A Big Earth Data Platform for Three Poles

**Oxygen Isotope, dust, anion and accumulation data from the Dunde Ice Core (1987)**

1、Description

This data set contains data from the three ice cores drilled from the Dunde ice cap in the northern Tibetan Plateau in 1987. Core D-1 has a length of 139.8 m and is divided into 3585 samples for isotope analysis. Core D-3 has a length of 138.4 m, and the upper 56 m was cut into several samples on site and stored in bottles after melting, while the remaining length was frozen and preserved.
The data set contains three data tables, namely, 10-year mean oxygen isotope data for the Dunde ice core (520-1987 A.D.), 5-year mean water equivalent accumulation data for Dunde ice core and 10-year mean dust data for the Dunde ice core.

Data source: National Centers for Environmental Information (http://www.ncdc.noaa.gov/data-access/paleoclimatology-data/datasets/ice-core).
Processing method: Average.

Table 1: 10-year mean oxygen isotope data for core D-3 (520 - 1987 A.D.)
a. Name explanation
Field 1: Start time
Field 2: End time
Field 3: Oxygen isotope value
b. Dimensions (units of measure)
Field 1: Dimensionless
Field 2: Dimensionless
Field 3: ‰

Data Table 2: 5-year mean water equivalent accumulation data for core D-1 (1606-1984)
a. Name explanation
Field 1: Start time
Field 2: End time
Field 3: Accumulation
b. Dimensions (units of measure)
Field 1: Dimensionless
Field 2: Dimensionless
Field 3: m

Data Sheet 3: 10-year mean dust data for core D-3 (520 - 1987 A.D.)
a. Name explanation
Field 1: Start time
Field 2: End time
Field 3: Dust (diameter 0.63-16 µm)
Field 4: Dust (diameter 2.00-60 µm)
Field 5: Cl-
Field 6: SO42-
Field 7: NO3-
b. Dimensions (units of measure)
Field 1: Dimensionless
Field 2: Dimensionless
Field 3: Particles/mL
Field 4: Particles/mL
Field 5: ppb
Field 6: ppb
Field 7: ppb

2、Keywords

Theme：Isotopes,Ice core,Ice-core,Glacier(Ice Sheet)
Discipline：Palaeoenvironment,Cryosphere
Places：Dunde Ice Cap, Tibetan Plateau
Time：520-1987 A.D, 1606-1984

3、Data details

1.Scale：None

2.Projection：

3.Filesize：0.1MB

4.Data format：EXCEL

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：38.0 | - |
| west：96.0 | - | east：96.0 |
| - | south：38.0 | - |

5、Time frame:1987-01-09 08:00:00+00:00--1988-01-08 08:00:00+00:00

6、Reference method

References to data:

National Centers for Environmental Information (NCEI). Oxygen Isotope, dust, anion and accumulation data from the Dunde Ice Core (1987). A Big Earth Data Platform for Three Poles, 2018

References to articles:

Thompson, L.G., Mosley-Thompson, E., Brecher, H. Davis, M.E., Leon, B., Les, D.H., Lin, P.N., Mashiotta, T., &Mountain, K. (2006). Abrupt tropical climate change: Past and present. Proceedings of the National Academy of Sciences of the United States of America, 103(28), 10536-10543.

Yao, T.D., &Thompson, L.G. (1992). Trends and features of climatic changes in the past 5000 years recorded by the Dunde ice core. Annals of Glaciology, 16, 21-24.

7、Supporting project information

8、Data resource provider

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