A Big Earth Data Platform for Three Poles

**HiWATER: Land cover product in the middle of the Heihe River Basin on Jun. 29, 2012**

1、Description

On 29 June 2012, CASI sensor carried by the Harbin Y-12 aircraft was used in a visible near Infrared hyperspectral airborne remote sensing experiment, which is located in the observation experimental area (30×30 km). The land cover pattern product in the middle reaches of the Heihe River Basin were obtained at a spatial resolution of 1 m, using CASI aerial data with high spatial and spectral resolution．A hierarchical classification structure integrated by pixel-based classification and object-based classification is used to obtain production．According to surveyed reference data about land cover and visual interpretation from high resolution imagery，the accuracy of the classification result of land cover was evaluated，and the result showed that overall accuracy was 84.61 %，Kappa coefficient was 0.8262．

2、Keywords

Theme：Vegetation coverage data,Ecological remote sensing products,Terrestrial Surface Remote Sensing  
Discipline：Terrestrial Surface  
Places：Heihe River Basin, the artificial oasis experimental area in the middle reaches  
Time：2012, 2012-06-29

3、Data details

1.Scale：None

2.Projection：WGS84 UTM

3.Filesize：11879.0MB

4.Data format：las

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：39.4 | - |
| west：99.8 | - | east：100.6 |
| - | south：38.7 | - |

5、Time frame:2018-11-26 18:48:18+00:00--2018-11-26 18:48:18+00:00

6、Reference method

References to data:

Liu Liangyun, XIAO Qing. HiWATER: Land cover product in the middle of the Heihe River Basin on Jun. 29, 2012. A Big Earth Data Platform for Three Poles, doi:10.3972/hiwater.171.2014.db2017

References to articles:

Wang Zhihui, Liu Liangyun. Monitoring on land cover pattern and crops structure of Oasis irrigation area of middle reaches in Heihe River Basin using remote sensing data. Advances in Earth Science, 2013, 28 (8): 948-956.  
  
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

name: Liu Liangyun  
unit:   
email:   
  
name: XIAO Qing  
unit: Institute of Remote Sensing and Digital Earth, Chinese Academy of Sciences  
email: xiaoqing@irsa.ac.cn