A Big Earth Data Platform for Three Poles

**Genomic variation data of modern Tibetans**

1、Description

The average altitude of the Tibetan Plateau is more than 4000 meters. The harsh environment such as high cold and low oxygen poses a huge challenge to human survival. However, since the late Paleolithic period, Tibetan people in the plateau have reached the Plateau, and in the Neolithic period, people began to permanently settled on the high-altitude areas on a large scale. The history of population migration in this process has become the focus of different fields. In order to analyze the genetic structure of Tibetan population from the perspective of the whole genome and trace back the history of human settlement on the plateau, we obtained the whole genome variation data of 20 Tibetan individuals. The SNP typing of 20 samples was carried out by DNA array method, and about 700000 loci (including nuclear genome, mitochondrial DNA and Y chromosome) of each sample were obtained. Based on the above data, relevant biological information analysis (mainly including chip site quality control analysis, Y chromosome and mitochondrial DNA haplotype analysis) was carried out. This data is helpful to analyze the genetic structure of Tibetan population from the perspective of nuclear genome, Y chromosome and mitochondrial DNA. By comparing with the data of people around the plateau, we can trace the migration and settlement history of the plateau population comprehensively.

2、Keywords

Theme：Population,Tibetan ethnic group
Discipline：Human-nature Relationship
Places：The Tibetan Plateau
Time：2018-2019

3、Data details

1.Scale：None

2.Projection：

3.Filesize：809.0MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：32.28 | - |
| west：85.52 | - | east：97.65 |
| - | south：28.05 | - |

5、Time frame:2018-04-06 00:00:00+00:00--2020-01-05 11:59:59+00:00

6、Reference method

References to data:

KONG Qingpeng. Genomic variation data of modern Tibetans. A Big Earth Data Platform for Three Poles, doi:10.11888/Ecolo.tpdc.2703702020

References to articles:

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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