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Keisuke Hosokawa, Ph.D.

D.O.B: 12 May, 1975

Gender: Male

Nationality: Japan

Email: hosokawa@ice.uec.ac.jp

Department of Communication Engineering and Informatics

University of Electro-Communications

Chofugaoka 1-5-1, Chofu, Tokyo, 182-8585, Japan

+81 (0)42 443 5299

Education

1994.4 - 1998.3

Faculty of Science, Kyoto University, Japan (Bachelor of Science, Mar. 1998)

Supervisor: Professor Tohru Araki

1998.4 - 2000.3

Master's Course, Graduate School of Science, Kyoto University, Japan (M. Sci., Mar. 2000)

Supervisor: Professor Toshihiko Iyemori

2000.4 - 2003.3

Doctor's Course, Graduates School of Science, Kyoto University, Japan

Supervisor: Professor Toshihiko Iyemori

2001.1 - 2001.2

Visiting Researcher, Department of Physics and Astronomy, University of Leicester, UK

Supervisor: Professor Mark Lester

2001.9 - 2001.12

Visiting Researcher, Department of Physics and Astronomy, University of Leicester, UK

Supervisor: Professor Mark Lester

2002.4 - 2003.3

Research Fellow of the Japan Society for the Promotion of Science (JSPS Research Fellow)

2003.3.24

Ph.D. received from Kyoto University,

Ph.D. Thesis "Observational studies on the high-latitude ionospheric plasma irregularities"

Employment History

2003.4 - 2007.3

Research Assistant, University of Electro-Communications

2007.4 - Present

Assistant Professor, University of Electro-Communications

2010.3 - 2011.2

Visiting Researcher, University of Oslo

Professional Societies

American Geophysical Union (Member)

European Geosciences Union (Member)

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

Awards

Outstanding student paper award by the Space Physics and Aeronomy section,
2000 Fall Meeting, American Geophysical Union, 12 April, 2001

Obayashi young scientist award,
Society of Geomagnetism and Earth, Planetary and Space Sciences, 29 September, 2009

Services

Session Convener on "High- and Mid-Latitude Ionosphere: New Insights from Recent
Ground-based Observations and Satellite Collaborations", AOGS 2008, Busan, Korea.

Session Convener on " Dynamical Processes of the Cusp/Polar Cap Ionosphere",
2010 AGU Fall Meeting, San Francisco, USA.

Session Convener on " High-Latitude Ionosphere: New Insights from Recent Ground-based and
Satellite Observations", 2011 AOGS, Taipei.

Reviewer for Journal of Geophysical Research, Geophysical Research Letters,
Annales Geophysicae, Journal of Atmospheric and Solar-Terrestrial Physics,
Earth Planets and Space, and Advances in Polar Upper Atmosphere Research

International Collaborative Research Activities

2009.5 - Present

Core member of "Polar ionosphere cusp and cap - solar cycle 24" workgroup (PICCAP-24)

2007.9 - Present

Member of "Spacecraft coordination working group" in the SuperDARN community

2004.7 - Present

Member of "FITACF working group" in the SuperDARN community

Grants

2010.3 - 2011.2

Principal Investigator "Global imaging of the plasma environment in the polar cap
ionosphere with dual all-sky cameras", JSPS Grant (Excellent Young Researcher Overseas
Visit Program), ¥5,261,730

2008.4 - 2011.3

Principal Investigator "Effect of magnetospheric and ionospheric plasma convection on the
evolution of aurora substorms", JSPS Grant (Kakenhi Wakate-B), ¥2,400,000

2005.4 - 2008.3

Principal Investigator "Global map of mesospheric temperature environment derived from
Super Dual Auroral Radar Network", JSPS Grant (Kakenhi Wakate-B), ¥1,800,000

2002.4 - 2003.4

Principal Investigator "Monitoring of polar cap boundary with Super Dual Auroral Radar
Network", JSPS Grant (Gakushin DC2), \$1,000,000

Research Activities

When Keisuke Hosokawa was a graduate student at Kyoto University, he had studied ionospheric irregularities with Super Dual Auroral Radar Network (SuperDARN). In particular, he investigated the statistical distribution of irregularities in the subauroral F region ionosphere and found an active source of irregularities associated with the mid-latitude trough. He was awarded outstanding student paper award at the AGU fall meeting in 2000 for this result. He had also developed a method for extracting polar mesosphere summer echoes (PMSE) from the SuperDARN data. This method demonstrated the potential of SuperDARN for the study of the middle atmosphere.

Since 2003, Hosokawa has been working at University of Electro-Communications as an assistant professor. He and his colleagues started optical observation with a highly-sensitive all-sky airglow imager in the polar cap, at Resolute Bay, since January 2005. Currently, he is studying the polar patches and tongue of ionization by combining the data from the SuperDARN radars and optics. Also, he has been conducting observations of auroral fine-scale structures with radio and optical measurements in Iceland and Norway since 2005. He analyzed high time resolution optical data in combination with radar observations with SuperDARN and EISCAT and demonstrated very dynamic behavior of the ionospheric electric field associated with an occurrence of aurora. He was awarded Obayashi young scientist award from Society of Geomagnetism and Earth, Planetary and Space Sciences in 2009 for these observations of ionospheric structures with radar and optics.

Currently, Hosokawa is a core member of "Polar ionosphere cusp and cap - solar cycle 24 workgroup (PICCAP-24)". The objective of this workgroup is to build a network of ground-based observations in the polar cap and encourage an international collaborative research on the polar cap ionosphere. He is also involved in the "Spacecraft coordination working group" and "FITACF working group" in the international SuperDARN community and is contributing to the coordination of the SuperDARN observation schedule and improvement of the SuperDARN data product.

Publications

01. Hosokawa, K., J. I. Moen, K. Shiokawa, and Y. Otsuka, Decay of polar cap patch, *Journal of Geophysical Research*, 116, doi: 10.1029/2010JA016297, 2011
02. Wild, J. A., E. E. Woodfield, E. Donovan, R. Fear, A. Grocott, M. Lester, A. Fazakerley, E. Lucek, A. Kadokura, K. Hosokawa, C. Carlson, J. McFadden, K.-H. Glassmeier, V. Angelopoulos, G. Björnsson, Midnight sector observations of auroral omega bands, *Journal of Geophysical Research*, 116, doi: 10.1029/2010JA015874, 2011
03. Miyashita, Y., I. Shinohara, M. Fujimoto, H. Hasegawa, K. Hosokawa, T. Takada and T. Hori, A powerful tool for browsing quick-look data in solar-terrestrial physics: "Conjunction Event Finder", *Earth, Planets and Space*, 63, e1-e4, 2011
04. Hosokawa, K., J. I. Moen, K. Shiokawa, and Y. Otsuka, Motion of polar cap arcs, *Journal of Geophysical Research*, 116, doi:10.1029/2010JA015906, 2011
05. Hosokawa, K., T. Tsugawa, K. Shiokawa, Y. Otsuka, N. Nishitani, T. Ogawa and M. Hairston, Dynamic temporal evolution of polar cap tongue of ionization, *Journal of Geophysical Research*, 115, doi:10.1029/2010JA015848, 2010
06. Nishimura, Y., L. Lyons, S. Zou, X. Xing, V. Angelopoulos, S. Mende, J. Bonnell, D. Larson, U. Auster, T. Hori, N. Nishitani, K. Hosokawa, G. Sofko, M. Nicolls, and C. Heinselman, Pre-onset time sequence of auroral substorms: Coordinated observations by ASIs, satellites and radars, *Journal of Geophysical Research*, doi:10.1029/2010JA015832, 2010
07. Taguchi, S., K. Hosokawa, S. Suzuki, A. Tawara, H. U. Frey, J. Mazka, A. S. Yukimatu, and N. Sato, Distorted flow during moving mesoscale plasma precipitation in the cusp, *Journal of Geophysical Research*, 115, doi:10.1029/2010JA015535, 2010
08. Hosokawa, K. and Y. Ogawa, Pedersen current carried by electrons in auroral D-region, *Geophysical Research Letters*, doi:10.1029/2010GL044746, 2010
09. Hosokawa, K., T. Motoba, A. S. Yukimatu, S. E. Milan, M. Lester, A. Kadokura, N. Sato, and G. Björnsson, Plasma irregularities adjacent to auroral patches in the post-midnight sector, *Journal of Geophysical Research*, 115, doi:10.1029/2010JA015319, 2010
10. Motoba, T., K. Hosokawa, A. Kadokura, N. Sato, and G. Björnsson, Varying IMF By effects on interhemispheric conjugate auroral features during weak substorm, *Journal of Geophysical Research*, 115, doi:10.1029/2010JA015369, 2010
11. Hosokawa, K. and N. Nishitani, Plasma irregularities in the duskside subauroral F region ionosphere as observed with mid-latitude SuperDARN radar in Hokkaido, Japan, *Radio Science*,

- 45, doi:10.1029/2009RS004244, 2010
12. Hayashi, H., N. Nishitani, T. Ogawa, Y. Otsuka, T. Tsugawa, K. Hosokawa and A. Saito, Large scale traveling ionospheric disturbance observed by SuperDARN Hokkaido HF radar and GPS network on 15 December 2006, *Journal of Geophysical Research*, 115, doi:10.1029/2009JA014297, 2010
 13. Taguchi S., K. Hosokawa, S. Suzuki, A. S. Yukimatu, and N. Sato, Initial development of the HF radar polar patch driven by the azimuthal flow burst in the cusp, *Journal of Geophysical Research*, 115, doi:10.1029/2009JA014631, 2010
 14. Hosokawa, K., Y. Ogawa, A. Kadokura, H. Miyaoka, and N. Sato, Modulation of ionospheric conductance and electric field associated with pulsating aurora, *Journal of Geophysical Research*, 115, doi:10.1029/2009JA014683, 2010
 15. Hosokawa, K., J.-P. St.-Maurice, G. J. Sofko, K. Shiokawa, Y. Otsuka, and T. Ogawa, Reorganization of polar cap patches through shears in the background plasma convection, *Journal of Geophysical Research*, 115, doi:10.1029/2009JA014599, 2010
 16. Jayachandran P. T., K. Hosokawa, J. W. MacDougall, S. Mushini, R. B. Langley, and K. Shiokawa, GPS Total Electron Content Variations Associated with a Polar Cap Arc, *Journal of Geophysical Research*, 114, doi:10.1029/2009JA014916, 2009
 17. Maeda, S., Y. Ogawa, K. Hosokawa, S. Nozawa, S. Oyama, T. Tsuda and A. Brekke, Ion heating in high-speed flow channel within the duskside cell of the polar-cap ion convection under large IMF-By condition, *Journal of Geophysical Research*, 114, doi:10.1029/2009JA014300, 2009
 18. Suzuki, S., K. Hosokawa, T. F. Shibata, K. Shiokawa, Y. Otsuka, N. Nishitani, T. Ogawa, A. V. Koustov, and B. M. Shevtsov, Coordinated observations of nighttime medium-scale traveling ionospheric disturbances in 630-nm airglow and HF radar echoes at midlatitudes, *Journal of Geophysical Research*, 114, doi:10.1029/2008JA013963, 2009
 19. Taguchi, S., S. Suzuki, K. Hosokawa, Y. Ogawa, A. S. Yukimatu, N. Sato, M. R. Collier, T. E. Moore, Moving meso-scale plasma precipitation in the cusp, *Journal of Geophysical Research*, 114, doi:10.1029/2009JA014128, 2009
 20. Tsuda, T., S. Nozawa, S. Oyama, T. Motoba, Y. Ogawa, H. Shinagawa, N. Nishitani, K. Hosokawa, N. Sato, M. Lester and R. Fujii Acceleration mechanism of high-speed neutral wind observed in the polar lower thermosphere, *Journal of Geophysical Research*, 114, doi:10.1029/2008JA013867, 2009
 21. Hosokawa, K., T. Kashimoto, S. Suzuki, K. Shiokawa, Y. Otsuka and T. Ogawa, Motion of polar cap patches: A statistical study with all-sky airglow imager at Resolute Bay, Canada, *Journal of Geophysical Research*, 114, A04318, doi:10.1029/2008JA014020, 2009
 22. Kataoka, R., K. Hosokawa, N. Nishitani and Y. Miyoshi, SuperDARN Hokkaido radar observation of westward flow enhancement in subauroral latitudes, *Annales Geophysicae*, 27, 1695-1699, 2009
 23. Hosokawa, K., T. Tsugawa, K. Shiokawa, Y. Otsuka, T. Ogawa and M. Hairston, Unusually elongated, bright airglow plume in the polar cap F region: is it tongue of ionization?, *Geophysical Research Letters*, 36, doi:10.1029/2009GL037512, 2009
 24. Ogawa, T., N. Nishitani, Y. Otsuka, K. Shiokawa, T. Tsugawa and K. Hosokawa, Medium-scale traveling ionospheric disturbances observed with the SuperDARN Hokkaido radar, all-sky imager and GPS network, and their relation to concurrent sporadic-E layer irregularities, *Journal of Geophysical Research*, 114, doi:10.1029/2008JA013893, 2009
 25. Hosokawa, K., K. Shiokawa, Y. Otsuka, T. Ogawa, J.-P. St.-Maurice, G. J. Sofko, D. A. Andre, The relationship between polar cap patches and field-aligned irregularities as observed with an all-sky airglow imager at Resolute Bay and the PolarDARN radar at Rankin Inlet, *Journal of Geophysical Research*, 114, doi:10.1029/2008JA013707, 2009
 26. Taguchi, S., K. Hosokawa, A. Nakao, M. R. Collier, T. E. Moore, N. Sato, and A. S. Yukimatu, HF radar polar patch and its relation with the cusp during By-dominated IMF: Simultaneous

- observations at two altitudes, *Journal of Geophysical Research*, 114, doi:10.1029/2008JA013624, 2009
27. Suzuki, S., K. Shiokawa, K. Hosokawa, K. Nakamura, and W. K. Hocking, Statistical characteristics of polar cap mesospheric gravity waves observed by an all-sky airglow imager at Resolute Bay, Canada, *Journal of Geophysical Research*, 114, doi:10.1029/2008JA013652, 2009
 28. Ebihara, Y., N. Nishitani, T. Kikuchi, T. Ogawa, K. Hosokawa, M.-C. Fok, M. F. Thomsen, Dynamical property of SAPS as a manifestation of fine structures of the ring current during the magnetic storm of 15 December 2006, *Journal of Geophysical Research*, 114, doi:10.1029/2008JA013614, 2009
 29. Miyashita, Y., K. Hosokawa, T. Hori, Y. Kamide, S. Machida, N. Sato, A. S. Yukimatu, M. Fujimoto, I. Shinohara, T. Mukai, Y. Saito, and J. B. Sigwarth, Response of large-scale ionospheric convection to substorm expansion onsets: A case study, *Journal of Geophysical Research*, 113, doi:10.1029/2008JA013586, 2008
 30. Hosokawa, K., A. Kadokura, N. Sato, S. E. Milan, M. Lester, G. Bjornsson, and Th. Saemundsson, Electric field modulation behind pulsating aurora, *Journal of Geophysical Research*, 113, doi:10.1029/2008JA013601, 2008
 31. Hosokawa, K., S. Taguchi, S. Suzuki, M. R. Collier, T. E. Moore, and M. F. Thomsen, Estimation of magnetopause motion from low-energy neutral atom emission, *Journal of Geophysical Research*, 113, doi:10.1029/2008JA013124, 2008
 32. Koustov, A., K. Hosokawa, N. Nishitani, T. Ogawa, and K. Shiokawa, Rankin Inlet PolarDARN radar observations of duskward moving Sun-aligned optical forms, *Ann. Geophys.*, 26, 2711–2723, 2008
 33. Milan, S. E., K. Hosokawa, M. Lester, N. Sato, H. Yamagishi, and F. Honary D region HF radar echoes associated with energetic particle precipitation and pulsating aurora *Ann. Geophys.*, 26, 1897-1904, 2008
 34. Suzuki, S., S. Taguchi, K. Hosokawa, M. R. Collier, T. E. Moore, H. U. Frey, and S. B. Mende, Conjugate observations of ENA signals in the high-altitude cusp and proton auroral spot in the low-altitude cusp with IMAGE spacecraft, *Geophysical Research Letters*, 35, doi:10.1029/2008GL034543, 2008
 35. Ishida, T., K. Hosokawa, T. Shibata, S. Suzuki, N. Nishitani, and T. Ogawa, SuperDARN observations of daytime MSTIDs in the auroral and mid-latitudes: Possibility of long-distance propagation, *Geophysical Research Letters*, 35, doi:10.1029/2008GL034623, 2008
 36. Ebihara Y, N. Nishitani, T. Kikuchi, T. Ogawa, K. Hosokawa, and M. -C. Fok, Two-dimensional observations of overshielding during a magnetic storm by the SuperDARN Hokkaido radar, *Journal of Geophysical Research*, 113, doi:10.1029/2007JA012641, 2007
 37. Fujiwara, H., R. Kataoka, M. Suzuki, S. Maeda, S. Nozawa, K. Hosokawa, H. Fukunishi, N.Sato, and M. Lester, Electromagnetic energy deposition rate in the polar upper thermosphere derived from the EISCAT Svalbard radar and CUTLASS Finland radar observations. *Annales Geophysicae*, 25, 2393-2403, 2007
 38. Kataoka, R., N. Nishitani, Y. Ebihara, K. Hosokawa, T. Ogawa, T. Kikuchi, and Y. Miyoshi, Dynamic variations of a convection flow reversal in the subauroral postmidnight sector as seen by the SuperDARN Hokkaido HF radar, *Geophysical Research Letters*, 34, doi:10.1029/2007GL031552, 2007
 39. Murata, Y., S. Taguchi, K. Hosokawa, A. Nakao, M. R. Collier, T. E. Moore, N. Sato, H. Yamagishi, A. S. Yukimatu, Correlative variations of the neutral atom emission in the high-altitude cusp and the fast anti-sunward convection in the low-altitude cusp, *Journal of Geophysical Research*, 112, doi:10.1029/2007JA012404, 2007
 40. Kunori, T., M. Nose, S. Taguchi, K. Hosokawa, M. R. Collier, and T. E. Moore, Storm phase dependence of ion outflow: Statistical signatures obtained by IMAGE/LENA, *Geophysical Research Letters*, 34, doi:10.1029/2007GL029877, 2007

41. Hosokawa, K., K. Shiokawa, Y. Otsuka, A. Nakajima, T. Ogawa, and J. D. Kelly, Estimating drift velocity of polar cap patches with all-sky airglow imager at Resolute Bay, Canada, *Geophysical Research Letters*, 33, 10, 10.1029/2006GL026916, 2006
42. Taguchi, S., K. Hosokawa, Y. Murata, A. Nakao, M. R. Collier, T. E. Moore, A. Yamazaki, N. Sato, and A. S. Yukimatu, Neutral atom emission coming from the direction of the high-latitude magnetopause under northward IMF, *Advances in Polar Upper Atmospheric Research*, 20, 17-26, 2006
43. Taguchi, S., K. Hosokawa, A. Nakao, M. R. Collier, T. E. Moore, A. Yamazaki, N. Sato, and A. S. Yukimatu, Neutral atom emission in the direction of the high-latitude magnetopause for northward IMF: Simultaneous observations from IMAGE spacecraft and SuperDARN radar, *Geophysical Research Letters*, 33, 10.1029/2005GL025020, 2006
44. Hosokawa, K., T. Ogawa, N. F. Arnold, M. Lester, N. Sato, and A. S. Yukimatu, Extraction of polar mesosphere summer echoes from SuperDARN data, *Geophysical Research Letters*, 32, 10.1029/2005GL022788, 2005
45. Nose, M., S. Taguchi, K. Hosokawa, S. P. Christon, R. W. McEntire, T. E. Moore, and M. R. Collier, Overwhelming O⁺ contribution to the plasma sheet energy density during the October 2003 superstorm: Geotail/EPIC and IMAGE/LENA observations, *Journal of Geophysical Research*, 110, 10.1029/2004JA010930, 2005
46. Taguchi, S., S.-H. Chen, M. R. Collier, T. E. Moore, M.-C. Fok, K. Hosokawa, and A. Nakao, Monitoring the high-altitude cusp with the Low Energy Neutral Atom Imager: Simultaneous observations from IMAGE and Polar, *Journal of Geophysical Research*, 110, 10.1029/2005JA011075, 2005
47. Taguchi, S., K. Hosokawa, M. R. Collier, M.-C. Fok, A. S. Yukimatu, N. Sato, and R. A. Greenwald, Simultaneous observations of the cusp with IMAGE Low Energy Neutral Atoms Imager and SuperDARN radar, *Advances in Polar Upper Atmospheric Research*, 18, 53-64, 2004
48. Hosokawa, K., T. Ogawa, N. Sato, A. S. Yukimatu, T. Iyemori, Statistics of Antarctic Mesospheric Echoes Observed with the SuperDARN Syowa Radar, *Geophysical Research Letters*, 31, doi:10.1029/2003GL018776, 2004
49. Hosokawa, K., S. Yamasita, P. Stauning, N. Sato, A. S. Yukimatu and T. Iyemori, Origin of the SuperDARN broad Doppler spectra: simultaneous observation with Oersted satellite magnetometer, *Annales Geophysicae*, 22, 159–168, 2004
50. Fujita, S., T. Tanaka, T. Kikuchi, K. Fujimoto, K. Hosokawa, M. Itonaga, A numerical simulation of the geomagnetic sudden commencement: 1. Generation of the field-aligned current associated with the preliminary impulse, *Journal of Geophysical Research*, 108, 10.1029/2002JA009407, 2003
51. Ogawa, T., K. Hosokawa, N. Nishitani, N. Sato, H. Yamagishi, and A. S. Yukimatu, Characteristics of polar mesosphere summer echoes observed with the Syowa Station HF radars, *Advances in Polar Upper Atmosphere*, 17, 13–29, 2003
52. Kataoka, R., H. Fukunishi, K. Hosokawa, H. Fujiwara, A. S. Yukimatu, N. Sato and Y.-K Tung, Transient production of F-region irregularities associated with TCX passage, *Annales Geophysicae*, 21, 1531–1541, 2003
53. Hosokawa, K., E. E. Woodfield, M. Lester, S. E. Milan, N. Sato, A. S. Yukimatu, and T. Iyemori, Interhemispheric comparison of spectral width boundary as observed by the SuperDARN radars, *Annales Geophysicae* 21, 1553–1565, 2003
54. Hosokawa, K., M. Sugino, M. Lester, N. Sato, A. S. Yukimatu, and T. Iyemori, Simultaneous measurement of duskside subauroral irregularities from the CUTLASS Finland radar and EISCAT UHF system, *Journal of Geophysical Research* 107, 10.1029/2002JA009494, 2002
55. Hosokawa, K., E. E. Woodfield, M. Lester, S. E. Milan, N. Sato, A. S. Yukimatu, and T. Iyemori, Statistical characteristics of Doppler spectral width as observed by the conjugate SuperDARN

- radars, *Annales Geophysicae* 20, 1213–1223, 2002
56. Woodfield, E. E., K. Hosokawa, S. E. Milan, N. Sato, and M. Lester, An inter-hemispheric, statistical study of nightside spectral width distribution from coherent HF scatter radars, *Annales Geophysicae* 20, 1921–1934, 2002
 57. Hosokawa, K., T. Iyemori, A. S. Yukimatu, and N. Sato, Source of field-aligned irregularities in the subauroral F region as observed by SuperDARN radars, *Journal of Geophysical Research* 106, 24,713–24,731, 2001
 58. Hosokawa, K., T. Iyemori, A. S. Yukimatu, and N. Sato, Characteristics of solar flare effect in the high-latitude ionosphere as observed by the SuperDARN radars, *Advances in Polar Upper Atmosphere Research* 14, 66–75, 2000

Presentations at international conference

01. Hosokawa, K., J. I. Moen, K. Shiokawa, and Y. Otsuka, Decay of polar cap patch, AGU Fall Meeting, December 2010, Sanfrancisco, USA (poster)
02. Hosokawa, K., T. Tsugawa, K. Shiokawa, N. Nishitani, Y. Otsuka, T. Ogawa, and M. Hairston, Multi-instrumental comprehensive study of polar cap tongue of ionization during magnetic storm on December 15, 2006, 38th COSPAR Scientific Assembly, July 2010, Bremen, Germany (talk)
03. Hosokawa, K., Y. Ogawa, A. Kadokura, S. E. Milan, M. Lester, and N. Sato, Modulation of Ionosphere Associated with Pulsating Aurora - Observations in Iceland and Norway -, IPY Oslo Science Conference 2010, June 2010, Oslo, Norway (poster)
04. Hosokawa, K., Y. Ogawa, A. Kadokura, H. Miyaoka, and N. Sato, Modulation of ionospheric conductance and electric field associated with pulsating aurora EGU General Assembly, May 2010, Vienna, Austria (talk)
05. Hosokawa, K., T. Tsugawa, K. Shiokawa, N. Nishitani, Y. Otsuka, T. Ogawa, and M. Hairston, Multi-instrumental comprehensive study of polar cap tongue of ionization during magnetic storm on December 15, 2006, AGU Fall Meeting, December 2009, Sanfrancisco, USA (talk)
06. Hosokawa, K., Patches and TOI from 4 years observations at Resolute Bay, Cusp and Polar Cap Ionosphere Present Knowledge and Future Planning, April 2009, Oslo, Norway (invited talk)
07. Hosokawa, K., T. Tsugawa, K. Shiokawa, N. Nishitani, Y. Otsuka, T. Ogawa, Polar cap tongue of ionization during magnetic storm on December 14-15, 2006, SuperDARN Workshop and Annual Meeting 2009, May 2009, Corsica, France (talk)
08. Hosokawa, K., R. Sugita, A. Kadokura, A. S. Yukimatu, N. Sato, S. E. Milan, M. Lester, G. Bjornsson, T. Saemundsson, Small-scale converging electric field structure in the vicinity of breakup auroral arcs, SuperDARN Workshop and Annual Meeting 2009, May 2009, Corsica, France (poster)
09. Hosokawa, K., Modification of ionospheric current system during an intense pulsating aurora, 1st Workshop on Norway-Japan Arctic Space Research with Sounding Rockets, October 2009, The Royal Norwegian Embassy Tokyo, Tokyo, Japan (invited talk)
10. Hosokawa, K., T. Tsugawa, K. Shiokawa, N. Nishitani, Y. Otsuka and T. Ogawa, Optical observation of polar cap tongue of ionization, AGU Fall Meeting, December 2008, Sanfrancisco, USA (poster)
11. Hosokawa, K., PMSE observed with SuperDARN, Japan-China Scientific Cooperation Program sponsored by JSPS and NSFC Joint Seminar "Study on polar ionosphere-magnetosphere coupling", Aug 2008, Tokyo (talk)
12. Hosokawa, K., K. Shiokawa, Y. Otsuka, and T. Ogawa, Motion of large-scale structures in the polar cap ionosphere, Asia-Oceania Geoscience Society (AOGS) 5th Annual General Meeting, June 2008, Busan, Korea (invited talk)
13. Hosokawa, K., K. Shiokawa, Y. Otsuka, and T. Ogawa, Spatial relationship of polar cap patches and field-aligned irregularities observed with an all-sky airglow imager at Resolute Bay and

- SuperDARN radars, Asia-Oceania Geoscience Society (AOGS) 5th Annual General Meeting, June 2008, Busan, Korea (poster)
14. Hosokawa, K., A. Kadokura, N. Sato, S. E. Milan, M. Lester, G. Bjornsson, T. Saemundsson, Electric field oscillation behind pulsating aurora, SuperDARN Workshop and Annual Meeting 2008, June 2008, Newcastle, Australia (talk given by N. Sato)
 15. Hosokawa, K., S. Taguchi, S. Suzuki, R. Nishizawa, M. R. Collier, T. E. Moore, and M. F. Thomsen, Motion of the Earth's Magnetopause Estimation from low-energy neutral atom emissions, American Geophysical Union (AGU) Fall Meeting, Dec 2007, Sanfrancisco, US (talk)
 16. Hosokawa, K., N. Nishitani, T. Ogawa, T. Tsugawa, R. Kataoka, and A. Saito, Initial Backscatter Occurrence Statistics from SuperDARN Hokkaido Radar, SuperDARN Workshop and Annual Meeting 2007, June 2007, Abashiri, Japan (talk)
 17. Hosokawa, K., K. Shiokawa, Y. Otsuka, T. Ogawa, J.-P. St-Maurice, G. Sofko, and D. Andre, Spatial relationship of polar cap patches and field-aligned irregularities observed with an all-sky imager at RSB and PD Rankin Inlet, SuperDARN Workshop and Annual Meeting 2007, June 2007, Abashiri, Japan (talk)
 18. Hosokawa, K., T. Ogawa, N. F. Arnold, M. Lester, N. Sato, and A. S. Yukimatu, An interhemispheric comparison of Polar Mesosphere Summer Echoes (PMSE) as detected with conjugate SuperDARN radars, Greenland IPY 2007 Space Science Symposium (GSSS-2007), May 2007, Kangerlussuaq, Greenland (invited talk)
 19. Hosokawa, K., K. Shiokawa, Y. Otsuka, and T. Ogawa, Optical observations of polar cap patches, Greenland IPY 2007 Space Science Symposium (GSSS-2007), May 2007, Kangerlussuaq, Greenland (poster)
 20. Hosokawa, K., T. Ogawa, A. S. Yukimatu, and N. Sato, Statistical properties of Polar Mesosphere Summer Echoes as detected with the Super Dual Auroral Radar Network, American Geophysical Union (AGU) Fall Meeting, Dec 2006, Sanfrancisco, US (poster)
 21. Hosokawa, K., K. Shiokawa, Y. Otsuka, T. Ogawa, A. S. Yukimatu, and N. Sato, Spatial relationship of polar cap patches and field-aligned irregularities observed with an all-sky airglow imager and the SuperDARN radar, SuperDARN Workshop and Annual Meeting 2006, May 2006, Verginia, US (talk)
 22. Hosokawa, K., T. Yamano, N. Sato, S. Shimizu, Y. Murata, S. E. Milan, M. Lester, G. Bjornsson, and T. Saemundsson, Simultaneous measurement of auroral fine-scale structures with ground based all-sky TV camera and SuperDARN over Iceland, SuperDARN Workshop and Annual Meeting 2006, May 2006, Verginia, US (poster)
 23. Hosokawa, K., T. Ogawa, A. S. Yukimatu, and N. Sato, Extraction of PMSE from SuperDARN data, American Geophysical Union (AGU) Fall Meeting, Dec 2005, Sanfrancisco, US (poster)
 24. Hosokawa, K., T. Ogawa, A. S. Yukimatu, and N. Sato, Extraction of PMSE from SuperDARN data, SuperDARN 2005 Workshop and Annual Meeting, May 2005, Lake District, UK (poster)
 25. Hosokawa, K., K. Shiokawa, Y. Otsuka, A. Nakajima, T. Ogawa, J. D. Kelly, M. Lester, A. S. Yukimatu, and N. Sato, Simultaneous observation of polar cap patches with ground-based all-sky imager and SuperDARN, SuperDARN 2005 Workshop and Annual Meeting, May 2005, Lake District, UK (talk)
 26. Hosokawa, K., S. Taguchi, S. Yamasita, A. S. Yukimatu, N. Sato and T. Iyemori, On the relationship between spectral characteristics of high-latitude plasma irregularities and small-scale electromagnetic field fluctuations, SuperDARN 2004 Workshop and Annual Meeting, May 2004, Saskatoon, Canada (poster)
 27. Hosokawa, K., T. Ogawa, N. Arnold, M. Lester, A. S. Yukimatu, and N. Sato, Statistical analysis of backscatters from first range gates with SENSU Syowa East and CUTLASS Iceland East, SuperDARN 2004 Workshop and Annual Meeting, May 2004, Saskatoon, Canada (talk)

28. Hosokawa K., S. Taguchi, A. Yamazaki, A. Nakao, M. R. Collier, T. E. Moore, M. Lester, A. S. Yukimatu, and N. Sato, Poleward-moving patch of neutral atoms as observed with IMAGE LENA imager, SuperDARN 2004 Workshop and Annual Meeting, May 2004, Saskatoon, Canada (talk)
29. Hosokawa K., T. Ogawa, N. Arnold, M. Lester, A. S. Yukimatu, and N. Sato, Statistics of Antarctic Mesospheric Echoes observed with the SuperDARN Radar in Antarctica, XXVIII SCAR Open Science Conference, July 2004, Bremen, Germany (poster)
30. Hosokawa K., T. Ogawa, N. Arnold, M. Lester, A. S. Yukimatu, and N. Sato, Statistical properties of Polar Mesosphere Summer Echoes as detected with Super Dual Auroral Radar Network, 2nd International Conference in Polar Research of China, October 2004, Beijing, China (talk)
31. Hosokawa K., E. E. Woodfield, M. Lester, S. E. Milan, N. Sato, A. S. Yukimatu, and T. Iyemori, Interhemispheric comparison of spectral width boundary as identified by the SuperDARN radars, SuperDARN 2002 Workshop and Annual Meeting, May 2002, Alaska, US (talk)
32. Hosokawa K., E. E. Woodfield, M. Lester, S. E. Milan, N. Sato, A. S. Yukimatu, and T. Iyemori, Interhemispheric comparison of spectral width boundary as identified by the SuperDARN radars, 2002 Western Pacific Geophysics Meeting, 12 July 2002, Oakland, New Zealand (talk)
33. Hosokawa K., E. E. Woodfield, M. Lester, S. E. Milan, N. Sato, A. S. Yukimatu, and T. Iyemori, Interhemispheric comparison of spectral width boundary as identified by the SuperDARN radars, XXVII Scientific Committee on Antarctic Research Meeting, July 2002, Shanghai, China (talk)
34. Hosokawa K., E. E. Woodfield, M. Lester, S. E. Milan, N. Sato, A. S. Yukimatu, and T. Iyemori, Characteristics of the spectral width boundary around dayside ionosphere as observed by CUTLASS and SENSU, SuperDARN 2001 Workshop and Annual Meeting, May 2001, Venice, Italy (talk)
35. Hosokawa K., M. Sugino, A. S. Yukimatsu, N. Sato, and T. Iyemori, Simultaneous observation of the subauroral plasma irregularities by EISCAT and SuperDARN, 10th International EISCAT Workshop, July 2001, Tokyo, Japan (poster)
36. Hosokawa K., A. S. Yukimatsu, T. Iyemori, N. Sato, and M. Sugino, Source of plasma irregularities in the subauroral F region as observed by the SuperDARN radars, 2001 Asia-Pacific Radio Science Conference (AP-RASC), August 2001, Tokyo, Japan (poster)
37. Hosokawa K., E. E. Woodfield, M. Lester, S. E. Milan, N. Sato, A. S. Yukimatu, and T. Iyemori, Interhemispheric comparison of spectral width boundary as observed by the conjugate SuperDARN radars, Magnetosphere Ionosphere Solar Terrestrial (MIST) Meeting, Nov 2001, London, UK (oral)
38. Hosokawa, K., A. S. Yukimatu, T. Iyemori, and N. Sato, Spatial distribution of irregularity occurrence rate in the subauroral F region as observed by the SuperDARN radars, SuperDARN 2000 Workshop and Annual Meeting, May 2000, Beachworth, Australia (talk)
39. Hosokawa, K., A. S. Yukimatu, T. Iyemori, and N. Sato, Spatial distribution of irregularity occurrence rate in the subauroral F region as observed by the SuperDARN radars, First S-Ramp Conference, Oct 2000, Sapporo, Japan (poster)
40. Hosokawa, K., T. Iyemori, A. S. Yukimatu, N. Sato, and M. Sugino, Active source of the plasma irregularities in the subauroral F region as observed by the SuperDARN radars, American Geophysical Union (AGU) Fall Meeting, Dec 2000, Sanfrancisco, US (poster)