

IIRS Outreach Programme

The IIRS outreach programme, which was started in 2007 with 12 Universities/ Institutions has now grown substantially to 3572+. The beneficiaries of the programme may include:

- Central/State/Private Universities & Academic Institutions
- Central & State Government Departments
- Forest Resource Professionals
- State Forest Departments/Forest Training Academies
- Research Institutes
- Geospatial Industries
- NGOs

About IIRS

Indian Institute of Remote Sensing (IIRS) under Indian Space Research Organisation (ISRO), Department of Space, Govt. of India is a premier Training and Educational Institute set up for developing trained professionals in the field of Remote Sensing, Geoinformatics and GNSS Technology for Natural Resources, Environmental and Disaster Management. Formerly known as Indian Photo-interpretation Institute (IPI), founded in 1966, the Institute boasts to be the first of its kind in entire South-East Asia. While nurturing its primary endeavour to build capacity among the user community by training mid-career professionals, the Institute has enhanced its capability and evolved many training and education programmes that are tuned to meet the requirements of various target groups, ranging from fresh graduates to policy makers including academia. IIRS also conducts e-learning programme on Remote Sensing and Geo-information Science (<http://elearning.iirs.gov.in>).

Forestry and Ecology Department

Forestry and Ecology Department (FED) is the oldest department of IIRS, established in 1966 with the aim of providing training and skill development on the utility of aerial photography for forest mapping, resources inventory, monitoring and resource management for forest managers in particular and scientific community in general. The scope and activities of the Department have evolved and enlarged over the years keeping pace with technological advancements. FED strives to achieve excellence and remain in the forefront for research and capacity building in RS and GIS applications in forestry and ecology. The Department has a history of very strong research group contributing to the methodology development and execution for various nation-wide research projects for forestry sector in the country.

Contact Details

Workshop Organiser

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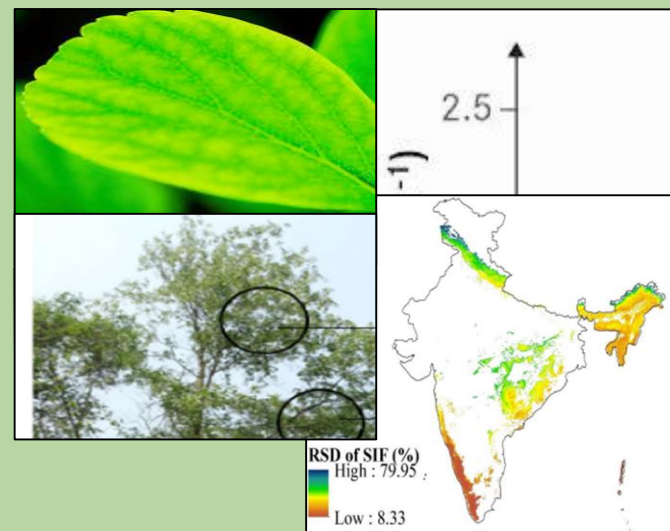
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IIRS Outreach Programme



Workshop
on

Utilities of Sun-Induced Chlorophyll Fluorescence in Vegetation Studies

Date: July 18, 2024



Organised by

Indian Institute of Remote Sensing
Indian Space Research Organisation
Department of Space, Govt. of India
Dehradun

www.iirs.gov.in

About the Course

Plants emit a faint reddish glow during photosynthesis. This faint glow, called solar-induced chlorophyll fluorescence (SIF), can be detected by specialized satellites. The study of SIF is a relatively new field, but it holds a lot of promise for studying vegetation from space. Scientists are using satellite fluorescence in different ways for vegetation studies. Since SIF is directly linked to photosynthesis, it can provide a more direct measure of plant health and productivity than traditional methods that rely on reflected sunlight. This can be helpful for monitoring crops, forests, and other ecosystems. By tracking changes in SIF over time, researchers can develop models to predict crop yields. This information can be used by farmers to improve their management practices. Plants fluoresce less when they are stressed by drought. By monitoring SIF, researchers can identify areas that are suffering from drought early on. This information can be used to help water managers allocate water resources more effectively. Phenology is the study of seasonal changes in plants. SIF can explain the condition of vegetation for budburst, flowering, and leaf senescence. This information can be used to understand how plants are responding to climate change. Overall, satellite fluorescence is a powerful new tool for studying vegetation from space. As the technology continues to develop, we can expect to see even more innovative applications in the years to come.

Hence, we invite you to attend this online workshop on "Utilities of Sun-Induced Chlorophyll Fluorescence in Vegetation Studies". The workshop is scheduled on July 18, 2024. It will comprise lectures related to various aspects of SIF applications in vegetation studies. The lectures will be delivered by the faculty from IIRS and invited experts.

Overview of Program

The course is conducted through IIRS outreach facility. IIRS has successfully conducted 211 courses so far through its outreach programme with 803542 participants from 3572+ Institutions/ Universities (as of 28th June , 2024) spread across India.

Objective of the Course : To familiarize academicians and researchers about the utility of SIF in vegetation studies.

Content: Basic principles of Ch fluorescence and sun-induced chl fluorescence, Use of hand held fluorometer for vegetation studies, Simulation of SIF using RTM models, Retrieval of SIF from satellite observations, satellite SIF products, utilisation for SIF for vegetation productivity and stress studies.

Target Participants

The course is designed for the researchers and students (at least Graduate) engaged in the field of ecology, vegetation science, environmental studies, geospatial technology and modelling.

Registration Fee

There is no registration fee.

Course Registration

- Course updates and other details will be available on URL- <http://www.iirs.gov.in/Edusat-News/>.
- All the participants have to register online through registration page available on above web page.

Award of Certificate

All the participants who attend the programme through e-class portal will get a e-certificate for participation.

Programme Reception

Individuals can attend the course live via any web browser through the e-class portal of IIRS, Dehradun i.e. <https://eclass.iirs.gov.in>.

Important links

Courses updates and other details will be available on URL – <https://www.iirs.gov.in/EDUSAT-News>

To participate in this programme the interested, organisations/universities/departments/institutes have to identify coordinator at their end. The identified coordinator will register online his/her institute as nodal centre in IIRS website (<https://elearning.iirs.gov.in/edusatregistration/coordinator>)

All the participants have to register online through registration page by selecting his/her organization as nodal centre on below link: <https://elearning.iirs.gov.in/edusatregistration/student>

There are limited number of seats. Registration will be done on first come first serve basis