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Collaborative Programmes and Projects

Multi-institutional, national and international collaborative research programmes have been at the core of C-MMACS overall research. C-MMACS to-day has active collaboration with a number of national and international institutions. At the national level, C-MMACS is a participant of projects like Indian Ocean Modelling Programme (INDOMOD) and New Millennium Technology Leadership Initiative (NMITLI) project on Monsoon Related Meso-scale Forecasting. At the international level, C-MMACS is the Indian Node of the Indo-French Centre for Environment and Climate (IFCEC).

The year 2002-03 has seen considerable strengthening of the existing programmes and initiation of new ones. A notable development has been the launching of two CSIR Network projects- one in the area of Environmental Modelling and the other in the area of computational mechanics, with C-MMACS as the nodal organization. There had been also other exciting developments: A broad framework for collaboration between CSIR laboratories and Tezpur University has been initiated for an effective synergy between these two organizations.

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Sponsored Projects

Collaborative Projects

In-house Projects

Sponsored / Collaborative Projects

Establishment of Continuous Recording GPS systems in North Eastern India

A Kinematic Study of Suspected Major Active Shear/fault zones in the West Southern Peninsular Shield of India : Implication on Seismogenesis

Dynamics of Continental Collision Process and Rheology of Lower Crust Based on GPS Studies in Indian Sub-Continent

Procurement of GPS receivers along with accessories for DST National network of GPS stations

Dynamics of Continental Collision and Rheology of Lower Crust based on GPS studies in Indian SubContinent

Geometry, Kinematics and Deformation Mechanisms in the Gish Transverse Zone in the Darjiling-Sikkim Himalaya, India

Microzonation studies in Anjar (Kutch) using micro-tremor measurements

Scale Interaction in air, land, sea coupled environment and north-east monsoon

Evaluation and Validation of Systems of Assimilation

Modelling of Biogeochemical cycles in Bay of Bengal

Thin Films-Simulation of Dewetting. (C-MMACS- IIT Kanpur)
Simulation of Liquid Crystal Defects. (C-MMACS-RR1)

Simulation of Tropical Cyclone using LMD GCM

Monsoon - Related Meso-Scale Forecasting

Indo-Italian research project on Site-specific Seismic Hazard Assessment for Megacities Utilizing Modelling Techniques (C-MMACS - University of Trieste, Italy)

In-house Projects

GPS measurements to determine Time Evolving Surface Strain Field in the Bhuj Region

Monitoring of Continuously Operating C-MMACS GPS Station Located in the IISC Campus

Determination of Shear Velocity Structure of the Indian Crust Beneath a Few Geodynamically Significant Regions Using Broad Band Seismic Records.

Dendritic Solidification: Simulation of Dendritic Solidification Using the Isotropic Scheme.

Viscoelastic Instability: Simulation of Fene-p Equations for a Wavy Channel

Complex Fluid Flow Modelling and Simulation

Mesoscale Modelling for Monsoon Related Predictions

Determination of Shear Indian Crust Beneath a Velocity Structure of the Few Geodynamically Broad Band Seismic Records

Coupled Atmospheric-Hydrological Model to Forecast Spatio-temporal Variability of Water Resource

Role of Lithospheric Heterogenetics in Earthquake Dynamics

General Budget of C-MMACS

Capital Equipment for C-MMACS