

NAME: Prof. James A. Slavin

DATE OF BIRTH: May 15, 1955

PRESENT POSITION: Professor of Space Science and Chair
Department of Climate and Space Sciences and Engineering
University of Michigan, Ann Arbor

RESEARCH: Magnetospheric Physics; Solar wind interactions with weakly-magnetized planets and comets; Space-borne magnetometry; Spacecraft Mission Design and Management.

EDUCATION: 1982 - Ph.D., Space Physics, University of California at Los Angeles
1978 - M.S., Space Physics, University of California at Los Angeles
1976 - B.S., Physics, Case Institute of Technology

PREVIOUS APPOINTMENTS: 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: 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
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

NASA 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 Study Scientist, Mercury Orbiter
1989-1991 Project Scientist, ISTP/POLAR
1984-1986 Study Scientist, Mars Aeronomy Observer

NASA SCIENCE
INSTRUMENT
INVESTIGATIONS:

2015 – Co-Investigator, Europa Clipper, Plasma Instrument for
Magnetic Sounding
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, GGS/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:

2014 G. A. DiBraccio, Univ. of Michigan
2013 J. M. Raines, Univ. of Michigan
2013 S. M. Curry, Univ. of Michigan
2009 A. Masters, Imperial College
2005 J. F. Chapman, University of Sydney
1996 E. Kallio, University of Helsinki
1993 M. B. Moldwin, Boston University

POST-DOCTORAL SCIENTISTS:

2015 - J. M. Jasinski (Univ. Cillege 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. Imber (Univ. of Leicester)
2007 - 2011 M. Sarantos (Rice University)
2002 - 2005 E.I. Tanskanen (Univ. of Helsinki)
1996 - 1998 M.C. Collier (Univ. of Maryland)
1996 - 1999 S. Taguchi (Univ. of Kyoto)
1993 - 1995 M.M. Kuznetsova (Moscow State Univ.,
Space Research Institute)

1992 - 1995 J. J. Moses (Univ. of California at
Los Angeles)
1990 - 1992 C.J. Owen (Imperial College)

EDITORIAL SERVICE: 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: 2013-2014 Oversight Committee for Research and Data
2013 CoE Awards Committee

EXTERNAL SERVICE: 2015- Steering Committee for NASA's Living with a Star
(LWS) 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 Magnetics 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 Meteorological Society

SCIENTIFIC PUBLICATIONS (h-Index = 56)

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, *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, and J. A. Slavin, and L. H. Brace (1980), Observations of the Dayside Ionopause and Ionosphere of Venus, *J. Geophys. Res.*, 85, 7,679.
22. 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. Sprieter, 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, 11, 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. 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.
62. 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.
63. 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.
64. 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.
65. Solar Wind-Magnetosphere Coupling, eds. Y. Kamide and J. A. Slavin, Terra-Reidel Publishers, Tokyo, 1986.

66. 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.
67. 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.
68. 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.
69. 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.
70. 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.
71. 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.
72. 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.
73. 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.
74. 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.
75. 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.
76. 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.
77. 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.
78. 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.

79. 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.
80. 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.
81. 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.
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