

# Training on INSAT-3DR: Observations to Applications



## **Geostationary Meteorological Satellite**- INSAT-3DR

INSAT-3DR is an advanced meteorological satellite built by Indian Space Research Organisation (ISRO). It was launched by GSLV-F05 rocket from Satish Dhawan Space Centre, Sriharikota on 8 September 2016. It has a 6-channel Imager (Very High Resolution Radiometer) and a 19-channel Sounder system, orbiting in a geo-stationary orbit, positioned at 74°E. Also INSAT-3DR carries a Data Relay Transponder as well as a Search and Rescue Transponder.

INSAT-3DR Imager has better horizontal resolution than its predecessors: I-km at Visible & SWIR channels, 4-km at MWIR & TIR channels and 8-km at WV channel. INSAT-3DR sounder has I8-infrared channels and a visible channel with a horizontal resolution of I0 km. Important Meteorological and Oceanographic parameters obtained from INSAT-3DR are rainfall, sea surface temperature, atmospheric motion vectors, snow cover, aerosol, cloud properties, outgoing longwave radiation, land surface temperature, upper tropospheric humidity, agro-meteorological parameters, temperature & humidity profiles and total ozone.

Number of value added products such as stability indices are also available from INSAT-3DR observations. INSAT-3DR data can be assessed from Meteorological & Oceanographic Satellite Data Archival Centre [http://mosdac.gov.in]. INSAT-3DR data products are assimilated into numerical models of operational weather forecasting centres from across the globe on near real-time.

### **Training on INSAT-3DR**

Satellite Meteorology and Oceanography Research and Training (SMART) programme of Space Applications Centre, Ahmedabad is organising a training programme on 'INSAT-3DR: Observations to Applications'. This training programme aims to generate awareness about INSAT-3DR mission among students, researchers and faculty members. This training programme will cover data processing aspects, geophysical parameter retrieval and potential scientific applications of INSAT-3DR data.

#### **Details of the Training Programme**

Course Date	14-17 February 2017
Number of participants	20
Target Group	Students, JRFs, Post-docs, early carrier researchers, faculties, etc., affiliated to recognised Universities and research institutions working in Atmospheric science, Oceanography and related fields, interested to explore INSAT-3DR data for their research and studies.
Prerequisite	Working knowledge of Linux, shell scripting, Fortran/C/C++ and GrADS.
Last Date to Apply	Filled-in application must reach on or before 15 January 2016. Application sent by email (scanned copy) is also accepted.

Training programme consists of forenoon lectures by eminent scientists working in ISRO's INSAT-3DR project followed by hands-on with INSAT-3DR data in the afternoon. Participants will be provided subsidised paid accommodation at SAC guest house on twin sharing basis. No fee will be charged for attending the training. No TA/DA will be provided to attend the training. Participation certificates will be provided after completion of the training.

Interested may send the filled-in application form to:

Dr. V. Sathiyamoorthy

Head, MRTD/MRG

Space Applications Centre (ISRO)

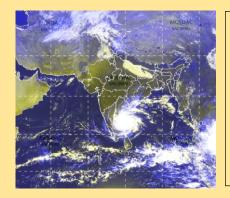
Bodal, Ahmedabad - 380058

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Email: sathya@sac.isro.gov.in

For further details please visit our website http://mosdac.gov.in/smart

#### Tropical Cyclone Vardah as viewed by INSAT-3DR



Tropical Cyclone Vardah is seen crossing South Indian coast in this visible imagery captured by INSAT-3DR at 1145 IST of 12 December 2016. White patch stretching east-west along the Indo-Gangetic plains is fog.