1.Scale：10000

2.Projection：WGS84

3.Filesize：94000.0MB

4.Data format：None

4、Space scope

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

5、Time frame:1979-01-21 16:00:00+00:00--2019-11-18 16:00:00+00:00

6、Reference method

References to data:

YE Aizhong. Antarctic and Actic sea ice data set (1979-2019). A Big Earth Data Platform for Three Poles, doi:10.11888/Glacio.tpdc.2702942019

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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