A Big Earth Data Platform for Three Poles

**Chronological data and environmental index data set of Gannan Maqu aeolian sedimentary profile**

1、Description

This data is the chronological, magnetic and grain size data of Maquqiao (MQQ) aeolian sequence in the eastern Tibetan Plateau (TP). We measured the magnetic susceptibility and grain size data of the profile at 2.5 cm intervals. AMS14C dating samples were tested in Peking University and Beta Analytic in Miami, United States. 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 show the variations of magnetic susceptibility and grain size of aeolian sequences in the eastern TP since the Holocene, which has important reference significance for the study of aeolian sand activities associated with desertification and serious land degradation in the eastern TP.

2、Keywords

Theme：Magnetic susceptibility,Optically stimulated luminescence dating,Grain size,Paleoclimate Reconstruction
Discipline：Palaeoenvironment
Places：Gannan Tibetan Autonomous Prefecture
Time：Holocene

3、Data details

1.Scale：None

2.Projection：

3.Filesize：1.0MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：33.961 | - |
| west：102.078 | - | east：102.078 |
| - | south：33.961 | - |

5、Time frame:None--None

6、Reference method

References to data:

YANG Shengli, CHEN Zixuan, LIU Xiaojing, LI Qiong. Chronological data and environmental index data set of Gannan Maqu aeolian sedimentary profile. A Big Earth Data Platform for Three Poles, doi:10.11888/Paleoenv.tpdc.2718082021

References to articles:

Yang, S., Liu, X., Cheng, T., Luo, Y., Li, Q., Liu, L., & Chen, Z. (2021). Stepwise Weakening of Aeolian Activities During the Holocene in the Gannan Region, Eastern Tibetan Plateau. Front. Earth Sci. 9: 686677.

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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