A Big Earth Data Platform for Three Poles

**Database of lake diatom - salinity of lake water conversion relationship on the Tibetan Plateau (1723-2001)**

1、Description

This data set contains Chen Co fossil diatoms, Chen Co conductivity reconstruction, Nam Co fossil diatoms, and Nam Co conductivity reconstruction. It can be used to study the characteristics of the living diatom species and for quantitative reconstruction of the paleoenvironments of the lakes of the Tibetan Plateau. The diatom data are obtained on the basis of the sample identification statistics, the water environment data are measured by the instrument, and the reconstructed conductivity is calculated from the diatom-salinity conversion function. This data set is obtained from laboratory measurements. The data are obtained immediately after the completion of the instrument or experiment. The samples and data are collected in strict accordance with relevant operating procedures at all stages.  
There are 6 subtables in this dataset:  
Subtable 1 is for a lake environment and has 18 fields, which are the lake name, number, lake number, latitude, longitude, water depth, altitude and water environment indicators;  
Subtable 2 is for the diatoms in surface sediments and has 4 fields, which are the lake serial number, the diatom abbreviation, the diatom name and its content;  
Subtable 3 is for the Chen Co diatoms and has 6 fields, which are sample number, analysis number and depth, diatom abbreviation, diatom name and its content;  
Subtable 4 is for the Chen Co conductivity reconstruction and has 3 fields, which are the depth, age, and conductivity of diatom reconstruction;  
Subtable 5 is for Nam Co fossil diatoms and has 5 fields. The first two fields are depth and age, and the other fields are the contents of diatoms of different species; and  
Subtable 6 is for the Nam Co conductivity reconstruction and has 3 fields, which are the depth, age, and conductivity of the diatom reconstruction.  
The dimension of diatom content in each subtable is the percentage of percent. The units of sample depth, water depth, age, longitude, latitude, altitude, ion content and conductivity are cm, m, AD, ° east longitude, ° north latitude, m, mg/L, and μS/cm, respectively.  
The diatom samples are collected from approximately 90 lakes on the Tibetan Plateau within a longitude range of 84.528 -102.360 °E and a latitude range of 28.148-38.897 °N; altitude: 2797-5180 m.

2、Keywords

Theme：Electrical conductivity,Soil,Vegetation,Diatoms,Lacustrine Sediments,Sediments  
Discipline：Terrestrial Surface,Palaeoenvironment  
Places：Tibetan Plateau   
Time：

3、Data details

1.Scale：None

2.Projection：

3.Filesize：0.2MB

4.Data format：EXCEL

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：39.0 | - |
| west：84.0 | - | east：102.0 |
| - | south：28.0 | - |

5、Time frame:1723-01-11 22:16:47+00:00--2002-01-09 19:37:00+00:00

6、Reference method

References to data:

YANG Xiangdong. Database of lake diatom - salinity of lake water conversion relationship on the Tibetan Plateau (1723-2001). A Big Earth Data Platform for Three Poles, doi:10.11888/Ecology.tpe.19.db2018

References to articles:

7、Supporting project information

8、Data resource provider

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