

5 Day Training on Microwave Remote Sensing Applications

(August 18 - 22, 2025)



#### **Brief:**

The successful launch of indigenously developed SAR, Radar Imaging Satellite **EOS-4** active microwave remote sensing satellite, has opened up new vistas for operational utilization of microwave data for mapping of natural resources and Disaster management in India. EOS-04 is a Radar Imaging Satellite designed to provide high quality images under all weather conditions.

**EOS-4** carries a multi-mode C-band (5.35 GHz) Synthetic Aperture Radar (SAR), operates at various beam modes having a number of combinations of linear as well as circular polarization, varying swath in the range of 10-220 km and spatial resolution varying between 1m to 50 m depending on mode of acquisition. Unique applications of radar technology and synergy with optical data have tremendous scope for a better understanding in developing new applications. The data is valuable for applications such as Agriculture, Forestry & Plantations, Soil Moisture & Hydrology and Flood mapping. Also, EOS-4 provides unique characteristics of fully polarized & compact polarized data in multi incidence besides being equipped for interferometry. The data acquired will complement the Resourcesat, Carosat and RISAT 2B series of satellites.

## Training Focus:

The main objective of this course is to provide basis for enhancing knowledge towards a better understanding of SAR EOS-4 data acquisition & processing, interpretation and utilization for various applications.

The course covers Microwave Remote Sensing Technology & Applications addressing:

- Introduction to SAR Technology
- SAR Signal Processing
- Interferometry
- Polarimetry

Resource Applications, Case studies and Demonstrations using COTS and Open tools in

- Agriculture & Soils
- Environment & Forestry
- Snow & Hydrology
- Flood Mapping



SAR Polarimetric Composite

### **Eligibility & Selection**

Users/Professionals working in Satellite imagery and applications domain and having Masters in Science or Bachelors degree in Engineering or Graduation with 2 years of experience in relevant areas. Knowledge in working with optical satellite imagery and experience in using Image Processing software is essential. Selection of candidates is subject to fulfillment of eligibility criteria, current utilization, scope of work in the domain and prior exposure to remote sensing tools will be considered.

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### How to Apply?

Duly filled applications form with sponsorship certificate are invited from working professionals of State Government / Central Government Departments, NGOs, Private Companies and Faculty/Research Scholars from Academic Institutions who are gearing up to utilize SAR datasets for various Research projects. The application form should reach NRSC, Hyderabad by speed post (EMS) by August 1st, 2025. Candidates can send a scanned copy of the application form to training@nrsc.gov.in (attachment < 4 MB) as advance copy and duly send the originals by speed post to reach the address mentioned below before the due date.

## **Course Fee & Admission**

The course tuition fee given in below table to be paid by Electronic Bank Transfer to NRSC account. Visit our website for more details. Tuition fee does not include lodging & boarding charges. Kindly enclose and send duly filled application form with sponsorship certificate should reach us on or before the due date. Selected candidates will be intimated by email/mobile. Applicants will be provided accommodation in NRSC Guest House II inside the campus and food is served by NRSC canteen at a nominal price. Right of admission reserved with NRSC.

Course fee (Rs.) for individual applicants	
(Central Govt./State Govt./PSUs/Pure Govt. Organizations/Govt. Academic Colleges/Institutes)	*(Industry/Autonomous Bodies & its Institutes, Private Org./ NGOs/ Private Academia/Other Institutes)
Rs. 10,000/-	Rs. 11,800/-

\*Course Fee Rs. 10,000/- + 18% GST.

# Postal Address & Contact:

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