A Big Earth Data Platform for Three Poles

**CAMELE: Collocation-Analyzed Multi-source Ensembled Land Evapotranspiration Data**

1、Description

CAMELE: Collocation-Analyzed Multi-Source Ensembled Land Evapotranspiration data provide an estimation of global land total evapotranspiration at 0.1°-8daily and 0.25°-daily resolutions. The 0.1°-8daily collection covers the period from 20010101 to 20190829, while the 0.25°-daily provides the estimation from 19810101 to 20200831. TCA-based algorithms are used to evaluate the uncertainties and the error cross-correlation value of five widely used global land evapotranspiration products, including ERA5-land total evaporation, FLUXCOM-RS, PMLV2 (Penman-Monteith-Leuning model version 2 global evaporation), GLEAM v3.3a and GLDASv2.1 Noah. By minimizing the mean square error, the optimal weights of each product for linear combination are given using the evaluation results. Multiple information including the core collection method, synthetic experiments, site-based validation and evaluation of the merging data were described in our paper.

2、Keywords

Theme：Evapotranspiration,Evaporation capacity,Hydrology  
Discipline：Terrestrial Surface  
Places：Global  
Time：Long Period, 1981-2020

3、Data details

1.Scale：None

2.Projection：WGS84

3.Filesize：5.0MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：90.0 | - |
| west：180.0 | - | east：180.0 |
| - | south：60.0 | - |

5、Time frame:1980-12-31 16:00:00+00:00--2020-08-30 16:00:00+00:00

6、Reference method

References to data:

YANG Hanbo, LI Changming. CAMELE: Collocation-Analyzed Multi-source Ensembled Land Evapotranspiration Data. A Big Earth Data Platform for Three Poles, 2021

References to articles:

7、Supporting project information

8、Data resource provider

name: LI Changming  
unit: Tsinghua University  
email: licm\_13@163.com  
  
name: YANG Hanbo  
unit: Tsinghua University  
email: yanghanbo@tsinghua.edu.cn