A Big Earth Data Platform for Three Poles

**Daily MODIS-based Land Surface Evapotranspiration Dataset of 2021 in Qilian Mountain Area (ETHi-merge V1.0)**

1、Description

This dataset contains daily land surface evapotranspiration products of 2021 in Qilian Mountain area. It has 0.01 degree spatial resolution. The dataset was produced based on Gaussian Process Regression (GPR) method by fusing six satellite-derived evapotranspiration products including RS-PM (Mu et al., 2011), SW (Shuttleworth and Wallace., 1985), PT-JPL (Fisher et al., 2008), MS-PT (Yao et al., 2013), SEMI-PM (Wang et al., 2010a) and SIM (Wang et al.2008). The input variables for the evapotranspiration products include MODIS products, and MERRA meteorological data.

2、Keywords

Theme：Land-surface evapotranspiration,Latent heat flux,Remote Sensing Product,Evapotranspiration,Remote Sensing Technology,fusion,Optical remote sensing,Terrestrial Surface Remote Sensing  
Discipline：Terrestrial Surface,Remote Sensing Technology  
Places：Qilian Mountains area  
Time：2021

3、Data details

1.Scale：None

2.Projection：

3.Filesize：1484.8MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：44.99 | - |
| west：89.11 | - | east：107.02 |
| - | south：34.2 | - |

5、Time frame:2020-12-31 16:00:00+00:00--2021-12-30 16:00:00+00:00

6、Reference method

References to data:

YAO Yunjun, LIU Shaomin, SHANG Ke. Daily MODIS-based Land Surface Evapotranspiration Dataset of 2021 in Qilian Mountain Area (ETHi-merge V1.0). A Big Earth Data Platform for Three Poles, doi:10.11888/Terre.tpdc.2724302022

References to articles:

Yao, Y., Liang S., Li X., Chen J., & Liu S., et al. (2017). Improving global terrestrial evapotranspiration estimation using support vector machine by integrating three process-based algorithms. Agricultural and Forest Meteorology, 242, 55-74. DOI: 10.1016/j.agrformet.2017.04.011.

7、Supporting project information

8、Data resource provider

name: YAO Yunjun  
unit: Beijing Normal University  
email: boyyunjun@163.com  
  
name: LIU Shaomin  
unit: Beijing Normal University  
email: smliu@bnu.edu.cn  
  
name: SHANG Ke  
unit:   
email: shangke@mail.bnu.edu.cn