A Big Earth Data Platform for Three Poles

**Zircon and monazite U-Pb dating data of dome leucogranite in the eastern Himalaya (2018-2021)**

1、Description

In this study, the zircon and monazite U–Th–Pb geochronology of synkinematic and postkinematic leucogranites, which are affected by the STDS and NHGD, in four areas (Lhozhag, Kuju, Xiaozhan, and Cuonadong) in Shannan City, Tibet, China, was measured. The results show that the oldest synkinematic two-mica granite from Lhozhag, which is affected by the STDS, is 24–25 Ma, so the time of STDS activity is at or slightly earlier than 25 Ma. The youngest synkinematic leucogranite is the garnet-bearing muscovite granite in Cuonadong at 18.4 Ma. The oldest undeformed postkinematic leucogranite (not affected by the STDS) is the muscovite granite in Xiaozhan at 17.4 Ma. Therefore, the end of STDS activity can be limited to 18.4–17.4 Ma. The STDS includes three forms: detachment fault in the NHGD (northern extension of the STDS), the inner STDS between the GHC and Tethyan Himalayan Sequence, and the outer STDS at the bottoms of synformal klippes.

2、Keywords

Theme：Gneiss Dome,Rocks/Minerals,Geochemistry,Tectonics,Monazite and zircon,Geochronology
Discipline：Solid earth
Places：Cuonadong, Tethys Himalaya, Tibet
Time：28–17 Ma

3、Data details

1.Scale：None

2.Projection：

3.Filesize：0.1MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：33.0 | - |
| west：81.0 | - | east：89.0 |
| - | south：28.0 | - |

5、Time frame:None--None

6、Reference method

References to data:

ZHANG Linkui. Zircon and monazite U-Pb dating data of dome leucogranite in the eastern Himalaya (2018-2021). A Big Earth Data Platform for Three Poles, doi:10.11888/Atmos.tpdc.2721242022

References to articles:

7、Supporting project information

National Key R&D Program of China（2018YFC0604103）

8、Data resource provider

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