A Big Earth Data Platform for Three Poles

**Spatial and temporal evolution pattern of ecological environment in the China-Mongolia-Russia Economic Corridor (1982-2020)**

1、Description

This dataset includes the maximum normalized vegetation index (NDVI) data from 1982 to 2015, the maximum enhanced vegetation index (EVI) data from 2000 to 2020, and the land cover change (LUCC) data from 2001 to 2019 in the China-Mongolia-Russia Economic Corridor (CMREC). Among these, NDVI data was extracted from GIMMS satellite data with a resolution of 8 km; EVI and LUCC data were extracted from MODIS satellite data (MOD13A3 and MCD12C1) with a resolution of 1 km and 5 km, respectively. The dataset filters the outliers or missing values in the original data, which is of higher quality than the source data. Meanwhile, we adopted the maximum value composite (MVC) method to process NDVI and EVI data to obtain the annual maximum NDVI and EVI, which can better reflect the vegetation distribution and change in CMREC over the past several decades. The spatio-temporal changes of vegetation and land use extracted from satellite remote sensing data will provide scientifical guidance for the risk control and prevention of the ecological environment change in CMREC.

2、Keywords

Theme：Others,Remote Sensing Technology,Ecological Degradation and Protection,Remote Sensing Product
Discipline：Remote Sensing Technology,Human-nature Relationship
Places：PTP, Pan-Third poleChina-mongolia-russia Economic Corridor,
Time：1982-2020

3、Data details

1.Scale：10000

2.Projection：

3.Filesize：981.68MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：58.9561812195 | - |
| west：94.9832729231 | - | east：138.577611923 |
| - | south：34.9504879378 | - |

5、Time frame:1981-12-31 16:00:00+00:00--2020-11-30 16:00:00+00:00

6、Reference method

References to data:

ZHANG Xueqin. Spatial and temporal evolution pattern of ecological environment in the China-Mongolia-Russia Economic Corridor (1982-2020). A Big Earth Data Platform for Three Poles, doi:10.11888/HumanNat.tpdc.2723182022

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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