A Big Earth Data Platform for Three Poles

**WATER: Dataset of LAI measurements in the Yingke oasis and Huazhaizi desert steppe foci experimental areas**

1、Description

The dataset of LAI measurements was obtained by LI-3000, the protractor and the ruler in the Yingke oasis and Huazhaizi desert steppe foci experimental areas on May, 20, 24, 25, 28 and 31, Jun. 6, 11, 12, 14, 16, 21 and 27, Jul. 2 and 9, 2008.  
 The maximum leaf length and width of maize and wheat, the leaf angle, length and width of each section (one leaf was divided into 3 sections) were measured. And also the plant height, leaf base height, the crop spacing, the canopy height, row spacing and ridge spacing were measured. Two representative plants would be taken back for indoor observation for the stem length, stem width, stem circumference, and leaf area by LAI3000. Data were archived in Excel format.

2、Keywords

Theme：Leaf area index,Vegetation,Biomass,Vegetation structure  
Discipline：Terrestrial Surface  
Places：Heihe River Basin, Arid Region Hydrology in the Middle Reaches,   
Time：2008-06-27, 2008-05-25, 2008,

3、Data details

1.Scale：None

2.Projection：4326

3.Filesize：333.1MB

4.Data format：

4、Space scope

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

5、Time frame:2008-06-05 16:00:00+00:00--2008-07-25 16:00:00+00:00

6、Reference method

References to data:

YAN Guangkuo, FAN Wenjie, ZHOU Mengwei, ZHOU Chunyan, XIA Chuanfu, YAN Binyan, ZHANG Yang, LI Li, SU Gaoli, LIU Sihan, SHEN Xinyi, YAO Yanjuan, TAO Xin, Wen Jianguang, XIAO Yueting, XIN Xiaozhou. WATER: Dataset of LAI measurements in the Yingke oasis and Huazhaizi desert steppe foci experimental areas. A Big Earth Data Platform for Three Poles, doi:10.3972/water973.0137.db2013

References to articles:

刘艳, 王锦地, 周红敏, 薛华柱. (2010). 黑河中游试验区不同分辨率LAI数据处理、分析和尺度转换. 遥感技术与应用, 25(6): 805-813.  
  
Fan WJ, Xu XR, Liu XC, Yan BY, Cui YK. Accurate LAI retrieval method based on PROBA/CHRIS data. Hydrology and Earth System Sciences, 2010, 14(8): 1499-1507. doi:10.5194/hess-14-1499-2010.  
  
Fan WJ, Yan BB, Xu XR. Crop area and leaf area index simultaneous retrieval based on spatial scaling transformation. Science in China Series D-Earth Sciences, 2010, 53(11): 1709-1716.  
  
姚延娟, 范闻捷, 刘强, 李丽, 陶欣, 辛晓洲, 柳钦火. 玉米全生长期叶面积指数收获测量法的改进. 农业工程学报, 2010, 26(8): 189–194.  
  
范闻捷, 闫彬彦, 徐希孺. 尺度转换规律与同步反演作物播种面积和叶面积指数. 中国科学D辑-地球科学, 2010, 40(12): 1725-1732.

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

name: Wen Jianguang  
unit:   
email: wenjg@irsa.ac.cn  
  
name: XIN Xiaozhou  
unit: Institute of Remote Sensing Application, Chinese Academy of Sciences  
email:   
  
name: ZHANG Yang  
unit:   
email: zhangyang@lzb.ac.cn  
  
name: FAN Wenjie  
unit: Peking University  
email: fanwj@pku.edu.cn  
  
name: LI Li  
unit: State Key Laboratory of Remote Sensing Science, Institute of Remote Sensing and Digital Earth, Chinese Academy of Sciences  
email: lili3982@radi.ac.cn  
  
name: SU Gaoli  
unit:   
email:   
  
name: YAN Guangkuo  
unit:   
email:   
  
name: ZHOU Chunyan  
unit:   
email:   
  
name: TAO Xin  
unit:   
email:   
  
name: YAN Binyan  
unit:   
email:   
  
name: YAO Yanjuan  
unit:   
email:   
  
name: LIU Sihan  
unit:   
email:   
  
name: XIAO Yueting  
unit:   
email:   
  
name: SHEN Xinyi  
unit:   
email:   
  
name: XIA Chuanfu  
unit:   
email:   
  
name: ZHOU Mengwei  
unit:   
email: mengweizhou@hotmail.com