A Big Earth Data Platform for Three Poles

**Meteorological observation data from Qomolangma station for atmospheric and environmental observation and research (2005-2016)**

1、Description

This data set includes the daily averages of the temperature, pressure, relative humidity, wind speed, precipitation, global radiation, P2.5 concentration and other meteorological elements observed by the Qomolangma Station for Atmospheric and Environmental Observation and Research from 2005 to 2016. The data are aimed to provide service for students and researchers engaged in meteorological research on the Tibetan Plateau. The precipitation data are observed by artificial rainfall barrel, the evaporation data are observed by Φ20 mm evaporating pan, and all the others are daily averages and ten-day means obtained after half hour observational data are processed. All the data are observed and collected in strict accordance with the Equipment Operating Specifications, and some obvious error data are eliminated when processing the generated data.

2、Keywords

Theme：Precipitation,Radiation,Temperature,Solar radiation,Pressure  
Discipline：Atmosphere  
Places：Tibetan Plateau , Qomolangma  
Time：2005-2016

3、Data details

1.Scale：None

2.Projection：

3.Filesize：19.34MB

4.Data format：EXCEL

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：28.36 | - |
| west：86.95 | - | east：86.95 |
| - | south：28.36 | - |

5、Time frame:2005-01-08 16:00:00+00:00--2017-01-07 16:00:00+00:00

6、Reference method

References to data:

MA Yaoming. Meteorological observation data from Qomolangma station for atmospheric and environmental observation and research (2005-2016). A Big Earth Data Platform for Three Poles, doi:10.11888/AtmosEnviron.tpe.0000014.file2018

References to articles:

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Ma, Y.M., Ma, W.Q., Zhong, L., Hu, Z., Li, M., Zhu, Z., et al. (2017). Monitoring and Modeling the Tibetan Plateau’s climate system and its impact on East Asia, Scientific Reports, 7, 44574, doi:10.1038/srep44574.  
  
Ma, Y.M., Kang, S.C., Zhu, L.P., Xu, B.Q., Tian, L.D., & Yao, T.D. (2008). Tibetan Observation and Research Platform- Atmosphere–land interaction over a heterogeneous landscape, Bulletin of the American Meteorological Society. 89, 1487–1492. doi:10.1175/2008BAMS2545.1.  
  
Ma, Y.M., Zhong, L., Wang, B.B., Ma, W.Q., Chen, X.L., & Li, M. (2011). Determination of land surface heat fluxes over heterogeneous landscape of the Tibetan Plateau by using the MODIS and in-situ data. Atmospheric Chemistry and Physics, 11, 10461–10469. doi:10.5194/acp-11-10461-2011.

7、Supporting project information

8、Data resource provider

name: MA Yaoming  
unit: Institute of Tibetan Plateau Research, Chinese Academy of Sciences  
email: ymma@itpcas.ac.cn