A Big Earth Data Platform for Three Poles

**Comprehensive observation data set of cloud precipitation process in Liupan Mountain (2021)**

1、Description

The data set is a sub data set of the comprehensive observation data set of cloud precipitation process, which is derived from the comprehensive investigation and test carried out in Liupanshan area during 2021. Liupanshan scientific research is carried out in Dawan station, Jingyuan station, Liupanshan station, Longde station, etc. Dawan station is mainly equipped with cfl-06 wind profile radar, ht101 cloud radar, mrr-2 micro rain radar, dsg5 raindrop spectrometer, three-dimensional anemometer, C12 laser cloud altimeter. Jingyuan station is mainly equipped with qfw-6000 microwave radiometer, hmb-kps cloud radar, dsg5 raindrop spectrometer Cl51 laser cloud altimeter. Liupanshan station is mainly equipped with ht101 cloud radar, mrr-2 micro rain radar, Ott laser raindrop spectrometer, cloud condensation nodule (CCN) counter, three-dimensional anemometer, FM120 droplet spectrometer and C12 laser cloud altimeter. Longde station is mainly equipped with rpg-hatpro-g4 microwave radiometer, cfl-06 wind profile radar, ht101 Cloud Radar, mrr-2 micro rain radar Ott laser raindrop spectrometer, C12 laser cloud altimeter. Meanwhile automatic weather station, iron tower (Shangpu), X-band all solid-state dual polarization Doppler Weather Radar (Pengyang County), gradient station and other observations were done. It can be used to study the impact of the eastward movement of the plateau system on the downstream, and to reveal the impact of the atmospheric boundary layer and free atmospheric exchange process on aerosols, clouds Fog and precipitation and their interaction.

2、Keywords

Theme：DSD,Precipitation,Drop spectrometer,laser cloud altimeter,X band radar,Remote Sensing Technology,Ka band milliwave Cloud Radar,Radar Weather,Micro rain radar,Ground-based microwave radiometer,wind profiler
Discipline：Atmosphere,Remote Sensing Technology
Places：Liupan Mountain
Time：2021

3、Data details

1.Scale：None

2.Projection：

3.Filesize：494738.0MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：37.0 | - |
| west：105.0 | - | east：107.0 |
| - | south：35.0 | - |

5、Time frame:2021-05-12 16:00:00+00:00--2021-11-05 16:00:00+00:00

6、Reference method

References to data:

FU Danhong . Comprehensive observation data set of cloud precipitation process in Liupan Mountain (2021). A Big Earth Data Platform for Three Poles, doi:10.11888/Atmos.tpdc.2719962022

References to articles:

7、Supporting project information

Second Tibetan Plateau Scientific Expedition Program

8、Data resource provider

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