A Big Earth Data Platform for Three Poles

**Comprehensive observation data set of cloud precipitation process in Sanjiang source (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 Sanjiangyuan area during 2021. The scientific research of Sanjiangyuan mainly focuses on Advanced Air King aircraft observation. The airborne observation system includes aerosol, cloud particle spectrometer and imager observation. The observation elements include precipitation particle concentration and image of IP probe, cloud particle concentration and image of CIP probe, cloud and aerosol particle data of CAS probe and Hotwire\_ LWC probe liquid water data, CAPS Summary aerosol, cloud and precipitation comprehensive data, AIMMS probe conventional meteorological elements, PCASP -100 probe aerosol particle data. Ground observation includes raindrop spectrometer, microwave radiometer and X-band radar. Raindrop spectrometer mainly observes equivalent volume diameter and particle falling speed. Microwave radiometer mainly observes temperature, humidity, water vapor and liquid water. And X-band radar mainly observes intensity, velocity and spectral width. It can provide data support for the study of the impact of westerly monsoon synergy on the cloud precipitation process of Sanjiang source.

2、Keywords

Theme：DSD,Precipitation,aircraft sounding,Remote Sensing Technology,x band radar,Radar Weather,Ground-based microwave radiometer  
Discipline：Atmosphere,Remote Sensing Technology  
Places：Zeku County, Sanjiangyuan  
Time：2021

3、Data details

1.Scale：None

2.Projection：

3.Filesize：58616.0MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：36.0 | - |
| west：100.5 | - | east：102.5 |
| - | south：34.0 | - |

5、Time frame:2021-05-12 16:00:00+00:00--2021-10-30 16:00:00+00:00

6、Reference method

References to data:

FU Danhong . Comprehensive observation data set of cloud precipitation process in Sanjiang source (2021). A Big Earth Data Platform for Three Poles, doi:10.11888/Atmos.tpdc.2719982022

References to articles:

7、Supporting project information

Second Tibetan Plateau Scientific Expedition Program

8、Data resource provider

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