



## Introduction

Doppler Weather Radar (DWR) is an indispensable tool for weather studies on continuous basis. DWRs have been used for atmospheric research for more than three decades. Radars operate by sending out energy from a source and listening to the amount that is scattered from targets. Conventional radars track and predict severe weather systems such as cyclones, thunderstorm, etc. whereas the DWRs provide detailed information on internal wind flow and structure with sufficient temporal and spatial resolutions. India Meteorological Department (IMD) installed and maintains more than twenty DWRs operating in S, C and X bands across India. As a national effort to design and develop indigenous weather radars, Indian Space Research Organisation (ISRO) has deployed dual band polarimetric DWRs in Cherrapunjee (S-band), Thiruvananthapuram (C-band) and Sriharikota (S-band). Polarimetric radar technology permits the identification of scatterers by remotely sensing their shapes and hence finds application in hydrometeor identification. DWR products are disseminated on near real-time by both IMD and ISRO (Meteorological & Oceanographic Satellite Data Archival Centre, MOSDAC).

## Training on Principles and Applications of Doppler Weather Radar

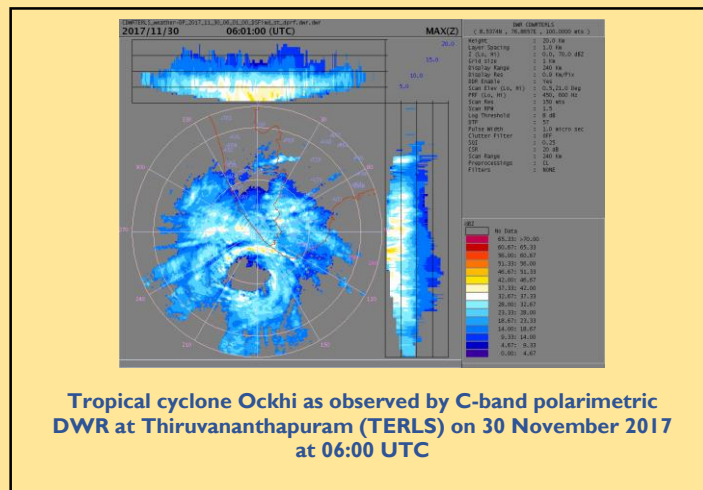
Under the SMART programme, a four days training programme on 'Principles and Applications of Doppler Weather Radar' is planned at Space Applications Centre, Ahmedabad. The proposed training will provide an introduction to DWR data products. This training is meant for students, researchers, early career scientists, faculty members, etc who are working/interested to work in this field. This training programme will cover fundamental principles of DWR, data acquisition, processing, dissemination, product interpretation, application for nowcasting and numerical weather prediction, DWR data assimilation etc. Hands-on sessions on visualisation and interpretation of DWR data will also be covered.

## Details of the Training Programme

Dates of training	19-22 November 2019
No. of participants	20
Target group	Students, researchers, faculty members, early career scientists and officials of Government of India recognized Universities/Institutes/Departments.
Pre-requisite	Working knowledge of Linux and Fortran are required.
Last date to apply	Filled-in application must reach on or before 15 October 2019.

Training programme consists of lectures in the forenoon by eminent scientists followed by hands-on familiarisation with DWR data in the afternoon. Outstation students/JRFs may be provided paid accommodation at SAC guest house on sharing basis. No fee will be charged for attending the training. No TA/DA will be provided. Participation certificate will be issued after the completion of training. Selected applicants will be intimated by email. Interested may send the filled-in application form on or before 15 October 2019 to:

Dr. V Sathiyamoorthy  
 Head, MRTD/MRG, Room No. 6112  
 Space Applications Centre (ISRO)  
 Bopal, Ahmedabad - 380058  
 Phone: 079-26916112 Fax: 079-26916127  
 Email: sathya@sac.isro.gov.in  
*Scanned copy of the filled-in applications sent by email also will be accepted.*





Space Applications Centre, Ahmedabad  
Application for SMART Training Programme

Affix recent  
passport  
size photo &  
get it  
attested

### Principles and Applications of Doppler Weather Radar

*(Please type or write in CAPITAL Letters)*

Name Dr./Mr./Ms/.....

Date of Birth (DD/MM/YYYY) .....

Gender .....

Correspondence Address (official) .....

Pin code .....

Email .....

Mobile .....

Designation .....

Educational Qualification .....

Permanent address with Pin code .....

How this training programme will be useful  
to your studies/research/work? .....

Signature of the applicant with date .....

Recommendation from Head of the  
Department or Institution with seal .....

*Last date to receive the completed application is 15 October 2019*