A Big Earth Data Platform for Three Poles

**Remote sensing products of vegetation parameters in Heihe River Basin (2021)**

1、Description

This dataset includes the normalized difference vegetation index (NDVI), fractional vegetation cover (FVC), vegetation net primary productivity (NPP), grassland biomass, forest stock volume remote sensing products of vegetation parameters in the Heihe River Basin from May 2021 to October 2021, with a spatial resolution of 8m. This dataset uses remote sensing data sources such as Gaofen-1, Gaofen-6, Sentinel, and Resource-3, combined with basic data such as meteorology and ground monitoring, and uses the band ratio method, mixed pixel decomposition model, CASA model and other vegetation parameters to reflect Algorithms and models are used to generate remote sensing products of monthly vegetation indices in key areas of Qilian Mountains during the growing season. This dataset provides data support for the diagnosis of regional ecological and environmental problems and dynamic assessment of the ecological environment by constructing a high-resolution satellite-based ecological environment monitoring data set.

2、Keywords

Theme：Vegetation coverage data,Gross primary productivity(NPP),NDVI,Biomass,Forest stock volume,Terrestrial Surface Remote Sensing  
Discipline：Terrestrial Surface  
Places：Heihe River Basin  
Time：In 2021

3、Data details

1.Scale：None

2.Projection：WGS84

3.Filesize：512000.0MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：43.0 | - |
| west：97.0 | - | east：102.0 |
| - | south：37.0 | - |

5、Time frame:2021-04-30 16:00:00+00:00--2021-10-31 03:59:59+00:00

6、Reference method

References to data:

ZHANG Jinlong, QI Yuan, CAO Yongpan, ZHOU Shengming, WANG Hongwei. Remote sensing products of vegetation parameters in Heihe River Basin (2021). A Big Earth Data Platform for Three Poles, doi:10.11888/Terre.tpdc.2725432022

References to articles:

Qi, Y., Lian, X.H., & Wang, H.W., et al. (2020). Dynamic mechanism between human activities and ecosystem services: a case study of Qinghai lake watershed, China. Ecological Indicators. 117, 106528.

7、Supporting project information

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

8、Data resource provider

name: ZHOU Shengming  
unit: Cold and Arid Regions Environmental and Engineering Research Institute, CAS  
email: 23156311@qq.com  
  
name: WANG Hongwei  
unit:   
email: wanghw@lzb.ac.cn  
  
name: ZHANG Jinlong  
unit:   
email: zjinlong@lzb.ac.cn  
  
name: QI Yuan  
unit: Northwest Institute of Eco-Environment and Resources, Chinese Academy of Sciences  
email: qiyan@lzb.ac.cn  
  
name: CAO Yongpan  
unit:   
email: