A Big Earth Data Platform for Three Poles

**BrGDGT data sets of lake surface sediments and  settling particles from Dagze Co in Qinghai Tibet Plateau**

1、Description

In recent years, branched chain glycerol dialkyl glycerol tetraethers (brGDGTs) derived from microbial cell membrane lipids are sensitive to environmental parameters (temperature and pH, etc.) and are widely used in the quantitative reconstruction of paleoenvironment. Based on the surface sediments of lakes in the Qinghai Tibet Plateau and brGDGTs in the surface sediments of other lakes published in China, we developed a new brGDGT-air temperature calibration. By collecting the annual suspended particulate matter of Dagze Co and analyzing brGDGTs, the distribution of brGDGTs in different water column layers were reconstructed. Combined with the modern observation results and the new calibration, using the results of brGDGT in the sediments of Xiada Co, the atmospheric temperature changes in the western Qinghai Tibet Plateau in the past 2000 years are reconstructed. This result provides an important theoretical reference for the reconstruction of temperature by brGDGTs in the future.

2、Keywords

Theme：Paleoclimate Reconstruction,Lake sediments
Discipline：Palaeoenvironment
Places：Qinghai-Tibet PlateauTibet,
Time：Common Era, modern

3、Data details

1.Scale：None

2.Projection：

3.Filesize：0.041MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：39.0 | - |
| west：79.0 | - | east：99.0 |
| - | south：29.0 | - |

5、Time frame:None--None

6、Reference method

References to data:

LIANG Jie, LIANG Jie. BrGDGT data sets of lake surface sediments and  settling particles from Dagze Co in Qinghai Tibet Plateau. A Big Earth Data Platform for Three Poles, doi:10.11888/Paleoenv.tpdc.2717282021

References to articles:

7、Supporting project information

The impact of human activities on the aquatic community structure of lakes in the central Qinghai-Tibet Plateau during the past two hundred years

8、Data resource provider

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