PS2: Middle and Upper Atmosphere Probing Techniques **Date: 26-02-2024** **Time: 13:30-14:30**

Chairs: Dr. Amit Kumar Patra, NARL / Dr. Surendra Sunda, AAI

S.No.	Time	Abstract No.	Title	Presenting Author	Affiliation	Mode
1	13:30	PS2-100	CCD-based daytime airglow photometer (CDAP) – a portable photometer for obtaining daytime OI 630.0 nm airglow emissions from the ground	Duggirala Pallamraju	Physical Research Laboratory, Ahmedabad	Oral
2	13:40	PS2-113	High power lidars at NARL	K Raghunath	National Atmospheric Research Laboratory, Gandaki	Oral
3	13:50	PS2-080	Indian Network for Space Weather Impact Monitoring (InSWIM): An initiative to observe and model the low latitude ionosphere over the Indian longitudes	Raj Kumar Choudhary	Space Physics Laboratory, VSSC, Trivandrum	Oral
4	14:00	PS2-141	Characterizing Low-Latitude Ionosphere with GMRT	Abhirup Datta	IIT Indore	Oral
5	14:10	PS2-084	Equatorial E region plasma irregularity spectral characteristics and causative mechanisms: An analysis using rocket based in-situ measurements under varying geophysical conditions	Sruthi T V	Space Physics Laboratory, VSSC, Trivandrum	Oral
6	14:20	PS2-044	A new method for deriving true height electron density profile from Ionograms	Ankita Manjrekar	Indian Institute of Geomagnetism, Mumbai	Oral

PS2: Middle Atmospheric Dynamics **Date: 26-02-2024** **Time: 14:30-15:30**

Chairs: Dr. Lakshmi Narayanan, Krea University/ N. Phani Chandrasekhar, NGRI

S.No.	Time	Abstract No.	Title	Presenting Author	Affiliation	Mode
1	14:30	PS2-063	Impact of sudden stratospheric warming on low-latitude middle atmosphere	Amitava Guharay	Physical Research Laboratory, Ahmedabad	Oral
2	14:40	PS2-067	Disturbing the Middle Atmospheric Balance: The Enduring Impact of Hunga Tonga-Hunga Ha'apai volcanic eruption	Ghouse Basha	National Atmospheric Research Laboratory, Gadanki	Oral
3	14:50	PS2-003	Evidence of Two-Step Nonlinear Interactions in the Presence of Zonally Symmetric Waves during Major Sudden Stratospheric Warmings	Gourav Mitra	Physical Research Laboratory	Oral
4	15:00	PS2-078	Mean winds and tidal variability from troposphere to the thermosphere by combining ground based and space borne measurements: First results	A. Kalyan Teja	National Atmospheric Research Laboratory, Gadanki	Oral
5	15:10	PS2-039	Anomalous CO2 cooling in MLT region during a major warming event	Akash Kumar	Indian Institute of Technology, Roorkee	Oral
6	15:20	PS2-028	A Puzzling Quasi-Periodic Variability in the Tropical Middle Atmosphere	Koushik N	Space Physics Laboratory, VSSC, Trivandrum	Oral

PS2: Middle Atmospheric Dynamics **Date: 27-02-2024** **Time: 12:00-13:00**

Chairs Dr. Amitava Guharay, PRL/ Ghouse Basha, NARL

S.No.	Time	Abstract No.	Title	Presenting Author	Affiliation	Mode
1	12:00	PS2-131	Investigation of the importance of geomagnetic activity as a source for gravity waves in the mesosphere	V. Lakshmi Narayanan	Krea University, Sricity	Oral
2	12:10	PS2-108	Extraction of Atmospheric Gravity waves from COSMIC GPSRO profiles and Identification of their Source Using GROGRAT model	Arun Jo Mathew	IISER Trivandrum	Oral
3	12:20	PS2-050	Long-term variations in the mesospheric winds over Maitri (~70° S), Antarctica	Rashmi Rawat	National Centre for Polar and Ocean Research, Goa	Oral
4	12:30	PS2-016	Simultaneous observations of terdiurnal and quarter-diurnal tides in the mesosphere and lower thermosphere from two medium frequency (MF) radars at Tirunelveli (8.7^{o}N, 77.8^{o}E) and Kolhapur (16.7^{o}N, 74.2^{o}E)	S Sathishkumar	Indian Institute of Geomagnetism, Mumbai	Oral
5	12:40	PS2-023	Seasonal and Interannual Variability of Quasi-two day wave over a Low Latitude Station	Anagha Prasad	University of Hyderabad	Oral
6	12:50	PS2-134	Quasi Two-day Waves In Earth's Middle Atmosphere: Sources, Propagation Characteristics and Wave-Wave Interactions	Karanam Kishore Kumar	Space Physics Laboratory, VSSC, Trivandrum	oral

PS2: Optical Aeronomy **Date: 27-02-2024** **Time: 14:00-15:30**

Chairs: Prof. Duggirala Pallamraju, PRL/ Dr. MV Sunil Krishna, IIT, Roorkee

S.No.	Time	Abstract No.	Title	Presenting Author	Affiliation	Mode
1	14:00	PS2-111	Short Wave Infrared Imager (SIRI) observations of small-scale gravity waves from Mount Abu (24.6 ^{o}N, 72.8 ^{o}E)	Ravindra Pratap Singh	Physical Research laboratory, Ahmedabad	Oral
2	14:10	PS2-005	A case study on multiple self-interactions of MSTID bands: New insights	Dipjyoti Patgiri	Indian Institute of Technology, Roorkee	Oral
3	14:20	PS2-018	Quarter-diurnal Tides in the Variation of Thermospheric Winds and the Nightglow Emissions over Low-latitudes	Sovan Saha	Physical Research Laboratory, Ahmedabad	Oral
4	14:30	PS2-012	Investigations of different types of MSTIDs and the dynamics behind their generation over the western Himalayan region	Rahul rathi	Indian Institute of Technology, Roorkee	Oral
5	14:40	PS2-036	Estimation of the downward heat flux in sub-auroral ionosphere using O(1D) day-glow emissions	Kshitiz Upadhyay	Physical Research Laboratory, Ahmedabad	Oral
6	14:50	PS2-075	Mesospheric Dynamics: Insights from the PRL Airglow InfraRed Spectrograph (PAIRS) over Ahmedabad, India	Kiran	Physical Research Laboratory, Ahmedabad	Oral
7	15:00	PS2-054	A New Approach to Obtain Daytime Three-Dimensional Gravity Wave Characteristics	Sunil Kumar	Physical Research Laboratory, Ahmedabad	Oral
8	15:10	PS2-065	Ionospheric precursors observed before Assam and Nepal Earthquakes	Uma Pandey	National Centre for Geodesy, IIT, Kanpur	Oral
9	15:20	PS2-011	An analogous study on ionospheric parameter measured with ionosonde and predicted using IRIPLAS-2011 Model during earthquake at Mid and Low Latitude	Harleen Kaur	Barkatullah University, Bhopal	Oral

PS2: Atmosphere-Ionosphere Coupling **Date: 28-02-2024** **Time: 12:00-13:00**

Chairs: Dr. Sumanta Sarkhel, IITR/ Dr. Ravindra Pratap Singh, PRL

S.No.	Time	Abstract No.	Title	Presenting Author	Affiliation	Mode
1	12:00	PS2-071	Semi-diurnal tidal influence on the Ionosphere-Thermosphere-Mesosphere (ITM) system	S Sridharan	National Atmospheric Research Laboratory, Gadanki	Oral
2	12:10	PS2-058	Novel Technique for Investigating Ionospheric Response due to Tonga Volcanic Eruption on 15 January 2022	Surendra Sunda	Airports Authority of India	Oral
3	12:20	PS2-004	Lightning and Gravity Wave Signatures Produced by the Hunga-Tonga Volcanic Eruption on Global Geomagnetic Data	N. Phani Chandrasekhar	National Geophysical Research Institute	Oral
4	12:30	PS2-020	Long-term analysis of planetary waves and their role in the atmosphere-ionosphere coupling	Ashish P. Jadhav	Indian Institute of Geomagnetism, Mumbai	Oral
5	12:40	PS2-142	Tropical cyclone induced gravity wave propagation over tropical thermosphere	Soumen Datta	IIT Indore	Oral
6	12:50	PS2-025	Remarkable changes in thermospheric winds and F-region plasma drifts during the QBO disruption of 2019/20	Meenakshi S	National Atmospheric Research Laboratory, Gadanki	Oral

PS2: Atmosphere-Ionosphere Coupling/ Electrodynamics of Ionosphere **Date: 28-02-2024** **Time: 14:00-15:30**

Chairs: Dr. S. Sridharan, NARL/ Prof. Abhirup Datta, IITI

S.No.	Time	Abstract No.	Title	Presenting Author	Affiliation	Mode
1	14:00	PS2-140	Ionospheric disturbances observed over Japanese and Indian region Ionosphere after 15 January 2022 Tonga volcano eruptions	Arti Bhardwaj	National Physical Laboratory, New Delhi	Oral
PS2: Electrodynamics of Ionosphere						
2	14:10	PS2-130	Implications of Equatorial E-Region Electrodynamics in Ionospheric Density Restructuring	Tarun Kumar Pant	Space Physics Laboratory, VSSC, Trivandrum	Oral
3	14:20	PS2-062	Quiet time variability of TEC over Bharati, Antarctic station	Gopi Krishna Seemala	Indian Institute of Geomagnetism, Mumbai	Oral
4	14:30	PS2-007	Parametric dependence of topside ionospheric scale height in NeQuick2 model and its consequences on the estimation of TEC over the equatorial and low latitudes	Venkatesh Kavutarapu	Physical Research Laboratory, Ahmedabad	Oral
5	14:40	PS2-115	Development and validation of ionospheric vertical plasma drift model for the Indian and Indonesian longitudes	P PavanChaitanya	National Atmospheric Research laboratory, Gadanki	Oral
6	14:50	PS2-077	Equatorial Counter-electrojets: Long-term Trends and Lunar Influences	P.V. Muhammed Kutty	GHSS, Vazhakkad, Malappuram, Kerala	Oral
7	15:00	PS2-144	Ionospheric Reconstruction over the Indian Sub-continent using GNSS Signal Tomography	Bhattacharjee	Institute of Radio Physics and Electronics, University of Calcutta	Oral
8	15:10	PS2-123	Beyond Individual Models: A Unified Ensemble Approach to Ionospheric TEC Prediction	Mohit Jagne	Indian Institute of Technology, Indore	Oral
9	15:20	PS2-110	Analysis of Amplitude and Phase Scintillation of GNSS Signals	Mohammed Kursheed	Chaitanya Bharathi Institute of Technology, Hyderabad.	Oral

PS2: Electrodynamics of Ionosphere **Date: 29-02-2024** **Time: 12:00-13:00**

Chairs: Prof. Abhay Kumar Singh, BHU/ Dr. Ajeet Kumar Maurya, BBAU

S.No.	Time	Abstract No.	Title	Presenting Author	Affiliation	Mode
1	12:00	PS2-096	Prediction of equatorial plasma bubble - how far is it possible?	A K Patra	National Atmospheric Research Laboratory, Gadanki	Oral
2	12:10	PS2-092	Equatorial Plasma Bubbles (EPBs) as investigated using long term ionosonde observations over Tirunelveli and its comparison with satellite observations	S Sripathi	Equatorial Geophysical Research Laboratory, Tirunelveli	Oral
3	12:20	PS2-074	Simultaneous study of plasma blobs, MSTIDs and plasma irregularities over low-mid latitude geomagnetic transition region	Mohammad Rafeeq Rather	University of Kashmir	Oral
4	12:30	PS2-019	Probing the evolution of the Equatorial Plasma Bubbles (EPBs) using ionosonde observations and its implication for their prediction	Gayathri B	Indian Institute of Geomagnetism, Mumbai	Oral
5	12:40	PS2-061	Identifying the Onset Location of Equatorial Plasma Bubbles (EPBs) and its Relationship with the Background Ionospheric Conditions.	Ajith K K	National Atmospheric Research Laboratory, Gadanki	Oral
6	12:50	PS2-001	On the Laggy Nature of D-region Ionosphere during Solar Flares	Sayak Chakraborty	Indian Centre for Space Physics, Kolkata	Oral

PS2: Space Weather Impact **Date: 29-02-2024** **Time: 14:00-15:30**

Chairs: Dr. Rajkumar Choudhary, SPL/S. Sripathi, IIGM

S.No.	Time	Abstract No.	Title	Presenting Author	Affiliation	Mode
1	14:00	PS2-064	Space Weather Study of Ionosphere during Ascending Phase of 25th Solar Cycle over Low Latitudes	Abhay Kumar Singh	Banaras Hindu University, Varanasi	Oral
2	14:10	PS2-043	Extremely large and rapid variation of equatorial geomagnetic field due to impingement of an interplanetary magnetic cloud	S. Tulasiram	Indian Institute of Geomagnetism, Mumbai	Oral
3	14:20	PS2-037	An overview of radiative cooling by Nitric Oxide (NO) in MLT region and its response to multiple geomagnetic events	MV Sunil Krishna	Indian Institute of Technology, Roorkee	Oral
4	14:30	PS2-120	A Critical Evaluation of Thermospheric Mass Density Models During Extreme Space Weather Events	Saikat Majumder	Digantara Research and Technologies Pvt. Ltd.	Oral
5	14:40	PS2-066	Geomagnetic signatures at high latitudes during the solar flare	S.S. Rao	Udaipur Solar Observatory, Udaipur	Oral
6	14:50	PS2-112	On the lower ionospheric effect of recent geomagnetic storms of March and April 2023 inferred using very low frequency signals recorded at low latitude Indian station	Ajeet Kumar Maurya	Babasaheb Bhimrao Ambedkar University, Lucknow	Oral
7	15:00	PS2-009	Study of solar storm impact on VLF signals by using deep learning neural network	Shivali Verma	Oriental College of Technology, Bhopal	Oral
8	15:10	PS2-029	Equatorial electric field perturbations during pre-and post-midnight hours: insights on the effects of IMF By and substorm	Ankit Kumar	Physical Research Laboratory, Ahmedabad	Oral
9	15:20	PS2-129	Statistical analysis of HILDCAA events of two different solar cycles and their comparison	Ayushi Nema	Sardar Vallabhbhai National Institute of Technology, Surat	Oral

PS2: Magnetosphere/ Space Weather Impact **Date: 01-03-2024** **Time: 12:00-13:00**

Chairs: Dr. Tarun Kumar Pant, SPL/ Venkatesh Kavutarapu, PRL

S.No.	Time	Abstract No.	Title	Presenting Author	Affiliation	Mode
1	12:00	PS2-145	Potential applications of the new ST Radar facility at Kolkata	Ashiq Paul	University of Calcutta	Oral
2	12:10	PS2-114	Investigations on the sources, coupling, and energy distribution during the Supersubstorms of the Solar Cycle 24	Sritam Hajra	National Atmospheric Research Laboratory, Gadanki	Oral
3	12:20	PS2-099	Comparative Analysis of S4 index for L5 and S Band Signals for Indian NavIC Constellation	Perumalla Naveen Kumar	Osmania University, Hyderabad	Oral
PS2: Magnetosphere						
4	12:30	PS2-017	Impact of substorm associated dipolarization events on ion flux and associated wave activity observed from Van Allen Probes	Trunali Anil Shah	Indian Institute of Geomagnetism, Mumbai	Oral
5	12:40	PS2-024	Lower Hybrid Drift Instablity in Earth's Magnetosphere	Neetasha Govindram Arya	Indian Institute of Geomagnetism, Mumbai	Oral
6	12:50	PS2-034	Electron Plasma Wave Activity Around the Earth's Magnetopause Region	Shubhangi Lagad	Indian Institute of Geomagnetism, Mumbai	Oral