A Big Earth Data Platform for Three Poles

**Basin scale hydrological and ecological processes and their impacts on global climate change data in the Loess Region**

1、Description

The hydrological ecological process at the loess basin scale and its response to global climate change is a project of the Major Research plan of the National Natural Science Foundation of China - Environmental and Ecological Science in Western China. The project is led by liu wenzhao, a researcher from the institute of water and soil conservation, ministry of water resources, Chinese academy of sciences. The project runs from January 2003 to December 2005.
The project submitted data:
The CLIGEN parameter and output dataset of the Loess Plateau: It was generated during the evaluation and improvement of the practicality of the weather generator CLIGEN in the Loess Plateau. The dataset includes parameter data files for driving CLIGEN and 100-year daily weather data files generated by running CLIGEN from 71 meteorological stations on the Loess Plateau. The 71 sites are distributed in 7 provinces (Shanxi, Shanxi, Gansu, Inner Mongolia, Ningxia, Henan, and Qinghai). Each file is individually saved in ASCII format and can be opened for viewing with text programs.
This data set is generated based on long-term serial daily meteorological data measured by 71 meteorological stations on the Loess Plateau. Daily meteorological parameters include: precipitation, maximum, minimum, and average temperature, solar radiation, relative humidity, wind speed and direction. The data comes from the China Meteorological Science Data Sharing Service Network and the Loess Plateau Soil and Water Conservation Database. Among them, solar radiation data is available at only 12 sites on the Loess Plateau. The solar radiation parameters at other sites are generated by kriging space interpolation. The dew point temperature is calculated using the average temperature and relative humidity.

2、Keywords

Theme：Precipitation,Temperature,Winds,Humidity/Dryness
Discipline：Atmosphere
Places：Loess Plateau
Time：

3、Data details

1.Scale：None

2.Projection：None

3.Filesize：177.53MB

4.Data format：ASCII格式

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：49.36 | - |
| west：73.45 | - | east：111.2 |
| - | south：20.9 | - |

5、Time frame:None--None

6、Reference method

References to data:

LIU Wenzhao. Basin scale hydrological and ecological processes and their impacts on global climate change data in the Loess Region. A Big Earth Data Platform for Three Poles, doi:10.11888/Meteoro.tpdc.2706282010

References to articles:

刘文兆等,黄土高原CLIGEN参数及输出数据集,中国科学院水利部水土保持研究所.2009

7、Supporting project information

8、Data resource provider

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