A Big Earth Data Platform for Three Poles

**30-meter and 16-day Landsat NDVI dataset of key nodes in pan-third pole (2000-2016)**

1、Description

The vegetation index mainly reflects the differences between the visible light, near-infrared reflection and soil background. The vegetation index can be used to quantitatively describe the growth of vegetation under certain conditions. At present, normalized vegetation index (NDVI) is an important data source for detecting vegetation growth status, vegetation coverage and eliminating some radiation errors. NDVI can reflect the background influence of plant canopy, such as soil, wet ground, snow, dead leaves, roughness, etc., and it is related to vegetation coverage. Landsat satellite data product is an important data source for NDVI estimation. Taking 31 key nodes and 3 major projects in the third pole as the research area, based on the data of Landsat-5 and landsat-8 from 2000 to 2016, the NDVI of different areas was cut and estimated, and finally the 16 day time series ten meter (30M) high-resolution NDVI data of key node areas in the third pole from 2000 to 2016 was obtained.

2、Keywords

Theme：Human-nature Remote Sensing,Agricultural remote sensing products  
Discipline：Human-nature Relationship  
Places：Pan-Third pole  
Time：2000-2016

3、Data details

1.Scale：None

2.Projection：

3.Filesize：580819.0MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：42.0 | - |
| west：97.0 | - | east：102.0 |
| - | south：37.0 | - |

5、Time frame:2000-07-08 16:00:00+00:00--2017-07-09 03:59:59+00:00

6、Reference method

References to data:

GE Yong, LING Feng, ZHANG Yihang. 30-meter and 16-day Landsat NDVI dataset of key nodes in pan-third pole (2000-2016). A Big Earth Data Platform for Three Poles, 2020

References to articles:

NDVI (Normalized Difference Vegetation Index) maps from Landsat. USGS

7、Supporting project information

8、Data resource provider

name: ZHANG Yihang  
unit: Institute of Geodesy and Geophysics, CAS  
email: zhangyihang12@mails.ucas.ac.cn  
  
name: GE Yong  
unit: Institute of Geographic Sciences and Natural Resources Research, CAS  
email: gey@lreis.ac.cn  
  
name: LING Feng  
unit:   
email: lingf@whigg.ac.cn