A Big Earth Data Platform for Three Poles

**Mineral and chemical composition analysis data set of moraine in the Namjagbarwa region (1982-1984)**

1、Description

In the discussion of glacial deposition process, formation conditions and evolution, the analysis and study of Quaternary glacial sediment structure, gravel fabric, grain size characteristics, clastic minerals, clay minerals and chemical composition of moraines are of certain significance for understanding the depositional environment of moraines, the scale of glacial activities and the number of glacial periods. The results of X-ray diffraction analysis of clay minerals show that the clay mineral assemblages of all kinds of moraines are dominated by hydrated phlogopite. The composition of this clay mineral is characterized by glaciation and formation in a special environment. For example, the hydrated phlogopite in the moraine clay minerals (glacial mud) is particularly rich, which can form hydrated phlogopite clay rock.  
According to the results of chemical composition analysis of five moraine samples from different ages (Table 2), the highest content of SiO2 is 53.9%, followed by Al2O3, which accounts for 13.59%, followed by Cao, MgO, FeO, K2O, Fe2O3, Na2O, etc. According to analysis, the chemical composition of moraine is closely related to bedrock. However, due to the action of glaciers and water, its chemical composition changes greatly.

2、Keywords

Theme：Moraine,Glacier(Ice Sheet)  
Discipline：Cryosphere  
Places：Nnamjagbarwa mountain  
Time：Quaternary

3、Data details

1.Scale：None

2.Projection：

3.Filesize：0.02MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：30.15 | - |
| west：94.11 | - | east：96.1 |
| - | south：28.5 | - |

5、Time frame:None--None

6、Reference method

References to data:

PENG Buzhuo, YANG Yichou, NIAN Yanyun. Mineral and chemical composition analysis data set of moraine in the Namjagbarwa region (1982-1984). A Big Earth Data Platform for Three Poles, doi:10.11888/Cryos.tpdc.2727112021

References to articles:

中国科学院登山科学考察队. (1996). 南迦巴瓦峰地区自然地理与自然资源. 北京, 科学出版社.

7、Supporting project information

8、Data resource provider

name: PENG Buzhuo  
unit:   
email: pengbuzhuo@sina.com  
  
name: YANG Yichou  
unit:   
email: yangyc@igsnrr.ac.cn  
  
name: NIAN Yanyun  
unit:   
email: yynian@lzu.edu.cn