A Big Earth Data Platform for Three Poles

**Observation data set of field meteorological stations in Central Asia and Western Asia (2019-2020)**

1、Description

The observation data set of field meteorological stations in Central Asia and Western Asia (2019-2020) includes the monthly meteorological data of 12 field meteorological stations in Kazakhstan (5 stations), Kyrgyzstan (1 station), Tajikistan (3 stations), Uzbekistan (1 station) and Iran (2 stations), involving 21 observation indicators: Monthly average temperature (TA), monthly average pressure (PA) Monthly average relative humidity (RH), monthly total rainfall (PR), monthly average wind speed (WS), monthly average wind direction (WD), 0cm monthly average soil temperature (TS1), 5cm monthly average soil temperature (TS2), 10cm monthly average soil temperature (Ts3), 15cm monthly average soil temperature (ts4), 20cm monthly average soil temperature (ts5), 40cm monthly average soil temperature (TS6) 60cm monthly average soil temperature (ts7), 100cm monthly average soil temperature (ts8), monthly total solar radiation (SR), monthly total reflected radiation (GR), monthly total ultraviolet radiation (UVR), monthly total net radiation (NR), monthly total photosynthetic effective radiation (PAR), monthly total soil heat flux (HF) and monthly total sunshine duration (SD).  
The 12 field stations cover farmland, forest, grassland, desert, desert, wetland, plateau, mountain and other different ecosystem types. The data length starts from October 2019 to December 2020. The original meteorological data collected by the ground meteorological observation station is obtained after format conversion after screening and review, and the data quality is good. Central Asia has diverse climate types, fragile ecological environment and frequent meteorological disasters. The establishment of this data set provides data support for long-term research in the fields of ecological environment monitoring, disaster prevention and reduction, climate change and ecological environment in Central Asia. At present, it has been applied in the research of ecological environment monitoring in Central Asia.

2、Keywords

Theme：Precipitation,Temperature,Pressure  
Discipline：Atmosphere  
Places：West Asia, Central Asia  
Time：2019-2020

3、Data details

1.Scale：None

2.Projection：

3.Filesize：0.118MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：55.37 | - |
| west：46.54 | - | east：87.12 |
| - | south：35.1 | - |

5、Time frame:2019-09-30 16:00:00+00:00--2020-12-30 16:00:00+00:00

6、Reference method

References to data:

LI Yaoming, LI Yaoming. Observation data set of field meteorological stations in Central Asia and Western Asia (2019-2020). A Big Earth Data Platform for Three Poles, doi:10.11888/Atmos.tpdc.2718722021

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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