A Big Earth Data Platform for Three Poles

**Heihe 30m FAPAR production (2012)**

1、Description

Image format: tif
Image size: about 925M per scene
Time range: may-october 2012
Time resolution: month
Spatial resolution: 30m
The algorithm firstly adopts the canopy BRDF model and presents the canopy reflectivity as a function of a series of parameters such as FAPAR, wavelength, reflectance 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/FAPAR products by look-up table (LUT) method. See references for detailed algorithm.

2、Keywords

Theme：Photosynthetically active radiation,Leaf area index,Vegetation
Discipline：Terrestrial Surface
Places：Heihe River Basin, whole basin
Time：2012

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:2012-05-13 02:00:00+00:00--2012-11-12 02:59:00+00:00

6、Reference method

References to data:

Heihe 30m FAPAR production (2012). A Big Earth Data Platform for Three Poles, doi:10.3972/heihe.091.2014.db2015

References to articles:

Fan, W. , Liu, Y. , Xu, X. , Chen, G. , & Zhang, B. . (2014). A new fapar analytical model based on the law of energy conservation: a case study in china. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 7(9), 3945-3955.

7、Supporting project information

8、Data resource provider