A Big Earth Data Platform for Three Poles

**Paleogeographic map of paleoclimate, lithofacies and Cretaceous of Pan tertiary (130mA, 90mA)**

1、Description

Guided by the theory of plate tectonics, paleogeography, petroliferous basin analysis and sedimentary basin dynamics, we have collected a large number of data and achievements of geological research and petroleum geology in recent years, including strata, sedimentation, paleontology, paleogeography, paleoenvironment, paleoclimate, structure, oil and gas (potash) geology and other basic materials, especially paleomagnetism, Paleogene Based on the data of detrital zircon and geochemistry, combined with the results of typical measured stratigraphic sections, the lithofacies and climate paleogeographic pattern of Cretaceous were restored and reconstructed, and two lithofacies paleogeographic maps of early and late Cretaceous of Pan tertiary and two climate paleogeographic maps of early and late Cretaceous of Pan tertiary were obtained, aiming at discussing the influence of paleogeography, paleostructure and paleoclimate In order to reveal the geological conditions and resource distribution of oil and gas formation, and provide scientific basis and technical support for China's overseas and domestic oil and gas exploration deployment.

2、Keywords

Theme：geologic map,plate boundaries,Geomagnetism,paleomagnetism,Tectonics,Paleomagnetic,plate tectonics,Paleoclimate Reconstruction
Discipline：Palaeoenvironment,Solid earth
Places：Pan tertiary
Time：Cretaceous

3、Data details

1.Scale：None

2.Projection：

3.Filesize：75.59MB

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. Paleogeographic map of paleoclimate, lithofacies and Cretaceous of Pan tertiary (130mA, 90mA). A Big Earth Data Platform for Three Poles, 2021

References to articles:

朱伟林, 李江海, 崔旱云. (2013). 全球盆地构造演化与油气分布. 北京: 科学出版社.

李江海. (2013). 全球古板块再造、岩相古地理及古环境图集[M]. 地质出版社.

Boucot, A.J., Xu, C., Scotese, C.R., & Morley, R.J. (2013). Phanerozoic paleoclimate: an atlas of lithologic indicators of climate.

Cope, J., Ingham, J., & Rawson, P. (1999). Atlas of palaeogeography and lithofacies. Geological Society of London.

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.

Dercourt, J., Gaetani, M., Vrielynck, B., Barrier, E., Biju-Duval, B., Brunet, M. F., ... & Sandulescu, M. (2000). Peri-Tethys Palaeogeographical Atlas 2000. Université Pierre et Marie Curie, Paris.

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

7、Supporting project information

8、Data resource provider

name: LI Yalin
unit:
email: liyalin@cugb.edu.cn