A Big Earth Data Platform for Three Poles

**Remote sensing inversion product of diurnal evapotranspiration in the middle reaches of Heihe River (2012)**

1、Description

Evapotranspiration monitoring is very important for agricultural water resource management, regional water resource utilization planning and sustainable development of social economy. The limitation of traditional monitoring et method is that it can't be observed in large area at the same time, so it can only be limited to the observation point. Therefore, the cost of personnel and equipment is relatively high. It can't provide the ET data of different land use types and crop types. Remote sensing can be used for quantitative monitoring of ET. the feature of remote sensing information is that it can reflect not only the macro structural characteristics of the earth's surface, but also the micro local differences.
This data uses MODIS data and m-sebal model from June to September 2012 and time scale expansion scheme based on reference evaporation ratio to estimate the spatial and temporal distribution of evapotranspiration in the whole growth season of the middle reaches of Heihe River, and uses ground observation data to evaluate m-sebal model and time scale expansion scheme in detail.
Its time resolution is day by day, spatial resolution is 250m, and data coverage is in the middle reaches of Heihe River, unit: mm.
The projection information of the data is as follows: UTM projection, 47N.

2、Keywords

Theme：MODIS,Atmosphere Remote Sensing
Discipline：Atmosphere
Places：Heihe River Basin, Middle Reaches of Heihe River Basin
Time：June to September 2012

3、Data details

1.Scale：250000

2.Projection：4326

3.Filesize：170.0MB

4.Data format：栅格

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：40.5 | - |
| west：98.5 | - | east：102.0 |
| - | south：38.5 | - |

5、Time frame:2012-06-28 00:00:00+00:00--2012-10-27 00:00:00+00:00

6、Reference method

References to data:

ZHOU Jian. Remote sensing inversion product of diurnal evapotranspiration in the middle reaches of Heihe River (2012). A Big Earth Data Platform for Three Poles, doi:10.3972/heihe.10004.2014.db2015

References to articles:

周彦昭, 周剑, 李妍, 王旭峰. (2014). 对比SEBAL和改进的SEBAL模型估算黑河中游绿洲戈壁蒸散发. 冰川冻土, 36(6):1526-1537.

7、Supporting project information

8、Data resource provider

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