A Big Earth Data Platform for Three Poles

**Time series dataset of the long-term dry-wet index in Western China (AD1500-BP2000)**

1、Description

Original information on the long-term dry-wet index (1500-2000) in western China is obtained by integrating data on dry-wet/drought-flood conditions and precipitation amounts in the western region published over more than a decade. The integrated data sets include tree rings, ice cores, lake sediments, historical materials, etc., and there are more than 50 such data sets.
In addition to widely collecting representative data sets on dry-wet changes in the western region, this study also clarifies the main characteristics of the dry-wet changes and climate zones in the western region, and the long-term dry-wet index sequence was generated by extracting representative data from different zones. The data-based dry-wet index sequence has a 10-year temporal resolution for five major characteristic climate zones in the western region over nearly four hundred years and a high resolution (annual resolution) for three regions over the past five hundred years.
The five major characteristic climate zones in the western region with a 10-year dry-wet index resolution over the last four hundred years are the arid regions, plateau bodies, northern Xinjiang, Hetao region, and northeastern plateau, and the three regions with a annual resolution over the last five hundred years are the northeastern plateau, Hetao region, and northern Xinjiang.
For a detailed description of the data, please refer to the data file named Introduction of Dry-Wet Index Sequence Data for West China.doc.

2、Keywords

Theme：Tree rings,Lacustrine Sediments,Ice-core,Sediments,Humidity/Dryness,Tree-ring
Discipline：Atmosphere,Palaeoenvironment
Places：Huanghe Valley, Changjiang Valley, Western China
Time：950-1999, 1500-2000

3、Data details

1.Scale：None

2.Projection：

3.Filesize：4.08MB

4.Data format：文本

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：53.9 | - |
| west：73.2 | - | east：135.5 |
| - | south：17.8 | - |

5、Time frame:0950-01-12 22:22:34+00:00--2000-01-11 19:08:29+00:00

6、Reference method

References to data:

LIN Xiang, QIAN Weihong. Time series dataset of the long-term dry-wet index in Western China (AD1500-BP2000). A Big Earth Data Platform for Three Poles, doi:10.11888/Paleoenv.tpdc.2700712011

References to articles:

Qian, W.H., Hu, Q., Zhu, Y.F., &Lee, D.K. (2003). Centennial-scale dry-wet variations in East Asia. Climate Dynamics, 21(1), 77-89.

Qian, W.H., &Lin, X. (2009). An integrated analysis of Dry-Wet variability in Western China for the last 4-5 centuries. Advances in Atmospheric Sciences, 26(5), 951-961.

7、Supporting project information

8、Data resource provider

name: QIAN Weihong
unit: Department of Atmospheric Science,College of Physics,Beijing University,China
email: qianwh@pku.edu.cn

name: LIN Xiang
unit: Department of Atmospheric Science,College of Physics,Beijing University
email: