A Big Earth Data Platform for Three Poles

**The 30-minute flux data in three pole region (2000-2016)**

1、Description

The dataset is a 30-minute eddy covariance flux observation data from nine flux stations in the Three Poles, including the data of ecosystem Net Carbon Exchange (NEE), Gross Primary Productivity(GPP), and Ecosystem Respiration (ER) . The time coverage of the data is from 2000 to 2016. The main steps of data pre-processing include outlier removal (±3σ), coordinate axis rotation(three-dimensional wind rotation), Webb-Pearman-Leuning correction, outlier elimination, carbon flux interpolation and decomposition. And missing data is interpolated by the nonlinear empirical formula between CO2 flux value(Fc) and environmental factors.

2、Keywords

Theme：Earth SurFace Processes,Carbon flux,Net ecosystem exchange
Discipline：Terrestrial Surface
Places：Three poles
Time：2000-2016

3、Data details

1.Scale：None

2.Projection：

3.Filesize：452.0MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：70.83 | - |
| west：-51.39 | - | east：161.34 |
| - | south：30.5 | - |

5、Time frame:2000-01-05 16:00:00+00:00--2017-01-04 16:00:00+00:00

6、Reference method

References to data:

ZHANG Yangjian, NIU Ben. The 30-minute flux data in three pole region (2000-2016). A Big Earth Data Platform for Three Poles, doi:10.11888/Ecolo.tpdc.2703222019

References to articles:

7、Supporting project information

CASEarth:Big Earth Data for Three Poles（grant No. XDA19070000）

8、Data resource provider

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