A Big Earth Data Platform for Three Poles

**HiWATER: Dataset of vegetation LAI measured by LAI2000 in the middle reaches of the Heihe River Basin**

1、Description

This dataset is the LAI observation in the artificial oasis experimental region of the middle stream of the Heihe River Basin. The observation period is from 24 May to 20 September 2012 (UTC+8).

Measurement instruments:
LAI-2000 (Beijing Normal University)

Measurement positions:
Core Experimental Area of Flux Observation Matrix
18 corn samples, 1 orchard sample, 1 artificial white poplar sample

Measurement methods:
To measure the incoming sky radiation on the canopy firstly. Then the transmission sky radiation are mearued under the canopy for serveral times. The canopy LAI is retrieved by using the gap probability model.

2、Keywords

Theme：Leaf area index,Vegetation
Discipline：Terrestrial Surface
Places：Heihe River Basin, the artificial oasis experimental area in the middle reaches
Time：2012-07-07, 2012-06-09, 2012-06-28, 2012, 2012-06-23, 2012-05-30, 2012-06-01, 2012-06-02, 2012-05-28, 2012-06-08, 2012-05-24, 2012-06-11, 2012-07-03, 2012-05-29, 2012-06-03

3、Data details

1.Scale：None

2.Projection：4326

3.Filesize：0.14MB

4.Data format：文本

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：38.88 | - |
| west：100.289 | - | east：100.46 |
| - | south：38.734 | - |

5、Time frame:2012-06-06 15:40:00+00:00--2012-07-20 15:41:00+00:00

6、Reference method

References to data:

MA Mingguo. HiWATER: Dataset of vegetation LAI measured by LAI2000 in the middle reaches of the Heihe River Basin. A Big Earth Data Platform for Three Poles, doi:10.3972/hiwater.058.2013.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: MA Mingguo
unit: Cold and Arid Regions Environmental and Engineering Research Institute, Chinese Academy of Sciences
email: mmg@lzb.ac.cn