A Big Earth Data Platform for Three Poles

**Meteorological observation data at grassland site of Ngoring Lake basin from 2017 to 2020**

1、Description

This data set is the conventional meteorological observation data of the Ngoring Lake Grassland Observation site (GS) in the source region of the Yellow River from 2017 to 2020, obtained by using Kipp&Zonen CNR4, Vaisala HMP155A, PTB110 and other instruments, with a time resolution of half an hour. Mainly include wind speed, wind direction, temperature, relative humidity（specific humidity in 2020）, air pressure, downward short-wave radiation, downward long-wave radiation, precipitation.

2、Keywords

Theme：Radiation,Temperature,Earth SurFace Processes,Humidity/Dryness,Grassland
Discipline：Atmosphere,Terrestrial Surface
Places：Ngoring Lake, Source Region of the Yellow River, Tibetan Plateau
Time：2020, 2017, 2019, 2018

3、Data details

1.Scale：None

2.Projection：

3.Filesize：6.0MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：34.914 | - |
| west：97.554 | - | east：97.554 |
| - | south：34.914 | - |

5、Time frame:2016-12-31 16:00:00+00:00--2020-12-30 16:00:00+00:00

6、Reference method

References to data:

MENG Xianhong, LI Zhaoguo. Meteorological observation data at grassland site of Ngoring Lake basin from 2017 to 2020. A Big Earth Data Platform for Three Poles, doi:10.11888/Atmos.tpdc.2728572022

References to articles:

Meng, X.H., Lyu, S.H., Li, Z.G., Ao, Y.H., Wen, L.J., Shang, L.Y., Wang, S.Y., Deng, M.S., Zhang, S.B., Zhao, L., Chen, H., Ma, D., Li, S.S., Shu, L.L., An, Y.Y., & Niu, H.L. (2022). Dataset of comparative observations for land surface processes over the semi-arid alpine grassland against alpine lake in the source region of the Yellow River. Advances in Atmospheric Science. Doi: 10.1007/s00376-022-2118-y.

Li, Z., Lyu, S., Chen, S., Ao, Y., Zhao, L., Chen, H., & Meng, X. (2021). Observed characteristics of the water and heat transfer of the soil–snow–atmosphere system through the snowpack in the eastern Tibetan Plateau. Atmospheric Research, 248, 105195.

Li, Z., Lyu, S., Wen, L., Zhao, L., Ao, Y., & Wang, S. (2017). Effect of a cold, dry air incursion on atmospheric boundary layer processes over a high-altitude lake in the Tibetan Plateau. Atmospheric Research, 185, 32-43.

7、Supporting project information

Second Tibetan Plateau Scientific Expedition Program
CASEarth:Big Earth Data for Three Poles（grant No. XDA19070000）
Pan-Third Pole Environment Study for a Green Silk Road-A CAS Strategic Priority A Program

8、Data resource provider

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