A Big Earth Data Platform for Three Poles

**Aerosol optical properties based on ground observation data in Arctic Alaska (1998-2016)**

1、Description

The aerosol optical thickness data of the Arctic Alaska station is based on the observation data products of the atmospheric radiation observation plan of the U.S. Department of energy at the Arctic Alaska station. The data coverage time is from 1998 to 2016, and the time resolution is hour by hour. The coverage site is the Arctic Alaska station, with the longitude and latitude coordinates of (71 ° 19 ′ 22.8 ″ n, 156 ° 36 ′ 32.4 ″ w). The source of the observed data is retrieved from the radiation data observed by mfrsr instrument. The optical characteristic variable is aerosol optical thickness, and the error range of the observed inversion is about 15%. The data format is NC format.

2、Keywords

Theme：Atmospheric remote sensing products,Aerosol,Aerosol optical depth/Thickness,Atmosphere Remote Sensing  
Discipline：Atmosphere  
Places：Arctic, Alaska  
Time：1998-2016

3、Data details

1.Scale：None

2.Projection：

3.Filesize：3000.0MB

4.Data format：nc

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：70.0 | - |
| west：318.0 | - | east：356.0 |
| - | south：50.0 | - |

5、Time frame:1998-01-06 16:00:00+00:00--2017-01-05 16:00:00+00:00

6、Reference method

References to data:

Aerosol optical properties based on ground observation data in Arctic Alaska (1998-2016). A Big Earth Data Platform for Three Poles, doi:10.11888/AtmosPhys.tpe.00000036.file2018

References to articles:

7、Supporting project information

CASEarth:Big Earth Data for Three Poles（grant No. XDA19070000）

8、Data resource provider