

19 November 2025 (Day 2)		
Plenary Talks: Meghdoot Auditorium: Chairs:		
9:00 to 9:20	Plenary talk	Prof. Ravi Nanjundiah, IISc: HPC technology for weather and climate: Opportunities and Challenges
9:20 to 9:40	Plenary talk	Dr. Rashmi, SAC, ISRO: Opportunities and Challenges in Remote Sensing Technology for weather and climate
Plenary Session: Meghdoot Auditorium: Chairs: Dr Thara Prabhakaran & Dr Suvarna Fadnavis		
9:40 to 10:40	Plenary Session (Meghdoot Auditorium) <b>[Prof. Sulochana Gadgil Memorial Session]</b>	09:40 - 09:45: Opening remark by Dr. R. R Kelkar Former DG, IMD: Memories of Sulochana Gadgil 09:45 – 10:00: Dr. M. Rajeevan, Former Secretary MoES, Vice Chancellor Atria University: Seasonal Prediction of South Asian Summer Monsoon 10:00 – 10:10: Prof Siddhartha Gadgil, IISc Monsoon: prediction and impact 10:10 – 10:20: Prof. J. S. Bhat, CAOS, IISc: Monsoon Field Experiments under ICRP 10:20 – 10:30: Prof. Vinayachandran, CAOS, IISc: Evolution of Indian Ocean Modelling from MOM-1 to MOM-6 10:30 – 10:40: Dr. P Francis, INCOIS- The Equatorial Indian Ocean Oscillation and Its Links to the Indian Summer Monsoon: A Review
10:40 to 11:00 Tea/coffee break		
<b>[Parallel Sessions Begin]</b>		
11:00 to 13:30 IST	Parallel Sessions	Slot C Meghdoot Auditorium: AMS Session – Perspectives on Monsoon Meteorology, Earth System Science & Society Varahamihira Hall: Climate Change & Extreme Weather Events (1 <sup>st</sup> Session - 2 <sup>nd</sup> @ Slot D) Meghdoot Lecture Hall 1: AI/ML in Weather Prediction & Climate Science (1 <sup>st</sup> Session - 2 <sup>nd</sup> @ Slot D) Meghdoot Lecture Hall 2: Advances in Climate Services for Sectoral Applications Monsoon Mission Hall: SAMA Special Session: Climate Impact on Cities and Urban Meteorology (Merged: Urban Meteorology: Planning and Resilient Infrastructure & Understanding and Mitigating Climate Impacts in Cities) HPC Lecture Hall: Soil Hydrology: Weather, Agriculture, Water Resources & Ecosystems Perspectives Aryabhatta Hall: (ICTM) Special Session International Commission on Tropical Meteorology: Tropical Weather and Climate: Our Understanding and Beyond

Slot C | Meghdoot Hall

19/11/2025 (DAY 2) time 11:00 to 13:30 IST

Session: AMS Session – Perspectives on Monsoon Meteorology, Earth System Science & Society

Session Co-Chairs: Dr. Anjuli S. Bamzai & Prof. Dev Niyogi

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Time (IST)	Speaker & Affiliation	Title of the Talk
11:00 – 11:20	Anjuli S. Bamzai, AMS, USA (Invited)	Overview of American Meteorological Society (AMS)
11:20 – 11:40	Venkataraman Lakshmi, Aashutosh Arya & Son Do, Univ. of Virginia, USA (Invited)	The 2022 floods in the Indus River Basin of Pakistan: Use of Earth Observations for Flood Mapping
11:40 – 12:00	Venkataraman Krishnamurthy & Jagadish Shukla, George Mason University, USA (Invited)	Combined effects of tropical Pacific Ocean and Indian Ocean temperatures on Summer Monsoon Rainfall over India
12:00 – 12:20	Mona Behl, Georgia Tech, USA (Invited)	MPOWIR: Mentoring Physical Oceanography Women to Increase Retention — Perspectives from 20 Years
12:20 – 12:40	Atul Jain, University of Illinois Urbana-Champaign, USA (Invited)	Sustainable Pathways in the Climate, Forestry and Agriculture Nexus
12:40 – 13:00	Dev Niyogi, University of Texas at Austin, USA (Invited)	Urban Digital Twins Integrating AI for Water and City Studies
13:00 – 13:20	Roger S. Pulwarty, USA (Invited)	Weather, Water, and Disaster Forensics: Learning from the Past for a More Resilient Future
13:20 – 13:30	Dev Niyogi	Wrap-Up Remarks

Slot C | Varahamihir Hall

19/11/2025 (DAY 2) 11:00 – 12:40 (1<sup>st</sup> Session – 2<sup>nd</sup> @ Slot D)

Session: Climate Change and Extreme Weather Events

Session Chairs: Roxy Mathew Koll and Akshaya Nikumbh

Time	Speaker & Affiliation	Title
11:00 – 11:20	Vinoj V, IIT Bhubaneswar (Invited)	<i>Climate Change and Urbanization over Indian Cities: Implication for Weather Extremes</i>
11:20 – 11:30	S. Lakshmi, IMD	<i>Evaluating the Impact of Climate Extremes on Air Pollution Episodes in Northern India</i>
11:30 – 11:40	Vaishnav Bartaria, Dayalbagh Educational Institute	<i>Role of Short-Lived Climate Pollutants in Modulating Heat Waves and Monsoon Extremes: Evidence from the Indo-Gangetic Basin</i>
11:40 – 11:50	Sahidul Islam, CDAC Pune	<i>Heat Stress Over Indian Cities: Role of Urban Expansion</i>
11:50 – 12:00	Raju Pathak, Nanyang Technological University, Singapore	<i>Urbanization and Climate Change Drive Intensifying Heatwaves Across Southeast Asia</i>
12:00 – 12:10	Sourabh Bal, Swami Vivekananda Institute of Science & Technology	<i>Evaluation of ICON Model in Simulating Heat Wave Events Over India</i>
12:10 – 12:20	Athira K S, IISER Mohali	<i>Understanding Extreme Winter Weather Over North India</i>

Time	Speaker & Affiliation	Title
12:20 – 12:30	Hari Prasad Dasari, KAUST, Saudi Arabia	<i>High-Resolution Climate Change Signals Over the Arabian Peninsula</i>
12:30 – 12:40	Lata Vishnoi, IMD Delhi	<i>Satellite-Derived Vegetation Health Assessment in Response to Super and Extremely Severe Cyclonic Storms across India</i>
12:40 – 12:55	Dr. Narendra Karmarkar	<i>A Knowledge Intense approach to effective Design</i>
12:55 – 13:10	DDN Storage	<i>DDN Storage Solutions for High-Performance Computing (HPC)</i>

**Slot C | Meghdoot Lecture Hall 1**  
**19/11/2025 (DAY 2) 11:00 13:00 Venue 3 (1<sup>st</sup> Session – 2<sup>nd</sup> @ Slot D)**  
**Session: AI/ML in Weather Prediction & Climate Science – I**  
**Session Chairs: Sandeep Sukumaran and Deepesh Kumar Jain**

#### Session Schedule

Time	Speaker & Affiliation	Title
11:00 – 11:20	Deepak Subramani, IISc India (Invited)	<i>Neural Operators for Spatiotemporal Forecasting</i>
11:20 – 11:40	Hariprasad Kodamana, IIT Delhi (Invited)	<i>To be updated</i>
11:40 – 12:00	Kieran M. R. Hunt, University of Reading, UK	<i>Stop using root-mean-square error as a precipitation target!</i>
12:00 – 12:20	Kalpesh R. Patil, Yokohama, Japan	<i>Deep Learning for Long-Lead Prediction of Indian Summer Monsoon Rainfall Using CNNs</i>
12:20 – 12:40	Gopinadh Konda, IBS Centre for Climate Physics, South Korea	<i>AI-Based Global KARINA Model Skilfully Simulates Intraseasonal Tropical Variability: MJO, BSISO, and Associated Air-Sea Dynamics</i>
12:40 – 13:00	Somnath Mahato, IMD	<i>Wind Speed Forecasting in Pune Using Machine Learning Techniques</i>
13:00 – 13:20	Gaurishankar Sawaisarje, IMD, Pune	<i>A Machine Learning Approach to Identifying Common Precursors in Diverse Thunderstorm Events</i>
13:20 – 13:35	<b>AMD</b>	<i>Leveraging AMD HPC Technologies for Improved Weather Forecasting</i>

#### Slot C | Monsoon Mission Hall

**Session: SAMA Special Session: Climate Impact on Cities and Urban Meteorology [(Merged: Understanding and Mitigating Climate Impacts in Cities+Urban Meteorology: Planning and Resilient Infrastructure Session)]**  
**Chair: Someshwar Das**

Date: 19 November 2025 (Day 2)

Time: 11:00 – 13:30 hrs

Time (IST)	Name & Affiliation	Title of the Talk
11:00 – 11:20	Kiran Nair, Technology Head, Adani Green Energy (Invited Talk)	<i>Urban Climate Resilience and Sustainable Energy Integration</i>
11:20 – 11:30	Ranjit Kumar, Department of	<i>Community-Based Solutions for Air-Pollution Mitigation in</i>

Time (IST)	Name & Affiliation	Title of the Talk
11:35	Chemistry, Dayalbagh Educational Institute, Agra	India: Dayalbagh, Agra as a Case Study
11:35 – 11:50	<b>Swagata Payra, BIT Mesra (Invited)</b>	Multi-Criteria Based Lightning Vulnerability Assessment using Demographic, Topographic and Ground-Based Lightning Data
11:50 –	Ajay Kumar Singh, India	A Case Study of Environmental Impact Assessment of Steel Industry at Jamshedpur Using Indigenously Developed SODAR
12:05 – 12:20	Meteorological Department Binit Kumar, NIT Rourkela	Predicting Urban Heat Island Intensity in Future Cities of India
12:20 – 12:35	Dr. Soumi Chakravorty, IMD Pune	Disproportionate Urbanization Exposes Indian Cities to Nocturnal Urban Heat and Dry Islands
12:35 – 12:50	Dr. M. Sreelakshmy, Nirmala College for Women, Coimbatore	Assessing Urban Heat Islands and Climate Resilience Using GIS and Remote Sensing: A Framework for Sustainable Infrastructure Planning
12:50 – 13:05	Debjyoti Roy, National Institute of Technology, Rourkela	Urbanization-Driven Modifications to Pre-Monsoon Thunderstorm Rainfall over Delhi: Insights from Long-Term Observations and High-Resolution WRF Simulations
13:05 – 13:20	Vivek Reddy Palsani, Mahindra University	Urban Land Surface Temperatures and Land Cover Adjacency: A Multi-City Analysis from India
13:20 – 13:35	Amal K. K., National Atmospheric Research Laboratory (NARL), Gadanki	Impact of Urbanization on Simulated Sea Breeze Dynamics over Chennai, India

Slot C | HPC Lecture Hall

19 November 2025 (Day 2)

Parallel Sessions – Slot C (11:00–13:30 IST)

Theme 22: Soil Hydrology: Weather, Agriculture, Water Resources and Ecosystems Perspectives  
Session Chair : Bhupendra Bahadur Singh

Time	Name & Short Affiliation	Title of Talk
11:00 – 11:20	Prof. Subimal Ghosh, IIT Bombay	Causal Discovery in Understanding Land–Atmosphere Interactions (Invited)
11:25 – 11:45	Prof. Karthikeyan Lanka, IIT Bombay	Integrating Scales of Prediction: Hyper-Resolution Soil Moisture Modeling to Subseasonal Drought Forecasting (Invited)
11:50 – 12:00	Sunilkumar P. S., NIT Karnataka	Influence of Precipitation-Driven Recharge and Groundwater Dynamics for Identifying Submarine Groundwater Discharge Proxies
12:05 – 12:15	Dr. Sumana Sarkar, CSIR–Fourth Paradigm Institute	Impact of Soil Moisture–Atmosphere Interactions on Extreme Temperature Anomalies: 2016 Krishna Basin Heatwave
12:20 – 12:30	Minotshing Maza, NIH Patna	Event-Based Design Flood Estimation in the Yomgo River Basin, Arunachal Pradesh
12:35 – 12:45	Srikar, IIST	Land Surface Initialization and Simulation of the 2007 Indian Summer Monsoon Onset
12:50 – 13:00	Sruthi Surendran, IIT Palakkad	Coupling a Mechanistic Soil Hydrological Model with a Dynamic Vegetation Model
13:05 – 13:15	Madhusudan Ingale, IITM Pune	Soil Moisture Memory as Persistence in Land Systems
13:20 –	D. Blaise, ICAR–CICR	Sustaining Rainfed Cotton Production on Vertisols: Integrating

Time	Name & Short Affiliation	Title of Talk
13:30		Hydrology, Rainfall, and Management
<b>Slot C   Meghdoot Hall 2</b>		
<b>Date and Time: 19/11/2025 (DAY 2) • 11:00–13:45 IST</b>		
<b>Session: Advances in Climate Services for Sectoral Applications</b>		
<b>Session Chair: Dr. Satyaban B. Ratna, IMD India</b>		
Time	Speaker & Affiliation	Title
11:00 – 11:05	Dr. Roger S. Pulwarty, WMO (SC-Climate), USA	<i>(Opening Remarks)</i> Climate Services: Status, Challenges, and Opportunities
11:05 – 11:20	Mrs. Anahit Hovsepyan, WMO, Switzerland	<i>(Invited)</i> The World Meteorological Organization's Perspective on Climate Services
11:20 – 11:35	Dr. K. J. Ramesh, RIMES Thailand & Former DG, IMD	<i>(Invited)</i> Perspective Challenges of Climate Services Under Changing Climate
11:35 – 11:50	Dr. Swadhin Behera, JAMSTEC, Japan	<i>(Invited)</i> Building a Digital Earth: AI and Digital Twins for Climate Services
11:50 – 12:05	Dr. Aakash Shrivastava, NCDC, India	<i>(Invited)</i> Heatwaves to Health Action: Perspectives from India's National Programme on Climate Change and Human Health (NPCCHH)
12:05 – 12:20	Dr. Himanshu Shekhar, DRDO, India	<i>(Invited)</i> Climate-Controlled Performance Parameters for High Energy Materials
12:20 – 12:35	Dr. Sanjay Srivastav, NIAS, India	<i>(Invited)</i> Climate Services for Disaster Risk Reduction: Challenges & Opportunities in Asia and Pacific
12:35 – 12:50	Dr. Anshul Agarwal, RIMES, Thailand	<i>(Invited)</i> South Asia Hydromet Forum – Enhancing Climate Services in South Asia
12:50 – 13:05	Dr. Rajashree Naha, BoM / University of Southern Queensland, Australia	<i>(Invited)</i> Advancing Innovative Daily-to-Seasonal Forecasting Tools for Northern Australian Livestock
13:05 – 13:20	Dr. Maria Dewi, UNU, Germany	<i>(Invited)</i> Impact-Based Early Warning for Floods & Droughts: Pilots for Greater Horn of Africa (Kenya & Ethiopia)
13:20 – 13:30	Dr. Satyaban B. Ratna, IMD, India	Climate Services in India: Current Status and the Way Forward

**Slot C | Aryabhatta Hall**

19/11/2025 (DAY 2)

**Venue: 7 — International Commission on Tropical Meteorology (ICTM) Special Session**

Time: 11:00 – 13:30 IST

Session Chair : Dr. Thara Prabhakaran, IITM Pune

Time (IST)	Speaker & Affiliation	Title of the Talk
11:00 – 11:30	Dr. R. Krishnan, IITM Pune	<i>Indian Monsoon in a Changing Climate – Opportunities and Challenges</i> (Invited lead talk)
11:30 – 11:55	Dr. Ajay Mohan, USA	<i>Climate Variability and Ocean Warming as Constraints on Near-Equatorial Cyclogenesis</i> (Invited)
11:55 – 12:20	Dr. Anurag Dipankar, ETH Zurich	Progress and Challenges in Global Storm-Resolving Modeling: The Road Ahead (Invited)
12:20 –	Dr. Abhilash S, Cochin University	<i>Rising Heat, Deepening Tropical Clouds and Stronger Storms:</i>

Time (IST)	Speaker & Affiliation	Title of the Talk
12:45	of Science and Technology (CUSAT)	<i>Unfolding Urban Climate Risks Along the Southwest Coast of India (Invited)</i>
12:45 – 13:10	Prof. Argha Banerjee, IISER Pune	<i>Himalayan Glaciers, Glacier-Fed Rivers, and Some Interesting Feedback Loops (Invited)</i>
13:10 – 13:25	Dr. Subodh Saha, IITM Pune	<i>Tropical Humid Heat Stress Crosses a Critical Threshold in a Warming World (Invited)</i>
13:25 – 13:30	—	<i>Session Summary &amp; ICTM mission and vission by Session Chair</i>

**13.30 to 14.30 IST Lunch break  
[Parallel Sessions Continue]**

14:30 to 16:30 IST	Parallel Sessions	<p>Slot D</p> <p>Aryabhatta Hall: Advances in Ocean–Atmosphere Interaction</p> <p>Varahamihira Hall: Climate Change &amp; Extreme Weather Events (2<sup>nd</sup> - Cont. from Slot C)</p> <p>Meghdoot Lecture Hall 1: AI/ML in Weather Prediction &amp; Climate Science (2<sup>nd</sup> Session - Cont. from Slot C)</p> <p>Monsoon Mission Hall: Advancement in Understanding Interactive Chemical Processes during the Asian Summer Monsoon</p> <p>HPC Lecture Hall: Impact Assessment, Adaptation, Disaster Preparedness and Community Engagement (Merged: Impact Assessment, Adaptation and Disaster Preparedness &amp; Community Engagement in the Field of Weather and Climate)</p> <p>Meghdoot Lecture Hall 2: ISRS Session: Remote Sensing for Atmosphere &amp; Ocean</p> <p>Meghdoot Auditorium: IITM-ECR Session</p>
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**Slot D | Aryabhatta Hall**  
**19/11/2025 (DAY 2) Time 14:30 to 16:30**  
**Advances in Ocean–Atmosphere Interaction**  
**Session Chair: Prasanth Pillai & Ankur Srivastava**

Time	Speaker & Affiliation	Title
14:30 – 14:45	D Shankar, CSIR-NIO, Goa (Invited LeadTalk)	Role of ocean dynamics in the evolution of SST in the Bay of Bengal during the summer monsoon
14:45 – 14:55	P. Amol, CSIR–National Institute of Oceanography	Surface Winds, Damping, and Bottom Currents in the Equatorial Indian Ocean
14:55 – 15:05	S. D. Sanap, India Meteorological Department	Springtime Dipole in Heatwave Patterns over the Indian Region
15:05 – 15:15	Jasti Chowdhury, IITM Pune	Assessing the Potential Predictability of Tropical Pacific and Indian Ocean SST in CMIP6 DPCC Models
15:15 – 15:25	Amit Kesarkar, NARL Gadanki	Multiscale-Scale-Aware Coupling Framework for Atmosphere–Ocean Interactions: Challenges in a Changing Climate
15:25 – 15:35	Maheswar Pradhan, IITM Pune	Coastal SST Fronts: A Key to Better Monsoon LPS Simulation
15:35 – 15:35	Vijay Pottapinjara, INCOIS	Impact of the Atlantic Zonal Mode on Ocean Surface Waves in the

Time	Speaker & Affiliation	Title
15:45		Tropical Indo-West Pacific during Boreal Summer
15:45 – 15:55	Ankur Srivastava, IITM Pune	The multi-year negative Indian Ocean Dipole of 2021–2022
15:55 – 16:05	M. Santosh, SPL, VSSC-ISRO	Coastal Low-Level Jet along Eastern India: Morphology, Seasonality, and Diurnal Variability
16:05 – 16:15	D. A. Ramu, CEOAS, University of Hyderabad	Prediction of extreme positive Indian Ocean Dipole events and their impact on monthly Indian Monsoon rainfall (June–November) from seasonal prediction models
16:15 – 16:25	Renu S. Das, IITM Pune	Influence of Air–Sea Interaction on Surface Heat Fluxes during Indian Summer Monsoon
16:25 – 16:30		Discussion & Conclusions

#### Slot D | Varahamihir Hall

19/11/2025 (DAY 2) Time 14:30 to 16:30

#### Session: Climate Change and Extreme Weather Events (2<sup>nd</sup> Session – Cont. from Slot C)

Session Chairs: Akshaya Nikumbh and Vinoj V.

Time	Speaker & Affiliation	Title
14:30 – 14:50	Dr. R. K. Jenamani, IMD (Invited)	<i>Major Extremely Heavy Rainfall Events and Cloudburst Cases over Western Himalayas (2023 &amp; 2025): Analysis, Hazards, Impacts &amp; Impact-Based MHEWS</i>
14:50 – 15:10	Bedartha Goswami, IISER Pune (Invited)	<i>Intraseasonal teleconnection between rainfall extremes over North India–Pakistan and the Sahel</i>
15:10 – 15:30	Raju Attada, IISER Mohali (Invited)	<i>Monsoon Hydroclimate Extremes over the Indian Himalayas</i>
15:30 – 15:40	Monika Sharma	<i>Some Characteristics of Cyclonic Disturbances affecting South Asia</i>
15:40 – 15:50	Dipanjan Dey, IIT Kharagpur	<i>Jet stream interactions triggered extreme rainfall over North India in June 2013 and July 2023</i>
15:50 – 16:00	Shubha Singh, NCMRWF Delhi	<i>Stratospheric Drivers of Extreme Weather Events over the Indian Subcontinent (2020–2024): A Dual Reanalysis Perspective using GFS &amp; ERA5</i>
16:00 – 16:10	Ranjan Kumar, IIT Kharagpur	<i>Quantitative Moisture Source Diagnosis for Extreme Precipitation in India Beyond Trajectory Diagnostics</i>
16:10 – 16:20	Deepak Pandidurai, IIT Roorkee	<i>Atmospheric moisture characteristics of multiday extreme precipitation–induced floods in India</i>
16:20 – 16:30	Kumarjit Saha, NCMRWF Delhi	<i>Orography and cloud-phase synergy: driving extreme rainfall over northeast India</i>
16:30 – 16:40	Ravi P. Maurya, IIT Madras	<i>Simulating the Manali cloudburst event of 2023: Role of ice-nucleating particles</i>
16:40 – 16:50	B. Koteswara Rao, IISER Tirupati	<i>Observational evidence of impact of heavy rainfall events on surface energetics and soil parameters</i>
15:30 – 15:40	Krishna Mishra, IMD	<i>Cloudburst over Udhampur on 26 August 2025: Synoptic and large-scale factors and NWP model forecast verification</i>

Slot D | Meghdoot Hall 1

19/11/2025 14:30 to 16:30 (DAY 2) (2<sup>nd</sup> Session –Cont. from Slot C)

Session: AI/ML in Weather Prediction & Climate Science – II

Session Chairs: Dr. Sandeep Sukumaran and Dr. Deepesh Kumar Jain

Time (IST)	Name & Affiliation	Title of the Talk
14:30 –	Mr. Pratik Patel, ARDE-DRDO (Invited)	AI and ML in weather prediction and Defence sector
14:50 –	Dr. Seshagiri Rao Kolu, Met Office, UK	Advancing Climate Modelling with AI and Machine Learning Foundation Models
15:10 –	Dr. Pankaj Lal Sahu, IIT Delhi, India	Tropical Cyclone Forecasting with Global Machine Learning Weather Prediction Models: Strengths and Weaknesses
15:30 –	S. V. Anirudh, IIT Bhubaneswar	A Hybrid Convolutional Regression Framework for Enhancing Extended-Range Monsoon Forecasts Using ISO-Constrained Ensemble Learning
15:50 –	Manisha Chaturvedi, Banaras Hindu University (BHU), India	Deep Learning Driven High-Resolution Projections of Diurnal Temperature Range under Climate Change Scenarios
16:10 –	Goriparthi Pavani, National Atmospheric Research Laboratory (NARL), India	Hybrid Quantile Mapping and CNN–LSTM for Bias Correction of High-Resolution Rainfall Forecasts

Slot D | Monsoon Mission Hall

19/11/2025 (DAY 2) 14:30 to 16:30

Session: Advances in Understanding Interactive Chemical Processes during the Asian Summer Monsoon

Session Chair: Dr. Suvarna Fadnavis

Time (IST)	Speaker & Affiliation	Title of the Talk
14:30 –	V. Ratnam, NARL, India (Invited)	Elevated Aerosols Layer in the Upper Troposphere and Lower Stratosphere: Variability, Impact, and Pollution Pathways
15:00 –	Sanjay Kumar Mehta, SRM University, India (Invited)	Asian Summer Monsoon Anticyclone: Global Effect and Climate Change
15:30 –	Siddarth S. Das, ISRO, India (Invited)	Decoding Stratosphere–Troposphere Interactions over the Asian Summer Monsoon Region: A Radar and Satellite Perspective
16:00 –	Hemanth Kumar Alladi	Impact of ENSO on the UTLS Chemical Composition in the Asian Summer Monsoon Anticyclone
16:15 –	Dr. Satheesh Chandran P. R.	Assessment of Temperature and Wind Biases in Reanalysis over the Indian Subcontinent during the Asian Summer Monsoon

Slot D | HPC Lecture Hall

19 November 2025 (Day 2) Time: 14:30 – 16:30 IST

Impact Assessment, Adaptation, Disaster Preparedness & Community Engagement

[Merged session Impact Assessment, Adaptation, and Disaster Preparedness + Community Engagement in the Field of Weather and Climate]

Session Chair: Dr. Marcella D'Souza, WOTR & Dr. Amir Bazaz, IIHS Bangalore

Time	Speaker & Affiliation	Title
14:30 –	Dr. J. V. Ratnam, JAMSTEC (Invited)	Skillful prediction of maximum air temperature over India using the SINTEX-F2 seasonal prediction system
14:50 –	Saurabh Kelkar, WOTR	Integrating Climate Model Outputs and Community Experience for

Time	Speaker & Affiliation	Title
15:10	(Invited)	Assessing Climate Change Impacts in Small Watersheds
15:10 – 15:20	Dipak Kumar Sahu, IMD	Diurnal variations of wind pattern during onset, active, break & withdrawal phases of monsoon over CSMI Airport Mumbai and its impact on aviation operations
15:20 – 15:30	Ahmed Abdallah Adam Mohamed, Mizoram University	Satellite-Based Drought Assessment in Major Sudan's Mechanized Rain-Fed Agriculture (2005–2024)
15:30 – 15:40	Monisha Kollipara, Mahindra University	AI-Enabled Risk Communication for Urban Heat Adaptation: Integrating Personalization and Citizen Participation
15:40 – 15:50	Manish Ranalkar, IMD Lucknow	Lightning Activity and Mortality in Uttar Pradesh: Atmospheric Forcing, Vulnerability Hotspots, and Evidence-Based Preparedness
15:50 – 16:00	Lareef Zubair, FECT Sri Lanka	Was the Xpress-Pearl Ship Maritime Disaster in May 2021 avoidable by managing weather risks?
16:00 – 16:10	Akhil Srivastava, IMD	Speaking the Community's Language: Heat Wave Warning Outreach for Delhi's Informal Sector
16:10 – 16:20	A. Asutosh, Aurassure	UCAN: Advancing Air Quality Monitoring Through University-Led Community Collaboration
16:20 – 16:30	Dr. Abhishek Anand, RMC Kolkata	Multi-Scale Behavioral Climate Governance: Cascading Climate Actions from Individuals to National Strategies
16:30 – 16:40	Prof Sushil Kumar, Gautam Buddha University	Role of Microphysics and Convective Parameterisation in Simulating Extreme Precipitation Events over the Himalayas: A Multi-Event WRF Analysis

Slot D | Meghdoot Hall 2

Indian Society of Remote Sensing (ISRS) Session – Remote Sensing for Atmosphere & Ocean

Date & Time: 19 November 2025, 14:30 – 16:55

Session Chair: Dr. P. C. Joshi, SAC-ISRO

Time	Speaker & Affiliation	Title
14:30 – 14:50	Atul Varma, SAC-ISRO (Invited)	Stochastic Downscaling of Coarser-Resolution Precipitation
14:50 – 15:02	Dr. Rizwan Ahmed, IMD	Assessing Climate Change Impacts on Land-Falling Tropical Cyclones Over the North Indian Ocean for Improved Forecasting and Coastal Resilience
15:02 – 15:14	Ravi Kumar Kunchala, IIT Delhi	Integration of Remote Sensing Observations and Machine Learning Models for Understanding CO <sub>2</sub> Dynamics Over India
15:14 – 15:26	Danish Hussain, SAC-ISRO	Validation of INSAT-3DS Aerosol Optical Depth Product Using AERONET Ground Observations
15:26 – 15:38	Kirti Soni, CSIR-AMPRI	Design and Development of SODAR System for Atmospheric Dynamics Studies
15:38 – 15:50	Mukesh Kumar, ARIES	Pandora-Based Insights into Trace Gases and Satellite Performance over the Central Himalayas
15:50 – 16:02	Dr. Jyoti Bhate, NARL	All-Sky Radiance Data Assimilation and Its Impact on Hydrometeor Representation
16:02 – 16:14	Saurabh Tripathi, SAC-ISRO	Hybrid Physics-AI Approach for High-Temporal-Resolution Virtual Satellite Images for Oceanic Gap Filling
16:14 – 16:26	Dr. M. Mahakur, IITM	Multi-Scale Aspects of IMSR from TRMM Precipitation Radar Observations
16:26 – 16:38	Dr. Ajay Bankar, IIT Madras	Qualitative Assessment of High-Resolution Gridded Precipitation Products Against Ground-Based Rain-Gauge Network
16:38 – 16:50	Dr. Gargi Rakshit, IMD	Diagnosing Intense Rainfall over Delhi NCR Using Satellite Observations and Reanalysis Outputs
16:50 – 17:02	Anjana U, SPL VSSC	Intertropical Convergence Zone: A Regional Perspective using Multi-metric Approach
17:02-17:14	Gayatri V	Evaluation of the fidelity of WRF forecasts and ERA5 and IMDAA reanalyses in reproducing IWV and its diurnal cycles during different seasons over a tropical, semi-arid station using GNSS observations

16:30 to 18:00 IST Poster session with Tea/Coffee

17:00 – 18:00 IST IMS GB Meeting at VARAHAMIHIRA HALL

18:30 to 19:30 pm Cultural program  
Hindustani Classical Vocal Recital by Pt Anand Bhate

19:30 to 21:30 Dinner by Director IITM