A Big Earth Data Platform for Three Poles

**Stable hydrogen isotope records of Qinghai Lake，Bangong Co and Lingge Co**

1、Description

The water vapor isotopes transported by different atmospheric circulation systems are different, and the precipitation on the Qinghai Tibet Plateau is affected by monsoon and westerly circulation, which is very sensitive to climate and environmental change. Hydrogen isotopes of wax in lake sediments provide a means to restore past precipitation information. The stable hydrogen isotope records of sediments from different lakes (Qinghai Lake, linggecuo lake and Bangong Lake) in the East and west of the Qinghai Tibet Plateau provided by the author reconstruct the isotopic changes of precipitation in the East and west of the Qinghai Tibet Plateau in the past 20000 years, and study the effects of summer monsoon and westerly jet on water vapor in the Qinghai Tibet Plateau since the late Pleistocene, It also provides important basic data for reconstructing the paleoclimate and environmental changes of the Qinghai Tibet Plateau in the past.

2、Keywords

Theme：Others,Paleoclimate Reconstruction
Discipline：Palaeoenvironment
Places：Qinghai Lake, Bangong Co, Lingge Co
Time：20 ka

3、Data details

1.Scale：None

2.Projection：

3.Filesize：0.03MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：37.12 | - |
| west：79.56 | - | east：100.45 |
| - | south：33.48 | - |

5、Time frame:None--None

6、Reference method

References to data:

HOU Juzhi. Stable hydrogen isotope records of Qinghai Lake，Bangong Co and Lingge Co. A Big Earth Data Platform for Three Poles, doi:10.11888/Paleoenv.tpdc.2717112021

References to articles:

Hou, J., D'Andrea, W. J., Wang, M., He, Y., & Liang, J. (2017). Influence of the Indian monsoon and the subtropical jet on climate change on the Tibetan Plateau since the late Pleistocene. Quaternary Science Reviews, 163, 84-94. doi:10.1016/j.quascirev.2017.03.013

He, Y., Hou, J. Z., Brown, E. T., Xie, S. Y., & Bao, Z. Y. (2018). Timing of the Indian Summer Monsoon onset during the early Holocene: Evidence from a sediment core at Linggo Co, central Tibetan Plateau. Holocene, 28(5), 755-766. doi:10.1177/0959683617744267

7、Supporting project information

Second Tibetan Plateau Scientific Expedition Program

8、Data resource provider

name: HOU Juzhi
unit:
email: houjz@itpcas.ac.cn