A Big Earth Data Platform for Three Poles

**Surface meltwater dataset at 30-m resolutionform Alexander Island in the Antarctic Peninsula （2000-2019）**

1、Description

In recent years, the Antarctic Ice Sheet experiences substantial surface melt, and a large amount of meltwater formed on the ice surface. Observing the spatial distribution and temporal evolution of surface meltwater is a crucial task for understanding mass balance across the Antarctic Ice Sheet. This dataset provides a 30 m surface meltwater coverage, extracted from Landsat images, in the typical ablation zone of the ice sheet (Alexandria Island, Antarctic Peninsula) from 2000 to 2019. The projection of this dataset is South Polar Stereographic. The formats of the dataset are vector (.shp) and raster (.tif).

2、Keywords

Theme：Glacier(Ice Sheet)  
Discipline：Cryosphere  
Places：Antarctica, Antarctic Peninsula  
Time：2000-2019

3、Data details

1.Scale：None

2.Projection：South\_Pole\_Stereographic

3.Filesize：1428.0MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：-71.4 | - |
| west：-72.7 | - | east：-68.8 |
| - | south：-72.5 | - |

5、Time frame:2000-01-09 00:00:00+00:00--2020-01-08 00:00:00+00:00

6、Reference method

References to data:

YANG Kang. Surface meltwater dataset at 30-m resolutionform Alexander Island in the Antarctic Peninsula （2000-2019）. A Big Earth Data Platform for Three Poles, doi:10.11888/Glacio.tpdc.2708072020

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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