A Big Earth Data Platform for Three Poles

**Ar-Ar age and whole-rock geochemical data of lamprophyres in Ramba, Tibet, China**

1、Description

This data includes main and micro geochemical data of the whole rock, 40Ar / 39Ar dating data of phlogopite, and Sr-Nd isotope data of the whole rock. The samples were collected from the edge of the Ramba dome in eastern Tibet. The argon isotope of phlogopite uses the stage heating method, and the plateau age and isochron age are calculated by ArArCALC software; The major elements in the whole rock were analyzed by X-ray fluorescence spectrometry (XRF); Trace elements in the whole rock were measured by Quadrupole Inductively coupled plasma mass spectrometer (Q-ICPMS); Sr-Nd isotopic composition was obtained by MC-ICP-MS. The data obtained show that the age of the phlogopite plateau is 13.1 ± 0.18 Ma, which is consistent with the inverse isochron age; The ultrapotassic melt comes from the partial melting of lithospheric mantle in the Indian continent, and the source depth is shallow, so it should be a spinel stable area.

2、Keywords

Theme：Lithospheric thinning,Ultra potassic rocks,Rocks/Minerals,Tectonics
Discipline：Solid earth
Places：Ramba dome
Time：Middle Miocene

3、Data details

1.Scale：None

2.Projection：None

3.Filesize：0.049MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：30.0 | - |
| west：90.0 | - | east：91.0 |
| - | south：29.0 | - |

5、Time frame:None--None

6、Reference method

References to data:

LIU Zhi-Chao. Ar-Ar age and whole-rock geochemical data of lamprophyres in Ramba, Tibet, China. A Big Earth Data Platform for Three Poles, doi:10.1111/ter.125072021

References to articles:

Liu, Z.C, Wang, J.G., Liu, X.C., Liu, Y.D., & Lai, Q.Z. (2021). Middle Miocene ultrapotassic magmatism in the Himalaya: A response to mantle unrooting process beneath the orogen. Terra Nova. 33, 240-251.

7、Supporting project information

Second Tibetan Plateau Scientific Expedition Program

8、Data resource provider

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