

# Curriculum Vitae of Yukitoshi (Toshi) Nishimura

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Associate Researcher  
Department of Atmospheric and Oceanic Sciences  
University of California, Los Angeles  
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## **EDUCATION**

- Ph.D. Tohoku University, Japan Geophysics 2009  
Thesis title: *Evolution of convection electric fields in the magnetosphere during geomagnetic storms and substorms*
- M.Sc. Tohoku University, Japan Geophysics 2006  
Thesis title: *Injection and pitch angle distribution of radiation belt and ring current particles associated with storm-time variation of electric and magnetic fields in Geospace*
- B.Sc. Tohoku University, Japan Geophysics 2004  
Thesis title: *Study of plasma waves in the equatorial plasmasphere*

## **APPOINTMENTS**

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|----------------------------|---------------------------------------|---------------------|
| Associate Researcher       | University of California, Los Angeles | 7/1/2015-present    |
| Assistant Researcher       | University of California, Los Angeles | 4/15/2010-6/30/2015 |
| Visiting Scholar           | University of California, Los Angeles | 6/12/2009-4/14/2010 |
| JSPS Research Fellow (SPD) | Nagoya University, Japan              | 4/1/2009-9/20/2011  |
| Research Scholar           | University of Minnesota               | 6/4/2008-8/11/2008  |
| Referred Student           | Nagoya University, Japan              | 4/1/2008-3/31/2009  |
| JSPS Research Fellow (DC1) | Tohoku University, Japan              | 4/1/2006-3/31/2009  |

## **RESEARCH AWARDS AND FELLOWSHIPS**

- Macelwane Medal  
American Geophysical Union (AGU) 7/21/2016
- Young Scientist Prize  
The Commendation for Science and Technology by the Minister of Education,  
Culture, Sports, Science and Technology, Japan 4/12/2016
- AT-RASC Young Scientist Award  
International Union of Radio Science (URSI) 5/18/2015
- Obayashi Young Scientist Award  
Society of Geomagnetism and Earth, Planetary and Space Sciences 11/2/2014
- JSPS Research Fellowship for Young Scientists (SPD) 2009-2011
- Student Presentation Award  
Society of Geomagnetism and Earth, Planetary and Space Sciences 5/29/2008
- JSPS Research Fellowship for Young Scientists (DC1) 2006-2009

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- Fall Meeting Outstanding Student Paper Award  
American Geophysical Union (AGU) 4/17/2007

### NEWS MEDIA COVERAGE

- Nishimura, Y. and L. Lyons, Colliding Auroras Produce Explosions of Light, NASA Press Release, December 17, 2009.  
[http://science.nasa.gov/science-news/science-at-nasa/2009/17dec\\_whenaurorascollide/](http://science.nasa.gov/science-news/science-at-nasa/2009/17dec_whenaurorascollide/)
- Nishimura, Y. and J. Bortnik, Pulsating Aurorae Secrets Revealed, National Geographic News, October 1, 2010.  
<http://news.nationalgeographic.com/news/2010/10/101001-pulsating-northern-lights-aurorae-space-science/>

### RESEARCH GRANTS

- **Grant-in-Aid for JSPS Fellows (DC1):** Variation of electromagnetic fields and energetic particle distributions in the equatorial inner magnetosphere during storms, 18-5248 (PI)  
Apr 01, 2006-Mar 31, 2008, 3000k JPY (\$25k)
- **Grant-in-Aid for JSPS Fellows (SPD):** Evolution of convection electric fields in the inner magnetosphere-ionosphere coupling system during storms, 21-6040 (PI)  
Apr 01, 2009-Sep 2011, 7200k JPY (\$72k)
- **NSF CEDAR:** Incoherent Scatter Radar (ISR) Measurements of Flow Bursts and Relations to Auroral Electrodynamics, AGS-1042255 (Co-I. PI: Lyons)  
Sep 15, 2011- Aug 31, 2014, \$450k
- **NSF Magnetospheric Physics:** Development of Large-Scale Electric Fields in the Inner Magnetosphere during Substorms, AGS-1101903 (PI)  
Dec 01, 2011- Nov 30, 2014, \$300k
- **NASA Geospace:** Azimuthal Pressure Gradient in the Undisturbed Near-Earth Plasma Sheet, NNX12AD11G (Co-I. PI: Xing)  
Jan 01, 2012-Dec 31, 2014, \$361k
- **NASA Geospace:** Global Distribution of Electrostatic Electron Cyclotron Harmonic Waves and Their Roles in Diffuse Auroral Precipitation and Plasma Sheet Electron Morphology, NNX12AD12G (Co-I. PI: Ni)  
Mar 01, 2012-Feb 28, 2015, \$360k
- **NASA Heliophysics Guest Investigator:** Source region of poleward boundary intensifications identified from multi-spacecraft observations in the magnetotail, NNX12AJ57G (PI)  
May 21, 2012- May 20, 2015, \$360k
- **NSF Aeronomy:** PFISR Ion-Neutral Observations in the Thermosphere (PINOT), AGS-1242356 (Co-I. PI: Bristow)  
Oct 01, 2012-Sep 30, 2015, \$133k
- **NASA Geospace:** Flow channel contributions to traditional space and ground features of substorm onset and current wedge formation, NNX13AI61G (Co-I. PI: Lyons)  
Jan 01, 2013-Dec 31, 2015, \$436k

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- **STEL, Nagoya University:** Study of the substorm and pulsations by integrating the global observation and simulations (Co-I. PI: Hashimoto)  
Apr 01, 2013-Mar 31, 2016, 1500k JPY (\$15k)
- **NASA Geospace:** The interrelationship between depolarization fronts, bursty bulk flows, and auroral streamers, NNX14AF70G (Co-I. PI: Pritchett)  
Feb 01, 2014-Jan 31, 2017, \$376k
- **NSF Antarctic Research:** Structure and Evolution of Dayside Diffuse Aurora and Enhanced Magnetospheric Density Regions from Coordinated Observations of South Pole All-Sky Imager and THEMIS Spacecraft, PLR-1341359 (PI)  
Aug 01, 2014-Jul 31, 2017, \$503k
- **NASA Heliophysics Supporting Research:** Understanding the role of kinetic ballooning instability in triggering substorm onset, NNX15AI62G (PI)  
Apr 16, 2015-Apr 15, 2018, \$392k
- **NASA Heliophysics Supporting Research:** Role of mid-latitude flywheel effect in magnetosphere-ionosphere-thermosphere coupling, 14-ITM14\_2-0032 (selected) (Co-I. PI: Maruyama)  
Apr 16, 2015-Apr 15, 2018, \$357k
- **NASA Heliophysics Supporting Research:** Structure and Evolution of Plasma Sheet Fast Flows Using THEMIS Observations and Global MHD Simulations, 14-MAG14\_2-0036 (selected) (Co-I. PI: El-Alaoui)  
Apr 16, 2015-Apr 15, 2018, \$436k
- **Air Force Office of Scientific Research:** Coordinated Radar, Optical and Satellite Analysis of Plasma Sheet-Subauroral Ionospheric Coupling via Meso-Scale Flow Channels, FA9550-15-1-0179 (PI)  
Aug 01, 2015-Jul 31, 2018, \$448k
- **NSF Magnetospheric Physics:** Properties of Meso-scale Polar Cap Structures and their Coupling to Nightside Auroral Dynamics, AGS-1451911 (PI)  
Sep 01, 2015-Aug 31, 2018, \$438k
- **NSF Aeronomy:** Collaborative Research: Coordinated Radar and Optical Analysis of Flow Channel Disturbances within the Nightside Auroral Oval/Plasma Sheet, AGS-1401822 (Co-I. PI: Lyons)  
Selected, \$450k
- **NASA Heliophysics Guest Investigator:** EMIC Wave Generation via Flow burst within the SAPS Region and Possible Connection to Plasma Sheet Flow Burst, 15-HGI15\_2-0013 (Co-I. PI: Lyons)  
Selected, \$434k
- **Air Force Office of Scientific Research:** Multidisciplinary university research initiative (MURI): Next Generation Advances in Ionosphere-Thermosphere Coupling at Multiple Scales for Environmental Specification and Prediction, 16RT0693 (Co-I. PI: Deng)  
Sep 15, 2016-Sep 14, 2021, \$1.5M (\$300k subaward)

### EXPERIMENTAL EXPERIENCE

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## Co-I

Redline auroral geospace observatory (REGO), led by Eric Donovan  
Imaging riometer array (GO-RIO), led by Emma Spanswick

## Science team member

Electric field instrument of Exploration of energization and Radiation in Geospace (ERG) satellite mission  
Electric field instrument of Jupiter Icy Moon Explorer (JUICE) satellite mission

## Observation team leader

Optical measurements at Amami Island for WIND (S-520-23) sounding rocket campaign, August-September 2007

## Lab test member

Thermal vacuum test of the Lunar Radar Sounder (LRS) instrument onboard the Kaguya satellite

## TEACHING AND MENTORING EXPERIENCE

- Teaching in full responsibility
  - Introduction to Space Physics**, Tohoku University
    - 4 semesters in 2004-2007, 10 undergraduates per section
    - Taught small section weekly, prepared course textbook
    - No evaluation in this course
  - Physical Mathematics I (complex mathematics)**, Tohoku University
    - 3 semesters in 2004-2006, 60 undergraduates per section
    - Taught large section weekly, prepared and graded homework and exams
    - Average evaluation: 4.2/5
  - Basic Computing for Freshman**, Tohoku University
    - 2 semesters in 2002-2003, 50 undergraduates per section
    - Taught large section weekly
    - Average evaluation: 69/100 (highest of 12 instructors)
- Teaching assistant
  - Science Cafe: Lightning in Space**, Tohoku University
    - 1 time in 2005, 100 high-school students per section
    - Led discussion in small section
  - Computer Lab**, Tohoku University
    - 8 semesters in 2004-2007, 60 undergraduates per section
    - Answered questions biweekly, assisted student classwork
- Tutor
  - High school math, physics and chemistry**
    - 1 quarter in 2001, one-on-one appointments
  - High school physics**
    - 2 semesters in 2000, one-on-one appointments

## Curriculum Vitae of Yukitoshi (Toshi) Nishimura

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- Graduate students supervising/supervised
  - Cheng Zhen           UCLA (2015-, with L. Lyons)
  - Boyi Wang           UCLA (2013-, with L. Lyons)
  - Naoko Takahashi   Tohoku University (2011-, with Y. Kasaba)
  - Ying Zou            UCLA (2010-2015, with L. Lyons)  
*Jacob A. Bjerknes Award, AOS UCLA, 2015*
  - Beatriz Gallardo   UCLA (2010-2016, with L. Lyons)  
*Teaching Assistant Award, AOS UCLA, 2015*  
*Dissertation Year Fellowship, UCLA, 2015*  
*Outstanding student paper award, AGU Fall Meeting, 2014*  
*First Place Prize, CEDAR workshop, 2014*
  - Kazuki Ogasawara   Tohoku University (2009-2011, M.Sc, with Y. Kasaba)
  - Naritoshi Kitamura   Tohoku University (2007-2012, Ph.D, with T. Ono)  
*JSPS Research Fellowship (PD), 2012*  
*JSPS Research Fellowship (DC2), 2010*
  - Midori Matsumoto   Tohoku University (2007-2009, M.Sc, with T. Ono)
  - Takahiro Ikeda      Tohoku University (2006-2008, M.Sc, with T. Ono)
- Ph.D thesis committee serving/served
  - Xin An               UCLA (2014-)
  - Chao Yue            UCLA (2013-2015)
  - Quanli Ma           UCLA (2012-2015)
  - Beatriz Gallardo    UCLA (2010-2016)
  - Ying Zou            UCLA (2010-2015)
- Undergraduate students supervised
  - Nathan Kang         UCLA (2014-2015, with L. Lyons)
  - Yichen Chen         UCLA (2013-2014, with L. Lyons)

### **PROFESSIONAL ACTIVITIES**

- **Proposal panelist** of the NASA Earth and Space Science Fellowship Program, 2012
- **Paper reviews** in AGU Monograph, JGR, GRL, JASTP, AnGeo, Science, EPS, ASR, AGU student paper award
- **Proposal reviews** in NASA and NSF
- **Meeting chair/co-chair** of 2008 JpGU Magnetosphere session, 2010 GEM diffuse aurora focus group, 2011 THEMIS Science Working Group meeting, and 2013 GEM-CEDAR workshop, 2015-2019 GEM Substorm Focus Group leaders, 2015 AGU multisatellite session
- **Providing comments to science TV programs** (*Cosmic Front* by NHK, Japan, 13 March 2012; *Cosmic Front* by NHK, 20 May 2012; *Spectacle of Space witnessed by astronaut Wakata*, by NHK, 16 October 2014)

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### INVITED TALKS

International Union of Geodesy and Geophysics (IAGA)	
Reporter Review speaker (accepted)	2017
AGU Fall Meeting Union session talk	2016
Geospace Environment Modeling (GEM) workshop	2016
International Symposium on Recent Observations and Simulations of the Sun-Earth System (ISROSES-III, declined)	2016
AGU Fall Meeting × 2	2015
ISAS Workshop: Magnetospheric Plasmas	2015
Geospace Environment Modeling (GEM) Tutorial Speaker	2015
AGU Joint Assembly	2015
International Association of Geomagnetism and Aeronomy (IAGA, declined)	2015
Geospace Environment Modeling (GEM) workshop	2014
Asia Oceania Geosciences Society	2014
International Conference of Substorms (ICS) 12	2014
AGU Fall Meeting	2014
Asia-Pacific Radio Science Conference (declined)	2013
Earth-Sun System Exploration Conference	2013
Advances and Perspectives in Auroral Plasma Physics Workshop	2013
University of Science and Technology of China	2013
International Conference on Storms, Substorms, and Space Weather (declined)	2013
International Conference of Substorms (ICS) 11	2012
Geospace Environment Modeling (GEM) workshop	2012
Inner Magnetosphere Coupling II	2012
Living with a Star - 2011 Workshop (declined)	2011
Earth-Sun System Exploration Conference	2011
Geospace Environment Modeling (GEM) workshop	2011
International Union of Geodesy and Geophysics (IUGG)	2011
Joint Messenger-BepiColombo workshop	2010
PFISR workshop: Science results and future plans	2010
Geospace Environment Modeling (GEM) workshop	2010
International Conference of Substorms (ICS) 10	2010
10th Cluster anniversary workshop	2010
Japan Geoscience Union Meeting	2009
International Association of Geomagnetism and Aeronomy (IAGA)	2009
Geospace Environment Modeling (GEM) workshop	2009
THEMIS science working group meeting	2009
Rice University Seminar	2009
Japan Geoscience Union Meeting	2008

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## REFEREED PUBLICATIONS

**Total Citations: 1557**

**H-index: 21**

**30 first authored, 78 coauthored with 41 unique authors**

<http://scholar.google.com/citations?user=YDPhMEIAAAAJ&hl=en>

1. Shinbori, A., **Y. Nishimura**, T. Ono, M. Iizima, A. Kumamoto, and H. Oya, Electrodynamics in the duskside inner magnetosphere and plasmasphere during a super magnetic storm on March 13-15, 1989, *Earth Planets Space*, 57, pp. 643-659, 2005. Citation: 17
2. **Nishimura, Y.**, T. Ono, M. Iizima, A. Shinbori, A. Kumamoto, and H. Oya, Statistical studies of fast and slow Z-mode plasma waves in and beyond the equatorial plasmasphere based on long-term Akebono observations, *Earth Planets Space*, 58, pp. 343-346, 2006. Citation: 3
3. **Nishimura, Y.**, A. Shinbori, T. Ono, M. Iizima, and A. Kumamoto, Storm-time electric field distribution in the inner magnetosphere, *Geophys. Res. Lett.*, 33, L22102, 2006. Citation: 11
4. Shinbori, A., T. Ono, M. Iizima, A. Kumamoto, and **Y. Nishimura**, Enhancements of magnetospheric convection electric field associated with sudden commencements in the inner magnetosphere and plasmasphere regions, *Adv. Space. Res.*, 38, pp. 1595-1607, 2006. Citation: 3
5. **Nishimura, Y.**, A. Shinbori, T. Ono, M. Iizima, and A. Kumamoto, Evolution of ring current and radiation belt particles under the influence of storm-time electric fields, *J. Geophys. Res.*, 112, A06241, 2007. Citation: 16
6. **Nishimura, Y.**, T. Ono, M. Iizima, A. Shinbori, and A. Kumamoto, Generation Mechanism of Z-mode Waves in the Equatorial Plasmasphere, *Earth Planets Space*, 59, pp. 1027-1034, 2007. Citation: 2
7. **Nishimura, Y.**, J. Wygant, T. Ono, M. Iizima, A. Kumamoto, D. Brautigam, and R. Friedel, SAPS measurements around the magnetic equator by CRRES, *Geophys. Res. Lett.*, 35, L10104, 2008. Citation: 16
8. **Nishimura, Y.**, J. Wygant, T. Ono, M. Iizima, A. Kumamoto, D. Brautigam, and F. Rich, Large-amplitude wave electric field in the inner magnetosphere during substorms, *J. Geophys. Res.*, 113, A7, A07202, 2008. Citation: 5
9. **Nishimura, Y.**, T. Kikuchi, J. Wygant, A. Shinbori, T. Ono, A. Matsuoka, T. Nagatsuma, and D. Brautigam, Response of convection electric fields in the

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- magnetosphere to IMF orientation change, *J. Geophys. Res.*, 114, A09206, 2009. Citation: 7
10. Kitamura, N. A. Shinbori, **Y. Nishimura**, T. Ono, M. Iizima, and A. Kumamoto, Seasonal variations of the electron density distribution in the polar region during geomagnetically quiet periods near solar maximum, *J. Geophys. Res.*, 114, A01206, 2009. Citation: 14
  11. Kalae, M. J., T. Ono, Y. Katoh, M. Iizima, and **Y. Nishimura**, Simulation of mode conversion from UHR-mode wave to LO-mode wave in an inhomogeneous plasma with different wave normal angles, *Earth Planets Space*, 61, 1243-1254, 2009. Citation: 4
  12. Hartinger, M., M. Moldwin, V. Angelopoulos, K. Takahashi, H. Singer, R. Anderson, **Y. Nishimura**, and J. Wygant, Pc5 wave power in the quiet-time plasmasphere and trough: CRRES observations, *Geophys. Res. Lett.*, 37, L07107, 2010. Citation: 6
  13. Li, W., R. Thorne, **Y. Nishimura**, J. Bortnik, V. Angelopoulos, J. P. McFadden, D. E. Larson, J. W. Bonnell, O. Le Contel, A. Roux, and U. Auster, THEMIS Analysis of Observed Equatorial Electron Distributions Responsible for Chorus Excitation, *J. Geophys. Res.*, 115, A00F11, 2010. **Citation: 81**
  14. Shinbori, A., **Y. Nishimura**, Y. Tsuji, T. Kikuchi, T. Araki, A. Ikeda, T. Uozumi, R. Otadoy, H. Utada, J. Ishitsuka, N. Trivedi, S. Dutra, N. Schuch, S. Watari, T. Nagatsuma, K. Yumoto, Anomalous occurrence features of the preliminary impulse of geomagnetic sudden commencement in the South Atlantic Anomaly region, *J. Geophys. Res.*, 115, A8, A08309, 2010. Citation: 4
  15. Kitamura, N., **Y. Nishimura**, T. Ono, A. Kumamoto, A. Shinbori, M. Iizima, A. Matsuoka, and M. R. Hairston, Temporal variations and spatial extent of the electron density enhancements in the polar magnetosphere during geomagnetic storms, *J. Geophys. Res.*, 115, A12, A00J02, 2010. Citation: 6
  16. **Nishimura, Y.**, L. Lyons, S. Zou, V. Angelopoulos, and S. Mende, Substorm triggering by new plasma intrusion: THEMIS all-sky imager observations, *J. Geophys. Res.*, 115, A7, A07222, 2010. **Citation: 135**
  17. Lyons, L., **Y. Nishimura**, Y. Shi, S. Zou, H. Kim, V. Angelopoulos, C. Heinselman, M. Nicolls, and K. Fornacon, Substorm Triggering by New Plasma Intrusion: Incoherent-Scatter Radar Observations, *J. Geophys. Res.*, 115, A7, A07223, 2010. Citation: 37
  18. Kalae, M. J., Y. Katoh, A. Kumamoto, T. Ono, and **Y. Nishimura**, Simulation of mode conversion process from upper-hybrid waves to LO-mode waves in the vicinity of the plasmopause, *Ann. Geophys*, 28, pp. 1289-1297, 2010. Citation: 7



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19. Xing, X., L. Lyons, **Y. Nishimura**, V. Angelopoulos, D. Larson, C. Carlson, J. Bonnell, and U. Auster, Substorm Onset by new Plasma Intrusion: THEMIS Spacecraft Observations, *J. Geophys. Res.*, Volume 115, A10, A10246, 2010. Citation: 31
20. Lyons, L. R., **Y. Nishimura**, X. Xing, V. Angelopoulos, S. Zou, D. Larson, J. McFadden, A. Runov, S. Mende, and K.-H. Fornacon, Enhanced transport across entire length of plasma sheet boundary field lines leading to substorm onset, *J. Geophys. Res.*, 115, A11, A00I07, 2010. Citation: 14
21. **Nishimura, Y.**, L. Lyons, S. Zou, V. Angelopoulos and S. Mende, J. W. Bonnell, D. Larson, U. Auster, T. Hori, N. Nishitani, K. Hosokawa, G. Sofko, M. Nicolls, and C. Heinselman, Preonset time sequence of auroral substorms: Coordinated observations by all-sky imagers, satellites and radars, *J. Geophys. Res.*, 115, 10, A00I08, 2010. Citation: 27
22. **Nishimura, Y.**, J. Bortnik, W. Li, R. M. Thorne, L. R. Lyons, V. Angelopoulos, S. B. Mende, J. Bonnell, O. Le Contel, C. Cully, R. Ergun, and U. Auster, Identifying the driver of pulsating aurora, *Science*, 330, 6000, 81-84, 2010. Citation: 86
23. **Nishimura, Y.**, T. Kikuchi, A. Shinbori, J. Wygant, Y. Tsuji, T. Hori, T. Ono, S. Fujita, and T. Tanaka, Direct measurements of the Poynting flux associated with convection electric fields in the magnetosphere, *J. Geophys. Res.*, 115, A12, A12212, 2010. Citation: 5
24. Kitamura, N., **Y. Nishimura**, T. Ono, Y. Ebihara, N. Terada, A. Shinbori, A. Kumamoto, T. Abe, M. Yamada, S. Watanabe, A. Matsuoka, and A. W. Yau, Observations of very-low-energy (<10 eV) ion outflows dominated by O<sup>+</sup> ions in the region of enhanced electron density in the polar cap magnetosphere during geomagnetic storms, *J. Geophys. Res.*, 115, A00J06, 2010. Citation: 14
25. Takahashi, K., J. Bonnell, K.-H. Glassmeier, V. Angelopoulos, H. J. Singer, P. J. Chi, Richard E. Denton, D.-H. Lee, M. Nose , **Y. Nishimura**, Multipoint observation of fast mode waves trapped in the dayside plasmasphere, *J. Geophys. Res.*, 115, A12, A12247, 2010. Citation: 14
26. **Nishimura, Y.**, L. Lyons, S. Zou, V. Angelopoulos and S. Mende, Reply to comment by Harald U. Frey on "Substorm triggering by new plasma intrusion: THEMIS all-sky imager observations", *J. Geophys. Res.*, 115, A12, A12233, 2010. Citation: 6
27. Zou, S., M. B. Moldwin, L. R. Lyons, **Y. Nishimura**, M. Hirahara, T. Sakanoi, K. Asamura, M. J. Nicolls, Y. Miyashita, S. B. Mende, C. J. Heinselman, Identification of substorm onset location and preonset sequence using Reimei, THEMIS GBO, PFISR, and Geotail, *J. of Geophys. Res.*, 115, A12, A12309, 2010. Citation: 14

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28. Li, W. R. M. Thorne, J. Bortnik, **Y. Nishimura**, V. Angelopoulos, L. Chen, J. McFadden, J. Bonnell, Global distributions of suprathermal electrons observed on THEMIS and potential mechanisms for access into the plasmasphere, *J. Geophys. Res.*, Volume 115, A00J10, 2010. Citation: 62
29. Runov, A., V. Angelopoulos, M. Sitnov, V. A. Sergeev, R. Nakamura, Y. Nishimura, H. U. Frey, J. P. McFadden, D. Larson, J. Bonnell, K.-H. Glassmeier, U. Auster, C. T. Russell, H. J. Singer, Dipolarization Fronts in the Magnetotail Plasma Sheet, *Planet. Space. Sci.*, 59, 7, 517-525, 2011. Citation: 47
30. Xing, X., L. R. Lyons, **Y. Nishimura**, V. Angelopoulos, E. Donovan, E. Spanswick, J. Liang, D. Larson, C. Carlson, and U. Auster, Near-Earth plasma sheet azimuthal pressure gradient and associated auroral development soon before substorm onset, *J. Geophys. Res.*, 116, A07204, 2011. Citation: 20
31. Kurita, S., Y. Miyoshi, F. Tsuchiya, **Y. Nishimura**, A. Morioka, T. Hori, Y. Miyashita, T. Takada, J. M. Albert, V. Angelopoulos, J. P. McFadden, H. U. Auster, and H. Misawa, Transport and loss of the inner plasma sheet electrons: THEMIS observations, *J. Geophys. Res.*, 116, A3, A03201, 2011. Citation: 6
32. Kimura, T., F. Tsuchiya, H. Misawa, A. Morioka, **Y. Nishimura**, Direct and indirect generation of Jovian quasiperiodic radio bursts by relativistic electron beams in the polar magnetosphere, *J. Geophys. Res.*, 116, A3, A03202, 2011. Citation: 2
33. Mende, S. B., H. U. Frey, V. Angelopoulos, and **Y. Nishimura**, Substorm triggering by poleward boundary intensification and related equatorward propagation, *J. Geophys. Res.*, 116, A00I31, 2011. Citation: 25
34. Nakamura, R., W. Baumjohann, E. Panov, A. A. Petrukovich, V. Angelopoulos, M. Volwerk, W. Magnes, **Y. Nishimura**, A. Runov, C. T. Russell, J. M. Weygand, O. Amm, H.-U. Auster, J. Bonnell, H. Frey, D. Larson, J. McFadden, Flux transport, dipolarization, and current sheet evolution during a double-onset substorm, *J. Geophys. Res.*, 116, A00I36, 2011. Citation: 14
35. Hartinger, M., V. Angelopoulos, M. B. Moldwin, K.-H. Glassmeier, Karl-Heinz, **Y. Nishimura**, Global energy transfer during a magnetospheric field line resonance, *Geophys. Res. Lett.*, 38, 12, L12101, 2011. Citation: 5
36. Li, W., R. M. Thorne, J. Bortnik, **Y. Nishimura**, and V. Angelopoulos, Modulation of Whistler mode Chorus Waves: 1. Role of Compressional Pc4-5 Pulsations, *J. Geophys. Res.*, 116, A6, A06205, 2011. Citation: 26
37. Li, W., R. M. Thorne, J. Bortnik, **Y. Nishimura**, V. Angelopoulos, and L. Chen, Modulation of Whistler-mode Chorus Waves: 2. Role of Density Variations, *J. Geophys. Res.*, 116, A6, A06206, 2011. Citation: 36

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38. Ogasawara, K., Y. Kasaba, **Y. Nishimura**, T. Hori, T. Takada, Y. Miyashita, V. Angelopoulos, S. B. Mende, and J. Bonnell, Azimuthal auroral expansion associated with fast flows in the near-Earth plasma sheet: Coordinated observations of the THEMIS all-sky imagers and multiple spacecraft, *J. Geophys. Res.*, 116, A6, A06209, 2011. Citation: 2
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