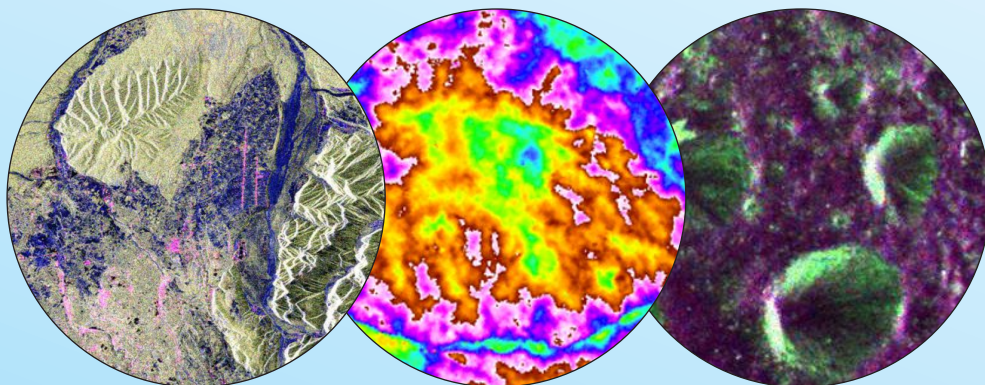


RISAT-UP Training Programme
“Principles & Applications of Radar Remote Sensing
with Emphasis on RISAT-1 Data Utilization”
(Sept 02-13, 2013)



9th Special Course on Microwave Remote Sensing
(2nd Course under RISAT-UP Programme)



Indian Institute of Remote Sensing
Indian Space Research Organisation
Department of Space, Govt. of India
4-Kalidas Road, Dehradun-248001
www.iirs.gov.in

Two-Weeks Special Course on Principles & Applications of Radar Remote Sensing with Emphasis on RISAT-1 Data Utilization

Introduction

India is one of the few nations in the world which has made tremendous progress in space technology and used it for the well being of the mankind. In the field of remote sensing, India excels in many fields such as satellite launching, sensor designing, data acquisition & processing, and a variety of applications for assessment and monitoring of natural resources and natural hazards in the country. Radar Remote Sensing, with the advantages like ascending & descending pass imaging capability; cloud, vegetation & ground penetration capability; high sensitivity to roughness & dielectric property of the surface, has its specific domains of applications compared to optical and thermal remote sensing. Besides, in the frontier areas like radar interferometry, radar polarimetry and polarimetric interferometry, it produces high-quality and precise information, and provides better understanding on the interaction of electromagnetic radiation with the earth surface materials. With the successful launch of the first civilian Radar Imaging Satellite (RISAT-1) on 26th April, 2012 by Indian Space Research Organization (ISRO) and the easy availability of all weather C-band SAR images in a variety of imaging modes at affordable price, the scope of EO applications has drastically widened for the Indian Remote Sensing user community. On this backdrop, ISRO has conducted a series of special courses in Radar Remote Sensing at various centres such as Indian Institute of Remote Sensing (IIRS), Space Application Centre (SAC), National Remote Sensing Centre (NRSC) and RRSC-Central (Nagpur). In fact, IIRS made a humble beginning way back 2002 by conducting a one-week course on Radar Remote Sensing in collaboration with the French Space Agency (CNES). Subsequently, IIRS has conducted six courses under JEP-Microwave Programme, one course under RISAT-UP Programme, and one course under CSSTEAP (UN) Programme. The present course will be the second course at IIRS under RISAT-UP Programme.

Target Participants

The preferred candidates for the programme are the working scientists or researchers from Govt and Public Sector organizations engaged in Remote Sensing and Geoinformatics applications in addition to the scientists/researchers from ISRO/DOS centres and RISAT-UP collaborators. The candidates need to have working knowledge in optical remote sensing and 9th Special Course on Microwave Remote Sensing.

Course Outline

The duration of the course would be two weeks during September 02-13, 2013. The first week of the course will be dedicated to understanding of the basics of radar remote sensing, radar data processing and overview of advanced techniques like radar Interferometry and radar polarimetry. In the second week, wide spectrum applications of radar remote sensing in mapping, monitoring and assessment of natural resources and natural hazards will be discussed with emphasis on RISAT-1 data usage wherever applicable. In addition, a session on Chandrayaan-1 MiniSAR data processing and applications will also be discussed in the 2nd week. There will be lectures followed by hands-on practicals for almost all the topics for a better understanding of theoretical concept and implementation.

Faculty

Well experienced faculty working in the field of radar remote sensing from IIRS, Dehradun will conduct the course. A few expert faculty from Space Application Centre (SAC), Ahmedabad and other ISRO centres may also deliver some lectures and share their experiences.

Course Fee & Logistics

There is no fee for attending the course. However, boarding and lodging will have to be borne by the sponsoring organizations and no TA/DA will be given by the host institution. IIRS Guest House and Hostel accommodation on single/twin sharing basis may be provided during the course period.

Local Pick-up and Drop facility at the beginning and end of the course may be provided during the odd hours.

How to Apply

Please fill in the attached application form and send it to us on or before 12th August, 2013. Online advance registration for the course is encouraged. Kindly visit IIRS website (www.iirs.gov.in) and click on Registration for 2-weeks RISAT-UP Radar Remote Sensing Course. The seats will be filled up on first-come basis and based on the requirement of the user organisation. In general, more than 2 candidates will not be selected from one organisation.

About IIRS

Indian Institute of Remote Sensing (IIRS) under Indian Space Research Organisation, Department of Space, Govt. of India is premier training and educational institute set up for developing trained professionals in the field of Remote Sensing, Geoinformatics and GPS Technology for Natural Resource, Environmental and Disaster Management.

The main function of the institute is capacity building through transfer of technology among user community, education at post-graduate level in the application of Remote Sensing and Geoinformatics for Natural Resource Management and to promote research in Remote Sensing and Geoinformatics. The Institute provides value-added services in the field of natural resources management, remote sensing, GIS and GPS technology.

Its alumni include more than 8600 persons from India and abroad. Its experienced scientists offer a multi-disciplinary dimension to the training programmes. The Institute is also host for the Centre for Space Science & Technology Education in Asia and the Pacific (affiliated to the United Nations) and conducts international training programmes in Remote Sensing and GIS.

Location & Accessibility

Dehradun is the capital city of Uttarakhand, located at the foothills of Himalayas in Doon valley. It is connected to major cities like New Delhi, Mumbai, Kolkata and Lucknow by rail. It is also connected to Delhi by air. IIRS campus is located at the heart of the city and is about 6 km away from the Rly Station and 12 km. away from the Bus Stand. Taxi and auto rickshaw are readily available either from Rly Station or Bus Stand.



For more information and further clarification, please write to Dean (Academics) or Group Director (PPEG). Filled-in application form may be sent to Group Director (PPEG) so as it reaches us on or before 12th August, 2013.

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