A Big Earth Data Platform for Three Poles

**Arctic high latitude and polar sea ice density (assessment product) (2002-2018)**

1、Description

Sea ice is the ice formed by the freezing of sea water on the sea surface, and the re freezing of precipitation on the sea ice surface also becomes a part of sea ice. Sea ice changes not only affect the stratification, stability and convection of the ocean, but also affect the large-scale temperature and salt environment. In addition, due to the high albedo and insulation of sea ice, it can change the radiation state of the polar surface and affect the energy and material exchange between air and sea. The change of sea ice not only affects the local marine ecological environment and the local atmospheric environment, but also affects the weather and climate of other regions in the way of remote correlation through complex feedback process. Through the evaluation, this data set presents four parameters related to polar sea ice: sea ice density, range, thickness and albedo. To provide a basis for the study of polar and global climate change.

2、Keywords

Theme：Sea ice thickness,Sea Ice,Sea ice concentration,Sea ice albedo  
Discipline：Cryosphere  
Places：Arctic  
Time：2002-2018

3、Data details

1.Scale：None

2.Projection：

3.Filesize：2000.0MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：85.0 | - |
| west：180.0 | - | east：180.0 |
| - | south：63.0 | - |

5、Time frame:2002-10-18 00:00:00+00:00--2018-11-18 11:59:59+00:00

6、Reference method

References to data:

QIU Yubao. Arctic high latitude and polar sea ice density (assessment product) (2002-2018). A Big Earth Data Platform for Three Poles, doi:10.11888/Glacio.tpdc.2702592019

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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