A Big Earth Data Platform for Three Poles

**Atmospheric environment data of navigation observation (2021)**

1、Description

This data-set contains the field measurements of meteorological parameters，trace gases, PM2. 5/PM10, particle number size distribution (12-530 nm), aerosol chemical composition (sulfate and nitrate in PM2.5) at Lulang and Xihai (29.8oN, 94.7oE, 3300 m a.s.l. and 36.9oN, 100.9oE, 3080 m a.s.l., respectively) in southeastern and northeastern part of Tibetan Plateau. The time period of this data-set is from April to May of 2021 and June of 2021. The data-set comes from two measurement campaigns in 2021. The mobile observation platform of Nanjing University, including various online measurement instruments, was used to conduct the field measurements. The data in this data-set is finalized data with the data correction according to the instruments calibration and data quality control based on the data closure research results between multiple instruments. The atmospheric components data, such as trace gases, PM2.5/PM10, particle number size distribution, aerosol chemical composition, are the observation data under actual atmospheric pressure conditions without pressure corrections. The data-set can be directly used to analyze the atmospheric physics and chemistry related scientific issues in the southeastern and northeastern part of the Tibetan Plateau. This data-set supplements the lack of field observation data related to the atmospheric environment in the northeastern part of the Tibetan Plateau.

2、Keywords

Theme：Atmospheric Quality,Aerosol,POPs,Aerosol optical depth/Thickness,Atmospheric Trace Gase,Sulfur oxides  
Discipline：Atmosphere  
Places：Xihaizhen, Lulang  
Time：2021

3、Data details

1.Scale：None

2.Projection：

3.Filesize：30.0MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：29.7 | - |
| west：94.7 | - | east：94.75 |
| - | south：29.95 | - |

5、Time frame:2021-03-31 16:00:00+00:00--2021-06-22 16:00:00+00:00

6、Reference method

References to data:

NIE Wei, CHI Xuguang. Atmospheric environment data of navigation observation (2021). A Big Earth Data Platform for Three Poles, doi:10.11888/Atmos.tpdc.2719482021

References to articles:

7、Supporting project information

Second Tibetan Plateau Scientific Expedition Program

8、Data resource provider

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