

**Professor James A. Slavin**  
**Department of Climate and Space Sciences and Engineering**  
**University of Michigan**

- RESEARCH: Magnetospheric Plasma Physics; Solar wind interactions with weakly-magnetized planets and comets; Space-borne magnetometry; Space Mission Design and Management.
- EDUCATION: 1982 - Ph.D., Space Physics, University of California at Los Angeles  
1978 - M.S., Geophysics and Space Physics, University of California at Los Angeles  
1976 - B.S., Physics, Case Western Reserve University
- PREVIOUS APPOINTMENTS: 2011 - Professor of Space Physics, Department of Climate and Space Sciences & Engineering, University of Michigan  
2011 - 2018 Chair, Department of Climate and Space Sciences & Engineering, University of Michigan  
2005 - 2011 Director, Heliophysics Science Division  
1990 - 2004 Head, Electrodynamics Branch  
1987 - 1989 Staff Scientist, NASA/GSFC Laboratory for Extraterrestrial Physics  
1986 - 1987 Discipline Scientist for Magnetospheric Physics, Space Physics Division, NASA Headquarters  
1983 - 1986 Research Scientist, Astrophysics and Space Physics Section, Caltech/Jet Propulsion Laboratory
- HONORS: 2017 - Asia Oceania Geosciences Society 14<sup>th</sup> Annual Meeting Distinguished Lecturer in Planetary Sciences  
2016 - NASA Group Achievement Award, MMS Instrument Suite  
2012 - International Academy of Astronautics Laurels for Team Achievement for MESSENGER  
2012 - Fellow, American Geophysical Union  
2009 - NASA Group Achievement Award, MESSENGER Mission  
2008 - NASA Exceptional Achievement Medal for Space Technology 5  
2007 - NASA Group Achievement Award, Space Technology-5  
2006 - NASA Certificate of Appreciation for Excellence in Leadership as Space Technology 5 Project Scientist  
2006 - University of California Regent's Lectureship in Space Physics  
2005 - Appointed to Federal Senior Executive Service (SES)  
2004 - NASA Exceptional Achievement Medal for Role of Magnetic Reconnection in Magnetospheric Substorms  
2004 - NASA Group Achievement Award, Cluster Mission  
2000 - NASA Group Achievement Award, Sun-Earth Connection 2000 Roadmap Team  
1998 - Publishers Association Award for Best Physics and Astronomy Book of 1998 for "New Perspectives in Magnetotail Physics"  
1998 - NASA Group Achievement Award, WIND MFI Team  
1995 - NASA Group Achievement Award, WIND Magnetic Fields Investigation  
1986 - NASA Group Achievement Award, International

Cometary Explorer Magnetometer Team  
1982 - National Research Council Resident Research Associate  
NASA Jet Propulsion Laboratory  
1981 - NASA Group Achievement Award, Pioneer Venus  
Orbiter Magnetometer Team

#### SPACE SCIENCE

MISSION LEADERSHIP: 1998-2008 Senior Project Scientist, Solar Terrestrial Probes  
2006-2007 Project Scientist, Magnetospheric MultiScale  
Mission  
1999-2006 Project Scientist, New Millenium Program  
Space Technology - 5 Micro-satellite  
Constellation Mission  
1989-1991 Project Scientist, ISTP/POLAR  
1989-1991 Study Scientist, Mercury Orbiter  
1984-1986 Study Scientist, Mars Aeronomy Observer

#### SPACE SCIENCE INSTRUMENTS:

2015 - Co-Investigator, Europa PIMS Investigation  
2013 - Co-Investigator, JUICE Magnetic Fields Investigation  
2009 - Co-Investigator, BepiColombo STROFIO Investigation  
2005 - Co-Investigator, MMS SMART Investigation  
2004 - Co-Investigator, BepiColombo MERMAG Investigation  
1999 - Co-Investigator, MESSENGER Mission  
1997 - Co-Investigator, IMP 8 Magnetic Field Investigation  
1994 - Participating Scientist, Mars Global Surveyor MAG-ER  
1992 - Participating Scientist, Mars Observer MAG-ER  
1990 - Co-Investigator, Mars-96 MAREMF Investigation  
1990 - Principal Investigator, ESA Polar Platform Advanced  
Particles and Fields Observatory  
1989 - Co-Investigator, EOS Geomagnetic Observing System  
1989 - Co-Investigator, ISTP/WIND Magnetic Fields  
Investigation  
1989 - Co-Investigator, Dynamics Explorer-1/2 Magnetic Fields  
Investigation  
1988 - IKI Guest Investigator, Phobos-1/2  
1988 - Co-Investigator Cluster Magnetic Fields Investigation  
1987 - Co-Investigator, ISEE-3/ICE Magnetic Fields  
Investigation  
1986 - Co-Investigator, CRAF Magnetic Fields Investigation  
1983 - Guest Investigator, Pioneer Venus Orbiter

DOCTORAL COMMITTEES: 2023 Charles Bowers, Univ. Of Michigan (Co-Chair, est)  
2020 Ryan M. Dewey, Univ. of Michigan (Co-Chair, est)  
2020 Mojtaba Akhavan-Tafti, Univ. of Michigan (Chair, est)  
2018 Patrick Belancourt, Univ. of Michigan (est.)  
2018 Doğa Can Su Öztürk, Univ. of Michigan (Co-Chair, est.)  
2017 Gangkai Poh, Univ. of Michigan (Chair)  
2017 Yuxi Chen, Univ. of Michigan  
2015 A. H. Sulaiman, Imperial College (Co-Chair)  
2014 Gina A. DiBraccio, Univ. of Michigan (Chair)  
2013 Jim M. Raines, Univ. of Michigan (Co-Chair)  
2013 Shannon M. Curry, Univ. of Michigan  
2009 Adam Masters, Imperial College (Co-Chair)  
1996 Esa Kallio, University of Helsinki (Opponent)  
1993 Mark B. Moldwin, Boston University

POST-DOCTORAL SCIENTISTS: 2018 - W.-J. Sun (PhD. Peking University)  
 2017 - 2018 G.-K. Poh (Ph.D. Univ of Michigan)  
 2015 - 2017 J. M. Jasinski (Ph.D. Univ. College London)  
 2011 - 2013 D. J. Gershman (Ph.D. Univ. of Michigan)  
 2010 - 2012 T. K. Sundberg (Ph.D. Royal Tech. Univ. Stockholm)  
 2008 - 2011 S. M. Imber (Ph.D. Univ. of Leicester)  
 2007 - 2011 M. Sarantos (Ph.D. Rice University)  
 2002 - 2005 E. I. Tanskanen (Ph.D. Univ. of Helsinki)  
 1996 - 1998 M. C. Collier (Ph.D. Univ. of Maryland)  
 1996 - 1999 S. Taguchi (Ph.D. Univ. of Kyoto)  
 1993 - 1995 M. M. Kuznetsova (Ph.D. Moscow State Univ., Space Research Institute)  
 1992 - 1995 J. J. Moses (Ph.D. Univ. of California at Los Angeles )  
 1990 - 1992 C. J. Owen (Ph.D. Imperial College)

EDITORIAL SERVICE: 2018 - Member, Editorial Board, Atmosphere, Earth, Ocean and Space (AEONS) Series, Springer Publishers  
 1997- 2013 Foreign Editor, *Journal of Earth, Spac, and Planets*  
 1998 Co-Editor (with J.B. Blake) *Particle Acceleration in Space Plasmas, Adv. Space Res., 21, No. 4*  
 1994-1998 Associate Editor, *J. Geophysical Research*  
 1992-1997 Associate Editor, *Reviews of Geophysics*  
 1986 Co-Editor, *Solar Wind - Magnetosphere Coupling*, Terra-Reidel Pub, Tokyo

UNIV. MICHIGAN SERVICE: 2017 – 2018 Shared Services Center Administrative Council  
 2013 - 2015 Oversight Committee for Research and Data  
 2013 College of Engineering Awards Committee

EXTERNAL SERVICE: 2015 - 2017 Steering Committee for NASA’s Living with a Star Program  
 2009 - 2011 Member, Virginia Tech Center for Space Science and Engineering Research Advisory Panel  
 2008 Member, Visiting Review Panel, University College of London, Mullard Space Science Laboratory  
 2008 - 2011 Member, Planetary Science Sub-Committee of NASA’s Science Advisory Council  
 2005 Member, Advanced Planning and Integration Office Sun-Solar System Connection Roadmap Panel  
 2003 Co-Chair, GSFC Magnetism Facility Workshop  
 2001 Sun-Earth Connections Lead, Deep Space Network 70 meter Receiver Science Workshop  
 2000 - 2004 Member, NASA HQ Geospace Science MOWG  
 2000 Co-Convenor, LWS Measurement Requirements Workshop  
 1999 - 2000 Co-Chair, SEC 2000 Roadmap Team  
 1999 Member, Committee of Visitors, NSF Upper Atmosphere Research Section  
 1995-1998 Member, Tellers Committee, American Geophysical Union

1995-1996	Member, Mercury Sub-committee, Terrestrial Planets Science Working Group
1993-1996	Co-Chair, COSPAR Sub-Commission D.3 on Planetary Magnetospheres
1991-1992	Solar-Terrestrial Physics Group Leader, National Academy of Sciences Geomagnetism Initiative Workshop
1990-1991	Member, Magnetospheres Panel, NASA HQ Space Physics Strategy-Implementation Study
1989-1993	Co-Chair, COSPAR Sub-Commission D.2 on Mars Plasma Environment
1985-1986	Co-Convenor, AGU Chapman Conference on Solar Wind-Magnetosphere Coupling

PROFESSIONAL SOCIETIES:

American Geophysical Union  
 American Astronomical Society/Division Planetary Sciences  
 American Association for the Advancement of Science  
 American Institute of Aeronautics and Astronautics  
 American Meteorological Society

**First Author Scientific Publications**

60. **Slavin, J. A.**, D. N. Baker, D. J. Gershman, G. Ho, S. M. Imber, S. M. Krimigis, and T. Sundberg (2018), Mercury's Dynamic Magnetosphere, in *Mercury*, eds. S. Solomon et al., in press, Cambridge, London.

59. **Slavin, J. A.**, G. A. DiBraccio, D. J. Gershman, S. Imber, G. K. Poh, J. Raines, T. H. Zurbuchen, X. Jia, D. N. Baker, S. A. Boardsen, T. Sundberg, A. Masters, C. L. Johnson, R. M. Winslow, B. J. Anderson, H. Korth, G. Ho, S. M. Krimigis, R. L. McNutt, Jr, and S. C. Solomon (2014), MESSENGER Observations of Mercury's Dayside Magnetosphere Under Extreme Solar Wind Conditions, *J. Geophys. Res. Space Physics*, 119, doi:10.1002/2014JA020319.

58. **Slavin, J. A.**, S. M. Imber, S. A. Boardsen, G. A. DiBraccio, T. Sundberg, M. Sarantos, T. Nieves-Chinchilla, A. Szabo, B. J. Anderson, H. Korth, T. H. Zurbuchen, J. M. Raines, C. L. Johnson, R. M. Winslow, R. M. Killen, R. L. McNutt, Jr., and S. C. Solomon (2012), MESSENGER Observations of a Flux Transfer Shower at Mercury, *J. Geophys. Res.*, 117, A00M06, doi:10.1029/2012JA017926.

57. **Slavin, J. A.** (2012), A Dynamic Twist in the Tail, *Science*, 336, 548 DOI: 10.1126/science.1221805.

56. **Slavin, J. A.**, B. J. Anderson, D. N. Baker, M. Benna, S. A. Boardsen, R. E. Gold, G. C. Ho, S. M. Imber, H. Korth, S. M. Krimigis, R. L. McNutt, Jr, J. M. Raines, M. Sarantos, D. Schriver, S. C. Solomon, P. Trávníček, and T. H. Zurbuchen (2012), MESSENGER Flyby Observations of Magnetotail Structure and Dynamics at Mercury, *J. Geophys. Res.*, 117, A01215, doi:10.1029/2011JA016900.

55. **Slavin, J. A.**, B. J. Anderson, D. N. Baker, M. Benna, S. A. Boardsen, G. Gloeckler, R. E. Gold, G. C. Ho, H. Korth, S. M. Krimigis, R. L. McNutt, Jr., L. R. Nittler, J. M. Raines, M.

Sarantos, D. Schriver, S. C. Solomon, R. D. Starr, P. M. Trávníček, T. H. Zurbuchen (2010), MESSENGER observations of extreme loading and unloading of Mercury's magnetic tail, *Science*, **329**, 665-668.

54. **Slavin, J. A.**, R. P. Lepping, C. -C. Wu, B. J. Anderson, D. N. Baker, M. Benna, S. A. Boardsen, R. M. Killen, H. Korth, S. M. Krimigis, W. E. McClintock, R. L. McNutt Jr., M. Sarantos, D. Schriver, S. C. Solomon, P. Travnicek, and T. H. Zurbuchen (2010), MESSENGER observations of large flux transfer events at Mercury, *Geophys. Res. Lett.*, **37**, L02105, doi:10.1029/2009GL041485.

53. **Slavin, J. A.**, M. H. Acuña, B. J. Anderson, S. Barabash, M. Benna, S. A. Boardsen, M. Fraenz, G. Gloeckler, R.E. Gold, G. C. Ho, H. Korth, S. M. Krimigis, R. L. McNutt, Jr., J.M. Raines, M. Sarantos, S. C. Solomon, T.-L. Zhang, and T. H. Zurbuchen (2009), MESSENGER and Venus Express observations of the solar wind interaction with Venus, *Geophys. Res. Lett.*, **36**, L09106, doi:10.1029/2009GL037876.

52. **Slavin, J. A.**, M. H. Acuna, B. J. Anderson, D. N. Baker, M. Benna, S. A. Boardsen, G. Gloeckler, R. E. Gold, G. C. Ho, H. Korth, S. M. Krimigis, R. L. McNutt, Jr., J. M. Raines, M. Sarantos, D. Schriver, S. C. Solomon, P. Trávníček, T. H. Zurbuchen (2009), MESSENGER Observations of Magnetic Reconnection in Mercury's Magnetosphere, *Science*, **324**, 606 – 610, doi:10.1126/science.1172011.

51. **Slavin, J. A.**, B. J. Anderson, T. H. Zurbuchen, D. N. Baker, S. M. Krimigis, M. H. Acuña, M. Benna, S. A. Boardsen, G. Gloeckler, R. E. Gold, G. C. Ho, H. Korth, R. L. McNutt, Jr., J. M. Raines, M. Sarantos, D. Schriver, S. C. Solomon, and P. Trávníček (2009), MESSENGER observations of Mercury's magnetosphere during northward IMF, *Geophys. Res. Lett.*, **36**, L02101, doi:10.1029/2008GL036158

50. **Slavin, J.A.**, M. H. Acuna, B. J. Anderson, D. N. Baker, M. Benna, G. Gloeckler, R. E. Gold, G. C. Ho, R. M. Killen, H. Korth, S. M. Krimigis, R. L. McNutt, Jr., L. R. Nittler, J. M. Raines, D. Schriver, S. C. Solomon, R. D. Starr, P. Trávníček, T. H. Zurbuchen (2008), Mercury's Magnetosphere after MESSENGER's First Flyby, *Science*, **321**, 85 – 89, doi:10.1126/science.1159040.

49. **Slavin, J. A.**, G. Le, R. J. Strangeway, Y. Wang, S. A. Boardsen, M. B. Moldwin, and H. E. Spence (2008), Space Technology 5 multi-point measurements of near-Earth magnetic fields: Initial results, *Geophys. Res. Lett.*, **35**, L02107, doi:10.1029/2007GL031728.

48. **Slavin, J.A.**, S.M. Krimigis, M. H. Acuña, B.J. Anderson, D.N. Baker, P.L. Koehn, H. Korth, S. Livi, B.H. Mauk, S.C. Solomon, and T.H. Zurbuchen (2007), MESSENGER at Mercury: Exploring the Magnetosphere, *Space Sci. Rev.*, **131**: 133-160, doi:10.1007/s11214-007-9154-x

47. **Slavin, J.A.** (2005), Mars Aeronomy Orbiter and its Contribution to the Vision for Exploration, *Space 2005*, Long Beach, California, AIAA 2005-6824

46. **Slavin, J.A.**, E. Tanskanen, M. Hesse, C.J. Owen, M.W. Dunlop, S. Imber, E. Lucek (2004), A. Balogh, and K.-H. Glassmeier (2005), Cluster observations of traveling compression regions in the near-tail, *J. Geophys. Res.*, **110**, A06207, doi:10.1029/2004JA010878

45. **Slavin, J.A.** (2004), Mercury's Magnetosphere, *Adv. Space Res.*, **33**/11, 1587-1872, doi:10.1016/j.asr.2003.02.019
44. **Slavin, J.A.**, C.J. Owen, M.W. Dunlop, E. Borälv, M.B. Moldwin, D.G. Sibeck, E. Tanskanen, M.L. Goldstein, A. Fazakerley, A. Balogh, E. Lucek, I. Richter, H. Reme, and J.M. Bosqued (2003), Cluster four spacecraft measurements of small traveling compression regions in the near-tail, *Geophys. Res. Lett.*, **30**(23), 2208, doi:10.1029/2003GL018438.
43. **Slavin, J.A.**, R.P. Lepping, J. Gjerloev, D.H. Fairfield, M.H. Acuna, M.L. Goldstein, A. Balogh, M. Dunlop, M.G. Kivelson, K. Khurana, A. Fazakerley, C.J. Owen, H. Reme and J.M. Bosqued (2003), Cluster measurements of electric current density within a flux rope in the plasma sheet, *Geophys. Res. Lett.*, **30**(7), 1362, doi:10.1029/2002GL016411.
42. **Slavin, J.A.**, R.P. Lepping, J. Gjerloev, D.H. Fairfield, M. Hesse, C.J. Owen, M.B. Moldwin, T. Nagai, A. Ieda, and T. Mukai (2003), Geotail observations of magnetic flux ropes in the plasma sheet, *J. Geophys. Res.*, **108**(A1), 1015, doi:10.1029/2002JA009557
41. **Slavin, J. A.**, D. H. Fairfield, R. P. Lepping, M. Hesse, A. Ieda, E. Tanskanen, N. Østgaard, T. Mukai, T. Nagai, H. J. Singer, and P. R. Sutcliffe (2002), Simultaneous observations of earthward flow bursts and plasmoid ejection during magnetospheric substorms, *J. Geophys. Res.*, **107**(A7), doi:10.1029/2000JA003501
40. **Slavin, J.A** (2001), Magnetospheres: Mercury, *Encyclopedia of Astronomy and Astrophysics*, ed. P Murdin, Institute of Physics Publishing/Macmillan, London
39. **Slavin, J.A.**, M. Hesse, C.J. Owen, S. Taguchi, D.H. Fairfield, R.P. Lepping, S. Kokubun, T. Mukai, A.T.Y. Lui, R. Anderson, H. Matsumoto and P.R. Sutcliffe (1999), Dual spacecraft observations of lobe magnetic field perturbations before, during and after plasmoid release, *Geophys. Res. Lett.*, **26**, 2,897
38. **Slavin, J.A.** (1998), Traveling Compression Regions, *New Perspectives in Magnetotail Physics*, eds. A. Nishida, S.W.H. Cowley and D.N. Baker, pp. 225-240, AGU Monograph, **105**, Washington, D.C.
37. **Slavin, J.A.**, D.H. Fairfield, M. Kuznetsova, C.J. Owen, R.P. Lepping, S. Taguchi, T. Mukai, Y. Saito, T. Yamamoto, S. Kokubun, A.T.Y. Lui, and G.D. Reeves (1998), ISTP observations of plasmoid ejection: IMP 8 and Geotail, *J. Geophys. Res.*, **103**, 119
36. **Slavin, J. A.**, C. J. Owen, J. E. P. Connerney, and S. P. Christon, Mariner 10 observations of field-aligned currents at mercury (1997), *Planet. Space Sci.*, **45**, 133
35. **Slavin, J.A.**, D.H. Fairfield, R.P. Lepping, A. Szabo, M.J. Reiner, M. Kaiser, C.J. Owen, T. Phan, R. Lin, S. Kokubun, T. Mukai, T. Yamamoto, H. Singer, S. Romanov, J. Buechner, T. Iyemori, and G. Rostoker (1997), WIND, GEOTAIL and GOES 9 observations of magnetic field dipolarization and bursty bulk flows in the near-tail, *Geophys. Res. Lett.*, **24**, 971

34. **Slavin, J. A.**, A. Szabo, M. Peredo, C. J. Owen, R. P. Lepping, R. Fitzenreiter, K. W. Ogilvie, J. L. Steinberg, and A. J. Lazarus (1996), Near-simultaneous bow shock crossings by WIND and IMP 8 on December 1, 1994, *Geophys. Res. Lett.*, **23**, 1,207
33. **Slavin, J. A.**, C. J. Owen, M. M. Kuznetsova, and M. Hesse (1995), ISEE 3 observations of plasmoids with flux rope magnetic topologies, *Geophys. Res. Lett.*, **22**, 2,061
32. **Slavin, J. A.**, C. J. Owen, and M. Hesse (1994), The evolution of the plasmoid-lobe interaction with downtail distance, *Geophys. Res. Lett.*, **21**, 2,765
31. **Slavin, J. A.**, M. Verigin, K. Gringauz, G. Kotova, S. Stahara, J. Spreiter, W. Riedler, K. Schwingenschuh, H. Rosenbauer, and S. Livi (1993), The solar wind interaction with Mars: Phobos-2 bow shock observations on 24 March, 1989, *Plasma Environment of Non-Magnetic Planets, COSPAR Colloquium Series*, **4**, pp. 279-283
30. **Slavin, J. A.**, M. F. Smith, E. L. Mazur, D. N. Baker, T. Iyemori, and E. W. Greenstadt (1993), ISEE-3 observations of traveling compression regions in the Earth's magnetotail, *J. Geophys. Res.*, **98**, 15,425, 1993.
29. **Slavin, J. A.**, M. F. Smith, E. L. Mazur, D. N. Baker, T. Iyemori, H. J. Singer, and E. W. Greenstadt (1992), ISEE-3 plasmoid and TCR observations during an extended interval of substorm activity, *Geophys. Res. Lett.*, **19**, 825
28. **Slavin, J. A.**, K. Schwingenschuh, W. Riedler, and Ye. Yeroshenko (1991), The solar wind interaction with Mars: Mariner 4, Mars-2, 3 & 5, and Phobos-2 observations of bow shock position and shape, *J. Geophys. Res.*, **96**, 11,235
27. **Slavin, J. A.**, R. P. Lepping, and D. N. Baker (1990), IMP-8 observations of traveling compression regions: New evidence for near-Earth plasmoids and neutral lines, *Geophys. Res. Lett.*, **17**, 913
26. **Slavin, J. A.**, D. N. Baker, J. D. Craven, R. C. Elphic, D. H. Fairfield, L. A. Frank, A. B. Galvin, W. J. Hughes, R. H. Manka, D. G. Mitchell, I. G. Richardson, T. R. Sanderson, D. J. Sibeck, H. J. Singer, E. J. Smith, and R. D. Zwickl (1989), CDAW-8 observations of plasmoid signatures in the geomagnetic tail: An assessment, *J. Geophys. Res.*, **94**, 15,153
25. **Slavin, J. A.**, D. S. Intriligator, and E. J. Smith, Pioneer Venus Orbiter magnetic field and plasma observations within the Venus magnetotail (1989), *J. Geophys. Res.*, **94**, 2,383
24. **Slavin, J. A.**, P. W. Daly, E. J. Smith, T. R. Sanderson, K.-P. Wenzel, R. P. Lepping, and H.W. Kroehl (1987), Magnetic configuration of the distant plasma sheet: ISEE-3 observations, *Magnetotail Physics*, ed. A. T. Y. Lui, pp. 59-64, JHU Press, Baltimore
23. **Slavin, J. A.**, E. J. Smith, P. W. Daly, K. R. Flammer, G. Gloeckler, B. A. Goldberg, D. J. McComas, F. L. Scarf, and J. L. Steinberg (1986), The P/Giacobini-Zinner Magnetotail, *Exploration of Halley's Comet*, ESA SP-250, Vol. I, pp. 81-87
22. **Slavin, J. A.**, B. A. Goldberg, E. J. Smith, D.J. McComas, S.J. Bame, M.A. Strauss, and

H. Spinrad (1986), The Structure of a Cometary Type I Tail: Ground-based and ICE Observations of P/Giacobini-Zinner, *Geophys. Res. Lett.*, **13**, 1,085

21. **Slavin, J. A.**, G. Jungman, and E. J. Smith (1986), Interplanetary Magnetic Field Intensity during Solar Cycle 21: ISEE-3/ICE Observations, *Geophys. Res. Lett.*, **13**, 513

20. **Slavin, J. A.**, E. J. Smith, B. T. Tsurutani, G. L. Siscoe, D. E. Jones, and D. A. Mendis (1986), Giacobini-Zinner Magnetotail: ICE Magnetic Field Observations, *Geophys. Res. Lett.*, **13**, 283

19. **Slavin, J. A.**, E. J. Smith, D. G. Sibeck, D. N. Baker, R. D. Zwickl, S.-I. Akasofu, and R. P. Lepping (1986), Solar Wind- Magnetosphere Coupling and the Distant Magnetotail, *Solar Wind-Magnetosphere Coupling*, eds. Y. Kamide and J. A. Slavin, pp. 717 -730, Terra-Reidel, Tokyo

18. **Slavin, J. A.**, E. J. Smith, D. G. Sibeck, D. N. Baker, R. D. Zwickl, and S.-I. Akasofu (1985), An ISEE-3 study of average and substorm conditions in the distant magnetotail, *J. Geophys. Res.*, **90**, A11,10,875–10,895.

17. **Slavin, J. A.**, E. J. Smith, J. R. Spreiter, and S. S. Stahara (1985), Gasdynamic Modeling of the Jovian and Saturnian Bow Shocks: Solar Wind Flow About the Outer Planets, *J. Geophys. Res.*, **90**, 6,275.

16. **Slavin, J. A.**, E. J. Smith, and D. S. Intriligator (1984), A comparative study of distant magnetotail structure at Venus and Earth, *Geophys. Res. Lett.*, **11**, 1,074

15. **Slavin, J. A.**, R. E. Holzer, J. R. Spreiter, and S. S. Stahara (1984), Planetary mach cones: theory and observation, *J. Geophys. Res.*, **89**, 2,708

14. **Slavin, J. A.**, E. J. Smith, B. T. Tsurutani, D. G. Sibeck, H. J. Singer, D. N. Baker, J. T. Gosling, E. W. Hones, and F. L. Scarf (1984), Substorm Associated Traveling Compression Regions in the Distant Tail: ISEE-3 Geotail Observations, *Geophys. Res. Lett.*, **11**, 657

13. **Slavin, J. A.**, E. J. Smith, and B. T. Thomas (1984), Large Scale Temporal and Radial Gradients in the IMF: Helios 1, 2, ISEE-3, and Pioneer 10, 11, *Geophys. Res. Lett.*, **11**, 279

12. **Slavin, J. A.**, B. T. Tsurutani, E. J. Smith, D. E. Jones, and D. G. Sibeck (1983), Average Configuration of the Distant Magnetotail: Initial ISEE-3 Magnetic Field Results, *Geophys. Res. Lett.*, **10**, 10, 973-976

11. **Slavin, J.A.**, and E. J. Smith (1983), Solar cycle variations in the interplanetary magnetic field, *Proceedings of Solar Wind 5 Conference*, ed. M. Neugebauer, pp. 323-331, NASA CP-2280, Washington, D.C.

10. **Slavin, J. A.**, E. J. Smith, P. R. Gazis, and J. D. Mihlov (1983), A Pioneer-Voyager study of the solar wind interaction with Saturn, *Geophys. Res. Lett.*, **10**, 1, 9-12



9. **Slavin, J. A.**, R. E. Holzer, J. R. Spreiter, S. S. Stahara, and D. S. Chaussee (1983), Solar wind flow about the terrestrial planets, 2. Comparisons with gasdynamic theory and implications for solar-planetary interactions, *J. Geophys. Res.*, **88**, 19
8. **Slavin, J. A.**, and R. E. Holzer (1982), The solar wind interaction with Mars revisited, *J. Geophys. Res.*, **87**, 10,285
7. **Slavin, J. A.**, and R. E. Holzer (1981), Solar wind flow about the terrestrial planets, 1. modeling bow shock position and shape, *J. Geophys. Res.*, **86**, A13, 11,401-11,418.
6. **Slavin, J. A.**, R. C. Elphic, C. T. Russell, F. L. Scarf, J. H. Wolfe, J. D. Mihalov, D. S. Intriligator, L. H. Brace, H. A. Taylor, Jr., and R. E. Daniell, Jr. (1980), The solar wind interaction with Venus: Pioneer Venus Observations of bow shock location and structure, *J. Geophys. Res.*, **85**, 7,625
5. **Slavin, J.A.**, and R.E. Holzer (1979), Empirical relationships between interplanetary conditions, magnetospheric flux transfer, and the AL index, *Quantitative Modelling of Magnetospheric Processes*, ed. W. P. Olson, pp. 423-435, AGU, Washington, D.C.
4. **Slavin, J. A.**, and R. E. Holzer (1979), On the Determination of the Hermaean Magnetic Moment: A critical review, *Phys. Earth Planet. Interiors*, **20**, 231
3. **Slavin, J. A.**, R. C. Elphic, and C. T. Russell (1979), A comparison of Pioneer Venus and Venera bow shock observations: Evidence for a solar cycle variation, *Geophys. Res. Lett.*, **6**,905
2. **Slavin, J. A.**, R. C. Elphic, C. T. Russell, J. H. Wolfe, and D. S. Intriligator (1979), Position and shape of the Venus bow shock: Pioneer Venus Orbiter observations, *Geophys. Res. Lett.*, **6**, 901
1. **Slavin, J. A.**, and R. E. Holzer (1979), The effect of erosion on the solar wind stand-off distance at Mercury, *J. Geophys. Res.*, **84**, 2,076-2,082.

**SCIENTIFIC PUBLICATIONS**  
**(17,800+ citations; h-Index = 70)**

**1978**

1. Holzer, R. E., and **J. A. Slavin** (1978), Magnetic flux transfer associated with expansions and contractions of the dayside magnetosphere, *J. Geophys. Res.*, **83**, 3,831.

**1979**

2. **Slavin, J. A.**, and R. E. Holzer (1979), The effect of erosion on the solar wind stand-off distance at Mercury, *J. Geophys. Res.*, **84**, 1,076.
3. Holzer, R. E., and **J. A. Slavin** (1979), A correlative study of magnetic flux transfer in the magnetosphere, *J. Geophys. Res.*, **84**, 2,573.
4. Kivelson, M. G., **J. A. Slavin**, and D. J. Southwood (1979), Magnetospheres of the galilean satellites, *Science*, **205**, 491, 1979.
5. Russell, C. T., R. C. Elphic, and J. A. Slavin (1979), Initial Pioneer Venus magnetic field results: Dayside observations, *Science*, **203**, 745.
6. Russell, C. T., R. C. Elphic, and **J. A. Slavin** (1979), Initial Pioneer Venus Magnetic Field Results: Nightside Observations, *Science*, **205**, 114.
7. Russell, C. T., R. C. Elphic, and **J. A. Slavin** (1979), The Solar Wind Interactions with Venus, Proceedings of the Magnetospheric Boundary Layers Conference, eds. B. Battrock and J. Mort, pp 231-239, ESA SP-148.
8. Russell, C. T., R. C. Elphic, and **J. A. Slavin** (1979), Pioneer Magnetometer Observations of the Venus Bow Shock, *Nature*, **282**, 815.
9. Russell, C. T., J. H. Allen, D. P. Cauffman, J. Feynman, E. W. Greenstadt, R. E. Holzer, S. M. Kaye, **J. A. Slavin**, R. H. Manka, G. Rostoker, and W. F. Stuart (1979), Solar Wind and Magnetosphere Interactions, Solar-Terrestrial Predictions Proceedings, ed. R. F. Donnelly, 2, 346-364, NOAA, Washington, DC.
10. **Slavin, J. A.**, and R. E. Holzer (1979), On the Prediction of Magnetospheric Configuration, Solar-Terrestrial Predictions Proceedings, ed. R. F. Donnelly, 2, pp. 365-374, NOAA, Washington, DC.
11. **Slavin, J. A.**, and R. E. Holzer (1979), Empirical Relationships Between Interplanetary Conditions, Magnetospheric Flux Transfer, and the AL Index, Quantitative Modelling of Magnetospheric Processes, ed. W. P. Olson, pp. 423-435, AGU, Washington, DC.
12. **Slavin, J. A.**, R. C. Elphic, C. T. Russell, J. H. Wolfe, and D. S. Intriligator (1979), Position and Shape of the Venus Bow Shock: Pioneer Venus Orbiter Observations, *J. Geophys. Res. Lett.*, **6**, 901.

13. **Slavin, J. A.**, R. C. Elphic, and C. T. Russell (1979), A Comparison of Pioneer Venus and Venera Bow Shock Observations: Evidence for a Solar Cycle Variation, *Geophys. Res. Lett.*, **6**, 905.
14. **Slavin, J. A.**, and R. E. Holzer (1979), On the Determination of the Hermaean Magnetic Moment: A Critical Review, *Phys. Earth Planet. Interiors*, **20**, 231.
15. Russell, C. T., R. C. Elphic, and **J. A. Slavin** (1979), Initial Pioneer Venus Magnetometer Observations, Proceedings of the 10th Lunar and Planetary Conference, pp. 2277-2290.
16. Siscoe, G. L., and **J. A. Slavin** (1979), Planetary Magnetospheres, *Rev. Geophys. Space Phys.*, **17**, 1,677.

## 1980

17. Elphic, R. C., C. T. Russell, **J. A. Slavin**, L. H. Brace, and A. F. Nagy (1980), The Location of the Dayside Ionopause of Venus: Pioneer Venus Orbiter Magnetometer Observations, *Geophys. Res. Lett.*, **7**, 561.
18. Southwood, D. J., M. G. Kivelson, R. J. Walker, and **J. A. Slavin** (1980), Io and its Plasma Environment, *J. Geophys. Res.*, **85**, 5,959.
19. **Slavin, J. A.**, R. C. Elphic, C. T. Russell, F. L. Scarf, J. H. Wolfe, J. D. Mihalov, D. S. Intriligator, L. H. Brace, H. A. Taylor, Jr., and R. E. Daniell, Jr. (1980), The Solar Wind Interaction with Venus: Pioneer Venus Observations of Bow Shock Location and Structure, *J. Geophys. Res.*, **85**, 7,625.
20. Elphic, R. C., C. T. Russell, **J. A. Slavin**, and L. H. Brace (1980), Observations of the Dayside Ionopause and Ionosphere of Venus, *J. Geophys. Res.*, **85**, 7,679.
21. Russell, C. T., R. C. Elphic, J. G. Luhmann, and **J. A. Slavin** (1980), On the Search for an Intrinsic Magnetic Field at Venus, Proceedings of the 11th Lunar and Planetary Conference, pp. 1897-1906.

## 1981

23. Holzer, R. E., and **J. A. Slavin** (1980), The Effect of Solar Wind Structure on Magnetospheric Energy Supply During Solar Cycle 20, *J. Geophys. Res.*, **86**, 675.
24. Holzer, R. E., and **J. A. Slavin** (1980), Processes Influencing the Diurnal Variation of the AL Index, *J. Geophys. Res.*, **86**, 8977, 1981.
25. Luhman, J. G., R. C. Elphic, C. T. Russell, **J. A. Slavin**, and J. D. Mihalov (1981), Observations of Large Scale Steady Magnetic Fields in the Nightside Venus Ionosphere and Near Wake, *Geophys. Res. Lett.*, **8**, 517, 1981.

26. **Slavin, J. A.**, and R. E. Holzer (1981), Solar Wind Flow about the Terrestrial Planets, 1. Modeling Bow Shock Position and Shape, *J. Geophys. Res.*, **86**, 11,401, 1981.
27. Smirnov, V. N., O. L. Vaisberg, S. A. Romanov, **J. A. Slavin**, C. T. Russell, and D. S. Intriligator (1981), Three Dimensional Shape and Position of Venus' Bow Shock (in Russian), *Kosmicheskie Issledovaniia*, 19, 613.
28. Theis, R. F., L. H. Brace, K. H. Schatten, C. T. Russell, **J. A. Slavin**, and J. H. Wolfe (1981), The Venus Ionosphere as an Obstacle to the Solar Wind, *Adv. Space Res.*, 1, 47.

## 1982

29. Holzer, R. E., and **J. A. Slavin**, An Evaluation of Three Predictors of Geomagnetic Activity, *J. Geophys. Res.*, 87, 2,558, 1982.
30. Holzer, R. E., and **J. A. Slavin**, A Quantitative Model of Geomagnetic Activity, *J. Geophys. Res.*, 87, 9,054, 1982.
31. **Slavin, J. A.**, and R. E. Holzer, The Solar Wind Interaction with Mars Revisited, *J. Geophys. Res.*, 87, 10,285, 1982.

## 1983

32. **Slavin, J. A.**, R. E. Holzer, J. R. Spreiter, S. S. Stahara, and D. S. Chaussee, Solar Wind Flow about the Terrestrial Planets, 2. Comparisons with Gasdynamic Theory and Implications for Solar-Planetary Interactions, *J. Geophys. Res.*, 88, 19, 1983.
33. **Slavin, J. A.**, E. J. Smith, P. R. Gazis, and J. D. Mihlov, A Pioneer-Voyager Study of the Solar Wind Interaction with Saturn, *Geophys. Res. Lett.*, 10, 9, 1983.
34. Holzer, R. E., and **J. A. Slavin**, Reply to Comments on "Three Predictors of Geomagnetic Activity", *J. Geophys. Res.*, 88, 4,955, 1983.
35. **Slavin, J. A.**, and E. J. Smith, Solar Cycle Variations in the Interplanetary Magnetic Field, Proceedings of Solar Wind 5 Conference, ed. M. Neugebauer, pp. 323-331, NASA CP-2280, Washington, DC, 1983.
36. **Slavin, J. A.**, B. T. Tsurutani, E. J. Smith, D. E. Jones, and D. G. Sibeck, Average Configuration of the Distant Magnetotail: Initial ISEE-3 Magnetic Field Results, *Geophys. Res. Lett.*, 10, 973, 1983.

## 1984

37. Tsurutani, B. T., **J. A. Slavin**, E. J. Smith, R. Okida, and D. E. Jones, Magnetic Structure of the Distant Geotail from -60 to -200 Re: ISEE-3, *Geophys. Res. Lett.*, 11, 1, 1984.

38. Hones, E. W., Jr., D. N. Baker, S. J. Bame, W. C. Feldman, J. T. Gosling, D. J. McComas, R.D. Zwickl, **J. A. Slavin**, E. J. Smith, and B. T. Tsurutani, Structure of the Magnetotail at 220 Re and Its Response to Geomagnetic Activity, *Geophys. Res. Lett.*, 11, 5, 1984.
39. **Slavin, J. A.**, R. E. Holzer, J. R. Spreiter, and S. S. Stahara, Planetary Mach Cones: Theory and Observation, *J. Geophys. Res.*, 89, 2,708, 1984.
40. Siscoe, G. L., D. G. Sibeck, **J. A. Slavin**, E. J. Smith, B. T. Tsurutani, and D. E. Jones, ISEE-3 Magnetic Field Observations in the Magnetotail: Implications for Reconnection, *Magnetic Reconnection in Space and Laboratory Plasmas*, ed. E. W. Hones, Jr., pp. 240-248, AGU, Washington, DC, 1984.
41. Cowley, S. W. H., R. J. Hynds, I. G. Richardson, P. W. Daly, T. R. Sanderson, K. P. Wenzel, **J. A. Slavin**, and B. T. Tsurutani, Energetic Ion Regimes in the Deep Geomagnetic Tail: ISEE-3, *Geophys. Res. Lett.*, 11, 275, 1984.
42. **Slavin, J. A.**, E. J. Smith, and B. T. Thomas, Large Scale Temporal and Radial Gradients in the IMF: Helios 1, 2, ISEE-3, and Pioneer 10, *Geophys. Res. Lett.*, 11, 279, 1984.
43. Feldman, W. C., S. J. Schwartz, S. J. Bame, D. N. Baker, J. Birn, J. T. Gosling, E. W. Hones, Jr., D. J. McComas, **J. A. Slavin**, E. J. Smith, and R. D. Zwickl, Evidence for Slow-mode Shocks in the Deep Geomagnetic Tail, *Geophys. Res. Lett.*, 11, 599, 1984.
44. Greenstadt, E., V. Formisano, C. Goodrich, J. Gosling, M. Lee, M. Leroy, M. Mellott, A. Robson, P. Rodriguez, J. Scudder, **J. Slavin**, M. Thomsen, C. Wu, and D. Winske, Collisionless Shock Waves in the Solar Terrestrial Environment, *Proceedings of the Solar Terrestrial Physics Workshop*, eds. D. M. Butler and K. Popadopoulos, Chap. 10, NASA RP-1120, Washington, DC, 1984.
45. **Slavin, J. A.**, E. J. Smith, B. T. Tsurutani, D. G. Sibeck, H. J. Singer, D. N. Baker, J. T. Gosling, E. W. Hones, and F. L. Scarf, Substorm Associated Traveling Compression Regions in the Distant Tail: ISEE-3 Geotail Observations, *Geophys. Res. Lett.*, 11, 657, 1984.
46. Zwickl, R. D., D. N. Baker, S. J. Bame, W. C. Feldman, J. T. Gosling, E. W. Hones, Jr., D. J. McComas, B. T. Tsurutani, and **J. A. Slavin**, Evolution of the Earth's Distant Magnetotail: ISEE-3 Electron Plasma Results, *J. Geophys. Res.*, 89, 11,007, 1984.
47. Baker, D. N., S. J. Bame, J. Birn, W. C. Feldman, J. T. Goslin, E. W. Hones, Jr., R. D. Zwickl, **J. A. Slavin**, E. J. Smith, B. T. Tsurutani, and D. G. Sibeck, Direct Observations of Passages of the Distant Neutral Line (80-140 Re) Following Substorm Onsets: ISEE-3, *Geophys. Res. Lett.*, 11, 1,042, 1984.
48. Hones, E. W., Jr., J. Birn, D. N. Baker, S. J. Bame, W. C. Feldman, D. J. McComas, R. D. Zwickl, **J. A. Slavin**, E. J. Smith, and B. T. Tsurutani, Detailed Examination of a Plasmoid in the Distant Magnetotail with ISEE-3, *Geophys. Res. Lett.*, 11, 1,046, 1984.
49. Scarf, F. L., F. V. Coroniti, C. F. Kennel, E. J. Smith, **J. A. Slavin**, B. T. Tsurutani, S. J. Bame, and W. C. Feldman, Plasma Wave Spectra Near Slow Mode Shocks in the Distant

Magnetotail, *Geophys. Res. Lett.*, 11, 1,050, 1984.

50. Smith, E. J., **J. A. Slavin**, B. T. Tsurutani, W. C. Feldman, and S. J. Bame, Slow Mode Shocks in the Earth's Magnetotail, *Geophys. Res. Lett.*, 11, 1,054, 1984.
51. Tsurutani, B.T., D. E. Jones, **J. A. Slavin**, D. G. Sibeck, and E. J. Smith, Plasma Sheet Magnetic Fields in the Distant Tail, *Geophys. Res. Lett.*, 11, 1,062, 1984.
52. **Slavin, J. A.**, E. J. Smith, and D. S. Intriligator, A Comparative Study of Distant Magnetotail Structure at Venus and Earth, *Geophys. Res. Lett.*, 11, 1,074, 1984.
53. Gosling, J. T., D. N. Baker, S. J. Bame, E. W. Hones, Jr., D. J. McComas, R. D. Zwickl, **J. A. Slavin**, E. J. Smith, and B. T. Tsurutani, Plasma Entry into the Distant Tail Lobes: ISEE-3, *Geophys. Res. Lett.*, 11, 1,078, 1984.
54. Sibeck, D. G., G. L. Siscoe, **J. A. Slavin**, E. J. Smith, S. J. Bame, and F. L. Scarf, Magnetotail Fluxropes, *Geophys. Res. Lett.*, 11, 1,090, 1984.

## 1985

55. Tsurutani, B. T., **J. A. Slavin**, Y. Kamide, R. D. Zwickl, and J. H. King, Coupling Between the Solar Wind and the Magnetosphere: CDAW-6 Results, *J. Geophys. Res.*, 90, 1,191, 1985.
56. Sibeck, D. G., G. L. Siscoe, **J. A. Slavin**, E. J. Smith, B. T. Tsurutani, and R. P. Lepping, The Distant Magnetotail's Response to a Strong IMF By: Twisting, Flattening, and Field Line Bending, *J. Geophys. Res.*, 90, 4,011, 1985.
57. **Slavin, J. A.**, E. J. Smith, J. R. Spreiter, and S. S. Stahara, Gasdynamic Modeling of the Jovian and Saturnian Bow Shocks: Solar Wind Flow About the Outer Planets, *J. Geophys. Res.*, 90, 6,275, 1985.
58. Kamide, Y., and **J. A. Slavin**, Meeting Report: Solar Wind- Magnetosphere Coupling, *EOS Trans. Amer. Geophys. Union*, 66, 666, 1985.
59. Sibeck, D. G., G. L. Siscoe, **J. A. Slavin**, E. J. Smith, B. T. Tsurutani, and S. J. Bame, Magnetic Field Properties of the Distant Magnetotail Magnetopause and Boundary Layer, *J. Geophys. Res.*, 90, 9,561, 1985.
60. **Slavin, J. A.**, E. J. Smith, D. G. Sibeck, D. N. Baker, R. D. Zwickl, and S.-I. Akasofu, An ISEE-3 Study of Average and Substorm Conditions in the Distant Magnetotail, *J. Geophys. Res.*, 90, 10,875, 1985.
61. Smith, E. J., **J. A. Slavin**, and B. T. Thomas, The Heliospheric Current Sheet: 3-Dimensional Structure and Solar Cycle Changes, *The Sun and the Heliosphere in Three Dimensions*, ed. R. G. Marsden, pp. 267-274, D. Reidel Pub., Dordrecht, 1986.

62. Smith, E. J., B. T. Tsurutani, **J. A. Slavin**, D. E. Jones, G. L. Siscoe, and D. A. Mendis, ICE Encounter with Giacobini-Zinner: Magnetic Field Observations, *Science*, 232, 382, 1986.
63. Thomas, B. T., **J. A. Slavin**, and E. J. Smith, Radial and Latitudinal Gradients in the IMF: Evidence for Meridional Flux Transport, *J. Geophys. Res.*, 91, 6760, 1986.
64. **Slavin, J. A.**, E. J. Smith, D. G. Sibeck, D. N. Baker, R. D. Zwickl, S.-I. Akasofu, and R. P. Lepping, Solar Wind- Magnetosphere Coupling and the Distant Magnetotail, *Solar Wind-Magnetosphere Coupling*, eds. Y. Kamide and **J. A. Slavin**, pp. 717 -730, Terra-Reidel, Tokyo, 1986.
65. Sibeck, D. G., **J. A. Slavin**, E. J. Smith, and B. T. Tsurutani, Geomagnetotail Twisting, *Solar Wind-Magnetosphere Coupling*, eds. Y. Kamide and **J. Slavin**, pp. 731-738, Terra-Reidel, Tokyo, 1986.
66. Smith, E. J., **J. A. Slavin**, R. D. Zwickl, and S. J. Bame, Shocks and Storm Sudden Commencements, *Solar Wind-Magnetosphere Coupling*, eds. Y. Kamide and J. Slavin, pp. 345-366, Terra- Reidel, Tokyo, 1986.
67. Sibeck, D. G., G. L. Siscoe, **J. A. Slavin**, E. J. Smith, R. P. Lepping, and A. J. Lazarus, Major Flattening of the Distant Geotail, *J. Geophys. Res.*, 91, 4223, 1986.
68. Baker, D. N., S. J. Bame, W. C. Feldman, J. T. Gosling, R. D. Zwickl, **J. A. Slavin**, and E. J. Smith, Strong Electron Bidirectional Anisotropies in the Distant Tail: ISEE-3 Observations of Polar Rain, *J. Geophys. Res.*, 91, 5637, 1986.
69. **Slavin, J. A.**, G. Jungman, and E. J. Smith, Interplanetary Magnetic Field Intensity during Solar Cycle 21: ISEE-3/ICE Observations, *Geophys. Res. Lett.*, 13, 513, 1986.
70. Heikkila, W. J., **J. A. Slavin**, E. J. Smith, D. N. Baker, and R. D. Zwickl, Neutral Sheet Crossings by ISEE-3 in the Distant Magnetotail, *Etude Comparative Des Systemes Magnetospheriques*, ed. R. Pellat, pp. 315-322, Toulouse, 1986.
71. Mendis, D. A., E. J. Smith, B. T. Tsurutani, **J. A. Slavin**, D. E. Jones, and G. L. Siscoe, Comet-Solar Wind Interaction: Dynamical Length Scales and Models, *Geophys. Res. Lett.*, 13, 239, 1986.
72. Jones, D. E., E. J. Smith, **J. A. Slavin**, B. T. Tsurutani, G. L. Siscoe, and D. A. Mendis, The Bow Wave of Comet Giacobini-Zinner; ICE Magnetic Field Observations, *Geophys. Res. Lett.*, 13, 243, 1986.
73. **Slavin, J. A.**, E. J. Smith, B. T. Tsurutani, G. L. Siscoe, D. E. Jones, and D. A. Mendis, Giacobini-Zinner Magnetotail: ICE Magnetic Field Observations, *Geophys. Res. Lett.*, 13, 283, 1986.
74. Siscoe, G. L., **J. A. Slavin**, E. J. Smith, B. T. Tsurutani, D. E. Jones, and D. A. Mendis, Statics and Dynamics of the Giacobini- Zinner Magnetic Tail, *Geophys. Res. Lett.*, 13, 287, 1986.

75. **Slavin, J. A.**, B. A. Goldberg, E. J. Smith, D.J. McComas, S.J. Bame, M.A. Strauss, and H. Spinrad, The Structure of a Cometary Type I Tail: Ground-based and ICE Observations of P/Giacobini-Zinner, *Geophys. Res. Lett.*, 13, 1,085, 1986.
76. **Slavin, J. A.**, E. J. Smith, P. W. Daly, K. R. Flammer, G. Gloeckler, B. A. Goldberg, D. J. McComas, F. L. Scarf, and J. L. Steinberg, The P/Giacobini-Zinner Magnetotail, Exploration of Halley's Comet, ESA SP-250, Vol. I, pp. 81-7, 1986.
77. Goldberg, B. A., **J. A. Slavin**, I. Halliday, B. A. McIntosh, G. C. L. Aikman, and A. F. Cook, High-resolution Imaging Studies of the Near Nucleus Regions of Comets, Exploration of Halley's Comet, ESA SP-250, Vol. I, pp. 153-6, 1986.
78. McComas, D. J., J. T. Gosling, S. J. Bame, **J. A. Slavin**, E. J. Smith, and J. L. Steinberg, The Comet Giacobini-Zinner Magnetotail: Axial Stresses and Inferred Near-Nucleus Properties, Exploration of Halley's Comet, ESA SP-250, Vol. I, pp. 301-4, 1986.
79. Smith, E. J., **J. A. Slavin**, S. J. Bame, M. F. Thomsen, S. W. H. Cowley, I. G. Richardson, D. Hovestadt, F. M. Ipavich, K. W. Ogilvie, M. A. Coplan, T. R. Sanderson, K-P. Wenzel, F.L. Scarf, A. F. Vinas, and J. D. Scudder, Analysis of the Giacobini-Zinner Bow Wave, Exploration of Halley's Comet, ESA SP-250, Vol. III, pp. 461-5, 1986.

## 1987

80. Murphy, N., **J. A. Slavin**, D. N. Baker, and H. J. Hughes, Enhancements of Energetic Ions Associated with Travelling Compression Regions in the Deep Geomagnetic Tail, *J. Geophys. Res.*, 92, 64, 1987.
81. Baker, D. N., R. C. Anderson, R. D. Zwickl, and **J. A. Slavin**, Average Plasma and Magnetic Field Variations in the Distant Magnetotail Associated with Near-Earth Substorm Effects, *J. Geophys. Res.*, 92, 71, 1987.
82. Baker, D. N., S. J. Bame, W. C. Feldman, J. T. Gosling, R. D. Zwickl, **J. A. Slavin**, and E. J. Smith, Bi-directional Electron Anisotropies in the Distant Tail: ISEE-3 Observations of Polar Rain, *Magnetotail Physics*, ed. A. T. Y. Lui, pp. 47-58, Johns Hopkins University Press, Baltimore, 1987.
83. **Slavin, J. A.**, P. W. Daly, E. J. Smith, T. R. Sanderson, K.-P. Wenzel, R. P. Lepping, and H. W. Kroehl, Magnetic Configuration of the Distant Plasma Sheet: ISEE-3 Observations, *Magnetotail Physics*, ed. A. T. Y. Lui, pp. 59-64, JHU Press, Baltimore, 1987.
84. Sibeck, D. G., **J. A. Slavin**, and E. J. Smith, ISEE-3 Magnetopause Crossings: Evidence for Kelvin-Helmholtz Instability, *Magnetotail Physics*, ed. A. T. Y. Lui, pp. 73-6, JHU Press, Baltimore, 1987.
85. Baker, D. N., S. J. Bame, D. J. McComas, R. D. Zwickl, **J. A. Slavin**, and E. J. Smith, Plasma and Magnetic Field Variations in the Distant Magnetotail Associated with



- Near-Earth Substorm Effects, Magnetotail Physics, ed. A. T. Y. Lui, pp. 137-142, JHU Press, Baltimore, 1987.
86. Christon, S. P., J. Feynman, and **J. A. Slavin**, Substorm Injection Fronts: Similar Magnetospheric Phenomena at Earth and Mercury, Magnetotail Physics, A. T. Y. Lui, pp. 393-402, JHU Press, Baltimore, 1987.
87. Schindler, R., T. E. Eastman, W. J. Heikkila, L. C. Lee, R. P. Lepping, L. R. Lyons, R. L. McPherron, and **J. A. Slavin**, Dialog on the Phenomenological Model of Substorms in the Magnetotail, Magnetotail Physics, ed. A. T. Y. Lui, pp. 415-28, JHU Press, Baltimore, 1987.
88. McComas, D. J., J. T. Gosling, S. J. Bame, **J. A. Slavin**, E. J. Smith, and J. L. Steinberg, The Giacobini-Zinner Magnetotail: Tail Configuration and Current Sheet, *J. Geophys. Res.*, 92,1,139, 1987.
89. Russell, C. T., M. Brook, S. Ruttenberg, E. J. Smith, and **J. A. Slavin**, Robert E. Holzer: In Celebration of His 80th Birthday, *EOS Trans. Amer. Geophys. Union*, 68, 761, 1987.
90. McComas, D. J., J. T. Gosling, C. T. Russell, and J. A. Slavin, Magnetotails at Unmagnetized Bodies: Comparison of Comet Giacobini-Zinner and Venus, *J. Geophys. Res.*, 92, 10,111, 1987.
91. Brosius, J. W., G. D. Holman, M. B. Niedner, Jr., J. C. Brandt, **J. A. Slavin**, E. J. Smith, R. D. Zwickl, and S. J. Bame, On the Cause of Two Plasma Tail Disconnection Events in Comet Halley during the ICE-Halley Radial Period, *Astron. Astrophys.*, 187, 267, 1987.

## 1988

92. Russell, C. T., D. N. Baker, and **J. A. Slavin**, The Magnetosphere of Mercury, Mercury, eds. F. Vilas, C. R. Chapman, and M. S. Matthews, pp. 514-561, Univ. of Arizona Press, Tucson, 1988.
93. Winterhalter, D., E. J. Smith, and **J. A. Slavin**, The Radial Gradient in the Interplanetary Magnetic Field, *Proc. of the Sixth Int'l. Solar Wind Conf.*, 2, pp. 587-591, 1988.
94. Balogh, A., S. W. H. Cowley, D. J. Southwood, G. Musmann, H. Luhr, F. M. Neubauer, K.-H. Glassmeier, W. Riedler, M. F. Heyn, M. H. Acuna, D. H. Fairfield, **J. A. Slavin**, M. G. Kivelson, R. C. Elphic, F. Primdahl, A. Roux, and B. T. Tsurutani, The Magnetic Field Investigation on Cluster, The Cluster Mission, ed. R. Schmidt, ESA SP-1103, pp. 15-20, Noordwijk, 1988.
95. Marshall, J. A., J. L. Burch, J. R. Kan, and **J. A. Slavin**, DE-1 Observations of Return Current Regions in the Nightside Auroral Oval, *J. Geophys. Res.*, 93, 14,542, 1988.
96. Winglee, R. M., P. L. Pritchett, P. B. Dusenbery, A. M. Persoon, J. H. Waite, Jr., T. E. Moore, J. L. Burch, H. L. Collin, **J. A. Slavin**, and M. Sugiura, Particle Acceleration and Wave Emissions Associated with the Formation of Auroral Cavities and Enhancements,

- J. Geophys. Res., 93, 14,567, 1988.
97. Reiff, P. H., G. Lu, D. R. Weimer, **J. A. Slavin**, and M. Sugiura, Auroral Electric and Magnetic Fields, SPI Conference Proceedings, 8, 207, 1988.
98. Smith, M. F., J. D. Winningham, and **J. A. Slavin**, A Filimentary Current Structure at Ionospheric Altitudes, Physics of Space Plasmas, SPI Conference Proceedings, 8, 2139, 1988.
- 1989**
99. **Slavin, J. A.**, D. S. Intriligator, and E. J. Smith, Pioneer Venus Orbiter Magnetic Field and Plasma Observations Within the Venus Magnetotail, J. of Geophys. Res., 94, 2383, 1989.
100. Baker, D. N., J. D. Craven, R. C. Elphic, D. H. Fairfield, L. A. Frank, H. J. Singer, **J. A. Slavin**, I. G. Richardson, C. J. Owen, and R. D. Zwickl, The CDAW-8 Substorm Event on 28 January 1983: A Detailed Global Study, Adv. Space Res., 8, 113, 1989.
101. Huebner, W. F., D. C. Boice, H. U. Schmidt, M. Schmidt-Voigt, R. Wegmann, F. M. Neubauer, and **J. A. Slavin**, Time-Dependent Study of Magnetic Fields in Comets Giacobini-Zinner and Halley, Adv. Space Res., 9, 385, 1989.
102. Stahara, S. S., R. R. Rachiele, J. R. Spreiter, and **J. A. Slavin**, Gasdynamic Model for Solar Wind Flow Past a Non-Axisymmetric Magnetosphere: Application to Jupiter and Saturn, J. Geophys. Res., 94, 13,353, 1989.
103. Riedler, W., D. Mohlmann, K. Schwingenschuh, J. Rustenbach, Oe. Aydogar, G. Berghofer, H. Lichtenegger, M. Delva, G. Schelch, K. Pirsch, G. Fremuth, M. Stellar, U. Auster, K.-H. Fornacon, H. J. Schenk, H. Michaelis, U. Motschmann, T. Roatsch, K. Sauer, R. Schroter, A. Grafe, D. Lenner, J. Linthe, V. N. Orayevski, V. Kobzev, Ye. Yeroshenko, V. Styashkin, J. Achache, **J. Slavin**, J. G. Luhmann, and C. T. Russell, Magnetic Fields near Mars: First Results of the Phobos Mission, Nature, 341, 604, 1989.
104. Fairfield, D. H., D. N. Baker, J. D. Craven, R. C. Elphic, J. F. L. A. Frank, I. G. Richardson, H. J. Singer, **J. A. Slavin**, B. T. Tsurutani, and R. D. Zwickl, Substorms, Plasmoids, Flux Ropes, and Magnetotail Flux Loss on March 25, 1983: CDAW-8, J. Geophys. Res., 94, 15,135, 1989.
105. **Slavin, J. A.**, D. N. Baker, J. D. Craven, R. C. Elphic, D. H. Fairfield, L. A. Frank, A. B. Galvin, W. J. Hughes, R. H. Manka, D. G. Mitchell, I. G. Richardson, T. R. Sanderson, D. J. Sibeck, H. J. Singer, E. J. Smith, and R. D. Zwickl, CDAW-8 Observations of Plasmoid Signatures in the Geomagnetic Tail: An Assessment, J. Geophys. Res., 94, 15,153, 1989.
106. Schindler, K., D. N. Baker, J. Birn, E. W. Hones, Jr., **J. A. Slavin**, and A. B. Galvin, Analysis of an Extended Period of Earthward Plasma Sheet Flow at ~220 Re: CDAW-8, J. Geophys. Res., 94, 15,177, 1989.

107. Richardson, I. G., C. J. Owen, S. W. H. Cowley, A. B. Galvin, T. R. Sanderson, M. Scholer, **J. A. Slavin**, and R. D. Zwickl, ISEE-3 Observations During the CDAW-8 Intervals: Case Studies of the Distant Geomagnetic Tail Covering a Wide Range of Geomagnetic Activity, *J. Geophys. Res.*, 94, 15,189, 1989.

## 1990

108. Winterhalter, D., E. J. Smith, J. H. Wolfe, and **J. A. Slavin**, Spatial Gradients in the Heliospheric Magnetic Field: Pioneer 11 Observations Between 1 AU and 24 AU Over Solar Cycle 21, *J. Geophys. Res.*, 95, 1, 1990.
109. **Slavin, J. A.**, R. P. Lepping, and D. N. Baker, IMP-8 Observations of Traveling Compression Regions: New Evidence for Near-Earth Plasmoids and Neutral Lines, *Geophys Res. Lett.*, 17, 913, 1990.
110. Feldman, W. C., J. Anderson, J. D. Bohlin, L. F. Burlaga, R. Farquhar, G. Gloeckler, B. E. Goldstein, J. W. Harvey, T. E. Holzer, W. V. Jones, P. J. Kellogg, S. M. Krimigis, M. R. Kundu, A. J. Lazarus, M. M. Mellott, E. N. Parker, R. Rosner, G. J. Rottman, **J. A. Slavin**, S. T. Suess, B. T. Tsurutani, R. T. Woo, and R. D. Zwickl, The Solar Probe Mission, Particle Astrophysics - The NASA Cosmic Ray Program for the 1990's and Beyond, eds. W. V. Jones, F. J. Kerr, and J. F. Ormes, AIP Proceedings 203, pp. 101-110, 1990.
111. Baker, D. N. and **J. A. Slavin**, The Mercury Dual Orbiter Mission, Particle Astrophysics: The NASA Cosmic Ray Program for the 1990's and Beyond, eds. W. V. Jones, F. J. Kerr, and J. F. Ormes, AIP Proceedings, 203, pp. 111-115, 1990.
112. Greenstadt, E. W., D. P. Traver, F. V. Coroniti, E. J. Smith, and **J. A. Slavin**, Observations of the Flank of Earth's Bow Shock to -110 Re by ISEE-3, *Geophys. Res. Lett.*, 17, 753, 1990.
113. Smith, M. F., J. D. Winningham, **J. A. Slavin**, and M. Lockwood, DE-2 Observations of Filamentary Currents at Ionospheric Altitudes, *Physics of Magnetic Flux Ropes*, ed. C. T. Russell, E. R. Priest, and L. C. Lee, pp. 591-598, AGU Geophysical Monograph No. 58, Washington, DC, 1990.
114. Baker, D. N., D. H. Fairfield, **J. A. Slavin**, and I. G. Richardson, The Substorm Event of 28 January 1983: A Detailed Global Study, *Planet. Space Sci.*, 38, 1495, 1990.
115. Burch, J. L., J. D. Menietti, and **J. A. Slavin**, Dayside Auroral Particle Acceleration Mechanisms Derived from Dynamics Explorer Data, *J. Geomag. Geoelectr.*, 42, 1365, 1990.

## 1991

116. Marshall, J. A., J. L. Burch, J. R. Kan, P. H. Reiff, and **J. A. Slavin**, Sources of Field-Aligned Currents in the Auroral Plasma, *Geophys. Res. Lett.*, 18, 45, 1991.

117. Riedler, W., K. Schwingenschuh, H. Lichtenegger, D. Mohlmann, J. Rustenbach, Ye. Yeroshenko, J. Achache, **J. Slavin**, J. G. Luhmann, and C. T. Russell, Interaction of the Solar Wind with the Planet Mars: Phobos-2 Magnetic Field Observations, *Planet. Space Sci.*, 39, 75, 1991.
118. Ludlow, G. R., W. J. Hughes, M. J. Engebretson, **J. A. Slavin**, M. Sugiura, and H. J. Singer, Ion Cyclotron Waves Near  $L = 4.6$ : A Ground-Satellite Correlation Study, *J. Geophys. Res.*, 96, 1451, 1991.
119. **Slavin, J. A.**, K. Schwingenschuh, W. Riedler, and Ye. Yeroshenko, The Solar Wind Interaction with Mars: Mariner 4, Mars-2, 3 & 5, and Phobos-2 Observations of Bow Shock Position and Shape, *J. Geophys. Res.*, 96, 11,235, 1991.

## 1992

120. **Slavin, J.A.**, M. F. Smith, E. L. Mazur, D. N. Baker, T. Iyemori, H. J. Singer, and E. W. Greenstadt, ISEE-3 Plasmoid and TCR Observations During an Extended Interval of Substorm Activity, *Geophys. Res. Lett.*, 19, 825, 1992.
121. Aggson, T. L., W. J. Burke, N. C. Maynard, W. B. Hanson, P. C. Anderson, **J. A. Slavin**, W.R. Hoegy, and J. L. Saba, Equatorial Bubbles Updrafting at Supersonic Speeds, *J. Geophys. Res.*, 97, 8581, 1992.
122. Baker, D. N., D. H. Fairfield, **J. A. Slavin**, I. G. Richardson, C. J. Owen, J. D. Craven, L. A. Frank, R. C. Elphic, H. J. Singer, and R. D. Zwickl, Correction to "The Substorm Event of 28 January 1983: A Detailed Global Study", *Planet Space Sci.*, 40, 589, 1992.
123. Owen, C. J., and **J. A. Slavin**, Viscously Driven Plasma Flows in the Deep Geomagnetic Tail, *Geophys. Res. Lett.*, 19, 1443, 1992.
124. Ishii, M., M. Sugiura, T. Iyemori, and **J. A. Slavin**, Correlation Between Magnetic and Electric Fields in the Field-Aligned Current Regions Deduced from DE-2 Observations, *J. Geophys. Res.*, 97, 13,877, 1992.
125. Lin, N., M. J. Engebretson, L. A. Reinleitner, J. V. Olson, D. L. Gallagher, L. J. Cahill, Jr., **J. A. Slavin**, and A. M. Persoon, Field and Thermal Plasma Observations of ULF Pulsations During a Magnetically Disturbed Interval, *J. Geophys. Res.*, 97, 14, 859, 1992.
126. Owen, C. J., and **J. A. Slavin**, Energetic Ion Events Associated with Travelling Compression Regions, *Proc. First International Substorm Conference, ESA SP - 335*, pp. 365-370, 1992.
127. Sharber, J. R., E. W. Hones, Jr., R. A. Heelis, J. D. Cravens, L. A. Frank, N. C. Maynard, **J. A. Slavin** and J. Birn, Dynamics Explorer measurements of particles, fields, and plasma drifts over a horse-collar auroral pattern, *J. Geomag. Geoelectr.*, 44, 1225, 1992.

## 1993

128. Taguchi, S., M. Sugiura, J. D. Winningham, and **J. A. Slavin**, Characterization of IMF By Dependent Field-Aligned Currents in the Cleft Region Based on DE-2 Observations, *J. Geophys. Res.*, 98, 1,393, 1993.
129. Ishii, M., M. Sugiura, T. Iyemori, and **J. A. Slavin**, Scale-length dependence of the ratio between the magnetic and electric field perturbations in the ionospheric field-aligned current region, *Proc. National Inst. Polar Res. Symp. on Upper Atmos. Phys.*, No. 6, 90-102, 1993.
130. Deng, W., T. L. Killeen, A. G. Burns, R. G. Roble, **J. A. Slavin**, and L. W. Wharton, The Effects of Neutral Inertia and Ionosphere Currents in the High-Latitude Thermosphere Following a Geomagnetic Storm, *J. Geophys. Res.*, 98, 7775, 1993.
131. **Slavin, J. A.**, M. F. Smith, E. L. Mazur, D. N. Baker, T. Iyemori, and E. W. Greenstadt, ISEE-3 Observations of Traveling Compression Regions in the Earth's Magnetotail, *J. Geophys. Res.*, 98, 15,425, 1993.
132. Erlandson, R. E., T. Aggson, W. Hoegy, and **J. Slavin**, Simultaneous Observations of Sub-Auroral Electron Temperature Enhancements and Electromagnetic Ion Cyclotron Waves, *Geophys. Res. Lett.*, 20, 1723, 1993.
133. Balogh, A., S.W.H. Cowley, M. W. Dunlop, D. J. Southwood, J. G. Thomlinson, K. H. Glassmeier, G. Musmann, H. Luhr, M. H. Acuna, D. H. Fairfield, **J. A. Slavin**, W. Riedler, K. Schwingenschuh, F. M. Neubauer, M. G. Kivelson, R. C. Elphic, F. Primdahl, A. Roux, and B. T. Tsurutani, The Cluster Magnetic Field Investigation: Scientific Objectives and Instrumentation, *Cluster: Mission, Payload, and Supporting Activities*, ESA SP-1159, pp. 95-114, 1993.
134. Richardson, I. G., C. J. Owen, **J. A. Slavin**, and T. T. von Roseninge, Energetic ( $> 0.2$  MeV) Electron Bursts in the Deep Geomagnetic Tail, *J. Geophys. Res.*, 98, 13,441, 1993.
135. Laakso, H., Aggson, **J. Slavin**, R. Grard, A. Pedersen, and K. Schwingenschuh, Current Layers in a Cometary Environment, *Plasma Environments of Non-Magnetic Planets*, COSPAR Colloquium Series, 4, pp. 114-119, 1993.
136. **Slavin, J. A.**, M. Verigin, K. Gringauz, G. Kotova, S. Stahara, J. Spreiter, W. Riedler, K. Schwingenschuh, H. Rosenbauer, and S. Livi, The Solar Wind Interaction with Mars: Phobos-2 Bow Shock Observations on 24 March, 1989, *Plasma Environment of Non-Magnetic Planets*, COSPAR Colloquium Series, 4, pp. 279-283, 1993.

## 1994

137. Basinska, E. M., W. J. Burke, N. C. Maynard, W. J. Hughes, D. J. Knudsen, and **J. A. Slavin**, Electric and Magnetic Field Fluctuations at High Latitudes in the Dayside Ionosphere, *Solar Wind Sources of Magnetospheric ULF Waves*, ed. M. J. Engebretson,

- K. Takahashi and M. Scholer, pp. 387-395, AGU, Washington, D.C., 1994.
138. Gary, J. B., R. A. Heelis, W. B. Hanson, and **J. A. Slavin**, Field-aligned Poynting Flux Observations in the High Latitude Ionosphere, *J. Geophys. Res.*, **99**, 11,417, 1994.
139. Rosenbauer, H., M. Verigin, G. Kotova, S. Livi, A. Remizov, W. Riedler, K. Schwingenschuh, N. Shutte, **J. Slavin**, K. Szego, M. Tatrallyay, and T. -L. Zhang, On the Correlation of the Magnetic Field in the Martian Magnetotail to the Solar Wind Parameters, *J. Geophys. Res.*, **99**, 17,199, 1994.
140. Kamide, Y., A. D. Richmond, C. F. Hutchins, B. A. Emery, B. -H. Ahn, O. de la Beaujardiere, J. C. Foster, R. A. Heelis, H. W. Kroehl, F. J. Rich, and **J. A. Slavin**, Ground-based Studies of Ionospheric Convection Associated with Substorm Expansion, *J. Geophys. Res.*, **99**, 19,451, 1994.
141. Zanetti, L., T. Potemra, R. Erlandson, P. Bythrow, B. Anderson, A. Lui, S. Ohtani, G. Fountain, R. Henshaw, B. Ballard, D. Lohr, J. Hayes, D. Holland, M. Acuna, D. Fairfield, **J. Slavin**, W. Baumjohann, M. Engebretson, K. Glassmeier, G. Gustafsson, T. Iijima, H. Luehr, F. Primdahl, Magnetic Field Experiment for the Freja satellite, *Space Science Reviews*, **70**, 465-482, 1994.
142. Weimer, D. R., J. D. Craven, L. A. Frank, W. B. Hanson, N. C. Maynard, R. A. Hoffman and **J. A. Slavin**, Satellite Measurements Through the Center of a Substorm Surge, *J. Geophys. Res.*, **99**, 23,639, 1994.
143. **Slavin, J. A.**, C. J. Owen, and M. Hesse, The Evolution of the Plasmoid-Lobe Interaction with Downtail Distance, *Geophys. Res. Lett.*, **21**, 2,765, 1994.
144. Gordon, L., D.E. Jones, and **J.A. Slavin**, Filamentary Structure of the Distant Magnetotail Lobes: ISEE 3, *Encyclia*, **71**, 243, 1994.

## 1995

145. Weimer, D., J. D. Craven, L. A. Frank, W. B. Hanson and **J. A. Slavin**, Electric Fields and Currents Associated with a Substorm Surge, Second International Conference on Substorms, ed. J. R. Kan, J. D. Craven, and S.-I. Akasofu, pp. 455-462, Fairbanks, 1995.
146. Owen, C. J., **J. A. Slavin**, I. G. Richardson, N. Murphy, and R. J. Hynds, Average Motion, Structure and Orientation of the Deep Magnetotail Determined from Remote Sensing of the Edge of the Plasma Sheet Boundary Layer with  $E > 35$  keV Ions, *J. Geophys. Res.*, **100**, 185, 1995.
147. Lepping, R. P., M. A. Acuna, L. F. Burlaga, W. M. Farrell, **J. A. Slavin**, K. H. Schatten, F. Mariani, N. F. Ness, F. M Neubauer, Y. C. Whang, J. B. Byrnes, P. V. Panetta, J. Scheifele, and E. M. Worley, The Wind Magnetic Field Instrument, *Space Sci. Rev.*, **71**, 207, 1995.
148. Peredo, M., **J. A. Slavin**, E. L. Mazur, and S. A. Curtis, The 3-D Position and Shape of the

- Bow Shock and their Variation with Ma, Ms, Mms and IMF Orientation, *J. Geophys. Res.*, 100, 7,907, 1995.
149. Nose, M., T. Iyemori, M. Sugiura, and **J. A. Slavin**, A Strong Dawn/Dusk Asymmetry of Pc5 Pulsation Occurrence observed by the DE-1 satellite, *Geophys. Res. Lett.*, 22, 2,053, 1995.
150. **Slavin, J. A.**, C. J. Owen, M. M. Kuznetsova, and M. Hesse, ISEE 3 Observations of Plasmoids with Flux Rope Magnetic Topologies, *Geophys. Res. Lett.*, 22, 2,061, 1995.
151. Taguchi, S., M. Sugiura, T. Iyemori, J. D. Winningham, and **J. A. Slavin**, Highly Structured ionospheric convection for northward IMF: A case study with DE-2 observations, *J. Geophys. Res.*, 100, 14,743, 1995.
- 1996**
152. Richardson, I. G., C. J. Owen, and **J. A. Slavin**, Energetic ( $>0.2$  MeV) Electron Bursts in the Deep Geomagnetic Tail Observed by the Goddard Space Flight Center Experiment on ISEE-3: Association with Geomagnetic Substorms, *J. Geophys. Res.*, **101**, 2,723, 1996.
153. Moses, J. J., **J. A. Slavin**, and R. A. Heelis, Ionospheric Signature of the Tail Neutral Line During the Growth Phase of a Substorm, *J. Geophys. Res.*, 101, 5,067, 1996.
154. **Slavin, J. A.**, A. Szabo, M. Peredo, C. J. Owen, R. P. Lepping, R. Fitzenreiter, K. W. Ogilvie, J. L. Steinberg, and A. J. Lazarus, Near-Simultaneous Bow Shock Crossings by WIND and IMP 8 on December 1, 1994, *Geophys. Res. Lett.*, 23, 1,207, 1996.
155. Owen, C.J., R. P. Lepping, K. Ogilvie, **J. A. Slavin**, W. Farrell, and J. Byrnes, The Lunar Wake at  $6R_L$ : WIND Magnetic Field Observations, *Geophys. Res. Lett.*, 23, 1,263, 1996.
156. Hesse, M., J. Birn, D. N. Baker, and **J. Slavin**, MHD Simulations of the Transition of Magnetic Reconnection from Closed to Open Field Lines, *J. Geophys. Res.*, 101, 10,805, 1996.
157. Pulkkinen, T. I., D. N. Baker, C. J. Owen, and **J. A. Slavin**, A Model for the Distant Tail Field: ISEE 3, *J. Geomag. Geoelectr.*, 48, 455, 1996.
158. Lepping, R. P., **J. A. Slavin**, M. Hesse, J. A. Jones, and A. Szabo, Analysis of Magnetotail Flux Ropes with Strong Core Fields: ISEE 3 Observations, *J. Geomag. Geoelectr.*, 48, 589, 1996.
159. Richardson, I. G., C.J. Owen, and **J. A. Slavin**, Energetic electron bursts in the Deep Geomagnetic Tail: Association with Substorms and Magnetotail Structures, *J. Geomagnetism and Geoelectricity*, 48, 657, 1996.

160. Nose, M., T. Iyemori, M. Sugiura, and **J. A. Slavin**, Particle Precipitation Associated with Transverse Pc5 Pulsations, Proc. NIPR Symp. Upper Atm. Phys., 9, pp. 34-41, 1996.
161. Taguchi, S., **J.A. Slavin**, R.P. Lepping, and M. Nose, Traveling Compression Regions Observed in the Mid-Tail Lobes near Substorm Expansion Phase Onset, Proc. Third International Substorm Conference, ESA SP-389, pp. 603-607, 1996.
- 1997**
162. **Slavin, J. A.**, C. J. Owen, J. E. P. Connerney, and S. P. Christon, Mariner 10 Observations of Field-Aligned Currents at Mercury, Planet. Space Sci., 45, 133, 1997.
163. Balogh, A., M.W. Dunlop, S.W.H. Cowley, D.J. Southwood, J.G. Thomlinson, K.H. Galssmeier, G. Musmann, H. Luhr, S. Buchert, M.H. Acuna, D.H. Fairfield, **J.A. Slavin**, W. Reidler, K. Schwingenschuh, M.G. Kivelson, and the Cluster Magnetometer Team, The Cluster Magnetic Fields Investigation, Space Sci. Rev., 79, 65, 1997.
164. Verigin, M., G. Kotova, N. Shutte, A. Remizov, K. Szego, M. Tatrallyay, I. Apathy, **J. A. Slavin** and J. Lemaire, Quantitative Model of the Martian Magnetopause Shape and Its Variations with Solar Wind Ram Pressure Based on Phobos 2 Observations, J. Geophys. Res., 102, 2,147, 1997.
165. Kotova, G., M. Verigin, A. Remizov, N. Shutte, H. Rosenbauer, S. Livi, K. Szego, M. Tatrallyay, **J. Slavin**, J. Lemaire, K. Schwingenschuh, and T. -L. Zhang, The Study of the Solar Wind Deceleration Upstream of the Martian Bow Shock, J. Geophys. Res., 102, 2,165, 1997.
166. Nakabe, S., T. Iyemori, M. Sugiura, and **J. A. Slavin**, A Statistical Study of the Magnetic Field Structure in the Inner Magnetosphere, J. Geophys. Res., 102, 17,571, 1997.
167. Taguchi, S., **J.A. Slavin**, and R.P. Lepping, IMP 8 Observations of Traveling Compression Regions in the Mid-Tail near Substorm Expansion Phase Onset, Geophys. Res. Lett., 24, 353, 1997.
168. Raeder, J., J. Berchem, M. Ashour-Abdalla, L.A. Frank, W.R. Paterson, K.L. Ackerson, S. Kokubun, T. Yamamoto, and **J.A. Slavin**, Boundary Layer Formation in the Magnetotail: Geotail Observations and Comparisons with a Global MHD Simulation, Geophys. Res. Lett., 24, 951, 1997.
169. **Slavin, J.A.**, D.H. Fairfield, R.P. Lepping, A. Szabo, M.J. Reiner, M. Kaiser, C.J. Owen, T. Phan, R. Lin, S. Kokubun, T. Mukai, T. Yamamoto, H. Singer, S. Romanov, J. Buechner, T. Iyemori, and G. Rostoker, WIND, GEOTAIL and GOES 9 Observations Of Magnetic Field Dipolarization and Bursty Bulk Flows in the Near-Tail, Geophys. Res. Lett., 24, 971, 1997.
170. Pulkkinen, T.I., D.N. Baker, N. Turner, H. Singer, L.A. Frank, J.B. Sigwarth, S. Kokubun, R. Nakamura, T. Mukai, J.B. Blake, C.T. Russell, H. Kawano, F. Mozer, and **J.A. Slavin**, Solar wind - magnetosphere coupling during an isolated



substorm event: A multispacecraft ISTP study, *Geophys. Res., Lett.*, 24, 983, 1997.

## 1998

171. **Slavin, J.A.**, D.H. Fairfield, M. Kuznetsova, C.J. Owen, R.P. Lepping, S. Taguchi, T. Mukai, Y. Saito, T. Yamamoto, S. Kokubun, A.T.Y. Lui, and G.D. Reeves, ISTP Observations of Plasmoid Ejection: IMP 8 and Geotail, *J. Geophys. Res.*, 103, 119 1998.
172. Tsyganenko, N.A., S.B.P. Karlsson, S. Kokubun, T. Yamamoto, A.J. Lazarus, K.W. Ogilvie, C.T. Russell, and **J.A. Slavin**, Global Configuration of the magnetotail current sheet as derived from Geotail, Wind, IMP 8, and ISEE 1 / 2 data, *J. Geophys. Res.*, 103, 6,827, 1998.
173. Collier, M.R., **J.A. Slavin**, R.P. Lepping, K. Ogilvie, A. Szabo, H. Laakso, and S. Taguchi, Multi-spacecraft Observations of Sudden Impulses in the Magnetotail Caused by Solar Wind Pressure Discontinuities – WIND and IMP 8, *J. Geophys. Res.*, 103, 17,293, 1998.
174. **Slavin, J.A.**, Traveling Compression Regions, *New Perspectives in Magnetotail Physics*, ed. A. Nishida, S.W.H. Cowley and D.N. Baker, pp. 225-240, AGU Monograph, 105, 1998.
175. McKenna-Lawlor, S., V.V. Afonin, E. Kirsch, K. Schwingenschuh, **J.A. Slavin**, and J.G. Trotignon, An Overview of Energetic Particles (55 keV - > 30 MeV) Recorded in the Close Martian Environment and their Energization in Local and External Processes, *Planet. Space Sci.*, 46, 83, 1998.
176. Taguchi, S., **J.A. Slavin**, and R.P. Lepping, Traveling Compression Regions in the Mid-Tail: 15 Years of IMP 8 Observations, *J. Geophys. Res.*, 103, 17,641, 1998 .
177. Nose, M., T. Iyemori, M. Sugiura, **J.A. Slavin**, R.A. Hoffman, and J.D. Winningham, Electron Precipitation Accompanying Pc5 Pulsations Observed by the DE Satellite at A Ground Station, *J. Geophys. Res.*, 103, 17, 587, 1998.
178. Collier, M.R., **J.A. Slavin**, R.P. Lepping, A. Szabo, and K.W. Ogilvie, Timing Accuracy for the Simple Planar Propagation of Magnetic Field Structure in the Solar Wind, *Geophys. Res. Lett.*, 25, 2,509, 1998.
179. Laakso, H., H. Opgenoorth, T. Pulkkinen, A. Viljanen, M. Brittnacher, J.W. Gjerloev, R. P. Lepping, and **J.A. Slavin**, Auroral Disturbances Produced by Brief Intervals, of Southward IMF, *Substorms-4*, ed. by S. Kokubun and Y. Kamide, pp. 283-286, 1998.
180. Taguchi, S., **J.A. Slavin**, M. Kiyohara, M. Nose, R.P. Lepping, and G. Reeves, Temporal Relationship between mid-tail TCRs and Substorm Onset: Evidence for NENL Formation in the Late Growth Phase, *J. Geophys. Res.*, 103, 26,607, 1998.

## 1999

181. Greenwald, R.A., J.M. Ruohoniemi, K.B. Baker, W.A. Bristow, G.J. Sofko, J.-P. Villain, M. Lester and **J.A. Slavin**, Convective Response to a Transient Increase in Dayside Reconnection, *Geophys. Res. Lett.*, 104, 1,007, 1999.
182. Pulkkinen, T.I., D.N. Baker, L.L. Cogger, L.A. Frank, J.B. Sigwarth, S. Kokubun, T. Mukai, H.J. Singer, K.W. Ogilvie, **J.A. Slavin**, and L. Zelenyi, Spatial extent and dynamics of a thin current sheet during the substorm growth phase on December 10, 1996, *J. Geophys. Res.*, 104, 28,475, 1999.
183. **Slavin, J.A.**, M. Hesse, C.J. Owen, S. Taguchi, D.H. Fairfield, R.P. Lepping, S. Kokubun, T. Mukai, A.T.Y. Lui, R. Anderson, H. Matsumoto and P.R. Sutcliffe, Dual Spacecraft Observations of Lobe Magnetic Field Perturbations Before, During and After Plasmoid Release, *Geophys. Res. Lett.*, 26, 2,897, 1999.
184. Tsurutani, B.T., E.J. Smith, B. Buti, S.L. Moses, F.V. Coroniti, A.L. Brinca, **J.A. Slavin**, and R.D. Zwickl, Mirror Mode Structures and ELF Plasma Waves in the Giacobini-Zinner Magnetosheath, *Non-Linear Processes in Geophysics*, 6, 229, 1999.

## 2000

185. Moldwin, M.B., S. Ford, R. Lepping, **J. Slavin**, and A. Szabo, Small-scale Magnetic Flux Ropes in the Solar Wind, *Geophys. Res. Lett.*, 27, 57, 2000.
186. Kawano, H., R. Nakamura, S. Kokubun, T. Mukai, T. Yamamoto, K. Yumoto, and **J.A. Slavin**, Substorm-associated Shrinkage of the Mid-tail Magnetosphere: IAGC Campagin #2, *Adv. Space Res.*, 25, 1,689, 2000.
187. **Slavin, J.A.**, *Magnetospheres: Mercury*, Encyclopedia of Astronomy and Astrophysics, ed. P Murdin, Institute of Physics Publishing/Macmillan, London, 2000.
188. Pulkkinen, T.I., M.V. Kubyshkina, D.N. Baker, L.L. Cogger, S. Kokubun, T. Mukai, H.J. Singer, **J.A. Slavin**, and L. Zelenyi, Magnetotail Currents during the Growth Phase and Local Auroral Break-up, to appear in *Magnetospheric Currents*, AGU Monograph, eds. S.Ohtani and R. Fujii, Washington, D.C., 2000.
189. Kauristie, K., V.A Sergeev, M. Kubyshkina, T.I. Pulkkinen, V. Angelopoulos, T. Phan, R.P. Lin, and **J.A. Slavin**, Ionospheric Current Signatures of Transient Plasma Sheet Flows, *J. Geophys. Res.*, 105, 10,677, 2000.
190. Verigin, M., G. Kotova, A. Remizov, V. Bezrukikh, O. Plokhova, **J. Slavin**, A. Szabo, M. Kessel, J. Safrankova, Z. Nemecek, T. Gomobosi, K. Kabin, F. Shugaev, and A. Kalinchenko, On the location and asymmetry of the terrestrial bow shock, *Proc. Interball Int'l Symposium*, pp. 289- 293, Kyiv, Feb. 1-4, 2000.
191. Kallio, E.I., T.I. Pulkkinen, H.E.J. Koskinen, A. Viljanen, **J.A. Slavin**, and K.W. Ogilvie,

Loading-Unloading Processes in the Nightside Ionosphere, *Geophys. Res. Lett.*, 27, 1,627, 2000.

192. Collier, M.C., A. Szabo, **J.A. Slavin**, R.P. Lepping, and S. Kokubun, IMF Length and Predictability: The Two Length Scale Medium, *J. Int. J. Geomagn. Aeron. GAI00348*, 2000.

## 2001

193. Collier, M.R., A. Szabo, W. Farrell, **J.A. Slavin**, R.P. Lepping, R. Fitzenreiter, B. Thompson, D.C. Hamilton, G. Gloecker, G. Ho, P. Bochsler, D. Larson, and L. Ofman (2001), Reconnection Remanents in the Magnetic Cloud of October 18-19, 1995: A Shock, Monochromatic Wave, Heat Flux Drop Out and Energetic Ion Beam, *J. Geophys. Res.*, **101**, 15,985.
194. Raeder, J., R.L. McPherron, L.A. Frank, W.R. Paterson, J.B. Sigwarth, G. Lu, H. Singer, S. Kokubun, T. Mukai, and **J.A. Slavin** (2001), Global Simulation of the Geospace Environment Modeling Substorm Challenge Event, *J. Geophys. Res.*, **106**, 381.
195. Moldwin, M.B., M. Collier, **J.A. Slavin**, and A. Szabo (2001), On the Origin of Reverse Polarity TCRs: Wind and IMP 8 Observations, *Geophys. Res. Lett.*, **28**, 1925.
196. Solomon, S.C., R.L. McNutt, Jr., R.E. Gold, M.H. Acuna, D.N. Baker, W.V. Boynton, C.R. Chapman, A.F. Cheng, G. Gloeckler, J.W. Head, III, S.M. Krimigis, W.E. McClintock, S.L. Murchie, S.J. Peale, R.J. Phillips, M.S. Phillips, M.S. Robinson, **J.A. Slavin**, D.E. Smith, R.G. Strom, J.I. Trombka, and M.T. Zuber, The MESSENGER Mission to Mercury, Scientific Objectives and Implementation, *Planet. Space Sci.* 49, 1445, 2001.
197. Verigin, M., G. Kotova, A. Szabo, **J. Slavin**, T. Gombosi, K. Kabin, F. Shugaev, and A. Kalinchenko, WIND Observations of the Terrestrial Bow Shock: 3-D Shape and Motion, *Earth, Planets, and Space*, 53, 1,001, 2001.
198. Moldwin, M.B., S. Mayerberger, H.K. Rassoul, M.R. Collier, R.P. Lepping, **J.A. Slavin**, and A. Szabo, Evidence of different magnetotail responses to small solar wind pressure pulses depending on IMF Bz polarity, *Geophys. Res. Lett.*, 28, 4,163, 2001.
199. Whang, Y.C., D. Fairfield, R.P. Lepping, T. Mukai, Y. Saito, **J. Slavin**, and A. Szabo, Double discontinuities at the magnetotail plasma sheet – lobe boundary, *Annales Geophysicae*, 19, 1,095, 2001.

## 2002

200. Tanskanen, E., T.I. Pulkkinen, H.E.J. Koskinen, and **J.A. Slavin**, Substorm energy budget during low and high solar activity: 1997 and 1999 compared, *J. Geophys. Res.*, 107, A6, 10.1029/2001JA900153, 2002.

201. **Slavin, J. A.**, D. H. Fairfield, R. P. Lepping, M. Hesse, A. Ieda, E. Tanskanen, N. Østgaard, T. Mukai, T. Nagai, H. J. Singer, and P. R. Sutcliffe, Simultaneous observations of earthward flow bursts and plasmoid ejection during magnetospheric substorms, *J. Geophys. Res.*, 107(A7), doi: 10.1029/2000JA003501, 2002
202. Tanskanen, E. H.E.J. Koskinen, T.I. Pulkkinen, **J.A. Slavin**, and K. Ogilvie, Dissipation to Joule heating: Isolated and stormtime substorms, *Adv. Space Res.*, 30, 2305, 2002.

### 2003

203. **Slavin, J.A.**, R.P. Lepping, J. Gjerloev, D.H. Fairfield, M. Hesse, C.J. Owen, M.B. Moldwin, T. Nagai, A. Ieda, and T. Mukai, Geotail Observations of Magnetic Flux Ropes in the Plasma Sheet, *J. Geophys. Res.*, 108(A1), 1015, doi:10.1029/2002JA009557, 2003.
204. Verigin, M., **J. Slavin**, A. Szabo, T. Gombosi, G. Kotova, O. Plochova, K. Szego, M. Tatrallyay, K. Kabin, and F. Shugaev, Planetary Bow Shocks: Gasdynamic Analytic Approach, *J. Geophys. Res.*, 108(A8), 1323, doi:10.1029/2002JA009711, 2003.
205. Verigin, M., **J. Slavin**, A. Szabo, G. Kotova, and T. Gombosi, Planetary Bow Shocks: Asymptotic MHD, *Earth Planets Space*, 54, 33, 2003.
206. Esper, J., S. Neeck, **J.A. Slavin**, J. Leitner, W. Wiscombe, and F.H. Bauer, Nano/Micro satellite constellations for Earth and space science, *Acta Astronautica*, 52, 785-791, 2003.
207. **Slavin, J.A.**, R.P. Lepping, J. Gjerloev, D.H. Fairfield, M.H. Acuna, M.L. Goldstein, A. Balogh, M. Dunlop, M.G. Kivelson, K. Khurana, A. Fazakerley, C.J. Owen, H. Reme and J.M. Bosqued, Cluster measurements of electric current density within a flux rope in the plasma sheet, *Geophys. Res. Lett.*, 30(7), 1362, doi:10.1029/2002GL016411, 2003.
208. Bertucci, C., C. Mazelle, **J.A. Slavin**, C.T. Russell, and M.H. Acuna, Magnetic field enhancement at Venus: Evidence for a magnetic pileup boundary, *Geophys. Res. Lett.*, 30(17), 1876, doi:10.1029/2003GL017271, 2003.
209. Pulkkinen, T.I., E.I. Tanskanen, M. Wiltberger, **J.A. Slavin**, T. Nagai, G.D. Reeves, L.A. Frank, and J.B. Sigwarth, Magnetotail flows can consume as much solar wind flows as a substorm, *J. Geophys. Res.*, 108(A8), 1326, doi:10.1029/2001JA009132, 2003.
210. **Slavin, J.A.**, C.J. Owen, M.W. Dunlop, E. Borälv, M.B. Moldwin, D.G. Sibeck, E. Tanskanen, M.L. Goldstein, A. Fazakerley, A. Balogh, E. Lucek, I. Richter, H. Reme and J.M. Bosqued, Cluster four spacecraft measurements of small traveling compression regions in the near-tail, *Geophys. Res. Lett.*, 30(23), 2208,

doi:10.1029/2003GL018438, 2003.

211. Crider, Dana H.; Vignes, Didier; Krymskii, Alexander M.; Breus, Tamara K.; Ness, Norman F.; Mitchell, David L.; **Slavin, James A.**; Acuña, Mario H., A proxy for determining solar wind dynamic pressure at Mars using Mars Global Surveyor data, *J. Geophys. Res.*, Vol. 108, No. A12, 1461, 10.1029/2003JA009875, 2003.
212. Pulkkinen, T.I., H.E.J. Koskinen, K. Kauriste, M. Palmroth, G.D. Reeves, E. Donovan, H.J. Singer, **J.A. Slavin**, C.T. Russell, and K. Yumoto, Storm-substorm Coupling: Signatures of stormtime substorms, *Auroral Phenomena and Solar-Terrestrial Relations – Proceedings of the Conference in Memory of Uri Galperin*, eds., L.M. Zelenyi, M.A. Geller, and J.H. Allen, pp. 309- 316, Boulder, 2003.
213. Vondrak, R., **J. Slavin**, L. Zelenyi, M. Guhathakurta, S. Curtis, and B. Tsurutani (2003), Measurement strategies for future missions to understand geospace dynamics, *Disturbances in Geospace The Storm – Substorm Relationship*, eds. A.S. Sharma, Y. Kamide, and G.S. Lakhina, pp. 255-268, American Geophysical Union, Washington, D.C.

## 2004

214. **Slavin, J.A.** (2004), Mercury's Magnetosphere, *Adv. Space Res.*, 33/11, 1587-1872, doi:10.1016/j.asr.2003.02.019
215. Verigin, M., D. Vignes, D. Crider, **J. Slavin**, M. Acuna, G. Kotova, A. Remizov, Martian Obstacle and Bow Shock: Origins of Boundary Anisotropy, *Adv. Space Sci.*, 33, 2,222, doi:10.1016/S0273-1177(03)00522-2, 2004.
216. Korth, H., B.J. Anderson, R.L. McNutt, Jr., M.H. Acuna, **J.A. Slavin**, N.A. Tsyganenko, S.C. Solomon and R.L. McNutt, Jr, Determination of the Properties of Mercury's Magnetic Field by the MESSENGER Mission, *Planet. Sp. Sci.*, 52 (8), 733-746, doi:10.1016/j.pss.2003.12.008, 2004.
217. Milan, S.E., S.W.H. Cowley, M. Lester, D.M. Wright, **J.A. Slavin**, M. Fillingim, and H.J. Singer (2004), Response of the magnetotail to changes in the open flux content of the magnetosphere, *J. Geophys. Res.*, 109, A04220, doi:10.1029/2003JA010350.
218. Mazelle, C., D. Winterhalter, K. Sauer, J.G. Trottingon, M.H. Acuna, K. Baumgartel, C. Bertucci, D.A. Brain, S.H. Brecht, M. Delva, E. Dubinin, M. Oieroset, and **J. Slavin**, Bow shock and upstream phenomena at Mars, *Space Sci. Rev.*, 111, 115, 2004.
219. Verigin, M.I., **J. Slavin**, A. Szabo, G.A. Kotova, A.P. Remizov, H. Rosenbauer, S. Livi, K. Szego, M. Tatrallyay, K. Schwingenschuh, and T.-L. Zhang, Unusually distant bow shock encounters at Mars: Analysis of March 24, 1989 Event, *Space Sci. Rev.*, 111, 233, 2004.
220. Le, G., S.-H. Chen, Y. Zheng, C.T. Russell, **J.A. Slavin**, C. Huang, S.M. Petrinec,

T.E. Moore, J. Samson, H.J. Singer, and K. Yumoto, Coordinated Polar Spacecraft, Geosynchronous Spacecraft, and Ground-based Observations of Magnetopause Processes and Their Coupling to the Ionosphere, *Annales Geophys.*, 22, 4,329, 2004.

221. Sigsbee, K., **J.A. Slavin**, and M. Oieroset, Magnetotail convection during substorms and directly driven events, *Substorms-7 Proceedings of the 7th International Conference on Substorms*, edited by Natalia Ganushkina and Tuija Pulkkinen, pp. 27-30, Finish Meteorological Institute, Helsinki, 2004.

## 2005

222. Owen, C.J., **J.A. Slavin**, A.N. Fazakerley, M.W. Dunlop, and A. Balogh, Cluster Electron Observations of the Separatrix Layer during Traveling Compression Regions, *Geophys. Res. Lett.*, 32, L03104, doi:10.1029/2004GL021761, 2005.
223. Fraser, B.J., J.L. Horowitz, **J.A. Slavin**, Z.C. Dent, and I.R. Mann Heavy ion mass loading Of the geomagnetic field near the plasmopause and ULF wave implications, *Geophys. Res. Lett.*, 32, L04102, doi:10.1029/2004GL021315.
224. Tanskanen, E., **J.A. Slavin**, D.H. Fairfield, D.G. Sibeck, J. Gjerloev, T. Mukai, A. Ieda, T. Nagai, Response of the magnetotail to prolonged southward Bz intervals: Loading, unloading, and continuous dissipation, *J. Geophys. Res.*, 110, A03216, doi:10.1029/2004JA010561, 2005.
225. Huttunen, K.E.J., **J. Slavin**, M. Collier, H.E.J. Koskinen, A. Szabo, E. Tanskanen, A. Balogh, E. Lucek, and H. Reme, Cluster Observations of Sudden Impulses in the Magnetotail Caused by Interplanetary Shocks and Pressure Increases, *Annales Geophys.*, 23, 609 - 624, 2005. SRef-ID: 1432-0576/ag/2005-23-609
226. Borälöv, E., Opgenoorth, H.J., Kauristie, K., Lester, M., Bosqued, J.-M., Dewhurst, J.P., Owen, C.J., Dunlop, M., **Slavin, J.A.**, Fazakerley, A., and Perry, C., Correlation between ground-based observations of substorm signatures and magnetotail dynamics, *Annales Geophysicae*, 23, 907-1011, 2005. SRef-ID: 1432-0576/ag/2005-23-997.
227. Zheng, Y., G. Le, **J.A. Slavin**, M.L. Goldstein, C. Cattell, A. Balogh, E.A. Lucek, H. Reme, J.P. Eastwood, M. Wilber, G. Parks, A. Retino and A. Fazakerley, Cluster observations of the signatures of continuous reconnection at the dayside magnetopause in the vicinity of the cusp, *Annales Geophys.*, 23, 2,199 – 2,215, 2005, SRef-ID: 1432-0576/ag/2005-23-2199..
228. **Slavin, J.A.**, E. Tanskanen, M. Hesse, C.J. Owen, M.W. Dunlop, S. Imber, E. Lucek, A. Balogh, and K.-H. Glassmeier (2005), Cluster observations of traveling compression regions in the near-tail, *J. Geophys. Res.*, 110, A06207, doi:10.1029/2004JA010878.
229. Sigsbee, K., **Slavin, J. A.**, Lepping, R. P., Szabo, A., Øieroset, M., Kaiser, M. L., Reiner, M. J., and Singer, H. J. (2005), Statistical and superposed epoch study of dipolarization events using data from Wind perige passes, *Annales Geophysicae*, 23, 831-851.

230. Sergeev, V.A., M.V. Kubyshkina, W. Baumjohann, R. Nakamura, O. Omm, T. Pulkkinen, V. Angelopoulos, S.B Mende, B. Klecker, T. Nagai, J.-A. Sauvaud, **J.A. Slavin**, and M.F. Thomsen, Transition from Substorm Growth to Substorm Expansion Phase as Observed with a Radial Configuration of ISTP and Cluster Spacecraft, *Annales Geophys.*, 2,183 – 2,198, 2005, SRef-ID: 1432-0576/ag/2005-23-2183.
231. Eastwood, J.P., D.G. Sibeck, **J.A. Slavin**, M.L. Goldstein, B. Lavraud, M. Sitnov, S. Imber, A. Balogh, E.A. Lucek, I. Dandouras (2005), Observations of a Multiple X-Line Structure in the Earth's Magnetotail Current Sheet: A Cluster Case Study, *Geophys. Res. Lett.*, 32, L11105, doi:10.1029/2005/GL022509.
232. Merka, J., A. Szabo, **J.A. Slavin**, and M. Peredo (2005), Three-dimensional position and shape of the bow shock and their variation with upstream Mach numbers and IMF orientation, *J. Geophys. Res.*, 110, A04202, doi:10.1029/2004JA010944.
233. Tanskanen, E. I., **J. A. Slavin**, A. J. Tanskanen, A. Viljanen, T. I. Pulkkinen, H. E. J. Koskinen, A. Pulkkinen, and J. Eastwood (2005), Magnetospheric substorms are strongly modulated by interplanetary high-speed streams, *Geophys. Res. Lett.*, 32, L16104, doi:10.1029/2005GL023318.
234. Carlisle, C.C., E.H. Webb, and **J.A. Slavin**, Space Technology 5 – Changing the Mission design without changing the hardware, 2005 IEEE Aerospace Conference Proceedings, March, 2005.
235. Milan, S.E., J.A. Wild, B. Hubert, C.M. Carr, E.A. Lucek, J.M. Bosqued, J.F. Watermann, and **J.A. Slavin** (2005), Flux closure during a substorm observed by Cluster, Double Star IMAGE FUV, SuperDARN, and Greenland magnetometers, *Annales Geophys.*
236. Tanskanen, E.I., M. Palmroth, T.I. Pulkkinen, H.E.J. Koskinen, P. Janhunen, N. Østgaard, **J.A. Slavin**, K. Liou (2005), Energetics of a substorm on 15 August, 2001: Comparing Empirical methods and a global MHD simulation, *Adv. Space Res.*, 36, 10, 1825.
237. **Slavin, J.A.** (2005), Mars Aeronomy Orbiter and its Contribution to the Vision for Exploration, Space 2005, Long Beach, California, AIAA 2005-6824.
238. Milan, S.E., J.A. Wild, B. Hubert, C.M. Carr, E.A. Lucek, J.M. Bosqued, J.F. Watermann, and J.A. Slavin (2005), Flux transport and tail dynamics during a prolonged substorm interval, *Proc. ESLAB Symposium*.
239. Kotova, G., M. Verigin, G. Zastenker, N. Nikolayeva, B. Smolkin, J. Slavin, A. Szabo, J. Meka, Z. Nemechek, and J. Safrankova (2005), Bow Shock Observations by Prognoz 11: Analysis and Model Comparison, *Adv. Space Sci.* 36, 1958-1963.

## 2006

240. Henderson, P.D., Owen, C.J., Alexeev, I.V., **Slavin, J.**, Fazakerley, A.N., Lucek, E.,

- Reme, H (2006). Cluster observations of flux rope structures in the near-tail. *Ann. Geophys.*, **24**, 651 – 666.
241. Pulkkinen, T.I., N.Y. Ganushkina, E.I. Tanskanen, M. Kubyshkina, G.D. Reeves, M.F. Thomsen, C.T. Russell, H.J. Singer, **J.A. Slavin**, and J. Gjerloev (2006), Magnetospheric current systems during stormtime sawtooth events, *J. Geophys. Res.*, *111*, A11S17, doi:10.1029/2006JA011672.
242. Le, G., **J.A. Slavin**, Y. Wang, R.J. Strangeway, T. Sabaka, and M. Purucker (2006), The ST-5 magnetic field constellation: First results, Proceedings of the First Swarm International Meeting, 3-5 May 2006, ESA WPP-261.
243. Carlisle, C.C., G. Le, **J.A. Slavin**, J.T. VanSant, and E.H. Webb (2006), Space Technology 5 – Technology Validation Update, 2006 IEEE Aerospace Conference Proceedings, Vols 1-9, 517-526, IEEE, N.Y., N.Y., USA.
244. Fujimoto, M., W. Baumjohann, K. Kabin, R. Nakamura, **J.A. Slavin**, N. Terada, and L. Zelenyi (2007), Hermean magnetosphere-solar wind interaction, *Space Sci. Rev.*, *132*: 529-550, doi:10.1007/s11214-007-9245-8.
245. Baumjohann, W., A. Matsuoka, K.H. Glassmeier, C.T. Russell, T. Nagai, M. Hoshino, T. Nakagawa, A. Balogh, **J.A. Slavin**, R. Nakamura, W. Magnes (2006), The magnetosphere of Mercury and its solar wind environment: Open issues and scientific questions, *Adv. Space Res.* *38*, 604–609.
- 2007**
246. Zong, Q.-G., S.Y. Fu, D.N. Baker, M.L. Goldstein, P. Song, **J.A. Slavin**, T.A. Fritz, J.B. Cao, O. Amm, H. Frey, A. Korth, P.W. Daly, H. Reme, and A. Pedersen (2007), Earthward flowing plasmoid: Structure and its related auroral signature, *J. Geophys. Res.*, *112*, doi:10.1029/2006JA012112
247. **Slavin, J.A.**, S.M. Krimigis, M. H. Acuña, B.J. Anderson, D.N. Baker, P.L. Koehn, H. Korth, S. Livi, B.H. Mauk, S.C. Solomon, and T.H. Zurbuchen (2007), MESSENGER at Mercury: Exploring the magnetosphere, *Space Sci. Rev.*, *131*: 133-160, doi:10.1007/s11214-007-9154-x
248. Anderson, B.J., M. H. Acuña, D. A. Lohr, J. Scheifele, A. Raval, H. Korth and **J. A. Slavin** (2007), The MESSENGER magnetic fields experiment, *Space Sci. Rev.*, *131*: 417-540, doi:10.1007/s11214-007-9246-7
249. Le, G., T. E. Moore, and **J. A. Slavin** (2007), Space Technology 5 - Enabling future constellation missions using micro-satellites for space weather, *Proceedings of 21<sup>st</sup> Annual AIAA/USU Conference on Small Satellites*, Paper number SSC07-IV-6, Logan, Utah August 2007.
250. Fujimoto, M., W. Baumjohann, K. Kabin, R. Nakamura, **J.A. Slavin**, N. Terada, and L. Zelenyi (2007), Hermean magnetosphere-solar wind interaction, *Space Sci. Rev.*,



132: 529-550, doi:10.1007/s11214-007-9245-8.

251. Orsini, S., L. Blomberg, D. Delcourt, R. Grard, S. Massetti, K. Seki, **J. Slavin** (2007), Magnetosphere-exosphere-surface coupling at Mercury, *Space Sci. Rev.*, 132: 551-573, doi:10.1007/s11214-007-9222-2.
252. Boardsen, S.A., and **J.A. Slavin** (2007), Search for pick-up ion generated Na<sup>+</sup> cyclotron waves at Mercury, *Geophys. Res. Lett.*, 34, L22106, doi:10.1029/2007GL031504
253. Purucker, M., T. Sabaka, G. Le, **J. A. Slavin**, R. J. Strangeway, and C. Busby (2007), Magnetic field gradients from the ST-5 constellation: Improving magnetic and thermal models of the lithosphere, *Geophys. Res. Lett.*, 34, L24306, doi:10.1029/2007GL031739.

## 2008

254. Le, G., Y. Zheng, C.T. Russell, R.F. Pfaff, **J.A. Slavin**, N. Lin, F. Mozer, G. Parks, M. Wilber, S.M. Petriner, E.A. Lucek, and H. Reme (2008), Flux Transfer Events Simultaneously Observed by Polar and Cluster: Flux Rope in the Subsolar Region and Flux Tube Addition to the Polar Cusp, *J. Geophys. Res.*, 113, A01205, doi:10.1029/2007JA012377
255. Sarantos, M., R.M. Killen, A.S. Sharma and **J.A. Slavin** (2008), Influence of Plasma Ions on Source Rates for the Lunar Exosphere During Passage through the Earth's Magnetosphere, *Geophys. Res. Lett.*, 35, L04105, doi:10.1029/2007GL032310.
256. **Slavin, J. A.**, G. Le, R. J. Strangeway, Y. Wang, S. A. Boardsen, M. B. Moldwin, and H. E. Spence (2008), Space Technology 5 multi-point measurements of near-Earth Magnetic fields: Initial results, *Geophys. Res. Lett.*, 35, L02107, doi:10.1029/2007GL031728.
257. Sharma, S., R. Nakamura, A. Runov, E.E. Grigorenko, H Hasegawa, M. Hoshino, P. Louarn, C.J. Owen, A. Petrukovich, J.-A. Sauvaud, V.S. Semenov, V.A. Sergeev, **J.A. Slavin**, B.U.O. Sonnerup, L.M. Zelenyi, G. Fruit, S. Haaland, H. Malova, and K. Snekvik (2008), Transient and localized processes in the magnetotail: A review, *Annales Geophys.*, 26, 955-1006.
258. Solomon, S.C., R. L. McNutt, Jr., T. R. Watters, D. J. Lawrence, W. C. Feldman, J. W. Head, S. M. Krimigis, S. L. Murchie, R. J. Phillips, **J. A. Slavin**, and M. T. Zuber (2008), Return to Mercury: A Global Perspective on MESSENGER's First Mercury Flyby, *Science*, 321, 59 – 62.
259. Anderson, B. J., M. H. Acuna, H. Korth, M. E. Purucker, C. L. Johnson, **J. A. Slavin**, S. C. Solomon, and R. L. McNutt, Jr. (2008), The structure of Mercury's magnetic field from MESSENGER's first flyby, *Science*, 321, 82 – 85.
260. **J. A. Slavin**, M. H. Acuna, B. J. Anderson, D. N. Baker, M. Benna, G. Gloeckler, R. E. Gold, G. C. Ho, R. M. Killen, H. Korth, S. M. Krimigis, R. L. McNutt, Jr., L. R. Nittler, J. M. Raines, D. Schriver, S. C. Solomon, R. D. Starr, P. Trávníček,

- T. H. Zurbuchen (2008), Mercury's Magnetosphere after MESSENGER's First Flyby, *Science*, 321, 85 – 89, doi:10.1126/science.1159040.
261. Zurbuchen, T. H., J. M. Raines, G. Gloeckler, S. M. Krimigis, **J. A. Slavin**, P. L. Koehn, R. M. Killen, A. L. Sprague, R. L. McNutt, Jr., and S. C. Solomon (2008), MESSENGER observations of the compositions of Mercury's ionized exosphere and plasma environment, *Science*, **321**, 90 – 92.
262. Wang, T., G. Le, **J.A. Slavin**, S.A. Boardsen, and R.J. Strangeway (2008), Statistical study of field-aligned currents using multi-spacecraft Space Technology 5 observations, *Geophys. Res. Lett.*, 36, L02105, doi:10.1029/2008GL035986.
263. Ieda, A., D.H. Fairfield, **J.A. Slavin**, K. Liou, C.-I. Meng, S. Machida, Y. Miyashita, M. Nose, T. Mukai, Y. Saito, G.K. Parks, and M.O. Fillingham (2008), Longitudinal association between magnetotail reconnection and auroral breakup based upon Geotail and Polar observations, *J. Geophys. Res.*, 113, A08207, doi:10.1029/2008JA013127.
264. Engebretson, M.J., J.L. Posch, A.M. Westerman, N.J. Otto, **J.A. Slavin**, G. Le, R.J. Strangeway, and M.R. Lessard (008), Temporal and spatial characteristics of Pc 1 Waves observed by ST-5, *J. Geophys. Res.*, 113, A07206, doi:10.1029/2008JA013145
265. Masters, A. N. Achilleos, M.K. Dougherty, **J.A. Slavin**, G.B. Hospodarsky, C.S. Arridge, and A.J. Coates (2008), An empirical model of Saturn's bow shock surface: Cassini observations of shock location and shape, *J. Geophys. Res.*, 113, A10210, doi:1029/2008JA013276.
266. Alexeev, I.I., E.S. Belenkaya, S. Yu. Bobrovnikov, **J.A. Slavin**, and M. Sarantos (2008), Paraboloidal model of Mercury's magnetosphere, *J. Geophys. Res.*, 113, A12210, doi:10.1029/2008JA013368
267. Juusola, L., O. Amm, H.U. Frey, K. Kauristie, R. Nakamura, C.J. Owen, V. Sergeev, **J.A. Slavin**, and A. Walsh (2008), Ionospheric signatures during a magnetospheric flux rope event, *Annales Geophys.*, 26, 3,967 – 3,977.

## 2009

268. Boardsen, S. A., B. J. Anderson, M. H. Acuña, **J. A. Slavin**, H. Korth, and S. C. Solomon (2009), Narrow-band ultra-low-frequency wave observations by MESSENGER during its January 2008 flyby through Mercury's magnetosphere, *Geophys. Res. Lett.*, 36, L01104, doi:[10.1029/2008GL036034](https://doi.org/10.1029/2008GL036034).
269. **Slavin, J. A.**, B. J. Anderson, T. H. Zurbuchen, D. N. Baker, S. M. Krimigis, M. H. Acuña, M. Benna, S. A. Boardsen, G. Gloeckler, R. E. Gold, G. C. Ho, H. Korth, R. L. McNutt, Jr., J. M. Raines, M. Sarantos, D. Schriver, S. C. Solomon, and P. Trávníček (2009), MESSENGER observations of Mercury's magnetosphere during northward IMF, *Geophys. Res. Lett.*, **36**, L02101, doi:10.1029/2008GL036158.
270. Sarantos, M., **J. A. Slavin**, M. Benna, S. A. Boardsen, R. M. Killen, D. Schriver, and

- P. Trávníček (2009), Sodium ion pickup observed above the magnetopause during MESSENGER's first Mercury flyby: Constraints on neutral exospheric models, *Geophys. Res. Lett.*, **36**, L04106, doi:10.1029/2008GL036207.
271. Sarantos, M., and **J. A. Slavin** (2009), On the possible formation of Alfvén wings at Mercury during encounters with coronal mass ejections, *Geophys. Res. Lett.*, **36**, L04107, doi:10.1029/2008GL036747.
271. Benna, M., M. H. Acuña, B. J. Anderson, S. Barabash, S. A. Boardsen, G. Gloeckler, R. E. Gold, G. C. Ho, H. Korth, S. M. Krimigis, R. L. McNutt, Jr.<sup>2</sup>, J. M. Raines, M. Sarantos, **J. A. Slavin**, S. C. Solomon, T. L. Zhang, and T. H. Zurbuchen (2009), Modeling of the response of Venus' induced planetary magnetosphere to changing IMF direction based on MESSENGER and Venus Express observations, *Geophys. Res. Lett.*, **36**, L04109, doi:10.1029/2008GL036718.
272. **Slavin, J. A.**, M. H. Acuña, B. J. Anderson, D. N. Baker, M. Benna, S. A. Boardsen, G. Gloeckler, R. E. Gold, G. C. Ho, H. Korth, S. M. Krimigis, R. L. McNutt, Jr., J. M. Raines, M. Sarantos, D. Schriver, S. C. Solomon, P. Trávníček, T. H. Zurbuchen (2009), MESSENGER Observations of Magnetic Reconnection in Mercury's Magnetosphere, *Science*, **324**, 606 – 610, doi:10.1126/science.1172011.
273. Trávníček, P. M., P. Hellinger, D. Schriver, D. Hercík, **J. A. Slavin**, and B. J. Anderson (2009), Kinetic instabilities in Mercury's magnetosphere: Three-dimensional simulation results, *Geophys. Res. Lett.*, **36**, L07104, doi:10.1029/2008GL036630.
274. **Slavin, J. A.**, M. H. Acuña, B. J. Anderson, S. Barabash, M. Benna, S. A. Boardsen, M. Fraenz, G. Gloeckler, R. E. Gold, G. C. Ho, H. Korth, S. M. Krimigis, R. L. McNutt, Jr., J. M. Raines, M. Sarantos, S. C. Solomon, T.-L. Zhang, and T. H. Zurbuchen (2008), MESSENGER and Venus Express observations of the solar wind interaction with Venus, *Geophys. Res. Lett.*, **36**, L09106, doi:10.1029/2009GL037876.
275. Anderson, B. J., M. H. Acuña, H. Korth, **J. A. Slavin**, H. Uno, C. L. Johnson, M. E. Purucker, S. C. Solomon, J. M. Raines, T. H. Zurbuchen, G. Gloeckler, and R. L. McNutt, Jr. (2009), The magnetic field of Mercury, *Space Sci. Rev.*, doi:10.1007/s11214-009-9544-3
276. Le, G., Y. Wang, **J. A. Slavin**, and R. J. Strangeway (2009), Space Technology 5 Multi-point observations of temporal and spatial variability of field-aligned currents, *J. Geophys. Res.*, **114**, A08206, doi:10.1029/2009JA014081.
277. Boardsen, S. A., **J. A. Slavin**, B. J. Anderson, H. Korth, and S. C. Solomon (2009), Comparison of ultra-low-frequency waves at Mercury under northward and southward IMF, *Geophys. Res. Lett.*, **36**, L18106, doi:10.1029/2009GL039525.
278. Baker, D. N., D. Odstrčil, B. J. Anderson, C. N. Arge, M. Benna, G. Gloeckler, J. M. Raines, D. Schriver, **J. A. Slavin**, S. C. Solomon, R. M. Killen, and T. H. Zurbuchen (2009), Space environment of Mercury at the time of the first MESSENGER flyby: Solar wind and interplanetary magnetic field modeling of upstream conditions, *J. Geophys. Res.*, **114**, A10101, doi:10.1029/2009JA014287.

279. Huang, T.S., E. Romashets, G. Le, Y. Wang, **J.A. Slavin**, A new time-dependent ionosphere–magnetosphere coupling model: Comparison of field-aligned currents against ST5 observations, *Journal of Atmospheric and Solar-Terrestrial Physics*, doi:10.1016/j.jastp.2009.03.020, 2009.

## 2010

280. Orisini, S., et al. (2009), SERENA: A suite of four instruments (ELENA, STROFIO, PICAM and MIPA) onboard BepiColombo-MPO for particle detection in the Hermean environment, *Planet Space Sci.*, doi:10.1016/j.pss.2008.09.012

281. Orsini, S., et al. (2010), SERENA: A suite of four instruments on board BepiColombo – MPO for particle detection in the Hermean environment, *Planet. Space Sci.*, **58**, 166 – 181, doi:10.1016/j.pss.2008.06.012.

282. K. –H., Glassmeier, H.-U. Auster, D. Heyner, K. Okrafka, C. Carr, G. Berghofer, B. J. Anderson, A. Balogh, W. Baumjohann, P. Cargill, U. Christensen, M. Delva, M. Dougherty, K. –H. Fornacon, T. S. Horbury, E. A. Lucek, W. Magners, M. Manda, A. Matsuoka, M. Matsuchima, U. Motschmann, R. Nakamura, Y. Narita, H. O'Brien, I. Richter, K. Schwingenschuh, H. Shibuya, **J.A. Slavin**, C. Sotin, B. Stoll, H. Tsunakawa, S. Vennerstrom, J. Vogt, and T. Zhang (2010), The fluxgate magnetometer of the BepiColombo Mercury Planetary Orbiter, *Planet. Space Sci.*, **58**, 287 – 299, doi:10.1016/j.pss.2008.06.018.

283. Feldman, W. C., et al. (2010), Evidence for extended acceleration of solar flare ions from 1–8 MeV solar neutrons detected with the MESSENGER Neutron Spectrometer, *J. Geophys. Res.*, *115*, A01102, doi:10.1029/2009JA014535.

284. **Slavin, J. A.**, R. P. Lepping, C. –C. Wu, B. J. Anderson, D. N. Baker, M. Benna, S. A. Boardsen, R. M. Killen, H. Korth, S. M. Krimigis, W. E. McClintock, R. L. McNutt Jr., M. Sarantos, D. Schriver, S. C. Solomon, P. Travnicek, and T. H. Zurbuchen (2010), MESSENGER observations of large flux transfer events at Mercury, *Geophys. Res. Lett.*, *37*, L02105, doi:10.1029/2009GL041485.

285. Lyatsky, W., G. V. Khazanov, and **J. A. Slavin** (2009), Alfvén Wave Reflection Model of Field-aligned Currents at Mercury, *Icarus*, *209*, 1, 40 – 49.

286. Benna, M., B. J. Anderson, D. N. Baker, S. A. Boardsen, G. Gloeckler, R. E. Gold, G. C. Ho, R. M. Killen, H. Korth, S. M. Krimigis, M. E. Purucker, R. L. McNutt, Jr., J. M. Raines, W. E. McClintock, M. Sarantos, **J. A. Slavin**, S. C. Solomon, and T. H. Zurbuchen (2010), Modeling of the magnetosphere of Mercury at the time of the First MESSENGER flyby, *Icarus*, *209*, 1, 3-10.

287. Trávníček, P. M., D. Schriver, P. Hellinger, D. Herčík, B. J. Anderson, M. Sarantos, and **J. A. Slavin** (2010), Mercury's magnetosphere–solar wind interaction for northward and southward interplanetary magnetic field: Hybrid simulations, *Icarus*, *209*, 1, 11 – 22, doi:10.1016/j.icarus.2010.01.008.

288. Alexeev, I. I., E. S. Belenkaya, **J. A. Slavin**, D. N. Baker, B. J. Anderson, S. A. Boardsen, C. L. Johnson, H. Korth, M. E. Purucker, M. Sarantos, and S. C. Solomon (2010), Mercury's magnetospheric magnetic field after the first two MESSENGER flybys, *Icarus*, 209, 1, 23 – 39, 10.1016/j.icarus.2010.01.024.
289. Boardsen, S. A., T. Sundberg, **J. A. Slavin**, B. J. Anderson, H. Korth, S. C. Solomon, L. G. Blomberg (2010), Observations of Kelvin-Helmholtz Waves along the Dusk-side Boundary of Mercury's Magnetosphere during MESSENGER's Third Flyby *Geophys. Res. Lett.*, 37, L12101, doi:10.1029/2010GL043606.
290. Le, G.; **Slavin, J. A.**; Strangeway, R. J. Space Technology 5 observations of the imbalance of regions 1 and 2 field-aligned currents and its implication to the cross-polar cap Pedersen currents *J. Geophys. Res.*, 115, No. A7, A07202
291. **Slavin, J. A.**, B. J. Anderson, D. N. Baker, M. Benna, S. A. Boardsen, G. Gloeckler, R. E. Gold, G. C. Ho, H. Korth, S. M. Krimigis, R. L. McNutt, Jr., L. R. Nittler, J. M. Raines, M. Sarantos, D. Schriver, S. C. Solomon, R. D. Starr, P. M. Trávníček, T. H. Zurbuchen (2010), MESSENGER observations of extreme loading and unloading of Mercury's magnetic tail, *Science*, 329, 665-668.
292. Sundberg, T., S.A.Boardsen, **J.A.Slavin**, L.G.Blomberg, and H.Korth, The Kelvin–Helmholtz instability at Mercury: An assessment (2010), *Planet. Sp. Sci.*, 58, 1434 – 1441.
293. Jackman, C. M., C. S. Arridge, **J. A. Slavin**, S. E. Milan, L. Lamy, M. K. Dougherty, and A. J. Coates (2010), In situ observations of the effect of a solar wind compression on Saturn's magnetotail, *J. Geophys. Res.*, 115, A10240, doi:10.1029/2010JA015312
294. Lyatsky, W., G. V. Khazanov, and **J. A. Slavin** (2010), Saturation of the electric field transmitted to the magnetosphere, *J. Geophys. Res.*, 115, A08221, doi:10.1029/2009JA015091

## 2011

295. Imber, S. M., J. A. Slavin, H. U. Auster, and V. Angelopoulos (2011), A THEMIS survey of flux ropes and traveling compression regions: Location of the near-Earth reconnection site during solar minimum (2011), *J. Geophys. Res.*, 116, A02201 doi:10.1029/2010JA016026
296. Cumnock, J. A., G. Le, S. Imber, J. A. Slavin, Y. Zhang, and L. J. Paxton, Space Technology 5 multipoint observations of transpolar arc-related field-aligned currents (2011), *J. Geophys. Res.*, 116, A02218, doi:10.1029/2010JA015912
297. Uritsky, V. M., J. A. Slavin, G. V. Khazanov, E. F. Donovan, S. A. Boardsen, B. J. Anderson, and H. Korth (2011), Kinetic-scale magnetic turbulence and finite Larmor radius effects at Mercury, *J. Geophys. Res.*, 116, doi:10.1029/2011JA016744.

298. Tanskanen, E. I., T. I. Pulkkinen, A. Viljanen, K. Mursula, N. Partamies, and J. A. Slavin (2011), From space weather toward space climate time scales: Substorm analysis from 1993 to 2008, *J. Geophys. Res.*, 116, A00I34, doi:10.1029/2010JA015788
299. Sarantos, M., R. M. Killen, W. E. McClintock, E. T. Bradley, R. J. Vervack, Jr., M. Benna, J.A. Slavin (2011), Limits to Mercury's magnesium exosphere from MESSENGER second flyby observations, *Planet. Space Sci.*, 59, 1992, doi:10.1016/j.pss.2011.05.002
300. Raines, J. M., J. A. Slavin, T. H. Zurbuchen, G. Gloeckler, B. J. Anderson, D. N. Baker, H. Korth, S. M. Krimigis, and R. L. McNutt, Jr. (2011), MESSENGER observations of the plasma environment near Mercury, *Planet. Space Sci.*, 59, 2004, doi:10.1016/j.pss.2011.02.004
301. Ho, G. C., R. D. Starr, R. E. Gold, S. M. Krimigis, J. A. Slavin, D. N. Baker, B. J. Anderson, R. J. McNutt, Jr., L. R. Nittler, and S. C. Solomon (2011), Observations of suprathermal electrons in Mercury's magnetosphere during the three MESSENGER flybys (2011), *Planet. Space Sci.*, 59, 2016, doi:10.1016/j.pss.2011.01.011
302. Schriver, D., P. Trávníček, M. Ashour-Abdalla, R. L. Richard, P. Hellinger, J. A. Slavin, B. J. Anderson, D. N. Baker, M. Benna, S. A. Boardsen, R. E. Gold, G. C. Ho, H. Korth, S. M. Krimigis, W. E. McClintock, J. L. McLain, T. M. Orlando, M. Sarantos, A. L. Sprague, and R. D. Starr (2011), Electron transport and precipitation at Mercury during The MESSENGER flybys: Implications for electron-stimulated desorption, *Planet. Space Sci.*, 59, 2026, doi:10.1016/j.pss.03.008
303. Anderson, B. J., J. A. Slavin, H. Korth, S. A. Boardsen, T. H. Zurbuchen, J. M. Raines, G. Gloeckler, R. L. McNutt, Jr., and S. C. Solomon (2011), The dayside magnetospheric boundary layer at Mercury, *Planet. Space Sci.*, 59, 2037, doi: 10.1016/j.pss.2011.01.010
304. Sundberg, T., S. A. Boardsen, J. A. Slavin, L. G. Blomberg, J. A. Cumnock, S. C. Solomon, B. J. Anderson, and H. Korth (2011), Reconstruction of propagating Kelvin-Helmholtz vortices at Mercury's magnetopause, *Planet. Space Sci.*, 59, 2051, doi:10.1016/j.pss.2011.05.008
305. Milan, S. E., and J. A. Slavin (2011), An assessment of the length and variability of Mercury's magnetotail, *Planet. Space Sci.*, 59, 2058, doi:10.1016/j.pss.2011.05.007
306. Baker, D. N., D. Odstrcil, B. J. Anderson, C. N. Arge, M. Benna, G. Gloeckler, H. Korth, L. R. Mayer, J. M. Raines, D. Schriver, J. A. Slavin, S. C. Solomon, P. Trávníček, and T. H. Zurbuchen (2011), The space environment of Mercury at the times of the second and third MESSENGER flybys, *Planet. Space Sci.*, 59, 2066, doi:10.1016/j.pss.2011.01.018
307. Korth, H., B. J. Anderson, T. H. Zurbuchen, J. A. Slavin, S. Perri, S. A. Boardsen, D. N. Baker, S. C. Solomon, and R. L. McNutt, Jr. (2011), The interplanetary magnetic field environment at Mercury's orbit, *Planet. Space Sci.*, 59, 2075, doi:10.1016/j.pss.2010.10.014
308. Gjerloev, J.A., S. Ohtani, T. Iijima, B. Anderson, J. Slavin, and G. Le, Characteristics of the Terrestrial Field-Aligned Current System (2011), *Ann. Geophys.*, 29, 1713–1729, doi:10.5194/angeo-29-1713-2011.
309. Le, G., P. J. Chi, R. J. Strangeway, and J. A. Slavin (2011), Observations of a unique type

of ULF wave by low-altitude Space Technology 5 satellites, *J. Geophys. Res.*, *116*, A08203, doi:10.1029/2011JA016574.

310. Sibeck, D. G., V. Angelopoulos, D.A. Brain, G.T. Delory, J. P. Eastwood, W.M. Farrell, R. E. Grimm, J. S. Halekas, H. Hasegawa, P. Hellinger, K. K. Khurana, R. J. Lillis, M. Øieroset, T. -D. Phan, J. Raeder, C.T. Russell, D. Schriver, J. A. Slavin, P. M. Travnicek, J. M. Weygand (2011), ARTEMIS Science Objectives, *Space Sci. Rev.*, DOI 10.1007/s11214-011-9777-9
311. Anderson, B. J., C. L. Johnson, H. Korth, M. E. Purucker, R. M. Winslow, J. A. Slavin, S. C. Solomon, R. L. McNutt, Jr., J. M. Raines, T. H. Zurbuchen (2011), The Global Magnetic Field of Mercury from MESSENGER Orbital Observations, *Science*, *333*, 1859, DOI: 10.1126/science.1211001
312. Zurbuchen, T. H., J. M. Raines, J. A. Slavin, D. J. Gershman, Jason A. Gilbert, G. Gloeckler, B. J. Anderson, D. N. Baker, H. Korth, S. M. Krimigis, M. Sarantos, D. Schriver, R. L. McNutt Jr., and S. C. Solomon, MESSENGER Observations of the Spatial Distribution of Planetary Ions Near Mercury, *Science*, *333*, 1862, DOI:10.1126/science.1211302
313. Ho, G. C., S. M. Krimigis, R. E. Gold, D. N. Baker, **J. A. Slavin**, B. J. Anderson, H. Korth, R. D. Starr, D. J. Lawrence, R. McNutt, Jr., and S. C. Solomon (2011), MESSENGER Observations of Transient Bursts of Energetic Electrons in Mercury's Magnetosphere, *Science*, *333*, 1865, DOI: 10.1126/science.1211141
314. Jackman, C. M., **J. A. Slavin**, and S. W. H. Cowley (2011), Cassini observations of plasmoid structure and dynamics: Implications for the role of magnetic reconnection in magnetospheric circulation at Saturn., *J. Geophys. Res.*, *116*, A10212, doi:10.1029/2011JA016682.
315. Korth, H., B. J. Anderson, J. M. Raines, **J. A. Slavin**, T. H. Zurbuchen, C. L. Johnson, M. E. Purucker, R. M. Winslow, S. C. Solomon, and R. L. McNutt, Jr. (2011), Plasma pressure in Mercury's equatorial magnetosphere derived from MESSENGER Magnetometer observations, *Geophys. Res. Lett.*, *38*, L22201, doi:10.1029/2011GL049451.
316. Schriver, D., P. M. Trávníček, B. J. Anderson, M. Ashour-Abdalla, D. N. Baker, M. Benna, S. A. Boardsen, R. E. Gold, P. Hellinger, G. C. Ho, H. Korth, S. M. Krimigis, R. L. McNutt Jr., J. M. Raines, R. L. Richard, **J. A. Slavin**, S. C. Solomon R. D. Starr, and T. H. Zurbuchen (2011), Quasi-trapped ion and electron populations at Mercury, *Geophys. Res. Lett.*, *38*, L23103, doi:10.1029/2011GL049629.

## 2012

317. Collinson, G. A., D. G. Sibeck, A. Masters, N. Shane, **J. A. Slavin**, A. J. Coates, T. L. Zhang, M. Sarantos, S. Boardsen, T. E. Moore, and S. Barabash (2012), Hot flow anomalies at Venus, *J. Geophys. Res.*, *117*, A04204, doi:10.1029/2011JA017277.

318. **Slavin, J. A.**, B. J. Anderson, D. N. Baker, M. Benna, S. A. Boardsen, R. E. Gold, G. C. Ho, S. M. Imber, H. Korth, S. M. Krimigis, R. L. McNutt, Jr, J. M. Raines, M. Sarantos, D. Schriver, S. C. Solomon, P. Trávníček, and T. H. Zurbuchen (2012), MESSENGER and Mariner 10 Flyby Observations of Magnetotail Structure and Dynamics at Mercury, *J. Geophys. Res.*, *117*, A01215, doi:10.1029/2011JA016900.
319. Winslow, R. M., C. L. Johnson, B. J. Anderson, H. Korth, **J. A. Slavin**, M. E. Purucker, and S. C. Solomon (2012), Observations of Mercury's northern cusp region with MESSENGER's Magnetometer, *Geophys. Res. Lett.*, *39*, L08112, doi:10.1029/2012GL051472.
320. Sundberg, T., S. A. Boardsen, **J. A. Slavin**, B. J. Anderson, H. Korth, T. H. Zurbuchen, J. M. Raines, and S. C. Solomon (2012), MESSENGER orbital observations of large-amplitude Kelvin-Helmholtz waves at Mercury's magnetopause, *J. Geophys. Res.*, *117*, A04216, doi:10.1029/2011JA017268.
321. **Slavin, J. A.** (2012), A Dynamic Twist in the Tail, *Science*, *336*, 548  
DOI: 10.1126/science.1221805
322. Sarantos, M., R. E. Hartle, R. M. Killen, Y. Saito, **J. A. Slavin**, and A. Gloer (2012), Flux estimates of ions from the lunar exosphere, *Geophys. Res. Lett.*, *39*, L13101, doi:10.1029/2012GL052001.
323. Sundberg, T., **J. A. Slavin**, S. A. Boardsen, B. J. Anderson, H. Korth, G. C. Ho, D. Schriver, V. M. Uritsky, T. H. Zurbuchen, J. M. Raines, D. N. Baker, S. M. Krimigis, R. L. McNutt Jr., and S. C. Solomon (2012), MESSENGER observations of dipolarization events in Mercury's magnetotail, *J. Geophys. Res.*, *117*, doi:10.1029/2012JA017756.
324. Boardsen, S. A., **J. A. Slavin**, B. J. Anderson, H. Korth, D. Schriver, and S. C. Solomon (2012), Survey of coherent 1 Hz waves in Mercury's inner magnetosphere from MESSENGER observations, *J. Geophys. Res.*, *117*, A00M05, doi:10.1029/2012JA017822.
325. Johnson, C. L., M. E. Purucker, H. Korth, B. J. Anderson, R. M. Winslow, M. M. H. Al Asad, **J. A. Slavin**, I. I. Alexeev, R. J. Phillips, M. Zuber, and S. C. Solomon (2012), MESSENGER observations of Mercury's magnetic field structure, *J. Geophys. Res.*, *117*, E00L14, doi:10.1029/2012JE004217.
326. **Slavin, J. A.**, S. M. Imber, S. A. Boardsen, G. A. DiBraccio, T. Sundberg, M. Sarantos, T. Nieves-Chinchilla, A. Szabo, B. J. Anderson, H. Korth, T. H. Zurbuchen, J. M. Raines, C. L. Johnson, R. M. Winslow, R. M. Killen, R. L. McNutt, Jr., and S. C. Solomon (2012), MESSENGER Observations of Flux Transfer Events at Mercury, *J. Geophys. Res.*, *117*, A00M06, doi:10.1029/2012JA017926.
327. Ho, G. C., S. M. Krimigis, R. E. Gold, D. N. Baker, B. J. Anderson, H. Korth, **J. A. Slavin**, R. L. McNutt, Jr., S. C. Solomon (2012), Spatial distribution and spectral characteristics of energetic electrons in Mercury's magnetosphere, *J. Geophys. Res.*, *117*, A00M04, doi:10.1029/2012JA017983



328. Korth, H., B. J. Anderson, C. L. Johnson, R. M. Winslow, **J. A. Slavin**, M. E. Purucker, S. C. Solomon, and R. L. McNutt, Jr. (2012), Characteristics of the Plasma Distribution in Mercury's Equatorial Magnetosphere Derived from MESSENGER Magnetometer Observations, *J. Geophys. Res.*, 117, A00M07, doi:10.1029/2012JA018052.
329. Raines, J. M., D. J. Gershman, T. H. Zurbuchen, M. Sarantos, **J. A. Slavin**, J. A. Gilbert, H. Korth, B. J. Anderson, G. Gloeckler, S. M. Krimigis, D. N. Baker, R. L. McNutt, Jr., S. C. Solomon (2012), Distribution and compositional variations of plasma ions in Mercury's space environment: The first three Mercury years of MESSENGER observations, *J. Geophys. Res.*, 118, doi:10.1029/2012JA018073.
330. Anderson, B. J., C. L. Johnson, H. Korth, R. M. Winslow, J. E. Borovsky, M. E. Purucker, **J. A. Slavin**, S. C. Solomon, M. T. Zuber, R. L. McNutt, Jr. (2012), Low-degree Structure in Mercury's Planetary Magnetic Field, *J. Geophys. Res.* 117, doi: 10.1029/2012JE004159.
331. McNutt Jr., R. L., Sean C. Solomon, P. D. Bedini, B. J. Anderson, D. T. Blewett, L. G. Evans, R. E. Gold, S. M. Krimigis, S. L. Murchie, L. R. Nittler, R. J. Phillips, L. M. Prockter, **J. A. Slavin**, M. T. Zuber, E. J. Finnegan, D. G. Grant, and the MESSENGER Team (2012), MESSENGER at Mercury: Early orbital operations, *Acta Astronautica*, <http://dx.doi.org/10.1016/j.actaastro.2012.08.012>.

## 2013

332. Belenkaya, E.S., I.I. Alexeev, **J.A. Slavin**, and M.S. Blokhina (2013), Influence of the solar wind magnetic field on the Earth and Mercury magnetospheres in the paraboloidal model *Planetary and Space Science*, 75, 46 – 55.
333. DiBraccio G. A., **Slavin J. A.**, S. A. Boardsen, B. J. Anderson, H. Korth, T. H. Zurbuchen, J. M. Raines, D. N. Baker, R. L. Jr. McNutt and S. C. Solomon (2013), MESSENGER observations of magnetopause structure and dynamics at Mercury, *J. Geophys. Res. Space Physics*, 118, doi:10.1002/jgra.50123.
334. Baker, D. N., G. K. Poh, O. D. Odstroil, C. N. Arge, M. Benna, C. L. Johnson, H. Korth, D. J. Gershman, G. C. Ho, W. E. McClintock, T. A. Cassidy, A. Merkel, J. M. Raines, D. Schriver, **J. A. Slavin**, S. C. Solomon, P. M. Trávníček, R. M. Winslow, and T. H. Zurbuchen (2013), Solar wind forcing at Mercury: WSA-ENLIL model results, *J. Geophys. Res. Space Physics*, 118, doi:10.1029/2012JA018064.
335. Winslow, R. M., B. J. Anderson, C. L. Johnson, **J. A. Slavin**, H. Korth, M. E. Purucker, D. N. Baker, S. C. Solomon (2013), Mercury's magnetopause and bow shock from MESSENGER observations, *J. Geophys. Res.*, 118, 2213–2227, DOI: 10.1002/jgra.50237
336. Masters, A., **J. A. Slavin**, G. A. DiBraccio, T. Sundberg, R. M. Winslow, C. L. Johnson, B. J. Anderson, and H. Korth (2013), A comparison of magnetic overshoots at the bow shocks of Mercury and Saturn, *J. Geophys. Res.*, 118, doi:10.1002/jgra.50428.

337. Le, G., P. J. Chi, X. Blanco-Cano, S. A. Boardsen, **J. A. Slavin**, B. J. Anderson, and H. Korth, (2013), Upstream ultra-low frequency waves in Mercury's foreshock region: MESSENGER magnetic field measurements, *J. Geophys. Res.*, *118*, 2809–2823, doi:10.1002/jgra.50342.
338. Sundberg, T., S. A. Boardsen, **J. A. Slavin**, V. M. Uritsky, B. J. Anderson, H. Korth, D. J. Gershman, J. M. Raines, T. H. Zurbuchen, and S. C. Solomon (2013), Cyclic reformation of a quasi-parallel bow shock at Mercury: MESSENGER observations, *J. Geophys. Res. Space Physics*, *118*, 6457–6464, doi:[10.1002/jgra.50602](https://doi.org/10.1002/jgra.50602).
339. Gershman, D. J., **J. A. Slavin**, J. M. Raines, T. H. Zurbuchen, B. J. Anderson, H. Korth, D. N. Baker, and S. C. Solomon (2013), Magnetic flux pileup and plasma depletion in Mercury's subsolar magnetosheath, *J. Geophys. Res.*, *118*, doi:10.1002/2013JA019244.

## 2014

340. Uritsky, V. M., **J. A. Slavin**, S. A. Boardsen, T. Sundberg, J. M. Raines, D. J. Gershman, G. Collinson, D. Sibeck, G. V. Khazanov, B. J. Anderson, and H. Korth (2014), Active current sheets and candidate hot flow anomalies upstream of Mercury's bow shock, *J. Geophys. Res. Space Physics*, *119*, doi:10.1002/2013JA019052.
341. Vogt, M.F., C.M. Jackman, **J.A. Slavin**, E.J. Bunce, S.W.H. Cowley, M.G. Kivelson, and K.K. Khurana (2014), Structure and Statistical Properties of Plasmoids in Jupiter's Magnetotail, *J. Geophys. Res. Space Physics*, *119*, 821–843, doi:[10.1002/2013JA019393](https://doi.org/10.1002/2013JA019393).
342. Collinson, G. A., D. G. Sibeck, A. Masters, N. Shane, T. L. Zhang, A. Fedorov, S. Barabash, A. J. Coates, T. E. Moore, **J. A. Slavin**, V.M. Uritsky, S. Boardsen, and M. Sarantos, (2014), A survey of hot flow anomalies at Venus, *J. Geophys. Res. Space Physics*, *119*, doi:10.1002/2013JA018863.
343. Curry, S. M., M. Liemohn, X. Fang, Y. Ma, **J. Slavin**, J. Espley, S. Bougher, and C. F. Dong (2014), Test particle comparison of heavy atomic and molecular ion distributions at Mars, *J. Geophys. Res. Space Physics*, *119*, 2328–2344, doi:10.1002/2013JA019221
344. Domingue, D. L., C. R. Chapman, R. M. Killen, T. H. Zurbuchen, J. A. Gilbert, M. Sarantos, M. Benna, **J. A. Slavin**, D. Schriver, P. M. Trávníček, T. M. Orlando, A. L. Sprague, D. T. Blewett, J. J. Gillis-Davis, W. C. Feldman, D. J. Lawrence, G. C. Ho, D. S. Ebel, L. R. Nittler, F. Vilas, C. M. Pieters, S. C. Solomon, C. L. Johnson, R. M. Winslow, J. Helbert, P. N. Peplowski, S. Z. Weider, N. Mouawad, N. R. Izenberg, and W. E. McClintock (2014), Mercury's Weather-Beaten Surface: Understanding Mercury in the Context of Lunar and Asteroidal Space Weathering Studies, *Space Sci Rev*, DOI 10.1007/s11214-014-0039-5
345. Korth, H., B. J. Anderson, D. J. Gershman, J. M. Raines, **J. A. Slavin**, T. H. Zurbuchen, S. C. Solomon, and R. L. McNutt Jr. (2014), Plasma distribution in Mercury's

- magnetosphere derived from MESSENGER Magnetometer and Fast Imaging Plasma Spectrometer observations, *J. Geophys. Res. Space Physics*, 119, doi:10.1002/2013JA019567.
346. Gershman, D. J., L. A. Fisk, G. Gloeckler, J. M. Raines, **J. A. Slavin**, T. H. Zurbuchen, and S. C. Solomon (2014), The velocity distribution of pickup He<sup>+</sup> at 0.3 AU by MESSENGER, *Astrophysical Journal*, 785:1 (13pp), doi:10.1088/0004-637X/785/1/1
347. Raines, J. M., D. J. Gershman, **J. A. Slavin**, T. H. Zurbuchen, H. Korth, B. J. Anderson, G. Gloeckler, S. C. Solomon (2014), Structure and dynamics of Mercury's magnetospheric cusp: MESSENGER measurements of protons and planetary ions, *J. Geophys. Res. Space Physics*, 119, 6587–6602, doi:[10.1002/2014JA020120](https://doi.org/10.1002/2014JA020120)
348. Jackman, C.M., **J. A. Slavin**, M.G. Kivelson, D. J. Southwood, N. Achilleos, M.F. Thomsen, G. A. DiBraccio, J.P. Eastwood, M.P. Freeman, M.K. Dougherty, M.F. Vogt (2014), Saturn's dynamic magnetotail: A comprehensive magnetic field and plasma survey of plasmoids and travelling compression regions, and their role in global magnetospheric dynamics, *J. Geophys. Res. Space Physics*, 119, 5465–5494, doi:10.1002/2013JA019388.
349. Jackman, C.M., C.S. Arridge, N. André, F. Bagenal, J. Birn, M.P. Freeman, X. Jia, A. Kidder, S.E. Milan, A. Radioti, **J.A. Slavin**, M.F. Vogt, M. Volwerk, A.P. Walsh (2014), Large-scale structure and dynamics of the magnetotails of Mercury, Earth, Jupiter and Saturn, *Space Sci. Rev.* 182, Issue 1-4, pp 85-154
350. Winslow, R. M., C. L. Johnson, B. J. Anderson, D. J. Gershman, J. M. Raines, R. J. Lillis, Haje Korth, **J. A. Slavin**, S. C. Solomon, T. H. Zurbuchen, M. T. Zuber (2014), Mercury's surface magnetic field determined from proton-reflection magnetometry, *Geophys. Res. Lett.*, 41, 4463–4470, doi:[10.1002/2014GL060258](https://doi.org/10.1002/2014GL060258).
351. Gershman, D. J., **J. A. Slavin**, J. M. Raines, T. H. Zurbuchen, B. J. Anderson, H. Korth, D. N. Baker, and S. C. Solomon (2014), Ion kinetic properties in Mercury's pre-midnight plasma sheet, *Geophys. Res. Lett.*, 41, doi:10.1002/2014GL060468.
352. Imber, S. M., **J. A. Slavin**, S. A. Boardsen, B. J. Anderson, H. Korth, R. L. McNutt, Jr., and S. C. Solomon (2014), MESSENGER observations of large dayside flux transfer events: Do they drive Mercury's substorm cycle?, *J. Geophys. Res. Space Physics*, 119, 5613–5623, doi:10.1002/2014JA019884.
353. **Slavin, J. A.**, G. A. DiBraccio, D. J. Gershman, S. Imber, G. K. Poh, J. Raines, T. H. Zurbuchen, X. Jia, D. N. Baker, S. A. Boardsen, T. Sundberg, A. Masters, C. L. Johnson, R. M. Winslow, B. J. Anderson, H. Korth, G. Ho, S. M. Krimigis, R. L. McNutt, Jr, and S. C. Solomon (2014), MESSENGER Observations of Mercury's Dayside Magnetosphere Under Extreme Solar Wind Conditions, *J. Geophys. Res. Space Physics*, 119, doi:10.1002/2014JA020319
354. Anderson, B. J., C. L. Johnson, H. Korth, **J. A. Slavin**, R. M. Winslow, R. J. Phillips, R. L. McNutt Jr., and S. C. Solomon (2014), Steady-state field-aligned currents at Mercury, *Geophys. Res. Lett.*, 41, 7444–7452, doi:[10.1002/2014GL061677](https://doi.org/10.1002/2014GL061677).

355. Sun, W.-J., S. Fu, Z. Pu, G. K. Parks, **J. A. Slavin**, Z. Yao, Q.-G. Zong, Q. Shi, D. Zhao, and Y. Cui (2014), The current system associated with the boundary of plasma bubbles, *Geophys. Res. Lett.*, 41, 8169–8175, doi:[10.1002/2014GL062171](https://doi.org/10.1002/2014GL062171)
356. DiBraccio, G. A., **J. A. Slavin**, S. M. Imber, D. J. Gershman, J. M. Raines, C. J. Jackman, S. A. Boardsen, B. J. Anderson, H. Korth, T. H. Zurbuchen, R. L. McNutt, and S. C. Solomon (2015), MESSENGER observations of flux ropes in Mercury's magnetotail, *Planet. Space Sci.*, 115, pp. 77-89 doi:10.1016/j.pss.2014.12.016.

## 2015

357. Sundberg, T., and **Slavin, J. A.** (2015) Mercury's Magnetotail, in *Magnetotails in the Solar System* (eds A. Keiling, C. M. Jackman and P. A. Delamere), John Wiley & Sons, Inc, Hoboken, NJ. doi: 10.1002/9781118842324.ch2
358. Le, G., **J. A. Slavin**, and R. F. Pfaff (2015), Challenges in Measuring External Currents driven by the Solar Wind-Magnetosphere Interaction, *Terrestrial Atmospheric and Oceanic Sciences*, 26, 1, 11 – 25, 10.3319/TAO.2014.08.19.02(GRT)
359. Knipp, D. J., L. M. Kilcommons, J. Gjerloev, R. J. Redmon, **J. Slavin**, and G. Le (2015), A large-scale view of Space Technology 5 magnetometer response to solar wind drivers, *Earth and Space Science*, 2, doi:10.1002/2014EA000057.
360. Sun, W.-J., **J. A. Slavin**, S. Fu, J. M. Raines, Q.-G. Zong, S. M. Imber, Q. Shi, Z. Yao, G. Poh, D. J. Gershman, Z. Pu, T. Sundberg, B. J. Anderson, H. Korth, and D. N. Baker (2015), MESSENGER observations of magnetospheric substorm activity in Mercury's near magnetotail, *Geophys. Res. Lett.*, 42, doi:10.1002/2015GL064052.
361. Seki, K., A. Nagy, C. M. Jackman, F. Crary, D. Fontaine, P. Zarka, P. Wurz, A. Milillo, **J. A. Slavin**, D. C. Delcourt, M. Wiltberger, R. Ilie, X. Jia, S. A. Ledvina, M. W. Liemohn, and R. W. Schunk (2015), A review of general physical and chemical processes related to plasma sources and losses for solar system magnetospheres, *Space Sci. Rev.*, DOI 10.1007/s11214-015-0170-y
362. Gershman, D. J., J. M. Raines, **J. A. Slavin**, T. H. Zurbuchen, T. Sundberg, S. A. Boardsen, B. J. Anderson, H. Korth, and S. C. Solomon (2015), MESSENGER observations of multiscale Kelvin-Helmholtz vortices at Mercury, *J. Geophys. Res. Space Physics*, 120, doi:10.1002/2014JA020903.
363. Boardsen, S. A., E.-H. Kim, J. M. Raines, **J. A. Slavin**, D. J. Gershman, B. J. Anderson, H. Korth, T. Sundberg, D. Schriver, and P. Travnicek (2015), Interpreting ~1 Hz magnetic compressional waves in Mercury's inner magnetosphere in terms of propagating ion-Bernstein waves, *J. Geophys. Res. Space Physics*, 120, doi:10.1002/2014JA020910.
364. Taguchi, S., A. Tawara, M. R. Hairston, **J. A. Slavin**, G. Le, J. Matzka, and C. Stolle (2015), Response of reverse convection to fast IMF transitions. *J. Geophys.*

Res. Space Physics, 120, 4020–4037. doi: 10.1002/2015JA021002.

365. Jia, X., **J. A. Slavin**, T. I. Gombosi, L. K. S. Daldor, G. Toth, and B. van der Holst (2015), Global MHD simulations of Mercury's magnetosphere with coupled planetary interior: Induction effect of the planetary conducting core on the global interaction, *J. Geophys. Res. Space Physics*, 120, 4763–4775, doi:10.1002/2015JA021143.
366. Good, S. W., R. J. Forsyth, J. M. Raines, D. J. Gershman, **J. A. Slavin**, and T. H. Zurbuchen (2015), Radial evolution of a magnetic cloud: MESSENGER STEREO and Venus Express observations, *Ap. J.*, 807, 177, <http://dx.doi.org/10.1088/0004-637X/807/2/177>
367. Dewey, R. M., D. N. Baker, B. J. Anderson, M. Benna, C. L. Johnson, H. Korth, D. J. Gershman, G. C. Ho, W. E. McClintock, D. Odstreil, L. C. Philpott, J. M. Raines, D. Schriver, **J. A. Slavin**, S. C. Solomon, R. M. Winslow and T. H. Zurbuchen (2015), Improving solar wind modeling at Mercury: Incorporating transient solar phenomena into the WSA-ENLIL model with the Cone extension, *J. Geophys. Res. Space Physics*, 120, doi:10.1002/2015JA021194.
368. Sun, W.-J., **J. A. Slavin**, S. Fu1, J. M. Raines, T. Sundberg, Q. –G. Zong, X. Jia, Q. Shi, X. Shen, G. Poh, Z. Pu, and T. H. Zurbuchen (2015), MESSENGER observations of Alfvénic and compressional waves during Mercury's substorms, *Geophys. Res. Lett.*, 42, 6189–6198, doi:10.1002/2015GL065452.
369. Sundberg, T., S. A. Boardsen, D. Burgess, and **J. A. Slavin** (2015), Coherent wave activity in Mercury's magnetosheath, *J. Geophys. Res. Space Physics*, 120, doi:10.1002/2015JA021499.
370. Zhong, J., W. X. Wan, **J. A. Slavin**, Y. Wei, R. L. Lin, L. H. Chai, J. M. Raines, Z. J. Rong, and X. H. Han (2015), Mercury's three-dimensional asymmetric magnetopause, *J. Geophys. Res. Space Physics*, 120, doi:10.1002/2015JA021425.
371. Raines, J. M., G.A. DiBraccio, T.A. Cassidy,, D.C. Delcourt, M. Fujimoto, X. Jia, V. Mangano, A. Milillo, M. Sarantos, **J.A. Slavin**, P. Wurz (2015), Plasma Sources in Planetary Magnetospheres: Mercury, *Space Sci Rev*, (in press), doi:10.1007/s11214-015-0193-4.
372. Liljeblad, E., T. Karlsson, J. M. Raines, **J. A. Slavin**, A. Kullen, T. Sundberg, and T. H. Zurbuchen (2015), MESSENGER observations of the dayside low-latitude boundary layer in Mercury's magnetosphere, *J. Geophys. Res. Space Physics*, 120, 8387–8400, doi:[10.1002/2015JA021662](http://dx.doi.org/10.1002/2015JA021662).
373. Welling, D. T., M. André, I. Dandouras, D. Delcourt, A. Fazakerley, D. Fontaine, J. Foster, R. Ilie, L. Kistler, J. H. Lee, M. W. Liemohn, **J. A. Slavin**, C. -P. Wang, M. Wiltberger, A. Yau (2015), The Earth: Plasma Sources, Losses, and Transport Processes *Space Science Reviews*10.1007/s11214-015-0187-2
374. DiBraccio, G. A., **J. A. Slavin**, J. M. Raines, D. J. Gershman, P. J. Tracy, S. A. Boardsen, T. H. Zurbuchen, B. J. Anderson, H. Korth, R. L. McNutt Jr., *et al.* (2015), First

Observations of Mercury's Plasma Mantle by MESSENGER, *Geophys. Res. Lett.*, 42, doi:[10.1002/2015GL065805](https://doi.org/10.1002/2015GL065805).

375. Gershman, D. J., et al. (2015), MESSENGER observations of solar energetic electrons within Mercury's magnetosphere, *J. Geophys. Res. Space Physics*, 120, 8559–8571, doi:10.1002/2015JA021610.
376. Kim, E.-H., S. A. Boardsen, J. R. Johnson and **J. A. Slavin** (2015), ULF waves at Mercury, in *Low-Frequency Waves in Space Plasmas*, *Geophys. Monogr. Ser.*, edited by A. Keiling et al., AGU, Washington, D. C.
377. Zhong, J., W. X. Wan, Y. Wei, **J. A. Slavin**, J. M. Raines, Z. J. Rong, L. H. Chai, and X. H. Han (2015), Compressibility of Mercury's dayside magnetosphere, *Geophys. Res. Lett.*, 42, doi:10.1002/2015GL067063.

## 2016

378. Arridge, C. S., J.P. Eastwood, C.M. Jackman, G.-K. Poh, **J.A. Slavin**, M.F. Thomsen, N. André, X. Jia, A. Kidder, L. Lamy, A. Radioti, N. Sergis, M. Volwerk, A.P. Walsh, P. Zarka, A.J. Coates, M.K. Dougherty (2016), Cassini in situ observations of long duration magnetic reconnection in Saturn's magnetotail, *Nature Physics Lett.*, 30 November 2015, <http://dx.doi.org/10.1038/nphys3565>
379. Russell, C.T., B. J. Anderson, W. Baumjohann, K.R. Bromund, D. Dearborn, D. Fischer, G. Le, H.K. Leinweber, D. Leneman, W. Magnes, J.D. Means, M.B. Moldwin, R. Nakamura, D. Pierce, K.M. Rowe, **J.A. Slavin**, R.J. Strangeway, R. Torbert, C. Hagen, I. Jernej, A. Valavanoglou, and I. Richter (2016), The Magnetospheric Multiscale Magnetometers, *Space Sci. Rev.*, DOI 10.1007/s11214-014-0057-3.
380. Baker, D. N., R. M. Dewey, D. J. Lawrence, J. O. Goldsten, H. Korth, S. M. Krimigis, **J. A. Slavin**, B. J. Anderson, G. C. Ho, R. L. McNutt, Jr., J. M. Raines, D. Schriver, and S. C. Solomon (2016), Intense energetic electron flux enhancements in Mercury's magnetosphere: An integrated view with high-resolution observations from MESSENGER, *J. Geophys. Res. Space Physics*, 121, doi:[10.1002/2015JA021778](https://doi.org/10.1002/2015JA021778)
381. Ieda, A., Y. Nishimura, Y. Miyashita, V. Angelopoulos, A. Runov, T. Nagai, H. U. Frey, D. H. Fairfield, **J. A. Slavin**, H. Vanhamäki, H. Uchino, R. Fujii, Y. Miyoshi, and S. Machida (2016), Stepwise tailward retreat of magnetic reconnection: THEMIS Observations of an auroral substorm, *J. Geophys. Res. Space Physics*, 121, 4548–4568, doi:10.1002/2015JA022244.
382. Gershman, D. J., J. C. Dorelli, G. A. DiBraccio, J. M. Raines, **J. A. Slavin**, G. Poh, and T. H. Zurbuchen (2016), Ion-scale structure in Mercury's magnetopause reconnection diffusion region, *Geophys. Res. Lett.*, 43, 5935–5942, doi:10.1002/2016GL069163.
383. Jasinski, J. M., **J. A. Slavin**, C. S. Arridge, G. Poh, X. Jia, N. Sergis, A. J. Coates, G. H. Jones, and J. H. Waite Jr. (2016), Flux transfer event observation at Saturn's dayside magnetopause by the Cassini spacecraft, *Geophys. Res. Lett.*, 43,

doi:10.1002/2016GL069260.

384. Eastwood, J. P., T. D. Phan, P. A. Cassak, D. J. Gershman, C. Haggerty, K. Malakit, M. A. Shay, R. Mistry, M. Øieroset, C. T. Russell, **J. A. Slavin**, M. R. Argall, L. A. Avanov, J. L. Burch, L. J. Chen, J. C. Dorelli, R. E. Ergun, B. L. Giles, Y. Khotyaintsev, B. Lavraud, P. A. Lindqvist, T. E. Moore, R. Nakamura, W. Paterson, C. Pollock, R. J. Strangeway, R. B. Torbert, and S. Wang (2016), Ion-scale secondary flux-ropes generated by magnetopause reconnection as resolved by MMS, *Geophys. Res. Lett.*, 43, doi:10.1002/2016GL068747
385. Le, G., H. Lühr, B. J. Anderson, R. J. Strangeway, C. T. Russell, H. Singer, **J. A. Slavin**, Y. Zhang, T. Huang, K. Bromund, *et al.* (2016), Magnetopause erosion during the 17 March 2015 magnetic storm: Combined field-aligned currents, auroral oval, and magnetopause observations, *Geophys. Res. Lett.*, 43, 2396–2404, doi:10.1002/2016GL068257.
386. Narita, Y., F. Plaschke, R. Nakamura, W. Baumjohann, W. Magnes, D. Fischer, Z. Voros, R. B. Torbert, C. T. Russell, R. J. Strangeway, H. K. Leinweber, K. R. Bromund, B. J. Anderson, G. Le, M. Chutter, **J. A. Slavin**, E. L. Kepko, J. L. Burch, U. Motschmann, I. Richter, and K.-H. Glassmeier (2016), Wave telescope technique for MMS magnetometer, *Geophys. Res. Lett.*, 43, doi:10.1002/2016GL069035
387. Nakamura, R., V. A. Sergeev, W. Baumjohann, F. Plaschke, W. Magnes, D. Fischer, A. Varsani, D. Schmid, T. K. M. Nakamura, C. T. Russell, R. J. Strangeway, H. K. Leinweber, G. Le, K. R. Bromund, C. J. Pollock, B. J. Giles, J. C. Dorelli, D. J. Gershman, W. Paterson, L. A. Avanov, S. A. Fuselier, K. Genestreti, J. L. Burch, R. B. Torbert, M. Chutter, M. R. Argall, B. J. Anderson, P.-A. Lindqvist, G. T. Marklund, Y. V. Khotyaintsev, B. Mauk, I. Cohen, D. N. Baker, A. Jaynes, R. E. Ergun, H. J. Singer, **J. A. Slavin**, L. Kepko, T. E. Moore, B. Lavraud, V. Coffey and Y. Saito (2016), Transient, small-scale field-aligned currents in the plasma sheet boundary layer during storm-time substorms, *Geophys. Res. Lett.*, 43, doi:10.1002/2016GL068768
388. Schmidt, D., R. Nakamura, M. Volwerk, F. Plaschke, Y. Narita, W. Baumjohann, W. Magnes, D. Fischer, H. U. Eichelberger, R. B. Torbert, C. T. Russell, R. J. Strangeway, H. K. Leinweber, G. Le, K. R. Bromund, B. J. Anderson, **J. A. Slavin**, and E. L. Kepko (2016), A comparative study of dipolarization fronts at MMS and Cluster, *Geophys. Res. Lett.*, 43, 6012–6019, doi:10.1002/2016GL069520.
389. Poh, G., et al. (2016), MESSENGER observations of cusp plasma filaments at Mercury, *J. Geophys. Res. Space Physics*, 121, 8260–8285, doi:10.1002/2016JA022552.
390. Breuillard, H., O. Le Contel, A. Retino, A. Chasapis, T. Chust, L. Mirioni, D. B. Graham, F. D. Wilder, I. Cohen, A. Vaivads, Yu. V. Khotyaintsev, P.-A. Lindqvist, G. T. Marklund, J. L. Burch, R. B. Torbert, R. E. Ergun, K. A. Goodrich, J. Macri, J. Needell, M. Chutter, D. Rau, I. Dors, C. T. Russell, W. Magnes, R. J. Strangeway, K. R. Bromund, F. Plaschke, D. Fischer, H. K. Leinweber, B. J. Anderson, G. Le, **J. A. Slavin**, E. L. Kepko, W. Baumjohann, B. Mauk, S. A. Fuselier, and R. Nakamura (2016), Multispacecraft analysis of dipolarization fronts and associated whistler wave emissions

using MMS data, *Geophys. Res. Lett.*, 43, 7279–7286, doi:10.1002/2016GL069188.

391. Plaschke, F., N. Kahr, D. Fischer, R. Nakamura, W. Baumjohann, W. Magnes, J. L. Burch, R. B. Torbert, C. T. Russell, B. L. Giles, R. J. Strangeway, H. K. Leinweber, K. R. Bromund, B. J. Anderson, G. Le, M. Chutter, **J. A. Slavin**, and E. L. Kepko (2016), Steepening of waves at the duskside magnetopause, *Geophys. Res. Lett.*, 43, 7373–7380, doi:10.1002/2016GL070003.
392. Fischer, D., Magnes, W., Hagen, C., Dors, I., Chutter, M. W., Needell, J., Torbert, R. B., Le Contel, O., Strangeway, R. J., Kubin, G., Valavanoglou, A., Plaschke, F., Nakamura, R., Mirioni, L., Russell, C. T., Leinweber, H. K., Bromund, K. R., Le, G., Kepko, L., Anderson, B. J., **Slavin, J. A.**, and Baumjohann, W.: Optimized merging of search coil and fluxgate data for MMS, *Geosci. Instrum. Method. Data Syst.*, 5, 521-530, doi:10.5194/gi-5-521-2016, 2016.
393. Karlsson, T., E. Liljeblad, A. Kullen, J. M. Raines, **J. A. Slavin**, and T. Sundberg (2016), Isolated magnetic field structures in mercury's magnetosheath as possible analogues for Terrestrial magnetosheath plasmoids and jets, *Planet. Sp. Sci.*, 129, 61-73, doi:10.1016/j.pss.2016.06.002
394. Zhao, C., C. T. Russell, R. J. Strangeway, S. M. Petriner, W. R. Paterson, M. Zhou, B. J. Anderson, W. Baumjohann, K. R. Bromund, M. Chutter, D. Fischer, G. Le, R. Nakamura, F. Plaschke, **J. A. Slavin**, R. B. Torbert, and H. Y. Wei (2016), Force balance at the magnetopause determined With MMS: Application to flux transfer events, *Geophys. Res. Lett.*, 43, 11,941–11,947, doi:10.1002/2016GL071568
395. Sun, W. J., S. Y. Fu, **J. A. Slavin**, J. M. Raines, Q. G. Zong, G. K. Poh, and T. H. Zurbuchen (2016), Spatial distribution of Mercury's flux ropes and reconnection fronts: MESSENGER observations, *J. Geophys. Res. Space Physics*, 121, 7590–7607, doi:10.1002/2016JA022787.

## 2017

396. Smith, A. W., **J. A. Slavin**, C. M. Jackman, R. C. Fear, G.-K. Poh, G. A. DiBraccio, J. M. Jasinski, and L. Trenchi (2017), Automated force free flux rope identification, *J. Geophys. Res. Space Physics*, 122, doi:10.1002/2016JA022994.
397. Poh, G. K., **J. A. Slavin**, X. Jia, J. M. Raines, S. M. Imber, W.-J. Sun, D. J. Gershman, G. A. DiBraccio, K. J. Genestreti, and A. W. Smith (2017), Mercury's cross-tail current sheet: Structure, X-line location and stress balance, *Geophys. Res. Lett.*, 44, doi:10.1002/2016GL071612.
398. Le, G., P. J. Chi, R. J. Strangeway, C. T. Russell, **J. A. Slavin**, K. Takahashi, H. J. Singer, B. J. Anderson, K. Bromund, D. Fischer, E. L. Kepko, W. Magnes, R. Nakamura, F. Plaschke, and R. B. Torbert (2017), Global observations of magnetospheric high-m poloidal waves during the 22 June 2015 magnetic storm, *Geophys. Res. Lett.*, 44, doi:10.1002/2017GL073048.



399. Russell, C. T., R. J. Strangeway, C. Zhao, B. J. Anderson, W. Baumjohann, K. R. Bromund, D. Fischer, L. Kepko, G. Le, W. Magnes, R. Nakamura, F. Plaschke, **J. A. Slavin**, R. B. Torbert, T. E. Moore, W. R. Paterson, C. J. Pollock, J. L. Burch, *Science* 02 Jun 2017: Vol. 356, Issue 6341, pp. 960-963, DOI: 10.1126/science.aag3112
400. Ozturk, D. S., S. Zou, and **J. A. Slavin** (2017), IMF  $B_y$  effects on ground magnetometer response to increased solar wind dynamic pressure derived from global MHD simulations, *J. Geophys. Res. Space Physics*, 122, doi:10.1002/2017JA023903.
401. Poh, G., **J. A. Slavin**, X., Jia, J. M., Raines, S. M., Imber, W.-J., Sun, D. J., Gershman, G. A., DiBraccio, K. J., Genestreti, and A. W., Smith (2017), Coupling Between Mercury and Its Night-Side Magnetosphere: Cross-Tail Current Sheet Asymmetry and Substorm Current Wedge Formation, *J. Geophys. Res. Space Physics*, 122, doi:10.1002/2017JA024266.
402. Smith, A. W., **J. A. Slavin**, C. M. Jackman, G.-K. Poh, and R. C. Fear (2017), Flux ropes in the Hermean magnetotail: Distribution, properties, and formation, *J. Geophys. Res. Space Physics*, 122, doi:10.1002/2017JA024295.
403. Sun, W. J., J. M. Raines, S. Y. Fu, **J. A. Slavin**, Y. Wei, G. K. Poh, Z. Y. Pu, Z. H. Yao, Q. G. Zong, W. X. Wan (2017) MESSENGER observations of the energization and heating of protons in the near Mercury magnetotail Sun, *Geophys. Res. Lett.*, 44, doi:10.1002/2017GL074276.
404. James, M. K., Imber, S. M., Bunce, E. J., Yeoman, T. K., Lockwood, M., Owens, M. J. and **J. A. Slavin** (2017), Interplanetary magnetic field properties and variability near Mercury's orbit. *J. Geophys. Res. Space Physics*, doi:10.1002/2017JA024435
405. Chen, Y., T.th, G., Cassak, P., Jia, X., Gombosi, T. I., **Slavin, J. A.**, ...Henderson, M. G. (2017). Global three-dimensional simulation of Earth's dayside reconnection using a two-way coupled Magnetohydrodynamics with embedded particle-in-cell model: Initial results, *Journal of Geophysical Research: Space Physics*, 122 <https://doi.org/10.1002/2017JA024186>
406. Imber, S. M., and **J. A. Slavin** (2017), MESSENGER Observations of Magnetotail Loading and Unloading: Implications for Substorms at Mercury. *J. Geophys. Res. Space Physics*, 122, <https://doi.org/10.1002/2017JA024332>
407. Jasinski, J. M., **Slavin J. A.**, Raines J. M. and DiBraccio G. A. (2017). Mercury's solar wind interaction as characterized by magnetospheric plasma mantle observations with MESSENGER. *Journal of Geophysical Research: Space Physics*, 122. <https://doi.org/10.1002/2017JA024594>
408. Nakamura, R., T. Nagai, J. Birn, V. A. Sergeev, Olivier Le Contel, Ali Varsani, W. Baumjohann, T. Nakamura, Sergey Apatenkov, Anton Artemyev, Robert E. Ergun, S. A. Fuselier, D. J. Gershman, B. J. Giles, Y. V. Khotyaintsev, Per-Arne Lindqvist, W. Magnes, Barry Mauk, C. T. Russell, H. J. Singer, Julia Stawarz, R. J. Strangeway, B. J. Anderson, K. R. Bromund, D. Fischer, L. Kepko, G. Le, F. Plaschke, **J. A. Slavin**, I. Cohen, A. Jaynes and D. L. Turner (2017), Near-Earth plasma sheet boundary

dynamics during substorm dipolarization, *Earth, Planets and Space* (2017) 69:129  
DOI 10.1186/s40623-017-0707-2

409. Leyser, R. P., Imber, S. M., Milan, S. E., and **Slavin, J. A.** (2017). The influence of IMF clock angle on dayside flux transfer events at Mercury, *Geophysical Research Letters*, 44, <https://doi.org/10.1002/2017GL074858>
410. Sun, W. J., Fu, S. Y., Wei, Y., Yao, Z. H., Rong, Z. J., Zhou, X. Z., ... Shen, X. C. (2017). Plasma sheet pressure variations in the near-Earth magnetotail during substorm growth phase: THEMIS observations. *Journal of Geophysical Research: Space Physics*, 122. <https://doi.org/10.1002/2017JA024603>
411. Dewey, R. M., **Slavin, J. A.**, Raines, J. M., Baker, D. N., & Lawrence, D. J. (2017). Energetic electron acceleration and injection during dipolarization events in Mercury's magnetotail. *Journal of Geophysical Research: Space Physics*, 122, 12,170–12,188. <https://doi.org/10.1002/2017JA024617>

## 2018

412. Rong, Z. J., Ding, Y., **Slavin, J. A.**, Zhong, J., Poh, G., Sun, W. J., ... Shen, C. (2018). The magnetic field structure of Mercury's magnetotail. *Journal of Geophysical Research: Space Physics*, 123, <https://doi.org/10.1002/2017JA024923>
413. Nakamura, R., Varsani, A., Genestreti, K. J., Le Contel, O., Nakamura, T., Baumjohann, W., et al. (2018). Multiscale currents observed by MMS in the flow braking region. *Journal of Geophysical Research: Space Physics*, 123, <https://doi.org/10.1002/2017JA024686>
414. Akhavan-Tafti, M., **Slavin, J. A.**, Le, G., Eastwood, J. P., Strangeway, R. J., Russell, C. T., et al. (2018). MMS examination of FTEs at the Earth's subsolar magnetopause. *Journal of Geophysical Research: Space Physics*, 123. <https://doi.org/10.1002/2017JA024681>
415. Ozturk, D. S., Zou, S., Ridley, A. J., & **Slavin, J. A.** (2018). Modeling study of the geospace system response to the solar wind dynamic pressure enhancement on 17 March 2015. *Journal of Geophysical Research: Space Physics*, 123. <https://doi.org/10.1002/2017JA025099>

## Books, Monographs and Technical Reports

1. M. Neugebauer, **J.A. Slavin**, and W.-H. Ip, , *A Plasma Model for Comet Kopff*, CRAF Proposal Information Package, Vol. XII, JPL D-2524, 1985.
2. *Solar Wind-Magnetosphere Coupling*, eds. Y. Kamide and **J. A. Slavin**, Terra-Reidel Publishers, Tokyo, 1986.
3. *Mars Aeronomy Observer: Report of the Science Working*, eds. D.M. Hunten and **J.A. Slavin**, NASA Technical Memorandum 89202, , October 1986.

4. *Solar Probe: Report of the Science Study Team*, eds. W.C. Feldman and B.T. Tsurutani, Jet Propulsion Laboratory Document 6797, November 1989.
5. *Mercury Orbiter: Report of the Science Working Team*, eds. J.W. Belcher and **J.A. Slavin**, NASA Technical Memorandum 4255, February 1991.
6. *Preliminary Calibration Plan for the Advanced Particles and Fields Observatory (APAF0) Magnetometer Experiment*, NASA Technical Memorandum 104545, July, 1991.
7. *U.S. National Geomagnetic Initiative*, National Academy Press, Washington, D.C. 1993.
8. *Particle Acceleration in Space Plasmas*, eds. J.B. Blake and **J.A. Slavin**, Adv. Space Res., 21, No. 4, 1998.
9. *Report of the Solar Probe Science Working Team*, Jet Propulsion Laboratory, 1999.
10. *Concept Study Report for the New Millennium Space Technology 5 Small Satellite Constellation Theme*, NASA, GSFC, July 15, 1999
11. *Sun-Earth Connection Roadmap: Strategic Panning for 2000 – 2025*, Chaired by K.T. Strong and **J.A. Slavin**, NASA, GSFC, 1999.
12. *The Report of the Magnetospheric Multiscale Mission (MMS) Science and Technology Definition Team*, Report of the NASA Science & Technology Definition Team, June 2000.
13. *The Magnetospheric Constellation Mission Dynamic Response and Coupling Observatory (DRACO): Understanding the global dynamics of the structured magnetotail*, Report of the NASA Science & Technology Definition Team, May 2001.
14. *Space Technology 5 (ST-5) project technology validation report*, NASA Goddard Spaceflight Center, September 6, 2006.