A Big Earth Data Platform for Three Poles

**The change of the displacement field and the Coulomb stress on the Yadong Gulu fault zone due to the rising of Nam Co lake water level since 1960**

1、Description

Under the background of global warming, over the past few decades the qinghai-tibet plateau lakes shows obvious extension. At present on the qinghai-tibet plateau lakes area increase sharply , such as water level changes reported by a number of studies, especially in Tibet's largest lakes such as Siling Co, Nam Co, and so on. We take the Nam Co lake as an example, discussed recent decades the non-structural loading force   
caused by the Nam Co water level rising result in the surrounding lithosphere deformation and the stress variation on the Yadong-Gulu fault zone (normal fault) and analysis of the seismic hazard. In this fragile ecological environment area, the relationship between the land surface processes and the lithosphere can give us some clues, the result of the data including the surface displacement field changes and the stress on the fault.

2、Keywords

Theme：Deformation observation,Tectonics,Lithospheric heterogeneity  
Discipline：Solid earth  
Places：Yadong-Gulu fault zone, Nam Co  
Time：1961-2015

3、Data details

1.Scale：None

2.Projection：WGS84

3.Filesize：397.0MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：31.8 | - |
| west：89.0 | - | east：92.1 |
| - | south：29.3 | - |

5、Time frame:1961-01-08 08:00:00+00:00--2016-01-07 08:00:00+00:00

6、Reference method

References to data:

LIN Xiaoguang. The change of the displacement field and the Coulomb stress on the Yadong Gulu fault zone due to the rising of Nam Co lake water level since 1960. A Big Earth Data Platform for Three Poles, doi:10.11888/Geo.tpdc.2705082019

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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