A Big Earth Data Platform for Three Poles

**Landsat-based continuous monthly 30m FVC Dataset in Qilian mountain area in 2021 (V1.0)**

1、Description

Fractional Vegetation Coverage (FVC) is defined as the proportion of the vertical projection area of Vegetation canopy or leaf surface to the total Vegetation area, which is an important indicator to measure the status of Vegetation on the surface. In this dataset, vegetation coverage is an evaluation index reflecting vegetation coverage. 0% means that there is no vegetation in the surface pixel, that is, bare land. The higher the value, the greater the vegetation coverage in the region. This data set includes the monthly synthesis of 30m\*30m surface vegetation index products in Qilian mountain area in 2021. Max value composition (MVC) method was used to synthesize monthly FVC products on the surface using the reflectivity data of Landsat 8 and sentinel 2 channels from Red and NIR channels.

2、Keywords

Theme：FVC,Near infrared remote sensing,Remote Sensing Technology,Visible remote sensing,Terrestrial Surface Remote Sensing
Discipline：Terrestrial Surface,Remote Sensing Technology
Places：Qilian Mountain Area
Time：January 1, 2021 to December 31, 2021

3、Data details

1.Scale：None

2.Projection：

3.Filesize：81100.0MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：45.0 | - |
| west：89.0 | - | east：107.0 |
| - | south：34.0 | - |

5、Time frame:2020-12-31 16:00:00+00:00--2021-12-31 03:59:59+00:00

6、Reference method

References to data:

ZHONG Bo, LI Yi, WU Junjun . Landsat-based continuous monthly 30m FVC Dataset in Qilian mountain area in 2021 (V1.0). A Big Earth Data Platform for Three Poles, doi:10.11888/Terre.tpdc.2726632022

References to articles:

Cihlar, J., Manak, D., & D'Iorio, M. (1994). Evaluation of Compositing Algorithms for AVHRR Data over Land. IEEE Transactions on Geoscience and Remote Sensing, 32(2), 427-437.

Huete, A., Didan, K., Miura, T., Rodriguez, E.P., Gao, X., & Ferreira, L.G. (2002). Overview of The Radiometric and Biophysical Performance of The MODIS Vegetation Indices. Remote Sensing of Environment, 83(1-2), 195–213.

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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