A Big Earth Data Platform for Three Poles

**Long-term SPOT\_Vegetation data of the Heihe River Basin**

1、Description

The vegetation sensor, sponsored by the European Commission, was launched by SPOT-4 in March 1998. It has received the spotvgt data for global vegetation cover monitoring since April 1998. The data is received by Kiruna ground station in Sweden, and the image quality monitoring center in Toulouse in France is responsible for image quality and provides relevant parameters (such as calibration coefficient). Finally, Belgium is responsible for image quality monitoring The Flemish Institute for technical research (Vito) vegetation processing center (ctiv) is responsible for preprocessing the data into 1km global data day by day. Preprocessing includes atmospheric correction, radiometric correction, geometric correction, and 10 day production to maximize the synthesized NDVI data, and set the value of - 1 to - 0.1 to - 0.1, and then convert to the DN value of 0-250 through the formula DN = (NDVI + 0.1) / 0.004. The dataset is a subset of China, which contains four bands of spectra synthesized every 10 days. Spot measurement (VGT) data is downloaded from the vegetation data website of Vito Institute in Belgium (http://free.vgt.vito.be), which includes the following:
Spot vegation NDVI data and four band data, 10 days maximum synthesis, spatial resolution of 1km, effective time of 1998-2008, data naming specification is coverage + product type + year + month + day. Spot vector BRDF data, 10 days maximum synthesis, spatial resolution of 8km, effective time of 2001-2008, data naming specification is coverage + product type + year + month + day. Spot vectorization NPP data, 10 day maximum synthesis, spatial resolution of 8km, effective time of 1998-2006, data naming standard of "Heihe ﹣ NPP ﹣ VGT" + [1 or 2] + [year + month + day].

2、Keywords

Theme：Vegetation, Spot, 遥感影像, VGT
Discipline：remote sensing products, Geography
Places：Heihe River Basin
Time：1998-2010

3、Data details

1.Scale：None

2.Projection：4326

3.Filesize：272.24MB

4.Data format：栅格

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：43.3 | - |
| west：96.1 | - | east：104.2 |
| - | south：37.7 | - |

5、Time frame:1998-04-08 00:00:00+00:00--2009-01-07 00:00:00+00:00

6、Reference method

References to data:

MA Mingguo, Greet Janssens, HU Ningke. Long-term SPOT\_Vegetation data of the Heihe River Basin. A Big Earth Data Platform for Three Poles, 2013

References to articles:

Janssens Greet，马明国. 中国地区长时间序列SPOT\_Vegetation植被指数数据集[Z]. 2006.

7、Supporting project information

8、Data resource provider

name: MA Mingguo
unit: Cold and Arid Regions Environmental and Engineering Research Institute, Chinese Academy of Sciences
email: mmg@lzb.ac.cn

name: HU Ningke
unit: Cold and Arid Regions Environmental and Engineering Research Institute, Chinese Academy of Sciences
email: changsheng0909@163.com

name: Greet Janssens
unit:
email: ctiv@vgt.vito.be