A Big Earth Data Platform for Three Poles

**Dataset of carbon flux, climate and surface albedo od alpine meadow and grassland ( 2003 - 2016)**

1、Description

1、Based on field eddy correlation (EC) measurement data, using the standard data processing method for EC data, including despiking, coordinate rotation, air density corrections, outlier rejection, and friction velocity threshold (u\*) corrections, gap filled, and NEE partition. The dataset collects carbon flux data and microclimate measurement data from 2003 to 2016 in three typical alpine grassland ecosystems on the Qinghai-Tibet Plateau, including Damxung alpine meadow, Haibei alpine meadow ，Naqu alpine meadow，Zoige alpine grassland，Qilian mountion grassland . The time resolution of data is high (30 min), and the interpolation of data is complete throughout the year. This dataset can be applied to carbon flux assessment, comparison and prediction in these alpine meadows, attribution of climate factors affecting carbon flux, validation of model simulation results, etc.  
2、Based on the MCDGF43 dataset, we produce the visible and near-infared albedo of Tibetan Plateau, using the standard data processing of hdf to tif , including the moasic, resample and masked by Tibetan Plateau's boundary. The time resolution of dataset is 8 days and the spatial resolution is 500 meters, which span the period of 2003-2016.

2、Keywords

Theme：Grassland ecosystem,Earth SurFace Processes,Cryosphere remote sensing products,Surface Freeze-thaw Cycle/state Remote Sensing,Albedo,Grassland  
Discipline：Terrestrial Surface,Cryosphere  
Places：Tibetan Plateau  
Time：2003-2016

3、Data details

1.Scale：None

2.Projection：

3.Filesize：17203.0MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：40.0 | - |
| west：72.0 | - | east：105.0 |
| - | south：25.0 | - |

5、Time frame:2003-01-11 08:00:00+00:00--2017-01-10 19:59:59+00:00

6、Reference method

References to data:

ZHANG Yangjian, YANG Yan, SU Peixi. Dataset of carbon flux, climate and surface albedo od alpine meadow and grassland ( 2003 - 2016). A Big Earth Data Platform for Three Poles, doi:10.11888/Ecolo.tpdc.2702922019

References to articles:

7、Supporting project information

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

8、Data resource provider

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