A Big Earth Data Platform for Three Poles

**Measurement data from 18 portable crustal displacement observation stations along Paizhen - Motuo, Southeast Tibetan Plateau (2021)**

1、Description

The data set is the original repeated GPS observation data along Paizhen - Motuo active deformation Himalayan orogenic belt in Southeast Tibetan Plateau. The data are measured in 2021, including the data of 18 stations, and the data quality is good. Through the observation data of these observation points, we can reveal the horizontal and vertical distribution characteristics of the northward converging strain of the Indian continent in the key parts of the Himalayan orogenic belt. And we can understand the current uplift state of the Himalayan orogenic belt and its correlation with horizontal movement, and combine with the active faults. Based on the theory of motion dislocation, the quantitative distribution of strain between earthquakes could be studied, as well as the strain accumulation characteristics, fault locking range and fault locking level between earthquakes, which provide important constraints for evaluating the seismic risk of active faults in the study area.

2、Keywords

Theme：Crustal Motion,Interseismic deformation,Seismology,Earthquake risk,Others
Discipline：Solid earth
Places：Eastern Himalayan tectonic syntaxis
Time：2021

3、Data details

1.Scale：None

2.Projection：None

3.Filesize：1018.0MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：29.6 | - |
| west：94.7 | - | east：95.5 |
| - | south：29.1 | - |

5、Time frame:2021-11-09 16:00:00+00:00--2021-11-25 16:00:00+00:00

6、Reference method

References to data:

HE Jiankun. Measurement data from 18 portable crustal displacement observation stations along Paizhen - Motuo, Southeast Tibetan Plateau (2021). A Big Earth Data Platform for Three Poles, doi:10.11888/SolidEar.tpdc.2728292022

References to articles:

7、Supporting project information

Pan-Third Pole Environment Study for a Green Silk Road-A CAS Strategic Priority A Program

8、Data resource provider

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