A Big Earth Data Platform for Three Poles

**HiWATER: Airborne LiDAR data in the Shenshawo desert area of the Heihe River Basin**

1、Description

On 19 August 2012 (UTC+8), Leica ALS70 airborne laser scanner carried by the Harbin Y-12 aircraft was used in a LiDAR airborne optical remote sensing experiment. Leica ALS70 airborne laser scanner has unlimited numbers of returns intensities measurements including the first, second, third return intensities. The wavelength of laser light is 1064 nm. The absolute flight altitude is 2900 m with the point cloud density 1 point per square meter. Airborne LiDAR-DEM and DSM data production were obtained through parameter calibration, automatic classification of point cloud density and manual editing.

2、Keywords

Theme：Airborne laser radar,Remote Sensing Technology  
Discipline：Remote Sensing Technology  
Places：Heihe River Basin, the artificial oasis experimental area in the middle reaches, Shenshawo desert station  
Time：2012-08-19, 2012

3、Data details

1.Scale：None

2.Projection：WGS84 UTM

3.Filesize：604.0MB

4.Data format：las

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：38.78 | - |
| west：100.46 | - | east：100.48 |
| - | south：38.76 | - |

5、Time frame:2018-11-24 10:49:02+00:00--2018-11-24 10:49:02+00:00

6、Reference method

References to data:

Wen Jianguang. HiWATER: Airborne LiDAR data in the Shenshawo desert area of the Heihe River Basin. A Big Earth Data Platform for Three Poles, doi:10.3972/hiwater.157.2014.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

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