

SuperDARN Workshop 2022 Program

(Pre-recorded meeting)

Session 1: Working Group Report

	Presentation Title	Affiliation	Presenter
1	Spacecraft Working Group update	University of Leicester	Jennifer, Carter
2	Scheduling Working Group Report	Dartmouth College	Evan, Thomas
3	DAWG Annual Report	University Centre in Svalbard	Emma, Bland
4	DDWG 2022 update	University of Saskatchewan	Kevin, Krieger

Session 2: Latest Project

	Presentation Title	Affiliation	Presenter
1	SENSU SuperDARN Japanese Antarctic Research Project Phase X and future direction	National Institute of Polar Research	Akira, Sessai
2	Introduction on the Chinese Meridian Project	NSSC, CAS	Jiyao, Xu
3	IMCP – Developing a Global Capability for Space and Atmospheric Study	NSSC, CAS	Weining, William, Liu
4	Development of Middle Latitude High Frequency Coherent Scattering Radar Network in China	NSSC, CAS	Jiaojiao, Zhang
5	Low latitude Hainan HF radar of Meridian Project II	IGGCAS, CAS	Lianhuan, Hu
6	auroraXcosmic project: space weather watch from Antarctica	National Institute of Polar Research	Ryuho, Kataoka
7	Progress in the Mid Latitude Agile high-frequency Radars of Chinese Meridian Project (Phase II)	NSSC, CAS	Ailan, Lan

Session 3: Plasma Flow and Convection

	Presentation Title	Affiliation	Presenter
1	Comparison of spacecraft and SuperDARN based high-latitude ionospheric electric field models	Lancaster University	Lauren, Orr
2	Spatial relationship of SAPS and particle boundaries as observed by Arase	ISEE, Nagoya Univ.	Tomoaki, Hori
3	SuperDARN HOP radars observation of sub-auroral flows associated with Stable Auroral Red (SAR) Arc structure during the 4 Nov 2021 storm event	ISEE, Nagoya Univ.	Nozomu, Nishitani
4	Multiple instrument observations of plasma and convection properties of a typical space hurricane event in the Northern Hemisphere	Shandong University, Weihai	Sheng, Lu
5	The Dependence of Cold and Hot Patches on Local Plasma Transport and Particle Precipitation in Northern Hemisphere Winter	Shandong University, Weihai, China	Duan, Zhang
6	The cause of westward flows in the mid-latitude ionosphere during the recovery phase of geomagnetic storms using SuperDARN Hokkaido East Radar and AMPERE	ISEE, Nagoya University	Kohei, Omori
7	A small and nearly fully closed Earth's magnetosphere for strongly northward interplanetary magnetic field	Shandong University Weihai	Xiang-Yu, Wang
8	On the Acceleration of Polar Cap Patches Entering the Nightside Auroral Oval	Institute of Space Sciences, Shandong University	Zanyang, Xing
9	Dependencies of GPS scintillation variations on the ionospheric plasma drift and TEC rate of change around the dawn sector of the polar ionosphere	Shandong University	Yong, Wang
10	Geospace Concussion: Global reversal of ionospheric vertical plasma drift in response to a sudden commencement	Virginia Tech	Xueling, Shi
11	Multiple technique observations of the hot and classical patches	Shandong University	YuZhang, Ma
12	Ionospheric outflow associated with SAPS observed by Arase and SuperDARN	ISEE, Nagoya Univ.	Nozomu, Nishitani
13	Dusk-Dawn Asymmetries in SuperDARN Convection Maps	Lancaster University	Maria-Theresia, Walach

Session 4: Multi-scale Coupling

	Presentation Title	Affiliation	Presenter
1	Joint LIDAR and HF radars trace the ionosphere/thermosphere coupling process over Zhongshan Station (ZHO), Antarctica	Polar Research Institute of China	Xiangcai, Chen
2	Poynting flux from SuperDARN and Swarm: How much are we underestimating?	University of Saskatchewan	Daniel, Billett
3	HMB Variations Measured by SuperDARN During the Extremely Radial IMFs	PRIC	Zhiwei, Wang
4	Mid-latitude comparisons of multi-scale ion and neutral velocity observations with general circulation model outputs.	Lancaster University	Elliott, Day
5	Storm Time MSTIDs in Mid Latitude SuperDARN and GPS TEC	Virginia Tech	Ian ,Kelley
6	A “wave-like” evolution of polar cap patches modulated by the magnetotail reconnections in wide magnetic local time regions	Institute of Space Sciences, Shandong University, Weihai, China	Qing-He, Zhang
7	MSTIDs with a magnetically active source from SANA E HF radar	Rhodes University	Tsige, Atilaw

Session 5: HF propagation

	Presentation Title	Affiliation	Presenter
1	Testing E-CHAIM ionospheric model with RISR incoherent scatter radars	U of Saskatchewan, Saskatoon, SK, Canada	Sasha, Koustov
2	An examination of SuperDARN backscatter modes using machine learning guided by ray-tracing	Virginia Tech	Bharat, Kunduri
3	Occurrence rates of SuperDARN ground scatter echoes and electron density in the ionosphere	U of Saskatchewan, Saskatoon, SK, Canada	Sasha , Koustov
4	Coordinate Registration of SuperDARN Radar Backscatter using 3D Raytracing	JHU/APL	Alex, Chartier
5	Towards an empiric model of HF propagation at very high latitudes	University of Saskatchewan, Canada	Pasha, Ponomarenko

Session 6: Radar Technique

	Presentation Title	Affiliation	Presenter
1	Investigation of a synchronous sampling mode on TIGER-3 for the determination of Sea State parameters	La Trobe University, Australia	Darrell, Elton

Session 7: Data Processing and Analysis

	Presentation Title	Affiliation	Presenter
1	Classification of SuperDARN Backscatter Observations using Machine Learning Algorithms	Virginia Tech	Shibaji, Chakraborty
2	A method for improved placement of the SuperDARN Heppner-Maynard boundary	Lancaster University	Adrian, Grocott
3	The Clustering algorithm of SuperDARN backscatter echoes based on deep learning	Hangzhou Dianzi University	Xing, Kong
4	Mode and m-number analysis of Pc5 waves observed by the SuperDARN Hokkaido East radar	Institute for Space-Earth Environmental Research, Nagoya University	Koki, Morita
5	On utilising spectral width of HF radar echoes for constraining equatorward extent of the high-latitude plasma circulation pattern	University of Saskatchewan, Canada	Pasha, Ponomarenko
6	Statistical characteristics of midlatitude ionospheric F-region backscatter observed by the SuperDARN Jiamusi radar	NSSC, CAS	Wei, Wang
7	SuperDARN radar estimates of thermospheric neutral density	SANSA	Michael, Kosch

Session 8: Data Archive and Distribution

	Presentation Title	Affiliation	Presenter
1	Enhancing FAIRness of Data in SuperDARN: NSSDC's Efforts for Open Science	NSSC, CAS	Xu, Xin

*Notice: The order of the pre-recorded presentation in this file may not consistent with the display on the website exactly.