A Big Earth Data Platform for Three Poles

**Pan tertiary Cenozoic climate, lithofacies paleogeography map (53ma)**

1、Description

Guided by the theories of plate tectonics, paleogeography, petroliferous basin analysis and sedimentary basin dynamics, a large number of data and achievements of geological research and oil and gas geological research in the pan third pole in recent years are collected, including basic materials such as strata, sedimentation, paleontology, paleogeography, paleoenvironment, paleoclimate, structure, oil and gas (potassium salt) geology, especially paleomagnetism Based on the data of paleontology, detrital zircon and geochemistry, combined with the results of typical measured stratigraphic sections, the Cenozoic lithofacies and climate paleogeographic pattern are restored and reconstructed, and the pan tertiary Cenozoic lithofacies paleogeographic map (1) and pan tertiary Cenozoic climate paleogeographic map (3) are obtained, in order to explore the impact of paleogeography, paleostructure and paleoclimate on oil and gas Control and influence of (including potassium salt) resources, so as to reveal the geological conditions of oil and gas formation and the law of resource distribution, and provide scientific basis and technical support for China's overseas and domestic oil and gas exploration deployment.

2、Keywords

Theme：Rocks/Minerals,Tectonics,Paleomagnetic,Paleoclimate Reconstruction
Discipline：Palaeoenvironment,Solid earth
Places：Pan-Third Pole
Time：Cenozoic

3、Data details

1.Scale：None

2.Projection：None

3.Filesize：51.6MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：90.0 | - |
| west：180.0 | - | east：180.0 |
| - | south：90.0 | - |

5、Time frame:None--None

6、Reference method

References to data:

LI Yalin. Pan tertiary Cenozoic climate, lithofacies paleogeography map (53ma). A Big Earth Data Platform for Three Poles, doi:10.11888/SolidEar.tpdc.2718962021

References to articles:

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Markello, J.R., Koepnick, R.B., Waite, L.E., Collins, J.F., Lukasik, J., & Simo, J.A. (2008). The carbonate analogs through time (CATT) hypothesis and the global atlas of carbonate fields—A systematic and predictive look at Phanerozoic carbonate systems. Controls on carbonate platform and reef development: SEPM Special Publication, 89, 15-45.

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Scotese, C.R., & Golonka, J. (1997). Paleogeographic atlas (pp. 1-45). Arlington: PALEOMAP Project, University of Texas at Arlington.

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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