

## Earth Observation for Ocean- Atmospheric processes and Dynamics

**September 8 – 12, 2025**



### Organised by

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

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### INTRODUCTION

With the advancement of Earth observation technology and the availability of a range of satellite platforms, various remotely sensed data products are available for atmosphere and oceanic studies. The information received from satellite sensors has greatly enhanced our understanding of the synoptic scale dynamics and associated processes across a range of spatial-temporal scales within the Atmosphere ocean coupled system. Further, these observations are greatly used for the monitoring of important atmosphere-ocean coupled processes of the Earth's climate system, such as Monsoon, El-Nino/La-Nina, Indian Ocean Dipole, Tropical Cyclones, Marine Heat Waves etc.

### OBJECTIVE

The course is designed with a view to providing participants an exposure to the available satellite-based products for ocean-atmosphere studies, scientific concepts and an overview of approaches and pathways for understanding ocean-atmospheric processes and dynamics using satellite data.

### COURSE CONTENT

- Introduction to Ocean-Atmosphere coupled system
- Overview of Earth Observation Satellites and Sensors for Ocean and Atmospheric Studies
- Physical processes and dynamics associated with South-West monsoon system
- Introduction to the physical mechanism & dynamics associated with the processes - El-Nino southern Oscillation, Indian ocean dipole, Tropical Cyclones, Marine heat waves etc.
- Earth Observation satellite applications in coupled ocean-atmosphere system

### DURATION AND MODE OF COURSE

The course duration is of 1 week from September 8-12, 2025. The course will be held in offline mode through a combination of lectures and practical sessions.

### ESSENTIAL QUALIFICATION

Post-graduate in Marine Sci./ Earth Sci. / Oceanography/ Appl. Geol./ Env. Sci./ Physics/Meteorology/Atmos. Sci./Geography or equivalent.

**NOTE:** Candidates nominated by the govt. organisations & professionals working in the field of Atmospheric and Ocean sciences will be given preference for admission.

### COURSE FEE

Rs. 6,500/- (Rs. 2,000: Tuition Fee + Rs. 4,500: Registration & Other Charges)) for self financed and govt. sponsored candidates. The course fee is to be paid by those who are selected and will be communicated subsequently.

### ACCOMMODATION AND FOOD

Accommodation will be provided on single occupancy basis in IIRS hostel. Participants may avail food facility at hostel mess run by IIRS students as per prevailing rates. The expenditure towards boarding and lodging will be borne by the participants as per prevailing actual rates.

### HOW TO APPLY

Refer course flyer, online application and other details:

<https://admission.iirs.gov.in/courseflyers>

<https://admission.iirs.gov.in/coursecalender>

Only **Online Applications** will be considered on or before 27.07.2025 [17:30 hrs.]

### CONTACT DETAILS

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