A Big Earth Data Platform for Three Poles

**High spatial and temporal resolution multispectral remote sensing images (2000 to 2016) of the Belt and Road key node areas**

1、Description

High spatial and temporal resolution remote sensing image plays a very important role in land use change detection, disaster monitoring and bio-geochemical parameter estimation.Currently, Landsat multi-spectral series satellite data (including Landsat TM, ETM+ and OLI multi-spectral bands) is one of the most widely used multi-spectral data.Taking the One Belt And One Road key node area as the research area, and based on the data of Landsat TM/ETM+/OLI series with good quality from 2000 to 2016, python was used to clip the data in the research area with the masks .To solve the partial data missing problem, MODIS imagery on the missing date and Landsat-MODIS data pair of adjacent phases are combined for spatio-temporal fusion to obtain Landsat-like data.Finally, the high spatial and temporal resolution remote sensing images of 34 key node area during 2001 to 2016 lasted for 8 to 16 days was obtained.

2、Keywords

Theme：Galactic System  
Discipline：Solar-Terrestrial Physics and Astronomy  
Places：Important nodes in the One Belt And One Road region  
Time：2000-2016

3、Data details

1.Scale：None

2.Projection：

3.Filesize：169564.16MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：57.37 | - |
| west：-1.53 | - | east：106.97 |
| - | south：-6.38 | - |

5、Time frame:2000-01-27 16:00:00+00:00--2016-12-30 16:00:00+00:00

6、Reference method

References to data:

YIN Zhixiang, LING Feng. High spatial and temporal resolution multispectral remote sensing images (2000 to 2016) of the Belt and Road key node areas. A Big Earth Data Platform for Three Poles, 2020

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: LING Feng  
unit:   
email: lingf@whigg.ac.cn  
  
name: YIN Zhixiang  
unit:   
email: yinzx@ahu.edu.cn