A Big Earth Data Platform for Three Poles

**Daily soil temperature and moisture dataset in a small catchment of Qinghai Lake Basin (2019-2021)**

1、Description

This dataset provide the daily observations of soil water contents and soil temperature in the Qihuli catchment in the upper reach of Qihai Lake basin. Daily soil water content and soil temperature were measured in the shady slope, sunny slope and the outfall of this catchment in the period of 2019-2021. The Qihuli catchment is located at 37°25′N and 100°15′E, with the elevation ranging from 3565-3716. The soil water content and soil temperature were continuously monitored using the ECH2O and 5TE sensors at both shady and sunny slopes. The monitoring depths are 10 cm, 30 cm, 50 cm, 80 cm, 110 cm, and 10 cm, 30 cm, 60 cm, 90 cm, and 120 cm at shady and sunny slope sites, respectively. The soil water content and soil temperature were monitored continuously using the Trime and PICO32 sensors, which were installed at ten soil depths, including 5 cm, 10 cm, 20 cm, 40 cm, 80 cm, 100 cm, 120 cm, 140 cm, 160 cm and 180 cm. This dataset can support the long-term investigation of ecohydrological processes in typical catchment and also support the validation of hydrology models.

2、Keywords

Theme：Soil,Soil water content,Soil temperature,Hydrology,Soil Moisture,Soil temperature  
Discipline：Terrestrial Surface  
Places：Qinghai Lake Basin  
Time：2019-2021, Daily

3、Data details

1.Scale：None

2.Projection：

3.Filesize：1.0MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：37.41 | - |
| west：100.25 | - | east：100.25 |
| - | south：37.41 | - |

5、Time frame:2018-12-31 16:00:00+00:00--2021-12-30 16:00:00+00:00

6、Reference method

References to data:

Li Xiaoyan. Daily soil temperature and moisture dataset in a small catchment of Qinghai Lake Basin (2019-2021). A Big Earth Data Platform for Three Poles, doi:10.11888/Terre.tpdc.2726802022

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

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