# Cal-Val Systems for Spaceborne Ocean Colour Sensors

The CAL-VAL systems consist of a pair of buoys named “Optical & Met” in deep ocean & a robotic sun-photometer on the island. A discuss type wave following buoy, filled with Polyurethane foam, for deep sea application is used as a platform to mount the sensors. This buoy type has 2.2m diameter and 2100 kgs reverse buoyancy weight and a central pipe structure of 5m length with three 1.75m arms extending sideways.

**the in-situ parameters available are: optical, meteorological, biological, physical & atmospheric.**

## Objectives

ISRO has developed successfully CAL-VAL site at Kavaratti for India’s OceanSat-II OCM-II sensor’s vicarious calibration and its geo-physical product validation. The recent observations from various instruments are analysed along with OCM-I & OCM-II radiance products and other contemporaneous satellite sensors.

## Potential utilization & applications of the site/data

- Vicarious in-flight calibration of Ocean colour sensors
- Validation of OceanSat-II Geo-physical products
- Bio-optical algorithm development and its validation
- Time series studies and inter-sensor comparison
- Near real time data evaluation