A Big Earth Data Platform for Three Poles

**WATER: Dataset of LAS (Large Aperture Scintillometer) observations at the Linze grassland station from May to Aug ,2008**

1、Description

The dataset of LAS (Large Aperture Scintillometer, made in Holland) observations was obtained in the Linze grassland station, Linze county (Gansu province), from May 19 to Aug. 31, 2008. The instrument was composed of the transmitter (100°04′10.4″E, 39°15′02.8″N, 9.25m), the receiver (100°03′36.8″E, 39°15′02.8″N, 9.1m) and the data acquisition system. The transmitter and the receiver were 1550m away from each other and the operating altitude was 9.2m. The observation item was natural logarithm of structural parameters of the refractive index (UCn2). The transmitting frequency was 0.5HZ. The data were named after WATER\_LAS\_Linze\_yyyymmdd-yyyymmdd.csv (yyyymmdd-yyyymmdd for observation time). The missing data were marked "None". For more detailed information, please refer to Directions on LAS (Large Aperture Scintillometer) observations.

2、Keywords

Theme：Surface energy balance,Radiation,Sensible heat flux  
Discipline：Atmosphere  
Places：Heihe River Basin, Arid Region Hydrology in the Middle Reaches,   
Time：

3、Data details

1.Scale：None

2.Projection：4326

3.Filesize：1.29MB

4.Data format：

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：39.35 | - |
| west：100.0 | - | east：100.3 |
| - | south：39.05 | - |

5、Time frame:2008-06-01 16:00:00+00:00--2008-09-13 16:00:00+00:00

6、Reference method

References to data:

LI Xin, LIU Shaomin, XU Ziwei. WATER: Dataset of LAS (Large Aperture Scintillometer) observations at the Linze grassland station from May to Aug ,2008. A Big Earth Data Platform for Three Poles, doi:10.3972/water973.0285.db2015

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王维真, 徐自为, 刘绍民, 李新, 马明国, 王介民. (2009). 黑河流域不同下垫面水热通量特征分析. 地球科学进展, 24(7), 714-723.  
  
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Liu, S.M., Xu, Z.W., Wang, W.Z., Bai, J., Jia, Z., Zhu, M., & Wang, J.M. (2011). A comparison of eddy-covariance and large aperture scintillometer measurements with respect to the energy balance closure problem. Hydrology and Earth System Sciences, 15(4), 1291-1306.  
  
Xu, T., Liu, S., Xu, L., Chen ,Y., Jia, Z., Xu, Z., &Nielson, J. (2015). Temporal Upscaling and Reconstruction of Thermal Remotely Sensed Instantaneous Evapotranspiration. Remote Sensing, 7(3), 3400-3425.  
  
Tang RL, Li ZL, Tang BH. An application of the T-s-VI triangle method with enhanced edges determination for evapotranspiration estimation from MODIS data in arid and semi-arid regions: Implementation and validation. Remote Sensing of Environment, 2010, 114(3): 540-551.

7、Supporting project information

The CAS (Chinese Academy of Sciences) Action Plan for West Development Project  
National Program on Key Basic Research Project (973 Program

8、Data resource provider

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