A Big Earth Data Platform for Three Poles

**Chronological and environmental index data set of Zhouqu loess profile**

1、Description

This data is the chronological, magnetic, grain size and bulk density data of Zhouqu (ZQ) loess paleosol sequence in the eastern Tibetan Plateau (TP). We measured the magnetic susceptibility, grain size and bulk density data of the profile at 5 cm intervals. All the experimental analysis was completed at the Key Laboratory of Western China's Environmental Systems (Ministry of Education), Lanzhou University, China. The OSL ages were determined by an automated Risø TL/OSL DA-20 reader. The magnetic susceptibility was measured by Bartington MS2 magnetic susceptibility meter; The grain size data were measured by a Malvern Mastersizer 2000 laser diffractometer; The bulk density data were determined by according to the oil-soaked method; The data set show the variation characteristics of magnetic susceptibility, grain size and bulk density of loess sequence in the eastern TP since the last glacial period, which plays an important role in studying the paleoenvironment, paleoclimate, dust accumulation history and its relationship with the surrounding atmospheric circulation in the eastern TP.

2、Keywords

Theme：Magnetic susceptibility,Optically stimulated luminescence dating,Grain size,Loess,bulk density,Paleoclimate Reconstruction
Discipline：Palaeoenvironment
Places：eastern Tibetan Plateau
Time：Last glaciation

3、Data details

1.Scale：None

2.Projection：

3.Filesize：1.0MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：30.779 | - |
| west：104.399 | - | east：104.399 |
| - | south：30.779 | - |

5、Time frame:None--None

6、Reference method

References to data:

XIA Dunsheng, YANG Shengli, CHEN Zixuan, LI Qiong. Chronological and environmental index data set of Zhouqu loess profile. A Big Earth Data Platform for Three Poles, doi:10.11888/Paleoenv.tpdc.2718062021

References to articles:

7、Supporting project information

Second Tibetan Plateau Scientific Expedition Program

8、Data resource provider

name: XIA Dunsheng
unit: Lanzhou University
email: dsxia@lzu.edu.cn

name: YANG Shengli
unit: Lanzhou University
email: shlyang@lzu.edu.cn

name: CHEN Zixuan
unit:
email: chenzx19@lzu.edu.cn

name: LI Qiong
unit:
email: leeqiong@lzu.edu.cn