A Big Earth Data Platform for Three Poles

**HiWATER: Airborne LiDAR-DSM data production in the middle reaches of the Heihe River Basin**

1、Description

Data content: precipitation data of the Aral Sea basin from 2015 to 2018.  
Data sources and processing methods: from the new generation of global precipitation measurement (GPM) of NASA (version 06, global precipitation observation program), the daily rainfall can be obtained by adding the three-hour rainfall data, and then the eight day rainfall can be obtained.  
Data quality: the spatial resolution is 0.1 ° x 0.1 ° and the temporal resolution is 8 days. The value of each pixel is the sum of rainfall in 8 days.  
Data application results: under the background of climate change, it can be used to analyze the correlation between meteorological elements and vegetation characteristics.

2、Keywords

Theme：Digital surface model(DSM),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：0

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:2018-11-20 18:50:06.800996+00:00--2018-11-20 18:50:06.801000+00:00

6、Reference method

References to data:

Wen Jianguang. HiWATER: Airborne LiDAR-DSM data production in the middle reaches of the Heihe River Basin. A Big Earth Data Platform for Three Poles, doi:10.3972/hiwater.149.2013.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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