

Paper No.	Paper Title
	Authors (Speaker , Corresponding Author*)

11/17 (Tue) Day 2 21:00 - 24:00

POSTER 1A (Chair: Jyrki Manninen & Yusuke Ebihara)

P1-01	Application of Magneto-Impedance Sensor to Geomagnetic Field Measurements for Constructing Distributed Arrays of Small Instruments (DASI)
	Hiroshi Nomura* , Masahito Nosé, Hitoshi Aoyama, Takeshi Kawano, and Masafumi Hirahara
P1-02	Observations of Ionospheric Parameters using EISCAT Radar and Its Comparison with model predictions
	Geletaw B.* , Melessew N., Baylie D., Seydie M.
P1-03	Molecular ion upflow observed by the EISCAT radar in conjunction with the Arase (ERG) satellite during the September 7, 2017 magnetic storm
	Masayoshi Takada* , Kanako Seki, Yasunobu Ogawa, Kunihiro Keika, Satoshi Kasahara, Shoichiro Yokota, Tomoaki Hori, Kazushi Asamura, Yoshizumi Miyoshi, Iku Shinohara
P1-04	In Situ and Remote Observations of High-Energy Electrons in Pulsating Aurora Using All-Sky Imagers, Van Allen Probes, and PFISR
	R. N. Troyer* , A. N. Jaynes, S. L. Jones, R. G. Michell, M. Samara, S.R. Kaeppler, R. Varney, A. Reimer, and D. L. Hampton
P1-05	Electron Scattering Effect of VLF Transmitters on L Shells < 3.0
	Man Hua* , Wen Li, Qianli Ma, and Binbin Ni
P1-06	The Applicability of the Lowest Part of the ELF Range (<100 Hz) for Remote Sensing the Atmosphere-Ionosphere-Magnetosphere System
	Tamás Bozóki* , Gabriella Sători, Péter Steinbach, József Bór, Tamás Pető, Earle Williams, Irina Mironova
P1-07	Mid-Latitude Ionospheric Response to the Super Geomagnetic Storm of March 2015
	Sushanta K. Mondal* , Sujay Pal, Mahabub Rahaman , and Subrata K.Midya
P1-08	Occurrence Characteristics of Electromagnetic Ion Cyclotron Waves at Sub-Auroral Ground Station Maitri
	Aditi Upadhyay* , Bharati Kakad, Amar Kakad, Yoshiharu Omura and Ashwini K. Sinha
P1-09	Monitoring of Seismo-Ionospheric Changes and Meteorological Influences on the Ionosphere from a Low altitude Station at Cooch Behar, India
	Prabir Kumar Haldar* , Bakul Das and Sujay Pal

P1-10	Observations of Low-Frequency Electromagnetic Waves and Auroras at Kola Peninsula and Scandinavia During ERG Flybys
	A. G. Demekhov* , B. V. Kozelov, T. A. Popova, A. G. Yahnin, A. S. Nikitenko, Yu. V. Fedorenko, A. V. Roldugin, E. E. Titova, and J. Manninen
P1-11	Simultaneous Spacecraft and Ground-Based Observation of QP Emissions with Two Modulation Periods
	Mychajlo Hajoš* , Andrei Demekhov, Dmitry Pasmanik., Ondřej Santolík, Alexandr Nikitenko, and Jyrki Manninen
P1-12	Analysis of VLF Band Waves in the Sq Current System Observed by S-310-44 Sounding Rocket
	Taketoshi Miyake* , Ryuichiro Nakamura, Keigo Ishisaka, Takumi Abe, Atsushi Kumamoto and Makoto Tanaka
P1-13	Turbulent Signatures in the Polar Cusp Ionosphere using sounding rocket mission observations
	F. Di Mare* , J. I. Moen, L. B. N. Clausen, and A. Spicher
P1-14	Characteristics of ELF/VLF Emissions From Multi-Point Ground and Space Conjugated Events
	C.Martinez-Calderon* , Y.Katoh, J.Manninen, O.Santolík, Y.Kasahara, S.Matsuda, A.Kumamoto,F.Tsuchiya, A.Matsuoka, M.Shoji, M.Teramoto, I.Shinohara, K.Shiokawa and Y.Miyoshi
P1-15	Is a Near-Equatorial Free Energy Source Necessary to Generate Latitudinally Limited Equatorial Noise?
	Kyungguk Min* , Kaijun Liu, Richard E. Denton, Scott A. Boardsen, and František Němec
P1-16	Conjugate Observations of QP Emissions by Kannuslehto Station and RBSP
	B. Bezdekova* , F. Nemeč, J. Manninen, G. B. Hospodarsky, O. Santolík , W. S.Kurth, and D. P. Hartley
P1-17	Long-lasting strong whistler echo trains associated with a North-European winter storm
	I. Kolmašová* , O. Santolík, J. Manninen, J. Lichtenberger, R. Lán, and L. Uhlíř
P1-18	First Results of the Simultaneous Observations of Auroral Hiss at Three Stations Located at Auroral and Polar Latitudes
	Yury V. Fedorenko, Alexander S. Nikitenko* , Jyrki Manninen, Natalia G. Klemenova, Alexey V. Larchenko, Sergey V. Pilgaev, Liudmila I. Gromova, and Olga M. Lebed
P1-19	High-Latitude Auroral Hiss: Observations and Modelling
	Alexander S. Nikitenko* , Olga M. Lebed, Yury V. Fedorenko , Jyrki Manninen , Natalia G. Kleimenova , and Liudmila I. Gromova
P1-20	New findings using VLF and SMR measurements at middle and high- latitudes
	Edith Macotela* , Jorge Chau, Mark Clilverd, and Jyrki Manninen

P1-21	Van Allen Probes Science Gateway
	Giuseppe Romeo* , Aleksandr Ukhorskiy, and Tom Sotirelis
P1-22	The Use of Ground-Detected Whistler-Mode Chorus Waves to Monitor the Source Population for Radiation Belts Modeling
	L. Juhasz* , J. Lichtenberger, Y. Omura, R. Friedel and M. Clilverd
P1-23	The Angular Distribution of Whistler-Mode Chorus and the Importance of Plumes in the Chorus-Hiss Mechanism
	David P. Hartley* , Lunjin Chen, Craig A. Kletzing, Richard B. Horne, Ondrej Santolík
P1-24	Dynamics of Relativistic Electrons in the Slot Region during Geomagnetically Quiet Times: Losses due to Various Wave-Particle Interactions Versus Source from Cosmic Ray Albedo Neutron Decay(CRAND)
	Zheng Xiang* , Xinlin Li, Binbin Ni, M.A.Temerin, Hong Zhao, Kun Zhang and Leng Ying Khoo
P1-25	Direct detection of nonlinear generation process of electromagnetic ion cyclotron emissions observed by the Arase spacecraft
	M. Shoji* , Y. Miyoshi, L. M. Kistler, K. Asamura, Y. Kasaba, S. Matsuda, Y. Kasahara, A. Matsuoka, M. Teramoto, T. Takashima, and I. Shinohara
P1-26	Pitch-Angle Diffusion of Energetic Protons Upon Their Interaction With EMIC Waves: Comparison of Calculation Results With THEMIS and NOAA/POES Data
	Tatiana A. Popova* , Andris A. Lyubchich, Andrei G. Demekhov and Alexander G. Yahnin
P1-27	Pitch Angle Scattering by Electrostatic Electron Cyclotron Harmonic Waves Based on Arase Observations
	M. Fukizawa* , T. Sakanoi, Y. Miyoshi, Y. Kazama, Y. Kasahara, S. Matsuda, A. Matsuoka, S-Y. Wang, S. W-Y. Tam

POSTER 1B (Chair: Mark A. Clilverd & Satoshi Kurita)

P1-28	Observations of Triggered EMIC Emissions by ARASE: 2017/11/14 and 2017/10/24 case studies
	B. Grison* , A. Hendry, M. Shoji, O. Santolik, Y. Miyoshi, K. Asamura, A. Matsuoka, Y. Kasahara, and I. Shinohara
P1-29	Rapid Precipitation of Relativistic Electron by EMIC Rising-Tone Emissions Observed by the Van Allen Probes
	S. Nakamura* , Y. Omura, C. Kletzing, and D. N. Baker
P1-30	Radiation Belt Relativistic Electron Depletions During Intense Geomagnetic Storms
	Sneha A. Gokani* , Desheng Han, and R. Selvakumaran
P1-31	Statistical Study of EMIC Wave-Related Electron Precipitation: Ground-Based Magnetometer and Subionospheric VLF/LF Radio Measurements
	A. Hirai* , F. Tsuchiya, T. Obara, Y. Kasaba, Y. Katoh, H. Misawa, K. Shiokawa, Y. Miyoshi, S. Kurita, and Martin Connors
P1-32	Spatial Distributions of EMIC Waves Depending on Geomagnetic Conditions During the Van Allen Probes and ERG era
	C.-W Jun* , Y. Miyoshi, C. Yue, J. Bortnik, L. Lyons, Y. Nishimura, C. Kletzing, Y. Kasahara, Y. Kasaba, S. Matsuda, M. Shoji, F. Tsuchiya, A. Kumamoto, A. Matsuoka, and I. Shinohara
P1-33	Electromagnetic Ion Cyclotron (EMIC) Waves in the Lunar Wake: Simultaneous observations by ARTEMIS P1 and P2
	Biswajit Ojha* , Satyavir Singh, Gurbax S. Lakhina, and Yoshiharu Omura
P1-34	SuperSID@Paris-Observatory: results and perspectives
	Briand C.* , Inturi S., Cecconi B.
P1-35	Energetic Electron Precipitations Showing ULF Modulation of VLF/LF Standard Radio Waves
	Hiroyo Ohya* , Takuya Miyashita, Fuminori Tsuchiya, Mitsunori Ozaki, Yoshizumi Miyoshi, Kazuo Shiokawa, Nozomu Nishitani, Martin Connors, and Simon G. Shepherd

P1-36	Relative Contribution of ULF and Chorus Waves to the Radiation Belt Variation
	N. Takahashi* , K. Seki, Mei-Ching Fok, Yihua Zheng, Yoshizumi Miyoshi, Satoshi Kasahara, Kunihiro Keika, David Hartley, Yoshiya Kasahara, Yasumasa Kasaba, Nana Higashio, Ayako Matsuoka, Shoichiro Yokota, Tomoaki Hori, Iku Shinohara
P1-37	Study of the Excitation Mechanism of Storm-Time Pc5 ULF Waves by Ring Current Ions Based on the Drift-Kinetic Simulation
	T. Yamakawa* , K. Seki, T. Amano, N. Takahashi, and Y. Miyoshi
P1-38	Roles of Magnetospheric Convection on Nonlinear Drift Resonance Between Electrons and ULF Waves
	Li Li, Yoshiharu Omura, Xu-Zhi Zhou*, Qiu-Gang Zong, Sui-Yan Fu, Robert Rankin, Alexander W. Degeling
P1-39	Acceleration of Energetic Electrons by the Auroral Kilometric Radiation
	Veronika S. Grach* , Andrei G. Demekhov
P1-40	Automatic Identification on Lower-Band Chorus Elements with Mask Region-based Convolutional Neural Network
	Jieh-Yun Chang* , Kai-Yu Chang, Yu-Tung Chang, Chieh-Hsi Chen, Yu-Wei Chen, and Jih-Hong Shue
P1-41	Global Modeling of the Storm-Time Magnetosphere With Empirical Ring Current Pressure
	V. G. Merkin* , K. A. Sorathia, G. K. Stephens, A. T. Michael, M. I. Sitnov, A. Y. Ukhorskiy, J. Garretson, J. G. Lyon
P1-42	Nonlinear effects in the evolution of Weibel instability
	M. A. Garasev* , E. V. Derishev
P1-43	Probing a Post Monsoon Mesoscale Convective System and Upward Electric Discharges Over Indian Low Latitude Region
	Adarsh Dube* , Ajeet K. Maurya, Rajesh Singh
P1-44	The Effect of Plasma Boundaries on the Dynamic Evolution of Relativistic Radiation Belt Electrons
	Dedong Wang* , Yuri Y. Shprits, Irina S. Zhelavskaya, Alexander Y. Drozdov, Nikita A. Aseev, Frederic Effenberger, Angelica Castillo, and Sebastian Cervantes
P1-45	A statistical study of the relationship between Pc1 wave propagation and ionospheric plasma density structures
	Hyangpyo Kim* , Kazuo Shiokawa, Jaeheung Park, Yoshizumi Miyoshi, and Junga Hwang
P1-46	Pi2 pulsations observed by the Arase satellite inside and outside the plasmasphere
	M. Teramoto* , A. Matsuoka, Y. Kasahara, Y. Kasaba, A. Kumamoto, F. Tsuchiya, S. Matsuda, M. Nosé, R. Nomura, S. Kurita, M. Shoji, S. Imajo, Y. Miyoshi, and I. Shinohara

P1-47	Observations of the Source Region of Whistler Mode Waves in Magnetosheath Mirror Structures
	Naritoshi Kitamura* , Yoshiharu Omura, Satoko Nakamura, Takanobu Amano, Scott A. Boardsen, Narges Ahmadi, Olivier Le Contel, Per-Arne Lindqvist, Robert E. Ergun, Yoshifumi Saito, Shoichiro Yokota, Daniel J. Gershman, William R. Paterson, Craig J. Pollock, Barbara L. Giles, Christopher T. Russell, Robert J. Strangeway, and James L. Burch
P1-48	Machine Learning for Quantifying Effects of Seasonal Variation and Natural Phenomenon on the D-region Ionosphere
	David Richardson* , and Morris B. Cohen
P1-49	Study of Electron PAD evolution using Van Allen Probes
	B. Veenadhari* , Megha Pandya, Y. Ebihara, and S. G. Kanekal
P1-50	The ballooning instability: MHD and kinetic approaches
	Dmitri Klimushkin* , Pavel Mager, and Alexander Rubtsov
P1-51	Experimental evidence of transverse Alfvénic resonator for Pc4 waves: A Van Allen Probes Case Study
	Olga S. Mikhailova* , Pavel N. Mager, Olga V. Mager and Dmitri Yu. Klimushkin
P1-52	Dispersion analysis of foreshock waves on ion-to-electron scales using MMS spacecraft data
	Yasuhito Narita*
P1-53	Laboratory Modelling of Plasma Waves Excitation and Transformation to Electromagnetic Emission in a Mirror-Confined Plasma
	M. Viktorov* , B. Eliasson, S. Golubev, D.C. Speirs, D. Mansfeld, K. Ronald, A.D.R. Phelps

11/18 (Wed) Day 3 09:00 - 12:00

POSTER 2A (Chair: Jacob Bortnik & Masafumi Hirahara)

P2-01	Chorus wave interactions with ultra-relativistic electrons
	Hayley J. Allison* , Yuri Y. Shprits, Irina S. Zhelavskaya, and Dedong Wang
P2-02	On How High-Latitude Chorus Waves Tip the Balance Between Acceleration and Loss of Relativistic Electrons
	Dedong Wang* , Yuri Y. Shprits
P2-03	Alfven wave parallel electric field in the dipole model of the magnetosphere
	Danila V. Kostarev* , Pavel N. Mager, and Dmitriy Yu. Klimushkin
P2-04	Plasmasheet Dynamics and the Radiation Belts: Preliminary Results from Stormtime Simulations Using GAMERA-RCM
	K. Sorathia* , V. Merkin, A. Ukhorskiy, A. Michael, and F. Toffoletto
P2-05	Anomalous Trapping of Low Pitch Angle Electrons by Coherent Whistler Mode Waves
	Masahiro Kitahara* and Yuto Katoh
P2-06	Study of the Pitch Angle Scattering of Small Pitch Angle Electrons by Coherent Whistler-Mode Waves
	G. Ishizawa* , Y. Katoh, M. Kitahara, A. Kumamoto, T. Kimura, and Y. Kawazura
P2-07	Evolution of Relativistic Electron Fluxes affected by oblique chorus emissions
	Yikai Hsieh* , Yuko Kubota, and Yoshiharu Omura
P2-08	Electron Pitch-Angle Scattering by Oblique Whistler Waves: Comparison between Test Particle Simulation and Quasi-Linear Theory
	Fumiko Otsuka* , Kaiti Wang, Tohru Hada, and Shuichi Matsukiyo
P2-09	Combined Scattering of Radiation Belt Electrons Caused by Cyclotron, Landau and Counce Resonance with Low-Frequency Hiss
	Juan Yi , Binbin Ni*, Song Fu, Danny Summers, Ruoxian Zhou, Xudong Gu
P2-10	Boris-type particle solvers in particle-in-cell (PIC) simulation
	Seiji Zenitani* , Kato N. Tsunehiko, Takayuki Umeda
P2-11	Some Results of Theoretical Study on Quasiperiodic VLF Emissions
	P.A. Bespalov*
P2-12	Chorus Emissions Triggered by the Shot Electromagnetic Noise
	P.A. Bespalov* , and O.N. Savina

P2-13	Particle simulation of whistler mode triggered emissions in a uniform magnetic field
	Yuya Fujiwara* , Yoshiharu Omura, Yikai Hsieh , Takeshi Nogi , and Satoko Nakamura
P2-14	Electromagnetic Particle Simulation of VLF Triggered Emissions
	Takeshi Nogi* , Yoshiharu Omura, and Satoko Nakamura
P2-15	Modeling of the Fine Structure of Chorus Emissions Using the Nonlinear Growth Theory
	Miroslav Hanzelka* , Ondřej Santolík, Yoshiharu Omura, Ivana Kolmašová, and Craig A. Kletzing
P2-16	Conjugate Observations of Pc1 Waves on the Ground and Onboard ERG and Van Allen Probes and Related Variations of Energetic Ion Flux
	A.G.Demekhov* , T.A.Popova, A.G.Yahnin, S.Yokota, S.Kasahara, K.Keika, T.Hori, F.Tsuchiya, A.Kumamoto, Y.Kasahara, A.Matsuoka, M.Shoji, Y.Miyoshi, I.Shinohara, and T.Raita
P2-17	A Statistical Characteristics of Pc1 Pulsations Observed at Low-Latitude
	Jiwoo Kim* , Junga Hwang, Hyangpyo Kim, and YuYi
P2-18	Arase observation of electron pitch angle scattering by Electrostatic Cyclotron Harmonic waves
	S. Kurita* , Y. Miyoshi, S. Kasahara, S. Yokota, Y. Kasahara, S. Matsuda, A. Matsuoka, K. Keika, T. Hori, and I. Shinohara
P2-19	What Do Multicomponent VLF Wave Records Tell on Entry Altitudes of Guided Propagation in the Plasmasphere?
	P. Steinbach*, L. Juhász , O. Ferencz, J. Bór , and J. Lichtenberger
P2-20	MLT Dependence of Contribution of Charge Exchange Loss to the Storm Time Ring Current Decay: Van Allen Probes Observations
	S. Y. Li* , H. Luo
P2-21	Coherent D Region Ionospheric Sounding with Loran C
	Steven A. Cummer* , Zilong Qin, Fanchao Lyu , and Mingli Chen
P2-22	Characteristics of Whistler Source Lightning
	Steven A. Cummer* , János Lichtenberger, and Dávid Koroncay
P2-23	CANVAS: A CubeSat Mission to Measure the Distribution of VLF Energy Injected Into the Magnetosphere by Ground-Based Sources
	Riley A. Reid* , Robert A. Marshall, David M. Malaspina, Scott E. Palo
P2-24	Nonlinear Analysis of Generation Region of Whistler-Mode Chorus Waves in the Inner Magnetosphere Under Various Solar Wind Conditions
	Hiroki Shimamoto* , Yusuke Ebihara, Yoshiharu Omura, Takuya Ikeda, Takashi Tanaka and Mei-Ching Fok

P2-25	Spectral Broadening of NWC Transmitter Signal
	Zhiyang Xia* , and Lunjin Chen
P2-26	An Analysis of Slow-Shock and Slow Shock-Like Structures Observed in the 2D Hybrid Magnetic Reconnection Simulations
	Nehpreet K. Walia* , Kanako Seki, and Takanobu Amano
P2-27	High-Frequency Wave Generation near the Electron Diffusion Region
	Kyunghwan Dokgo* , Kyoung-Joo Hwang, James L. Burch, Eunjin Choi, Peter H. Yoon, David G. Sibeck, and Daniel B. Graham
P2-28	Energetic Electron Acceleration in Unconfined Reconnection Jets
	G. Chen* , H. S. Fu, and Y. Zhang, Xiaocan Li, Y. S. Ge, A. M. Du, C. M. Liu, Y. Xu

POSTER 2B (Chair: Binbin Ni & Takanobu Amano)

P2-29	PIC Simulation on non-Linear Developments of Lower-Hybrid Instabilities Driven by Energetic Ions
	T. Kotani* , M. Toida, T. Moritaka and S. Taguchi
P2-30	Variation of Dayside Chorus Waves Associated with Solar Wind Dynamic Pressure Based on MMS Observations
	Rongxin Tang* , Qianshui Peng, Haimeng Li, Kai Yuan and Yuhao Wang
P2-31	Modulation Of Whistler-Mode Waves By Ultra-Low Frequency Wave In a Magnetic Hole: MMS Observation
	He Zhang , Rongxin Tang*, Kai Yuan, Yuhao Wang, X.H. Deng and M Zhou
P2-32	Evolution of Turbulence in the Kelvin–Helmholtz Instability in the Terrestrial Magnetopause
	F. Di Mare* , L. Sorriso-Valvo, A. Retinò , F. Malara and H. Hasegawa
P2-33	Observations of Waves and Pitch Angle Distributions of Electrons at Dipolarization sites
	K. Wang* , F. Otsuka, T. Hada, C. H. Lin
P2-34	An unexpected whistler wave generation around dipolarization fronts
	H. S. Fu* and G. Chen
P2-35	Monitoring Energetic Lightning in Southeast Asia using ELF magnetic field observations in Malaysia
	Y. Hobara* , H. Kikuchi, C. Gomes , A. Mohamed , M. Stock and K. Shiokawa
P2-36	F- Layer Critical Frequency deduced from Lightning Whistlers
	S.Hirai, Y.Hobara* , S Kanazawa and J.L.Pinçon
P2-37	Medium Frequency Broadcasting Waves and Other Emissions Observed by the Arase Satellite (Hectometric Line Spectra)
	Kozo Hashimoto* , Fuminori Tsuchiya, Atsushi Kumamoto, Yoshiya Kasahara, Yoshizumi Miyoshi, Yuichi Otsuka, Atsuki Shinbori, Tatsuhiro Yokoyama, Isamu Nagano, Ayako Matsuoka
P2-38	Relativistic electron precipitation associated with pulsating aurora observed by VLF radio propagation: A case study
	F.Tsuchiya* , A.Hirai, T.Obara, H.Misawa, S.Kurita, Y.Miyoshi, K.Shiokawa, M.Connors, M.Ozaki, Y.Kasahara, A.Kumamoto, Y.Kasaba, A.Matsuoka, M.Shoji, I.Shinohara
P2-39	The strong emissions in the ionosphere associated with the fluxes of the energetic electrons and temperature variations above the thunderstorms
	Jan Błęcki* , Jan Słomiński, Roman Wronowski, Sergey Savin, Rafał Iwański , Michel Parrot, and Roger Haagmans
P2-40	High Resolution Plasmaspheric Electron Density Measurement on the Van Allen Probes
	David Koroncay* , Janos Lichtenberger, and William Kurth

P2-41	Correlations of low-energy electrons with chorus emissions observed by ERG: An event study
	Y. Kazama* , H. Kojima, Y. Miyoshi, Y. Kasahara, H. Usui, I. Shinohara, B.-J. Wang, S.-Y. Wang, S. W. Y. Tam, T.-F. Chang, K. Asamura, A. Kumamoto, F. Tsuchiya, Z. Kasaba, S. Matsuda, M. Shoji, A. Matsuoka, M. Teramoto, and T. Takashima
P2-42	Recurrent Inner Magnetosphere Chorus Waves Observation Following Corotating Interaction Region
	Livia R. Alves* , Graziela B. da Silva, L. A. da Silva, Antonio L. Padilha, David G. Sibeck, Shrikanth G. Kanekal, J. Bernard. Blake , Craig Kletzing, Daniel Baker
P2-43	Ring current proton heating by magnetosonic waves: Comparisons between test particle simulations and quasi-linear theory calculations
	Ruoxian Zhou , Song Fu*, Binbin Ni, Xing Cao, Man Hua, and Xudong Gu
P2-44	The lower ionospheric anomalous response to the Solar Flares: revealed using Very Low Frequency waves
	Ajeet K. Maurya* , Rajesh Singh
P2-45	Numerical Study of Proton Dynamics in South Atlantic Anomaly using Test Particle Simulations
	Kirolosse M. Girgis* , Tohru Hada, and Shuichi Matsukiyo
P2-46	Analysis of Plasmaspheric Hiss by Arase Spacecraft
	Tomoya Ito* , Satoko Nakamura, Yoshiharu Omura, and Hirotsugu Kojima
P2-47	Field-Aligned Electron Density Distribution in the Inner Magnetosphere Obtained From Coordinated Observations of Arase and Van Allen Probes
	Yuki Obana* , Yukinaga Miyashita, Naomi Maruyama, Atsuki Shinbori, Masahito Nosé, Yuichi Otsuka, Atsushi Kumamoto, Fuminori Tsuchiya, Shoya Matsuda, Ayako Matsuoka, Yoshiya Kasahara, Yoshizumi Miyoshi, Iku Shinohara, William S. Kurth, Craig A. Kletzing, Charles W. Smith and Robert J. MacDowall
P2-48	Isolated Electrostatic Potential Structures Observed by the Arase Satellite
	Tomoe Taki* , Hirotsugu Kojima, Yoichi Kazama, Yoshiya Kasahara, Yoshizumi, Miyoshi, Iku Shinohara, Hideyuki Usui, Shoya Matsuda, Wang S.-Y., Tam Sunny W.Y., and Ayako Matsuoka
P2-49	Identifying the Physical Mechanisms to Explain the Extreme Plasmaspheric Erosion for the September 2017 Storm
	Naomi Maruyama , Andrew Menz, Yuki Obana, Mei-Ching Fok, Christian Ferradas, Atsuki Shinbori, Kumiko K. Hashimoto, Mariangel Fedrizzi, Masahito Nosé, Yuichi Otsuka, Nozomu Nishitani, Tomoaki Hori, Atsushi Kumamoto, Fuminori Tsuchiya, Shoya Matsuda, Ayako Matsuoka, Yoshiya Kasahara, Akimasa Yoshikawa, Yoshizumi Miyoshi and Iku Shinohara
P2-50	Quantifying Outer Belt Electron Losses due to Wave-Particle Interactions: A Multiscale Modeling Approach
	A. T. Michael , K. A. Sorathia*, A. Y. Ukhorskiy, and V. G. Merkin
P2-51	Automated Detection and Extraction of ELF/VLF Signals using Mask Regional Convolutional Neural Network
	Vijay Harid* , Mark Golkowski, Chao Liu , Yan Pang, and Morris Cohen

P2-52	Evaluation of Automatic Electron Density Determination by using a Convolutional Neural Network
	S. Matsuda* , T. Hasegawa, A. Kumamoto, F. Tsuchiya, Y. Kasahara, Y. Miyoshi, Y. Kasaba, A. Matsuoka, I. Shinohara
P2-53	Development of the chip implemented as high-speed current detection circuits for particle sensors
	Motoyuki Kikukawa* , Hirotsugu Kojima, Kazushi Asamura, and Yoshifumi Saito
P2-54	From Van Allen to REAL
	Thomas Sotirelis* , Robyn Millan, John Sample, and Drew Turner
P2-55	Foreshock Transient Generated ULF Waves in the Magnetosphere
	Hui Zhang* , Xiaochen Shen, Liangliang Zhao, Qiugang Zong, Quanqi Shi, and Boyi Wang
P2-56	Identifying the Driving Process of IPDP-type EMIC Waves
	Aaron T. Hendry* , Ondřej Santolík, Craig A. Kletzing, Ian R. Mann, Kazuo Shiokawa, Martin Connors