

The 14th Symposium on Polar Science Program (Version 2023 Nov. 13)

OA Session	P 1-3
OB Session	P 4-6
OG Session	P 7-8
OM Session	P 9-12
OS Session	P 13-14
IA Session	P 15-16
IW Session	P 17-18



[OA] Antarctic meteorites

Scopes

This session is held to present recent research outcomes for Antarctic meteorites and micrometeorites. It will also be an opportunity for general and topical discussion sessions dealing with new data from non-Antarctic meteorites and extraterrestrial materials, and related experimental and theoretical works.

Conveners: Akira Yamaguchi (NIPR)

Oral presentations (09:00 – 12:00, 13:00 – 16:50)

Date: Tue. 14 November

Chair Takashi Mikouchi (University of Tokyo) and Tomoko Arai (Chiba Inst. Tech)				
	9:00	9:05	Opening (A. Yamaguchi (NIPR))	
ID	Time		Title	Author(s)
	9:05	9:15	Tribute to Professor Hiroshi Takeda: Contributions to Antarctic meteorite research and planetary sciences	T. Arai* (Chiba Inst. Tech), T. Mikouchi (University of Tokyo)
OA-O-01	9:15	9:30	Abundant refractory materials admixed into the CA chondrule-forming regions	M. Zhang* (University of Wisconsin-Madison), K. Fukuda (Osaka University), M. J. Tappa (University of Wisconsin-Madison), M. Kimura (NIPR), A. M. Bauer (University of Wisconsin-Madison), N. T. Kita (University of Wisconsin-Madison)
OA-O-02	9:30	9:45	Co-precipitation temperature of olivine and spinel in FeO-rich chondrules inferred from Al-in-Olivine thermometry	T. Sumitani* (Osaka University), K. Fukuda (Osaka University), W. O. Nachlas (University of Wisconsin-Madison), A. Yamaguchi (NIPR), M. Zhang (University of Wisconsin-Madison), G. Siron (University of Bologna), M. Kimura (NIPR), K. Terada (Osaka University), N. T. Kita (University of Wisconsin-Madison)
OA-O-03	9:45	10:00	High-precision SIMS Al-Mg analysis of FeO-poor chondrules in Asuka 12236 CM2.9 chondrite	K. Fukuda* (Osaka University), M. Zhang (University of Wisconsin-Madison), M. Kimura (NIPR), N. T. Kita (University of Wisconsin-Madison)
OA-O-04	10:00	10:15	On the relationship between modal abundances of minerals and degrees of aqueous alteration of the brecciated clasts in the Orgueil CI chondrite	M. Masuda (Department of Earth and Planetary Science, The University of Tokyo), T. Mikouchi* (The University Museum, The University of Tokyo), M. E. Zolensky (ARES, NASA Johnson Space Center)
OA-O-05	10:15	10:30	Ice and Liquid Water in Asteroid Ryugu – Constraints from Sample A0180	M. Genge* (Imperial College London), A. Natasha (The Natural History Museum), M. Van Ginneken (University of Kent), L. Pinaut (Birkbeck College), P. Wozniakiewicz (University of Kent), H. Yano (Japan Aerospace Exploration Agency)
OA-O-06	10:30	10:45	Prompt gamma-ray analysis of Antarctic meteorites (1) – C1-related chondrites	M. Ebihara* (Tokyo Metropolitan University), N. Shirai (Kanagawa University), A. Yamaguchi (NIPR), T. Osawa (JAEA)
OA-O-07	10:45	11:00	CM2 clasts are present in CR2 chondrite NWA 15175 - but in general CM xenoliths are uncommon	M. Zolensky* (NASA Johnson Space Center)
OA-O-08	11:00	11:15	Metamorphism of Low Petrologic Type Ordinary and Carbonaceous Chondrites: Further Insights from The Behavior of Chromium in Ferroan Olivine from Aberration Corrected Scanning Transmission Electron Microscopy	A. J. Brearley* (Department of Earth & Planetary Sciences, University of New Mexico, Albuquerque)
OA-O-09	11:15	11:30	An experimental study on the formation of niningerite and oldhamite: Implication for the chondrule formation of the EH3 chondrite	N. Imae* (NIPR)
OA-O-10	11:30	11:45	Survey of primordial and altered carbonaceous chondrite clasts in Howardites	J. Isa* (ELSI TITEC), A. Nakato (NIPR), R. Kanemaru (JAXA), A. Yamaguchi (NIPR), T. Noguchi (Kyoto Univ.)
OA-O-11	11:45	12:00	The effect of fluid alteration in Antarctic chondrites	R. Maeda* (JAMSTEC), G. Steven (VUB), A. Yamaguchi (NIPR), V. Debaille (ULB), P. Claey's (VUB)
	12:00	13:00	Lunch Break	

Chair Kohei Fukuda (Osaka Univ.) and Masahiro Yasutake (Japan Synchrotron Radiation Research Institute)				
OA-O-12	13:00	13:15	Argon and nitrogen signatures in metal separates from Portales Valley (H6) chondrite	R. R. Mahajan* (Physical Research Laboratory, Ahmedabad - 380009, Gujarat, India)
OA-O-13	13:15	13:30	Formation and Radial Transport of Chondrules in the Inner Solar System: Model on Ordinary and Rumuruti Chondrite's Oxygen Isotope Compositions	H. Kaneko* (Tokyo Institute of Technology), T. Nakamoto (Tokyo Institute of Technology)
OA-O-14	13:30	13:45	Antarctic micrometeorites as a resource to complement the current Solar System inventory: the case of 16O-poor cumulate porphyritic cosmic spherules	S. Goderis* (Vrije Universiteit Brussel), M. Van Ginneken (University of Kent), M. J. Genge (Imperial College London), R. Maeda (Japan Agency for Marine-Earth Science and Technology), P. Wozniakiewicz (University of Kent), L. Folco (Universita di Pisa), M. Suttle (Open University), A. Yamaguchi (National Institute of Polar Research), S. Decrée (Royal Belgian Institute of Natural Sciences)
OA-O-15	13:45	14:00	Observation of internal structure of carbon grains in Dar al Gani 999 ureilite	M. Yasutake* (Japan Synchrotron Radiation Research Institute), M. Matsumoto (Tohoku University), J. Matsuno (Ritsumeikan University), A. Tsuchiyama (Ritsumeikan University), K. Uesugi (Japan Synchrotron Radiation Research Institute), A. Takeuchi (Japan Synchrotron Radiation Research Institute)
OA-O-16	14:00	14:15	Vesta's impact silence: no major events recorded by eucrites after ~ 3.4 Ga	F. Jourdan* (Curtin University), T. Kennedy (Curtin University)
OA-O-17	14:15	14:30	Igneous Differentiation Mechanisms in Mafic Rocks from the Moon and Earth: Comparing the NWA 773 Clan of Lunar Meteorites with the Murotomisaki Gabbroic Sill	T. Fagan* (Waseda University), S. Nishizawa (Waseda University), F. Hattori (Waseda University), S. Fujioka (Waseda University), H. Nagaoka (Ritsumeikan University)
	14:30	14:45	Coffee Break	
OA-O-18	14:45	15:00	Understanding Lunar Geochemistry beyond Procellarum KREEP Terrane from Antarctic Lunar Meteorites	Y. Srivastava* (Physical Research Laboratory, Ahmedabad, India), A. Basu Sarbadhikari (Physical Research Laboratory, Ahmedabad, India), J. M. Day (Scripps Institution of Oceanography, University of California San Diego, La Jolla, CA), A. Yamaguchi (NIPR)
OA-O-19	15:00	15:15	Reestimate the intermediate water reservoir on Mars recorded by martian meteorite Yamato 980459	S. Hu* (Institute of Geology and Geophysics, CAS), A. Yamaguchi (NIPR), Y. Zhang (Nanjing University), H. He (Institute of Geology and Geophysics, Chinese Academy of Sciences), J. Hao (Institute of Geology and Geophysics, Chinese Academy of Sciences), W. Yang (Institute of Geology and Geophysics, Chinese Academy of Sciences), Y. Lin (Institute of Geology and Geophysics, Chinese Academy of Sciences)
OA-O-20	15:15	15:30	Determination of Amino Acid Enantiomers in Antarctic Meteorites by 3D-HPLC	K. Kobayashi* (Yokohama National University), H. Kenji (Kyushu University), F. Aogu (University of Shizuoka), M. Hajime (Fukuoka Institute of Technology)
OA-O-21	15:30	15:45	In search for new meteorite dense collection area in the Sor Rondane mountains	V. Debaille* (Université libre de Bruxelles), M. Schönbachler (ETH Zurich), M. Valdes (The Field Museum of Natural History & The University of Chicago), R. Maeda (Université libre de Bruxelles & Vrije Universiteit Brussel), M. Poudelet (International Polar Guide Association), S. Goderis (Vrije Universiteit Brussel), P. R. Heck (The Field Museum of Natural History & The University of Chicago), V. Tollenaar (Université libre de Bruxelles), H. Zekollari (Vrije Universiteit Brussel & Université libre de Bruxelles & ETH Zurich), P. Claeys (Vrije Universiteit Brussel)
OA-O-22	15:45	16:00	Exploring sedimentary micrometeorite traps in Western Greenland	F. Van Maldeghem* (AMGC, Vrije Universiteit Brussel), W. Vandoorne (Into the Arctic), P. Claeys (AMGC, Vrije Universiteit Brussel), S. Goderis (AMGC, Vrije Universiteit Brussel)
OA-O-23	16:00	16:15	Thermal infrared spectroscopic features of meteorites, rocks, and minerals for the application to future planetary missions	S. Furukawa* (The University of Tokyo, JAXA), T. Okada (The University of Tokyo, JAXA), Z. LI (The University of Tokyo, JAXA), Y. Shimaki (JAXA), N. Sakatani (JAXA), H. Senshu (Chiba Institute of Technology), T. Sekiguchi (Hokkaido University of Education), H. Demura (University of Aizu), T. Arai (Maebashi Institute of Technology), T. Kouyama (National Institute of Advanced Industrial Science and Technology), M. Kanamaru (JAXA), T. Ishizaki (JAXA), S. Tanaka (JAXA), A. Yamaguchi (NIPR), N. Imae (NIPR)
	16:15	17:00	Poster Core Time	

Poster presentations (16:15 – 17:00)

Date: Tue. 14 November

ID	Title	Author(s)
OA-P-01	SpaceDust – A micrometeorite project at the conjunction between art, science and public outreach	J. Roszjar* (NHM Vienna), S. Leimer (Studio Sonia Leimer, Vienna)
OA-P-02	The Ensisheim Meteorite (Fall 1492) Revisited	V. H. Hoffmann (MSM-SNSB; University of Munich, Germany), M. Junge (MSM-SNSB; University of Munich, Germany), F. Hentschel (MSM-SNSB; University of Munich, Germany), W. W. Schmahl (MSM-SNSB; University of Munich, Germany), M. Kaliwoda* (MSM-SNSB; University of Munich, Germany)
OA-P-03	CY chondrite: A tentative classification criteria	M. Kimura* (NIPR), R. C. Greenwood (The Open University, United Kingdom), A. Yamaguchi (NIPR)
OA-P-04	Current Understanding of DESTINY+ Target Asteroid (3200) Phaethon	T. Arai* (Chiba Inst. Tech), D+ Science Team
OA-P-05	The shock recovery experiments of CI chondrites	T. Nakahashi* (Hiroshima University), M. Miyahara (Hiroshima University), A. Yamaguchi (NIPR), T. Kobayashi (NIMS), H. Yusa (NIMS), N. Tomioka (JAMSTEC)

[OB] Polar Biology

This session covers the following research topics.

Polar marine biology and ecosystem -including (but not limited to) the studies of environment, biogeochemistry, and method.

Polar terrestrial ecosystem -environment, biodiversity, and biological responses.

Conveners: Ryosuke Makabe and Masaki Uchida (NIPR)

Oral presentations (10:00 – 11:40, 13:00 – 14:20)

Date: Wed. 15 November

	10:00	10:10	Opening	
Chair	Akinori Takahashi (NIPR)			
ID	Time		Title	Author(s)
OB-O-01	10:10	10:40	Oceanographic Measurements of a Marine Heatwave and the Behavioral Response of a Top Predator: The Northeast Pacific Blob 2014-2017	*Rachel R. Holser (University of California, Santa Cruz), Theresa R. Keates (University of California, Santa Cruz), Daniel E. Crocker (Sonoma State University), Luis Hückstädt (University of Exeter), Chandra Goetsch (University of California, Santa Cruz), Birgitte I. McDonald (San Jose State University), Sarah E. Peterson (University of California, Santa Cruz), Patrick W. Robinson (University of California, Santa Cruz), Christopher A. Edwards (University of California, Santa Cruz), Daniel P. Costa (University of California, Santa Cruz)
OB-O-02	10:40	11:00	Wild animals in poorer body condition sleep less to forage more	*Taiki Adachi (UCSC), Patrick W. Robinson (UCSC), Sarah H. Peterson (UCSC), A. Marm Kilpatrick (UCSC), Akinori Takahashi (NIPR), Yasuhiko Naito (NIPR), Daniel P. Costa (UCSC), Roxanne S. Beltran (UCSC)
OB-O-03	11:00	11:20	Prevalence of antibiotic resistance genes in East Antarctic seabirds	Takahiro Segawa (University of Yamanashi), Akinori Takahashi (National Institute of Polar Research), Nobuo Kokubun (NIPR), *Satoshi Ishii (University of Minnesota)
OB-O-04	11:20	11:40	Microhabitat use and feeding behaviour of Adélie penguins <i>Pygoscelis adeliae</i> under Antarctic fast sea ice	*Hina Watanabe (SOKENDAI), Junichi Takagi (Kyoto University), Akinori Takahashi (NIPR)
	11:40	13:00	Lunch Break	
Chair	Sakae Kudoh (NIPR)			
ID	Time		Title	Author(s)
OB-O-05	13:00	13:20	How resilient are Antarctic soil bacteria in a tropical climate?	*Clemente Michael Vui Ling Wong (Universiti Malaysia Sabah), Chuen Yang Chua (Universiti Malaysia Sabah), Marcelo Aravena González (Instituto Antártico Chileno), Paris Lavin (Universidad de Antofagasta), Yoke Kqueen Cheah (Universiti Putra Malaysia)
OB-O-06	13:20	13:40	Seasonal variation in airborne prokaryotic and eukaryotic communities in Ny-Ålesund, Svalbard	*Jun Uetake (Hokkaido University), Yutaka Tobo (NIPR)
	13:40	14:20	Poster flash talks (One minutes in each presentation)	
	14:30	16:00	Poster Core Time	
	17:30		Icebreaker	

Poster presentations (13:40 – 16:00)

Date: Wed. 15 November

ID	Title	Author(s)
OB-P-01	Prokaryotic and eukaryotic community structures in surface sediments of the East Antarctic coastal region	*Hideaki Ochi (Soka University), Ryo Matsuda (Soka University), Keigo D. Takahashi (Soka University, NIPR), Ryosuke Makabe (NIPR, SOKENDAI, TUMSAT), Takuya Itaki (AIST), Shin Sugiyama (Hokkaido University), Norio Kurosawa (Soka University)
OB-P-02	Population density and genetic diversity of sympagic copepods in the Southern Ocean	*Miku Narusawa (Soka University), Keigo D. Takahashi (Soka University, NIPR), Ryo Matsuda (Soka University), Masayoshi Sano (University of Tokyo), Ryosuke Makabe (NIPR, SOKENDAI, TUMSAT), Masato Moteki (NIPR, TUMSAT), Norio Kurosawa (Soka University)
OB-P-03	Eukaryotic community structure in sea ice and sinking particles during summer off Wilkes Land, East Antarctica	*Ryo Matsuda (Soka Univ.), Keigo D. Takahashi (Soka Univ., NIPR), Masayoshi Sano (University of Tokyo, NIPR), Ryosuke Makabe (NIPR, SOKENDAI, TUMSAT), Shintaro Takao (NIES), Masato Moteki (TUMSAT, NIPR), Norio Kurosawa (Soka Univ.)
OB-P-04	DNA metabarcoding analysis of the early-stage diet of mesopelagic fishes and squids in the Southern Ocean	*Aiko Tachibana (TUMSAT), Masato Moteki (TUMSAT, NIPR)
OB-P-05	Identification of myctophid larvae in the Southern Ocean using DNA barcoding	*Akiko Mabuchi (TUMSAT), Rin Aoki (TUMSAT), Aiko Tachibana (TUMSAT), Masato Moteki (TUMSAT, NIPR)
OB-P-06	In-situ measurement of dissolved oxygen concentration and feeding behavior of northern elephant seals in the mesopelagic zone.	*Atsuya Ogata (SOKENDAI), Arina Favilla (University of California Santa Cruz), Rachel Holser (University of California Santa Cruz), Theresa Keates (University of California Santa Cruz), Taiki Adachi (University of California Santa Cruz), Daniel Costa (University of California Santa Cruz), Akinori Takahashi (NIPR, SOKENDAI)
OB-P-07	Population-level use of low-oxygen zones of a mesopelagic predator, the northern elephant seal	*Arina B. Favilla (University of California, Santa Cruz), Akinori Takahashi (NIPR), Rachel R. Holser (University of California, Santa Cruz), Ana M.M. Sequeira (Australian National University), Elliott L. Hazen (National Oceanic and Atmospheric Administration), Marm A. Kilpatrick (University of California, Santa Cruz), Atsuya Ogata (SOKENDAI), Daniel P. Costa (University of California, Santa Cruz)
OB-P-08	Socio-ecological traits of the interactions between Steller sea lions and small-scale fisheries in Hokkaido coastal waters	*Fleur Brochut (Hokkaido University), Yumi Kobayashi (Hokkaido University), Mina Jimbo (HRO), Orio Yamamura (Hokkaido University)
OB-P-09	Exploitation of distant Antarctic habitats by juvenile macaroni penguins from the southern Indian Ocean	*JB Thiebot (Hokkaido University), CA Bost (CNRS / Universite de La Rochelle)
OB-P-10	The ecological responses of Rhinoceros auklet to the environmental events	*Hikari Ozawa (Toyo University), Nanaka Tojo (Toyo University), Teru Kanaida (Toyo University), Shunsuke Nibe (Toyo University), Kohei Oshima (Tsukuba University), Ui Shimabukuro (Meiji University), Kazuhiko Hirata (Natural History Museum and Institute, Chiba), Motohiro Ito (Toyo University)
OB-P-11	Post-fledging movements of rhinoceros auklets in northern Hokkaido	*Akinori Takahashi (NIPR, SOKENDAI), Toshitaka Imaki (SOKENDAI)
OB-P-12	Examination of cultivation conditions for novel bacteria in an Antarctic Lake	*Kaori Iiyama (Soka University), Akinori Kawamata (Ehime Prefectural Science Museum), Satoshi Imura (NIPR, SOKENDAI), Hiroyuki D. Sakai (RIKEN BRC), Norio Kurosawa (Soka University)
OB-P-13	Isolation and characterization of pyrene degrading bacteria from Antarctic soil.	*Shigeo Namoto (Shibaura Institute of Technology), Siti Aqlima Ahmad (Universiti Putra Malaysia), Azham Zulkharnain (Shibaura Institute of Technology)
OB-P-14	Determination of bacterial counts in immobilized beads using strain BS19 isolated from Antarctic soil	*Ryuhei Cho (Shibaura Institute of Technology), Siti Aqlima Ahmad (Universiti Putra Malaysia), Azham Zulkharnain (Shibaura Institute of Technology)
OB-P-15	Characterization of phenanthrene-degrading bacteria isolated from Antarctic soil	*Sere Nakamura (Shibaura institute of technology), Siti Aqlima Ahmad (Universiti Putra Malaysia), Azham Zulkharnain (Shibaura Institute of Technology)
OB-P-16	Biodegradation of plasticizers by Antarctic soil bacteria	*Yudai Inagaki (Shibaura Institute of Technology), Siti Aqlima Ahmad (Universiti Putra Malaysia), Azham Zulkharnain (Shibaura Institute of Technology)
OB-P-17	Optimization of heterocyclic compounds degradation using Antarctic isolated bacteria strain BS19	*CHENGLIU WANG (Shibaura Institute of Technology, Japan), Siti Aqlima Ahmad (Universiti Putra Malaysia), Azham Zulkharnain (Shibaura Institute of Technology)

OB-P-18	Application of the Biolog EcoPlate™ technique for assessing the microbial metabolic diversity in moss profiles of continental Antarctica	Yudai Nagata (Doshisha University), *Takashi Osono (Doshisha University), Motohiro Hasegawa (Doshisha University), Satoru Hobara (Rakuno Gakuen University), Dai Hirose (Nihon University), Yukiko Tanabe (NIPR), Sakae Kudoh (NIPR), Masaki Uchida (NIPR)
OB-P-19	Intracellular response of Antarctic yeast to cold stress	*Tatsuya Fujikawa (National Institute of Technology, Asahikawa College), Masaharu Tsuji (National Institute of Technology, Asahikawa College), Jun-ichi Ishihara (Chiba University), Hiroki Takahashi (Chiba University), Veronica Segarra (Goucher College)
OB-P-20	A <i>Talaromyces</i> fungal species from Deception Island, Antarctica exhibited strong antimicrobial activity against pathogenic bacteria	*Clemente Michael Vui Ling Wong (Universiti Malaysia Sabah), Yong Sheau Ting (Universiti Malaysia Sabah)
OB-P-21	Characterization of <i>Mortierella</i> spp. Isolated from a <i>Sanionia</i> Moss Colony in Ny-Ålesund, Spitsbergen Island, Norway: Focus on Mycelium Growth and Colonization under Low-Temperature Conditions	Motoaki Tojo (Osaka Metropolitan University), *Hinase Kamihata (Osaka Metropolitan University), Masaki Uchida (NIPR)
OB-P-22	Investigation of diversity and distribution of tardigrades in moss environment around Syowa Station and Mt. Riiser-Larsen	*Miyu Sato (Keio University), Hideto Naito (Keio University), Satoshi Imura (NIPR, SOKENDAI), Megumu Tujimoto (Keio University, SOKENDAI)
OB-P-23	Photoprotective metabolites in asexual life cycle stages of the Antarctic moss <i>Ceratodon purpureus</i> in response to UV radiation	*Shunichi Arai (SOKENDAI), Sakae Kudoh (SOKENDAI, National Institute of Polar Research), Tomotake Wada (University of Tokyo, NIPR), Satoshi Imura (SOKENDAI, NIPR)
OB-P-24	Temperature response of photosynthesis of the alpine-vegetative moss <i>Racomitrium lanuginosum</i> (Hedw.) Brid. in the Mt. Fuji	*Mutsuki Iwasaki (Chuo University), Chihiro Azai (Chuo University), Fumino Maruo (Chuo University)
OB-P-25	Photosynthetic characteristics of <i>Bistorta vivipara</i> in Ny-Ålesund, Svalbard	*Masaki Uchida (NIPR), Soshi Osaki (Hiroshima Univ.), Takayuki Nakatsubo (Hiroshima Univ.)

[OG] Polar Geosciences

Scopes

This session covers research topics from the fields of geology, mineralogy, geomorphology, quaternary research, geodesy, and geophysics.

Conveners: Yuichi AOYAMA, and Kenji Horie (NIPR)

Oral presentations (09:30 – 11:40, 13:10 – 15:10)

Date: Wed. 15 November

	10:30	10:40	Opening	
Chair	Yuichi Aoyama (NIPR)			
ID	Time		Title	Author(s)
OG-O-01	10:40	11:00	Unveiled bathymetry in front of glaciers in Lützow-Holm Bay, East Antarctica	*Masakazu Fujii (NIPR & SOKENDAI), Yoshifumi Nogi (NIPR & SOKENDAI)
OG-O-02	11:00	11:20	An introduction to the penetrators in Antarctic regions.	*Yasuhiro Nishikawa (Kochi University of Technology), Satoshi Tanaka (Institute of Space and Astronautical Science), Kodai Yamamoto (Kochi University of technology)
OG-O-03	11:20	11:40	The pressure–temperature path of a mylonitized pelitic granulite in the Hidaka metamorphic belt, Hokkaido, Japan	*Ippei Kitano (Hokkaido University)
	11:40	13:10	Lunch Break	
Chair	Kenji Horie (NIPR)			
OG-O-04	13:10	13:30	Geology of eastern Dronning Maud Land (Lützow-Holm Complex) and Enderby Land (Napier Complex and Rayner Complex), and geological field project objectives in JARE 65 (2023-2024)	*Tomokazu Hokada (NIPR & SOKENDAI), Tatsuro Adachi (Kyushu University), Yuki Mori (JASRI), Sreehari Lakshmanan (Shimane Univrsity)
OG-O-05	13:30	13:50	Carbon-isotope composition of graphite associated with V-bearing grossular and origin of C-O-H fluid from Menipa, Sør Rondane Mountains, East Antarctica	*Tetsuo Kawakami (Kyoto University), Tatsuro Adachi (Kyushu University), Satish-Kumar, M. (Niigata University), Fumiko Higashino (Kyoto University), Masaoki Uno (Tohoku University)
OG-O-06	13:50	14:10	Regional sea-level highstand triggered Holocene ice sheet thinning across coastal Dronning Maud Land, East Antarctica	*Yusuke Suganuma (NIPR)
Chair	Yusuke Suganuma (NIPR)			
OG-O-07	14:10	14:30	Modelling Glacial Isostatic Adjustment in Firedrake	*William Scott (Australian National University), Mark Hoggard (Australian National University), Sia Ghelichkhan (Australian National University), Angus Gibson (Australian National University), Stephan Kramer (Imperial College London), Rhodri Davies (Australian National University)
OG-O-08	14:30	14:50	Assessing the GLOF Hazard and Risk of Lato Lake in Zaskar region of north-western Himalaya	*Rayees Ahmed (University of Kashmir)
OG-O-09	14:50	15:10	Late Quaternary glaciation and its implications in the Yankti Kuti valley, Uttarakhand, India.	*Pinkey Bisht (Wadia Institute of Himalayan geology)
	15:10	15:30	Coffee Break	
	15:30	17:00	Poster Core Time	

Poster presentations (15:30 – 17:00)

Date: Wed. 15 November

ID	Title	Author(s)
OG-P-01	Petrography of V and Zn-rich gahnite-sillimanite-muscovite gneiss from Menipa, Sør Rondane Mountains, East Antarctica	*Tatsuro Adachi (Kyushu University), Tetsuo Kawakami (Kyoto University), Fumiko Higashino (Kyoto University), Masaoki Uno (Tohoku University)
OG-P-02	Mode of occurrence of kyanite in sillimanite-biotite-garnet gneiss from Berckmanskampen, Sør Rondane Mountains, East Antarctica	*Fumiko Higashino (Kyoto University), Tetsuo Kawakami (Kyoto University), Tatsuro Adachi (Kyushu University), Masaoki Uno (Tohoku University)
OG-P-03	Metamorphic conditions and occurrences of Grt-Bt gneisses from Vesthovde higasi-iwa, Lützow-Holm Complex, East Antarctica	*Sotaro Baba (University of the Ryukyus), Nobuhiko Nakano (Kyushu University), Shin-ich Kagashima (Yamagata University), Atsushi Kamei (Shimane University), Tomokazu Hokada (NIPR)
OG-P-04	Zircon geochemistry of felsic gneisses from Harvey Nunatak, Napier Complex in East Antarctica	*Mami Takehara (NIPR), Kenji Horie (NIPR), Tomokazu Hokada (NIPR)
OG-P-05	Post-peak incipient charnockite formation in the Neoproterozoic Trivandrum Block, southern India: new insights from monazite Th-U-total Pb geochronology	*Toshiaki Tsunogae (University of Tsukuba)
OG-P-06	Crystal size distribution and microstructures of garnet in the highest-grade zone of the Ryoke metamorphic complex in the Yanai area, SW Japan	*Risa Hayashi (Kyushu University), Takeshi Ikeda (Kyushu University)
OG-P-07	Attractive Himalayan geology: Invitation to the 12th Student Himalayan Field Exercise Tour	*Masaru Yoshida (Gondwana Institute for Geology and Environment)
OG-P-08	Constraint on the last interglacial ice volume from the GIA modelling and far-field sea levels	*Jun'ichi Okuno (ROIS & NIPR & SOKENDAI)
OG-P-09	Spatiotemporal variations in the ice mass of East Antarctica during the Holocene revealed by sea-level observations and GIA modelling	*Takeshige Ishiwa (NIPR), Jun'ichi Okuno (ROIS & NIPR & SOKENDAI), Yuki Tokuda (Tottori University of Environmental Studies), Satoshi Sasaki (Nagoya University), Takuya Itaki (AIST), Yusuke Suganuma (NIPR)
OG-P-10	Primary data collection and prospects for penetrator system in the Antarctic environment at JARE64	*Kodai Yamamoto (Kochi University of Technology), Masa-yuki Yamamoto (Kochi University of Technology), Yasuhiro Nishikawa (Kochi University of Technology), Satoshi Tanaka (JAXA)
OG-P-11	Differential SAR Interferometry Time Series Analysis for Detecting Crustal Deformation in the Polar Regions	*Koichiro Doi (NIPR & SOKENDAI)

[OM] Polar Meteorology and Glaciology

Scopes

This session covers research topics from the fields of atmospheric science, meteorology, glaciology, sea ice, oceanography, and paleoclimatology.

Conveners: Daisuke Goto and Ikumi Oyabu (NIPR)

Oral presentations

(14:30 – 17:00 on 14 Nov. and 09:00 – 12:00 and 13:30 – 14:50 on 15 Nov.)

Date: Tue. 14 November

	14:30	14:40	Opening	
Chair	Takeshi Tamura (NIPR)			
ID	Time		Title	Author(s)
OM-O-01	14:40	15:00	2023 Breakup of the land-fast ice in Lützow-Holm bay, Antarctica	*Takuji Waseda (The University of Tokyo), Kazutaka Tateyama (Kitami Institute of Technology), Ryosuke Uchiyama (The University of Tokyo), Takehiko Nose (The University of Tokyo), Tsubasa Kodaira (The University of Tokyo), Tomotaka Katsuno (The University of Tokyo), Takeshi Tamura (NIPR), Takenobu Toyota (Hokkaido University), Jean Rebault (Met. Norway), Mario Hoppmann (Alfred-Wegener Institute), Daisuke Shimizu (NIPR)
OM-O-02	Canceled		Estimating Marine Ice Thickness Beneath the Amery Ice Shelf from Airborne Radio-Echo Sounding	*Xueyuan Tang (Polar Research Institute of China), Lijuan Wang (Polar Research Institute of China), Jingxue Guo (Polar Research Institute of China), Gang Qiao (Tongji University), Lu An (Tongji University), Lin Li (Polar Research Institute of China), Jamin S. Greenbaum (Scripps Institution of Oceanography, University of California), Feras A. Habbal (Oden Institute for Computational Engineering and Sciences, University of Texas at Austin), Lenneke M. Jong (Australian Antarctic Division), Tas Van Ommen (Australian Antarctic Division), Jason L. Roberts (Australian Antarctic Division), Duncan A. Young (Institute for Geophysics, University of Texas at Austin), Donald D. Blankenship (Institute for Geophysics, University of Texas at Austin), Bo Sun (Polar Research Institute of China)
OM-O-03	15:00	15:20	The observed sea-ice edge position over the Barents and Greenland Seas: Its temporal variability	*Ryusuke Masunaga (JAMSTEC), Yoshiki Komuro (JAMSTEC), Takao Kawasaki (AORI, The University of Tokyo), Jun Ono (JAMSTEC)
OM-O-04	15:20	15:40	Fundamentals in sea ice rheology	*Jinro Ukita (AORI, the Univ of Tokyo)
	15:40	16:00	Coffee Break	
Chair	Naohiko Hirasawa (NIPR)			
OM-O-05	16:00	16:20	Development status of compact, software-defined-radio-based radio echo sounder for helicopter-borne ice thickness measurement in glaciers around Syowa Station	*Taishi Hashimoto (NIPR), Masahiro Minowa (Hokkaido University), Kazuhiko Mushiake (Ilohas Project Co., Ltd.), Shuntaro Hata (Hokkaido University), Ken Kondo (Hokkaido University)
OM-O-06	16:20	16:40	Long-term monitoring of icequakes on the grounding zone of Langhovde Glacier, East Antarctica	*Masahiro Minowa (Hokkaido University), Ken Kondo (Hokkaido University), Evgeny Podolskiy (Hokkaido University), Shin Sugiyama (Hokkaido University)
OM-O-07	16:40	17:00	Surface elevation change on Taku Glacier in southeastern Alaska from 2014 to 2021	*ARLEC CHANG (Hokkaido University), KEN SATO (Hokkaido University), SHIN SUGIYAMA (Hokkaido University), JASON AMUNDSON (University of Alaska Southeast), LYNN KALUZIENSKI (University of Alaska Southeast), SOREN THOMPSON (University of Alaska Southeast)

Date: Wed. 15 November

Chair Shuji Fujita (NIPR)				
ID	Time		Title	Author(s)
OM-O-09	9:00	9:20	A novel laser melting sampler for discrete, sub-centimeter depth-resolved analyses of stable water isotopes in ice cores	*Yuko Motizuki (RIKEN Nishina Center), Yoichi Nakai (RIKEN Nishina Center), Kazuya Takahashi (RIKEN Nishina Center), Junya Hirose (RIKEN Nishina Center), Yu Vin Sahoo (RIKEN Nishina Center), Masaki Yumoto (RIKEN Center for Advanced Photonics), Masayuki Maruyama (RIKEN Center for Advanced Photonics), Michio Sakashita (RIKEN Center for Advanced Photonics), Kiwamu Kase (RIKEN Center for Advanced Photonics), Satoshi Wada (RIKEN Center for Advanced Photonics), Hideaki Motoyama (National Institute of Polar Research), Yasushige Yano (RIKEN Nishina Center)
OM-O-10	9:20	9:40	Black carbon deposition in Northeast Greenland over the past 350 years	*Kumiko Goto-Azuma (NIPR & SOKENDAI), Kaori Fukuda (NIPR), Jun Ogata (NIPR), Yuki Komuro (Laboratory for Environmental Research at Mount Fuji), Motohiro Hirabayashi (NIPR), Fumio Nakazawa (NIPR & SOKENDAI), Ikumi Oyabu (NIPR & SOKENDAI), Kyotaro Kitamura (NIPR), Shuji Fujita (NIPR & SOKENDAI), Nobuhiro Moteki (The University of Tokyo), Tatsuhiko Mori (Keio University), Sho Ohata (Nagoya University), Yutaka Kondo (NIPR), Makoto Koike (The University of Tokyo), Naga Oshima (Meteorological Research Institute), Ayaka Yonekura (Marine Works Japan), Yoshimi Ogawa-Tsukagawa (NIPR), Kenji Kawamura (NIPR & SOKENDAI), Teruo Aoki (NIPR), Naoyuki Kurita (Nagoya University), Sune O. Rasmussen (University of Copenhagen), Giulia Sinnl (University of Copenhagen), Trevor J. Popp (University of Copenhagen), Dorthe Dahl-Jensen (University of Copenhagen & University of Manitoba)
OM-O-11	9:40	10:00	Surface temperature at Dome Fuji during the last interglacial period	*Ikumi Oyabu (NIPR & SOKENDAI), Kenji Kawamura (NIPR, SOKENDAI & JAMSTEC), Christo Buizert (OSU), Frédéric Parrenin (IGE), Ryu Uemura (Nagoya Univ.), Motohiro Hirabayashi (NIPR), Jun Ogata (NIPR), Kyotaro Kitamura (NIPR), Kaori Fukuda (NIPR), Shuji Fujita (NIPR & SOKENDAI), Tomotaka Saruya (NIPR), Kumiko Goto-Azuma (NIPR & SOKENDAI)
Chair Kumiko Goto-Azuma (NIPR)				
OM-O-12	10:00	10:20	Investigation of the physical effects such as diffusion, smoothing, deformation, and inclination, to ice core signals in the deep section (2400m to the deepest part) of the Antarctic Dome Fuji ice sheet	*Shuji Fujita (NIPR & SOKENDAI), Motohiro Hirabayashi (NIPR), Jun Ogata (NIPR), Kaori Fukuda (NIPR), Tomotaka Saruya (NIPR), Kumiko Goto-Azuma (NIPR & SOKENDAI), Kenji Kawamura (NIPR & SOKENDAI), Ikumi Oyabu (NIPR & SOKENDAI), Fumio Nakazawa (NIPR & SOKENDAI), Yoshinori Iizuka (ILTS, Hokkaido University), Hiroshi Ohno (Kitami Institute of Technology), Akira Hori (Kitami Institute of Technology), Atsushi Miyamoto (Institute for the Advancement of Graduate Education, Hokkaido University), Shun Tsutaki (NIPR), Kyotaro Kitamura (NIPR), Yoshimi Tsukagawa (NIPR)
	10:20	10:40	Coffee Break	
OM-O-13	10:40	11:00	Multi-phase, transient spin-up for the Antarctic ice sheet with the SICOPOLIS model	Tom Dangleterre (Hokkaido University), *Ralf Greve (Hokkaido University), Constantijn J. Berends (Utrecht University), Jorge Bernaldes (Utrecht University)
OM-O-14	11:00	11:20	Spatial distribution of snow specific surface area along the traverse route from the coast to Dome Fuji, Antarctica: multiple in-situ observations	*Ryo Inoue (SOKENDAI), Teruo Aoki (NIPR), Shuji Fujita (NIPR & SOKENDAI), Shun Tsutaki (NIPR & SOKENDAI), Hideaki Motoyama (NIPR & SOKENDAI), Fumio Nakazawa (NIPR & SOKENDAI), Kenji Kawamura (NIPR & SOKENDAI)
Chair Atsushi Yoshida (NIPR)				
OM-O-15	11:20	11:40	Warming trend in the Dome Fuji region of East Antarctica over the past three decades	*Naoyuki Kurita (Nagoya University), Takao Kameda (Kitami Institute of Technology), Naohiko Hirasawa (National Institute of Polar Research), Hideaki Motoyama (National Institute of Polar Research), David Mikołajczyk (University of Wisconsin-Madison), Lee J Welhouse (University of Wisconsin-Madison), Linda M Keller (University of Wisconsin-Madison), George A Weidner (University of Wisconsin-Madison), Matthew A Lazzara (Madison Area Technical College)

OM-O-16	11:40	12:00	Fine structure of a precipitation event associated with a synoptic-scale disturbance at Syowa Station, Antarctica	*Naohiko Hirasawa (National Institute of Polar Research), Hiroyuki Konishi (Osaka-Kyoiku University), Yasushi Fujiyoshi (Emeritus Prof., Hokkaido University), Masanori Yabuki (Kyoto University), Katsushi Iwamoto (City of Mombetsu, Hokkaido)
	12:00	13:30	Lunch Break	
OM-O-17	13:30	13:50	Ice cloud formation related to oceanic supply of ice-nucleating particles: A case study in the Southern Ocean near an atmospheric river in late summer	*Kazutoshi Sato (NIPR & SOKENDAI), Jun Inoue (NIPR & SOKENDAI)
OM-O-18	13:50	14:10	Atmospheric River Events in the 64th Japanese Antarctic Research Expedition	*Kazu TAKAHASHI (SOKENDAI), Jun INOUE (NIPR, SOKENDAI), Kazutoshi SATO (NIPR, SOKENDAI), Naohiko HIRASAWA (NIPR, SOKENDAI)
OM-O-19	14:10	14:30	An attempt to detect of Atmospheric River by Satellite Cloud Images in the Antarctic	*Kazue Suzuki (Hosei University), Terumasa Tokunaga (Kyushu Institute of Technology), Naohiko Hirasawa (NIPR), Takashi Yamanouchi (NIPR), Hideaki Motoyama (NIPR)
OM-O-20	14:30	14:50	Heavy Snow Cloud Detection in Satellite Images Based on Semi-Supervised Image Segmentation	*Lin Magari (Kyushu Institute of Technology), Terumasa Tokunaga (Kyushu Institute of Technology), Kazue Suzuki (Hosei University)
	15:30	17:00	Poster Core Time	

Poster presentations (15:30 – 17:00 on 15 Nov.)

Date: Wed. 15 November

ID	Title	Author(s)
OM-P-01	Icebergs refloat affecting the breakup of multi-year landfast sea ice	*Shuki Ushio (NIPR)
OM-P-02	Spatiotemporal high-resolution behavior of ocean acidification in Southern Ocean and other regions	*Yaojunnan Cai (Hokkaido University), Bofeng Li (Hokkaido University), Xianliang Pan (Hokkaido University), Yutaka Watanabe (Hokkaido University)
OM-P-03	Freshening of coastal regions of east Antarctic based on a hybrid parameterization technique	*Bofeng Li (Hokkaido University), Xianliang Pan (Hokkaido University), Weiyi Gan (Hokkaido University), Yutaka Watanabe (Hokkaido University)
OM-P-04	Relationship between low pressure and sea ice during the development of a turbulent ice belt in Antarctica.	*Yuji Yoshida (Graduate School of Engineering, Kitami Institute of Technology), Kazutaka Tateyama (Kitami Institute of Technology)
OM-P-05	Interannual variation in top-of-atmosphere upward shortwave flux over the Antarctic region	*Michinari Amma (Tohoku University), Tadahiro Hayasaka (Tohoku University)
OM-P-06	Comparison of cloud fractions from whole-sky camera observations around Syowa Station during JARE 60	*Amiri Yokotani (Nara Women's University), Rena Tanaka (Nara Women's University), Moeka Horiuchi (Nara Women's University), Makoto Kuji (Nara Women's University), Masanori Yabuki (Kyoto University), Naohiko Hirasawa (NIPR / SOKENDAI)
OM-P-07	Analysis of short-term variations of atmospheric CO ₂ and O ₂ observed at Ny-Ålesund, Svalbard	*Daisuke Goto (NIPR), Hikaru Sekine (Tohoku University), Shinji Morimoto (Tohoku University)
OM-P-08	Precipitation and Wind Speed Observation in the Blizzard by the Doppler Weather Radar at Syowa Station, Antarctica	*Hiroyuki Konishi (Osaka Kyoiku University)
OM-P-09	Introduction of Antarctic climate monitoring data - Meteorology, Glaciology and Satellite -	*Naohiko Hirasawa (National Institute of Polar Research), Keiichi Hara (Fukuoka University), Fumio Nakazawa (National Institute of Polar Research), Masaki Okada (National Institute of Polar Research)
OM-P-10	Regional variations in mineralogy of dust in ice cores obtained from northeastern and northwestern Greenland over the past 100 years	*Naoko Nagatsuka (NIPR), Kumiko Goto-Azuma (NIPR, SOKENDAI), Koji Fujita (Nagoya University), Yuki Komuro (LERMF), Motohiro Hirabayashi (NIPR), Jun Ogata (NIPR), Kaori Fukuda (NIPR), Yoshimi Ogawa-Tsukagawa (NIPR), Kyotaro Kitamura (NIPR), Ayaka Yonekura (NIPR), Fumio Nakazawa (NIPR), Yukihiko Onuma (JAXA), Naoyuki Kurita (Nagoya University), Sune Olander Rasmussen (University of Copenhagen), Giulia Sinnl (University of Copenhagen), Trevor James Popp (University of Copenhagen), Dorthe Dahl-Jensen (University of Copenhagen)
OM-P-11	Numerical modelling of the fluctuations of Qaanaaq Glacier in northwestern Greenland from 1985 to 2022	*Takuro Imazu (Hokkaido University), Shin Sugiyama (ILTS, Hokkaido University)
OM-P-12	Drone survey on Qaanaaq Glacier, northwestern Greenland, for studying surface elevation change and supraglacial stream development	*Soratakato Yamada (Hokkaido University), Shin Sugiyama (Hokkaido University), Shinta Ukai (Hokkaido University)
OM-P-13	Spatial Extent and Dynamic Impact of Channelised Basal Drainage beneath the Greenland Ice Sheet	*Kuba Oniszk (University of Cambridge), Poul Christoffersen (University of Tasmania), Stephen Brough (University of Liverpool)
OM-P-14	Firn/ice temperature and conductivity observed in the accumulation area of Qaanaaq Ice Cap, northwest Greenland	*Masahiro Minowa (Hokkaido University), Ken Kondo (Hokkaido University)
OM-P-15	Snow accumulation inferred from a GPR survey around the Southeastern Dome, Greenland Ice Sheet	*Hiroyuki Sakata (Hokkaido university), Masahiro Minowa (Hokkaido university), Koji Fujita (Nagoya university), Sumito Matoba (Hokkaido university), Kaoru Kawakami (Hokkaido university), Mai Matsumoto (Hokkaido university), Yoshinori Iizuka (Hokkaido university)
OM-P-16	Evaluation of classification techniques for snow deposition and erosion patterns in the Antarctic ice sheet using a machine learning method	*Konosuke Sugiura (University of Toyama), Naohiko Hirasawa (National Institute of Polar Research)
OM-P-17	Development of a numerical library for coupling between ice-sheet and climate models	*Fuyuki SAITO (JAMSTEC), Ryouta O'ishi (AORI), Takashi Obase (AORI), Ayako Abe-Ouchi (AORI)

[OS] Space and upper atmospheric sciences

Scopes

This session covers the solar-terrestrial science related to topics in the polar upper atmosphere, ionosphere and magnetosphere.

Conveners: Ryuho Kataoka, and Masaki Tsutsumi (NIPR)

Oral presentations (09:00 – 12:00, 13:30 – 15:45)

Date: Wed. 15 November

Chair Ryuho Kataoka (NIPR)				
ID	Time		Title	Author(s)
OS-O-01	9:30	9:45	Status report of AJ1007: Space environmental changes and their effects on the Earth's atmosphere	*Ryuho Kataoka (NIPR) and auroraXcosmic team
OS-O-02	9:45	10:00	Auroral conjugate observation network in Antarctica using unmanned system: Current status and future perspective	*A. Kadokura (NIPR), Y. Tanaka, Y. Ogawa, R. Kataoka, M. Okada, H. Yamagishi, Y. Otsuka, H. Robert, G. K. Seemala, M. Kosch
OS-O-03	10:00	10:15	Localized mesospheric ozone destruction below isolated proton aurora at subauroral latitudes	*M. Ozaki(Kanazawa Univ.), K. Shiokawa, R. Kataoka, M. Mlynczak, L. Paxton, M. Connors, S. Yagitani, Y. Otsuka, S. Nakahira, I. Mann
OS-O-04	10:15	10:30	Atmospheric ionization of EMIC-wave driven energetic electron precipitation events	*K. Murase (SOKENDAI), R. Kataoka, T. Nishiyama, Y. Ogawa, Y. Tanaka, M. Tsutsumi, K. Sato,
OS-O-05	10:30	10:45	Wide energy electron precipitation associated with pulsating aurorae: Arase-EISCAT conjugate observations and computer simulations	*Y. Obayashi (ISEE), Y. Miyoshi, S. Saito, K. Hosokawa, Y. Ogawa, S. Oyama, K. Asamura, Y. Kazama, S. Wang, S. Kasahara, S. Yokota, T. Mitani, T. Takashima, I. Shinohara, C. Jun, T. Hori, K. Keika, Y. Kasahara, S. Matsuda, F. Tsuchiya, A. Kumamoto, S. Nakamura, A. Matsuoka, A. Kero, P. Verronen, E. Turunen
	10:45	11:00	Coffee Break	
Chair Ryuho Kataoka (NIPR)				
OS-O-06	11:00	11:15	EISCAT_3D and Japan's Activities	*Y. Ogawa (NIPR), H. Miyaoka, S. Nozawa, T. Hashimoto, S. Oyama, K. Nishimura, T. T. Tsuda, H. Fujiwara, M. Tsutsumi, Y. Tanaka, T. Nishiyama, M. Fukizawa, Y. Miyoshi, K. Hosokawa, T. Nakamura, R. Fujii, "
OS-O-07	11:15	11:30	Adaptive sidelobe suppression to mitigate the number of discarded data samples with Hard Target Echo Removal functionality of the EISCAT_3D	*T. Hashimoto (NIPR), Y. Ogawa
OS-O-08	11:30	11:45	IMF dependence of the midnight thermospheric wind at an auroral latitude based on 9 winter measurements in Tromsø, Norway	*S. Oyama (ISEE), K. Hosokawa, H. Vanhamäki, A. Aikio, T. Sakanoi, L. Cai, I. I. Virtanen, K. Shiokawa, N. Nishitani, A. Shinbori, Y. Ogawa,
OS-O-09	11:45	12:00	How effective the mirror force makes a difference in atmospheric ionization and electron density?	*T. Tanaka (SOKENDAI), Y. Ogawa, Y. Katoh, M. Fukizawa, A. Artemyev, V. Angelopoulos, X. Zhang, "
OS-O-10	12:00	12:15	Impact of Solar Proton Events (SPEs) on thermospheric cooling emission"	*T. Bag (NIPR), Y. Ogawa, R. Kataoka
	12:15	13:00	Lunch Break	
Chair Ryuho Kataoka (NIPR)				
OS-O-11	13:00	13:15	Progress report on the imaging receiver system at the SuperDARN Hokkaido East radar (2023)	*N. Nishitani (ISEE), Y. Hamaguchi, T. Hori
OS-O-12	13:15	13:30	Multiple convection cells induced by in-front and off-front interactions between the obliquely northward IMF and the geomagnetic field	Takashi Tanaka (Kyushu Univ.)
OS-O-13	13:30	13:45	Interaction between the skeletal magnetic field and plasma dynamics in the solar wind-magnetosphere system under the northward IMF condition	*S. Fujita (ISM), T. Tanaka, M. Watanabe, D. Cai

OS-O-14	13:45	14:00	How does interchange reconnection proceed in the terrestrial magnetosphere?	*M. Watanabe (Kyushu Univ.), D. Cai, P. Xiong, S. Fujita, T. Tanaka
OS-O-15	14:00	14:15	A new look at the nightside convection system for oblique northward interplanetary magnetic field	*S. Liu (Kyushu Univ.), W. Masakazu, T. Takashi
	14:15	14:30	Coffee Break	
Chair Ryuho Kataoka (NIPR)				
OS-O-16	14:30	14:45	Cosmic-Ray Modulation After the Next Solar Maximum Suggested by the CALET Experiment	*S. Miyake (Ibaraki College), K. Munakata, Y. Akaike, C. Kato, R. Kataoka, S. Torii
OS-O-17	14:45	15:00	Cosmic ray observation at Syowa station in the Antarctic -- current status and near future plan --"	*C. Kato (Shinshu Univ.), S. Miyake, Y. Hayashi, R. Kataoka, M. Kozai, A. Kadokura, Y. Masuda, M. Matsumoto
OS-O-18	15:00	15:15	AMIDER as an Integrated Publication System for Research Data	*M. Kozai (PEDSC), Y. Tanaka, S. Abe, Y. Minamiyama, A. Shinbori
OS-O-19	15:15	15:30	Time variation of correction coefficients for atmospheric effects on cosmic ray count rate	*Y. Hayashi (Shinshu Univ.), C. Kato, Y. Masuda, M. Matsumoto, R. Kataoka, M. Kozai, A. Kadokura, S. Miyake, K. Munakata, "
OS-O-20	15:30	15:45	Analysis of temporal variation of cosmic ray intensity observed with global networks of neutron monitors and muon detectors	*K. Munakata (Shinshu Univ.)
	15:45	17:00	Poster Core Time	
	17:15	18:30	Icebreaker	

Poster presentations (15:45 – 17:00 on 15 Nov.)

Date: Wed. 15 November

ID	Title	Author(s)
OS-P-01	Observation of GPS phase fluctuations at high-latitude under low solar activity	*L. Chien-Chih (Chien Hsin University of Science and Technology)
OS-P-02	Discussion of the properties of an implicit-explicit Runge-Kutta scheme that strictly satisfies Gauss's laws for the full two-fluid plasma model	*J. Wehmeyer (SOKENDAI), T. Miyoshi
OS-P-03	Morphology of the ionospheric scintillations over the southern polar cusp station, Bharati	*S. P. Radhakrishna (ISEE), R. Choudhary, S. K. R, Y. Miyoshi
OS-P-04	Simultaneous Millimeter-wave Multi-line Observation at Syowa: Results in the First Year of Regular Observation"	*A. Mizuno(ISEE), H. Goto, T. Nakajima, T. Nagahama, G. Mizoguchi, R. Kataoka, Y. Tanaka, R. Koike, M. K. Ejiri, Y. Tomikawa, H. Suzuki, F. Tsuchiya, I. Murata, K. Y., I. E. I. R. Consortium
OS-P-05	Two-wavelength optical measurements on the Omega band aurora	*Y. Morii (ISEE), Y. Miyoshi, S. Kurita, K. Hosokawa, R. Nakamura, S. Oyama, Y. Ogawa, S. Imajo, S. Saito, K. Asamura
OS-P-06	Magnetospheric-density estimation from SuperDARN VLOS data to identify magnetospheric regions, by using FLR events in ionospheric or ground/sea backscatters	*H. Kawano (Kyushu Univ.), A. S. Yukimatu, N. Nishitani, Y. Tanaka, S. Saita, T. Hori

Interdisciplinary Session [IA] Arctic Research

Scopes

This session invites presentations from a wide range of topics related to the Arctic, including all disciplines of natural sciences, engineering, humanities and social sciences.

The Arctic is experiencing rapid environmental and amplified climatic changes, creating significant challenges for people living in this region and various impacts around the globe. We have been trying to elucidate the whole picture of these changes in the Arctic and their phenomena, but many open questions still remain. The Arctic change also has impacts on the global climate as well as ecosystems and human societies in higher-middle latitudes, which is also a scope of the session.

We welcome the contributions on the latest findings on the ongoing change in the Arctic, as well as its past change and perspectives on future change, improved understanding of processes and mechanisms, its impact on our society. We also welcome submissions from the results of the ArCS II Project.

Conveners: Hiroshi Miyaoka, Teruo Aoki, Kentaro Nishimoto, Hiroyuki Enomoto, Hironori Yabuki, and Kazutoshi Sato (NIPR)

Oral presentations (09:00 – 12:00, 13:30 – 14:30)

Date: Thu. 16 November

Chair: Hiroyuki Enomoto (NIPR)				
ID	Time		Title	Author(s)
IA-O-01	9:00	9:15	Direct measurements of turbulent fluxes in the ice-ocean boundary layer of the central Arctic Ocean: Application of the eddy-covariance method	*Yusuke Kawaguchi (The University of Tokyo), Benjamin Rabe, Mario Hoppman, Ivan Kzunetov, Alejandra Quintanilla-Zurita, Jacob Allerholt, Daniel Scholz
IA-O-02	9:15	9:30	Turbulent mixing feature above the Chukchi Plateau and the Canada Basin	*Eun Yae Son (The University of Tokyo), Yusuke Kawaguchi
IA-O-03	9:30	9:45	The Pan-Arctic Monthly Sea Ice–Atmosphere Drag Coefficient Dataset and its Applications	*Alexander Mchedlishvili (University of Bremen), Wolfgang Dorn, Christof Lüpkes, Alek Petty, Annete Rinke, Michel Tsamados, Gunnar Spreen
IA-O-04	9:45	10:00	Prediction of summer Arctic sea-ice distribution with a statistical method in 2023	*Motomu Oyama (NIPR), Hajime Yamaguchi, Noriaki Kimura
IA-O-05	10:00	10:15	Five-member ensemble wave forecast for the R/V Mirai 2023 Arctic Ocean expedition using different sea ice forcing	*Takehiko Nose (The University of Tokyo), Takuji Waseda, Tsubasa Kodaira, Xingkun Xu
IA-O-06	10:15	10:30	Spectral downshift of Three-wave system and Bichromatic waves under “sea ice”	*K. Sato, T. Waseda, T. Kodaira, Y. Fujiwara, T. Nose, T. Katsuno
	10:30	10:45	Coffee Break	
Chair: Kentaro Nishimoto (Tohoku University)				
IA-O-07	10:45	11:00	Navigational hazard by sea ice along the North East Passage	*Natsuhiko Otsuka (Hokkaido University), Shotaro Uto
IA-O-08	11:00	11:30	Reflections on Ten Years of Japan and the Arctic Council	*Edward Rhys Jones (University of Oxford)
IA-O-09	11:30	11:45	Conservation of the diversity of natural and cultural resources through the application of the Intergenerational Equity Principle in Arctic constitutions: comparative observation of Indigenous rights on “future” healthy environment in Norway and Alaska	*Sara Fusco (University of Lapland)
IA-O-10	11:45	12:00	Social Determinants of Health among American Indians and Alaska Natives ~Focusing on the narratives from retired Community Health Aides~	*Akari Sato (Tohoku University school of Medicine) Kumiko Nakano (Tohoku University school of Medicine) Megumu Iwamoto (Tohoku University school of Medicine) Junko Omori (Tohoku University school of Medicine)
	12:00	13:30	Lunch Break	

Chair: Teruo Aoki (NIPR)				
IA-O-11	13:30	13:45	Changes in Greenlandic coastal environments and their impact on Society – Overview of the 2023 field activities in Qaanaaq –	*Shin Sugiyama, Members of the ArCS II Coastal Environments Project
IA-O-12	13:45	14:00	Multi-component approach to marine food webs in Inglefield Bredning coastal ecosystems, northwestern Greenland	*Jean-Baptiste Thiebot, Mayuko Otsuki, Asuka Yushima, Monica Ogawa, Yuta Sakuragi, Hiroko Tajima, Makoto Tomiyasu, Evgeny Podolskiy, Kohei Hasegawa, Yoko Mitani, Yutaka Watanuki, Atsushi Yamaguchi, and Shin Sugiyama
IA-O-13	14:00	14:15	Methane Concentration at the outlet of Castner Glacier, Alaska Range, 2023	*Keiko Konya (JAMSTEC), Go Iwahana, Tomoaki Morishita, Jun Uetake, Yota Sato, Kazuhiro Ayukawa, Yasuhide Mikami, Tetsuo Sueyoshi
IA-O-14	14:15	14:30	Future climate change over the present-state marginal ice zone and the onset of Northern Sea Route in various MRI-ESM2.0 ScenarioMIP simulations	*Takuro Aizawa, Naga Oshima, Seiji Yukimoto and Yusuke Ushijima
	14:30	14:45	Coffee Break	
Chair: Hiroshi Miyaoka (NIPR)				
	14:45	15:30	3-min poster presentation (12 lightning talks from IA-P-01 to IA-P-12)	
	15:30	17:00	Poster Core Time	

Poster presentations (14:45 – 17:00)

Date: Thu. 16 November

ID	Title	Author(s)
IA-P-01	Study on the Mechanisms of Atmospheric and Oceanic Warming in the Arctic Based on Heat Budget Analysis of the Upper Ocean	*Fangzhou Zheng (The University of Tokyo), Masakazu Yoshimori
IA-P-02	Improved Arctic sea-ice reproductions and their impacts on atmospheric and oceanic fields in an initialized climate model	*Jun Ono (JAMSTEC), Yoshiki Komuro, Hiroaki Tatebe, Noriaki Kimura
IA-P-03	Roles of temperature and moisture in the recent Arctic relative humidity changes	*Masakazu Yoshimori (The University of Tokyo), Masatake E. Hori
IA-P-04	Consideration of whether a climatic regime shift has prevented the occurrence of a cold summer in northeast Eurasia since 2010	*Miku Amano (Mie University), Yoshihiro Tachibana, Yuta Ando
IA-P-05	Response of tropical climate to polar sea ice melt in climate model simulations	*Varunesh Chandra, and S. Sandeep
IA-P-06	Inter-comparison of the GCOM sea ice product on the Arctic ocean	*Rigen Shimada (Japan Aerospace Exploration Agency), Yukio Kurihara, Eri Yoshizawa
IA-P-07	Time series analysis of snow cover duration in the Northern Hemisphere during the recent 20 years	*Masahiro Hori (University of Toyama), Masashi Niwano, Rigen Shimada, Teruo Aoki
IA-P-08	Validation of ice thickness estimation method using GPR data at Qaanaaq Glacier in northwest Greenland	*Ken Sato (Hokkaido University), Shin Sugiyama
IA-P-09	Prokaryotic communities in subglacial outflows in the Alaska Range	*Jun Uetake (Hokkaido University), Tomoaki Morishita, Go Iwahana, Tetsuo Sueyoshi, Keiko Konya
IA-P-10	Pathways of freshwater from Greenland Ice Sheet and its impacts on sea ice and ocean	*Kazuya Kusahara (JAMSTEC), Yoshiki Komuro, Fuyuki Saito, Hiroaki Tatebe
IA-P-11	Arctic education using sea ice data from ADS (Arctic Data archive System)	*Yoshihiro Niwa, Akiko Mohri and Hironori Yabuki
IA-P-12	Characteristics of sea ice and causes of outflow in the southern Sea of Okhotsk	*Yusuke Kohama, Kazutaka Tateyama, Shotaro Uto, Koh Izumiyama

Interdisciplinary Session [IW] Whole atmosphere

Scopes

Scope: Earth's lower, middle, and upper atmosphere interact with one another through various kinds of vertical coupling processes induced by waves, physical and chemical processes, and energy input from the sun and magnetosphere. The viewpoints of both aeronomy and meteorology, and related interdisciplinary studies are essential to understanding a wide altitude region from the troposphere to the thermosphere comprehensively as "whole atmosphere". This session provides an opportunity to present and discuss observational, theoretical, and modeling studies focusing on a variety of phenomena in each layer or across multiple layers of the earth's atmosphere.

Conveners: Masaki Tsutsumi, Mitsumu K. Ejiri, and Takanori Nishiyama (NIPR)

Oral presentations (09:25 – 12:00)

Date: Thu. 16 November

Chair: Masaru Kogure (Kyushu University, NASA/GSFC)				
ID	Time		Title	Author(s)
	9:25	9:30	Opening remarks	
IW-O-01	9:30	9:45	LODEWAVE Phase II (LOng-Duration balloon Experiment of gravity WAVE over Antarctica)	*Yoshihiro Tomikawa (NIPR & SOKENDAI), Kaoru Sato (U. Tokyo), Yoshitaka Saito (JAXA/ISAS), Isao Murata (Tohoku U.), Naohiko Hirasawa (NIPR, SOKENDAI), Masashi Kohma (U. Tokyo), Kyoichi Nakashino (Tokai U.), Daisuke Akita (Tokyo Inst. Tech.), Takuma Matsuo (Meiji U.), Masatomo Fujiwara (Hokkaido U.), Takana Kaho (Shonan Inst. Tech.), Lihito Yoshida (SOKENDAI)
IW-O-02	9:45	10:00	Numerical simulation of orographic gravity waves observed over Syowa Station	*Masashi Kohma (The University of Tokyo), Kaoru Sato (The University of Tokyo), David C. Fritts (GATS Inc.), Thomas S. Lund (GATS Inc.)
IW-O-03	10:00	10:15	Momentum flux and hodograph analysis of inertia gravity waves over Syowa Station: comparison between the pansy radar and the ERA5 reanalysis	*Lihito Yoshida (SOKENDAI), Yoshihiro Tomikawa (NIPR & SOKENDAI), Mitsumu K. Ejiri (NIPR & SOKENDAI), Tsutsumi Masai (NIPR & SOKENDAI), Masashi Kohma (The University of Tokyo), Kaoru Sato (The University of Tokyo)
IW-O-04	10:15	10:30	Long-term meteor wind observations as by-products of routine measurements of PANSY radar at Syowa St. (69S), Antarctica	*Masaki Tsutsumi (NIPR & SOKENDAI), Taishi Hashimoto (NIPR & SOKENDAI), Koji Nishimura (Kyoto Univ.), Toru Sato (Kyoto Univ.), Masashi Kohma (Univ. of Tokyo), Kaoru Sato (Univ. of Tokyo)
	10:30	10:45	Break	
Chair: Takanori Nishiyama (NIPR & SOKENDAI)				
IW-O-05	10:45	11:00	Temperature diagnostics for the winter mesopause region estimated from N ₂ ⁺ (0,0) Meinel band at 1.1 μm observed by the NIRAS-2 and the NIRAC	*Takanori Nishiyama (NIPR & SOKENDAI), Masato Kagitani (Tohoku Univ.), Senri Furutachi (UEC), Takuo T. Tsuda (UEC), Yuki Iwasa (AIST), Yasunobu Ogawa (NIPR & SOKENDAI), Noora Partamies (Univ. Centre in Svalbard), Pater Dalin (Swedish Institute of Space Physics), Satonori Nozawa (ISEE, Nagoya Univ.), Fuminori Tsuchiya (Tohoku Univ.), Fred Sigernes (Univ. Centre in Svalbard)
IW-O-06	11:00	11:15	A plan for ground-based observation of noctilucent clouds in Antarctic region.	*Akiho Endo (Meiji Univ.), Hidehiko Suzuki (Meiji Univ.), Rina Kawakami (Meiji Univ.), Ayune Masuda (Meiji Univ.)
IW-O-07	11:15	11:30	Comparison between Ca ⁺ layer and sporadic E layer over Syowa Station	*Mitsumu K. Ejiri (NIPR & SOKENDAI), Takanori Nishiyama (NIPR & SOKENDAI), Takuo T. Tsuda (UEC), Katsuhiko Tsuno (RIKEN, RAP), Yuki Kojo (Kyoto Univ.), Akinori Saito (Kyoto Univ.), Michi Nishioka (NICT), Takuji Nakamura (NIPR & SOKENDAI), Makoto Abo (TMU), Takuya D. Kawahara (Shinshu Univ.), Takayo Ogawa (RIKEN, RAP), Satoshi Wada (RIKEN, RAP)
IW-O-08	11:30	11:45	Medium-Scale Traveling Ionospheric Disturbances Created by Primary Gravity Waves Generated by a Weather Front.	*Masaru Kogure (Kyushu University, NASA/GSFC), Min-Yang Chou (NASA/GSFC), Jia Yue (NASA/GSFC), Yuichi Otsuka (Nagoya Univ.), Huixin Liu (Kyushu Univ.), Fabrizio Sassi (NASA/GSFC), Sarah McDonald (Naval Research Laboratory), Jennifer Tate (Computational Physics, Inc.), Nicholas Pedatella (NCAR), Cora E. Randall (Univ. of Colorado), Lynn V. Harvey (Univ. of Colorado)
	11:45	12:00	Discussion	

Poster presentations (15:45 – 17:00 on 15 Nov.)

Date: Wed. 15 November

ID	Title	Author(s)
IW-P-1	A statistical analysis of gravity waves in the troposphere and lower stratosphere over the Antarctic observed by the PANSY radar	*Eiji Tokimori (The Univ. of Tokyo), Masashi Kohma (The Univ. of Tokyo), Kaoru Sato (The Univ. of Tokyo)
IW-P-2	Atmospheric wave variability in the upper mesosphere based on ground-based observations of OH airglows (1.20-1.35 μm) in Longyearbyen (78.1°N, 16.0°E)	*Senri Furutachi (UEC), Takanori Nishiyama (NIPR & SOKENDAI), Takuo T. Tsuda (UEC), Yasunobu Ogawa (NIPR), Masaki Tsutsumi (NIPR), Noora Partamies (UNIS), Satonori Nozawa (ISEE, Nagoya University)
IW-P-3	Seasonal variations in the potassium layer over Syowa station (69.0°S, 39.6°E), Antarctic	*Jinyi Hu (UEC), Takuo T. Tsuda (UEC), Mitsumu K. Ejiri (NIPR & SOKENDAI), Takanori Nishiyama (NIPR & SOKENDAI), Takuji Nakamura (NIPR & SOKENDAI), Katsuhiko Tsuno (RIKEN, RAP), Makoto Abo (TMU), Takuya D. Kawahara (Shinshu Univ.), Takayo Ogawa (RIKEN, RAP), Satoshi Wada (RIKEN, RAP)
IW-P-4	High resolution wind observations based on MF radar meteor echo measurements in the northern and southern high latitudes	*Masak Tsutsumi (NIPR & SOKENDAI)