A Big Earth Data Platform for Three Poles

**Qilian Mountains integrated observatory network: Dataset of Heihe integrated observatory network (leaf area index of Sidaoqiao, 2018)**

1、Description

This dataset contains the LAI measurements from the Sidaoqiao in the downstream of the Heihe integrated observatory network from June 16 to October 18 in 2018. The site was located in Ejina Banner in Inner Mongolia Autonomous Region. The elevation is 870 m. There are 2 observation samples, around Sidaoqiao superstation (101.1374E, 42.0012N) and Mixed forest station (101.1335E, 41.9903N), each of which is about 30m×30m in size. Five sub-canopy nodes and one above-canopy node are arranged in each sample.   
The LAI data is obtained from LAINet measurements following four steps: (1) the raw data is light quantum (level 0); (2) the daily LAI can be obtained using the software LAInet (level 1); (3) the invalid and null values are screened and using the 7 days moving averaged method to obtain the processed LAI (level 2); (4) for the multi LAINet nodes observation, the averaged LAI of the nodes area is the final LAI (level 3).  
The released data are the post processed LAI products and stored using \*.xls format.  
For more information, please refer to Liu et al. (2018) (for sites information), Qu et al. (2014) for data processing) in the Citation section.

2、Keywords

Theme：Leaf area index,Vegetation  
Discipline：Terrestrial Surface  
Places：The lower reaches of the heihe river, Sidaoqiao superstation, the natural oasis eco-hydrology experimental area in the lower reaches  
Time：2018

3、Data details

1.Scale：None

2.Projection：None

3.Filesize：0.07MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：42.0012 | - |
| west：101.1335 | - | east：101.1374 |
| - | south：41.9903 | - |

5、Time frame:2018-06-24 16:00:00+00:00--2018-10-26 16:00:00+00:00

6、Reference method

References to data:

LI Xin, XU Ziwei, Qu Yonghua. Qilian Mountains integrated observatory network: Dataset of Heihe integrated observatory network (leaf area index of Sidaoqiao, 2018). A Big Earth Data Platform for Three Poles, doi:10.11888/Meteoro.tpdc.2707622019

References to articles:

Qu, Y.H., Zhu, Y.Q., Han, W.C., Wang, J.D., & Ma, M.G. (2014). Crop leaf area index observations with a wireless sensor network and its potential for validating remote sensing products. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 7(2), 431-444.  
  
Liu, S.M., Li, X., Xu, Z.W., Che, T., Xiao, Q., Ma, M.G., Liu, Q.H., Jin, R., Guo, J.W., Wang, L.X., Wang, W.Z., Qi, Y., Li, H.Y., Xu, T.R., Ran, Y.H., Hu, X.L., Shi, S.J., Zhu, Z.L., Tan, J.L., Zhang, Y., & Ren, Z.G. (2018). The Heihe Integrated Observatory Network: A Basin-Scale Land Surface Processes Observatory in China. Vadose Zone Journal, 17(1), 180072. doi:10.2136/vzj2018.04.0072.

7、Supporting project information

Pan-Third Pole Environment Study for a Green Silk Road-A CAS Strategic Priority A Program

8、Data resource provider

name: XU Ziwei  
unit: Beijing Normal University  
email: xuzw@bnu.edu.cn  
  
name: LI Xin  
unit:   
email: xinli@itpcas.ac.cn  
  
name: Qu Yonghua  
unit:   
email: qyh@bnu.edu.cn