Upper Yangtze River Scientific Data Center

**Automatic Measurement Data of Chlorophyll Fluorescence at Jinfoshan National Station (2020)**

1、Description

The automatic vegetation fluorescence observation system is set up at the Karst Ecosystem Field Observation and Research Station (106.3191E, 29.7627N) in Hutou Village, Beibei District, Chongqing City. The vertical height of the observation system from the ground is 10m, and the underlying surface is green trees such as osmanthus fragrans. The fluorescence automatic observation system adopts QE65 Pro spectrometer to realize synchronous observation with LI7500RS vorticity observation system. The all-weather vegetation fluorescence observation system is based on the spectral observations inside and outside the O2-A and O2-B dark lines near 760nm and 687nm, and extracts sunlight induced chlorophyll fluorescence through 3FLD, SFM and other algorithms. The core work of this equipment is to measure the solar incident irradiance and the apparent radiance of the ascending vegetation canopy quasi synchronously. The solar incident irradiance is obtained through upward observation of optical fiber with cosine corrector, and the apparent radiance of the vegetation canopy upward is obtained through another optical fiber observation canopy, and then the data is transmitted to the host computer through optical fiber for calculation.

2、Keywords

Theme：Remote Sensing Technology  
Discipline：Remote Sensing Technology  
Places：Chongqing, China  
Time：2020

3、Data details

1.Scale：None

2.Projection：

3.Filesize：0.46MB

4.Data format：None

4、Space scope

|  |  |  |
| --- | --- | --- |
| - | north：29.79 | - |
| west：106.32 | - | east：106.45 |
| - | south：29.76 | - |

5、Time frame:2020-09-30 16:00:00+00:00--2020-11-29 16:00:00+00:00

6、Reference method

References to data:

TANG Xuguang . Automatic Measurement Data of Chlorophyll Fluorescence at Jinfoshan National Station (2020). Upper Yangtze River Scientific Data Center, 2022

References to articles:

7、Supporting project information

8、Data resource provider

name: TANG Xuguang   
unit: Southwest University  
email: xgtang@swu.edu.cn