

## Successful Retrieval of the INCOIS Flux Buoy and Mooring System from the Bay of Bengal

The Indian National Centre for Ocean Information Services (INCOIS) under the Ministry of Earth Sciences has deployed a Flux Buoy Mooring designed by the Woods Hole Oceanographic Institution (WHOI), USA in the Bay of Bengal on 23 May 2019 as part of the Ocean Mixing and Monsoon project under MoES's National Monsoon Mission Program.

The highly sophisticated flux buoy and mooring system is heavily equipped with surface marine meteorological and sub-surface oceanographic sensors to observe the annual cycle of the surface, upper ocean temperature, salinity, and velocity structure at select depths. Such observations at very fine resolution are necessary to develop improved air-sea flux parameterizations in the monsoon region and thereby improve the ocean and atmospheric forecast models.

This flux buoy and mooring system with Direct Covariance Flux System (DCFS) is first of its kind deployed in the Indian Ocean and designed to acquire data for one year. The mooring was expected to be recovered in May 2020 by the Engineers by WHOI and could not be achieved due to COVID-19 pandemic.

In a well coordinated effort by Scientists of INCOIS, NIOT and ORV Sagar Nidhi Team, the complex flux buoy and mooring system was successfully retrieved during a cruise onboard ORV Sagar Nidhi (SN-156) on 07 Oct 2020.



