A Big Earth Data Platform for Three Poles

**LAI production of in 1KM of the Heihe River Basin (2000-2012)**

1、Description

The algorithm firstly adopts the canopy BRDF model and represents the canopy reflectivity as a function of a series of parameters such as LAI/FAPAR, wavelength, reflectivity of soil and leaves, aggregation index, incidence and observation Angle.The parameter table is established for several key parameters as the input of inversion.Then input the pre-processed surface reflectance data and land cover data, and invert LAI products by look-up table (LUT) method.See references for detailed algorithms.
Image format: tif
Image size: about 1M per scene
Time range: 2000-2012
Temporal resolution: 8 days
Spatial resolution: 1km

2、Keywords

Theme：Leaf area index,Vegetation
Discipline：Terrestrial Surface
Places：Heihe River Basin, whole basin
Time：

3、Data details

1.Scale：800000

2.Projection：4326

3.Filesize：1135.0MB

4.Data format：tif

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：42.6893038 | - |
| west：97.3520258 | - | east：102.1548642 |
| - | south：37.7401842 | - |

5、Time frame:2000-01-10 15:00:00+00:00--2013-01-09 15:00:00+00:00

6、Reference method

References to data:

LAI production of in 1KM of the Heihe River Basin (2000-2012). A Big Earth Data Platform for Three Poles, doi:10.3972/heihe.090.2014.db2015

References to articles:

Liao, Y. , Fan, W. , & Xu, X. . (2013). Algorithm of leaf area index product for HJ-CCD over Heihe River Basin. IGARSS 2013 - 2013 IEEE International Geoscience and Remote Sensing Symposium. IEEE.

7、Supporting project information

8、Data resource provider