A Big Earth Data Platform for Three Poles

**WATER: Dataset of the total station measurements at the super site around the Dayekou Guantan forest station**

1、Description

The data set is based on the geodetic coordinate data and other auxiliary data of the corner points of 16 subsamples of super sample plots, the setting points of lidar base station of the foundation and the base points of each tree trunk measured by the total station.
The data acquisition time of total station is from June 3, 2008 to June 12, 2008, which is divided into two groups. One total station is used respectively, with the models of topcon602 and topcon7002. A total of 1468 Picea crassifolia trees in the super sample plot were measured, and all the corner points of the sub sample plot and the top points of the stake set on the base station of lidar were located. These positioning results are the main data content of the dataset. In addition, on June 3, 2008, June 4, 2008, June 6, 2011, the differential GPS z-max was used to locate all the stake vertices. By manually measuring the height of each stake, the height of the surface under the stake was calculated, and finally the three-dimensional coordinate position of the surface of each tree and the topographic map of super sample plot were generated. These data constitute the secondary data of the dataset.
This data set can provide detailed ground observation data for the establishment of real three-dimensional forest scene, the development and correction of various three-dimensional forest remote sensing models, and ground validation data for the extraction of airborne lidar forest parameters.

2、Keywords

Theme：Gravity,differential global position system
Discipline：Solid earth
Places：Heihe River Basin, Dayekou watershed foci experimental areas, Forest and Hydrology Experimental Areas, Super Site around the Dayekou Guantan Forest Station
Time：2008

3、Data details

1.Scale：None

2.Projection：4326

3.Filesize：19.2MB

4.Data format：

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：38.534361 | - |
| west：100.250212 | - | east：100.251297 |
| - | south：38.533171 | - |

5、Time frame:2008-06-13 16:00:00+00:00--2008-06-22 16:00:00+00:00

6、Reference method

References to data:

ZHANG Hao, LIU Qingwang. WATER: Dataset of the total station measurements at the super site around the Dayekou Guantan forest station. A Big Earth Data Platform for Three Poles, doi:10.3972/water973.0055.db2012

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7、Supporting project information

The CAS (Chinese Academy of Sciences) Action Plan for West Development Project
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8、Data resource provider

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