



NATIONAL CONFERENCE ON POLAR SCIENCES

16th-18th September, 2025 NCPOR, Goa

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NCPS 2025: YPSM Poster Session

Date: 16th September 2025

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 GeoEAIS

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
P.B. 8	2a	NCPS2025/139	Mr. Shubham Jigneshbhai Mehta	Quantifying Polar Ionospheric TEC Response to Geomagnetic Storms: Exploring Seasonal and Latitudinal Dependencies



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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	NCPS2025/173	Dr. Alok Kumar Ranjan	Latitudinal Distribution of Thermospheric Nitric Oxide (NO) Infrared Radiative Cooling During May and October 2024 Geomagnetic Storms
P.B. 11	2a	NCPS2025/212	Mr. Deepak S	EMIC wave -driven energetic particle precipitation during the recovery phase of a geomagnetic storm
P.B. 12	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. 13	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. 14	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. 15	2a	NCPS2025/379	Mr. Gaurav Verma	Ionospheric TEC Variability and Phase Scintillation Response over Antarctica during Geomagnetic Storms of 2012.
P.B. 16	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. 17	2b	NCPS2025/107	Dr. Reetambhara Dutta	Signature of Sudden Stratospheric Warming in the Polar and its Antipodal UMLT region
P.B. 18	2b	NCPS2025/127	Mr. Lekhraj Saini	Arctic Precipitation: New insights and statistics from long term observations at Ny-Ålesund
P.B. 19	2b	NCPS2025/232	Ms. Shrayasi Samanta	Accelerating Greenland Ice Sheet Melt and its impact on South Asian Summer Monsoon
P.B. 20	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. 21	2b	NCPS2025/346	Mr. Deepak	Influence of Arctic Oscillation on Wintertime Air Pollution Over Northern India: Exploring Teleconnections and Aerosol Dynamics
P.B. 22	2c	NCPS2025/36	Mr. Ritesh Kumar	Investigation of transport pathways of Black Carbon to the Arctic
P.B. 23	2c	NCPS2025/87	Ms. Anjali Sathyanath	What drove the high Total Column Ozone event in the Arctic in March 2024?
P.B. 24	2c	NCPS2025/104	Ms. Sandhya Singh	Atmospheric Trace Gases and Cloud Condensation Nuclei in Southern Ocean Marine Boundary Layer



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P.B. 25	2c	NCPS2025/376	Pranali Laxman Thakur	Rainfall related Gamma ray enhancement observed at Arctic
P.B. 26	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				

3. Southern Ocean in a Changing Climate

Board No.	Session No.	Registration No.	Presenter Name	Abstract Title
P.B. 27	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. 28	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. 29	3a	NCPS2025/165	Mr. Soumyadeep Dutta	Characteristics of an annually recurring open-ocean polynya in the Southern Ocean
P.B. 30	3a	NCPS2025/221	Mr. Jitender Singh	High-Resolution GHG observations over Southern Ocean: Results from cruise campaign SOE-12, Feb-March 2025
P.B. 31	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. 32	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. 33	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. 34	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. 35	3b	NCPS2025/32	Dr. Pooja Prabhakar Ghadi	Sea Ice Dynamics and SST Variability Around the Kerguelen Plateau: Insights from Diatom Records
P.B. 36	3b	NCPS2025/99	Mr. Sreerag	Inter-annual Variability in Environmental Forcing and Phytoplankton Community Structure in the Indian Sector of the Southern Ocean

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P.B. 37	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. 38	3b	NCPS2025/128	Mr. Ranjan Kumar Sahu	ADCP derived backscatter as a zooplankton proxy
P.B. 39	3b	NCPS2025/252	Mr. Boda Srinivas	Transported planktic foraminifera compromise high-latitude Mg/Ca thermometry
P.B. 40	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. 41	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)				

4. Climate Change and Variability

Board No.	Session No.	Registration No.	Presenter Name	Abstract Title
P.B. 42	4a	NCPS2025/52	Mr. Shubhajyoti Roy	Large Ozone Intrusions during Sudden Stratospheric Warmings on the Arctic Enhance Ozone Radiative Forcing over South Asia
P.B. 43	4a	NCPS2025/95	Mr. Rahul Kumar Agrawal	Tracing soil organic carbon loss pathways in the Arctic and Himalayan permafrost regions using radiocarbon and stable carbon isotopes of soil CO ₂ and CH ₄
P.B. 44	4a	NCPS2025/103	Mr. Gurpreet Singh Virk	Global Dimethyl Sulfide Concentrations and Fluxes resilient to interannual climate modes
P.B. 45	4a	NCPS2025/123	Mr. Anurag Chaudhary	Interaction of Arctic Amplification with the modal variability of the annual mean Hadley cell on inter-annual timescales.
P.B. 46	4a	NCPS2025/136	Dr. Sourav Chatterjee	Variability of ocean heat content and marine heat waves in the Nordic Seas.
P.B. 47	4a	NCPS2025/177	Ms. Abhirami M	Assessing Future Climate Projections: An In-depth Analysis of CMIP6 Models on Indian Ocean Warming, Sea Surface Temperature Biases, and Precipitation Patterns

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P.B. 48	4a	NCPS2025/211	Ms. Ayushi Udgata	Geomorphological Influence on Biogeochemical Variability in Antarctic Lake Sediments: Elemental Signatures from lakes of Schirmacher Oasis
P.B. 49	4a	NCPS2025/282	Ms. Roshni K S	Geochemical Insights into Productivity and Nutrient Utilization Variability Across Glacial-Interglacial Cycles in the Atlantic Sector of the Southern Ocean
P.B. 50	4a	NCPS2025/340	Mr. Ahammed Shereef Ms	Intraseasonal Warm Water Intrusions into an Arctic Fjord: Wintertime Dynamics in Kongsfjorden, Svalbard
P.B. 51	4a	NCPS2025/344	Ms. Rina Rani Palei	Microtextural Variations of Pyrite in Foraminiferal Tests: Indicators of Redox Shifts at the Sediment–Water Interface
P.B. 52	4a	NCPS2025/355	Ms. Tanuja	Climate Variability and Emerging Trends in the Beas Basin, Northwestern Himalayas
P.B. 53	4a	NCPS2025/356	Mr. Swadesh Mohapatra	Teleconnecting the Poles to the Tropics: SAM-Masarine High Coupling and Indian Monsoon Variability
P.B. 54	4a	NCPS2025/389	Dr. Km Ajayeta Rathi	From Bloom to Decline: Tracking Primary Productivity in Arctic Kongsfjorden
P.B. 55	4a	NCPS2025/409	Ms. Kruttika Mohapatra	Dissolved Sulfur isotopic composition of the Brahmaputra River system: A time-series study
P.B. 56	4b	NCPS2025/33	Ms. Anoosha	Reconstructing Climate and Ecology Through Diatom Analysis: A Micro to Macro Approach
P.B. 57	4b	NCPS2025/34	Dr. Thena T	Volcanic Forcing and Ocean Response: Sedimentary and SST Signals of Subpolar North Atlantic Climate Variability during the Mid-Pleistocene
P.B. 58	4b	NCPS2025/60	Mr. Rohit Thangjam	A ~2500 years record of climate events reflected in high Arctic fjord sediment and its probable connection to human societal changes globally
P.B. 59	4b	NCPS2025/100	Mr. Uday Sharma	Glacio-fluvial landform evolution in transitional climatic settings of Spiti basin, NW Himalaya
P.B. 60	4b	NCPS2025/144	Dr. Sreevidya Edayilam	Late Quaternary frontal dynamics and paleoproductivity changes in the Indian Sector of the Southern Ocean inferred from planktonic foraminiferal assemblages



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P.B. 61	4b	NCPS2025/158	Mr. Ghulam Rabbani	Reconstruction of East Antarctic Ice Sheet Dynamics through Sediment Provenance Studies using Radiogenic Isotope Records
P.B. 62	4b	NCPS2025/238	Ms. Aditi Nautiyal	Sea-Surface temperatures in the Indian Polar Front Zone of the Southern Ocean for the last 40,000 years
P.B. 63	4b	NCPS2025/274	Ms. Stuti Jain	Four Century Record of Forest-Stand Structure and Tree-line Dynamics in Kashmir, Western Himalayas
P.B. 64	4b	NCPS2025/280	Ms. Khushboo Kumari	A sea-ice history of Southern Ocean since the last glacial-interglacial cycle
P.B. 65	4b	NCPS2025/284	Mr. Biswaranjan Jena	Multi-Proxy Evidence of Paleoenvironmental Shifts Driven by Nutrient Supply Variability and Glacial Cycles in Baffin Bay: Insights from IODP Expedition 400 Sediments
P.B. 66	4b	NCPS2025/285	Ms. Sakshi Mishra	Paleoenvironment Changes during Late Pleistocene: Insights from Geochemical Proxies IODP 400 Site U1604, Northwest Greenland
P.B. 67	4b	NCPS2025/327	Ms. Sharmila Sherin VM	Antarctic Influence on Tropical Indian Ocean SSTs During Heinrich Stadials
P.B. 68	4b	NCPS2025/331	Dr. Mohamad Nuruzzama	Investigating global climate signals in Antarctic lacustrine archives: A 25,000-year record from Schirmacher Oasis
P.B. 69	4c	NCPS2025/39	Dr. Biswajit Roy	Macroalgal growth in Arctic fjords and its impact in carbon dynamics under recent warming trends
P.B. 70	4c	NCPS2025/77	Ms. Souhitya Pattanayak	Relative influence of Southern Annular Mode and Zonal Wavenumber 3 on Antarctic Surface Temperature
P.B. 71	4c	NCPS2025/101	Mr. Sankirna Devidas Joge	Long-term seasonal changes in Dimethyl sulfide (DMS) concentrations for the Arctic
P.B. 72	4c	NCPS2025/112	Mr. Deva Jefflin A R	Evaluating Glacier Mass Loss in the Chandra Basin: Field-Climate Data vs. Spatial Modeling Techniques
P.B. 73	4c	NCPS2025/115	Mr. Nandakishore Menon	CHNS-Based Sediment Chemistry as a Proxy for Antarctic Climate Reconstruction: A Case Study from the Larsemann Hills
P.B. 74	4c	NCPS2025/145	Ms. Athulya R	Assessing the Impact of Warming on Arctic Precipitation Using Pseudo-Global Warming Experiments with Polar WRF
P.B. 75	4c	NCPS2025/241	Ms. Anirjita Das	Role of ocean and atmospheric processes on mixed layer depth variability in the Arctic between 2000 - 2023
P.B. 76	4c	NCPS2025/243	Ms. Rahna Ramesh. T	Holocene Black carbon records from Pup Lagoon Lake sediments of East Antarctica and evidence for paleofire



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P.B. 77	4c	NCPS2025/291	Ms. Rachana Subba	Temporal Variability in the $\delta^{13}\text{C}$ Signature of Atmospheric CO_2 in the Indian Sector of the Southern Ocean
P.B. 78	4c	NCPS2025/298	Mr. Devendra Kumar Dubey	The role of the Amundsen Sea Blocking on West Antarctic climate
4a: Physical forcings, biogeochemical feedback and variability				
4b: Past climate variability and global linkages				
4c: Climate Change and Impact in Polar Regions				

5. Cryospheric Processes and Dynamics

Board No.	Session No.	Registration No.	Presenter Name	Abstract Title
P.B. 79	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. 80	5a	NCPS2025/110	Dr. Aditya Mishra	Estimating aerosol induced reduction in snow cover days over Indian Himalayas
P.B. 81	5a	NCPS2025/134	Ms. Shruti Singh	Recent Volcanic eruption signatures from the two coastal ice rises in East Antarctica
P.B. 82	5a	NCPS2025/140	Dr. Anirudha Mahagaonkar	Katabatic Winds and Antarctic Subsurface Thermal Dynamics: Insights from a Decade of Thermistor Measurements
P.B. 83	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. 84	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. 85	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. 86	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

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P.B. 87	5a	NCPS2025/208	Dr. Om Kumar	Retreating Hindu Kush Himalaya glaciers, permafrost thawing and past and present carbon climate feedback
P.B. 88	5a	NCPS2025/237	Ms. Gopika Das K	Volumetric seasonal evolution of supraglacial lakes on the Greenland Ice Sheet.
P.B. 89	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. 90	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. 91	5a	NCPS2025/299	Mr. Prankur Sharma	Development of a model to estimate snow depth in the Indian Himalayas using polarimetric SAR data
P.B. 92	5a	NCPS2025/313	Ms. Rooma	Eastern Himalayan Retreat: Role of Energy Flux and Climate Variability, Past Trends to Future Outlook
P.B. 93	5a	NCPS2025/325	Ms. Arya A R	Long-term glacier mass balance estimation of Baspa glaciers, Himachal Pradesh
P.B. 94	5a	NCPS2025/328	Mr. Pawan Singh	Short-Term Monitoring of Glacier Activities Using Terrestrial Time-Lapse Imagery at Drang Drung Glacier, Western Himalaya
P.B. 95	5a	NCPS2025/380	Mr. Adarsh Padhi	Multi-decadal snow cover variability in the Gangotri and Triloki basins: a comparative glacio-hydrological perspective.
P.B. 96	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. 97	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. 98	5b	NCPS2025/122	Mr. Umar Faruque	Differing velocities of two neighbouring glaciers in Kumaun Himalaya: Impact of climatic and non-climatic drivers
P.B. 99	5b	NCPS2025/126	Mr. Ravindra Kumar	A Fully Automated Multi-Data Approach for Monitoring Glacial Lake Dynamics in High Mountain Asia



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P.B. 100	5b	NCPS2025/149	Mr. Talawar Raghavendra Chandrappa	Assessment of Water Storage Variability in the Chandra Basin, Western Himalaya using Reanalysis Data
P.B. 101	5b	NCPS2025/220	Mr. Subhranil Mustafi	GLDeepNet+: A U-Net-Based Deep Learning Framework for Multi-source Glacial Lake Mapping
P.B. 102	5b	NCPS2025/224	Mr. Karthik C B	Surface elevation changes and melt patterns of debris-covered Batal Glacier in the Western Himalaya
P.B. 103	5b	NCPS2025/245	Mr. Debapriya Chakraborty	Multi-Modal monitoring and analysis of Flood Pathways for Glacial Lake Outburst
P.B. 104	5b	NCPS2025/259	Mr. Pradeep Srinivasalu	Impact of Glacier and Snow Changes on Runoff in the Parvati Basin Using a Distributed Hydrological Model
P.B. 105	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. 106	5b	NCPS2025/311	Mr. Shivang Alok	Volume estimation of glaciers in Alaknanda sub- basin
P.B. 107	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. 108	5b	NCPS2025/372	Dr. Sandeep Kumar Mondal	Investigating Zemu Glacier in the Sikkim Himalayas: A Satellite Remote Sensing Based Approach
P.B. 109	5b	NCPS2025/391	Ms. Simran Kashyap	Length Change of Selected Benchmark Glaciers in the Indian Himalaya

5a: Cryospheric Processes and Variability

5b: Glacier dynamics, processes and glacio-hydrological responses

6. Sea Ice Variability and Modelling

Board No.	Session No.	Registration No.	Presenter Name	Abstract Title
P.B. 110	6a	NCPS2025/41	Dr. Girija Kalyani Burada	Tracking the Cracks: Insights into Sea Ice Deformation
P.B. 111	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.



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P.B. 112	6a	NCPS2025/163	Ms. Swathi M	The record low Antarctic sea ice extent of 2023: The role of ocean and atmospheric factors
P.B. 113	6a	NCPS2025/301	Dr. Tariq Ejaz	Increasing Weddell Sea Ice variability in recent decades triggered by high-frequency Pacific Oscillations
P.B. 114	6a	NCPS2025/303	Mr. Aravind Manikandan M K	Interannual variability of Landfast-sea-ice in the Prydz Bay region of East Antarctica
P.B. 115	6a	NCPS2025/323	Ms. Kshitija Shrimant Suryawanshi	Sea ice extremes in the Ross Sea during winter 2023: Role of ocean-atmospheric forcing
P.B. 116	6a	NCPS2025/336	Mr. Sathish Kashaboina	Extreme temperature events and its impact on Antarctic heat waves
P.B. 117	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. 118	6a	NCPS2025/354	Mr. Suraj Ravindran	Subseasonal to Seasonal forecasting of Arctic sea ice using NCMRWF seamless modeling system.
P.B. 119	6a	NCPS2025/360	Dr. Ashwita Chouksey	Teleconnection between Antarctic Sea Ice and the Indian Summer Monsoon
P.B. 120	6a	NCPS2025/393	Ms. Akshaya Muraleedharan V	Sea-Ice Concentration in Barents-Kara sea region, Arctic during 2023-24 winter
P.B. 121	6b	NCPS2025/53	Ms. Juhi Yadav	Teleconnections between Arctic sea ice and Indian Summer Monsoon Rainfall: Observational and Model Perspectives
P.B. 122	6b	NCPS2025/66	Ms. Anushka Sunil	Role of Major Climate Modes on Arctic Sea Ice Dynamics
P.B. 123	6b	NCPS2025/91	Mr. Ajay B	Storm-induced changes in thermal and physical properties of sea ice: A Modelling and Observational Study
P.B. 124	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				



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7. Polar Environment and Ecology

Board No.	Session No.	Registration No.	Presenter Name	Abstract Title
P.B. 125	7a	NCPS2025/198	Ms. Pratiksha Dattatraya Deshmukh	Interplay between bacterial communities and summer phytoplankton bloom during the melting phase of land-fast sea ice in Prydz Bay, East Antarctica
P.B. 126	7a	NCPS2025/240	Ms. Dhuhsana	Coccolithophore ecology and biogeography in the South West Atlantic Ocean.
P.B. 127	7a	NCPS2025/296	Ms. Anna Maria Mathews	Distribution of Pico-phytoplankton (cyanobacteria) in Arctic and Southern Ocean Polar Ecosystem
P.B. 128	7a	NCPS2025/306	Mr. Fazil Rahiman	Biogeochemical Tracers of Organic Matter in Arctic Fjord Sediments
P.B. 129	7b	NCPS2025/15	Dr. Ashok Jagtap	Cold-adapted Bioactive compounds from Arctic macroalgae: Emerging Bioprospecting Resources
P.B. 130	7b	NCPS2025/26	Ms. Ujjaini Basu	Ecosystem Responses to Atlantification: A Foraminiferal Perspective from Krossfjorden, Svalbard
P.B. 131	7b	NCPS2025/114	Dr. Pratika Singh	In Silico Exploration of Diatom ISIP and Microbial Siderophore Interactions: Iron Tug-of-War in the Southern Ocean
P.B. 132	7b	NCPS2025/265	Mr. Soumya Subhra Baishnab	Influence of environmental parameters in modulating the species and trait composition of meiobenthic population in high Arctic fjords: unveiling through hierarchical modeling
P.B. 133	7b	NCPS2025/290	Ms. Haripriya T K	Spatial Distribution and Ecological Implications of Heavy Metals in Surface Sediments of Schirmacher Hills Lakes, East Antarctica
P.B. 134	7b	NCPS2025/307	Ms. Snigdha Bhaumik	The Signature of Evolution: Phylogenetic Signal and Functional Ecology of Arctic Macrobenthos
P.B. 135	7b	NCPS2025/309	Ms. Sanya Pandoh	Organic Matter Characterization of Terrestrial Soil and Sediments near Kongsfjorden, Svalbard (Arctic)
P.B. 136	7b	NCPS2025/317	Ms. Archana Singh	Understanding Organic Carbon Sources and Fate in a Rapidly Changing Arctic Fjord System

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P.B. 137	7b	NCPS2025/337	Mr. Jayakrishnan M	Exploring Cryosphere bacteria for Plant growth promotion and Disease Control
P.B. 138	7b	NCPS2025/341	Ms. Athira Menon T	Invisible Drivers of Change: Viruses in Polar Ecosystems and Their Climate Interactions
P.B. 139	7c	NCPS2025/6	Ms. Kavya K B	Discovery of Potential Chemotherapeutic Agents from Actinomycetes Isolated from the Arctic Kongsfjord
P.B. 140	7c	NCPS2025/30	Ms. Shwetakshi Mishra	Characterizing the Arctic Samples- A Predictive Approach to Detect Occurrence of Biohydrogen Producing Microbes
P.B. 141	7c	NCPS2025/50	Mr. Rajdeep Shaw	Antarctic Bacterial Extracellular Polysaccharide Coating Enhances the Shelf Life of Tomato fruit after post-harvesting
P.B. 142	7c	NCPS2025/121	Dr. Aritri Sanyal	Insights into ecosystem development in Antarctic cryoconite holes
P.B. 143	7c	NCPS2025/142	Mr. Rantim Bhattacharjee	Optimization and Characterization of Bacterial Siderophores from the Indian Sector of the Southern Ocean
P.B. 144	7c	NCPS2025/179	Ms. Aanchal Chauhan	Comparative Analysis of EPS-Mediated Biofilm Formation on Glass and Plastic Surfaces from Polar Bacterial Isolates
P.B. 145	7c	NCPS2025/236	Ms. Anju Chalari	Manganese Enrichment Alters Benthic Bacterial Community Composition in Arctic Fjord Sediments
P.B. 146	7c	NCPS2025/253	Mr. Shekar Babu Kumbha	Unveiling the Cryoprotective Potential of Antarctic Marine Sediment Bacteria
P.B. 147	7c	NCPS2025/320	Mr. Vishal Kumar	Understanding Microbial Lipid (GDGT and 3-OH FAs) Responses Across Arctic Ecological Gradients
P.B. 148	7c	NCPS2025/326	Mr. Sai Mahesh Kumar S	Diversity and Bioprospecting of Marine Bacteria from Ny-Ålesund- the High Arctic Region
P.B. 149	7c	NCPS2025/334	Ms. Farsana A	Arctic actinomycetes as a novel source of L-asparaginase with relevance to food safety and cancer therapy
P.B. 150	7c	NCPS2025/370	Ms. Akhila A	Unveiling the Ecological Roles of Novel Microbial Species in Antarctic Aquatic Ecosystems: Implications for Climate Change
P.B. 151	7d	NCPS2025/57	Ms. Saritha V K	PFAS in the Arctic Fjords and the Terrestrial Environment of Ny-Ålesund, Svalbard



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P.B. 152	7d	NCPS2025/143	Dr. Nishant Jain	Air quality monitoring around the Indian Antarctica research stations
P.B. 153	7d	NCPS2025/190	Ms. Vaishnavi Dixit	Unveiling hidden benthic foraminiferal diversity in the Indian Sector of the Southern Ocean (ISSO): insights from eDNA metabarcoding studies
P.B. 154	7d	NCPS2025/271	Ms. Ancy C Stoy	A Pocket-Sized Tool for Polar Watch: Integrating Mini Secchi Disk, Forel-Ule Colour Scale, and Citizen Science for Water Quality Monitoring in Polar Environments
P.B. 155	7d	NCPS2025/361	Dr. Siddhartha Sarkar	Black carbon in Antarctic lakes: Distribution and its stable isotopic composition

7a: Planktons: climatological and ecological perspectives

7b: Diversity and Ecology of Flora and Fauna

7c: Microbial diversity: their role in the environment and industry

7d: Environmental Monitoring and Assessment

8. Polar Operations, Governance and Outreach

Board No.	Session No.	Registration No.	Presenter Name	Abstract Title
P.B. 156	8a	NCPS2025/135	Mr. Sarabjeet Singh Chhabra	Application of Artificial Intelligence (AI) in Arctic Expedition Logistics
P.B. 157	8a	NCPS2025/199	Dr. Pramod Bhaiyasaheb Shinde	Development and Deployment of an Automatic Snow Gauge System for Accurate Snowfall Measurement in North India
P.B. 158	8a	NCPS2025/416	Dr. Prasad Vinayak Patil	Underwater Robotics in Polar Regions: Technologies and Applications
P.B. 159	8c	NCPS2025/116	Ms. Ranjita Behera	Psychological Resilience in Extreme Environments: Managing Mental Health on Polar Expeditions
P.B. 160	8d	NCPS2025/279	Ms. Arti Kumari	Arctic Governance in a Multipolar World: Russia's Role and India's Aspirations

8a: Engineering and Infrastructure for Polar Regions

8b: Communication and Data Systems in Extreme Environments (Nil)

8c: Health, Safety, and Human Factors in Polar Operations

8d: Governance, Policy, and International Cooperation

8e: Education, Outreach, and Capacity Building in Polar Science (Nil)

Date: 16th September 2025