A Big Earth Data Platform for Three Poles

**MODIS multi-spectral remote sensing images dataset of 15 key node regions of Pan third pole (2000-2016)**

1、Description

The MODIS Terra MOD09A1 Version 6 product provides an estimate of the surface spectral reflectance of Terra MODIS Bands 1 through 7 corrected for atmospheric conditions such as gasses, aerosols, and Rayleigh scattering. Along with the seven 500 m reflectance bands is a quality layer and four observation bands. For each pixel, a value is selected from all the acquisitions within the 8-day composite period. The criteria for the pixel choice include cloud and solar zenith. When several acquisitions meet the criteria the pixel with the minimum channel 3 (blue) value is used.Based on MCD12Q1 data from 2001 to 2016, MatLab was used to tailor the masks of 18 key nodes in Southeast Asia and middle East. Finally.
This dataset is based on the data of MOD09A1 V6 synthesized in 8 days from 2001 to 2016 downloaded by the National Aeronautics and Space Administration (NASA). The spatial resolution is 500 meters, and MatLab is used to mask cut the data in the research area, and Finally, the land cover data of 18 key nodes from 2001 to 2016 were obtained..
The 18 key regions covered by the data mainly include: Bangkok, Port of Myanmar, Chittagong, Colombo, Dhaka, Gwadar, Hambantot, Huangjing and Malacca, Kwantan, Maldives, Mandalay, Sihanouk, Vientiane, Yangon, etc.).

2、Keywords

Theme：Vegetation coverage data,Vegetation,Land Use/Land Cover,Land cover,Terrestrial Surface Remote Sensing
Discipline：Terrestrial Surface
Places：Pan-Third pole
Time：2000-2016

3、Data details

1.Scale：None

2.Projection：

3.Filesize：12075.3MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：58.68 | - |
| west：-3.31 | - | east：-110.9 |
| - | south：-1.09 | - |

5、Time frame:2000-01-05 00:00:00+00:00--2017-01-04 00:00:00+00:00

6、Reference method

References to data:

LI Xinyan. MODIS multi-spectral remote sensing images dataset of 15 key node regions of Pan third pole (2000-2016). A Big Earth Data Platform for Three Poles, 2018

References to articles:

Vermote, E. (2015). MOD09A1 MODIS/Terra Surface Reflectance 8-Day L3 Global 500m SIN Grid V006. NASA EOSDIS LP DAAC. doi: 10.5067/MODIS/MOD09A1.006

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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