A Big Earth Data Platform for Three Poles

**Element data of aerosols in remote station (Ranwu) at the southeast of Tibetan Plateau (2019-2020)**

1、Description

Knowledge the elemental composition of aerosols in remote areas is very important for assessing the impact of human activities. This dataset reports the elemental composition of atmospheric aerosols (TSP) in Ranwu, a remote area in the southeast of the Tibet Plateau, from November 2019 to December 2020. The data include acid soluble and total soluble components. The results of acid soluble components are determined by adding 1% sample volume of nitric acid to react for seven days; The treatment of the total soluble component is to use the mixture of nitric acid and hydrofluoric acid for determination after pressurized digestion. The Chinese loess reference material (GBW07408) is used for quality control. In general, the element concentrations in this area are lower than those in other stations in the southeast of the Qinghai Tibet Plateau, but slightly higher than those in the interior of the plateau (Nam co). The interior of the Tibet Plateau is the main source of elements from the crust, and the typical heavy metal elements are the long-distance transport of pollutants emitted by human activities in South Asia and Southeast Asia. The data supplement the database of aerosol elements in the southeast of the Tibet Plateau.

2、Keywords

Theme：elemental composition,Aerosol
Discipline：Atmosphere
Places：southeastern Tibetan plateau
Time：2019, 2020

3、Data details

1.Scale：None

2.Projection：

3.Filesize：0.02MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：29.21 | - |
| west：96.51 | - | east：96.51 |
| - | south：29.21 | - |

5、Time frame:2019-11-25 16:00:00+00:00--2020-12-07 16:00:00+00:00

6、Reference method

References to data:

LI Chaoliu . Element data of aerosols in remote station (Ranwu) at the southeast of Tibetan Plateau (2019-2020). A Big Earth Data Platform for Three Poles, doi:10.11888/Atmos.tpdc.2729792022

References to articles:

Xu, Y., Li, Q., Xie, S., Zhang, C., Yan, F., Liu, Y., Kang, S., Gao, S., & Li, C. (2022). Composition and sources of heavy metals in aerosol at a remote site of Southeast Tibetan Plateau, China. Science of the Total Environment, 157308.

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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