



Ministry of Earth Sciences
India Meteorological Department, Government of India

Development of Indian Specific Cloud-resolving Scale Model for Severe Weather Forecasting

Call for Proposals

India Meteorological Department (IMD) is implementing a programme on '**Development of High Impact Severe Weather Forecasting System**' under the 12th 5-Year Plan approved by the Ministry of Earth Sciences, which is the nodal agency for promoting earth and atmospheric sciences related R&D studies in the country. One of the key aspect of this programme is to develop an Indian specific high resolution cloud-resolving scale model for severe weather forecasting based on WRF model frame work (I-WRF). The WRF model is used by many organizations/academic communities in India and abroad. In order to make an integrated effort in sharing the expertise and resources in development of data assimilation and mesoscale modelling system utilizing national talents in collaboration with different institutions, many key issues are identified by a national brainstorming meeting, namely, (1) Improvement of dynamics and physical parameterization schemes, (2) Observations utilization including test bed data sets (STORM, FDP on Cyclone and Fog), (3) Convective scale data assimilation with rapid refresh cycle, (4) Model diagnostics, new products development and performance evaluation, (6) Ensemble and probabilistic forecasting, (7) Visualization of observations, and model simulated products. The success of the new model will be measured by targeted skill scores for forecasting severe thunderstorms, cyclones, fog and heavy rainfall.

Proposals are invited from the scientific community working at different universities, academic institutions and research organizations in India to participate in the field experiment, and undertake research in the areas related to above objectives. Proposals should include details on methodology, work plan, financial implications, deliverables, time schedule, facilities available with the institute, requirements to execute the proposed study as well as detailed bio-data of the PI/Co-PI, etc. Proposals should clearly include the existing skill scores (up to 72 hours) of the WRF model being used for at least one or more of the 4 types of severe weather events (please see the website www.imd.gov.in for details). The proposal may be submitted (3 hard copies) in the prescribed format by MoES (<http://moes.gov.in/RND/rnds.html>) to **The Project Director**, Severe Weather Programme, India Meteorological Department, Lodhi Road, New Delhi 110 003, Phone: 2464 2206, e-mail: swirl.india@gmail.com. In addition, a soft copy of the proposal is also required to be sent by e-mail. The deadline for submission of proposals is **31 March 2015** or 2 months from the date of this publication.