A Big Earth Data Platform for Three Poles

**Sedimentary ancient DNA data from baishiya Karst Cave**

1、Description

Sediment ancient DNA is biological ancient DNA scattered in Paleoenvironmental samples, which is different from ancient DNA directly extracted from ancient animal bones and plant remains. Paleoenvironmental DNA is mainly mixed with multi species ancient DNA extracted from environmental samples such as glaciers, frozen soil, lake sediments, peat sediments, site cultural layer, dental calculus and fecal fossils. These DNA enter the environment with biological residues (including remains, hair, feces and urine), degrade rapidly and denature slowly in the environment, and finally adsorb on minerals and other particles or integrate into their own genome by microorganisms for long-term preservation, thus forming paleoenvironmental DNA. Sediment DNA is a new ancient DNA analysis technology. The sediments of archaeological sites can track the DNA preservation status of relevant sites and possible humans, make up for the shortcomings that human fossils are generally available but not available, greatly expand the research object and open a new window to study the population evolution of Paleolithic archaeological sites. The ancient DNA of stratum sediments from baishiya karst cave site where Xiahe human mandible was found was systematically sampled and analyzed.

2、Keywords

Theme：Land use,Land Resources  
Discipline：Human-nature Relationship,Palaeoenvironment  
Places：Baishiya Karst Cave, Xiahe Country, Gansu Province  
Time：160k

3、Data details

1.Scale：None

2.Projection：

3.Filesize：0.04MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：35.44845556 | - |
| west：102.5703639 | - | east：102.5703639 |
| - | south：35.44845556 | - |

5、Time frame:None--None

6、Reference method

References to data:

ZHANG Dongju , FU Qiaomei. Sedimentary ancient DNA data from baishiya Karst Cave. A Big Earth Data Platform for Three Poles, doi:10.1126/science.abb63202021

References to articles:

7、Supporting project information

Second Tibetan Plateau Scientific Expedition Program

8、Data resource provider

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