A Big Earth Data Platform for Three Poles

**Analysis data of plant carbon and nitrogen cycle (2019-2020)**

1、Description

The data were collected from the sample plot of Haibei Alpine Meadow Ecosystem Research Station (101°19′E，37°36′N，3250m above sea level), which is located in the east section of Lenglongling, the North Branch of Qilian Mountain in the northeast corner of Qinghai Tibet Plateau. Alpine meadow is the main vegetation type in this area. The data recorded the light, air temperature and humidity, wind temperature and wind speed above the alpine plant canopy. The radiation intensity above the alpine plant canopy was recorded by LI-190R photosynthetic effective radiation sensor (LI-COR, Lincoln NE, USA) and LR8515 data collector (Hioki E. E. Co., Nagano, Japan), and the recording interval was once per second. S580-EX temperature and humidity recorder (Shenzhen Huatu) and universal anemometer are used (Beijing Tianjianhuayi) record the daily dynamics of air temperature and humidity, wind temperature and wind speed every three seconds. The recording time is from 10:00 on July 13 to 21:00 on August 17, Beijing time. Due to the need to use USB storage time and replace the battery every day, 3-5min of data is missing every day, and the missing time period is not fixed. At present, the data has not been published. Through research on the data The data can further explore the microenvironment of alpine plant leaves and its possible impact on leaf physiological response.

2、Keywords

Theme：Maximum/Minimum temperature,Photosynthetically active radiation,Temperature,Wind temperature,Vegetation,Winds,Grassland,Land Surface Parameter,Wind direction,PAR,Air temperature,Grassland,westerly-monsoon,wind speed
Discipline：Atmosphere,Terrestrial Surface
Places：Haibei Tibetan Autonomous Prefecture, Qinghai Province
Time：2019-2020

3、Data details

1.Scale：None

2.Projection：

3.Filesize：217.3MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：37.6 | - |
| west：101.3 | - | east：101.3 |
| - | south：37.6 | - |

5、Time frame:2020-07-12 16:00:00+00:00--2020-08-16 16:00:00+00:00

6、Reference method

References to data:

TANG Yanhong, ZHENG Tianyu. Analysis data of plant carbon and nitrogen cycle (2019-2020). A Big Earth Data Platform for Three Poles, doi:10.11888/Terre.tpdc.2719432021

References to articles:

7、Supporting project information

Second Tibetan Plateau Scientific Expedition Program

8、Data resource provider

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