

The 12th International Conference on Substorms (ICS-12)

Program

10-14 November 2014

Ise-Shima Royal Hotel, Japan

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This conference is sponsored by:

International Exchange Program of the National Institute of Information and Communications Technology (NICT)

Institute of Space and Astronautical Science, Japan Aerospace Exploration Agency (ISAS/JAXA)

JSPS Strategic Young Researcher Overseas Visits Program for Accelerating Brain Circulation

National Institute of Polar Research (NIPR)

Research Institute for Sustainable Humanosphere (RISH), Kyoto University as the 268th Symposium on Sustainable Humanosphere

Solar-Terrestrial Environment Laboratory (STEL), Nagoya University

This conference is held in cooperation with:

Society of Geomagnetism and Earth, Planetary, and Space Sciences (SGEPSS)

SPeCIMEN (Specification and Prediction of the Coupled Inner-Magnetospheric Environment) of VarSITI (Variability of the Sun and Its Terrestrial Impact)

Conveners: Masaki Fujimoto and Kazuo Shiokawa

Science Organizing Committee (SOC):

O. Amm, E. Donovan, M.-C. Fok, M. Fujimoto, K.-H. Glasmeier, A. Kadokura, M. Lessard, M. Lester, R. Nakamura, Y. Omura, M. I. Panasyuk, A. Runov, O. Santolik, J.-A. Sauvaud, K. Shiokawa (chair), D. Sibeck, X. Wang

Local Organizing Committee (LOC):

M. Fujimoto, M. Hirahara, T. Hori, A. Ieda, S. Imada, R. Kataoka, K. Keika, S. Machida, S. Masuda, Y. Miyashita, Y. Miyoshi, N. Nishitani, S. Nozawa, Y. Otsuka, S. Oyama, K. Seki, K. Shiokawa (chair), I. Shinohara, M. Shoji, T. Umeda, A. Yukimatu

General Information

Conference Site

The conference will take place at:

Ise-Shima Royal Hotel
Shima,
939-6 Aza-Kasatori, Matoya, Isobe-cho, Shima-shi, Mie 517-0295
TEL: +81-599-55-2111, FAX: +81-599-55-2688

Incoming messages will be placed on information boards in the registration area. In case of emergency in Japan, please call 080-3065-7143 (Kazuo Shiokawa, LOC Chair).

Registration

All participants must register, paying registration fees. There are the following three categories for registration:

Professional	35,000 yen
Student	25,000 yen
Accompanying Person*	10,000 yen

*Not attending the scientific program but wishes to participate the Ice breaker and the Banquet.

Name Badge

Access to the meeting rooms is restricted to registered ICS-12 participants. It is therefore absolutely necessary to wear the name badge provided at registration at all times, including the time during the Banquet.

Medical Service

Prefectural Shima Hospital 県立志摩病院
Tel: 0599(43)0501
15 minutes by car.

If you feel ill and wish to see a doctor, you will have to go to a hospital. House call doctors or private practitioners are not common in Japan. Please ask the hotel staff to call the hospital on your behalf. They will let them know of your visit in advance and the hospital might be able to provide an English speaking assistant.

ICS-12 Special Issue on Earth Planets and Space

The ICS-12 SOC encourages the participants to submit their presentations to the ICS-12 special issue on the open-access refereed journal "Earth, Planets, and Space" (EPS) (<http://www.earth-planets-space.org/>). This special issue solicits papers from ICS-12 that widely cover various topics of substorms, i.e., substorm processes in the tail, interaction between the tail and the inner magnetosphere and ionosphere, substorm currents and its dynamics, and the role of substorm in geospace energetics, as well as the role of MHD and kinetic instabilities in substorms. Other substorm-related researches are also welcomed, such as storm-substorm relationship, ULF/ELF/VLF waves, and non-Earth substorm-like features.

The article processing charge (APC) for letters (8 page maximum) contributed to the special issue is only 100 Euros. Full papers or Technical Reports can also be submitted and the normal APC is assessed: 200 Euros for members and 600 Euros for non-members.

Deadline for submission: March 31, 2015

Expected publication date: November 30, 2015

Guest Editors: Kazuo Shiokawa (chief), Masaki Fujimoto, and Olaf Amm

Only new and original content can be published in EPS; EPS does not accept review papers. For those who plan to write a review paper, please contact SOC chair, Kazuo Shiokawa (shiokawa at stelab.nagoya-u.ac.jp). We plan to make such review papers as invited papers on another journal "Progress in Earth and Planetary Science (PEPS)" under Japan Geoscience Union, and combine the papers in EPS and PEPS into a special issue book.

Oral Program

Nov. 10 (Mon)

8:30-8:45 opening remarks

1. The role of substorm in geospace energetics

Chair: Kazuo Shiokawa

- 8:45-9:45 Why does the aurora flare up? (tutorial) Akasofu, S.-I.
- 9:45-10:05 A missing variable in the solar wind-magnetosphere-ionosphere coupling studies (invited) Sergeev, V.A., D.A. Sormakov, and V. Angelopoulos
- 10:05-10:20 Magnetic energy and internal energy for the expansion phase of auroral substorms Kataoka, R., S. Fujita, and T. Tanaka
- 10:20-10:35 Solar wind-magnetosphere coupling and magnetospheric response mechanisms: substorms, steady magnetospheric convection and sawtooth events Walach, M.-T., and S. E. Milan
- 10:35-11:00 Break

Chair: Kazuo Shiokawa

- 11:00-11:20 The role of the substorm in solar wind-magnetosphere-ionosphere coupling (invited) Milan, S. E., J. C. Coxon, L. B. N. Clausen, B. J. Anderson, and H. Korth
- 11:20-11:35 Statistical characteristics of particle injections throughout the equatorial magnetotail Gabrielse Christine, Vassilis Angelopoulos, Andrei Runov, and Drew L. Turner
- 11:35-11:50 Thermospheric density perturbations in response to substorms Clausen, L. B. N., S. E. Milan, and A. Grocott
- 11:50-12:05 Session 1 Summary Shiokawa, K.
- 12:05-13:30 Lunch

2.The role of MHD and kinetic instabilities in substorms

Chair: Jonathan Rae

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|-------------|---|--|
| 13:30-13:50 | The Role of Kinetic Instabilities in Plasma Sheet and Substorm Dynamics (invited) | Pritchett, P. L. |
| 13:50-14:05 | Possible link of drift wave in the near-Earth plasma sheet to preonset auroral arc | Motoba, T. and S. Ohtani |
| 14:05-14:20 | Fine-scale electrodynamic structure behind auroral vortex street | Hosokawa, K. , S. E. Milan, M. Lester, A. Kadokura, and N. Sato |
| 14:20-14:35 | A stereo observation of the rayed arc formation on the initial brightening of an auroral substorm | Sakaguchi, K., K. Hosokawa, Y. Hiraki, Y. Ogawa, A. Kadokura, S. E. Milan, and M. Lester |
| 14:35-14:50 | Auroral vortex street and Alfvén resonant modes related to the onset of substorm | Hiraki, Y. |
| 14:50-15:20 | Break | |

Chair: Keisuke Hosokawa

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|-------------|---|---|
| 15:20-15:40 | Coupling between reconnection and interchange instability (invited) | Birn, J., Y.-H. Liu, W. S. Daughton, M. Hesse, and K. Schindler |
| 15:40-15:55 | Ionospheric flow structures associated with auroral beading at substorm auroral onset | Bea Gallardo-Lacourt, Y., Nishimura, L. R. Lyons, J. M. Ruohoniemi, E. Donovan, V. Angelopoulos, K. A. McWilliams, and N. Nishitani |
| 15:55-16:10 | Growth of auroral arc structures through Alfvénic magnetosphere-ionosphere coupling | Watanabe, T.-H. |

16:10-16:25	The instability that drives the substorm onset arc	Rae, I.J., N. M. E. Kalmoni, C. E. J. Watt, K. R. Murphy, I. R. Mann, and H. U. Frey
16:25-16:55	Break	
Chair: Masaki Fujimoto		
16:55-17:10	On the lesser known one-hour periodicity of substorms	Keiling, A., M. M. Kuznetsova, M. Hesse, and V. Angelopoulos
17:10-17:25	Destabilization of 2D magnetic current sheets by resonance with bouncing electron - a new theory	Fruit, G., A. Tur, P. Louarn, and Z. Ferret
17:25-17:40	Characteristic roles of magnetic reconnection to magnetospheric dynamics	Ogino, T.
17:40-17:55	Session 2 summary	Fujimoto M.
17:55-19:30	Dinner	
19:30-21:30	Poster Session 1	

Nov. 11 (Tue)

3. Substorm-related processes in the tail

Chair: Shinobu Machida

8:30-9:30	Magnetospheric substorms as revealed by recent multi-spacecraft observations (tutorial)	Angelopoulos, V.
9:30-9:45	Evolution of the plasma jets in the near Earth magnetotail	Nakamura, R., A. Alexandrova, D. Schmid, W. Baumjohann, M. Volwerk, and N. Kahr
9:45-10:00	Current system around the dipolarization front and its relation to substorm current wedge:	Pu, Z., Z. Yao, and J. Liu

Multi-spacecraft observations

10:00-10:15	Asymmetric braking and dawnward diversion of dipolarization fronts: the ion reflection effects	Zhou, X.-Z., V. Angelopoulos, J. Liu, A. Runov, and D.-X. Pan
10:15-10:45	Break	
Chair: Shinichi Ohtani		
10:45-11:05	ARTEMIS observations of plasmoids and related structures (invited)	Kiehas, S.A., Angelopoulos, V., Runov, A., and Li, S.-S.
11:05-11:20	Magnetotail stretching and thinning in satellite and laboratory experiment	Petrukovich, A. A., A. V. Artemyev, E. V. Yushkov, A. G. Frank, and R. Nakamura
11:20-11:35	Ionospheric ions during Pseudo-breakup auroras	Parks, G. K., E. S. Lee, M. Fillingim, Y. B. Cui and S. Y. Fu
11:35-11:50	Favorable conditions for energetic ion and electron acceleration during magnetic reconnection	Imada, S., M. Hirai, and M. Hoshino
11:50-12:05	Empirical modeling 3D force-balanced pressure and magnetic field structures during substorm growth phase	Yue, C., C.-P. Wang, S. Zaharia, L. Lyons, T.-S. Hsu, Y. Wang, X. Xing, M. Henderson, V. Angelopoulos, T. Nagai, and A. T. Y. Lui
12:05-13:30	Lunch	
Chair: Andrei Runov		
13:30-13:50	Plasma sheet low-entropy flow channels: high-resolution global MHD simulations using the LFM model (invited)	Merkin, V. G., M. Wiltberger, J. G. Lyon, and M. Sitnov
13:50-14:10	Recent results on Geotail observations of magnetotail reconnection (invited)	Shinohara, I.
14:10-14:25	Catapult current sheet relaxation model	Machida, S., Y. Miyashita, A. Ieda, M.

	confirmed by THEMIS observations	Nosé, V. Angelopoulos, and J. P. McFadden
14:25-14:40	Relative timing of substorm-associated processes in the near-earth magnetotail and development of auroral onset arc	Miyashita, Y., A. Ieda, S. Machida, Y. Hiraki, V. Angelopoulos, J. P. McFadden, H. U. Auster, S. B. Mende, E. Donovan, and D. Larson
14:40-14:55	Session 3 summary	Runov, A.
14:55-15:25	Break	

4. ULF/ELF/VLF waves

Chair: Nozomu Nishitani

15:25-15:40	Exploring substorms with ULF waves (invited)	Rae, I. J., K. R. Murphy, I. R. Mann, C. E. J. Watt, D. K. Milling, C. Forsyth, and N. M. E. Kalmoni
15:40-15:55	Evidence for the acceleration of auroral electrons by shear Alfvén waves during substorm onset	Watt, C. E. J., I. J. Rae, A. P. Walsh, K. R. Murphy, H. U. Frey, R. Rankin, I. R. Mann, and A. N. Fazakerley
15:55-16:10	Statistical study of Pi2 pulsations observed by the SuperDARN Hokkaido radar	Teramoto, M., and N. Nishitani
16:10-16:25	Ionosphere-ground transition of Pi2 polarisation near the plasmopause	Ponomarenko, P. V., and C. L. Waters
16:25-16:55	Break	

Chair: Yoshiharu Omura

16:55-17:15	Interplanetary Alfvénic and ULF waves and their geomagnetic effects (invited)	Tanskanen, E. I., K. Snekvik, J. Guo, and R. Hynönen
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17:15-17:30	A study of ULF wave excitation by drift-bounce resonance due to ion injection into the inner magnetosphere	Seki, K., T. Amano, Y. Miyoshi, S. Saito, Y. Matsumoto, Y. Miyashita, K. Keika, and T. Umeda
17:30-17:45	Pi1B pulsations observed on the ground and in space by GOES and THEMIS satellites at substorm onset	Lessard, M., Ge, Y. , Mouikis, C., Engebretson, M. J. and Singer, H. J.
17:45-18:00	Session 4 summary	Omura, Y.
18:00-19:30	dinner	
19:30-20:30	Auroral research history from 1866 to today (evening talk)	Akasofu, S.-I.

Nov. 12 (Wed)

5. Storm-substorm relationship

Chair: Marc Lessard

8:30-9:30	The role of substorms in radiation belt particle enhancements (tutorial)	Baker, D.N.
9:30-9:45	Spectrum characteristics of electromagnetic ion cyclotron triggered emissions and associated energetic proton dynamics	Shoji, M., and Y. Omura
9:45-10:00	Importance of successive substorm activities to cause the large flux enhancement of the outer belt via chorus wave-particle interactions	Miyoshi, Y., and R. Kataoka
10:00-10:15	SAMPEX observation of relativistic electron precipitations associated with diffuse auroras	Kurita, S., A. Kadokura, Y. Miyoshi, Y. Sato, H. Misawa, and A. Morioka
10:15-10:35	Break	

Chair: Masafumi Shoji

10:35-10:50	Generatin mechanism of whistler-mode chorus emissions	Omura, Y.
10:50-11:05	Simulation study of the generation mechanism of whistler-mode chorus and hiss-like emissions	Katoh, Y., and Y. Omura
11:05-11:20	Magnetospheric substorms and the problem of the acceleration of relativistic electrons of the outer electron radiation belt	Antonova, E. E., I. P. Kirpichev, M. O. Riazantseva, V. O. Barinova, V. G. Vorobjev, O. I. Yagodkina, O. V. Kozyreva, V. V. Vovchenko, I. L. Ovchinnikov, and M. V. Stepanova
11:20-11:35	Extremely intense ELF magnetosonic waves during substorms	Tsurutani, B., B. Falkowski, J. Pickett, O. Verkhoglyadova, O. Santolik, and G. Lakhina
11:35-11:50	Relativistic (MeV) electron acceleration at geosynchronous orbit during continuous substorm/HILDCAA events	Hajra, R., Bruce T. Tsurutani, Ezequiel Echer, and Walter D. Gonzalez
11:50-12:00	Promotion on ICS-13 at New Hampshire	Lessard, M.
12:00-13:00	Lunch	
13:00-18:30	Excursion	
19:00-21:00	Banquet	

Nov. 13 (Thu)

Chair: Mei-Ching Fok

8:30-8:50	Multi-point observations of particle injections during storms and substorms (invited)	Henderson, M. G.
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8:50-9:05	Energetic protons and oxygen ions observed by Van Allen probes/RBSPICE during storm-time substorms	Keika, K., K. Seki, M. Nosé, L. J. Lanzerotti, M. Gkioulidou, and A. Ukhorskiy
9:05-9:20	The role of substorm in initiating the SMC periods	Dubyagin, S., and N. Ganushkina
9:20-9:40	The role of plasmashet injections in ring current formation: Results from the Van-Allen Probes, THEMIS, Cluster and IMAGE (invited)	Brandt, P. C., M. Gkioulidou, A. Y. Ukhorskiy, V. G. Merkin, S. Ohtani, M. Sitnov, and D. G. Mitchell
9:40-9:55	High latitude continuation of the ordinary ring current, storm-substorm dynamics and discrete auroral arcs	Antonova, E. E., V. G. Vorobjev, I. P. Kirpichev, O. I. Yagodkina, O. V. Kozyreva, V. V. Vovchenko, M. O. Riazantseva, M. S. Pulinets, S.S.Znatkova, I. L. Ovchinnikov, I. A. Kornilov, T. A. Kornilova, and M. V. Stepanova
9:55-10:10	Nightside magnetospheric current circuit: Time constants of the solar wind-magnetosphere coupling	Ohtani, S., and T. Uozumi
10:10-10:25	Session 5 summary	Fok, M.-C.
10:25-10:50	Break	

6. Interaction between the tail and the inner magnetosphere and ionosphere

Chair: Yusuke Ebihara

10:50-11:10	Coupling between flow bursts and waves that lead to substorm onset (invited)	Nishimura, Y., L. R. Lyons, M. J. Nicolls, D. L. Hampton, R. G. Michell, M. Samara, W. A. Bristow, E. F. Donovan, E.
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		Spanswick, V. Angelopoulos, and S. B. Mende
11:10-11:25	Substorm pre-onset and onset: Progress and near-term challenges in the THEMIS era	Lynos, L., Y. Nishimura, Y. Zou, B. Gallardo-Lacourt, V. Angelopoulos, A. Runov, and E. Donovan
11:25-11:40	Characterizing the auroral substorm: A superposed epoch analysis of the aurora through the substorm growth and expansion phases	Murphy, K. R., Larry Kepko, C. E. J. Watt, I. J. Rae, D. G. Sibeck, Ian R. Mann, Eric Donovan, E. Spanswick, and B. Jackel
11:40-11:55	Properties of localized polar cap flow enhancements and their connection to PBIs and substorms	Zou, Y., Y. Nishimura, L. R. Lyons, K. Shiokawa, E. F. Donovan, J. Michael Ruohoniemi, K. A. McWilliams, and N. Nishitani
11:55-12:15	Evaluating the role of pre-onset streamers in substorm onset and development (invited)	Kepko, L.
12:15-13:30	Lunch	
Chair: Kyle R. Murphy		
13:30-13:50	Recent progress in understanding of the interaction of the plasmashet with the inner magnetosphere (invited)	Toffoletto, F. R., J. Yang, R. A. Wolf, and S. Sazykin
13:50-14:05	Thermodynamic and spectral properties of the DFB/bubble plasma population in the near-earth magnetotail	Runov, A., V. Angelopoulos, C. Gabrielse, J. Liu, D. L. Turner, and X. Z. Zhou
14:05-14:20	Response of the earths distant magnetotail to varying solar wind	Sibeck, D. G.

conditions

14:20-14:35 Tailward leap of magnetic reconnection: A THEMIS case study Ieda, A., T. Nishimura, Y. Miyashita, and S. Machida

14:35-14:50 Solar wind magnetosphere coupling during a long sequence of BBF's preceding substorm onset Palin, L., C. Jacquey, H. Opgenoorth, M. Connors, J.-A. Sauvaud, and R. Nakamura

14:50-15:15 Break

Chair: Pavlo Ponomarenko

15:15-15:35 Effects of tailward retreat of oscillatory flow braking (invited) Panov, E. V., R. Nakamura, W. Baumjohann, M. V. Kubyshkina, V. A. Sergeev, and V. Angelopoulos

15:35--15:50 Substorm simulation 1: To what extent the substorm observation are reproduced numerically? Ebihara, Y., T. Tanaka, T. Kikuchi, M. Den, and S. Fujita

15:50-16:05 Substorm simulation 2: Growth phase convection and current generating the quiet arc Tanaka, T., M. Den, S. Fujita, Y. Ebihara, T. Kikuchi, and K. Hashimoto

16:05-16:20 Substorm simulation 3: Change of the plasma sheet force balance causing the sudden onset Den, M., T. Tanaka, S. Fujita, Y. Ebihara, T. Kikuchi, and K. Hashimoto

16:20-16:45 Break

Chair: Rumi Nakamura

16:45-17:00 Connecting the tail, inner-magnetosphere and ionosphere with the two-way coupled BATSRUS-CRCM-RBE model Fok, M.-C., N. Y. Buzulukova, A. Glocer, S.-H. Chen, E. A. MacDonald, B. J. Anderson, P. W. Valek, L. J. Lanzerotti, M. Gkioulidou, H. Spence,

and P. Dixon

17:00-17:15	Magnetosphere-ionosphere equilibrium destabilisation model: A new substorm onset paradigm	Mann, I. R.
17:15-17:30	Substorm onset process: Ignition of auroral acceleration and related substorm phases	Morioka, A., Y. Miyoshi, Y. Kasaba, N. Sato, A. Kadokura, H. Misawa, Y. Miyashita, and I. Mann
17:30-17:45	A quantitative measure of substorms	Frey, H. U.
17:45-18:00	Session 6 summary	Nakamura, R.
18:00-19:30	Dinner	
19:30-21:30	Poster Session 2	

Nov. 14 (Fri)

7. Non-Earth substorm-like features

Chair: David Sibeck

8:30-8:50	MESSENGER observations of large dayside flux transfer events: Do they drive Mercury's substorm cycle? (invited)	Imber, S. M. and J. A. Slavin
8:50-9:10	Dynamic injections in the magnetospheres of the solar system (invited)	Mauk, B. H.
9:10-9:25	Session 7 summary	Sibeck, D.
9:25-9:55	Break	

8. Substorm currents and its dynamics

Chair: Yoshimasa Tanaka

9:55-10:15	Large-scale field-aligned current dynamics during the substorm cycle (invited)	Clausen, L. B. N., S. E. Milan, J. B. H. Baker, J. M. Ruohoniemi, S. Wing, S. Ohtani, and B. J. Anderson
10:15-10:30	Substorm current wedge in MHD simulations	Birn, J., and M. Hesse
10:30-10:45	The deformation of magnetospheric magnetic field by twin-loop substorm current wedge	Nikolaev, A. V., V. A. Sergeev, M. V. Kubishkina, N. A. Tsyganenko, H. Singer, and V. Angelopoulos
10:45-11:00	In-situ spatio-temporal measurements of the detailed azimuthal substructure of the substorm current wedge	Forsyth, C., A. N. Fazakerley, I. J. Rae, C. E. J. Watt, K. Murphy, J. A. Wild, T. Karlsson, R. Mutel, C. J. Owen, R. Ergun, A. Masson, M. Berthomier, E. Donovan, H. U. Frey, J. Matzka, C. Stolle, and Y. Zhang
11:00-11:15	Combining ground and near space magnetic measurements of the substorm current wedge	Connors, M., R. L. McPherron, B. Anderson, H. Korth, C. T. Russell, and X. Chu
11:15-11:30	Energy conversion processes for the magnetosphere-ionosphere coupling convection and sudden enhancement of a field-aligned current at the substorm onset	Fujita, S., T. Tanaka, Y. Ebihara, and M. Den
11:30-11:45	On the role of the shape of the magnetotail current sheet in the substorm triggering	Kubyshkina, M., V. Semenov, N. Tsyganenko, D. Kubyshkina, and N. Partamies
11:45-12:00	Field aligned current study during the solar declining- extreme minimum of 23 solar cycle	Victor, N. Jeni, C. Panneerselvam, and C. P. Anil Kumar

12:00-13:30 Lunch

Chair: Martin Connors

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| 13:30-13:50 | The large-scale current system during auroral substorms (invited) | Gjerloev, J. W. and R. A. Hoffman |
| 13:50-14:05 | Instantaneous analysis of ionospheric electrodynamic of a complete substorm bulge | Amm, O., A. Grocott, M. Lester, S. Milan, L. Kepko, R. L. McPherron, J. Weygand, R. Nakamura, V. Sergeev, S. Apatenkov, J. Birn, and T. Pulkkinen |
| 14:05-14:20 | Spatiotemporal variations of eastward propagating auroral vortices observed during the substorm | Tanaka, Y., Y. Ogawa, A. Kadokura, H. Miyaoka, B. Gustavsson, N. Partamies, D. Whiter, U. Brändström, and C.-F. Enell |
| 14:20-14:35 | Overshielding at mid-equatorial latitudes during storms and substorms as observed with SuperDARN, HF Doppler sounder and magnetometers | Kikuchi, T., K. K. Hashimoto, Y. Ebihara, Y. Nishimura, B. Veenadhari, T. Hori, N. Nishitani, I. Tomizawa and T. Nagatsuma |
| 14:35-14:50 | Substorm electric fields at nightside low latitude observed by HF Doppler sounder | Hashimoto, K. K., T. Kikuchi, I. Tomizawa, and T. Nagatsuma |
| 14:50-15:20 | Break | |

Chair: Olaf Amm

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| 15:20-15:35 | Relationship between PC index and interplanetary electric field EKL under actual conditions of varying solar wind | Troshichev, O., and D. Sormakov |
| 15:35-15:50 | Theta aurora as an energy release in the polar cap region | Obara, T. and T. Tanaka |
| 15:50-16:05 | Dynamic morphology of dayside pulsating aurora observed at South | Kadokura, A. , T. Motoba, Y. Ogawa, Y. |

	Pole Station	Ebihara, and A. T. Weatherwax
16:05-16:20	Electric field generation in the geomagnetic tail	Podgorny, A., S. Minami, and I. Podgorny
16:20-16:35	Positive feedback between changes in the electrical conductivity of the ionosphere and the intensity of field-aligned currents during substorms	Mishin, V. V., V. M. Mishin, Y. Karavaev, Z. Y. Pu, C. Wang, S. Lunyushkin, and A. Moiseev
16:35-16:50	Session 8 summary	O. Amm
16:50-17:00	Concluding remarks	

Poster Program

Nov. 10 (Mon) 19:30-21:30

P-MON01	Solar cycle dependence and energy coupling during continuous substorm/HILDCAA events	Hajra, R., E. L. Echer, B. T. Tsurutani, and W. D. Gonzalez
P-MON02	Ionospheric effects on the lower-thermospheric wind in the vicinity of nightside poleward expanding aurora after substorm onset	Oyama, S., J. Kurihara, T. T. Tsuda, K. Shiokawa, Y. Miyoshi, and B. J. Watkins
P-MON03	Geospace at the time of substorms and SEP spectra	Tripathi, S. C., P. A. Khan, A. K. Gwal, and Purohit, P. K.
P-MON04	Auroral fragmentation into patches during the substorm recovery phase	Shiokawa K., A. Hashimoto, T. Hori, K. Sakaguchi, Y. Ogawa, E. Donovan, E. Spanswick, M. Connors, Y. Otsuka, S.-I. Oyama, S. Nozawa, and K. McWilliams
P-MON05	Effect of magnetic curvature on drift Alfvén waves revisited	Higuchi, Y.
P-MON06	Role of interplanetary shock impact angles in substorm triggering	Oliveira, D., and J. Raeder
P-MON07	Bimodal behaviour of magnetotail depolarization fronts: A statistical study	Schmid, D., M. Volwerk, R. Nakamura, F. Plaschke, and W. Baumjohann
P-MON08	How plasma sheet temperature varies with upstream solar wind conditions and affects substorm intensity.	Forsyth, C., C. E. J. Watt, I. J. Rae, A. N. Fazakerley, P. Boakes, and R. Nakamura
P-MON09	Time development of the dipolarization front and its interactions with dipole region obtained by 2-1/2 dimensional full-particle simulation	Uchino, H., and S. Machida
P-MON10	Investigation of solar wind dependence of the plasma sheet	Saeki, R., K. Seki, Y. Saito, I. Shinohara, Y. Miyashita, S.

	based on long-term Geotail/LEP data evaluation	Imada, and S. Machida
P-MON11	Statistical study of VLF/ELF emissions at subauroral latitudes in Athabasca, Canada.	Martinez C. C., K. Shiokawa, Y. Miyoshi, M. Ozaki, I. Schofield, and M. Connors
P-MON12	Importance of ionospheric beating for the formation of Pc1 pearl structures based on ground observations in Canada, Russia and Japan	Jun, C.-W., K. Shiokawa, I. Schofield, M. Connors, I. Poddelsky, and B. Shevtsov
P-MON13	Test particle simulation of relativistic electron microbursts induced by EMIC triggered emissions in a dipole magnetic field	Kubota, Y., Y. Omura, and D. Summers
P-MON14	Sub-packet structures in EMIC triggered emissions observed by the THEMIS probes	Nakamura, S., Y. Omura, M. Shoji, D. Summers, and M. Nose
P-MON15	Low frequency electrostatic supersolitons in magnetized nonthermal plasma	Rufai, O. R., R. Bharuthram, S. V. Singh and G. S. Lakhina
P-MON16	ULF waves related to substorm onset and its interaction with energetic particles	Ren, J., Q. G. Zong, Y. F. Wang, and X. Z. Zhou
P-MON17	Correlated temporal variations of AKR, substorm current wedge and global Pi 2	Uozumi, T., A. Yoshikawa, S. Ohtan, S. Imajo, D. G. Baishev, A. V. Moiseyev, B. M. Shevtsov, and K. Yumoto
P-MON18	High-time resolution correlation analysis between VLF/ELF chorus waves and pulsating aurora observed at Athabasca, Canada	Sunagawa, N., K. Shiokawa, Y. Miyoshi, R. Kataoka, M. Ozaki, K. Sawai, I. Schofield, and M. Connors
P-MON19	Automatic identification of Pc4-5 waves using THEMIS mode data from the SuperDARN Hokkaido HF radar	T. Matsushita, K. Seki, N. Nishitani and T. Hori

P-MON20	Study of Wave-Particle Interaction Analyzer for direct measurements of pitch angle scattering of energetic electrons by whistler-mode chorus emissions	Kitahara, M., Y. Katoh, H. Kojima, Y. Omura, and WPIA discussion group
P-MON21	Occurrence characteristics of subauroral rapid plasma flows and lowest speed threshold of SAPS observed by the SuperDARN Hokkaido HF radar	Nagono, H., N. Nishitani, and T. Hori
P-MON22	Small-scale high-speed auroral morphology during storm-time substorms	Fukuda, Y., R. Kataoka, Y. Miyoshi, N. Sunagawa, H. Yamada, K. Shiokawa, A. Hashimoto, Y. Ebihara, and D. Hampton
P-MON23	Prediction of magnetospheric perturbations over Indian sector using neural network model	Unnikrishnan, K.
P-MON24	The interplanetary causes of supersubstorms (SML < -2000 nT)	Tsurutani, B., R. Hajra, E. Echer and P. Newell
P-MON25	Occurrence characteristics of dayside SAPS structures observed by the SuperDARN Hokkaido radar	Nishitani, N., T. Hori, and H. Nagano
P-MON26	Statistical study of the inner boundary of the plasma sheet electrons during magnetic storms	Ohki, K., A. Kumamoto, and Y. Katoh
P-MON27	Properties of energetic ion PSD during storm-time substorms observed by Van Allen Probes	Mitani, K., K. Seki, K. Keika, L. J. Lanzerotti, M. Gkioulidou, D. G. Mitchel, and C. A. Kletzing
P-MON28	Severe geomagnetic storms and sub storms and their relations with triggering of strong earth quakes and ionospheric disturbances	Ghosh, P., and T. K. Ramkumar
P-MON29	Wavelet analysis of HILDCAA related signatures observed from low latitude geomagnetic station	Adhikari, B., Jr. O. Mendes, O. M. Domingues, and E. Echer

P-MON30	Characterization of the Occurrences of the Geomagnetic Storms over Dar es Salaam, Tanzania	Sulungu, E., Uiso, and C., Marobhe, I.
P-MON31	Temporal and spatial variations of storm-time ionospheric currents as seen in the geomagnetic field	Shinbori, A., T. Hori, Y. Tanaka, Y. Koyama, T. Kikuchi, and T. Nagatsuma

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P-THU01	Asymmetry Characteristics of the World-wide Solar Quiet Field of the Horizontal Magnetic Field Intensity	Owolabi, T. P., O. S. Bolaji, A. B. Rabiou, and G. M. Olayanju
P-THU02	Ionospheric Response to Geomagnetic Storm of August 2011 around the Equatorial Anomaly Crest in Southeast Asian Sector	Abadi, P., and B. Muslim
P-THU03	Monitoring and modeling of ionosphere irregularities caused by substorms activity on the base of GNSS measurements.	Cherniak, I., and I. Zakharenkova
P-THU04	Ionospheric total electron content as proxy of geomagnetic storms in Nigeria, Africa, within equatorial ionospheric anomaly region	Rabiou A. B., V. A. Eyelade, R. B. Abdulrahim, and A. A. Obafaye-Isreal
P-THU05	High-latitude ionospheric irregularities as seen from multi-satellite observations	Zakharenkova, I., and E. Astafyeva
P-THU06	MST radar observed sub storm associated Spread-F events over the Indian tropical region of Gadanki	Ramkumar, T. K., and Priyanka Ghosh
P-THU07	Investigation of ionospheric response to two moderate geomagnetic storms using GPS-TEC measurements in the South American and African sectors during the ascending phase of solar cycle 24	de Abreu, A. J., P. R. Fagundes, M. Gende, O. S. Bolaji, Jesus, and Brunini, C.

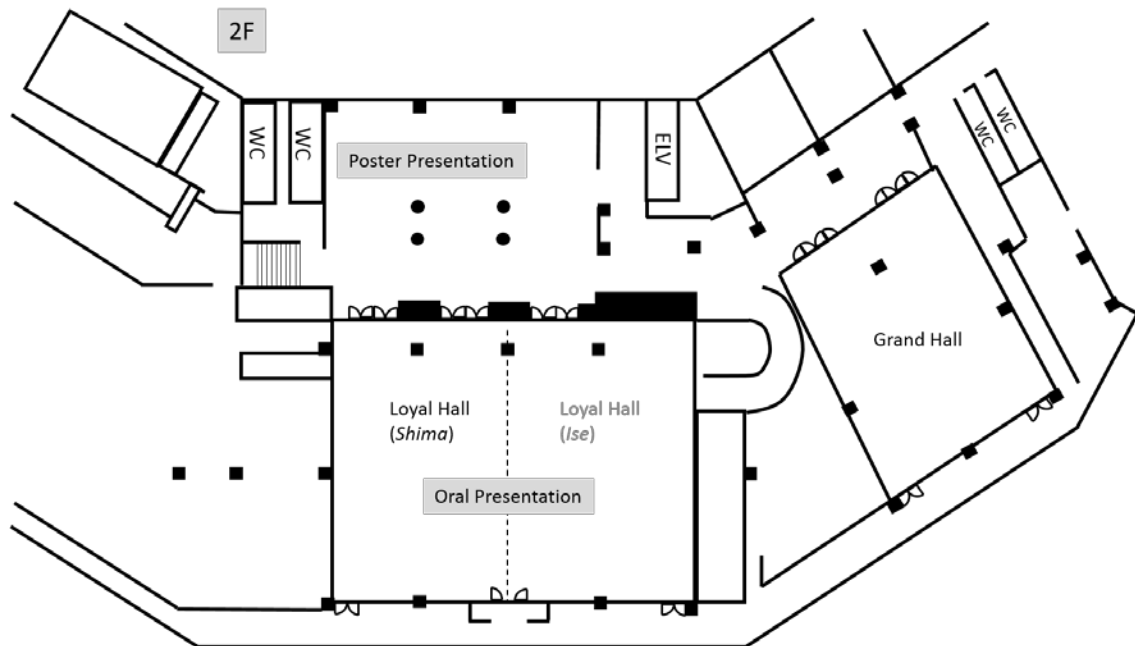
P-THU08	Interplanetary phenomena associated with geomagnetic storms of varying strength and ionospheric effects	Kumar, S.
P-THU09	Dependence of time derivative of horizontal geomagnetic field on sunspot number and aa index	Falayi, E. O. and A. B. Rabi
P-THU10	Simulation of energetic electron injections by the electromagnetic field of a transient, localized dipolarizing flux bundle	Gabrielse, C., V. Angelopoulos, A. Runov, and D. L. Turner
P-THU11	Investigation of post-geomagnetic storm effect on atmospheric electricity at high latitude	Victor, N. J., C. Panneerselvam, S Manu, and C. P. A. Kumar
P-THU12	Response of ionospheric electric fields at mid-low latitudes during geomagnetic sudden commencements	Takahashi, N., Y. Kasaba , A. Shinbori, Y. Nishimura, T. Kikuchi, and T. Nagatsuma
P-THU13	Evolution of convection vortices associated with sudden impulses observed by SuperDARN	Hori, T., A. Shinbori, N. Nishitani, and S. Fujita
P-THU14	Rapid enhancement of oxygen ion flux in the inner magnetosphere during substorms.	Nakayama, Y., Y. Ebihara, and T. Tanaka
P-THU15	Auroral dynamics based on OI 630 nm auroral polarization observation at Pokar Flat	Takasaki, S., T. Sakanoi, M. Kagitani, and D. L. Hampton
P-THU16	Simultaneous observation of FLR, whistler-mode chorus and pulsating aurora from the Van Allen Probes and ground-based systems	Jaynes, A. N., M. Lessard, K. Takahashi, C. Kletzing, J. Wygant, E. Donovan, and B. Blake
P-THU17	Electrodynamics of the low-latitude thermosphere-ionosphere from coincident measurements of zonal neutral winds, EPB and plasma drift velocities	Chapagain N. P., M. J. Jonathan, Makela, J. W. Meriwether, D. J. Fisher, and J. L. Chau
P-THU18	Study of LSTIDs parameters determined using SuperDARN	Oinats, A. V., V. I. Kurkin , O. I. Berngardt , and N.

	ground backscatter data during geomagnetically disturbed conditions	Nishitani
P-THU19	Influences of possible grand minimum on substorms and MI coupling processes	Yukimatu, A. S.
P-THU20 Withdrawn	Calibrating the global MHD simulation model considering parametric uncertainty in the magnetosphere-ionosphere coupling process under substorm conditions	Saita, S., Fujita, S., Kadokura, A., Tanaka, T., Yukimatsu, Akira Sessai, Tanaka Y.-M., Ohtani S., Murata, Ken T., and Higuchi, T.
P-THU21	Observations of field-aligned ionospheric irregularities during quiet and disturbed conditions with EKB radar: first results	Berngardt, O. I., N. A. Zolotukhina, and A.V.Oinats
P-THU22	Energy accumulation for substorms and solar flares	Podgorny, I., S. Minami, and A. Podgorny
P-THU23	Occurrence characteristics of Saturn's short-term kilometric radio burst	Maruno, D., Y. Kasaba, T. Kimura, A. Morioka, and B. Cecconi
P-THU24	MHD modeling and models as important instruments in studying of key magnetospheric processes	Sedykh, P.A.
P-THU25	"Polar" and "high-latitude" substorms	Despirak, I., A. Lubchich, N. Kleimenova, and N. Zelinsky
P-THU26	Asymmetry of summer and winter Earth's hemispheres response to changes in the solar wind and this asymmetry influence on the development of substorms	Mishin, V. V. , Y. Karavaev, V. M. Mishin, Z. Y. Pu , C. Wang, S. Lunyushkin , and A. Moiseev
P-THU27	PC index as a proxy of the solar wind energy that entered into the magnetosphere: Relationship between PC and magnetic substorms and storms	Troshichev, O., D. Sormakov, and A. Janzhura

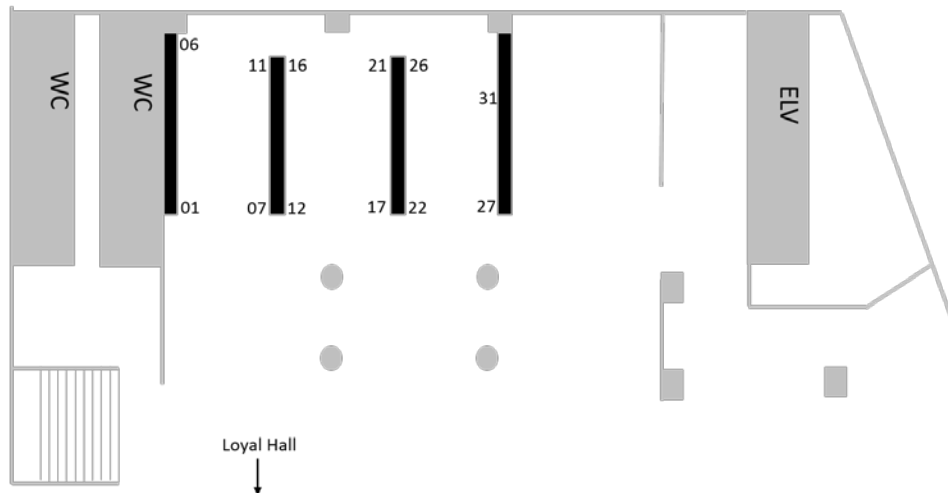
P-THU28 Bursty reconnection modulating the substorm current wedge, a substorm case study revisited using ECLAT tools

Palin, L., K. Ågren, K., T. Zivkovic, H. Opgenoorth, Fasckó, G., V. A. Sergeev, M. V. Kubyshkina, A. Nikolaev, S. E. Milan, S. M. Imber, K. Kauristie, M. Palmroth, M., van de Kamp, M., R. Nakamura, and P. Boakes

Instruction for Poster Presentation



Poster Layout



Poster Guidelines

Two poster sessions will be held in the evening on Nov. 10th (Mon) and 13th (Thu) (detailed schedule will be updated on the schedule page). To locate your assigned poster board on the day of your presentation, please look for the board marked with your paper number. All posters at the first window should be up after Monday noon, and taken off from the poster board by each presenter by Wednesday noon. Posters at the second window should be up by Thursday noon, and taken off by each presenter by Friday noon.

Each poster will have 0.9 m (W) x 1.8 m (H) of space. Push pins will be provided by LOC. The title should be legible from at least 3 m distance. Please note that LOC will not provide any services for printing and receiving your poster.

Excursion to Ise Jingu (Ise Grand Shrine) and Mikimoto Pearl Island

We have a half-day guided tour on Wednesday. Your tour bus takes you to two famous places in the area around the venue, called the Ise-Shima National Park, on the Shima Peninsula.

This tour is INCLUDED in the registration fee.

SCHEDULE

Date: Wednesday, November 13, 2014

MEETING TIME: 12:55

MEETING PLACE: Hotel Lobby

Departure: 13:00

Return: 18:30

Route: Hotel == ~40 min ==> Mikimoto Pearl Island

== ~30 min ==> Ise Jingu & Okage-Yokocho

== ~60 min ==> Hotel



INFORMATION

Ise Jingu (Ise Grand Shrine)

<http://www.isejingu.or.jp/english/>

Ise Jingu is one of the most sacred Shinto shrine in Japan, a complex of 125 Shinto shrines. Amaterasu Omikami, the ancestral goddess of the Imperial Family, was enshrined 2000 years ago, and has been worshiped by the successive emperors. This tour goes to NAIKU, the inner shrine, which includes the main shrine dedicated to Amaterasu Omikami,

Check out how to do CHOZU (ritual cleansing) and REIHAI (pray) in Page 3 of Ise-shima General Sightseeing Guide (available at the registration desk).



Okage-Yokocho in Oharai-machi

<http://www.okageyokocho.co.jp> <https://www.facebook.com/okageyokocho>

After Ise Jingu, enjoy various kinds of local food and souvenirs from Ise Shima area. See detail in Ise-shima General Sightseeing Guide (Pages 3 & 4) and its Japanese version (Pages 7 & 8).

Mikimoto Pearl Island

<http://www.mikimoto-pearl-museum.co.jp/eng/>

You can see many kinds of pearls and learn about pearl cultivation in this theme park. Also enjoy watching Ama (woman divers) demonstrate the roles that they played in pearl cultivation. See detail in Ise-shima General Sightseeing Guide Page 8.



