A Big Earth Data Platform for Three Poles

**Human activity parameters at Qilian Mountain Area (V1.0) (1985-2017)**

1、Description

This data set includes 30 m cultivated land and construction land distribution products in Qilian Mountains from 1985 to 2017. The product is based on Landsat series data production. In the production of cultivated land products, the normalized vegetation index NDVI is used, and the production rules are set by using the prior knowledge of Crop Phenology and crop planting types. In the production of construction land products, the normalized vegetation index NDVI is used by using the Landsat series data synthesized in summer. NDBI, MNDWI and other indicators, assisted by DEM, lighting data to set product production rules. Taking the products of 2015 as an example, the accuracy of the products of cultivated land and construction land in 2015 is 89.43% and 91.89% 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：1985-2017

3、Data details

1.Scale：None

2.Projection：WGS84

3.Filesize：42000.0MB

4.Data format：None

4、Space scope

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

5、Time frame:1985-01-15 08:00:00+00:00--2018-01-14 08:00:00+00:00

6、Reference method

References to data:

ZHONG Bo, JUE Kunsheng. Human activity parameters at Qilian Mountain Area (V1.0) (1985-2017). A Big Earth Data Platform for Three Poles, doi:10.11888/Socioeco.tpdc.2701232019

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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