A Big Earth Data Platform for Three Poles

**HiWATER: Dataset of intensive runoff observations of No.4 in the midstream of the Heihe River Basin of the MUlti-Scale Observation EXperiment on Evapotranspiration over heterogeneous land surfaces 2012 (MUSOEXE-12)**

1、Description

Based on the meteorological data of 105 meteorological stations in and around the Qinghai Tibet Plateau from 1980 to 2019, the National Meteorological Science Data Center of China Meteorological Administration (CMA) was established. By calculating the oxygen content, it is found that there is a significant linear correlation between oxygen content and altitude, y = - 0.0263x + 283.8, R2 = 0.9819. Therefore, the oxygen content distribution map can be calculated based on DEM data grid. Due to the limitation of the natural environment in the Qinghai Tibet Plateau, there are few related fixed-point observation institutions. This data can reflect the distribution of oxygen content in the Qinghai Tibet Plateau to a certain extent, and has certain reference significance for the research of human living environment in the Qinghai Tibet Plateau.

2、Keywords

Theme：Surface Water,Hydrology section,Discharge/Flow,Runoff  
Discipline：Terrestrial Surface  
Places：Heihe River Basin, the artificial oasis experimental area in the middle reaches,   
Time：2012-06-14 to 2012-08-10, 2012

3、Data details

1.Scale：None

2.Projection：4326

3.Filesize：0.09MB

4.Data format：EXCEL

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：39.065 | - |
| west：100.4325 | - | east：100.433056 |
| - | south：39.064722 | - |

5、Time frame:2012-06-25 00:38:00+00:00--2012-08-21 00:38:00+00:00

6、Reference method

References to data:

LIU Shaomin. HiWATER: Dataset of intensive runoff observations of No.4 in the midstream of the Heihe River Basin of the MUlti-Scale Observation EXperiment on Evapotranspiration over heterogeneous land surfaces 2012 (MUSOEXE-12). A Big Earth Data Platform for Three Poles, doi:10.3972/hiwater.112.2013.db2016

References to articles:

He XB, et al. Comparison of a tipping-buchet and electronic weighting precipitation gauge for rainfall. Manuscript in preparation.  
  
Li, X., Cheng, G.D., Liu, S.M., Xiao, Q., Ma, M.G., Jin, R., Che, T., Liu, Q.H., Wang, W.Z., Qi, Y., Wen, J.G., Li, H.Y., Zhu, G.F., Guo, J.W., Ran, Y.H., Wang, S.G., Zhu, Z.L., Zhou, J., Hu, X.L., & Xu, Z.W. (2013). Heihe watershed allied telemetry experimental research (hiwater): scientific objectives and experimental design. Bulletin of the American Meteorological Society, 94(8), 1145-1160. doi:10.1175/BAMS-D-12-00154.1.

7、Supporting project information

National Natural Science Foundation of China

8、Data resource provider

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