A Big Earth Data Platform for Three Poles

**Structural geochemical database of Zhangbaling uplift in eastern China**

1、Description

This data includes excel and JPG format chart. Excel data include the contents and isotopic ratios of major and trace elements, Rb Sr and SM nd in the whole rock.
All samples were crushed to less than 200 mesh using conventional techniques. The whole rock macro and trace element analysis was carried out in ALS minerals / ALS Chemex laboratory, Guangzhou, China.
The contents and isotopic ratios of Rb Sr and SM nd were determined by isotope dilution method at the Key Laboratory of crust mantle materials and environment, University of science and technology of China.
Jpg image format data include: (1) field photos and micrographs (cross polarized light) of Zhangbaling and Feidong intrusive rocks（ 2) Cathodoluminescence (CL) images of typical zircons from Zhangbaling intrusive rocks（ 3) Simplified geological map of the study area (a) the study area and its surrounding areas (b) the study area includes Zhangbaling and Feidong areas（ 4) Zircon U-Pb isotopic concordance map of Zhangbaling intrusion（ 5) Zircon U-Pb isotopic consistency map of Feidong intrusion（ 6) TAS igneous rock diagram (7) the relationship between MgO and SiO2 (a) and Mg # and SiO2 (b) (8) chondrite normalized REE model (9) Sr / Y and y) and (LA / Yb) n and YBN chart (10) Mesozoic Magmatic Rocks (LA / Yb) n and YBN of Zhangba formation represent LA / Yb and Yb normalized chondrite（ 11) The initial SR – Nd isotopic compositions of the late Mesozoic Magmatic Rocks of the Zhangba formation. Data of Dabie high Sr / y granitoids (12) initial isotopic composition of lead in Late Mesozoic (13) age distribution map of magmatic rocks in Zhangba formation (14) HF (T) and u – Pb age map of zircon intrusive rocks in Zhangba formation and data of rocks in other areas（ 15) Late Mesozoic Magmatic Rocks of Zhangba formation.
This database can be used to study the deep crustal processes and tectonic relationships in the northern Zhangbaling and southeastern Feiling areas.

2、Keywords

Theme：zircon,magma,Rocks/Minerals,Geochemistry,Geologic Hazard,Isotopic geochemistry
Discipline：Solid earth
Places：Tan-Lu Fault, Zhangbaling
Time：Cretaceous

3、Data details

1.Scale：None

2.Projection：

3.Filesize：3.54MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：32.6 | - |
| west：117.67 | - | east：117.93 |
| - | south：32.28 | - |

5、Time frame:None--None

6、Reference method

References to data:

YAN Jun, LI Yixi. Structural geochemical database of Zhangbaling uplift in eastern China. A Big Earth Data Platform for Three Poles, doi:10.1080/00206814.2020.17164012021

References to articles:

Li, Y., Yan, J., Song, C., Li, C., & Li, Z. (2020). Petrogenesis of late mesozoic granitoids from the southern segment of the tan–lu fault, eastern china: implications for the tectonic affinity of the zhangbaling uplift. International Geology Review, 1-23.

7、Supporting project information

The deep process and resource effect of major geological events in Yanshan period

8、Data resource provider

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