A Big Earth Data Platform for Three Poles

**Quaternary glacial data set (sediments, glacial sites) in Hengduan Mountains (1982-1984)**

1、Description

The data set includes the characteristics of ancient glacial sediments, such as grain size characteristics, sporopollen characteristics, environmental indicators of chemical elements, mineral characteristics of sediments, etc. Table 1 shows the analysis of five samples collected from the red moraine of Q2, which shows that the grain size characteristics of different ages are the difference of grain size distribution caused by weathering strength. The earlier the moraine is formed, the farther the grain size characteristics of the moraine are from the typical moraine facies. According to Tang Lingyu's (1984) analysis of spores and pollen in lignite (Table 2), there are many clouds and firs, but there are many warm loving Castanea, Liquidambar and Quercus, which indicates that the mountain is dark coniferous cold temperate to warm temperate vegetation, while the piedmont plain is warm temperate or even mountain subtropical vegetation, and its altitude is not very high. The sporopollen analysis data of four surface soil samples and Q31 and q32 moraine samples from high to low altitude on the east slope of Gongga mountain show that the SPOROPOLLEN ASSEMBLAGES OF Q31 and q32 moraines are not significantly different from those at present (tables 3 and 4). The chemical elements of moraine samples were analyzed by icpq plasma analyzer. The results show that the other 18 elements can reflect the weathering degree in different degrees except Fe2O3, which is too influenced by local lithology to retrieve the information of age and weathering degree. There are 28 fine-grained samples, and the results are summarized in the table below. The analysis results of Hengduanshan moraine samples are shown in Table 6. It can be seen that there is little difference in the most stable mineral content of the Moraine in different periods. The mineral characteristics of the Moraine in this area clearly reflect the relationship between it and weathering time. It is hoped that through the geochemical study of the temporal and spatial sequence of glacial deposits, the indicator of element migration can be established for the study of Quaternary glacial environment in China.

2、Keywords

Theme：Pollen,Glacial sediment,Glaciation,Paleoclimate Reconstruction
Discipline：Palaeoenvironment
Places：Hengduan Mountains
Time：1982-1984

3、Data details

1.Scale：None

2.Projection：

3.Filesize：23.0MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：32.08 | - |
| west：97.0 | - | east：103.0 |
| - | south：22.0 | - |

5、Time frame:None--None

6、Reference method

References to data:

LI Jijun. Quaternary glacial data set (sediments, glacial sites) in Hengduan Mountains (1982-1984). A Big Earth Data Platform for Three Poles, doi:10.11888/Glacio.tpdc.2713132021

References to articles:

中国科学院青藏高原综合科学考察队. (1996). 横断山冰川[M]. 北京: 科学出版社

7、Supporting project information

Comprehensive scientific investigation of Hengduan Mountains area

8、Data resource provider

name: LI Jijun
unit:
email: lijj@lzu.edu.cn