A Big Earth Data Platform for Three Poles

**Vegetation Coverage Data of the China-Mongolia-Russia Economic Corridor with a Resolution of 1km from 2000 to 2020 (Version 1.0)**

1、Description

Based on the MODIS satellite remote sensing data, the overall vegetation coverage (VC) of the China-Mongolia-Russia Economic Corridor was calculated. The traditional VC formula selects the normalized difference vegetation index (NDVI) as a variable. For the reduction of deviation caused by soil background and the impacts of the atmosphere, the enhanced vegetation index (EVI) instead of NDVI is adopted in the calculation process of VC data set. The original data is the enhanced vegetation index data in the Terra MODIS Vegetation Index Data Version 6 (MOD13A3) with the resolution of 1 km. The MOD13A3 dataset is of higher quality than the source data because it filters the outliers or missing measurements of the MODIS satellite data. The China-Mongolia-Russia Economic Corridor is an area with high risk of desertification. At present, the development of desertification in the corridor extends along the main road between China and Mongolia, and the desertification is the most serious in densely populated urban areas. The regional desertification information can be extracted effectively from the vegetation coverage data, which will provide ecological and environmental data support for the disaster risk prevention and safe operation of transportation and pipelines.

2、Keywords

Theme：Galactic System
Discipline：Solar-Terrestrial Physics and Astronomy
Places：China-Mongolia-Russia
Time：2000-2020

3、Data details

1.Scale：10000

2.Projection：

3.Filesize：1146.88MB

4.Data format：None

4、Space scope

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

5、Time frame:2000-07-31 16:00:00+00:00--2020-08-01 03:59:59+00:00

6、Reference method

References to data:

ZHANG Xueqin. Vegetation Coverage Data of the China-Mongolia-Russia Economic Corridor with a Resolution of 1km from 2000 to 2020 (Version 1.0). A Big Earth Data Platform for Three Poles, doi:10.11888/Ecolo.tpdc.2711112020

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

name: ZHANG Xueqin
unit:
email: zhangxq@igsnrr.ac.cn