A Big Earth Data Platform for Three Poles

**Fission-track and Cenozoic detrital zircon U-Pb chronological results**

1、Description

There are 6 apatite fission track data and 2 zircon fission track data in tiekelike mountain, West Kunlun. The age error is less than 10%; The results show that the tiekelike mountains in the north of West Kunlun have undergone rapid exhumation since Miocene. There are 17 groups of detrital zircon U-Pb dating results of Cenozoic sediments from keriyang section and kashtashi section in front of West Kunlun Mountains, which are analyzed by LA-ICP-MS method, and the age concordance is less than 10%; These results indicate that the early provenance of the Piedmont sediments came from Songpan Ganzi and South Kunlun blocks, and the South Kunlun block and North Kunlun block provided provenance to the Piedmont since the Atushi formation. These results indicate that the Cenozoic uplift of the West Kunlun Mountains experienced a process of gradual northward growth. Four apatite fission track results of bedrock samples from the upper and lower walls of Tashkurgan normal fault in the Pamir orogenic belt were obtained by using the external detector method, and the age error was less than 15%; The results show that the Tashkurgan normal fault began to move about 8.5 Ma, and the footwall of the normal fault tilted westward, which may indicate that there was a structural system transformation from the previous north-south compression orogeny to the late Cenozoic East-West collapse extension in the East Pamir area.

2、Keywords

Theme：Tectonics  
Discipline：Solid earth  
Places：West Kunlun  
Time：MA

3、Data details

1.Scale：None

2.Projection：

3.Filesize：0.5MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：39.0 | - |
| west：70.0 | - | east：80.0 |
| - | south：36.0 | - |

5、Time frame:None--None

6、Reference method

References to data:

LIN Xiubin. Fission-track and Cenozoic detrital zircon U-Pb chronological results. A Big Earth Data Platform for Three Poles, doi:10.11888/Geogra.tpdc.2715542021

References to articles:

7、Supporting project information

Second Tibetan Plateau Scientific Expedition Program

8、Data resource provider

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