A Big Earth Data Platform for Three Poles

**HiWATER: Data subset of WSN observation in the midstream of the Heihe River Basin (synchronous with PLMR)**

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 updated from 2017 to 2019, with the time resolution of hour by hour. The coverage site is the northern 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 characteristic variable is aerosol optical thickness, and the error range of the observed inversion is about 15%. The data format is NC format. The aerosol optical thickness data of Qomolangma station and Namuco station in the Qinghai Tibet Plateau is based on the observation data products of Qomolangma station and Namuco station from the atmospheric radiation view of the Institute of Qinghai Tibet Plateau of the Chinese Academy of Sciences. The data coverage time is from 2017 to 2019, the time resolution is hour by hour, the coverage sites are Qomolangma station and Namuco station, the longitude and latitude coordinates are (Qomolangma station: 28.365n, 86.948e, Namuco station Mucuo station: 30.7725n, 90.9626e). The source of the observed data is retrieved from the radiation data observed by mfrsr instrument. The characteristic variable is aerosol optical thickness, and the error range of the observed inversion is about 15%. The data format is TXT.

2、Keywords

Theme：Soil,Soil temperature,Soil moisture/Water content
Discipline：Terrestrial Surface
Places：Heihe River Basin, the artificial oasis experimental area in the middle reaches, flux observation matrix
Time：2012

3、Data details

1.Scale：None

2.Projection：4326

3.Filesize：28.0MB

4.Data format：文本

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：38.9055 | - |
| west：100.3215 | - | east：100.4097 |
| - | south：38.8369 | - |

5、Time frame:2012-07-13 10:00:00+00:00--2012-08-15 16:00:00+00:00

6、Reference method

References to data:

MA Mingguo, LI Xin, Li Dazhi. HiWATER: Data subset of WSN observation in the midstream of the Heihe River Basin (synchronous with PLMR). A Big Earth Data Platform for Three Poles, doi:10.3972/hiwater.129.2013.db2015

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Li, X., Liu, S.M., Xiao, Q., Ma, M.G., Jin, R., Che, T., Wang, W.Z., Hu, X.L., Xu, Z.W., Wen, J.G., Wang, L.X. (2017). A multiscale dataset for understanding complex eco-hydrological processes in a heterogeneous oasis system. Scientific Data, 4, 170083. doi:10.1038/sdata.2017.83.

7、Supporting project information

Heihe Watershed Allied Telemetry Experimental Research (HiWATER)
National High-tech R&D Program of China (863 Program)

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