

National Space Science Symposium-2026, Umiam, Meghalaya

PS-1 (Space-Based Meteorology, Oceanography, Geosphere–Biosphere Interactions, and Climate Change)

Details and type of presentation for the accepted abstracts

SN	Abstract ID	Registration ID	Abstract Title	Authors	Type of Presentation
1	NSSS2026ABS016	NSSS2026REG0216	Performance Analysis of a Solar-Electric High-Altitude UAV for Climate Monitoring in Polar Regions	Adwait Agnihotri, Shikhar Gore	Poster
2	NSSS2026ABS018	NSSS2026REG0120	Polarizability Affecting Nucleation of Water Vapour Condensation in Presence of External Electric Field	Mukesh Chandra	Oral
3	NSSS2026ABS026	NSSS2026REG0244	Understanding the Interactions between Biosphere and Atmosphere in India by Synthesising the Carbon, Water, and Energy Fluxes across its Dominant Ecosystems	Pramit Kumar Deb Burman	Oral
4	NSSS2026ABS027	NSSS2026REG0380	Biomass and carbon sequestration modelling through optical and SAR data for dry deciduous forests of UK district, Karnataka India	A. G. Koppad, Rachana, Gowri B Gowda	Poster
5	NSSS2026ABS028	NSSS2026REG0381	Impact of DWR Data Assimilation in the NCUM-R 4D-VAR system on Lightning and Rainfall forecast	Joydeb Saha, Devajyoti Dutta, S. Indira Rani, J.P. George	Oral
6	NSSS2026ABS034	NSSS2026REG0172	Satellite-Based AI Natural Disaster Impact Mapping For Coastal Regions.	Amlan Upadhyaya	Oral
7	NSSS2026ABS040	NSSS2026REG0115	Miyawaki Plantation for Sustainable Urban Greening- A Case Study on Soil Physicochemical Improvement at IESD BHU Varanasi.	Isha Singh	Poster
8	NSSS2026ABS051	NSSS2026REG0575	Climate and agricultural nexus in semi-arid regions of Nashik district Maharashtra	Rajaram A Jadhav	Poster
9	NSSS2026ABS052	NSSS2026REG0585	Inferring cyclone landfall from outgoing longwave radiation	Deveerappa Jagadheesha	Poster

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10	NSSS2026ABS055	NSSS2026REG0601	The study of lightning activity in association with aerosols over Indian region	Swapnil S Potdar, Rupraj Biswasharma, Devendraa Siingh	Poster
11	NSSS2026ABS057	NSSS2026REG0616	AI-Powered CubeSat Constellation for Microplastic Detection and Classification Using Sentinel-1 SAR and Sentinel-2 Multispectral Imagery	Shambhavi Shukla, Sarthak Sharma, Sanskar Verma and Shanthosh K.V.	Oral
12	NSSS2026ABS069	NSSS2026REG0702	A Comparative Analysis of Environmental Factors and Vortex Structure in Developing and Non-Developing Tropical Disturbances over the Bay of Bengal	Arpita Munsi, Amit P. Kesarkar	Poster
13	NSSS2026ABS070	NSSS2026REG0704	Analysis of tropical cyclone evolution related to its impact on aviation at two coastal airports	Arpita Munsi, Ganesh K. Das	Oral
14	NSSS2026ABS078	NSSS2026REG0265	Roll Clouds and Closed Convective Cloud Cells - Lesser-known monsoon clouds	Swathi .B and V. Sathiyamoorthy	Oral
15	NSSS2026ABS079	NSSS2026REG0586	Evaluation of suitable microphysics schemes for lightning prediction over complex terrain of Western Himalaya region, Uttarakhand India	Sanjeev Kumar,, Alok Sagar Gautam, Swapnil S. Potdar,, Rupraj Biswasharma,, N. Umakanth, Devendraa Siingh,	Poster
16	NSSS2026ABS089	NSSS2026REG0816	AI use technology based on satellite used in flood mechanism	Dr. Rakesh Kumar Mishra	Poster

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SN	Abstract ID	Registration ID	Abstract Title	Authors	Type of Presentation
17	NSSS2026ABS100	NSSS2026REG0228	Advancing Methane Retrievals over Wetlands and Water Bodies with Atmospheric Methane Observations and Emission Modeling: Insights from the MERLIN Mission and CHARM-F Airborne Campaign	Arunima Das, Christoph Kiemle, Sabrina Zechlau, Sebastian Wolff, Martin Wirth, Anna-Leah Nickl, Alina Fiehn, Andreas Fix	Poster
18	NSSS2026ABS102	NSSS2026REG0813	Cloud Base Distribution over a Tropical Urban Region, Hyderabad, India	H. Z. Vanlalrochana, T. Narayana Rao, V. Jayachandran, S. Satheeshkumar, C. Sudheesh	Poster
19	NSSS2026ABS107	NSSS2026REG0895	Lightning Polarity and Thermodynamic Fingerprints of Indian Hailstorms: A Multi-Satellite Comparison with Non-Hail Thunderstorms	Akshay Patil, Aditi Yadav, Bhushan Vibhute, T Dharmaraj, Sunil Pawar	Poster
20	NSSS2026ABS108	NSSS2026REG0890	Sources and photochemical processes of reactive trace gases over the Indian subcontinent and northern Indian Ocean: Aspects of chemistry-climate interactions	L. K. Sahu, Mansi Gupta, Nidhi Tripathi, Dibyani Singh, Ravi Yadav, T.G. Malik	Oral
21	NSSS2026ABS118	NSSS2026REG0878	Design, Development, and Launching techniques for Small Scientific Balloons in Atmospheric Science Research	B S Mallikarjuna, Stalin Peter Godi, Nagendra Neerudu, T V Rao, Devendra Ojha	Poster
22	NSSS2026ABS125	NSSS2026REG0867	Intercomparison of Atmospheric Turbulence obtained by X-band DWR and MST Radar	Ramyakrishna Enugonda, T. Narayana Rao	Poster
23	NSSS2026ABS148	NSSS2026REG0997	Assessment of Diurnally Evolving Atmospheric Boundary Layer over the Central India under the Influence	Adarsh Jain, Damu Bala Subrahamanyam	Oral

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SN	Abstract ID	Registration ID	Abstract Title	Authors	Type of Presentation
			of Extreme Heat Waves		
24	NSSS2026ABS153	NSSS2026REG1043	Aerosol's effects on lightning and cloud microphysics across North-East and North-West India	Deen Mani Lal, S. P. Jnanesh and M. K. Srivastava	Poster
25	NSSS2026ABS157	NSSS2026REG1068	Chemistry of southwest monsoon rainfall at a high-altitude site in Western Ghats, India	Vinayak Waghamare , Leena.P.P , M.Y. Aslam, Sachin S. Patil, Lalit R. Chaudhari, Subrata Mukherjee, V. Anilkumar, G. Pandithurai, B. Padmakumari	Poster
26	NSSS2026ABS161	NSSS2026REG1077	Impact of Lightning Activity on Atmospheric Boundary Layer Parameters and their consequences over Pune, India and its surrounding region	Aditi Yadav, Akshay Patil, Bhushan Vibhute, T Dharmaraj, Sunil Pawar	Poster
27	NSSS2026ABS166	NSSS2026REG1069	Millennial Scale Exhumation Rates of Western Himalayas: Constraints from Luminescence Thermochronology	Malika Singhal, Saptarishi Dey, Naveen Chauhan	Poster
28	NSSS2026ABS168	NSSS2026REG0548	Rapid and Sluggish Progress of Southwest Monsoon: Impacts on the Spatial Pattern of Rainfall	Kandula V Subrahmanyam, V. Nandana, K. Kishore Kumar, R. K. Nayak, M.V. Ramana, G. Srinivasa Rao and Prakash Chauhan	Oral
29	NSSS2026ABS181	NSSS2026REG0995	Two Decades from Space: Tracking Phytoplankton Variability in the Antarctic Marginal Ice Zone	Prince Prakash, Rahul Mohan, and Alvarinho J. Luis	Oral

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30	NSSS2026ABS185	NSSS2026REG0557	Variation in surface latent heat flux and surface temperature during high magnitude earthquakes	Ananna Bardhan and Dinesh Kumar Sharma	Poster
31	NSSS2026ABS186	NSSS2026REG1130	Tropospheric Ozone Sensitivity over India from OMI Satellite Observations	Vijay Kumar Sagar, A.L. Kanchana, Dr. R.K. Nayak, Dr. Suvarna Fadnavis	Poster
32	NSSS2026ABS195	NSSS2026REG1158	Morphotectonic Assessment of the Kuppam River Basin in the Western Ghats of Kerala Using Geospatial Data Science	C P Lijitha, P.Pratheesh	Poster
33	NSSS2026ABS197	NSSS2026REG1162	Satellite Meteorology of the Cryosphere: Linking Arctic Sea Ice Decline to Precipitation and Snow Variability over the Hindu Kush-Himalaya	Siddhant Arya, Amita Prabhu and B. Padma Kumari	Poster
34	NSSS2026ABS200	NSSS2026REG0828	LES Simulated Turbulence Characteristics During Winter Fog Events: A WiFEX case study over IGI Airport, New Delhi.	Priyangshu Choudhury, Sandeep Wagh, Sachin Ghude	Poster
35	NSSS2026ABS201	NSSS2026REG1168	Influence of Aerosol Mixing State on Hygroscopic Growth and Fog Formation in New Delhi: Insights from HTDMA Measurements	Chaitrali Shinde, Sandeep Wagh, Akash Vispute, Sachin Ghude	Oral
36	NSSS2026ABS202	NSSS2026REG1106	CCN Activity and Aerosols Chemical Composition During Fog and Haze Episodes in New Delhi, India.	Mrunal Naik, Chaitrali Shinde, Akash Vispute, Bhagyashri Katre, Sandeep Wagh, Sachin Ghude	Poster

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SN	Abstract ID	Registration ID	Abstract Title	Authors	Type of Presentation
37	NSSS2026ABS205	NSSS2026REG1176	Satellite Based Insights into Cloud-Aerosol Coupling and Global SST Feedbacks Driving Monsoon Drying over the Gangetic Plains	Amita Prabhu, Siddhant Arya, Sachin Deshpande and B. Padma Kumari	Oral
38	NSSS2026ABS206	NSSS2026REG1178	A Comprehensive Assessment of PM _{2.5} in the Central Himalayan Region: Observations, trends and Modeling, using a unique CUP sensor network	. Vikas Rawat; . Narendra Singh; . S. K. Dhaka; . Yutaka Matsumi; . Sachiko Hayashida	Poster
39	NSSS2026ABS208	NSSS2026REG1185	Long term comparative study of Aerosol Radiative Forcing between Indus, Ganges and Brahmaputra river basins	Manoj K. Srivastava, Bharat Ji Mehrotra, Amarendra Singh, Atul K. Srivastava	Oral
40	NSSS2026ABS209	NSSS2026REG1114	Nowcasting Cloud Motion and Detecting Extreme Weather Anomalies using Enhanced U-Net, Diffusion Models, and Self Supervised Retraining	Heli Shah, Krish Vaghasia, Nisarg Vashi, Hensi Patel, Dr. Sudeep Tanwar	Oral
41	NSSS2026ABS217	NSSS2026REG1136	Impact of two distinct types of crop residue burning emissions on ambient black carbon over the Northwestern IGP	Vaneet Kumar, Atinderpal Singh and Karamjit Singh	Poster
42	NSSS2026ABS218	NSSS2026REG1186	Integrated Remote Sensing of MCSs in the Monsoon Core Zone: 3D Structure and Evolution via Satellite, Polarimetric Radar, and Lightning Data	Sachin M. Deshpande, Manisha Tupsoundare, Rupraj Biswasharma, Abhijeet Kumar, Subrata K. Das, Amita Prabhu, Harshad Hanmante, and Ashruba Ghorapade	Poster

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SN	Abstract ID	Registration ID	Abstract Title	Authors	Type of Presentation
43	NSSS2026ABS223	NSSS2026REG0577	Unravelling the spectral variability of equivalent temperature over Chennai	Athira Sasikumar, Veena Suresh Babu	Poster
44	NSSS2026ABS224	NSSS2026REG1131	An Investigation on the Geophysical Drivers and Biophysical Responses to the 2022 Flood over the Morigaon-Nagaon Districts of Assam in North-East India	Aniket Chakraborty, Binita Pathak, Pradip Kumar Bhuyan	Poster
45	NSSS2026ABS233	NSSS2026REG1149	Understanding the Chemical Sensitivity of Ozone and Particulate Nitrate using Multi-Satellite Observations and Ground observation over Delhi	Vikrant Tomar, Manish Naja, Prajwal Rawat, Kang Sun, Upendra Kumar	Oral
46	NSSS2026ABS242	NSSS2026REG1247	Effect of CO and CH ₄ on O ₃ near surface air temperature and Surface skin temperature, and their relation with relative humidity in Alwar, Rajasthan	Pranjal Joshi and Vimal Saraswat	Oral
47	NSSS2026ABS256	NSSS2026REG1024	Characterizing Rain Effects on Surface Wind Retrievals from the Newly Launched EOS-06 OSCAT-3 Scatterometer over the Indian Summer Monsoon Region	Vaibhav Tyagi and Saurabh Das	Oral
48	NSSS2026ABS261	NSSS2026REG1039	Spatiotemporal analysis of Land Use Land Cover changes over Dibrugarh, Sibsagar, and Charaideo Districts of Upper Assam	Himashree Das, Aniket Chakraborty, Binita Pathak, Pradip Kumer Bhuyan	Poster

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49	NSSS2026ABS269	NSSS2026REG1280	Temporal and Seasonal Variations of Fine-mode Absorbing Aerosols over Gorakhpur in the Central Indo-Gangetic Plain during 2021-2025	Ayush Singh, Prayagraj Singh, Bakhtawar Hameed Abdullah, Aditya Vaishya, Prabhunath Prasad and Shantanu Rastogi	Poster
50	NSSS2026ABS281	NSSS2026REG1179	Measurements of Size-Resolved Activation Properties of Aerosol Particles and Three Possible Pathways of Activation in Urban Fog.	Sandeep Wagh, Akash Vispute and Sachin Ghude	Poster
51	NSSS2026ABS298	NSSS2026REG1331	Validation and performance analysis of OCM-3 sensor for chlorophyll-a detection in coastal and offshore waters of southwest Bay of Bengal	Alexkirubakaran A	Oral
52	NSSS2026ABS305	NSSS2026REG1313	Evaluating Climatic Variability and Land Atmosphere Feedbacks in the Western Himalayan Ecosystem	Rahul Jaiswal, Manish Kumar Pandey, and Sunita Verma,	Poster
53	NSSS2026ABS308	NSSS2026REG1334	Investigating the role of water vapor and ozone in the formation of tropopause inversion layer	K. P. Aathira,, M. Pramitha	Oral
54	NSSS2026ABS312	NSSS2026REG1349	Investigation of Cloud Properties over Gorakhpur using ground-based and satellite measurements	Minakshi Singh, Prayagraj Singh , Prabhunath Prasad, Som Kumar Sharma , and Shantanu Rastogi	Poster
55	NSSS2026ABS313	NSSS2026REG1355	A study on Aerosol volatility under varying environmental conditions over an high altitude Site in Western Ghat India, HACPL, Mahabaleshwar.	M.Y. Aslam, Subrata Mukherjee, Vinayak Waghmare, Sachin S. Patil, Lalit R. Chaudhari G. Pandithurai, B. Padmakumari	Poster

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56	NSSS2026ABS314	NSSS2026REG1348	Understanding Lightning Activity over Southern India: Evidence from the Indian Lightning Location Network	Abhinav Kumar Shukla and C. K. Unnikrishnan	Poster
57	NSSS2026ABS319	NSSS2026REG1346	Long-Term Assessment of Meteorological Influences on PM10 Concentrations over the Central Himalayan Region and Indo-Gangetic Plain of India	Preeti Tiwari, Priyanka Srivastava, Bharat Ji Mehrotra, Manoj Kumar Srivastava, Manish Naja, Manoj Kumar, Sudhir Kumar Sharma,	Oral
58	NSSS2026ABS323	NSSS2026REG1316	Evolving Patterns of Lightning Activity in Indian Lightning Hotspots	CK Unnikrishnan K Akshaya KU Amrutha	Oral
59	NSSS2026ABS326	NSSS2026REG1328	Digital soil mapping of Soil Organic Carbon stocks in West Bengal: A Climate Change Perspective	Progya Mukherjee and R. K. Mall	Poster
60	NSSS2026ABS329	NSSS2026REG1305	Comparative Assessment of BiLSTM and GRU for High-Resolution Downscaling of Tmin Across India	Manisha Chaturvedi and R.K. Mall	Poster
61	NSSS2026ABS333	NSSS2026REG1322	Assessing the Impact of Climate Variability on Rainfed Sorghum Productivity in the Western Vidarbha Central Plateau Agroclimatic Zone	Mrinalini Srivastava, R.K Mall	Poster
62	NSSS2026ABS336	NSSS2026REG1372	Rising Trend of Catastrophic Positive Cloud-to-Ground Lightning in Maharashtra: Climate Change and Its Relation to Long-Range Dust Transport	Abhijeet Gangane, S.D. Pawar, Hamza Varikoden, V. Gopalakrishnan and D.M. Lal	Poster
63	NSSS2026ABS338	NSSS2026REG0964	Estimation of Surface Particulate Matter Concentration over Indian region using Statistical Model	Nilanjana Sengupta, Yogesh Kant, D. Mitra, Anuj Kumar	Oral

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64	NSSS2026ABS340	NSSS2026REG1374	Flood monitoring using RISAT 1A MRS SAR-EOS 4 data: A cases study on 2025 western Punjab flood, India	Pradip Sarkar and R.K Mall	Oral
65	NSSS2026ABS343	NSSS2026REG0764	Aerosol physical optical and radiative properties over central India from Atmospheric Research Testbed and satellite observations	Shravani Banerjee, Udaya Kumar Sahoo, B. Padmakumari	Poster
66	NSSS2026ABS352	NSSS2026REG1290	Role of Local and Advected Aerosols on Cloud Microphysics in the Western Ghats, India	Arindam Das, P P Leena, V. Anilkumar, Subrata Mukherjee, G. Pandithurai, Sachin Patil, B. Padma Kumari	Poster
67	NSSS2026ABS359	NSSS2026REG1234	Rainfall characteristics over the Lakshadweep Islands using satellite and disdrometer observations	Ambuj K Jha, Kaustav Chakravarty, Harikrishna Devisetty, B Padma Kumari	Poster
68	NSSS2026ABS375	NSSS2026REG1306	Urban Heat Mitigation through Green Infrastructure: A Coupling Coordination Analysis of Bengaluru Urban Growth	Rupam Singh, R.K. Mall	Poster
69	NSSS2026ABS376	NSSS2026REG1142	Impact Assessment of the Haryana Pond and Wastewater Management Authority HPWWMA A Geosphere Biosphere Social Perspective on Groundwater Management	Kanika Chowdhary and Vivek Kumar	Oral
70	NSSS2026ABS389	NSSS2026REG1036	Declining trends of Atmospheric Boundary Layer Height over India: Relation and Implications on Surface temperature, fluxes and aerosols	Ghouse Basha, M. Venkat Ratnam, and V. Yesubabu	Poster

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71	NSSS2026ABS390	NSSS2026REG1468	Balloon borne measurement campaigns of Asian Tropopause Aerosol Layer, BATAL, Insights from a decade of observations	M. Venkat Ratnam and Jean Paul Vernier	Oral
72	NSSS2026ABS391	NSSS2026REG0992	Shortwave radiative impacts of the Asian tropopause aerosol layer from in situ balloon measurements and regional satellite analyses	B.L. Madhavan, V.N. Santhosh, M. Venkat Ratnam, S.T. Akhil Raj, J.-P. Vernier	Oral
73	NSSS2026ABS392	NSSS2026REG0564	Aerosol-cloud interaction observed in the mixed-phase cloud using ground-based, in-situ, and satellite observations	Trishna Bhattacharyya, Renju Nandan, A. Sai Krishnaveni and M. Venkat Ratnam	Oral
74	NSSS2026ABS393	NSSS2026REG1469	Disentangling Meteorological and Emission Drivers of PM _{2.5} Variability in Kolkata Using Explainable Machine Learning	Bijoy Krishna Gayen, B. L. Madhavan, M. Venkat Ratnam	Poster
75	NSSS2026ABS394	NSSS2026REG0978	Diurnal Variations of Cirrus Cloud Properties observed Using Micro Pulse Lidar Observations over a tropical latitude	P. Riya Mol, M. Venkat Ratnam, S. Vijaya Bhaskara Rao and C. Sudheesh	Poster
76	NSSS2026ABS395	NSSS2026REG1417	Retrieval of High-Precision Columnar Greenhouse Gases from the Ground-based Remote Sensing FTIR Spectrometer data over Hyderabad, India	Alla SaiKrishna, Mahesh Pathakoti.	Oral
77	NSSS2026ABS399	NSSS2026REG1473	Comparative Rainwater Chemistry during Southwest and Northeast Monsoons at a Tropical Rural Site	Sanjana Mukherjee, Chaithanya D. Jain, and M. Venkat Ratnam	Poster

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78	NSSS2026ABS400	NSSS2026REG1484	Convective Transport of Lower-Atmospheric Pollutants to the UTLS: Insights into ATAL Formation from Rainwater and Aerosol Chemistry	Chaithanya D. Jain, Shaik Darga Saheb, Shamitaksha Talukdar, B. L. Madhavan, Ghouse Basha and M. Venkat Ratnam	Poster
79	NSSS2026ABS401	NSSS2026REG1291	First Insights from NISAR L- and S-Band Dual-Frequency SAR Data in Characterising Ocean Surface Features	Swapna M, Rajesh S, Nagamani PV and Srinivasa Rao G.	Oral
80	NSSS2026ABS405	NSSS2026REG0994	A machine learning framework for identification of factors influencing cloud condensation nuclei	V. Ravi Kiran, T. Jayasri, and M.Venkata Ratnam	Poster
81	NSSS2026ABS412	NSSS2026REG0457	Quantification of aerosol-induced radiative perturbations and their influence on non-radiative fluxes over Indo-Gangetic Plain	Anas Lbnu Basheer, Vijayakumar S. Nair, B. Nithin, Kirankumar N.V.P., Mukunda M. Gogoi, Sobhan Kumar Kompalli, Karamjit Singh, S. Suresh Babu	Oral
82	NSSS2026ABS415	NSSS2026REG1510	Trend and Variability Analysis of Rainfall over Burhi Dihing River Basin Using Reconstructed Time Series	Jinee Gogoi, Sushanta Kundu, Bhaskar J. Das, Shyam S. Kundu	Poster
83	NSSS2026ABS421	NSSS2026REG1504	Tibetan Plateau Amplification and Its Contrasting Impacts on Indian Summer Monsoon Rainfall: Insights from Satellite Observations of 2022 and 2023	Shreyasi Upadhyay, Jasti S. Chowdary, Ramesh Kumar Yadav	Oral

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84	NSSS2026ABS422	NSSS2026REG0365	Global Aerosol Classification Using Particle Linear Depolarization Ratio Data from AERONET	Shantikumar Singh Ningombam, Swagata Mukhopadhyay, Amoghavarsha AV, BL Madhavan, Eck Thomas F, Umesh Chandra Dumka, Pradeep Khatri, Pawan Gupta	Oral
85	NSSS2026ABS424	NSSS2026REG1544	Geospatial-Based Web Framework for Real-Time Monitoring of Environmental Air Pollution and AQI over India	Sathyaseelan M, Kusuma Munesh Ramji, Mahesh P	Oral
86	NSSS2026ABS425	NSSS2026REG1513	Detection of Methane Emissions over India Using EnMAP-A Hyperspectral Imaging Sensor	Sathyaseelan M, Mahesh P, Kusuma Munesh Ramji	Poster
87	NSSS2026ABS429	NSSS2026REG1546	Landslide Early Warning System for North East India using Radar Rainfall and Soil Water	Sumon Kumar Mondal, Swastika Chakraborty	Poster
88	NSSS2026ABS431	NSSS2026REG0994	Balloon-borne measurement of aerosol particle size: B-MAPS	V. Ravi Kiran and M. Venkat Ratnam	Oral
89	NSSS2026ABS433	NSSS2026REG1539	From Space to Resilience: AI-Driven Flood Hazard Mapping Using SAR-Optical Fusion and Optimization Techniques	Rahul Das, Bhaskar Jyoti Das	Oral

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90	NSSS2026ABS443	NSSS2026REG1570	Atmospheric boundary layer and elevated aerosol layer characteristics over a valley and a mountainous location of North-East India	Partha Jyoti Sahu, Binita Pathak, Arup Borgohain, Som Kumar Sharma, Barsha Dutta, Aniket Chakraborty, Rohit Gautam, Uday Bhattacharjee, Aniket Patel, Arban S. Youroi, Arundhati Kundu, Shyam S. Kundu, Pradip Kumar Bhuyan, Kalyan Bhuyan, S.P. Aggarwal	Poster
91	NSSS2026ABS448	NSSS2026REG1608	Deciphering the variability of Urban Heat Island effect over a tropical metro region of Hyderabad using dense ground network of observations	Satheesh Kumar Shekatam, and Narayana Rao Thota	Oral
92	NSSS2026ABS451	NSSS2026REG1541	Geospatial assessment of space-based AWiFS derived NDVI pattern with respect to ground-based IMD rainfall data over Assam, India	Sudip Kumar Kundu, Sanjay O'Neill Shaw, Sunit Das, Charu Singh, K N Mohan, Kripan Ghosh, Sivananda Damodara Pai, Mrutunjay Mohapatra	Poster
93	NSSS2026ABS452	NSSS2026REG1166	Investigating the influence of Vertically Integrated Moisture Flux Divergence and Evapotranspiration on Precipitation Variability in North-East India	Anindita Borah, Binita Pathak, Partha Jyoti Sahu, Pradip Kumar Bhuyan	Poster
94	NSSS2026ABS454	NSSS2026REG1000	Estimating Background PM _{2.5} Concentrations Using a Wavelet-Based Convolution Framework	Vikas and Jyoti Bhate	Poster

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95	NSSS2026ABS455	NSSS2026REG1543	Characterizing Recent Decade of Arctic Sea Ice Dynamics: Application of Validated SARAL-AltiKa Data to Uncover Dominant Modes of Variability and their Climatic Precursors	Chungkham Thombson , Rajkumar Kamaljit Singh , Sandip Rashmikanth Oza , Purvee Nisarg Joshi , Sushil Kumar Singh , and Ishmohan Bahuguna	Poster
96	NSSS2026ABS456	NSSS2026REG0749	Long-Term Columnar and Near-Surface Air Pollution over Hyderabad, India: A 17-Year Multi-Platform Assessment of Urban Urban-Regional Air Quality	Jayachandran V and T. Narayana Rao	Poster
97	NSSS2026ABS457	NSSS2026REG0749	From Sea Surface Anomalies to Mountain Floods: Dynamics of the July 2024 Mesoscale Convective Complex Over the Western Ghats	Subin Jose and . V. Jayachandran	Oral
98	NSSS2026ABS459	NSSS2026REG1599	Reliable satellite link via data relay transponder payload for meteorological data from automatic weather stations	Mynam Harinath, Rahul G Waghmare, Deepankar Roy, Dr. Senthil Kumar V	Oral
99	NSSS2026ABS460	NSSS2026REG1618	Tracking the changes in tropical forests using time-series Synthetic Aperture Radar Data	Unmesh Khati, Anam Sabir, Bhavya Jaiman	Oral
100	NSSS2026ABS462	NSSS2026REG1643	A Tale of Four Cities: Remote Sensing Analysis of the Dual Impact of Urbanization on Temperature and Vegetation in Central India	Dr. Mrunmayee Lokhande, Dr. Pritam Wanjari	Poster
101	NSSS2026ABS468	NSSS2026REG1656	Spatiotemporal Analysis of the Biophysical Parameters on Primary Productivity in the North Indian Ocean	Anju Kumari, Mohammed Suhail, Abhinav Gummalla, P V Nagamani, Jorphin Joseph, Haritha M	Poster

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102	NSSS2026ABS473	NSSS2026REG1651	Changing Northeast India Summer Monsoon Onset Dynamics in a Warming World	Simanta Das, Rahul Mahanta, Bijit Kumar Banerjee and B.N. Goswami	Oral
103	NSSS2026ABS480	NSSS2026REG1038	Long term estimation of the net ecosystem exchange over India using model simulations	S Akshay, S Sijikumar	Poster
104	NSSS2026ABS486	NSSS2026REG1490	Retrieval of Sub-Hourly Aerosol Optical Depth from INSAT-3DR Geostationary Satellite using a Fusion-Enhanced Machine Learning Framework	Chakradhar Rao Tandule, Mukunda M. Gogoi, Shiba Shankar Gouda and S. Suresh Babu	Oral
105	NSSS2026ABS490	NSSS2026REG0209	Global Aerosol Classification Machine Learning vs Non machine learning approaches	Swagata Mukhopadhyay, Shantikumar Singh Ningombam, Pawan Gupta, Erik Larson	Poster
106	NSSS2026ABS491	NSSS2026REG0359	The Indian Lightning Detection Network (ILDN): A Citizen Science Framework for Lightning Nowcasting and Hazard Mitigation	Anirban Guha and Trisanu Banik	Oral
107	NSSS2026ABS502	NSSS2026REG1654	Impact of INSAT-3DR sounder data assimilation in predicting thunderstorms over North-east India	Arundhati Kundu, Shyam S. Kundu, Rekha B. Gogoi, Abhay Srivastava, Aniket Chakravorty, Rahul Mahanta	Poster
108	NSSS2026ABS503	NSSS2026REG1694	Utilisation of Machine learning to predict the air temperature and Relative Humidity at a glacier site (Yala) of Eastern Himalaya	Dr Nilamoni Barman and Dr Anadi Gayen	Poster

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109	NSSS2026ABS505	NSSS2026REG0593	Two decades of aerosol optical depth change over India's million-plus cities: disentangling emissions growth from meteorology (2005-2024)	Sukanya Bhattacharya and Anirban Guha	Poster
110	NSSS2026ABS506	NSSS2026REG1083	Understanding the cloud microphysical processes during extreme rainfall over southern peninsular India in the NE-monsoon using satellite observations	Jeni N Victor, Umakanth, N, Rupraj Biswasharma, Murali Krishna, and Padmakumari	Poster
111	NSSS2026ABS509	NSSS2026REG1488	Assessing Precipitation Extremes in the Arctic: Observations, Reanalysis, and PGW Experiments over Ny-Alesund	R. Athulya and Nuncio Murukesh	Poster
112	NSSS2026ABS511	NSSS2026REG0593	Atmospheric Boundary Layer Dynamics over Agartala, a North-Eastern Indian Location: Insights from Ground-based Lidar Observations and Reanalysis Datasets	Sukanya Bhattacharya, Dharmendra Kumar Kamat, Marylina Das, Dipanjana De, Supratim Chatterjee, Jayasree Dhali, Aniket Patel, Anirban Guha, Som Kumar Sharma	Poster
113	NSSS2026ABS519	NSSS2026REG0587	Characteristics and Dynamics of Atmospheric Clouds over a Northeastern Indian Region Agartala: Insights from Ground-based Lidar, Satellite, and Reanalysis Datasets	Dipanjana De, Aniket Patel, Sukanya Bhattacharya, Supratim Chatterjee, Marylina Das, Jayasree Dhali, Dharmendra Kumar Kamat, Som Kumar Sharma, Anirban Guha	Poster

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114	NSSS2026ABS528	NSSS2026REG1704	Impact of Orography on Extreme Rainfall Event in Thoothukudi, Tamil Nadu, December 2023	K.L. Arunkumar, V. Yesubabu, C.V. Srinivas, Naresh Krishna Vissa, J S Ivan	Poster
115	NSSS2026ABS530	NSSS2026REG1652	Development of a UAV based Pollution Sensing System	Lakshya Rasaprolu, Dr. Saurabh Das	Poster
116	NSSS2026ABS534	NSSS2026REG1614	Key Atmospheric Drivers of Monsoon Lightning: Insights from Machine Learning and Deep Learning Models	Mili Ghosh Nee Lala, Sumedha Surbhi Singh, Ankita Ayushi, Swagata Payra, Alok Taori	Poster
117	NSSS2026ABS535	NSSS2026REG1718	Unraveling Snow Cover Dynamics and Responses to Climate Change in the Indian Himalayan Region	Khushboo, Bhavana Thakur, Sumit Rai	Poster
118	NSSS2026ABS537	NSSS2026REG1706	Impact of Monoterpenes Ozonolysis at an Indian Urban Site	Dibyani Singh, Mansi Gupta, T.K. Sunil Kumar, Lokesh Kumar Sahu	Poster
119	NSSS2026ABS538	NSSS2026REG1078	Molecular-Level Understanding of PAH Transformation and their effect on Biosphere: Structural and Toxicity Analysis of Pyrene and Benzo-e-pyrene	Dhyani Vadgama, Satyam Shinde, Rohit Srivastava	Oral
120	NSSS2026ABS539	NSSS2026REG1699	Observational studies of Atmospheric Electric Field Effects on the Drop Size Distribution and Rainfall Rate of thunderstorms	Lapynsuk Thabah, Abhay Srivastava, Shyam Sundar Kundu, Arup Borgohain, Sunil Dnyandeo Pawar	Poster
121	NSSS2026ABS543	NSSS2026REG1724	Adjusted Optical Design for Sunphotometer	Malaidevan P, Jacob Sebastian, Harish Gadhavi	Oral

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122	NSSS2026ABS546	NSSS2026REG1730	Clouds characterization over an Extreme easternmost valley location of India: First-time results	Binita Pathak,, Som Kumar Sharma, K Baishya, Barsha Dutta, Partha Jyoti Sahu, Uday Bhattacharjee, Kalyan Bhuyan,	Oral
123	NSSS2026ABS550	NSSS2026REG1667	Assessment of Atmospheric Aerosols : Concentrations and Emission Sources in a Rapidly Urbanizing Environment	Pragya Parmita Konwar, Arban Shongdor Youroi, Manoj Saikia, Arup Borgohain, Simanta Hazarika	Poster
124	NSSS2026ABS554	NSSS2026REG1267	Future Climate Influence on PM2.5 Levels in India using WRF-Chem under CMIP6 Pathway SSP3-7.0	Vaishnavi, Vikas Singh, Jyoti Bhate, Amit P Kesrkar	Oral
125	NSSS2026ABS560	NSSS2026REG1737	Retrieval of Aerosol Optical Depth from Ocean Color Monitor-3: Refinement using SCAT-3 ocean surface winds	S. S. Prijith, A. K. Athul and S. Suresh Babu	Oral
126	NSSS2026ABS563	NSSS2026REG1678	Assessing Seasonal and Annual Impacts of Aerosols on Radiative Forcing in Two Distinct Urban Climates of India	Kankana Ghosh, Divya Prakash, Swagata Payra	Poster
127	NSSS2026ABS564	NSSS2026REG1663	Monsoonal Cloud Microphysics over the Eastern Himalayan Region: Insights from EarthCARE Cloud Profiling Radar	Arban Shongdor Youroi Arup Borgohain Rohit Gautam Arundhati Kundu Shyam S. Kundu	Oral
128	NSSS2026ABS566	NSSS2026REG1498	Synergistic Fusion of Aerosol Optical Depth from Satellite and Ground based Observations using Machine Learning Enhanced Geo-statistics	Shiba Shankar Gouda, Mukunda M. Gogoi, S Suresh Babu	Poster

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129	NSSS2026ABS574	NSSS2026REG1680	Influence of Atmospheric aerosols on ET at locations having different soil moisture	J. Murmu R. Latha M. Kumar	Poster
130	NSSS2026ABS576	NSSS2026REG1747	Detection of Smoke Aerosols Using HARP2/PACE Polarization Measurements	C. B. Lima, A. K. Athul, S. S. Prijith and S. Suresh Babu	Poster
131	NSSS2026ABS578	NSSS2026REG0716	Interpretable Machine Learning for Rainfall Forecasting: A ClimateChange Perspective in Meghalaya, India	Abinaya Devi N, Dr. Rajendra Prasath	Poster
132	NSSS2026ABS586	NSSS2026REG1757	Vertical and horizontal characteristics of precipitation during active and break spells over South Asia using multiple space based radar	Shailendra Kumar	Oral
133	NSSS2026ABS588	NSSS2026REG1760	Implications of Sea Breeze Circulation on the Atmospheric Aerosol Environment in the Houston Coastal Region	Tamanna Subba, et al.	Poster
134	NSSS2026ABS595	NSSS2026REG0587	Urban Heat Island Influence on Lightning Activity Across Indian Cities during Pre-Monsoon and Monsoon (2022–2025)	Dipanjana De, Trisanu Banik, Anirban Guha	Poster
135	NSSS2026ABS596	NSSS2026REG1770	Long-term climate characteristics of Sea Breeze phenomena over Sriharikota using Met-tower observations and ERA-5 reanalysis dataset	K K Amal, V Yesubabu, Rajasekhar M, Govindan Kutty	Poster

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136	NSSS2026ABS597	NSSS2026REG1762	Microphysical features of Rainfall over Dibrugarh using Laser-Optical Disdrometer	Uday Bhattacharjee, Binita Pathak, Som Kumar Sharma, Partha Jyoti Sahu, Barsha Dutta, Pradip Kumar Bhuyan	Poster
137	NSSS2026ABS598	NSSS2026REG1697	Leveraging gridded datasets to assess atmospheric boundary layer height over North-East Indian region	Rohit Gautam,, Arup Borgohain, Arban Shongdor Youroi, Shyam Sundar Kundu, Shiv Prasad Aggarwal	Oral
138	NSSS2026ABS599	NSSS2026REG0951	Land surface feedback and rainfall bias in the dynamical models with different physical parametrizations	Pratibha Gautam, , Rajib Chattopadhyay, Susmitha Joseph, A.K. Sahai	Poster
139	NSSS2026ABS601	NSSS2026REG0989	Recent Intensification of the Asian Summer Monsoon Anticyclone and Its Coupling to Rainfall Shifts over South and East Asia	V. N. Santhosh, B. L. Madhavan, M. Venkat Ratnam	Poster
140	NSSS2026ABS602	NSSS2026REG1768	Deep Ocean Insights into the Indian Ocean Geoid Low	Lachit S. Ningthoujam, Sanjay S. Negi Amit Kumar, Rahul Yadav, P Sion Kumari and John P Kurian	Poster
141	NSSS2026ABS606	NSSS2026REG1746	Cloud and Boundary Layer Dynamics in Response to a Dust Storm during May 2025 over Western India	Aniket, Som Kumar Sharma, Dharmendra Kumar Kamat, Arun, Ruchita Shah	Poster
142	NSSS2026ABS607	NSSS2026REG1763	Seasonal Trends, Health Risks, and Ozone Formation Potential of Benzene, Toluene, and Xylene in Agra (2020–2024)	Richa Bhardwaj, Muskan Agarwal, Simran Bamola, Neha, Anita Lakhani	Poster

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143	NSSS2026ABS609	NSSS2026REG1505	Hygroscopicity of Dicarboxylic Acids and Sugars as Drivers of Cloud Condensation Nuclei Activity: Insights from Climate Change	Muskan Agarwal, Simran Bamola, Richa Bhardwaj, Neha, Anita Lakhani	Poster
144	NSSS2026ABS610	NSSS2026REG1607	Application of Multi-Satellite Data Observations for Identifying Meteorological Conditions in Transitioning Black Carbon Aerosols	Karthik V, Amit P Kesarkar and Jyoti Bhate	Poster
145	NSSS2026ABS612	NSSS2026REG1713	Integrated satellite observations and a modelling approach for the identification of cloudburst events	Debojit Sarkar, Amit P Kesarkar, Jyoti Bhate, and Karthik V.	Oral
146	NSSS2026ABS613	NSSS2026REG1606	Seasonal Variability in Ultrafine PM1 Pollution the northwestern Indian Himalayan Region: Ground monitoring and Machine Learning	Anil Singh Salal, Archana Bawari, Sheetal Chaudhary, Namarta Sharma, Rajesh Joshi, Jagdish Chandra Kuniyal	Poster
147	NSSS2026ABS614	NSSS2026REG0303	A Hybrid Deep-Learning Framework for Regional Air Quality Modeling over the Indian Subcontinent	S. Harithasree, , Imran Girach, Aditya Vaishya, Yash Dahima, Kiran Sharma, Shantanu Rastogi, Lokesh K. Sahu, N. Ojha	Oral
148	NSSS2026ABS617	NSSS2026REG1779	Urbanization, Air Pollution, and Local Climate Shifts: Evidence from a Five-Year Study in Agra	Neha, Muskan Agarwal, Simran Bamola, Richa Bhardwaj, Anita Lakhani	Poster
149	NSSS2026ABS619	NSSS2026REG1664	Physicochemical Properties of Atmospheric Aerosols in a Semi-Arid Region of Southern India.	Shaik Fasiha Begum, Annareddy Ramanjula Reddy, Thatapi Bhavana, Chukkaluri Chandrasekhar Reddy and Yadiki Nazeer Ahammed	Poster

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150	NSSS2026ABS620	NSSS2026REG1784	Cloud Characteristics over the Indian Oceanic Regions using Machine Learning Frameworks: A Comprehensive Study of Data-Driven Approaches	Niyati Mevadaa, Rohit Srivastava and Som Kumar Sharma	Poster
151	NSSS2026ABS621	NSSS2026REG1669	Local and Non-Local Sources of Black Carbon and the Role of Meteorology in a Tropical Semi-Arid Region of India	Annareddy Ramanjula Reddy, Shaik Fasiha Begum, Thatapi Bhavana, Chukkaluri Chandrasekhar Reddy and Yadiki Nazeer Ahammed	Poster
152	NSSS2026ABS622	NSSS2026REG1771	Column CO ₂ a priori estimation for upcoming EnSAC on-board G20 mission	Imran A. Girach, Bipasha Paul Shukla, Mehul R Pandya	Oral
153	NSSS2026ABS626	NSSS2026REG1035	Basin-scale reorganization of climate-phytoplankton linkages in the Indian Ocean: ENSO emergence and IOD retreat	Haritha M, Abhinav Gummalla, Dr. P V Nagamani, Anju Kumari,	Poster
154	NSSS2026ABS627	NSSS2026REG0993	Impact of Atmospheric Parameters on PM _{2.5} and Black Carbon Variability in Delhi	Anjali Rana, Preeti Tiwari, Sudhir Kumar Sharma, Sachchidanand Singh	Poster
155	NSSS2026ABS628	NSSS2026REG1647	Physicochemical Properties of Atmospheric Aerosols in a Semi-Arid Region of Southern India	Shaik Fasiha Begum, Annareddy Ramanjula Reddy, Thatapi Bhavana, Chukkaluri Chandrasekhar Reddy and Yadiki Nazeer Ahammed	Poster

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156	NSSS2026ABS637	NSSS2026REG1795	Tracking and Statistics of Mesoscale Convective Cells during the Indian Summer Monsoon	Alok Sharma and Saurabh Das	Poster
157	NSSS2026ABS638	NSSS2026REG1746	Study of the Atmospheric Clouds and Boundary Layer Dynamics over the Indian Western Ghats using Lidar, Satellites and Reanalysis Data	Aniket, Sachin S. Gunthe, Som Kumar Sharma, Ramesh Chand K.A., M. Devaprasad, Dharmendra Kumar Kamat, Arun, Ruchita Shah	Poster
158	NSSS2026ABS640	NSSS2026REG1795	Tracking and Statistics of Mesoscale Convective Cells during Indian Summer Monsoon	Alok Sharma and Saurabh Das	Poster
159	NSSS2026ABS646	NSSS2026REG1368	Integrated Multi-Model Framework for multi hazard and its impact on forest Carbon under Climate change Scenarios	Balaramdas K R, R.Mohanraj, R. Jegankumar	Poster
160	NSSS2026ABS648	NSSS2026REG1613	Characterization of cloud properties governing lightning activity over the Indian region	Goriparthi Pavani, Jyoti Narayan Bhate, Amit P Kesarkar	Poster
161	NSSS2026ABS651	NSSS2026REG0832	Hybrid Approach: Combining Physical and CNN-Based Cloud Fraction Parametrizations for Enhanced NWP Performance	Subhrajit Rath,Dr. Deepeshkumar Jain	Poster
162	NSSS2026ABS653	NSSS2026REG1802	Mesoscale Convective Systems and Associated Lightning Activity over Southern India	Amrutha K U, and C. K. Unnikrishnan	Poster

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163	NSSS2026ABS657	NSSS2026REG1798	Hybrid Radiative Transfer–Machine Learning Framework for Estimating Vegetation Biophysical Variables from TRISHNA Estimating Vegetation Biophysical Variables Using a Hybrid Radiative Transfer and Machine Learning Framework for the Upcoming TRISHNA Mission	Dr. Anand S Sahadevan, Mukesh Kumar, Dr. Nikhil Lele, Dr. Bimal Bhattacharya	Poster
164	NSSS2026ABS664	NSSS2026REG1811	Assessing the Influence of Land Use/Land Cover on Regional Meteorology over the Tropical Inland Urban City of Hyderabad	T.V Ramesh Reddy, T. Narayana Rao	Poster
165	NSSS2026ABS666	NSSS2026REG1665	Evaluation of aerosol scattering coefficient using an Integrating Nephelometer and a Cavity attenuated phase shift-based (CAPS) extinction monitor.	Bhavesh Kuli, T.A. Rajesh, Vishnu Kumar Dhaker, and S. Ramachandran	Poster
166	NSSS2026ABS674	NSSS2026REG1813	AI-Driven Assessment of Liquefaction Probability in Shillong City Using Remote Sensing Data Inputs	Sananda Mondal and Gopal Sharma	Oral
167	NSSS2026ABS676	NSSS2026REG1734	A Multi-Platform Approach to Investigate Orographic Clouds and Rainfall Variability over the Indian Himalayan Region	Ruchita Shah, Som Sharma, Aniket, Shantikumar Ningombam, Dharmendra Kamat, Dorje Angchuk, Shuchita Srivastava, Pooja Jindal, Arun, and Debashish Mitra	Oral

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168	NSSS2026ABS681	NSSS2026REG1707	Insights into the Dynamics of the Atmospheric Boundary Layer over Delhi during Severe Air Pollution and Fog Conditions	Dharmendra Kumar Kamat, Som Kumar Sharma, Kondapalli Niranjana Kumar, Ruchita Shah, Aniket, Arun	Poster
169	NSSS2026ABS682	NSSS2026REG1767	Application of aerial LiDAR mapping for characterizing meter-scale turbulence in the ABL.	Harish Varma, Anandakumar M. Ramiya, Jyoti Narayan Bhate, Goriparthi Pavani, Amit P. Kesarkar	Poster
170	NSSS2026ABS683	NSSS2026REG1765	A Study on Cloud Characteristics and Variability over Central India	Dizna James, Lekhraj Saini, Saurabh Das	Poster
171	NSSS2026ABS684	NSSS2026REG1240	New insights on aerosol radiative effects due to aerosol types	Kamran Ansari, S. Ramachandran	Poster
172	NSSS2026ABS685	NSSS2026REG1817	Investigation of Seasonal Dynamics of Clouds over the Northwestern Region of Himalayas using Ground-Based Lidar, Satellite, and Reanalysis	Ankit Tandon, Aniket, Shweta Yadav, Som Kumar Sharma, Dharmendra Kumar Kamat, Arun, Ruchita Shah	Oral
173	NSSS2026ABS686	NSSS2026REG1803	Characterizing Diurnal Rainfall Variability in Monsoon-Controlled Oceanic Domains: Bay of Bengal vs Arabian Sea	Patita Kalyana Sahoo, Utkarsh Verma , Samir Pokhrel	Poster
174	NSSS2026ABS687	NSSS2026REG1771	CO2 variability as observed from in situ measurements, model simulations and satellite observations	Imran A. Girach, K.N. Uma, Naveen Chandra, Prabir K. Patra, N.V.P. Kiran Kumar, Prabha R. Nair	Poster

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175	NSSS2026ABS688	NSSS2026REG1822	Spatio-Temporal Dynamics of Net Ecosystem Productivity over India during 2001-2024.	Lipsa Shibu, Rabindra Kumar Nayak, A.Bhuvana Chandra, MV Ramana, G.Srinivasa Rao	Poster
176	NSSS2026ABS689	NSSS2026REG0765	A pathway to improve CCN activity by synergic approach of observation, laboratory experiment, numerical simulations	Avishek Ray, G. Pandithurai, Bipin Kumar, Lois Thomas, Subrata Mukherjee, Rohit D. Patil, Anil Kumar	Poster
177	NSSS2026ABS690	NSSS2026REG1804	Potential Role of Eurasian Soil Moisture in Shaping Recent ISMR Trends: A Satellite and Reanalysis Perspective	Nishant Gautam, Siddhant Arya, Subodh Kumar Saha, Amita Prabhu, Yashas Shivamurthy	Poster
178	NSSS2026ABS696	NSSS2026REG1824	Impact of cloud datasets on Solar Radiation Estimates: An RTM-Based Case Study Over Shillong	Manasa M, R.K.Nayak, Bhuvana Chandra A, Ramana M.V., Srinivas Rao G.	Poster
179	NSSS2026ABS700	NSSS2026REG1790	Radiative Fluxes Over the Himalayan Region: Evaluating Parameterization Schemes and Exploring the Potential of the XGBoost Machine Learning Algorithm for Downward Longwave Radiation	Mayank Kumar Chauhan; Narendra Singh; Jaydeep Singh; Akanksha Rajput; Hemwati Nandan; K. Rajeev; and N. V. P. Kiran Kumar	Poster
180	NSSS2026ABS706	NSSS2026REG1788	Lidar-Based Characterization of atmospheric properties variability during a Dust Event Over the complex terrain of central Himalayan region	Shishir Kumar Singh, Narendra Singh, Ashish Kumar, Subhajit Debnath, Mayank Kumar Chauhan,, Vikas Rawat,	Poster

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182	NSSS2026ABS719	NSSS2026REG1827	MODIS Satellite Data for Aerosols Measurements	Dr A N Satyanarayana Dr S P V Subba Rao Dr V Kumara Swamy	Poster
183	NSSS2026ABS721	NSSS2026REG0064	INSAR Data Analysis and Usage Software (INDUS) - A Containerized GUI based Software Application for Interferometric Synthetic Aperture Radar (InSAR) Analysis	Wasim Akram, Mayur D Chopda, Krishna Murari Agarwal, Jalpa Modi, V. Manavala Ramanujam, Aastha Patel	Poster
184	NSSS2026ABS722	NSSS2026REG1836	High-resolution UAV survey and thermal baseline of the Luna crater, Kutch, India.	Nitesh Vinodbhai Pandey and Vijay Sindha	Poster
185	NSSS2026ABS725	NSSS2026REG1844	Satellite-Based Short-Lead Severe-Weather Nowcasting and Monitoring over India	Abhishek Chhari, Dr Neerja Sharma, Dr Randhir Singh	Poster
186	NSSS2026ABS728	NSSS2026REG1842	Assessing the Methodological Differences in the Estimation of Cropland NPP across Indian States	Umayal S, R K Nayak, Bhuvana Chandra A, Ramana M V, Srinivas Rao G	Poster
187	NSSS2026ABS730	NSSS2026REG0949	3D line-by-line radiative transfer over Polyhedron multi-scale meshes	Amit P Kesarkar and Jyoti N Bhate	Oral
188	NSSS2026ABS742	NSSS2026REG1042	Growth of UHI Intensity over Delhi using MODIS Observations from 2000–2025	Disha B. Kardani, Jalpesh A. Dave, Dhiraj B. Shah, Ashwin Gujrati, Himanshu J. Trivedi, Mehul R. Pandya	Oral

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PS-1 (Space-Based Meteorology, Oceanography, Geosphere–Biosphere Interactions, and Climate Change)

Details and type of presentation for the accepted abstracts

SN	Abstract ID	Registration ID	Abstract Title	Authors	Type of Presentation
189	NSSS2026ABS744	NSSS2026REG1828	Temporal Evolution of Atmospheric Trace Gases Driven by Boundary Layer Dynamics	Pranami Mahanta, Binita Pathak, Aniket Chakraborty, Partha Jyoti Sahu, Kalyan Bhuyan, Pradip Kumar Bhuyan	Poster
190	NSSS2026ABS746	NSSS2026REG1808	Winter Emissions vs. Summer Photochemistry: Seasonal Variability of Particle-Bound Oxy-PAHs in Agra, India	Simran Bamola, Muskan Agarwal, Richa Bhardwaj, Neha, Anita Lakhani	Poster
191	NSSS2026ABS748	NSSS2026REG1856	Understanding microphysical and dynamical drivers of extreme monsoon rainfall from Multi-Doppler radars observation	Subrata Kumar Das, Jagdish Jena, Sunil Khadgarai, Chiranjeevi Guttula, Aditya Jaiswal and Sachin Deshpande	Oral
192	NSSS2026ABS754	NSSS2026REG1820	Effect of Raindrop Size Distribution on Radar Rainfall Estimation in Rain Shadow Region: A Dual-Polarization Composite Framework for C-DWR	Nitig Singh, P. Murugavel, Thara Prabhakaran	Poster
193	NSSS2026ABS756	NSSS2026REG1638	Temperature Dependence and Sub-seasonal Modulation of Indian Monsoon Hourly Rainfall Extremes	Bijit Kumar Banerjee, Devabrat Sharma, Mohen Konwar, Simanta Das, Utpal Sarma, B. N. Goswami	Oral
194	NSSS2026ABS764	NSSS2026REG1868	Predictive Modelling of Arctic Microbial Communities for finding Biohydrogen producers Using Geosphere Indicators	Shwetakshi Mishra, Srikanth Mutnuri	Oral

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SN	Abstract ID	Registration ID	Abstract Title	Authors	Type of Presentation
195	NSSS2026ABS767	NSSS2026REG1750	Exploring Gross Primary Productivity variability and its environmental drivers in Meghalaya using Microwave Remote Sensing and Regional Reanalysis	Anusuya Gogoi	Poster
196	NSSS2026ABS768	NSSS2026REG1819	Snow-to-Rain Transition: Microphysical and Atmospheric Insights from the Arctic	Lekhraj Saini, Saurabh Das, Nuncio Murukesh	Poster
197	NSSS2026ABS769	NSSS2026REG1855	Long-Term Trends and Driving Mechanisms of Atmospheric Boundary Layer Height over Northeast India: A Reanalysis Data Assessment.	Manasi Gogoi, Arup Borgohain, Arundhati Kundu, Arban S. Youroi, Shyam S. Kundu, Pradip K. Bhuyan, Aniket Chakravorty, Binita Pathak, N.V.P. Kiran Kumar	Oral
198	NSSS2026ABS778	NSSS2026REG0350	LinearSVR Technique for Retrieving High Resolution 3D Wind Field from Single Doppler Weather Radar	Vaibhav Tyagi, Satish Nande, and Saurabh Das	Poster
199	NSSS2026ABS779	NSSS2026REG1912	Impact of lead time in the simulation of an MCS event during 15-17 September 2023	Parvathy Thankachy P and Saurabh Das	Oral
200	NSSS2026ABS783	NSSS2026REG1814	Sustainable Synthesis of Bio-Waste-Derived Graphene for Bioaerosol Mitigation in Ambient Air	Mohammad Ikbal, Dr. Ranjit Kumar	Poster
201	NSSS2026ABS793	NSSS2026REG1906	Estimates of Realizable Wind and Solar Power Potential over India	S.V.S. Sai Krishna, A. Bhuvana Chandra, K. Srinivasarao, Reema Matthew, R.K. Nayak, M.V. Ramana	Oral

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SN	Abstract ID	Registration ID	Abstract Title	Authors	Type of Presentation
202	NSSS2026ABS795	NSSS2026REG0808	Convective moistening of the upper troposphere as inferred from INSAT-3D imager observations	Mata Mahakur, G.S. Meena, and O. P. Srijeeth	Oral
203	NSSS2026ABS797	NSSS2026REG1067	Parameter estimation for vadose–zone and surface-layer interface solver over polyhedron meshes	Jyoti Bhate and Amit Kesarkar	Poster
204	NSSS2026ABS801	NSSS2026REG1889	Effects of Monsoonal Dynamics on Phytoplankton Photosynthetic Performance in the Sundarbans Using Fast Fluorometry	Abhinav G, Rajdeep Roy, Nagamani P.V.	Poster
205	NSSS2026ABS812	NSSS2026REG1956	Asymptotic Drag Laws in the Truly Neutral Atmospheric Boundary Layer	Abhishek Gupta, Harish Choudhary, Thara Prabhakarasn, Shivsai Ajit Dixit	Poster
206	NSSS2026ABS814	NSSS2026REG1848	Leveraging a Network of Low-Cost Sensors for Air Quality Monitoring and Modeling over India	Aditya Vaishya, S. Harithasree , Yash Dahima, Kiran Sharma, Shantanu Rastogi, Imran Girach, N. Ojha	Oral
207	NSSS2026ABS817	NSSS2026REG1923	Drivers of Urban Ozone Variability in Semi-Arid Western India	Tapaswini Sarangi, S. Harithasree, Riya Mahendra, Imran Girach, Narendra Ojha, Lokesh Sahu, Aditya Vaishya	Poster
208	NSSS2026ABS819	NSSS2026REG1826	Study of the vertical distribution and optical-physical properties of aerosols over Delhi during the pre-monsoon season using Raman LIDAR	Vasundhara Sharma, Bishan Kumar, Gokul Githesh, Devduth C, And Radhakrishnan S.R.	Oral

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SN	Abstract ID	Registration ID	Abstract Title	Authors	Type of Presentation
209	NSSS2026ABS824	NSSS2026REG1961	A Spatially Coherent Sparse Unmixing Approach for Next-Generation Trace Gas Retrieval from TROPOMI Level-1B Data	Touseef Ahmad, Bipasha Paul Shukla, Mehul R Pandya	Oral
210	NSSS2026ABS827	NSSS2026REG1962	Aerosol-Cloud-Radiative Interactions over the Central Himalayas: Insights from Decadal Trends	Priyanka Srivastava, Manish Naja, Hema Joshi, T.R. Seshadri, Mukunda M Gogoi, S. Suresh Babu, R Kumar	Oral
211	NSSS2026ABS830	NSSS2026REG1951	Inferring baseline atmospheric composition and regional influences over the Indian Subcontinent through model simulations	N. Ojha, I. Girach, S. Harithasree, M. Soni, T. Sarangi, A. Vaishya, L. K. Sahu	Oral
212	NSSS2026ABS831	NSSS2026REG0589	Impact of non-precipitating clouds on surface radiation components based on high-resolution in situ data over tropical station in southeast peninsular India	Bonu Koteswara Rao and Kadiri Saikranthi	Oral
213	NSSS2026ABS836	NSSS2026REG1684	Assessment of Diwali Associated Air Pollution Using APCB Monitoring Data from Various Locations of Guwahati in North East India	Chinmoy Patar, Siddhartha Neog, Jhuma Biswas, Bijit kumar Banerjee,, Barlin Das and Binita Pathak	Poster
214	NSSS2026ABS840	NSSS2026REG1867	Influence of Meteorological Parameters on Seasonal Ozone Variation over a low latitude region of Rajasthan	Vimal Saraswat and Pranjal Joshi	Poster

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SN	Abstract ID	Registration ID	Abstract Title	Authors	Type of Presentation
215	NSSS2026ABS851	NSSS2026REG1969	Indian Precipitation Experiment (IPEX): First Results from the 2025 Pilot Study on Contrasting Microphysical Features of Indian Monsoon Rainfall	Kaustav Chakravarty, Ambuj Jha, Harikrishna Devisetty, Rohit Patil, Gargi Rakshit and B.Padma Kumari	Oral
216	NSSS2026ABS853	NSSS2026REG1970	Fog Processing and its Impact on Aerosol Oxidative Potential in the Italian Po Valley: Insights from FAIRARI 2021/22	Anil Patel, M. Paglione, A. Neuberger, F. Mattsson, Y. Gramlich, D. Hadden, S. L. Haslett, M. Rinaldi, C. Mohr, I. Riipinen, P. Zieger, S. Decesari And S. S. Steimer	Poster
217	NSSS2026ABS854	NSSS2026REG0868	A Hybrid PINN-Transformer Model for Near Real-Time 3D Reconstruction of Ocean State from Satellite Imagery	Siddhartha Mahesha Pundit, Kinshuk Bhardwaj	Oral
218	NSSS2026ABS860	NSSS2026REG1619	Predicting atmospheric Black Carbon using Machine Learning Models at a Forested Himalayan Site	Archana Bawari, Rajesh Joshi, Jagdish Chandra Kuniyal, Sheetal Chaudhary, Mukunda M. Gogoi, Suresh Babu, Bimal Pande	Poster
219	NSSS2026ABS865	NSSS2026REG1494	Eddy Covariance Measurements of Surface Energy Budget Components Over a Coastal Station in Southwest Peninsular India	Sandhya K Nair	Poster
220	NSSS2026ABS866	NSSS2026REG2003	Estimates of Aerosol Emission Fluxes from Crop Residue Burning in North-west India Using Bayesian Inversion Model	H. S. Gadhavi, A. Arora, And Prabir Patra	Oral

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SN	Abstract ID	Registration ID	Abstract Title	Authors	Type of Presentation
221	NSSS2026ABS867	NSSS2026REG2080	Vertical Coupling and Momentum Transportation during Mesoscale Convective Systems over the Complex Terrain of Northeast India: Insights from ST Radar Observations	Samiran Patgiri, Bijit Banerjee,, BN Goswami, Mahen Konwar, Utpal Sarma,	Poster

- All lead authors have been communicated about the decision as per the table above. In case the acceptance letter is not received, please inform us.
- The authors of the abstracts that were rejected, has already been communicated about the decision.
- All poster presentations shall be given the opportunity for Lightning Oral Talk. The authors are requested to prepare accordingly
- **Discrepancies, if any may be brought to our notice for correction.**