A Big Earth Data Platform for Three Poles

**Carbon and oxygen isotopic features of marine carbonate rocks from the Yalai 2 section in Nyalam, Tibet (433-419 Ma)**

1、Description

Carbon cycle is controlled by relative changes in carbon fluxes of global atmosphere, hydrosphere, lithosphere, and biosphere. During the geological history, carbon isotope excursions usually occur in the critical period. Carbon isotope positive excursions are recognized to be related to abundant organic burial or enhanced primary productivity. Silurian δ13Ccarb curves from Euramerica have been established, but the isotopic patterns in different sections and regions can be quite different. Before the use of δ13Ccarb records to facilitate high resolution correlation, it is necessary to conduct sedimentary facies and diagenesis analyses and compare numerous isotopic records on a global scale, in order to learn the global versus local contribution in a δ13C record. 43 geochemical samples were collected from the Wenlock to Pridoli Pulu Formation for carbon and oxygen isotopic analyses, in order to reveal carbon cycling process in northern margin of Gondwana continent and alternation of carbon isotopic records during diagenesis. At the Yalai 2 section, δ13C values show a major positive shift in the Ludlow, which could be recognized in other sections around the world, indicating that major carbon cycling perturbation occurred during this time interval. This dataset include 43 carbon and oxygen isotopic records.

2、Keywords

Theme：Paleontology,Geochemistry,Strata,Carbon isotope  
Discipline：Solid earth  
Places：Nyalam  
Time：Silurian

3、Data details

1.Scale：None

2.Projection：

3.Filesize：0.032MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：28.4 | - |
| west：86.1 | - | east：86.1 |
| - | south：28.4 | - |

5、Time frame:None--None

6、Reference method

References to data:

CHEN Zhongyang. Carbon and oxygen isotopic features of marine carbonate rocks from the Yalai 2 section in Nyalam, Tibet (433-419 Ma). A Big Earth Data Platform for Three Poles, doi:10.11888/Geo.tpdc.2716322021

References to articles:

7、Supporting project information

Second Tibetan Plateau Scientific Expedition Program

8、Data resource provider

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