A Big Earth Data Platform for Three Poles

**Paleoclimatic results of Lunpola-Wuyu-Bangor Basin**

1、Description

The Lunpola Basin distributed in the central part of the Banggong-Nujiang suture belt contains thick and continuous Cenozoic sediments, which have great potential for increasing our understanding of the tectonic uplift, paleoaltimetry, erosion, and depositional history of the Tibetan Plateau and climate environmental evolution. In this study, detailed investigations were carried on a Cenozoic continuous lacustrine sedimentary section, Lunpori (LPR), from the upper sequence of the central basin. Constrained by tie points of U-Pb zircon ages in the layers of tuffs and mammalian fossils of a rhinocerotid humerus, paleomagnetic methods yield ages of ~21.2 to 15 Ma for the section. In addition, we further select some parameters (e.g., magnetic susceptibility and saturation isothermal remanent magnetization (SIRM)) to establish a high-resolution magnetic record to explore the paleoclimate change. The magnetic susceptibility is measured by Kappabridge while the SIRM is measured by Mini spin and Impulse Magnetizer. The results suggest that magnetic susceptibility (χ) gradually increases during the period of semi-deep to the deep lake but shows a decrease in the stage of the shallow lake. Combining with the maximum values of χ often appearing in the layer of sandstones and no obvious correlation between the χ and SIRM, we preliminarily considered that the supply of detritus may dominate the variation of the χ. Lithofacies, pollen, and fossil records suggest that a relatively temperate, humid climate prevailed in the Lunpola Basin during the sedimentary period of the Dingqinghu Fm.

2、Keywords

Theme：Marine Sediments,Paleoclimate Reconstruction  
Discipline：Palaeoenvironment  
Places：Lunpola Basin  
Time：Miocene

3、Data details

1.Scale：None

2.Projection：

3.Filesize：0.018MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：31.9 | - |
| west：89.6 | - | east：89.7 |
| - | south：31.8 | - |

5、Time frame:None--None

6、Reference method

References to data:

TAN Mengqi. Paleoclimatic results of Lunpola-Wuyu-Bangor Basin. A Big Earth Data Platform for Three Poles, doi:10.11888/Paleoenv.tpdc.2709882020

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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