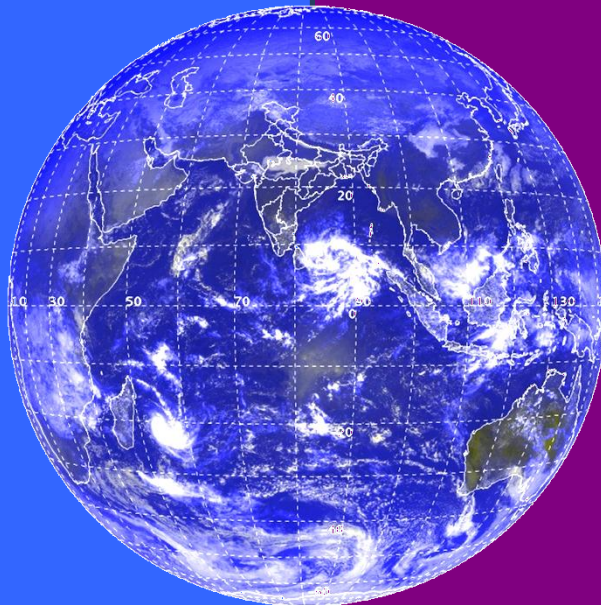
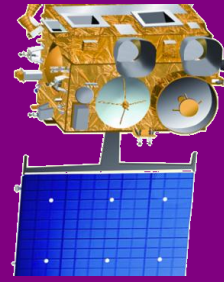
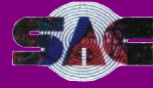


स्मार्ट

अंतरिक्ष उपयोग केंद्र, अहमदाबाद में विद्यार्थियों, अकादमिकों, और अनुसंधानकर्ताओं के मध्य उपग्रह मौसम विज्ञान और समुद्र विज्ञान के क्षेत्र में अनुसंधान को बढ़ावा देने के लिए इसरो की एक पहल |



SMART

ISRO's initiative to promote research in Satellite Meteorology and Oceanography among students, academics and researchers at Space Applications Centre, Ahmedabad

<http://mosdac.gov.in/SMART>

SMART

Satellite Meteorology and Oceanography Research and Training

Introduction

Indian Space Research Organisation (ISRO) has launched dedicated meteorological and oceanographic satellites viz., INSAT series, Kalpana-1, Megha-Tropiques, Oceansat-1 & 2, RISAT-1 and SARAL. In future, ISRO has planned to launch INSAT-3DR, Scatsat, GISAT and a few more satellites for meteorological and oceanographic studies. Data collected by these satellites are archived and disseminated through a data portal 'Meteorological and Oceanographic Satellite Data Archival Centre' (MOSDAC) designed and developed by Space Applications Centre (SAC), Ahmedabad.

Objective

SMART is ISRO's initiative to support students, academics and researchers across the country to pursue research in the field of Meteorology and Oceanography using satellite data archived at MOSDAC and other related datasets. *SMART* is managed by MOSDAC Research and Training Division (MRTD), MOSDAC Research Group, SAC

SMART provides following support for students, academics and researchers:

- i. Familiarisation to MOSDAC data
- ii. Data analytics and advanced visualization
- iii. State-of-the-art computer facilities and
- iv. Research guidance

Two outreach initiatives namely (i) Research Initiative and (ii) Training Initiative are planned as part of *SMART* to accomplish its objective.

I. Research Initiative

Research initiative of *SMART* offers three programmes to cater the needs of students, academics and researchers across the country namely:

(i) *Research Initiation Programme (IP)*

This programme is designed to initiate research aptitude among students, academics and researchers in the field of Satellite Meteorology and Oceanography. Post-graduate students of Meteorology, Oceanography and related fields, intending to do their final year/semester project, young researchers and academics may apply for this programme. They will be introduced to Satellite Meteorology and Oceanography, provided research guidance and support to carry out research for three to nine months.

(ii) *Advance Research Programme (ARP)*

In this programme, researchers and academics attached with institutes and universities across the country will be supported to carry out advance research in their research topic using MOSDAC data for about three to six months. They will be introduced to advanced satellite data retrieval techniques, calibration/validation methods and latest results on satellite data applications

(iii) Data Exploration Programme (DEP)

It is an inter-disciplinary data exploratory programme on Satellite Meteorology and Oceanography. It is open for undergraduate students, academics and researchers of recognized universities and research institutions with innovative ideas to use satellite data in Meteorology, Oceanography, Data mining and Image processing. They will be provided research guidance, computational and data support to carry out research for one to three months.

II. Training Initiative

Under *SMART*, satellite data training programmes will be organised periodically to popularise MOSDAC data among students, academics and researchers. It is generally a short duration (three to five days) programme, planned about 2-3 times a year. About 15 participants will be admitted to this programme. Familiarization of MOSDAC data, hands-on sessions on data handling and pre- and post-satellite launch trainings will be part of this training initiative. Calendar of *SMART* training initiative will be announced well in advance.

Facilities Offered

A dedicated research and training lab equipped with state-of-the-art workstations, display systems, MOSDAC data and storage facility are established in SAC as part of *SMART*. Students, academics and researchers attending the research and training

programmes will be allowed to use these facilities. Also they will be permitted to use the SAC canteen facility during their stay at SAC.

Call for Participation

Applications are invited from students, academics and researchers for *SMART* research initiative programmes viz., IP, ARP and DEP. Interested may fill-in the application form provided at the *SMART* website and forward it to the Head, MRTD, SAC through their respective Head of the Department/Institution. Applications are accepted throughout the year. Patent, copyright, IPR arising from the work done at SAC should be made jointly with SAC.

Contact

Applications should be mailed to

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Fax : 079-26916127

For further details, refer to
<http://mosdac.gov.in/SMART>