A Big Earth Data Platform for Three Poles

**Holocene sporopollen dataset on the northern slope of the Tianshan Mountains**

1、Description

The research area is located in the middle section o the northern slope of the Tianshan Mountains. The research area extends from Wusu in the Tacheng District of Xinjiang in the west to Mulei County in Changji Prefecture in the east. It is approximately 500 km long from east to west. The vertical vegetation gradient on the northern slope of the Tianshan Mountains can be divided into six different belts: alpine cushion vegetation belt (>3400 m), sub-alpine meadow belt (3400~2700 m), mid-mountain forest belt (2700~1720 m), forest steppe belt (1720~1300 m), semi-desert belt (1300~700 m) and typical desert belt (<700 m).
Based on the characteristics of the vertical vegetation belts on the northern slope of the Tianshan Mountains, five sedimentary sections with different elevations, different vegetation belts and different sedimentary ages were selected for analysis. Five mid-late Holocene sections were measured to calculate the composite dissimilarity index of sporopollen, and the index was used to explain the sporopollen diversity. The index was then combined with integrated multiple analysis data, such as particle size, magnetic susceptibility, and ignition loss, and the changes in biodiversity and environmental characteristics since the mid-late Holocene in the area were assessed.
The data include the following:
1. Sporopollen grain number data for the Daxigou section (8-110 cm, a total of 52 layers were analysed for sporopollen grain number, 3640±60 a BP to 890±60 a BP)
2. Sporopollen grain number data for the Xiaoxigou section (0-90 cm, a total of 38 layers were analysed for sporopollen grain number, 3240±60 a BP)
3. Sporopollen grain number data for the Huashuwozi section (0-106 cm, a total of 52 layers were analysed for sporopollen grain number, 2170±185 a BP to 450±155 a BP)
4. Sporopollen grain number data for the Sichanghu section (10-84 cm, a total of 19 layers were analysed for sporopollen grain number, 1000±50 a BP to 665±65 a BP)
5. Sporopollen grain number data for the Dongdaohaizi section (0-190 cm, a total of 64 layers were analysed for sporopollen grain number, 4500±310 a BP to 305±130 a BP)
For detailed descriptions of the data, please refer to the following study: "Palaeo-biodiversity at the Northern Piedmont of Tianshan Mountains in Xinjiang During the Middle to Late Holocene"

2、Keywords

Theme：Pollen,Paleoclimate Reconstruction
Discipline：Palaeoenvironment
Places：Tianshan, Xinjiang
Time：Late Holocene, Medieval Warm Period

3、Data details

1.Scale：None

2.Projection：

3.Filesize：0.14MB

4.Data format：EXCEL

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：43.0 | - |
| west：80.0 | - | east：83.0 |
| - | south：41.5 | - |

5、Time frame:2003-01-15 03:08:29+00:00--2005-01-14 03:08:29+00:00

6、Reference method

References to data:

NI Jian. Holocene sporopollen dataset on the northern slope of the Tianshan Mountains. A Big Earth Data Platform for Three Poles, doi:10.11888/Ecolo.tpdc.2700022011

References to articles:

7、Supporting project information

8、Data resource provider

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