A Big Earth Data Platform for Three Poles

**Temperature and precipitation data at meteorological stations in five Central Asian countries (1980-2015)**

1、Description

The data set covers 599 meteorological stations in five Central Asian countries, including the following elements: \* daily maximum temperature, \* daily minimum temperature, \* observed temperature, \* Precipitation (i.e. rain, melting snow), covering the following dates: 1980-1986; 1996-2005; 2010; 2014; 2015  
The data comes from ghcn-d, a data set containing global land area daily observation data, which integrates climate records.  
The data is a direct measurement of surface temperature, without interpolation or model assumptions, and contains many long-term site records. The disadvantage is uneven space coverage. Due to changes in observation time, site location, and the type of thermometer used, the records contain many heterogeneity.  
For more information about this dataset, see https://www.ncdc.noaa.gov/ghcnd-data-access

2、Keywords

Theme：Climatic Resources  
Discipline：Human-nature Relationship  
Places：five major cities in central Asia  
Time：1980-2015

3、Data details

1.Scale：None

2.Projection：

3.Filesize：662.0MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：35.08 | - |
| west：180.0 | - | east：87.29 |
| - | south：55.25 | - |

5、Time frame:1980-01-20 00:00:00+00:00--2016-01-19 00:00:00+00:00

6、Reference method

References to data:

Temperature and precipitation data at meteorological stations in five Central Asian countries (1980-2015). A Big Earth Data Platform for Three Poles, doi:10.11888/Geogra.tpdc.2710062019

References to articles:

Menne, M.J., Durre, I., Korzeniewski, B., McNeal, S., Thomas, K., Yin, X., Anthony, S., Ray, R.,   
Vose, R.S., Gleason, B.E., and Houston, T.G. (2012). Global Historical Climatology Network -   
Daily (GHCN-Daily), Version 3. [indicate subset used following decimal, e.g. Version 3.12].  
  
Menne, M.J., I. Durre, R.S. Vose, B.E. Gleason, and T.G. Houston, 2012: An overview of the Global Historical Climatology Network-Daily Database. Journal of Atmospheric and Oceanic Technology, 29, 897-910, doi.10.1175/JTECH-D-11-00103.1.  
  
Durre I., M. J. B.E. Gleason, T. G. Houston, and R. S. Vose, 2010: Comprehensive automated quality assurance of daily surface observations. J. Applied Meteor. and Climatol., 49, 1615-1633, doi.10.1175/2010JAMC2375.1  
  
Durre, I., M.J. Menne, and R.S. Vose, 2008: Strategies for evaluating quality assurance procedures. Journal of Applied Meteorology and Climatology, 47, 1785–1791, doi:10.1175/2007JAMC1706.1.

7、Supporting project information

Pan-Third Pole Environment Study for a Green Silk Road-A CAS Strategic Priority A Program

8、Data resource provider