India Meteorological Department
Ministry of Earth Sciences

Years of Service to the Nation
राष्ट्र सेवा के 150 वर्ष

सत्यमेव जयते

India Meteorological Department is celebrating 150th year of its establishment during 15th January 2024-15th January 2025. In this backdrop a series of Popular talks are being organized by IMD.

In this series, India Meteorological Department invites you to attend a Popular talk on

Seamless NWP modelling systems at NCMRWF

DGM Conference Hall,
Mausam Bhawan, Lodi Road

Dec 27, 2024 **Time: 04:00 PM**

Dr V S Prasad
Director, National Centre for Medium Range Weather Forecasting (NCMRWF)

https://imd-mb.webex.com/imd-mb/j.php?MTID=m90004c1c9c29141bb65d8ffb305e959f

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About the Speaker

Dr. V.S. Prasad has obtained his Ph.D in Meteorology and Oceanography from Andhra University and carried out Post-doctoral Studies at Kyoto University, Japan. Presently, he is heading NCMRWF, MoES. He Played significant role in developing state-of-art data assimilation systems and operational ensemble forecasting systems in India. Under his leadership NCMRWF successfully carried out first ever global reanalysis project in India. His main areas of research are Data processing, satellite data retrieval and data assimilation. Dr. Prasad published more than 100 scientific papers in various national and international journals. He received many awards such as B.N Desai Medal, N Melatchthon Phillip prize, Mausam Biannual award, MoES Merit Certificate, JSPS fellowship and also elected as IMS fellow.

About the Talk

Over the decades, NCMRWF has pioneered several breakthroughs in computational modeling, data assimilation, and ensemble forecasting. Key milestones include the introduction of the Unified Model (UM) in 2012, which brought seamless global and regional forecasting systems. In 2014, NCMRWF further advanced its capabilities by introducing the Hybrid Ensemble Kalman Filter (ENKF) variational assimilation within the T574L64 model. This system was soon upgraded to a 4D Ensemble Variational (EnVar) assimilation method, allowing us to implement the T1534L64 model. In 2017, these advancements enabled the launch of the world's highest-resolution Ensemble Forecasting System at 12 km, representing a significant jump in forecast precision by reducing the model uncertainties. NCMRWF has also expanded into advanced modeling systems, including city-scale models like the Delhi Model for air quality and the High-Resolution Rapid Refresh (HRRR) model..