A Big Earth Data Platform for Three Poles

**Single mineral chemical composition and Ar-Ar geochronological data of volcanic ash in Serbian loess**

1、Description

This data set consists of volcanic ash chronological analysis data in Serbian loess. Volcanic ash chronology is a method to correlate and date geological, PALEOCLIMATOLOGICAL, archaeological and other strata and events by using volcanic ash layer as isochronous marker. Generally, the volcanic ash in sediments is compared through the chemical composition characteristics and characteristic mineral assemblages of minerals, and the age of volcanic ash layer is determined through the calibration of isochronous strata in the region; The age of the volcanic ash layer can also be determined by absolute dating methods such as AR ar. The volcanic ash chronological analysis data include the single mineral chemical composition of 8 layers of volcanic ash samples in different loess sections of Serbia and the AR ar chronological data of diorthite of 1 layer of volcanic ash samples. Among them, the single mineral chemical composition of volcanic ash samples was determined by jeol jxa 8100 electron probe of electron probe and scanning electron microscope laboratory of Institute of Geology and Geophysics, Chinese Academy of Sciences. The AR ar chronology data of diorite of volcanic ash samples were determined by helix SFT mass spectrometer of environmental research center of Scottish University Union. This data can provide further age constraints for the Loess in Serbia and is of great significance for the study of paleoclimate / Paleoenvironment in southeastern Europe.

2、Keywords

Theme：Loess,Loess,Paleoclimate Reconstruction,Tephrochronology
Discipline：Palaeoenvironment
Places：Serbia
Time：since one million years

3、Data details

1.Scale：None

2.Projection：

3.Filesize：0.1MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：46.0 | - |
| west：19.0 | - | east：21.0 |
| - | south：44.5 | - |

5、Time frame:None--None

6、Reference method

References to data:

HAO Qingzhen. Single mineral chemical composition and Ar-Ar geochronological data of volcanic ash in Serbian loess. A Big Earth Data Platform for Three Poles, doi:10.11888/Paleoenv.tpdc.2716882021

References to articles:

付玉. (2021). 塞尔维亚黄土-古土壤序列记录的过去一百万年气候变化：黏土矿物学和火山灰年代学证据. 中国科学院大学, 北京.

7、Supporting project information

Comparative study of past climate changes at multi-timescale in East Asian monsoon region and Westerly zone
NSFC Basic Research Center Program: Continental Evolution and Earth’s monsoon System
NSFC National Science Fund for Distinguished Young Scholars: Quaternary Geology

8、Data resource provider

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