A Big Earth Data Platform for Three Poles

**WATER: Dataset of forest structure parameter survey at the temporary forest sampling plot in the Dayekou watershed foci experimental area (2008)**

1、Description

The forest hydrology experimental area of Heihe River integrated remote sensing experiment includes the dense observation area of Dayekou basin and the dense observation area of Pailugou basin. Due to the concentrated distribution of the fixed sample plots in the drainage ditch basin, these sample plots lack of representativeness to the forest of the whole dayokou basin, so in June 2008, 43 temporary forest sample plots were set up in the whole dayokou basin. The data set is the ground observation data of the 43 temporary plots. In addition to the measurement and recording of stand status and site factors, Lai was also observed.   
The instruments used to measure each wood in the sample plot are mainly tape, DBH, flower pole, tree measuring instrument and compass. The DBH, tree height, height under branch, crown width in cross slope direction, crown width along slope direction and single tree growth were measured for each tree. WGS84 latitude and longitude coordinates of the center point of the sample plot were measured with different hand-held GPS, and the positioning error was about 5-30m. Other observation factors include: Forest Farm, slope direction, slope position, slope, soil thickness, canopy density, etc. The implementation time of these temporary sample plots is from 2 to 30 June 2008.   
The data set can provide ground data for the development of remote sensing inversion algorithm of forest structure parameters.

2、Keywords

Theme：Forest ecosystem,Leaf area index,Vegetation,Forest,Forests  
Discipline：Terrestrial Surface  
Places：Heihe River Basin, Dayekou watershed foci experimental areas, Forest and Hydrology Experimental Areas  
Time：2008

3、Data details

1.Scale：None

2.Projection：4326

3.Filesize：1.41MB

4.Data format：

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：38.5765 | - |
| west：100.2158 | - | east：100.30698 |
| - | south：38.4382 | - |

5、Time frame:2008-06-17 00:00:00+00:00--2008-07-15 00:00:00+00:00

6、Reference method

References to data:

WATER: Dataset of forest structure parameter survey at the temporary forest sampling plot in the Dayekou watershed foci experimental area (2008). A Big Earth Data Platform for Three Poles, doi:10.3972/water973.0054.db2012

References to articles:

何祺胜, 陈尔学, 曹春香, 刘清旺, 庞勇. 基于LIDAR数据的森林参数反演方法研究. 地球科学进展, 2009, 24(7): 748-755.  
  
刘清旺. 机载激光雷达森林参数估测方法研究. 北京: 中国林业科学研究院, 2009.  
  
Tian, X., Li, Z.Y., van der Tol C, Su, Z., Li, X., He, Q.S., Bao, Y.F., Chen, E.X., & Li, L.H. (2011). Estimating zero-plane displacement height and aerodynamic roughness length using synthesis of LiDAR and SPOT-5 data. Remote Sensing of Environment, 115(9): 2330-2341. 10.1016/j.rse.2011.04.033.  
  
凌飞龙, 李增元, 陈尔学, 何祺胜. 青海云杉林叶面积指数半球摄影测量方法研究[J]. 地球科学进展, 2009(07): 803–809.

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