A Big Earth Data Platform for Three Poles

**Autumn sea ice in Barents Kara Sea, Arctic (1289-1993) AD**

1、Description

1) This data is the reconstructed autumn sea ice from 1289 to 1993 in Barents Kara Sea, Arctic ; 2) Based on multiple statistical methods modeling, this sea ice time series is reconstructed by the ice core and tree ring proxy record; 3) This long term sea ice series is annual resolution and have a high reliability; 4) This data can help us know the historical changes of Arctic sea ice and its response and impact on climate change. The Barents Sea Kara Sea area is the key sea area where the extreme cold air flows southward in winter and spring in China. However, the lack of observation data limits our understanding of its mechanism. It is very important to reconstruct the characteristics of long-term Arctic sea ice change to study the Arctic sea ice change in the global context and its impact on China's historical climate.

2、Keywords

Theme：Sea Ice  
Discipline：Atmosphere,Cryosphere  
Places：Barents-Kara Sea  
Time：millennium

3、Data details

1.Scale：None

2.Projection：

3.Filesize：0.02MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：90.0 | - |
| west：None | - | east：110.0 |
| - | south：60.0 | - |

5、Time frame:None--None

6、Reference method

References to data:

XIAO Cunde. Autumn sea ice in Barents Kara Sea, Arctic (1289-1993) AD. A Big Earth Data Platform for Three Poles, doi:10.11888/Meteoro.tpdc.2709262019

References to articles:

Zhang, Q. , Xiao, C. , Ding, M. , & Dou, T. . (2018). Reconstruction of autumn sea ice extent changes since ad1289 in the barents-kara sea, arctic. Science China Earth Sciences, 61(9),1279-1291

7、Supporting project information

CASEarth:Big Earth Data for Three Poles（grant No. XDA19070000）

8、Data resource provider

name: XIAO Cunde  
unit: Beijing Normal University  
email: cdxiao@lzb.ac.cn