A Big Earth Data Platform for Three Poles

**Meteorological data of surface environment and observation network in high and cold regions of China (2020)**

1、Description

1) Data content (including elements and significance): 19 stations of Alpine network (Southeast Tibet station, Namuco station, Everest station, mustage station, Ali station, Golmud station, Tianshan station, Qilian mountain station, Ruoergai station (2 points in total, Northwest Institute and Chengdu Institute of Biology), Yulong Snow Mountain station and Naqu station (including stations, Qinghai Tibet Institute, Northwest Institute and Geography Institute), Haibei Station, Sanjiangyuan station, Shenza station,, Lhasa station and Qinghai Lake Station) meteorological observation data set of Qinghai Tibet Plateau in 2020 (temperature, precipitation, wind direction and speed, relative humidity, air pressure, radiation and flux)
2) Data source and processing method: Excel format for field observation of 19 stations of Alpine network
3) Data quality description: Daily resolution of the station
4) Data application achievements and prospects: Based on the long-term observation data of field stations of the alpine network and overseas stations in the pan third pole region, a series of data sets of meteorological, hydrological and ecological elements in the pan third pole region are established; Complete the inversion of meteorological elements, lake water quantity and quality, aboveground vegetation biomass, glacier and frozen soil change and other data products through intensive observation in key areas and verification of sample plots and sample points; Based on the Internet of things technology, a multi station networked meteorological, hydrological and ecological data management platform is developed to realize real-time acquisition, remote control and sharing of networked data. In addition, the data set is an update of the meteorological data of the surface environment and observation network in China's high and cold regions (2019).

2、Keywords

Theme：Maximum/Minimum temperature,Precipitation,Temperature,Winds,wind speed
Discipline：Atmosphere
Places：Qinghai-Tibet
Time：2020

3、Data details

1.Scale：None

2.Projection：

3.Filesize：1.25MB

4.Data format：None

4、Space scope

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

5、Time frame:2019-12-31 16:00:00+00:00--2020-12-30 16:00:00+00:00

6、Reference method

References to data:

ZHU Liping. Meteorological data of surface environment and observation network in high and cold regions of China (2020). A Big Earth Data Platform for Three Poles, doi:10.11888/Atmos.tpdc.2718752021

References to articles:

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