A Big Earth Data Platform for Three Poles

**Heihe 1km FAPAR production (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 use look-up table (LUT) inversion to obtain FAPAR products.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：Photosynthetically active radiation,Vegetation  
Discipline：Terrestrial Surface  
Places：Heihe River Basin, whole basin  
Time：2000-2012

3、Data details

1.Scale：800000

2.Projection：4326

3.Filesize：1104.0MB

4.Data format：tif

4、Space scope

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

5、Time frame:2000-01-06 15:00:00+00:00--2013-01-05 15:00:00+00:00

6、Reference method

References to data:

FAN Wenjie. Heihe 1km FAPAR production (2000-2012). A Big Earth Data Platform for Three Poles, doi:10.3972/heihe.089.2014.db2015

References to articles:

Liu, Y. , Fan, W. , Xu, X. , & Chen, G. . (2013). A new FAPAR retrieval model for continuous vegetation. doi:10.1109/IGARSS.2013.6723470

7、Supporting project information

8、Data resource provider

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