A Big Earth Data Platform for Three Poles

**Long-term serial GIMMS vegetation index dataset in China (1981-2006)**

1、Description

GIMMS (glaobal inventory modelling and mapping studies) NDVI data is the latest global vegetation index change data released by NASA C-J-Tucker and others in November 2003.
The dataset includes the global vegetation index changes from 1981 to 2006, the format is ENVI standard format, the projection is ALBERS, and its time resolution is 15 days and its spatial resolution is 8km. GIMMS NDVI data recorded the changes of vegetation in 22a area in the format of satellite data.
1. File format:
The GIMMS-NDVI dataset contains all rar compressed files with a 15-day interval from July 1981 to 2006. After decompression, it includes an XML file, an .HDR header file, an .IMG file, and a .JPG image file.
2. File naming:
The naming rules for compressed files in the NOAA / AVHRR-NDVI data set are: YYMMM15a (b) .n \*\*-VIg\_data\_envi.rar, where YY-year, MMM-abbreviated English month letters, 15a-synthesized in the first half of the month, 15b-synthesized in the second half of the month, \*\*-Satellite. After decompression, there are 4 files with the same file name, and the attributes are: XML document, header file (suffix: .HDF), remote sensing image file (suffix: .IMG), and JPEG image file. In this data set, the user uses the remote sensing image file with the suffix .IMG to analyze the vegetation index.
Remote sensing image files with suffix of .IMG and .HDF used by users to analyze vegetation indices can be opened in ENVI and ERDAS software.
3. The data header file information is as follows:
Coordinate System is:
    PROJECTION ["Albers\_Conic\_Equal\_Area"],
    PARAMETER ["standard\_parallel\_1", 25],
    PARAMETER ["standard\_parallel\_2", 47],
    PARAMETER ["latitude\_of\_center", 0],
    PARAMETER ["longitude\_of\_center", 105],
    PARAMETER ["false\_easting", 0],
    PARAMETER ["false\_northing", 0],
    UNIT ["Meter", 1]]
Pixel Size = (8000.000000000000000, -8000.000000000000000)
Corner Coordinates:
Upper Left (-3922260.739, 6100362.950) (51d20'23.06 "E, 46d21'21.43" N)
Lower Left (-3922260.739, 1540362.950) (71d16'1.22 "E, 8d41'42.21" N)
Upper Right (3277739.261, 6100362.950) (151d 8'57.22 "E, 49d 9'35.37" N)
Lower Right (3277739.261, 1540362.950) (133d30'58.46 "E, 10d37'13.35" N)
Center (-322260.739, 3820362.950) (101d22'21.08 "E, 35d42'18.02" N)
Band 1 Block = 900x1 Type = Int16, ColorInterp = Undefined
    Computed Min / Max = -16066.000,11231.000
4. Conversion relationship between DN value and NDVI
 NDVI = DN / 1000, divided by 10000 after 2003
  The NDVI value should be between [-1,1]. Data outside this interval represent other features, such as water bodies.

2、Keywords

Theme：NDVI,Terrestrial Surface Remote Sensing
Discipline：Terrestrial Surface
Places：China
Time：1981-2006

3、Data details

1.Scale：None

2.Projection：None

3.Filesize：1930.59MB

4.Data format：栅格

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：53.9 | - |
| west：73.2 | - | east：135.5 |
| - | south：17.8 | - |

5、Time frame:1981-07-21 09:00:00+00:00--2007-01-20 20:14:00+00:00

6、Reference method

References to data:

Tucker, C.J., J.E.Pinzon, M.E.Brown. Long-term serial GIMMS vegetation index dataset in China (1981-2006). A Big Earth Data Platform for Three Poles, 2013

References to articles:

Tucker,C.J,J.E.Pinzon,and M.E.Brown(2004),Global Inventory Modeling and Mapping Studies,NA94apr15b.n11-VIg,2.0,Global Land Cover Facility,University of Maryland,College Park,Maryland,04/15/1994.

7、Supporting project information

8、Data resource provider

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