Physical Research Laboratory, Ahmedabad

Colloquium 19-06

Speaker: **Prof. Debasis Sengupta**
Chairman , Centre for Atmospheric and Oceanic Sciences (CAOS), IISc Bangalore.

Title: **" Biweekly Monsoon mode in the Bay of Bengal "**

Time: **Wednesday, 27 March 2019, 16.00 hrs.**

Venue: **K.R. Ramanathan Auditorium, PRL**

Abstract

The Asian monsoon has two quasi-periodic "modes" of sub-seasonal variability - a northward moving mode in the 30-50 day period band, and a westward moving 10-20 day mode (or the "quasi-biweekly" oscillation). These two modes have been known to tropical meteorologists for over four decades, but the discovery of sub-seasonal modes in the ocean is relatively recent. I shall discuss some remarkable 10-20 day oscillations seen in mooring, satellite and other observations from the equatorial Indian Ocean and north Bay of Bengal.

The Speaker

Prof. Debasis Sengupta did his M.Sc in Physics from IIT Delhi, 1980. He Obtaimed his Ph.D. from NIO, Goa working with Prof. V V R Varadachari of NIO, Goa and Prof. Y S Prahalad, Mathematics Department, Bombay University. His Post-doctoral work was on localisation of Rossby waves on random topography with Prof. G M Reznik at the Institute of Oceanology, USSR Academy of Sciences, Moscow. This was followed by short stint at NCMRWF, Delhi learning about monsoons and weather forecasts. He Joined CAOS, Indian Institute of Science, in 1991.

Prof. Sengupta and his students work mainly on ocean circulation and upper ocean physics, in particular the role of river water in air-sea coupling. Prof. Sengupta is leading the MoES-National Monsoon Mission project "Ocean Mixing and Monsoon (OMM)", from 2013 onwards. Scientists from 20 Indian and US institutions have worked together on this project to make fine-scale measurements in the Bay of Bengal, with an aim to understand physics near the air-sea interface, turbulent mixing in the ocean, and the ocean's role in monsoon variability on time scales of days to weeks.

Tea at 15:30 hrs
ALL ARE WELCOME