A Big Earth Data Platform for Three Poles

**The 7000 years of isotope and geochemical data of the Puruogangri Ice Sheet (2000)**

1、Description

This data set comprises the oxygen isotope and geochemical data of two deep-drilled ice cores drilled in the Puruogangri ice sheet (33°55'N, 89°05'E, altitude: 6070 meters) in the central Tibetan Plateau in 2000. The ice core depths are 118.4 and 214.7 meters, respectively.
Source of the data: National Centers for Environmental Information (http://www.ncdc.noaa.gov/data-access/paleoclimatology-data/datasets/ice-core) .
The data set contains 6 tables, which are the average values of 1 oxygen isotope per meter of the Puruogangri ice core, the 10-year average data of 1 oxygen isotope of the Puruogangri ice core, the average values of 2 oxygen isotope and the soluble aerosol concentrations per meter of the Puruogangri ice core, the 5-year average data of 2 oxygen isotope and aerosol concentrations of Puruogangri ice core, 10-year average data of 2 oxygen isotope and aerosol concentrations of the Puruogangri ice core, and the 100-year average values of 2 oxygen isotopic and aerosol concentrations of the Puruogangri ice core. The information on the fields is as follows:
Table 1: the average values of 1 oxygen isotope per meter of the Puruogangri ice core
Field: Field Name [Dimensions (Unit of Measure)]
Field 1: Depth [m]
Field 2: δ18° [‰]
Table 2: the 10-year average data of 1 oxygen isotope of the Puruogangri ice core
Field: Field Name [Dimensions (Unit of Measure)]
Field 1: Start time [Dimensionless]
Field 2: End time [Dimensionless]
Field 3: δ18° [‰]
Table 3: the average values of 2 oxygen isotope and soluble aerosol concentration per meter of the Puruogangri ice core
Field: Field Name [Dimensions (Unit of Measure)]
Field 1: Depth [m]
Field 2: Dust (diameter 0.63-20 um) [particles/mL]
Field 3: 18° [‰]
Field 4: F- [ppb]
Field 5: Cl- [ppb]
Field 6: SO42- [ppb]
Field 7: NO3- [ppb]
Field 8: Na+ [ppb]
Field 9: NH4+ [ppb]
Field 10: K+ [ppb]
Field 11: Mg2+ [ppb]
Field 12: Ca2+ [ppb]
Table 4: the 5-year average data of 2 oxygen isotope and aerosol concentration of the Puruogangri ice core
Field: Field Name [Dimensions (Unit of Measure)]
Field 1: Start time [Dimensionless]
Field 2: End time [Dimensionless]
Field 3: δ18° [‰]
Field 4: Accumulation [cm/yr]
Field 5: Dust (diameter 0.63-20 um) [particles/mL]
Field 6: F- [ppb]
Field 7: Cl- [ppb]
Field 8: SO42- [ppb]
Field 9: NO3- [ppb]
Field 10: Na+ [ppb]
Field 11: NH4+ [ppb]
Field 12: K+ [ppb]
Field 13: Mg2+ [ppb]
Field 14: Ca2+ [ppb]
Table 5: the 10-year average data of 2 oxygen isotope and aerosol concentrations of the Puruogangri ice core
Field: Field Name [Dimensions (Unit of Measure)]
Field 1: Start time [Dimensionless]
Field 2: End time [Dimensionless]
Field 3: δ18° [‰]
Field 4: Dust (diameter 0.63-20 um) [particles/mL]
Field 5: F- [ppb]
Field 6: Cl- [ppb]
Field 7: SO42- [ppb]
Field 8: NO3- [ppb]
Field 9: Na+ [ppb]
Field 10: NH4+ [ppb]
Field 11: K+ [ppb]
Field 12: Mg2+ [ppb]
Field 13: Ca2+ [ppb]
Table 6: the 100-year average values of 2 oxygen isotopic and aerosol concentrations of the Puruogangri ice core
Field: Field Name [Dimensions (Unit of Measure)]
Field 1: The last year of the interval [Dimensionless]
Field 2: δ18° [‰]
Field 3: Dust (diameter 0.63-20 um) [particles/mL]
Field 4: F- [ppb]
Field 5: Cl- [ppb]
Field 6: SO42- [ppb]
Field 7: NO3- [ppb]
Field 8: Na+ [ppb]
Field 9: NH4+ [ppb]
Field 10: K+ [ppb]
Field 11: Mg2+ [ppb]
Field 12: Ca2+ [ppb]

2、Keywords

Theme：Isotopes,Ice core,Aerosol,Ice-core,Glacier(Ice Sheet)
Discipline：Atmosphere,Palaeoenvironment,Cryosphere
Places：Puruogangri, Tibetan Plateau
Time：2000,

3、Data details

1.Scale：None

2.Projection：

3.Filesize：0.1MB

4.Data format：EXCEL

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：33.0 | - |
| west：89.0 | - | east：89.0 |
| - | south：33.0 | - |

5、Time frame:2000-01-08 08:00:00+00:00--2001-01-07 19:59:59+00:00

6、Reference method

References to data:

National Centers for Environmental Information (NCEI). The 7000 years of isotope and geochemical data of the Puruogangri Ice Sheet (2000). A Big Earth Data Platform for Three Poles, 2018

References to articles:

Thompson, L.G., Yao, T.D., Davis, M.E., Mosley-Thompson, E., Mashiotta, T.A., Lin, P.N., Mikhalenko, V.N., &Zagorodnov, V.S. (2006). Holocene climate variability archived in the Puruogangri ice cap on the central Tibetan Plateau. Annals of Glaciology, 43(1), 61-69.

7、Supporting project information

8、Data resource provider

name: National Centers for Environmental Information (NCEI)
unit: National Centers for Environmental Information (NCEI)
email: data@itpcas.ac.cn