



NATIONAL CONFERENCE ON POLAR SCIENCES

16th-18th September, 2025 NCPOR, Goa

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NCPS 2025 Poster Session

Date: 17th September 2025 Time: 14:00–15:30 hrs

Venue: Polar Bhawan

1. Crustal Evolution and Reconstruction

Board No.	Session No.	Registration No.	Presenter Name	Abstract Title
P.B. 1	1a	NCPS2025/175	Mr. Akash Kumar Pandey	Lithological interpretation of sub ice terrain of Princess Elizabeth Land, East Antarctica through englacial rock fragments
P.B. 2	1a	NCPS2025/275	Ms. Rashmi Saini	Dronning Maud Land links to East African Orogeny and TOAST: A review from Tectometamorphic process, Geochronological and Geophysical perspective
P.B. 3	1a	NCPS2025/394	Mr. Ali Habib Alvi	Microscale Geochemical Variability in Seamount-Top Polymetallic Nodules from the West Sewel Ridge, Andaman Sea
P.B. 4	1b	NCPS2025/353	Ms. Nirmita Chaudhari	Blue Ice Moraines (BIMs) dating: a non-conventional proxy for understanding the ice sheet stability in Antarctica and sub-ice geology
P.B. 5	1c	NCPS2025/293	Mr. Avirajsinh Jadav	Rapid Ice Mass Loss from the Lambert Glacier-Amery Ice Shelf System through Meltwater Pulse 1A and the Early Holocene
P.B. 6	1d	NCPS2025/203	Mr. Sandro Chatterjee	Mid-Neoproterozoic extension in the Larsemann Hills, East Antarctica: Tectonic constraints on Indo-Antarctic correlation in Rodinia

1a: Geochronology, Geochemistry and Petrology

1b: Crustal Evolution: Insight from Recent Geophysical and Geological Investigations

1c: Geodesy and geodynamics

1d: Antarctic Geological Evolution and GeoEAS

2. Space Weather and Meteorology

Board No.	Session No.	Registration No.	Presenter Name	Abstract Title
P.B. 7	2a	NCPS2025/82	Mr. Sunil Kumar	Auroral Dynamics linked to Phases of Substorm and their Implication for Radio Wave Propagation



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P.B. 8	2a	NCPS2025/139	Mr. Shubham Jigneshbhai Mehta	Quantifying Polar Ionospheric TEC Response to Geomagnetic Storms: Exploring Seasonal and Latitudinal Dependencies
P.B. 9	2a	NCPS2025/151	Dr. Nilesh Chauhan	A Compact All-Sky Camera System for Auroral Monitoring: Development and Performance Assessment
P.B. 10	2a	NCPS2025/160	Dr. Sumanjit Chakraborty	On the magnetic field variations over the Antarctic and Arctic regions during two extreme geomagnetic storms of 2024
P.B. 11	2a	NCPS2025/173	Dr. Alok Kumar Ranjan	Latitudinal Distribution of Thermospheric Nitric Oxide (NO) Infrared Radiative Cooling During May and October 2024 Geomagnetic Storms
P.B. 12	2a	NCPS2025/212	Mr. Deepak S	EMIC wave -driven energetic particle precipitation during the recovery phase of a geomagnetic storm
P.B. 13	2a	NCPS2025/251	Mr. Govind Narayanan K	On the response of the mesopause region over an Indian Antarctic station Bharati to the geomagnetic storm of 23-24 March 2023
P.B. 14	2a	NCPS2025/261	Dr. Kshitiz Upadhyay	Storm-Time Dynamics of Subauroral Polarization Streams and Their Coupling Between High and Mid-Latitude Ionosphere During Solar Cycle 25
P.B. 15	2a	NCPS2025/269	Dr. Jayanta Kumar Behera	High-Speed Solar Wind Events and Their Impact on Cosmic Noise Absorption: Local Time Variation and Long-Term Climate Relevance at High Latitudes
P.B. 16	2a	NCPS2025/295	Mr. Siddhant	Greenland Sea Ice Decline and Its Linkages to Hindu Kush Monsoon Precipitation: Role of Arctic Oscillation, Indian Ocean SSTs, and Remote Teleconnections
P.B. 17	2a	NCPS2025/379	Mr. Gaurav Verma	Ionospheric TEC Variability and Phase Scintillation Response over Antarctica during Geomagnetic Storms of 2012.
P.B. 18	2a	NCPS2025/410	Prof. Sunil Sukumaran Poikayil	Surface deformation and Lamb Wave characteristics associated to 15 January 2022 Hunga Tonga Volcanic Eruption
P.B. 19	2b	NCPS2025/75	Ms. Chittella Sai Prabala Swetha	Radiosonde measurements and Polar WRF simulations of low-level wind jets in the Amundsen Sea Embayment, West Antarctica
P.B. 20	2b	NCPS2025/81	Mr. Vivek Kumar	Evaluation of ERA5 and MERRA2 Reanalysis Data Accuracy using Antarctic Upper-Air Observations at Bharati Station



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P.B. 21	2b	NCPS2025/107	Dr. Reetambhara Dutta	Signature of Sudden Stratospheric Warming in the Polar and its Antipodal UMLT region
P.B. 22	2b	NCPS2025/127	Mr. Lekhraj Saini	Arctic Precipitation: New insights and statistics from long term observations at Ny-Ålesund
P.B. 23	2b	NCPS2025/232	Ms. Shrayasi Samanta	Accelerating Greenland Ice Sheet Melt and its impact on South Asian Summer Monsoon
P.B. 24	2b	NCPS2025/302	Mr. Sumesh R K	Unveiling the Snowfall Microphysics in the Schirmacher Oasis, Antarctica: Initial Observations and Insights
P.B. 25	2b	NCPS2025/345	Mr. Nishant Gautam	North Eurasian Soil Moisture as a Potential Predictor of Indian Summer Monsoon Rainfall in a changing Climate
P.B. 26	2b	NCPS2025/346	Mr. Deepak	Influence of Arctic Oscillation on Wintertime Air Pollution Over Northern India: Exploring Teleconnections and Aerosol Dynamics
P.B. 27	2b	NCPS2025/383	Mr. Pankaj Soni	Surface and Upper-Air Meteorological Monitoring at Bharati Station, Antarctica: Observations from the 41st Indian Scientific Expedition
P.B. 28	2c	NCPS2025/36	Mr. Ritesh Kumar	Investigation of transport pathways of Black Carbon to the Arctic
P.B. 29	2c	NCPS2025/87	Ms. Anjali Sathyanath	What drove the high Total Column Ozone event in the Arctic in March 2024?
P.B. 30	2c	NCPS2025/104	Ms. Sandhya Singh	Atmospheric Trace Gases and Cloud Condensation Nuclei in Southern Ocean Marine Boundary Layer
P.B. 31	2c	NCPS2025/138	Dr. Munmun Chakarvorty	Source fingerprinting of atmospheric dust based on mineralogy, major and rare earth element geochemistry of leaf-dust sediments collected in parts of Indo-Gangetic plain: An exclusive domain for interfluvial sediment mixing
P.B. 32	2c	NCPS2025/376	Pranali Laxman Thakur	Rainfall related Gamma ray enhancement observed at Arctic
P.B. 33	2c	NCPS2025/381	Mr. Aman Shrivastava	Chemical characterization of Atmospheric Aerosols in the Gangotri Glacier Valley, NW Himalaya, India

2a: Solar-terrestrial Interaction Studies

2b: Weather and Climate

2c: Atmospheric Chemistry and Aerosols



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3. Southern Ocean in a Changing Climate

Board No.	Session No.	Registration No.	Presenter Name	Abstract Title
P.B. 34	3a	NCPS2025/88	Dr. Shailesh Pednekar	Intrusion of Warm, Modified Circumpolar Deep Water in Quilty Bay, East Antarctica during Austral Winter
P.B. 35	3a	NCPS2025/111	Ms. Shreya Mehta	How effective is Ocean Alkalinity Enhancement as a Carbon Dioxide Removal method in the Indian Sector of the Southern Ocean?
P.B. 36	3a	NCPS2025/164	Mr. Sidhesh Gajanan Borker	Dimethylsulfide dynamics in the Indian Sector of the Southern Ocean during the withdrawal phase of the austral summer 2025.
P.B. 37	3a	NCPS2025/165	Mr. Soumyadeep Dutta	Characteristics of an annually recurring open-ocean polynya in the Southern Ocean
P.B. 38	3a	NCPS2025/221	Mr. Jitender Singh	High-Resolution GHG observations over Southern Ocean: Results from cruise campaign SOE-12, Feb-March 2025
P.B. 39	3a	NCPS2025/222	Ms. Mansi Gupta	A comparative study on the Dimethylsulfide emission processes over the Northern and Southern Indian Ocean
P.B. 40	3a	NCPS2025/289	Ms. Cxynna S	Recurring eddies in the Southern Subtropical and Subantarctic frontal regions of the Indian sector of the Southern Ocean during austral summer
P.B. 41	3a	NCPS2025/304	Dr. Vishnu Narayanan Nampoothiri S	Decadal variability and reassessment of the hydrography and water mass characteristics in the Indian Sector of Southern Ocean
P.B. 42	3a	NCPS2025/312	Mr. Roni Johns Abraham	Role of mesoscale eddies in the warm water intrusion to the shelf regions of the Prydz Bay, Eastern Antarctica during Austral Summer
P.B. 43	3a	NCPS2025/397	Ms. Alvia Begum	Past Ocean-Atmosphere CO ₂ Exchange and SST Variability in the Indian Sector of the Southern Ocean
P.B. 44	3b	NCPS2025/29	Dr. Gurumoorthi	Rising Marine Heatwaves in the Southern Ocean: Regional Hotspots and the Impact of ENSO
P.B. 45	3b	NCPS2025/32	Dr. Pooja Prabhakar Ghadi	Sea Ice Dynamics and SST Variability Around the Kerguelen Plateau: Insights from Diatom Records

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P.B. 46	3b	NCPS2025/99	Mr. Sreerag	Inter-annual Variability in Environmental Forcing and Phytoplankton Community Structure in the Indian Sector of the Southern Ocean
P.B. 47	3b	NCPS2025/113	Mr. Sunil Kumar Padhi	Layers Beneath the Surface: Decoding Deep Chlorophyll Maxima in the Indian Sector of the Southern Ocean
P.B. 48	3b	NCPS2025/128	Mr. Ranjan Kumar Sahu	ADCP derived backscatter as a zooplankton proxy
P.B. 49	3b	NCPS2025/252	Mr. Boda Srinivas	Transported planktic foraminifera compromise high-latitude Mg/Ca thermometry
P.B. 50	3b	NCPS2025/310	Ms. Arya P Kumar	Role of Mesoscale Eddies in Modulating Nutrient Transport and Primary Productivity in the Indian Sector of the Southern Ocean (2010-2024)
P.B. 51	3b	NCPS2025/339	Ms. Nandini Raj	Particulate Organic Matter Dynamics of during a developing Under-Ice pelagic bloom in Prydz Bay, Antarctica
3a: Ocean-atmospheric Processes				
3b: Biogeochemical Processes				
3c: Ocean Modelling (Nil)				

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5. Cryospheric Processes and Dynamics				
Board No.	Session No.	Registration No.	Presenter Name	Abstract Title
P.B. 52	5a	NCPS2025/47	Ms. Seerat Magray	Remote sensing-based assessment of albedo changes from 2001-2022 on benchmark glaciers in western Himalaya, India using Google Earth Engine: implications on glacier mass loss
P.B. 53	5a	NCPS2025/110	Dr. Aditya Mishra	Estimating aerosol induced reduction in snow cover days over Indian Himalayas
P.B. 54	5a	NCPS2025/125	Dr. Chandan Sarangi	Enhanced Snow cover day implicates aerosol-snow association over Himalayas
P.B. 55	5a	NCPS2025/134	Ms. Shruti Singh	Recent Volcanic eruption signatures from the two coastal ice rises in East Antarctica
P.B. 56	5a	NCPS2025/140	Dr. Anirudha Mahagaonkar	Katabatic Winds and Antarctic Subsurface Thermal Dynamics: Insights from a Decade of Thermistor Measurements



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P.B. 57	5a	NCPS2025/146	Mr. Shivam Sundram	Tracing lead (Pb) sources and transport to East Antarctica using Pb concentration and Isotope Analysis of Surface Snow Cores
P.B. 58	5a	NCPS2025/150	Mr. Ishtiaq Ahmed	Reconstruction of glacier evolution and Post-Little Ice Age Glacier Recession in the Upper Chenab Basin, Lahaul region, NW Himalaya, India.
P.B. 59	5a	NCPS2025/185	Ms. Sapna Azad	Long-Term Mass Balance Assessment of the Lambert Glacier-Amery Ice Shelf Basin in East Antarctica (2009-2023) using Input Output Method.
P.B. 60	5a	NCPS2025/193	Mr. Kirti Kumar Mahanta	Surface Geophysical Techniques for Measuring Active Layer Thickness in Himalayan Permafrost Regions
P.B. 61	5a	NCPS2025/206	Mr. Durgesh Dwivedi	Glacier Ice Thickness Estimation Using Surface Velocity and Slope Parameters: A Case Study of the Shalang Glacier, Central Himalaya
P.B. 62	5a	NCPS2025/208	Dr. Om Kumar	Retreating Hindu Kush Himalaya glaciers, permafrost thawing and past and present carbon climate feedback
P.B. 63	5a	NCPS2025/237	Ms. Gopika Das K	Volumetric seasonal evolution of supraglacial lakes on the Greenland Ice Sheet.
P.B. 64	5a	NCPS2025/257	Mr. Ajay Godara	Monitoring Geodetic Mass Balance through UAV based Ultra High-Resolution Topography Data Near Schirmacher Oasis, East Antarctica
P.B. 65	5a	NCPS2025/287	Ms. Aleena Shajan	Grain Size Distribution Studies and Heavy Mineral Studies of Till Deposits from Princess Elizabeth land East Antarctica
P.B. 66	5a	NCPS2025/299	Mr. Prankur Sharma	Development of a model to estimate snow depth in the Indian Himalayas using polarimetric SAR data
P.B. 67	5a	NCPS2025/313	Ms. Rooma	Eastern Himalayan Retreat: Role of Energy Flux and Climate Variability, Past Trends to Future Outlook
P.B. 68	5a	NCPS2025/325	Ms. Arya A R	Long-term glacier mass balance estimation of Baspa glaciers, Himachal Pradesh
P.B. 69	5a	NCPS2025/328	Mr. Pawan Singh	Short-Term Monitoring of Glacier Activities Using Terrestrial Time-Lapse Imagery At Drang Drung Glacier, Western Himalaya



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P.B. 70	5a	NCPS2025/351	Dr. Gautami	Biogeochemical roles of glacier surface sediment during summer in coastal Antarctica
P.B. 71	5a	NCPS2025/380	Mr. Adarsh Padhi	Multi-decadal snow cover variability in the Gangotri and Triloki basins: a comparative glacio-hydrological perspective.
P.B. 72	5b	NCPS2025/48	Ms. Sakshi Mankotia	Long Term Temperature and Precipitation Trend and Glacier Mass Balance Variations in Suru Sub Basin, Western Himalayas
P.B. 73	5b	NCPS2025/109	Mr. Nandu Krishnan	Assessment of Avalanche Hazard from Hanging Glaciers in the Uttarakhand Himalaya: Regional Inventory, Dynamic Flow Modelling, and Exposure Analysis
P.B. 74	5b	NCPS2025/118	Mr. Mukut Singha Konwar	Seasonal variability of Surface Mass Balance of Larsemann Sub-basin using ground-based data and deducing the impact of meteorological parameters
P.B. 75	5b	NCPS2025/119	Mr. Deepak Yuvraj Gajbhiye	Climate-Driven Ice Dynamics and Mass Loss in Central Dronning Maud Land, East Antarctica: Implications for Future Sea-Level Rise
P.B. 76	5b	NCPS2025/122	Mr. Umar Faruque	Differing velocities of two neighbouring glaciers in Kumaun Himalaya: Impact of climatic and non-climatic drivers
P.B. 77	5b	NCPS2025/126	Mr. Ravindra Kumar	A Fully Automated Multi-Data Approach for Monitoring Glacial Lake Dynamics in High Mountain Asia
P.B. 78	5b	NCPS2025/149	Mr. Talawar Raghavendra Chandrappa	Assessment of Water Storage Variability in the Chandra Basin, Western Himalaya using Reanalysis Data
P.B. 79	5b	NCPS2025/220	Mr. Subhranil Mustafi	GLDeepNet+: A U-Net-Based Deep Learning Framework for Multi-source Glacial Lake Mapping
P.B. 80	5b	NCPS2025/224	Mr. Karthik C B	Surface elevation changes and melt patterns of debris-covered Batal Glacier in the Western Himalaya
P.B. 81	5b	NCPS2025/245	Mr. Debapriya Chakraborty	Multi-Modal monitoring and analysis of Flood Pathways for Glacial Lake Outburst
P.B. 82	5b	NCPS2025/259	Mr. Pradeep Srinivasalu	Impact of Glacier and Snow Changes on Runoff in the Parvati Basin Using a Distributed Hydrological Model



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P.B. 83	5b	NCPS2025/273	Mr. Abishek Thamizhmaran	SAR-Based Snow Cover Mapping over Gangotri Glacier Using Polarimetric Descriptors with Validation from Normalized Difference Snow Index (NDSI)
P.B. 84	5b	NCPS2025/311	Mr. Shivang Alok	Volume estimation of glaciers in Alaknanda sub-basin
P.B. 85	5b	NCPS2025/335	Mr. Shashi Kant Rai	Geomorphic processes in an unreported GLOF cascade and past avalanches in the Warwan basin, Jammu and Kashmir, Western Himalaya
P.B. 86	5b	NCPS2025/372	Dr. Sandeep Kumar Mondal	Investigating Zemu Glacier in the Sikkim Himalayas: A Satellite Remote Sensing Based Approach
P.B. 87	5b	NCPS2025/391	Ms. Simran Kashyap	Length Change of Selected Benchmark Glaciers in the Indian Himalaya
P.B. 88	5b	NCPS2025/440	Dr. Chander Prakash	Quantifying Glacier Dynamics in the Chandra Basin: Linking High-Resolution Surface Temperature and SAR-Derived Velocity Using Machine Learning
5a: Cryospheric Processes and Variability				
5b: Glacier dynamics, processes and glacio-hydrological responses				

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6. Sea Ice Variability and Modelling				
Board No.	Session No.	Registration No.	Presenter Name	Abstract Title
P.B. 89	6a	NCPS2025/41	Dr. Girija Kalyani Burada	Tracking the Cracks: Insights into Sea Ice Deformation
P.B. 90	6a	NCPS2025/55	Ms. Janki Kanzariya	The impact of atmospheric heat fluxes in the recent decade (2015-2022) Sea Surface Temperature warming during Austral Summer in the Antarctic regions.
P.B. 91	6a	NCPS2025/156	Mr. Ramakant Prasad	Understanding the Role of ENSO in Modulating Antarctic Sea Ice Extent
P.B. 92	6a	NCPS2025/163	Ms. Swathi M	The record low Antarctic sea ice extent of 2023: The role of ocean and atmospheric factors
P.B. 93	6a	NCPS2025/301	Dr. Tariq Ejaz	Increasing Weddell Sea Ice variability in recent decades triggered by high-frequency Pacific Oscillations



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P.B. 94	6a	NCPS2025/303	Mr. Aravind Manikandan M K	Interannual variability of Landfast-sea-ice in the Prydz Bay region of East Antarctica
P.B. 95	6a	NCPS2025/323	Ms. Kshitija Shrimant Suryawanshi	Sea ice extremes in the Ross Sea during winter 2023: Role of ocean-atmospheric forcing
P.B. 96	6a	NCPS2025/336	Mr. Sathish Kashaboina	Extreme temperature events and its impact on Antarctic heat waves
P.B. 97	6a	NCPS2025/350	Mr. Jeebanjyoti Swain	Formation of an open-ocean polynya in the eastern Antarctic region: Insights from hydrographic observations, remote sensing, and reanalysis data
P.B. 98	6a	NCPS2025/354	Mr. Suraj Ravindran	Subseasonal to Seasonal forecasting of Arctic sea ice using NCMRWF seamless modeling system.
P.B. 99	6a	NCPS2025/360	Dr. Ashwita Chouksey	Teleconnection between Antarctic Sea Ice and the Indian Summer Monsoon
P.B. 100	6a	NCPS2025/393	Ms. Akshaya Muraleedharan V	Sea-Ice Concentration in Barents-Kara sea region, Arctic during 2023-24 winter
P.B. 101	6b	NCPS2025/16	Mr. Pauly Baby John	Status of the PRAISE Ice tethered mooring system in Prydz bay, East Antarctica
P.B. 102	6b	NCPS2025/53	Ms. Juhi Yadav	Teleconnections between Arctic sea ice and Indian Summer Monsoon Rainfall: Observational and Model Perspectives
P.B. 103	6b	NCPS2025/66	Ms. Anushka Sunil	Role of Major Climate Modes on Arctic Sea Ice Dynamics
P.B. 104	6b	NCPS2025/91	Mr. Ajay B	Storm-induced changes in thermal and physical properties of sea ice: A Modelling and Observational Study
P.B. 105	6b	NCPS2025/209	Ms. Aswathi Das M. T.	An Ocean–Sea Ice–Ice Shelf Coupled Numerical Model for Studying Coastal Ocean Processes in Prydz Bay, East Antarctica
6a: Sea ice variability and dynamics through time and space				
6b: Sea-ice modelling and observations				