A Big Earth Data Platform for Three Poles

**HiWATER: Dataset of the Portable Soil Respiration in the middle reaches of the Heihe River Basin (2012)**

1、Description

During the 2012 aerial remote sensing experiment conducted midstream, Li-Cor8100 was used to measure soil respiration every five days in the EC matrix area.  
Instrument: LI-Cor8100  
Measuring Method: Soil respiration ring was made using PVC pipe with length of 10 cm. Before measuring soil respiration, soil respiration ring was inserted into the soil, 4 cm in soil and 6 cm above soil. Soil respiration measurement should be taken after standing for at least 24 hours science ring was inserted in soil. Sample measurement time is during 9-12 in the morning. Set of three replicates per plot. Marked according to EC site name.  
Data content: Data content includes header information, and once every five days repeated three times observations value and the average value.  
Measuring location: EC sites within the matrix core experiment area (No. EC01 to EC17), each plot set three repeat samples. For the superstation (EC15) plot set nine repeat samples.  
Measuring time: From 6 June to 20 August, 2012, once every five days for site EC01, EC03, EC05, EC10, EC11, EC12, EC13, EC14, and EC17; from 1 July to 20 August, 2012, once every five days for site EC02, EC04, EC06, EC07, EC08, EC09 and EC16. The time used in this dataset is in UTC+8 Time.  
Part of the observation points during the observation just irrigation, these times are not observable.

2、Keywords

Theme：Soil,Soil respiration  
Discipline：Terrestrial Surface  
Places：Heihe River Basin, the artificial oasis experimental area in the middle reaches, flux observation matrix  
Time：2012, 2012-06-06 to 2012-08-20

3、Data details

1.Scale：None

2.Projection：4326

3.Filesize：0.0MB

4.Data format：文本

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：38.8814 | - |
| west：100.3364 | - | east：100.3983 |
| - | south：38.8265 | - |

5、Time frame:2012-06-17 01:04:00+00:00--2012-08-31 01:04:00+00:00

6、Reference method

References to data:

SONG Yi. HiWATER: Dataset of the Portable Soil Respiration in the middle reaches of the Heihe River Basin (2012). A Big Earth Data Platform for Three Poles, doi:10.3972/hiwater.034.2013.db2017

References to articles:

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)

8、Data resource provider

name: SONG Yi  
unit:   
email: songyi05@sohu.com