A Big Earth Data Platform for Three Poles

**Geochemical data set of amphibolites in Xilinhot area, Inner Mongolia**

1、Description

This data set includes major and trace data of whole rock, chemical data of amphibole plagioclase, zircon u-pb-hf isotope data and amphibole Ar isotope data of amphibolite and epidote amphibolite in Xilinhot area, Inner Mongolia. The major element data of the whole rock were obtained by XRF analysis, the trace element data by ICP-MS analysis, the chemical data of hornblende plagioclase minerals by EPMS analysis, the zircon U-Pb isotope data by LA-ICP-MS analysis, the zircon Hf isotope data by mc-la-icp-ms analysis, and the hornblende ar Ar isotope data by gv-5400 mass spectrometer. The above data were obtained in 2017 and published in gsab, a top international geoscience journal. The data are true and reliable. Through this set of data, we can analyze the characteristics of magma source area, understand the regional metamorphism events, and improve the Paleozoic tectonic evolution framework of the Central Asian orogenic belt.

2、Keywords

Theme：Rocks/Minerals,Geochemistry,Tectonics,Plate subduction,Ziron U-Pb dating,metamorphic rocks
Discipline：Solid earth
Places：Xilinhot
Time：Late Devonian to early Carboniferous

3、Data details

1.Scale：None

2.Projection：

3.Filesize：0.07MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：44.0 | - |
| west：115.5 | - | east：117.37 |
| - | south：43.5 | - |

5、Time frame:None--None

6、Reference method

References to data:

LI Yilong. Geochemical data set of amphibolites in Xilinhot area, Inner Mongolia. A Big Earth Data Platform for Three Poles, doi:10.1130/B31511.12021

References to articles:

Li, Y.L., Brouwer, F.M., Xiao, W.J., Zheng, J.P. (2017). Late Devonian to early Carboniferous arc-related magmatism in the Baolidao arc, Inner Mongolia, China: Signifcance for southward accretion of the eastern Central Asian orogenic belt. Geological Society of America Bulletin, 129(5/6), 677-697.

7、Supporting project information

The deep process and resource effect of major geological events in Yanshan period (2016YFC0600400)

8、Data resource provider

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