#### **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 Workshop**

The workshop on applications of satellite altimetry for inland water bodies is being organized which will provide an overview of advance remote sensing technique of altimetry and geospatial technology (RS & GIS) use for quantitative assessment and monitoring of inland water bodies. The main aim of this workshop is spread awareness about importance of satellite altimetry in monitoring the water level of inland water bodies, its use in reservoir sedimentation and hydrological modelling. It will provide platform to start an interaction between main stakeholders such as government agencies, academia, industry and NGO's for monitoring and management of water resources using satellite altimetry.

#### **Workshop Outline**

The workshop will cover following topics related to satellite altimetry.

- · Introduction of altimetry, its principles and future missions
- Re-tracking algorithms for Inland water level estimation
- Progress in river flow estimation using altimetry data
- Integrated approach of altimetry and hydrometric data based reservoir sedimentation
- Use of satellite altimetry data to calibrate and validate hydrodynamic models

## **Workshop Fee**

There is no course fee for attending this workshop.

#### **Target Participants**

The course is designed for professionals from Central / State Govt. / Private Organizations / NGO engaged in hydrometeorological based regional and national projects; students and researchers aligned to research in satellite altimetry.

#### **Expected Outcome**

After completion of the workshop participants will be familiarize with the satellite altimetry and its applications for monitoring of lake, reservoir volume and water level, stage-discharge of rivers and hydrological modelling.

#### **Workshop Registration**

- Course updates and other details will be available on URLhttp://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 Workshop**

- 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 workshop via the YouTube channel of IIRS i.e. https://www.youtube.com/user/edusat2004

#### **Contact Details**

Dr. Praveen K. Thakur Course Director WRD, IIRS Dehrdaun Tel: 0135-2524166 Email: praveen@iirs.gov.in

Dr. Poonam S Tiwari
Programme Coordinator
IIRS Outreach Programme
Tel: 0135-2524334
Email: poonam@iirs.gov.in

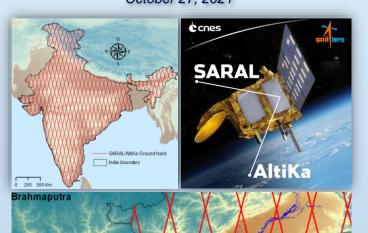
Mr. Pankaj R. Dhote Course Coordinator WRD, IIRS Dehardun Tel: 0135-2524169 Email: pdh@iirs.gov.in

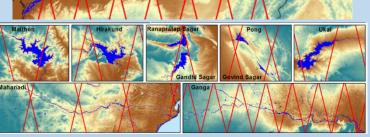
IIRS DLP Team
Mr. Janardan Vishwakarma
&
Mr. Ashok Ghildiyal
Tel: 0135-2524130
Email- dlp@iirs.gov.in

#### **IIRS Outreach Programme**

One Day Workshop on Applications of Satellite Altimetry for Inland Waterbodies

October 27, 2021







#### Organised by

Indian Institute of Remote Sensing Indian Space Research Organisation Department of Space, Govt. of India 4 Kalidas Road, Dehradun 248001

www.iirs.gov.in

## IIRS Outreach Programme

# One day workshop on

# "One Day Workshop on Applications Satellite Altimetry for Inland Waterbodies" October 27, 2021

Time	Lecture	Expert/Faculty
10.00 – 10.15	Inaugural session: Introduction to workshop, IIRS,	Director IIRS, Dean
	DLP	Academics, GHs/HoDs,
		WRD Faculty, SAC-ISRO
		Expert
10.20 - 11.15	L-1: Basics of altimetry	Dr. Neeraj Agarwal
		SAC-ISRO
11.20 – 12.15	L-2: Altimetry for inland hydrologic studies with focus on advanced satellite altimetry measurement techniques and SWOT mission	Dr. Praveen K. Thakur WRD, IIRS, ISRO
12.20 - 13.15	L-3: Satellite altimetry-based case studies for inland water bodies – Part 1 (Reservoirs and lakes)	Dr. Vaibhav Garg WRD, IIRS, ISRO
13.15 - 13.55	Lunch break	
14.00 - 14.55	L-4/Demo: Satellite altimetry-based case studies for inland water bodies – Part 2 (Rivers)	Mr. Pankaj R. Dhote WRD, IIRS, ISRO
14.55-15:10	Tea break	
15.10- 15.30	Panel Discussion & feedback	All experts