A Big Earth Data Platform for Three Poles

**Basic meteorological data of glacier moraine area at 24K in Galongla, Southeast Tibet station, Chinese Academy of Sciences (2018-2019)**

1、Description

The data are collected from the automatic weather station (AWS, Campbell company) in the moraine area of the 24K glacier in the Southeast Tibet Plateau, Chinese Academy of Sciences. The geographic coordinates are 29.765 ° n, 95.712 ° E and 3950 m above sea level. The data include daily arithmetic mean data of air temperature (℃), relative humidity (%), wind speed (M / s), net radiation (w / m2), water vapor pressure (kPa) and air pressure (mbar). In the original data, an average value was recorded every 30 minutes before October 2018, and then an average value was recorded every 10 minutes. The temperature and humidity are measured by hmp155a temperature and humidity probe. The net radiation probe is nr01, the atmospheric pressure sensor probe is ptb210, and the wind speed sensor is 05103. These probes are 2 m above the ground. Data quality: the data has undergone strict quality control. The original abnormal data of 10 minutes and 30 minutes are removed first, and then the arithmetic mean of each hour is calculated. Finally, the daily value is calculated. If the number of hourly data is less than 24, the data is removed, and the corresponding date data in the data table is empty. In addition to the lack of some parameter data due to the thick snow and low temperature in winter and spring, the data can be used by scientific researchers who study climate, glacier and hydrology through strict quality control.

2、Keywords

Theme：Temperature,Glacier moraine cover,Visibility,Humidity/Dryness,Glacier(Ice Sheet)
Discipline：Atmosphere,Cryosphere
Places：debris-covered 24K Glacier, 24K Glacier
Time：2018-2019

3、Data details

1.Scale：None

2.Projection：

3.Filesize：0.071MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：29.8 | - |
| west：95.7 | - | east：95.8 |
| - | south：29.7 | - |

5、Time frame:2017-12-31 16:00:00+00:00--2019-12-31 03:59:59+00:00

6、Reference method

References to data:

Luo Lun. Basic meteorological data of glacier moraine area at 24K in Galongla, Southeast Tibet station, Chinese Academy of Sciences (2018-2019). A Big Earth Data Platform for Three Poles, doi:10.11888/Meteoro.tpdc.2711312020

References to articles:

罗伦, 朱立平, 王永杰, 杨威, 旦增, 张宏波. (2019). 藏东南嘎隆拉冰川表碛冻融过程与零点幕效应. 冰川冻土, 41(4), 751-760．

Yang, W., Yao, T.D., Zhu, M.L., et al. (2017). Comparison of the meteorology and surface energy fluxes of debris-free and debris-covered glaciers in the southeastern Tibetan Plateau[J]. Journal of Glaciology, 63(242), 1090-1104.

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: Luo Lun
unit: Institute of Tibetan Plateau Research, CAS
email: luolun@itpcas.ac.cn