

About CEOS

The Committee on Earth Observation Satellites (CEOS) mission is to ensure international coordination of civil space-based Earth observation programs and promote exchange of data to optimize societal benefit and inform decision making for securing a prosperous and sustainable future for humankind. CEOS supports effective societal decision-making in the areas of climate monitoring and research; carbon observations, including observations to support the effective monitoring and management of the world's forested regions; food security; disaster risk management; biodiversity; capacity building; data availability and access, and more. The CEOS Working Group on Capacity Building & Data Democracy (WGCapD) undertakes a variety of activities based on the four pillars of the Data Democracy Initiative, viz., Data access, Data dissemination, Capacity building, and Software tools. The WGCapD builds upon this Initiative in an effort to increase the capacity of institutions in developing countries for effective use of Earth Observation (EO) data for the benefit of society and to achieve sustainable development. ISRO is contributing significantly to CEOS activities. For the year 2018 & 2019, WGCapD was chaired by Director, IIRS. ISRO is chair of CEOS for the year 2019-2020 and has put forward capacity building in the BIMSTEC region on as CEOS chair priority.

About IIRS

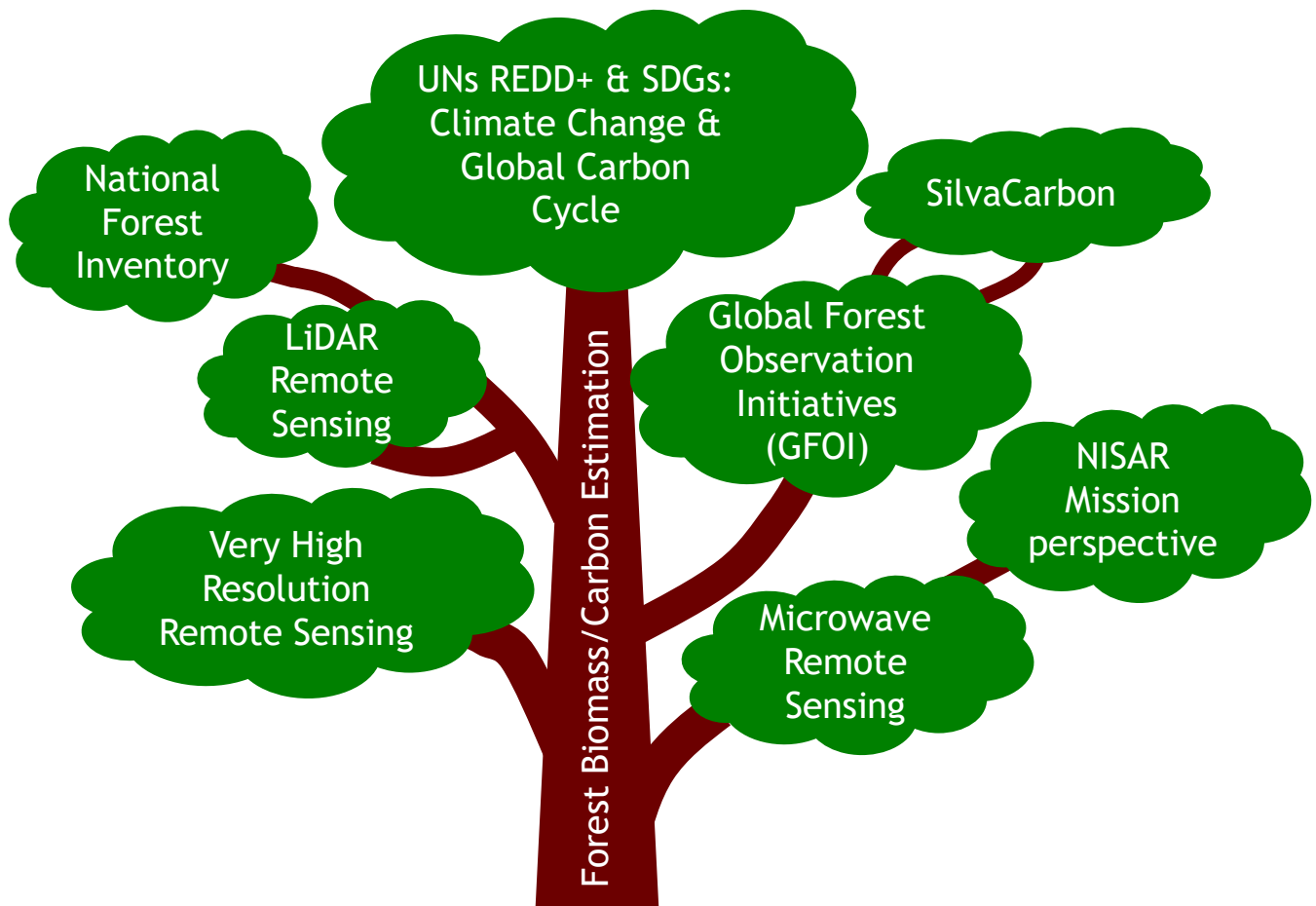
The Indian Institute of Remote Sensing (IIRS) is a constituent unit of the Indian Space Research Organisation (ISRO), Department of Space, Govt. of India. Since its establishment in 1966, IIRS is a key player for training and capacity building in geospatial technology and its applications through training, education, and research in Southeast Asia. The training, education and capacity building programmes of the Institute are designed to meet the requirements of Professionals at working levels, fresh graduates, researchers, academia, and decision-makers. IIRS is also one of the most sought after institutes for conducting specially designed courses for the officers from Central and State Government Ministries and stakeholder departments for the effective utilization of EO data. IIRS is also empanelled under the Indian Technical and Economic Cooperation (ITEC) programme of the Ministry of External Affairs, Govt. of India for providing short-term courses to international participants from ITEC member countries. IIRS hosts headquarters of Centre for Space Science and Technology Education in Asia and the Pacific (CSSTEAP), affiliated to the United Nations space programmes and conducts its Remote Sensing and GIS training and education.

About the Course

Forests sequester a large amount of carbon and play a crucial role in the global climate system. Quantification of forest biomass is, thus, vital for carbon budget accounting, carbon flux monitoring and for understanding the forest ecosystem response to climate change. Estimation of the forest biomass/carbon stocks not only contributes in Reducing Emissions from Deforestation and forest Degradation (REDD) programme but also in the sustainable management of the forest. Remotely sensed data integrated with forest inventories have become an effective approach to estimate forest biomass/carbon stocks. The role of space technology has been clearly emphasized in mapping and monitoring applications in the context of United Nations REDD+ and Sustainable Development Goals (SDGs) target 15.2. With the development of new sensors, improved spatial, spectral, radiometric, and temporal resolutions, EO data can play a significant role in mapping and monitoring of forest biomass/carbon. Better data integration approaches are also required for accurate and spatially explicit estimations of forest biomass/carbon.

The international short course on “Forest Biomass Assessment using Earth Observation Data” has been designed to expose the course participants on the use of RS-based approaches for mapping forest biomass/carbon stocks via integration of EO data, field inventory data, and models. The course duration is one week and will comprise of lectures, practical and field excursion.

Course Content



Learning Objectives

The training course is designed with a view to provide participants a basic understanding of the scientific concepts associated with the role of forest in global carbon cycle. The utility of EO data, both passive and active, and its integration with in-situ measurements and modelling approaches for forest biomass/carbon mapping and modelling will be the focus of this special course. The participants will gain practical knowledge and ability to access, analyze, and apply EO data for forest biomass/carbon estimation with special emphasis on United Nations REDD+ and Sustainable Development Goals (SDGs) target 15.2.

Target Participants

The target participants of the course are Foresters, Scientists, Academicians, Professionals, Researcher scholars and Students from the Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC) countries viz., Bhutan, Bangladesh, India, Myanmar, Nepal, Thailand, and Sri Lanka.

Number of Participants

25 participants representing BIMSTEC countries.

Language

The entire course will be delivered in English. Proficiency in written and spoken English is essential.

Instructors

This is a CEOS-WGCapD activity with support from ISRO and other space agencies. Instructors shall be from Indian Space Research Organisation (ISRO), Forest Survey of India (FSI), National Aeronautics and Space Administration (NASA), Japan Aerospace Exploration Agency (JAXA) & Other CEOS Agencies.

Travel Supports

Limited travel support with cheapest to and fro economy air ticket to Dehradun will be provided to selected foreign course participants. However, we encourage the course participants to arrange their own travel support from their parent organisation/country. Pick-up and drop from Dehradun airport (Jolly Grant) and Dehradun railway station can be provided by the organizer on request.

Boarding

Single occupancy AC room will be provided in IIRS hostel. No accommodation will be provided to the accompanying person/children. Breakfast, lunch and dinner will be provided to the course participants during their stay.

How to Apply

The aspirant participants may fill the online form available at IIRS website (<https://admissions.iirs.gov.in/shortcourse>) latest by 28 February 2020. Applicants are encouraged to apply well before the last date. Selection of the participants will be done based on the criteria decided by IIRS. Preference will be given to candidates working in the Government sector. In case of large number of applications, representation of member countries, experience in teaching/research and higher qualification will be considered for selection.

Location & Accessibility

IIRS is located in Dehradun (India) and its campus is endowed with scenic beauty. Dehradun is well connected to major cities of India via., air/rail/road. City is famous for its picturesque landscape, pleasant climate, high quality school education and several scientific organizations of national & international repute. Places of religious & tourist importance like Haridwar, Rishikesh and Mussoorie are located in the vicinity of Dehradun.

The weather is generally pleasant during mid-April. The average temperatures during mid April would be 22-29°C.

Important Dates

- Start date of online application: 21 January 2020
- Last date of online application: 28 February 2020
- List of shortlisted/selected candidates: 10 March 2020
- Start date of the training: 13 April 2020
- Last day of the training: 17 April 2020

Contact Details

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