A Big Earth Data Platform for Three Poles

**Zircon data set of rencuo ophiolite in central Qinghai Xizang Plateau**

1、Description

This data set is the zircon cathodoluminescence image data (CL image) and chronology data set of rencuo ophiolite in the central Qinghai Xizang Plateau. The lithology of the sample includes gabbro, diabase and plagioclase granite. The formation age is about 160-150ma, and the sampling and shooting time is 2019-2020.
The separation of zircon was completed in Hebei Regional Geological Survey Institute. Conventional heavy liquid and magnetic separation methods were used for separation, and finally pure zircon was selected under binocular microscope. The sample target was prepared in the Institute of geology, Chinese Academy of Geological Sciences. The diameter of the sample target was 25 mm.
The cathode fluorescence image analysis of zircon was completed on the cathode fluorescence analysis system of Institute of geology, Chinese Academy of Geological Sciences (Hitach s-3000n field emission environmental scanning electron microscope and chroma cathode fluorescence spectrometer of Gatan company). Zircon U-Pb dating data were obtained by shrimp II ion probe of Beijing ion probe center, and the data accuracy was ~ 0.5-1ma.
These data provide a key limit for understanding the formation and evolution of the Tethys ocean in the Qinghai Tibet Plateau, and have comparative significance for the study of oceanic zircons. The data association results have been published in the Geological Society of America Bulletin. The data results have been peer reviewed and the data quality is true and reliable.

2、Keywords

Theme：Ophiolite,Meso-Tethys Ocean,Rocks/Minerals,Bangong-Nujiang suture zone,Tectonics,Suture belt,Gabbro
Discipline：Solid earth
Places：Bangong-Nujiang suture zone, Tibetan Plateau
Time：Jurassic

3、Data details

1.Scale：50000

2.Projection：None

3.Filesize：70.0MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：31.5 | - |
| west：89.5 | - | east：90.5 |
| - | south：30.0 | - |

5、Time frame:None--None

6、Reference method

References to data:

TANG Yue. Zircon data set of rencuo ophiolite in central Qinghai Xizang Plateau. A Big Earth Data Platform for Three Poles, doi:10.1130/b35500.12021

References to articles:

Tang, Y., Zhai, Q.G., Chung, S.L, Hu, P.Y., Wang, J., Xiao, X.C., Song, B., Wang, H.T., & Lee, H.Y. (2020). First mid-ocean ridge-type ophiolite from the Meso-Tethys suture zone in the north-central Tibetan plateau. Geological Society of America Bulletin. 132(9/10), 2202–2220

7、Supporting project information

Second Tibetan Plateau Scientific Expedition Program

8、Data resource provider

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