

DIVECHA CENTRE FOR CLIMATE CHANGE INDIAN INSTITUTE OF SCIENCE BANGALORE-560012 Phone: 91-80-2293 3425/2075

Divecha Centre for Climate Change Seminar

Title : "GFDL's Climate and Earth System Modeling: From CMIP5 to CMIP6"

- Speaker : Prof. V.Ramaswamy, Director, NOAA/Geophysical Fluid Dynamics Laboratory, and Professor, Atmospheric and Oceanic Science Program, Princeton University, Princeton, New Jersey, USA
- Venue : Centre for Atmospheric & Oceanic Sciences Seminar Hall
- **Date** : Wednesday, 08 November 2017.
- **Time** : 3: 30 pm.

Abstract: The World Climate Research Program's Coupled Model Intercomparison Project (CMIP) has been a robust framework for conducting comparisons of the world's models on a common reference frame through positing common model experiments for the world's climate modelingcenters to perform. Analyses of the CMIP simulations have provided key inputs into the IPCC Assessments (e.g., CMIP5 àIPCC AR5 (2013), and CMIP6, currently ongoing, expected to feed into IPCC AR6 (2021)). Over the past four years, GFDL has been analyzing the biases and deficiencies in our CMIP5-era models, and developing the next-generation Climate and Earth System Models for the CMIP6-era. The research has comprised a number of advances in the atmospheric, oceanic, biospheric, cryospheric, and ecosystem components, along with the integrative aspects to capture the realism and wholesomeness of the system. Observations and theoretical developments have enabled improved representations of processes and interactions in the Earth System, with resulting improvements in the simulation of key climate variables and phenomena. These hold the promise of better estimates of climate, and biogeochemical, feedbacks and sensitivity, and more insights into the central uncertainties.

All are Welcome