A Big Earth Data Platform for Three Poles

**Meteorological data of surface environment and observation network in China's cold region (2018)**

1、Description

1) Data content (including elements and significance): 21 stations (Southeast Tibet station, Namucuo station, Zhufeng station, mustag station, Ali station, Naqu station, Shuanghu station, Geermu station, Tianshan station, Qilianshan station, Ruoergai station (northwest courtyard), Yulong Xueshan station, Naqu station (hanhansuo), Haibei Station, Sanjiangyuan station, Shenzha station, gonggashan station, Ruoergai station（ Chengdu Institute of biology, Naqu station (Institute of Geography), Lhasa station, Qinghai Lake Station) 2018 Qinghai Tibet Plateau meteorological observation data set (temperature, precipitation, wind direction and speed, relative humidity, air pressure, radiation and evaporation)  
2) Data source and processing method: field observation at Excel stations in 21 formats  
3) Data quality description: daily resolution of the site  
4) Data application results and prospects: Based on long-term observation data of various cold stations in the Alpine Network and overseas stations in the pan-third pole region, a series of datasets of meteorological, hydrological and ecological elements in the pan-third pole region were established; Strengthen observation and sample site and sample point verification, complete the inversion of meteorological elements, lake water quantity and quality, above-ground vegetation biomass, glacial frozen soil change and other data products; based on the Internet of Things technology, develop and establish multi-station networked meteorological, hydrological, Ecological data management platform, real-time acquisition and remote control and sharing of networked data.

2、Keywords

Theme：Precipitation,Radiation,Temperature,Precipitation amount,Solar radiation,Air temperature  
Discipline：Atmosphere  
Places：Qinghai-Tibetan Plateau  
Time：The year of 2018

3、Data details

1.Scale：1

2.Projection：

3.Filesize：1.3MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：44.0 | - |
| west：74.0 | - | east：101.0 |
| - | south：26.0 | - |

5、Time frame:2018-07-22 00:00:00+00:00--2019-07-21 00:00:00+00:00

6、Reference method

References to data:

ZHU Liping. Meteorological data of surface environment and observation network in China's cold region (2018). A Big Earth Data Platform for Three Poles, doi:10.11888/Meteoro.tpdc.2704232020

References to articles:

彭萍, 朱立平. (2017). 基于野外站网络的青藏高原地表过程观测研究, 科技导报, 35(6), 97-102

7、Supporting project information

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

8、Data resource provider

name: ZHU Liping  
unit: Institute of Tibetan Plateau Research, CAS  
email: lpzhu@itpcas.ac.cn