A Big Earth Data Platform for Three Poles

**High-resolution (10-30m) surface melt water dataset of the marginal polar region, 2000-2020**

1、Description

In recent years, the melting of the Antarctic ice sheet has accelerated, and a large amount of surface melt water has appeared on the surface of the Antarctic ice sheet. Understandings of the spatial distribution and dynamics of surface melt water on the Antarctic ice sheet is of great significance for the study of the mass balance of the Antarctic ice sheet. This dataset is 2000-2020 surface melt water dataset of Antarctica Ice Sheet typical melting area (Prydz bay) based on 10-30m Landsat-7, 8 and Sentinel-2 images. The projections are polar azimuthal projections in vector format (ESRI Shapefile) and raster format (GeoTIFF) and the time is Southern Hemisphere summer (December-to-February).

2、Keywords

Theme：Glacier(Ice Sheet)  
Discipline：Cryosphere  
Places：Marginal Polar Region  
Time：2000-2020

3、Data details

1.Scale：None

2.Projection：South\_Pole\_Stereographic

3.Filesize：674.0MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：-70.77 | - |
| west：66.81 | - | east：71.5 |
| - | south：-73.31 | - |

5、Time frame:2000-11-30 16:00:00+00:00--2020-11-30 16:00:00+00:00

6、Reference method

References to data:

YANG Kang. High-resolution (10-30m) surface melt water dataset of the marginal polar region, 2000-2020. A Big Earth Data Platform for Three Poles, doi:10.11888/Glacio.tpdc.2715792021

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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