A Big Earth Data Platform for Three Poles

**The cloud-free LAI dataset in the Heihe River Basin (2001-2011)**

1、Description

Based on MODIS Lai products (mcd15a2 and mod15a2), the daily and 1km resolution Lai datasets of 2001-2011 are obtained by using the improved hats algorithm to remove the cloud and reconstruct. The product coordinate system is longitude and latitude projection, and the spatial range is 96.5e-102.5e, 37.5n-43n. Every day's data is stored as a geotif file. The name is Heihe YYY ɇ Lai ɇ recon.ddd.tif, where yyyy is the year and DDD represents a certain day in a specific year. There are 365 days of output data by default every year. The data type is single precision floating-point type, the pixel filling value of invalid value is 255, the valid data range is 0-100, and the scaling factor is 0.1.

2、Keywords

Theme：LAI, MCD15A2, 叶面积指数, MODIS
Discipline：remote sensing products
Places：Heihe River Basin
Time：2000-2011

3、Data details

1.Scale：None

2.Projection：4326

3.Filesize：4940.0MB

4.Data format：栅格

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：43.0 | - |
| west：96.5 | - | east：102.5 |
| - | south：37.5 | - |

5、Time frame:2001-01-10 05:02:00+00:00--2012-01-09 05:02:00+00:00

6、Reference method

References to data:

JIA Li. The cloud-free LAI dataset in the Heihe River Basin (2001-2011). A Big Earth Data Platform for Three Poles, doi:10.3972/heihe.111.2013.db2014

References to articles:

Jia, L., Shang, H., Hu, G., Menenti, M. (2011). Phenological response of vegetation to upstream river flow in the Heihe Rive basin by time series analysis of MODIS data. Hydrology and Earth System Sciences, 15(3), 1047-1064, doi:10.5194/hess-15-1047-2011.

7、Supporting project information

8、Data resource provider

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