A Big Earth Data Platform for Three Poles

**Surface environment and meteorological data of observation network in alpine regions of China (2019)**

1、Description

1) Data content (including elements and significance): 19 stations (South-East Tibetan station, Namucuo station, Qomolangma station, Medog station, Ngari station, Naqu station（ITPCAS）, Golmud station, Tianshan station, Qilianshan station, Ruoergai station(NIEER) , Yulong Xueshan station, Naqu station(NIEER), Haibei Station, Sanjiangyuan station, Shenzha station, Ruoergai station (CIB), Naqu station(IG SNRR), Lhasa station，Qinghai lake station) Meteorological observation data sets (temperature, precipitation, wind direction and wind speed, relative humidity, atmospheric pressure, radiation and evaporation) of the Qinghai Tibet Plateau in 2019
2) Data source and processing method: field observation excel format of 19 stations in Alpine network
3) Data quality description: Daily resolution of stations
4) Achievements and prospects of data application: Based on the long-term observation data of the field stations in the alpine network and the overseas stations in the pan third polar region, a series of data sets of meteorological, hydrological and ecological elements in the pan third polar region are established; through the intensive observation and sample plot verification in key areas, the meteorological elements, lake water and water quality, aboveground vegetation biomass, glacier and frozen soil changes are completed According to the inversion of products; based on the technology of Internet of things, the meteorological, hydrological and ecological data management platform with multi station networking is developed to realize real-time acquisition, remote control and sharing of online data.

2、Keywords

Theme：Visibility
Discipline：Atmosphere
Places：Tibetan Plateau
Time：Daily, 2019

3、Data details

1.Scale：None

2.Projection：

3.Filesize：1.7MB

4.Data format：None

4、Space scope

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

5、Time frame:2019-01-12 16:00:00+00:00--2020-01-11 16:00:00+00:00

6、Reference method

References to data:

ZHU Liping. Surface environment and meteorological data of observation network in alpine regions of China (2019). A Big Earth Data Platform for Three Poles, doi:10.11888/Meteoro.tpdc.2707472020

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