A Big Earth Data Platform for Three Poles

**Millennial temperature datasets over the three poles produced by paleoclimate data assimilation**

1、Description

(1) Data content: Millennial temperature (near-surface air temperature anomaly based on the millinnial mean）datasets over the three poles, e.g., Arctic, Antarctic, and Qinghai-Tibet Plateau; (2) Data sources and processing methods: These datasets were produced by the authors themselves using the paleoclimate data assimilationand approach based on climatic proxies over the three poles; (3) Description of data quality: There are high spatio-temporal consistency between these datasets and several instrumental gridded temperature datasets (correlation coefficient above 0.6, p <0.001; Nash efficiency coefficient above 0.5). In addition, the correlations between these datasets and several proxy-based temperature series are between 0.4 and 0.8 (p <0.001). (4) Data application achievements and prospects: These datasets can be used to investigate the temporal and spatial variations in temperature over the three poles during the past millennium.

2、Keywords

Theme：Paleoclimate Reconstruction  
Discipline：Palaeoenvironment  
Places：The three poles (Arctic, Antarctic, Qinghai-Tibet Plateau)  
Time：The past millennium (1000-2000 CE)

3、Data details

1.Scale：None

2.Projection：WGS84

3.Filesize：42.39MB

4.Data format：None

4、Space scope

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

5、Time frame:None--None

6、Reference method

References to data:

FANG Miao. Millennial temperature datasets over the three poles produced by paleoclimate data assimilation. A Big Earth Data Platform for Three Poles, doi:10.11888/Paleoenv.tpdc.2727732022

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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