A Big Earth Data Platform for Three Poles

**Continuous observation data set of leaf area index (based on hemispheric image) in Zhangye City (2019-2021)**

1、Description

Leaf area index is an important structural parameter of ecosystem, which is used to reflect the number of plant leaves, changes in canopy structure, life vitality of plant community and its environmental effects, provide structured quantitative information for the description of material and energy exchange on the surface of plant canopy, and balance the energy of carbon accumulation, vegetation productivity and interaction between soil, plant and atmosphere in ecosystem, Vegetation remote sensing plays an important role. The data comes from the distributed leaf area index instrument independently developed by the project (based on hemispheric image), which takes hemispheric images of forest canopy at fixed time, fixed point and from bottom to top, and uploads them through wireless network. This data acquisition is the original hemispherical image, which needs further processing to calculate the leaf area index, which can be processed by hemiview and other software.

2、Keywords

Theme：Desert,Leaf area index,Vegetation  
Discipline：Terrestrial Surface  
Places：Zhangye City, Heihe River Basin  
Time：2019-2021

3、Data details

1.Scale：None

2.Projection：

3.Filesize：2600.0MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：38.5 | - |
| west：99.73 | - | east：99.98 |
| - | south：38.33 | - |

5、Time frame:2019-10-28 16:00:00+00:00--2021-06-01 16:00:00+00:00

6、Reference method

References to data:

SU Hongxin. Continuous observation data set of leaf area index (based on hemispheric image) in Zhangye City (2019-2021). A Big Earth Data Platform for Three Poles, doi:10.11888/Ecolo.tpdc.2717792021

References to articles:

7、Supporting project information

The development of the devices for vegetation structure and plant growth monitoring

8、Data resource provider

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