



TROPMET 2024

Recent Advances and Challenges in Understanding and Predicting High-impact Weather and Climate Extremes over Indian Subcontinent in the Climate Change Context

POSTER PRESENTATIONS Day 1: 10 December 2024

10 December 2024 (Tuesday)		Time: 14:00 -16:00 Hrs	
Venue: R M Hall			
SN	Abstract ID	Author	Title of the paper
1.	TROPMET2024-062	Adarsh Kumar Sharma	Mapping of Particle Pollution and Analysis of Different Atmospheric Constituents
2.	TROPMET2024-093	Himangi Tripathi	WRF-CHEM simulation of transport of aerosols and trace gases in Northern region of India throughout summer and winter
3.	TROPMET2024-270	Gaurav Singh	Applying Machine Learning technique to predict trends of air pollutant PM ₁₀ in Indian cities-Delhi and Bangaluru
4.	TROPMET2024-322	Pratiksha Dubey	Principal Component Analysis to study spatial variability in the ground truth data derived air quality and case study estimates over North West part of India
5.	TROPMET2024-243	Vishnu N G	Greenhouse Gas Emission from a Mangrove Patch at Kerala, India
6.	TROPMET2024-227	Dharmendra Kumar Kamat	Analyzing the impact of a severe Dust Storm on the Boundary Layer in the Western-Indian Region
7.	TROPMET2024-112	Betsy K B	Characteristics of the tropospheric aerosols and their radiative effect during the extreme and prolonged heat wave conditions over India
8.	TROPMET2024-099	Seetha C J	Exchange between the Atmospheric Boundary Layer and Free Troposphere over the Indian region: Roles of Topography and Monsoons
9.	TROPMET2024-105	Pallavi Sahoo	Reporting of National Inventory of Ammonia Emissions from 24 Anthropogenic Sources in India
10.	TROPMET2024-263	Priyadarshini Ghosh	A study of the Correlations among the Weather parameters and Air pollutants in six cities of West Bengal
11.	TROPMET2024-252	Darvesh Bansal	AI-Based Agricultural System for Crop-Specific Querying and Weather Forecasting
12.	TROPMET2024-023	Monu Yadav	Evaluation of Tropical Cyclone's Track using machine learning technique over the North Indian Ocean
13.	TROPMET2024-197	Ayushi Singh	Machine Learning-Based Detection of Convective Initiation Using INSAT-3DR
14.	TROPMET2024-121	Hritul Raturi	Deep Learning Based Prediction of Cloudburst Events Over the NWH Region
15.	TROPMET2024-067	Amees Chhatbar	Machine Learning-Based Identification of Convective Clouds Using INSAT-3DR Data and Lightning Detection
16.	TROPMET2024-104	PRAKASH KUMAR JALA	Early Warning System on Extreme Weather Events Using Machine Learning and Deep Learning Techniques



TROPMET 2024

Recent Advances and Challenges in Understanding and Predicting High-impact Weather and Climate Extremes over Indian Subcontinent in the Climate Change Context

17.	TROPMET2024-089	Mayank Pandey	Spatial prediction of monthly Air Temperature using Machine Learning Technique
18.	TROPMET2024-406	Yasti Panchbhaiya	Identification of extreme weather event using machine learning and artificial intelligence approaches over the Himalayan region of Uttarakhand
19.	TROPMET2024-413	Aman Deep Vishwkarma	Machine Learning Approaches for Analyzing Extreme Weather Events in The Garhwal Himalaya Region
20.	TROPMET2024-016	Shubhi Agrawal	Differences In Land-Atmosphere Feedback Processes During Early and Late Monsoon Onset Years
21.	TROPMET2024-P024	L S Ritika	Comparative Analysis of Aerosol trends over India and China: A Two-Decade Study (2001-2023)

10 December 2024 (Tuesday)

Time: 16:10 -18:00 Hrs

Venue: R M Hall

SN	Abstract ID	Author	Title of the paper
1.	TROPMET2024-321	Sudipta Manna	Assessing The Influence of Biophysical Factors on The Tropospheric Methane Concentration: A Case Study In Odisha
2.	TROPMET2024-274	Subhash	Climatological Analysis of Indian Summer Monsoon Variability
3.	TROPMET2024-217	Anindita Borah	Spatiotemporal Variation of Potential Evapotranspiration over North-East India
4.	TROPMET2024-236	Sruthi S	Advanced Climate Data Analysis and Projections for Kodaikanal Using Machine Learning Techniques
5.	TROPMET2024-332	Subham Maharana	Long Term Sea Surface Temperature and Salinity Dynamic in the Bay of Bengal
6.	TROPMET2024-060	Kritika	Trends in Extreme Precipitation Indices over the Mountainous Regions of Northwest Himalaya
7.	TROPMET2024-179	Swapnilkumar Kori	Assessment of the Seasonal Prediction Models in Representing the Monsoonal Rainfall
8.	TROPMET2024-209	Aswin Sagar	Climate change weakens South Asian monsoon circulation and its association with western north Pacific tropical convection.
9.	TROPMET2024-208	Harinandana M S	Urban Heat Island: A climatological perspective
10.	TROPMET2024-131	Shirin Sulthana	Is Tree Ring- Climate Relationship in Western Ghat Sensitive to Altitude? An Answer from Karnataka Teak Chronologies
11.	TROPMET2024-156	Susmita Behera	Assessing Thunderstorm and Monsoon Effects on Flooding in Odisha's Baitarani River Using WRF Model Simulations
12.	TROPMET2024-139	Roshan Beuria	Heat Stress and Urbanization in Coastal Odisha: Insights from Remote Sensing and WRF Modelling



TROPMET 2024



Recent Advances and Challenges in Understanding and Predicting High-impact Weather and Climate Extremes over Indian Subcontinent in the Climate Change Context

13.	TROPMET2024-370	Shivam Kesharwani	Future Projection of Marine Heatwaves over the Tropical Indian Ocean Using Highresnip Models
14.	TROPMET2024-284	Abhirami M	Assessing Future Climate Projections: An In-depth Analysis of CMIP6 Models on Indian Ocean Warming, Sea Surface Temperature Biases, and Precipitation Patterns
15.	TROPMET2024-058	Sangeetha P	Evaluation of total column ozone measurements from INSAT-3D/3DR with satellite-based AIRS and CAMS reanalysis data
16.	TROPMET2024-074	Manas Ranjan Singh	Enhancing Coastal Vulnerability Assessment: A Systematic Review of Indices and Integration of Geostatistical Tools for Improved Analysis
17.	TROPMET2024-362	Pramit Majumder	Theoretical Understanding and Numerical Simulation of Tropical Waves Using Reduced Gravity ENSO Model
18.	TROPMET2024-341	Karishma Dahiya	Evaluating the Indian Summer Monsoon variability during the end of the 21st century using CMIP6 projections. Evaluating the Indian Summer Monsoon variability during the end of the 21st century using CMIP6 projections
19.	TROPMET2024-391	Soumalya Roy	Study of Long Term Rainfall Trends over Different Regions of India
20.	TROPMET2024-324	Arnab Mandal	Investigating the Monthly Ozone Oscillation Using Space Based Technology: An Insight from Eastern India
21.	TROPMET2024-371	Abheendra Bandaray	Night Light Data as a proxy for Assessing Air Pollution in Urban Landscapes: Potential of Remote Sensing Technology



TROPMET 2024

Recent Advances and Challenges in Understanding and Predicting High-impact Weather and Climate Extremes over Indian Subcontinent in the Climate Change Context



Day-2: 11 December 2024 (Wednesday)

TECHNICAL SESSION: POSTER PRESENTATIONS

11 December 2024 (Wednesday)		Time: 11:15 -14:00 Hrs	
Venue: R M Hall			
SN	Abstract ID	Author	Title of the paper
1.	TROPMET2024-185	Agniva Pal	Investigating Air Pollution Dispersion from Forest Fires: A case study on Uttarakhand Using the HYSPLIT Model
2.	TROPMET2024-034	Ritama Das	A Comparative Study of SCAT-3 and GFS Wind Datasets for the Bay of Bengal Cyclones of 2023
3.	TROPMET2024-013	Thanushree B S	Interrelationship between Evapotranspiration and Indian Summer Monsoon Rainfall across Homogenous Regions of India
4.	TROPMET2024-358	Mudit	Evaluating The Decadal Prediction Skill of The Indian Summer Monsoon Rainfall in the DCPM Models
5.	TROPMET2024-337	Swapnali Vishnu Mahude	Trend Analysis of Rainfall Characteristics Using Mann-Kendall Test in Marathwada Region
6.	TROPMET2024-221	S S G Saidhanya sree	Leveraging Latent Diffusion Models for Precision in Precipitation Nowcasting Using Satellite Data
7.	TROPMET2024-348	Angel Anita Christy	Investigation of diurnal and seasonal variations in atmospheric boundary layer over a tropical coastal urban station
8.	TROPMET2024-224	Abhay Bhattarai	Characteristics Of Monsoon Hourly Rainfall Events Associated with Extreme Rainfall and Their Connection with Low Pressure Systems Over a Complex Terrain of Indian Subcontinents
9.	TROPMET2024-388	Abhijeet Kumar	Investigating the dynamic and microphysical processes in observed convection through range-height indicator scans of C-band polarimetric radar
10.	TROPMET2024-223	Mukesh	Western Disturbances: A Case Study of January-April 2023
11.	TROPMET2024-231	Sreehari V	An Observing System Simulation Experiment for the Impact of GNSS Zenith Tropospheric Delay Assimilation on Regional Weather Prediction
12.	TROPMET2024-414	Nandana V	Investigating the characteristics of drop size distribution in Urban precipitation extremes using Doppler Weather Radar and Laser Precipitation Monitor
13.	TROPMET2024-079	Rohit Gautam	Trends in temperature extremes across Northeast India and nearby areas: A multisite analysis using IMDAA datasets
14.	TROPMET2024-028	Swagata Mukhopadhyay	Studies Of Aerosol Optical and Radiative Properties Using Ground-Based Sky Radiometer Instruments



TROPMET 2024

Recent Advances and Challenges in Understanding and Predicting High-impact Weather and Climate Extremes over Indian Subcontinent in the Climate Change Context

			From High-Altitude Sites at Ladakh In the Hindu Kush Himalayan Region
15.	TROPMET2024-360	Prasenjit Dey	An Assessment of the Impact of Cyclones on the Ocean Surface Using Satellite and In-Situ Observations
16.	TROPMET2024-130	Debanjan Paul	Diurnal and seasonal variations of XCO ₂ over different Land Cover categories over Indian region using OCO-3 satellite observations
17.	TROPMET2024-080	Shalini Yadav	Investigating the spatiotemporal variability of atmospheric methane (CH ₄) over India using TROPOMI satellite retrievals
18.	TROPMET2024-021	Rama Kanta Nayak	Characteristics of the maximum duration and maximum intensity MHWs over the Bay of Bengal in recent period
19.	TROPMET2024-170	Surabhi Verma	Regional signatures of Monsoon weakening of global abrupt climate events
20.	TROPMET2024-125	Pavankumar Olekar	Tropical Extreme Rainfall Events: Sub-hourly scale variability.
21.	TROPMET2024-400	Josin Sanal Thomas	Hail growth detection and early warning from dual polarimetric signatures
22.	TROPMET2024-307	Prajna Priyadarshini	Study of Lightning Characteristics in association with Tropical Cyclones using Lightning Location Network (LLN)
23.	TROPMET2024-032	Smrati Purwar	Assessing the Role of Ground GNSS Observations in NCMRWF's Unified Model
24.	TROPMET2024-280	Sristi Shamarthi Das	Investigating climate change impacts over an Indian tropical station, Kolkata, using radiosonde observations for 1987 – 2024
25.	TROPMET2024-390	Shivaji Singh Patel	Evaluating the Impact of Microwave Imager Radiance Data Using 4D-Var Assimilation in NCUM-R Model Simulations of Tropical Cyclones over the Bay of Bengal
26.	TROPMET2024-155	Tapankumar Jigneshkumar Ka Patel	Assessment of Atmospheric temperature and moisture profiles from recently launched INSAT-3DS observations: Initial results
27.	TROPMET2024-203	Musaid P P	Physical and dynamical factors affecting the boundary layer tracer pathway to the Asian Summer Monsoon Anticyclone
28.	TROPMET2024-210	Bv Balasundhar	Comprehensive Evaluation of Aeolus Wind Products against In-Situ Observations and Re-Analysis datasets over the Indian Monsoon Region
29.	TROPMET2024-P018	Ganaraj Dalal	Unravelling the causes of heatwaves over Southwest India



TROPMET 2024

Recent Advances and Challenges in Understanding and Predicting High-impact Weather and Climate Extremes over Indian Subcontinent in the Climate Change Context



11 December 2024 (Wednesday)

Time: 15:00 -18:00 Hrs

Venue: R M Hall

SN	Abstract ID	Author	Title of the paper
1.	TROPMET2024-110	Ruhiteswar Choudhury	Comprehensive Analysis and Modeling of Extreme Rainfall Events for Enhanced Hydrological Risk Assessment and Resilience
2.	TROPMET2024-115	Dipanjali Ray	A Study Emphasizing on Probability Distribution Function and Implication of L-Moment Ratio Diagram in Temperature Data
3.	TROPMET2024-165	Bhavyasree	Sensitivity Of Microphysical Characteristics of Hailstorms over Assam and Bihar using Weather Research and Forecasting (WRF) Model
4.	TROPMET2024-164	Vinisha	Impact Of Assimilation of Upper Air Observation to Simulate the Severe Thunderstorm over Bihar and West Bengal, India using 3dvar of WRF Model
5.	TROPMET2024-245	Rose Raphel	Impact of advanced cloud microphysics schemes for the Kerala flood events in 2018 and 2019 using NCMRWF regional model
6.	TROPMET2024-102	Priya Bharati	ENSO-induced latitudinal variation of the subtropical jet modulates extreme winter precipitation over the Western Himalaya.
7.	TROPMET2024-366	Abantika Kar	Flood Risk and Vulnerability: A Comprehensive Study along the Vashishti River in Chiplun, Maharashtra
8.	TROPMET2024-116	Shritu Badoniya	Investigating the Possibility of Brown Ocean Effect Signature in Tropical Cyclones Formed over the Bay of Bengal During the Pre-Monsoon Season
9.	TROPMET2024-211	TUNGA S G	Radar Data Assimilation and Its Impact on the Forecast of Afternoon Convective Storms
10.	TROPMET2024-095	Sanjay Sriraj	Effectiveness of Dual-Resolution Hybrid Ensemble Variational Data Assimilation scheme using dense network of surface
11.	TROPMET2024-049	Francis Babu	Improving Convective Afternoon Rainfall Prediction using 4D-Var Assimilation over a Region with Dense Ground-Based Observations
12.	TROPMET2024-314	Sankhasubhra Chakraborty	Assessing the Impact of Radar Data Assimilation on Tropical Cyclones
13.	TROPMET2024-338	Parvathy Thankachy P	Impact of cumulus parameterization on precipitation at high spatial resolution: A case study of extreme rainfall event over central India
14.	TROPMET2024-145	Swarnamayee Das	Evaluating the WRF Model's Efficacy in Cyclone Path Forecasting: A Study Focused on Coastal Odisha
15.	TROPMET2024-126	Jiteshwar Dadich	Evaluation of Soil Texture Data and Soil Hydraulic Properties for Land Surface Modelling
16.	TROPMET2024-180	Azad Singh Rajpoot	An Assessment of the Impact of Indian Radiosonde/PILOT observations on the NWP Model Forecast: Study using FSOI method.



TROPMET 2024

Recent Advances and Challenges in Understanding and Predicting High-impact Weather and Climate Extremes over Indian Subcontinent in the Climate Change Context



17.	TROPMET2024-375	Rambilli Loknadh	Absence of Depressions During Contrasting Summer Monsoons: A Comparative Study of 2002 and 2010 Using RegCM5.
18.	TROPMET2024-177	Arpit Mohapatra	Assessment of Forecast of ESCS "Fani" using NCMRWF Regional and Global Ensemble Prediction Systems
19.	TROPMET2024-040	Adarsh Jain	Assessment of diurnally evolving atmospheric boundary layer over the central Indian region under the influence of extreme heat waves
20.	TROPMET2024-065	Sohaniya Mandal	Numerical Modelling of Extreme Waves in One Dimension Along Coastal Bay of Bengal
21.	TROPMET2024-191	Anuranjan Harsh	Drought Risk Analysis of Southern Bihar: An Integrated Approach
22.	TROPMET2024-092	Shubham	Assessing the Role of Low Level Jets on the Extreme Rainfall Events over Coastal Regions of Peninsular India
23.	TROPMET2024-291	Navdeep Singh	Nowcasting of Weather Using Doppler Weather Radar Data
24.	TROPMET2024-030	Pawan	Integrative Modeling of Coastal Flooding in Storm Surge Events: Utilizing ADCIRC and HEC-RAS for Comprehensive Flood Risk Assessment in Indian River Basins
25.	TROPMET2024-051	Deevi Prathima	Temporal and Intensity Dynamics of Fog across the Indo-Gangetic Plain: A Multi-decadal analysis from 1991-2024
26.	TROPMET2024-336	P Venkata Kishor Kumar Reddy	IoT-Based Real-Time Flood Monitoring and Early Warning System Using Water Level Sensors
27.	TROPMET2024-171	Pallavi Prabhu	Derived NWP products in forecasting the track and intensity of tropical cyclone MOCHA
28.	TROPMET2024-304	Vishnu B Bal	Understanding the Long-Term Changes in Tropical Cyclone Activity in the North Indian Ocean
29.	TROPMET2024-159	Rani Devi	The Potential drivers of cold waves over India under the climate change scenario
30.	TROPMET2024-292	Kethavath Lakshma	Biennial Variability of Boreal Spring Surface Air Temperature over India



TROPMET 2024

Recent Advances and Challenges in Understanding and Predicting High-impact Weather and Climate Extremes over Indian Subcontinent in the Climate Change Context



Day-3: 12 December 2024 (Thursday)

12 December 2024 (Thursday)

Time: 10:45 -13:00 Hrs

Venue: R M Hall

SN	Abstract ID	Author	Title of the paper
1.	TROPMET2024-272	Shubham Waje	The impact of Quasi-Biennial Oscillation on Indian Summer Monsoon Subseasonal variability
2.	TROPMET2024-064	Tukaram Zore	Role of Tropical Subseasonal Variability on Future Projection of Frequency and Intensity of Indian Heatwaves
3.	TROPMET2024-364	Arpan Bhattacharjee	Impact of Ocean Warming and ENSO on the Marine Heatwaves
4.	TROPMET2024-206	Amit Kumar Jena	Modulation of Cyclone Intensity and Track in Response to MJO: A Case Study on Cyclone Mocha and Biparjoy
5.	TROPMET2024-357	Dilna Damodaran	Long-term observations of stratospheric water vapour using SABER measurements: Implications for climate
6.	TROPMET2024-237	Shivam Saxena	Predicting Indian Summer Monsoon Onset with a month lead: Unlocking the Potential of Ocean Heat Content-Based Indices Over the Indo-Pacific Region
7.	TROPMET2024-327	Sonu Kumar	Spatiotemporal Analysis of Heatwaves in India: Implications for Socioeconomic Development and Disaster Risk Management
8.	TROPMET2024-255	Kumar Upavan	Lightning Induced Vulnerabilities over Indian Sub-Continent
9.	TROPMET2024-138	Ms. Debasmita Das	Effect of Climate Change and Climate Resilient Practices on Fruits
10.	TROPMET2024-186	Mrinalini Srivastava	Climate Change Impact on Rice Production in the Indo-Gangetic Plain: Adaptive Solutions
11.	TROPMET2024-143	Susri B Barnana Behera	Effect of different climate resilient crop management practices on growth parameters (CGR, RGR, and NAR) and agro meteorological indices of green gram (<i>Vigna radiate</i> L.) in rice fallow
12.	TROPMET2024-218	Kajal Barman	Assessment of Blue Carbon Stocks in Mangroves of Amba River Estuary, Raigad District, Maharashtra: A Case Study from India Using Remote Sensing and Ground Data
13.	TROPMET2024-183	Bhubaneswari Panda	Impact of extreme events (El Nino) on Algal bloom (Microplankton) in Indian Ocean
14.	TROPMET2024-002	Jashwanth, C.	"Predicting Pigeonpea Yield Using Machine Learning Approaches Under Changing Climatic Scenarios in the Eastern Dry Zone of Karnataka"
15.	TROPMET2024-320	Ajay Mohan	Change in Wheat Crop Yield for Different RCPs in the Context of Climate Change



TROPMET 2024

Recent Advances and Challenges in Understanding and Predicting High-impact Weather and Climate Extremes over Indian Subcontinent in the Climate Change Context

16.	TROPMET2024-287	Anjali Subhash Kale	The Growing Impact of Climate Variability on Indian Agriculture: A call for Resilience
17.	TROPMET2024-350	Vishwadip Bharne	Assessment of remote sensing derived drought Indicators over Maharashtra
18.	TROPMET2024-351	Ashwini U Dabhade	Assessment of seasonal soil moisture dynamics using satellite data over Marathwada
19.	TROPMET2024-004	Kumari Lipi	The Role of Patents in Fostering Climate Resilience: A Case Study of the Indian Subcontinent
20.	TROPMET2024-254	Dinesh Kumar Yadav	Role of Pre-Monsoon salinity anomalies in Influencing the onset of Indian Summer Monsoon
21.	TROPMET2024-256	Anmol Yadav	The Role of Atmospheric Circulation Anomalies on Extreme Wet and Dry Years in ISMR.
22.	TROPMET2024-395	Alankita Nag	Contrasting features of the marine heat waves over the Arabian Sea and Bay of Bengal
23.	TROPMET2024-403	Josephine Veronica Chaganti	Identifying Ocean Surface Microplastic Pathways in the Global Ocean
24.	TROPMET2024-161	Saran Rajendran	The role of Ocean Memory in the Interannual Variability of Indian Summer Monsoon
25.	TROPMET2024-107	Limonlisa Sahu	Sub-surface Salinity Variation and its Impact on the Indian Ocean Circulation
26.	TROPMET2024-288	Pritee Priyanka Mohapatra	Influence of Low-Pressure Systems on Extreme Rainfall Events over the Indian Region
27.	TROPMET2024-050	Amit Kumar Sharma	Interannual Variation of summer Heat Content of the Tropical Indian Ocean during 1872-2010
28.	TROPMET2024-396	Avijnan Das	Unconventional Genesis of Tropical Cyclone Asna in August 2024: Analysis of Formation, Intensification and Dissipation
29.	TROPMET2024-196	Pritam Anurag	Investigating The Influence of Atmospheric Rivers on Precipitation Patterns in India: Seasonal and Intraseasonal Perspective
30.	TROPMET2024-149	Sidha Sankalpa Moharana	On The Arabian Sea Warming and Its Impact on Tropical Cyclones



TROPMET 2024

Recent Advances and Challenges in Understanding and Predicting High-impact Weather and Climate Extremes over Indian Subcontinent in the Climate Change Context



12 December 2024 (Thursday)

Time: 13:30 -15:30 Hrs

Venue: R M Hall

SN	Abstract ID	Author	Title of the paper
1.	TROPMET2024-050	Amit Kumar Sharma	Interannual Variation of summer Heat Content of the Tropical Indian Ocean during 1872-2010
2.	TROPMET2024-396	Avijnan Das	Unconventional Genesis of Tropical Cyclone Asna in August 2024: Analysis of Formation, Intensification and Dissipation
3.	TROPMET2024-196	Pritam Anurag	Investigating The Influence of Atmospheric Rivers on Precipitation Patterns in India: Seasonal and Intraseasonal Perspective
4.	TROPMET2024-149	Sidha Sankalpa Moharana	On The Arabian Sea Warming and Its Impact on Tropical Cyclones
5.	TROPMET2024-301	Arkaprava Ray	Impact of Ocean Stratification and Warming on the Intensification of Pre-Monsoon Tropical Cyclones over Northern Bay of Bengal
6.	TROPMET2024-402	Salini Nayak	Identification of the Southwest Monsoon Current Variability and the Associated High-Salinity Core
7.	TROPMET2024-376	Abhishek Kushwaha	Unraveling the impacts of warming on the primary production in the Bay of Bengal: Insights of CMIP6 models
8.	TROPMET2024-096	Debojit Sarkar	Synoptic forcing and thermo-dynamical processes during cloudburst event over Sauni Binsar, Uttarakhand, India
9.	TROPMET2024-195	Rupam Singh	Decadal Analysis of Vegetation Dynamics and Climate Variable Interactions in the Indo-Gangetic Plain
10.	TROPMET2024-242	Shreya Bhowmick	Investigation of Heatwaves through Soil moisture and Vegetation Dynamics
11.	TROPMET2024-367	Krishna Kakad	Integrating Climatic Factors for Enhanced Land Use/Land Cover Prediction Using Machine Learning: A Case Study for Gandhinagar.
12.	TROPMET2024-374	Rohit Kumar Singh	Climatology and Spatio-Temporal Trend of Aerosol and its Potential Sources over Indo-Gangetic Plain
13.	TROPMET2024-387	Yalla Vyshnavi Sai	Impact on coastal inundation and storm surges due to land use/land cover (LULC) Changes on East Coast of India: Climate change perspective
14.	TROPMET2024-133	Aanchal Goel	Simulation of extreme rainfall event using numerical weather prediction WRF model
15.	TROPMET2024-123	Devvrat Sahai	Impact of Assimilating High Resolution Satellite Derived Soil Moisture Data on the Soil Moisture Obtained from Land Surface Models
16.	TROPMET2024-213	Chitikireddy Anand	Land Use Land Cover Prediction for Bhubaneswar City



TROPMET 2024

Recent Advances and Challenges in Understanding and Predicting High-impact Weather and Climate Extremes over Indian Subcontinent in the Climate Change Context

17.	TROPMET2024-354	Pranav U	Anthropogenic Source Dependency between CO ₂ And CH ₄ : A Study Using Multi-Source Data
18.	TROPMET2024-369	Amal K K	Impact of Urbanization on simulation of Sea Breeze over Chennai, India: A Numerical Study of Thermal and Surface Drag Effects
19.	TROPMET2024-039	Akshay S	Vegetation Photosynthesis and Respiration Model Based Assessment of Biospheric CO ₂ Flux from Major Ecosystems in India
20.	TROPMET2024-234	Shantanu Sanjay Dhawase	Applications of Agri-Photovoltaics in Agrometeorology
21.	TROPMET2024-P006	Vishwanath Boopathi	Two Decades of Primary Productivity of the Bay of Bengal through MODIS
22.	TROPMET2024-169	Anand Shankar	Enhancing Ensemble Extreme Precipitation Predictions through Generative AI
23.	TROPMET2024-393	Shubhendu Karmakar	Estimation of Glacier Ice Velocity Using Sentinel-1a Synthetic Aperture Radar (Sar) Data over Eastern Parts of Sikkim (Mangan District)
24.	TROPMET2024-P011	Prabhath H Kurup	Simulation of Cloudburst Event Over Kerala

VALEDICTORY SESSION (15:30– 17:30 Hrs)

High Tea: 17:30-18:00 Hrs