2022 年度国立極地研究所・名古屋大学宇宙地球環境研究所研究集会 (NIPR/ISEE FY2022 Research meeting)

SuperDARN 研究集会 (SuperDARN Research meeting)

Date：Thursday, March 9th, 2023(R5) 10:00～17:15 JST (=UTC+9h)

Venue：National Institute of Polar Research (Tokyo), Room C401 ＋ Online (Zoom) (Hybrid)

NIPR access: https://www.nipr.ac.jp/english/outline/summary/access.html

Zoom access：https:…

（meeting ID：…、passcode：…）

プログラム/Program

10:00-10:02 Opening — Yukimatu, A.S. (NIPR)

Part I — Chair: Yukimatu, A.S. (NIPR)

10:02-10:20 SuperDARN current status and updates °Yukimatu, A.S. (NIPR), Nishitani, N.(Nagoya Univ./ISEE)

10:20-10:40 Current status of the SuperDARN Hokkaido Pair of radars °Nishitani, N (Nagoya Univ. ISEE)

10:40-11:00 Study of polarization and m-number characteristics of ULF waves in the Pc5 frequency range observed by SuperDARN radars

（SuperDARN で観測された Pc5 帯 ULF 波動の振動方向・m-number 特性の研究）

°Koki Morita, Nozomu Nishitani, Tomoaki Hori, Kazuhiro Yamamoto, Simon G. Shepherd, Pasha Ponomarenko

Part II — Chair: Mariko Teramoto (Kyutech (Kyushu Inst. of Tech.))

11:00-11:20 Preliminary results of Special Time (ST) observations in support of Arase conjunctions

°K. Hosokawa (UEC), T. Hori, N. Nishitani, A. S. Yukimatu, Y. Miyoshi, K. Shiokawa and I. Shinokara

11:20-11:40 Increasing the resolution of the FFT for more precise FLR-frequency determination in VLOS

°H. Kawano (Kyushu Univ.), A.S. Yukimatu, N. Nishitani, Y. Tanaka, S. Saita, T. Hori

11:40-12:00 Preparation of Arase-SuperDARN conjunction event analysis to investigate the spatial structure of FLR excited by substorms

°Mariko Teramoto (Kyushu Inst. of Technology)

（サブストームが励起するFLRの空間構造の解明を目指したArase-SuperDARN conjunctionイベントの解析に向けて）

Lunch break: 12:00-13:00

Part III — Chair: Keisuke Hosokawa (UEC)

13:00-13:20 Strong electric fields adjacent to auroral electro-jects and sub-auroral storm time electro-jets - implications of ionosphere / magnetosphere coupling on Space Weather impacts

°Hermann Opgenoorth and Audrey Schillings (Umea Univ., Sweden, Leicester Univ., UK)

13:20-13:40 Expanding diagnostic capabilities of SuperDARN CANADA radars with Borealis USRP system

°Pasha Ponomarenko, Kathryn McWilliams, Kevin Krieger, Marci Detwiller, Keith Kotyk, Remington Rohel, and Daniel Billett (Univ. of Saskatchewan, Canada)

13:40-14:00 The cause of the mid-latitude ionospheric plasma flow during storm recovery phase observed by the SuperDARN Hokkaido East Radar compared to AMPERE and TIEGCM data

°K. Omori, N. Nishitani, T. Hori (ISEE), Gangu Lu (NCAR), Brian J. Anderson, Sarah K Vines (JHU/APL)

14:00-14:20 Statistical study of mid- and low-latitude electric field response corresponding to the CW structure that develops during substorms

（サブストーム時に発達する CW 構造に応じた、中低緯度電場応答の統計的研究）

°Moe Hayashi (Kyushu Univ.), Akimasa Yoshikawa, Akiko Fujimoto, Shin Ohtani

Tea break: 14:20-14:30

Part IV Chair: Tomoaki Hori (ISEE)

14:30-14:50 Geomagnetic activity dependence and dawn-dusk asymmetry of thermospheric winds at high latitudes
°Shin-ichiro Oyama (Nagoya U./ISEE), Anita Aikio, Takeshi Sakanoi, Keisuke Hosokawa, Heikki Vanhamaki, Lei Cai, Ilkka Virtanen, Marcus Pedersen, Kazuo Shiokawa, Atsuki Shinbori, Nozomu Nishitani and Yasunobu Ogawa

14:50-15:10 Characteristics of ionospheric disturbances after the 2022 Hunga Tonga-Hunga Ha'apai volcanic eruption and their generation mechanism observed with GNSS-TEC and SuperDARN Hokkaido pair of radars
（SuperDARN 北海道-陸別第一・第二 HF レーダーと全球 GNSS-TEC 観測から捉えたトンガ火山大規模噴火後の電離圏擾乱の特徴とその発生機構について）
°Atsuki Shinbori (Nagoya U./ISEE), Yuichi Otsuka, Takuya Sori, Michi Nishioka, Septi Perwitasari, Takuo Tsuda, and Nozomu Nishitani

15:10-15:25 MI coupling under low Alfven Mach number solar wind:Results of magnetospheric observations and expectation of ionospheric observations
（太陽風のアルフヴェン・マッハ数が低い場合の磁気圏電離圏結合：衛星観測の成果と電離圏観測への期待）
°Masaki N. Nishino (Univ. of Tokyo)、 Tomoaki Hori、 Hiroshi Hasegawa, Yukinaga Miyashita, Motoharu Nowada, Ryuho Kataoka

15:25-15:45 Pilot reanalysis of the magnetosphere-ionosphere system and future prospects
（磁気圏電離圏系再解析データ作成に向けた取り組みと今後の展望）
°S. Nakano (ISM), S. Fujita, R. Kataoka, A. Kadokura, Y. Tanaka, A. Nakamizo, K. Hosokawa, S. Saita

Part V Chair: Nozomu Nishitani (ISEE)

15:45-16:05 Statistical analysis of mid-latitude F region ionospheric echoes by the Hokkaido SuperDARN HF radar
（SuperDARN 北海道-陸別第一 HF レーダーを用いた中緯度電離圏 F 領域エコー発生分布の統計解析）
Itsuki Furuhashi, Nozomu Nishitani, and Tomoaki Hori (Nagoya Univ. ISEE)

16:05-16:25 SAPS electric field and particle boundaries as observed by SuperDARN and Arase
°T. Hori (ISEE), Y. Miyoshi, S. Nakamura, Y. Kasaba, T. Nakagawa, M. Kitahara, S. Matsuda, N. Nishitani, S. G. Shepherd, J. M. Ruohoniemi, A. Kumamoto, F. Tsuchiya, Y. Kasahara, K. Asamura, C.-W. Jun, Y. Kazama, S.-Y. Wang, S. W. Y. Tam, K. Keika, S. Kasahara, S. Yokota, A. Matsuoka, and I. Shinohara

16:25-16:45 Latitudinal distribution of the Sub-Auroral Polarization Streams observed by the SuperDARN Hokkaido Pair of (HOP) radars
（SuperDARN 北海道-陸別第一・第二レーダーで観測された SAPS の緯度特性）
°Nozomu Nishitani and Tomoaki Hori (Nagoya Univ. ISEE)

Part VI Chairs: Yukimatu. A.S. and Nishitani, N.

16:45-17:13 Discussion

17:13-17:15 Closing

(17:30- 懇親会？(possibly))