A Big Earth Data Platform for Three Poles

**The fundamental database of atmospheric boundary layer of the north Tibetan Plateau (1997-2008)**

1、Description

The data set collected long-term monitoring projects from multiple stations for atmosphere, hydrology and soil in the North Tibetan Plateau.   
The data set consisted of monitoring data obtained from the automatic weather station (AWS) and the atmospheric boundary layer tower (PBL) in the field. The sensors for temperature, humidity and pressure were provided by Vaisala of Finland; the sensors for wind speed and direction were provided by Met One of America, the radiation sensors were provided by APPLEY of America and EKO of Japan; the gas analyzers were provided by Licor of America; the soil water content instrument, ultrasonic anemometers and data collectors were provided by CAMPBELL of America. The observation system was maintained by professionals regularly (2-3 times a year), the sensors were calibrated and replaced, and the collected data were downloaded and reorganized.   
The data set was processed by forming a time continuous sequence after the raw data were quality-controlled. It met the accuracy level of the original meteorological observation data of the National Weather Service and the World Meteorological Organization (WMO). The quality control included the elimination of the missing data and the systematic error caused by the failure of the sensor.

2、Keywords

Theme：Soil,Radiation,Temperature,Desert,Humidity/Dryness,Soil moisture/Water content  
Discipline：Atmosphere,Terrestrial Surface  
Places：Tibetan Plateau , North Tibet  
Time：

3、Data details

1.Scale：None

2.Projection：

3.Filesize：17700.0MB

4.Data format：\*.dat

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：38.0 | - |
| west：73.0 | - | east：104.0 |
| - | south：28.0 | - |

5、Time frame:1997-01-08 00:00:00+00:00--2009-01-07 00:00:00+00:00

6、Reference method

References to data:

HU Zeyong. The fundamental database of atmospheric boundary layer of the north Tibetan Plateau (1997-2008). A Big Earth Data Platform for Three Poles, doi:10.11888/AtmosphericPhysics.tpe.43.file2018

References to articles:

7、Supporting project information

8、Data resource provider

name: HU Zeyong  
unit: Cold and Arid Regions Environmental and Engineering Research Institute, Chinese Academy of Sciences  
email: zyhu@lzb.ac.cn