A Big Earth Data Platform for Three Poles

**Contiguous solar induced chlorophyll fluorescence (CSIF) dataset of Tibetan Plateau (2000-2018)**

1、Description

The data set is based on the reflectance of MODIS channels and the observation data of SIF to establish the neural network model, so as to obtain the SIF data with high spatial and temporal resolution, which is often used as a reference for primary productivity. The data is from Zhang et al. (2018), and the specific algorithm is shown in the article. The source data range is global, and the Qinghai Tibet plateau region is selected in this data set. This data integrates the original 4-day time scale data into the monthly data. The processing method is to take the maximum value of the month, so as to achieve the effect of removing noise as much as possible. This data set is often used to evaluate the temporal and spatial patterns of vegetation greenness and primary productivity, which has practical significance and theoretical value.

2、Keywords

Theme：Galactic System
Discipline：Solar-Terrestrial Physics and Astronomy
Places：Qinghai-Tibet Plateau
Time：2000-2018

3、Data details

1.Scale：None

2.Projection：

3.Filesize：186.0MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：39.83 | - |
| west：73.45 | - | east：104.67 |
| - | south：25.99 | - |

5、Time frame:1999-12-31 16:00:00+00:00--2018-12-30 16:00:00+00:00

6、Reference method

References to data:

ZHANG Yao. Contiguous solar induced chlorophyll fluorescence (CSIF) dataset of Tibetan Plateau (2000-2018). A Big Earth Data Platform for Three Poles, doi:10.11888/Ecolo.tpdc.2710372020

References to articles:

Zhang, Y., Joiner, J., Alemohammad, S.H., Zhou, S., & Gentine, P. ( 2018). A global spatially contiguous solar-induced fluorescence (CSIF) dataset using neural networks. Biogeosciences, 15, 5779-5800, https://doi.org/10.5194/bg-15-5779-2018.

7、Supporting project information

The second comprehensive scientific investigation of Tibetan Plateau

8、Data resource provider

name: ZHANG Yao
unit:
email: yaozhang@lbl.gov