A Big Earth Data Platform for Three Poles

**Geological records and photograph dataset of the Jilong-Oma and Dati Basins During the field investigation over Southern Tibetan Plateau**

1、Description

The Southern Tibet Rift System (STRS) is one of the most prominent tectonic and geomorphological features in the southern Tibetan Plateau. The Jilong-Oma and Dati basins are located in the northern Himalaya Mountains. The late Cenozoic sedimentary sequences deposited in these two rift basins have archived abundant information about formation and evolution of the STRS and the uplift process of the Tibetan Plateau. The detailed stratigraphic and sedimentologic investigations were conducted on the late Cenozoic sediments in the Jilong-Oma basins. The late Cenozoic sediments in the Jilong-Oma Basin is over 610 m in thickness, including the lower conglomerate member of the fan delta facies (Danzengzhukang Fm., 400-600 m), the middle mudstone interbedded with sandstone member of fluvio-lacustrine facies (Oma Fm., 200-400 m) and the upper conglomerate intercalated with mudstone member of alluvial fan facies (Gongba Fm., 200-0 m). The Hipparion fossils were previously found at the bottom of the Oma Fm. The late Cenozoic sediments in the Dati Basin have a thickness of ~300 m, iucluding the lower mudstone, sandstone and sandy conglomerate member of fluvio-lacustrine faceis (Dati Fm., 80-305 m), and the upper conglomerate member of alluvial fan facies (Gongba Fm., 80-0 m). The Hipparion fossils were previously found at the upper part of the Dati Fm. By comparing with the Zhada Basin in the west part of the Himalaya orogen, it shows that these rift basins experienced the similar sedimentary evolution history and have the comparable Hipparion fossils. Establishing the precise chronology of these sediments and carrying out comprehensive comparison analyses between the rift basins play important roles in understanding the formation and evolution of the STRS, the uplift and deformation processes of the southern Tibetan Plateau and the climate change in the surrounding areas.

2、Keywords

Theme：Tectonics,Paleoclimate Reconstruction  
Discipline：Palaeoenvironment,Solid earth  
Places：Jilong-Oma and Dati Basins, southern Tibetan Plateau  
Time：The late Cenozoic

3、Data details

1.Scale：None

2.Projection：

3.Filesize：309.0MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：28.9 | - |
| west：85.33 | - | east：86.13 |
| - | south：28.5 | - |

5、Time frame:2017-12-06 16:00:00+00:00--2017-12-11 16:00:00+00:00

6、Reference method

References to data:

ZHANG Weilin. Geological records and photograph dataset of the Jilong-Oma and Dati Basins During the field investigation over Southern Tibetan Plateau. A Big Earth Data Platform for Three Poles, doi:10.11888/Geo.tpdc.2705352018

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

name: ZHANG Weilin  
unit: Institute of Tibetan Plateau Research, CAS  
email: zhangwl@itpcas.ac.cn