A Big Earth Data Platform for Three Poles

**Daily MODIS-based Land Surface Evapotranspiration Dataset of 2020 in Qilian Mountain Area (ETHi-merge V1.0)**

1、Description

This dataset contains daily land surface evapotranspiration products of 2020 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, MERRA meteorological data, and China Meteorological Forcing Dataset.

2、Keywords

Theme：Land-surface evapotranspiration,Latent heat flux,Evapotranspiration,Remote sensing evapotranspiration,Hydrology,Terrestrial Surface Remote Sensing
Discipline：Terrestrial Surface
Places：Qilian Mountains
Time：2020

3、Data details

1.Scale：None

2.Projection：

3.Filesize：2724.0MB

4.Data format：None

4、Space scope

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

5、Time frame:2019-12-31 16:00:00+00:00--2020-12-30 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 2020 in Qilian Mountain Area (ETHi-merge V1.0). A Big Earth Data Platform for Three Poles, doi:10.11888/Geogra.tpdc.2714102021

References to articles:

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

7、Supporting project information

Pan-Third Pole Environment Study for a Green Silk Road-A CAS Strategic Priority A Program

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