A Big Earth Data Platform for Three Poles

**Land cover change in Central Asia, South Asia and Indochina Peninsula（1992-2020）**

1、Description

This data includes the land cover data of Central Asia, South Asia and Indochina Peninsula in the from 1992 to 2020 with a spatial resolution of 300mLand cover data includes 10 primary categories, which are combined from the secondary categories of the original data. The data source is the surface coverage product CCI-LC of ESA, where the spatial distribution of cropland, built-up land, and water for the land cover data from 1992 to 2020. Combined with the Tsinghua university global land cover data (FROM GLC, 30 m grid), NASA MODIS global land cover data (MCD12Q1, 500 m grid), the United States Geological Survey (USGS global land data (GFSAD30, 30 m), Japanese global forest data (PALSAR/PALSAR - 2, 25 m), the training sample dataset of land cover interpretation were built from the consistent areas of multiple products. The Google Earth Engine and random forest algorithm were used to correct the cropland, built-up land, and water of temporal CCI-LC data. Using the high resolution images in Google Earth at 2019 and 2020, the accuracy of change areas of cropland, built-up land, and water was validated by the stratified random sampling. A total of 3,600 land parcels were selected from 1,200 land parcels of the three land cover types, indicating that the accuracy of our corrected product increased in the range of 11% to 26% for the change areas compared to the CCI-LC product.

2、Keywords

Theme：Land cover products,Others  
Discipline：Remote Sensing Technology  
Places：South Asia, Indochina Peninsula, Central Asia  
Time：1992-2020

3、Data details

1.Scale：None

2.Projection：WGS84

3.Filesize：382.61MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：55.4 | - |
| west：46.5 | - | east：119.3 |
| - | south：0.8 | - |

5、Time frame:1991-12-31 16:00:00+00:00--2020-12-30 16:00:00+00:00

6、Reference method

References to data:

XU Erqi. Land cover change in Central Asia, South Asia and Indochina Peninsula（1992-2020）. A Big Earth Data Platform for Three Poles, doi:10.11888/RemoteSen.tpdc.2718612021

References to articles:

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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