

About IIRS

Indian Institute of Remote Sensing (IIRS), a unit of Indian Space Research Organisation (ISRO), is a premier institute for capacity building and research in the field of remote sensing and geoinformatics. 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 Institute has a multi-disciplinary and problem oriented research agenda focusing on developing land-ocean-atmosphere applications and understanding Earth's surface and subsurface processes using primarily the space-based technologies. The research programmes are intricately linked to overall goal of ISRO towards operationalisation of space-based services for national development.

About Course

The one-week online course on 'Advances in monitoring and modelling of hydro-meteorological hazards using geospatial technology and process based models' will provide an overview of advance earth observation data and modelling approaches for monitoring and quantitative assessment of hydro-meteorological hazards. The hydro-meteorological events such as Uttarakhand flash floods 2013, Gomukh debris flow event 2017, Rockslide triggered Chamoli flash flood 2020 and snow avalanche of Draupadi ka Danda peak, Uttarakashi 2022 has alarmed the need of earth observation data and process based models to understand these complex events. The main aim of this course is to spread awareness about importance of remote sensing data and process-based modelling in assessment of the hydro-meteorological hazards such as floods, GLOFs, drought and avalanches.

Course Outline

The course will cover following topics:

- Overview of earth observation data and geospatial techniques
- Hydrological modelling and its application in hydro-meteorological hazards assessment
- Hydrodynamic modelling and its application in hydro-meteorological hazards assessment
- Drought monitoring and assessment using remote sensing data
- Snow & glacier mapping and avalanche vulnerability assessment

Course Fee

There is no course fee for attending this course.

Target Participants

The course is designed for professionals from Central / State Govt. / Private Organizations / NGOs engaged in hydro-meteorological hazards linked regional and national projects; students and researchers aligned to hydro-meteorological hazards studies.

Expected Outcome

After completion of the course participants will be familiarize with earth observation data and modelling approaches for monitoring and quantitative assessment of hydro-meteorological hazards.

Course Registration

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

How to Attend Course

- 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>
- The participants can also attend the live course via the **YouTube channel** of IIRS i.e. <https://www.youtube.com/user/edusat2004>

Contact Details

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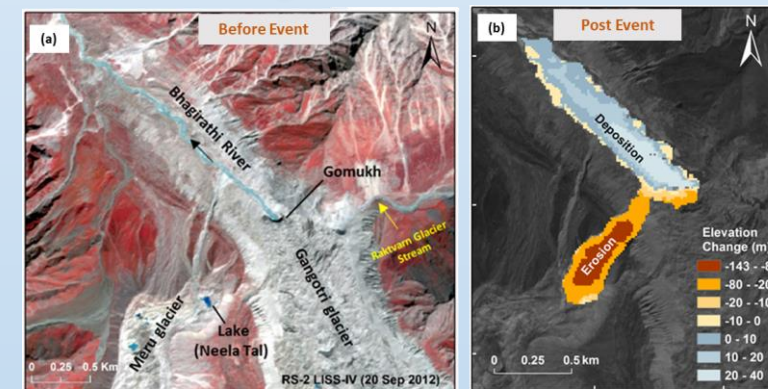
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IIRS Outreach Programme

One-week online course on
Advances in monitoring and modelling of hydro-meteorological hazards using geospatial technology and process based models'
during December 5-9, 2022



Organised by

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