A Big Earth Data Platform for Three Poles

**WATER: Dataset of automatic meteorological observations at the national observatory on climatology at Zhangye (2008-2009)**

1、Description

This data set contains the observation data of Zhangye National Climate Observatory from 2008 to 2009. The station is located in Zhangye, Gansu Province, with longitude and latitude of 100 ° 17 ′ e, 39 ° 05 ′ N and altitude of 1456m.   
The observation items include: atmospheric wind temperature and humidity gradient observation (2cm, 4cm, 10cm, 20m and 30m), wind direction, air pressure, photosynthesis effective radiation, precipitation, radiation four components, surface temperature, multi-layer soil temperature (5cm, 10cm, 15cm, 20cm and 40cm), soil moisture (10cm, 20cm, 50cm, 100cm and 180cm) and soil heat flux (5cm, 10cm and 15cm).   
Please refer to the instruction document published with the data for specific header and other information.

2、Keywords

Theme：Wind stress,Soil,Precipitation,Radiation,Temperature,Winds,Humidity/Dryness,Longwave radiation,Soil moisture/Water content,Air temperature,Pressure,Soil heat flux  
Discipline：Atmosphere,Terrestrial Surface  
Places：Heihe River Basin, Zhangye National Climate Observatory, Arid Region Hydrology in the Middle Reaches  
Time：2009, 2008

3、Data details

1.Scale：None

2.Projection：4326

3.Filesize：226.89MB

4.Data format：

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：39.08 | - |
| west：100.28 | - | east：100.28 |
| - | south：39.08 | - |

5、Time frame:2008-07-11 16:00:00+00:00--2010-07-11 16:00:00+00:00

6、Reference method

References to data:

WATER: Dataset of automatic meteorological observations at the national observatory on climatology at Zhangye (2008-2009). A Big Earth Data Platform for Three Poles, doi:10.3972/water973.0293.db2014

References to articles:

Xu, T., Liu, S., Xu, L., Chen ,Y., Jia, Z., Xu, Z., &Nielson, J. (2015). Temporal Upscaling and Reconstruction of Thermal Remotely Sensed Instantaneous Evapotranspiration. Remote Sensing, 7(3), 3400-3425.

7、Supporting project information

The CAS (Chinese Academy of Sciences) Action Plan for West Development Project  
National Program on Key Basic Research Project (973 Program

8、Data resource provider