A Big Earth Data Platform for Three Poles

**Paleomagnetic data of altash section in Southwest Tarim, Xinjiang, China (2021)**

1、Description

The data includes natural remanence, thermal demagnetization and magnetic susceptibility anisotropy of paleomagnetic samples in altash section in Southwest Tarim. The data is mainly used for magnetic stratigraphy in altash section. Combined with the results of isotopic dating, the chronological framework of altash section is established according to the records of geomagnetic polarity reversal in rocks or sediments and the comparison with standard polarity columns. From 2020 to 2021, members of the research group mainly used drilling rigs to drill paleomagnetic directional samples on the profile at an interval of 1 m (back to the laboratory to be processed into a 2 cm cylinder), and collected directional hand samples in individual areas (back to the laboratory to be processed into a 2 cm \* 2 cm \* 2 cm cube). The paleomagnetic experimental testing instrument includes two parts: 1 Rock superconducting magnetometer is used to measure the remanence and rock magnetic parameters of paleomagnetic samples; 2. Mfk kappa bridge is used to measure the magnetic susceptibility and magnetic susceptibility anisotropy of geological samples. A total of 298 samples were selected at an interval of 10 m, of which 221 obtained stable remanence, with a success rate of 74%. According to the preliminary paleomagnetic results, the chronological framework of altash section in Southwest Tarim is established; After all the paleomagnetic results are tested, combined with the accurate isotopic age, the high-precision magnetic stratigraphic sequence in Southwest Tarim will be established.

2、Keywords

Theme：Formation,Geomagnetism,magnetic declination,Quaternary Geology and Geomorphology  
Discipline：Palaeoenvironment,Solid earth  
Places：Altash section, Xinjiang  
Time：Late Eocene

3、Data details

1.Scale：None

2.Projection：

3.Filesize：0.78MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：76.55 | - |
| west：37.97 | - | east：37.97 |
| - | south：76.55 | - |

5、Time frame:None--None

6、Reference method

References to data:

ZHENG Hongbo . Paleomagnetic data of altash section in Southwest Tarim, Xinjiang, China (2021). A Big Earth Data Platform for Three Poles, doi:10.11888/Paleoenv.tpdc.2722562022

References to articles:

7、Supporting project information

8、Data resource provider

name: ZHENG Hongbo   
unit: Yunnan University  
email: zhenghb@ynu.edu.cn