A Big Earth Data Platform for Three Poles

**Geochemical Dataset of Lacustrine Core in Karakul lake, a distal proglacial lake of Muztagh Ata glaciers (0-1416cm)**

1、Description

Karakul lake is the distal proglacial lake of the Muztagh Ata glaciers in Xinjiang, and its material input is mainly affected by glacier changes. The Karakul lake sediment core was drilled in the deepest part of the Karakul Lake (38 ° 26.56 ′ N, 75 ° 03.65 ′ E, water depth of 19m) in June and July, 2013, by the research group of prof. Xubaiqing, Institute of Tibetan Plateau Research. The length of the sediment core was 14.16m. This data set is the geochemical data of the lake sediment core, providing high-resolution (0.2mm) information of geochemical elements' contents. The element data was obtained using the nondestructive X-ray fluorescence (XRF) measurements (Itrax Core Scanner, Sweden). The measurement was performed in the Key Laboratory of Tibetan Environment Changes and Land Surface Processes, Chinese Academy of Sciences. The element content in this data set changes obviously, among which the Zr element, Zr/Rb ratio and Rb/Sr ratio provides the long-term glacier change history in Muztagh Ata region, while Ti element provides the dust change history. These data are of great scientific significance for studying the long-term paleoclimate and environmental change histories in the the westerly-dominated region.

2、Keywords

Theme：Lacustrine Sediments,Paleoclimate Reconstruction
Discipline：Palaeoenvironment
Places：Muztagh Ata, Karakul
Time：Paleoclimate

3、Data details

1.Scale：None

2.Projection：

3.Filesize：11.8MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：38.44 | - |
| west：75.06 | - | east：75.06 |
| - | south：38.44 | - |

5、Time frame:None--None

6、Reference method

References to data:

XU Baiqing, ZHANG Xiaolong . Geochemical Dataset of Lacustrine Core in Karakul lake, a distal proglacial lake of Muztagh Ata glaciers (0-1416cm). A Big Earth Data Platform for Three Poles, doi:10.11888/Paleoenv.tpdc.2727852022

References to articles:

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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