

Abstract

Space Applications Centre (SAC), ISRO, Ahmedabad in cooperation with Birla Institute of Technology, Mesra Jaipur Off Campus is seeking to establish a site for Calibration and Validation (Cal-Val) activity for ISRO's Earth observation satellite sensors and its derived data products over land. This will enable us to pre-plan the field data collection campaign with state-of-the-art field instruments during the overhead pass of spaceborne and airborne sensors. The collaboration will help to carryout cal-val exercise (to monitor sensor performance and improve the data products if needed) and other scientific studies. This collaboration is to bring opportunity to mutually understand the relevant calibration & science issues both professionally and academically and benefit thereby.

The major focus is to conduct pre-planned field campaign with scientific instruments. Passive calibration devices (corner reflectors) shall be installed permanently at Institute campus, for achieving certain goals such as: 1) Validation of Level-1 and Level-2 data products of Synthetic Aperture Radar (SAR) satellite.

Objectives

Objectives of this joint work plan between SAC, Ahmedabad and Birla Institute of Technology, Mesra Jaipur Off Campus are:

- a. Conduct field campaign at site during the overhead pass of sensors.
- b. Permanently deployment of CR for SAR Calibration.
- c. Joint data analysis and publication.