A Big Earth Data Platform for Three Poles

**HiWATER: Airborne LiDAR-DEM data production in the middle reaches of the Heihe River Basin on July. 19, 2012**

1、Description

On 19 July 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. The relative flight altitude is 1500 m (the elevation of 2700 m). 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 with the point cloud density 4 points per square meter. Based on the original Airborne LiDAR-DEM data production were obtained through parameter calibration, automatic classification of point cloud density and manual editing.

2、Keywords

Theme：Digital elevation model(DEM),Terrestrial Surface Remote Sensing  
Discipline：Terrestrial Surface  
Places：Heihe River Basin, the artificial oasis experimental area in the middle reaches  
Time：2012-07-19, 2012

3、Data details

1.Scale：None

2.Projection：WGS84 UTM

3.Filesize：26624.0MB

4.Data format：las

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：39.0 | - |
| west：100.37 | - | east：100.49 |
| - | south：38.77 | - |

5、Time frame:2018-11-24 18:47:45+00:00--2018-11-24 18:47:45+00:00

6、Reference method

References to data:

Wen Jianguang. HiWATER: Airborne LiDAR-DEM data production in the middle reaches of the Heihe River Basin on July. 19, 2012. A Big Earth Data Platform for Three Poles, doi:10.3972/hiwater.010.2013.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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