A Big Earth Data Platform for Three Poles

**Human activity parameters at Qilian Mountain Area (V1.0) (2018)**

1、Description

This data set includes 30 m farmland and bulidingland distribution products in Qilian Mountains in 2018. The product is based on Landsat-8/OLI data. In the production of farmland products, the Normalized Difference Vegetation Index (NDVI) is used, and the production rules are set by using the prior knowledge of crop phenology and planting types. In the production of buildingland products, the normalized NDVI is used by using the Landsat series data synthesized in summer. other indexs like NDBI, MNDWI and other data like DEM, lighting data are used together to set product production rules. The accuracy of the products of farmland andbuildingland in 2018 is 90.05% and 90.97% respectively, based on the high-definition image of Google Earth and field survey data.

2、Keywords

Theme：Human-nature Remote Sensing,Human activity  
Discipline：Human-nature Relationship  
Places：Qilian moutain  
Time：2018

3、Data details

1.Scale：None

2.Projection：WGS84

3.Filesize：5200.0MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：45.0 | - |
| west：89.0 | - | east：107.0 |
| - | south：34.0 | - |

5、Time frame:2018-01-07 00:00:00+00:00--2019-01-06 00:00:00+00:00

6、Reference method

References to data:

ZHONG Bo, JUE Kunsheng. Human activity parameters at Qilian Mountain Area (V1.0) (2018). A Big Earth Data Platform for Three Poles, doi:10.11888/Socioeco.tpdc.2701222019

References to articles:

Zhong, B., Ma, P., Nie, A.H., Yang, A.X., Yao, Y.J., Lü, W.B., Zhang, H., & Liu, Q.H. (2014). Land cover mapping using time series HJ-1/CCD data. Science China Earth Sciences, 57(8), 1790-1799.  
  
Zhong, B., Yang, A.X., Nie, A.H., Yao, Y.J., Zhang, H., Wu, S.L., & Liu, Q.H. (2015). Finer resolution land-cover mapping using multiple classifiers and multisource remotely sensed data in the Heihe river basin. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 8(10), 4973-4992.

7、Supporting project information

Pan-Third Pole Environment Study for a Green Silk Road-A CAS Strategic Priority A Program

8、Data resource provider

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