

## Leif Svalgaard

### LIST OF SELECTED PUBLICATIONS AND PRESENTATIONS

116. Svalgaard, L. & H. Hudson, The Solar Radio Microwave Flux and the sunspot number, Sept. 2009, SOHO-23, 2009.

115. Cliver, E. W. & L. Svalgaard, A Forecast for Cycle 24 based on fluctuations above the floor in the solar wind, Sept. 2009, SOHO-23, 2009.

**114. Svalgaard, L., Updating the Historical Sunspot Record, Sept. 2009, SOHO-23, 2009 (Invited talk).**

113. Svalgaard, L., Reconstructing Solar Activity 1700-2009, Solar Analogs II, Sept. 2009, Lowell Obs., 2009.

**112. Svalgaard, L., Predicting the Solar Cycle, Solar Analogs II, Sept. 2009, Lowell Obs., 2009 (Invited talk).**

**111. Svalgaard, L., Geomagnetic Indices, Aug. 2009, Sopron, IAGA 11<sup>th</sup> Scientific Assembly, Abstract H02-FRI-O1430-0550. 2009 (Invited talk).**

110. Hudson, H & L. Svalgaard, Where are the flares? RHESSI Science Nuggets, [http://sprg.ssl.berkeley.edu/~tohban/wiki/index.php/Where\\_are\\_the\\_flares](http://sprg.ssl.berkeley.edu/~tohban/wiki/index.php/Where_are_the_flares) , 2009.

109. Svalgaard, L. & L. Bertello, The Waldmeier Discontinuity, Bulletin American Astronomical Society, vol 41 (2), Abstract 15.13, page 837, 2009.

108. Svalgaard, L & H. Hudson, Cycle 24 – don't panic yet! RHESSI Science Nuggets, [http://sprg.ssl.berkeley.edu/~tohban/wiki/index.php/Cycle\\_24\\_-\\_don't\\_panic\\_yet!](http://sprg.ssl.berkeley.edu/~tohban/wiki/index.php/Cycle_24_-_don't_panic_yet!) , 2009.

107. Cliver, E. W. & L. Svalgaard, Towards a Consensus View of the Heliospheric Magnetic Field Strength Since 1900, American Geophysical Union, Fall Meeting 2008, San Francisco CA, abstract #SH51A-1593, 2008.

106. Svalgaard, L. & K. H. Schatten, Predicting Solar Cycle 24 (Using Solar Polar Fields), American Geophysical Union, Fall Meeting 2008, San Francisco CA, abstract #SH51A-1593, 2008.

**105. Svalgaard, L., Recalibration of the Sunspot Number and Consequences for Predictions of Future Activity and Reconstructions of Past solar Behavior, Solar Activity During the Onset of Solar Cycle 24, Dec. 2008, Napa CA 2008 (Plenary talk).**

104. Svalgaard, L., Long-term Variations of Open Flux in the Heliosphere. Seminar SPRG, University of California, Berkeley, CA, 2008.

**103. Svalgaard, L., Observatory Data: a 170-year Sun-Earth Connection, XII IAGA Observatory Workshop, June 2008, Golden CO, 2008. (Keynote).**

**102. Svalgaard, L., IHV and IDV Indices: Derivation and Stability, American Geophysical Union, Spring Meeting 2008, Ft. Lauderdale FL, abstract #GP53A-07, 2008. (Invited).**

101. Svalgaard, L., Sunspot Number Calibration by the “Magnetic Needle” Makes Sense, American Geophysical Union, Spring Meeting 2008, Ft. Lauderdale FL, abstract #SP23A-07, 2008.

100. Svalgaard, L., Long-term Variations of Open Flux in the Solar Corona (The Open flux Has Been Constant Since at Least 1840s). Seminar, University of California, Los Angeles CA, 2008.

99. Svalgaard, L. Consensus Heliospheric Magnetic Field during the last ~120 years, Seminar, Lockheed-Martin Solar and Astrophysical Laboratory, Palo Alto CA, 2008.
98. Svalgaard, L., Reconstructing TSI from Heliospheric Magnetic Field as Deduced by McCracken from Cosmic Ray modulation, SORCE Meeting Feb. 2008, Santa Fe NM, 2008.
97. Brajša, R., H. Wöhl, D. Ruždjak, B. Vršnak, G. Verbanac, L. Svalgaard, & J.-F. Hochedez, On the solar rotation and activity, *Astronomische Nachrichten*, vol. 328(10), 1013-1015, doi:10.1002/asna.20710867, 2007.
96. Svalgaard, L., (No?) Century-scale Secular Variation in HMF, EUV, or TSI, American Geophysical Union, Fall Meeting 2007, San Francisco CA, abstract #GC21B-0351, 2007.
95. Cliver, E. W. & L. Svalgaard, Origins of the Wolf Sunspot Number Series: Geomagnetic Underpinning, American Geophysical Union, Fall Meeting 2007, San Francisco CA, abstract #SH13A-1109, 2007.
94. Svalgaard, L. & E. W. Cliver, Comment on "The heliomagnetic field near Earth, 1428-2005" by K. G. McCracken, *Journal of Geophysical Research*, vol 112 (Rejected), doi:10.1029/2007JA012885, 2007.
93. Svalgaard, L., "Floors" in IMF, EUV, and therefore in TSI, (Climate And Weather of the Sun-Earth System) CAWSES Newsletter, vol. 4, #2, p.8, <http://www.bu.edu/cawses/documents/cawses-news-v4-n2.pdf>, 2007.
- 92. Svalgaard, L., The Open Flux Has Been Constant Since ~1840, Workshop on Solar, Heliospheric & Interplanetary Environment (SHINE) 2007, Whistler BC, 2007. (Invited).**
91. Cliver, E. W. & L. Svalgaard, Validation/Reconstruction of the Sunspot Number Record, 1841-2007, XXIV General Assembly, International Union of Geodesy and Geophysics (IUGG) July 2-13, Perugia, Italy, 2007.
90. Svalgaard, L. & E. W. Cliver, The InterHourly-Variability (IHV) Index of Geomagnetic Activity and its Use in Deriving the Long-term Variation of Solar Wind Speed, *Journal of Geophysical Research*, vol. 112, A10111, doi:10.1029/2007JA012437, 2007.
89. Svalgaard, L. & E. W. Cliver, Long-term Geomagnetic Indices and their Use in Inferring Solar Wind Parameters in the Past, *Advances in Space Research*, vol. 40(7), 1112-1120, doi:10.1016/j.asr.2007.06.066, 2007.
88. Svalgaard, L., Calibrating the Sunspot Number using 'the Magnetic Needle', (Climate And Weather of the Sun-Earth System) CAWSES Newsletter, vol. 4, #1, [http://www.bu.edu/cawses/calbrating\\_sunspot\\_number\\_using\\_mag\\_needle.pdf](http://www.bu.edu/cawses/calbrating_sunspot_number_using_mag_needle.pdf), 2007.
87. Svalgaard, L., Calibrating Sunspot Numbers Using Variations of 'the Magnetic Needle', American Geophysical Union, Spring Meeting 2007, Acapulco, Mexico, abstract #SH54B-02, 2007.
86. Svalgaard, L. & E. W. Cliver, A Floor in the Solar Wind Magnetic Field, *The Astrophysical Journal (Letters)*, vol. 661, L203-L206, doi:10.1086/518786, 2007.
85. Svalgaard, L., A Floor in the Open Flux IMF Strength: Constant in Time (Centuries?) and Space (Latitude), American Geophysical Union, Fall Meeting 2006, San Francisco CA, abstract #SH21A-0313, 2006.
- 84. Svalgaard, L., E. W. Cliver, & Y. Kamide, Polar Fields and Solar Cycle 24 (Observational Study), Presentation for 'NOAA Solar Cycle 24 Prediction Panel', Oct. 2006, Boulder CO, 2006.**

- 83. Svalgaard, L. & E. W. Cliver, Physics-based Long-term Geomagnetic Indices, 2nd Space Climate Symposium, 13-16 Sept. 2006, Sinaia, Romania, 2006. (Invited).**
- 82. Cliver, E. W. & L. Svalgaard, The Solar Wind During Grand Minima, 2nd Space Climate Symposium, 13-16 Sept. 2006, Sinaia, Romania, 2006. (Invited).**
- 81. Svalgaard, L., Polar Fields, Large-Scale Fields, 'Magnetic Memory', and Solar Cycle Prediction, at Workshop on Solar, Heliospheric & Interplanetary Environment (SHINE) 2006, Zermatt UT, 2006. (Invited).**
- 80. Svalgaard, L., How Good (or Bad) Are the Inner Boundary Conditions for Heliospheric Solar Wind Modeling? Workshop on Solar, Heliospheric & Interplanetary Environment (SHINE) 2006, Zermatt UT, 2006. (Invited).**
79. Svalgaard, L. & E. W. Cliver, Interplanetary Magnetic Field Strength 1902-1913, American Geophysical Union, Spring Meeting 2006, Baltimore MD, abstract #SH51A-06, 2006.
78. Svalgaard, L. & E. W. Cliver, A Calibration of POES Hemispheric Power Index and its Strong Linear Relation to the IHV Geomagnetic Activity Index, (poster), Space Weather Week 2006, Boulder CO, 2006.
77. Svalgaard, L. & E. W. Cliver, Cycle 24: Smallest in 100 years or "What we think we know about the sun's polar fields", (poster), Space Weather Week 2006, Boulder CO, 2006.
76. Svalgaard, L. & E. W. Cliver, Reply to the comment by M. Lockwood et al. on "The IDV index: Its derivation and use in inferring long-term variations of the interplanetary magnetic field", Journal of Geophysical Research, vol. 111, A09110, doi:10.1029/2006JA011678, 2006. [1]
- 75. Svalgaard, L., Derivation of Dst Index back to ~1900, in Conference on Earth-Sun System Exploration: Energy Transfer, Jan. 16-20, 2006, Kona HI, 2006. (Invited).**
74. Svalgaard, L., Reconstruction of the Dst Index, American Geophysical Union, Fall Meeting 2005, San Francisco CA, abstract #SA12A-04, 2005.
73. Svalgaard, L., E. W. Cliver, & Y. Kamide, Sunspot Cycle 24: Smallest Cycle in 100 Years? Large-scale Structures and their Role in Solar Activity ASP Conference Series, Vol. 346, Proceedings of the Conference held 18-22 October, 2004, Sunspot, NM. Edited by K. Sankarasubramanian, M. Penn, and A. Pevtsov, p.401, 2005.
- 72. Svalgaard, L. & E. W. Cliver, Prediction of Solar cycle 24, Workshop on Solar Activity: Exploration, Understanding and Prediction, Sept. 19-21, Lund, Sweden, 2005 (Invited).**
71. Svalgaard, L. & E. W. Cliver, The IDV-Index: Its Derivation and Use in Inferring Long-term Variations of the Interplanetary Magnetic Field Strength, Journal of Geophysical Research, vol. 110 (A12), A12103, doi:10.1029/2005JA011203, 2005. [2]
70. Svalgaard, L., Magnetograph Saturation: Comparison of WSO and SOLIS, American Geophysical Union, Spring Meeting 2005, New Orleans LA, abstract #SH07-360, 2005.
69. Svalgaard, L., Retrieving Old Geomagnetic Records, North American IHY Community Science Planning Workshop, 16-18 Feb. (poster), 2005, Boulder CO, 2005.
68. Svalgaard, L., E. W. Cliver, & Y. Kamide, Sunspot cycle 24: Smallest cycle in 100 years? Geophysical Research Letters, vol. 32(1), L01104, doi:10.1029/2004GL021664, 2005. [5]
67. Svalgaard, L. & M. Schulz, Semiannual Variation of Geomagnetic Activity: Protons or Photons?

American Geophysical Union, Fall Meeting 2004, San Francisco CA, abstract #SM42A-02, 2004.

66. Cliver, E. W. & L. Svalgaard, The 1859 Solar-Terrestrial Disturbance and the Current Limits of Extreme Space Weather Activity, *Solar Physics*, vol. 224(1-2), p.407-422, doi:10.1007/s11207-005-4980-z, 2004. [3]

65. Le Sager, P. & L. Svalgaard, No increase of the interplanetary electric field since 1926, *Journal of Geophysical Research*, vol. 109(A7), A07106, doi:10.1029/2004JA010411, 2004. [1]

64. Escher, E. & L. Svalgaard, Asymmetry in the Rosenberg-Coleman effect around solar minimum revealed by wavelet analysis of the interplanetary magnetic field polarity data (1927-2002), *Geophysical Research Letters*, vol. 31(12), L12808, doi:10.1029/2004GL020228, 2004. [3]

**63. Svalgaard, L., The Value of Old Geomagnetic Records towards Space Climatology, CAUSES Kickoff Meeting, June 16-18, 2004, Irigo, Atsumi, Aichi, Japan, 2004. (Invited).**

**62. Svalgaard, L., The Value of Old Geomagnetic Records, First International Symposium on Space Climate, June 20-23, 2004, Oulu, Finland, 2004 (Invited).**

61. Cliver, E. W., L. Svalgaard, & D. F. Neidig, How big was the Carrington 1859 Flare? American Geophysical Union, Spring Meeting 2004, Toronto ON, abstract #SH43A-03, 2004.

60. Svalgaard, L., E. W. Cliver, & P. Le Sager, IHV: A new geomagnetic index, *Advances in Space Research*, vol. 34(2), p.436-439, 2004. [7]

59. Cliver, E.W., L. Svalgaard, & A. G. Ling, Origins of the semiannual variation of geomagnetic activity in 1954 and 1996. *Annales Geophysicae*, vol. 22(1), p.93-100, 2004. [3]

58. Le Sager, P. & L. Svalgaard, Interplanetary Electric field and Solar Open Magnetic Flux: No Increase Since 1926, American Geophysical Union, Fall Meeting 2003, San Francisco CA, abstract #SH21B-0165, 2003.

57. Svalgaard, L. & E. W. Cliver, New Geomagnetic Index (IDV) Measuring Magnitude of Interplanetary Magnetic field, American Geophysical Union, Fall Meeting 2003, San Francisco CA, abstract #SH21B-0108, 2003.

**56. Svalgaard, L., E. W. Cliver, & P. Le Sager, Determination of Interplanetary Magnetic Field Strength, Solar Wind Speed, and EUV Irradiance, 1890-Present. International Solar Cycle Studies Symposium, June 23-28, 2003, Tatranska Lomnica, Slovak Republic, Proceedings (ESA SP-535), 15, ed. A. Wilson. 2003, (Invited). [5]**

55. Svalgaard, L., E. W. Cliver, & P. Le Sager, No doubling of the Sun's coronal magnetic field during the last 100 years, EGS-AGU - EUG Joint Assembly, Nice, France, 6-11 April 2003, abstract #7616, 2003.

54. Le Sager, P., L. Svalgaard, & T. Huang, Main Magnetic Field Determination and Sq-Model Tuning from Local geomagnetic Variations. American Geophysical Union, Fall Meeting 2002, San Francisco CA, abstract #GP61A-1014, 2002.

53. Cliver, E. W. & L. Svalgaard, Evidence for a Dominant Russell-McPherron/Rosenberg-Coleman Origin of the Semiannual Variation of Geomagnetic activity in 1954 and 1996, American Geophysical Union, Fall Meeting 2002, San Francisco CA, abstract #SM72B-0614, 2002.

**52. Svalgaard, L., The Semi-annual Variation of Geomagnetic Activity. American Geophysical Union, Fall Meeting 2002, San Francisco CA, abstract #SM22B-06, 2002 (Invited).**

51. Svalgaard, L., E. W. Cliver, & A. G. Ling, The semiannual variation of great geomagnetic storms, *Geophysical Research Letters*, vol. 29(16), 1765, doi:10.1029/2001GL014145, 2002. [1]
50. Svalgaard, L. & E. W. Cliver, An independent assessment of solar wind conditions circa 1900 based on data obtained by the Roald Amundsen Gjøa expedition, 34th COSPAR Scientific Assembly, Second World Space Congress, Houston, 10-19 Oct., 2002.
49. Svalgaard, L., E. W. Cliver, & A. G. Ling, The semiannual variation of great geomagnetic storms, American Geophysical Union, Fall Meeting 2001, San Francisco CA, abstract #SM31B-0778, 2001.
48. Scherrer, P. H., J. M. Wilcox, & L. Svalgaard, The rotation of the sun - Observations at Stanford, *Astrophysical Journal*, Part 1, vol. 241, Oct.15, p.811-819, 1980. [51]
47. Wilcox, J. M., P. H. Scherrer, & L. Svalgaard, Intensity of tropospheric circulation associated with solar magnetic sector boundary transits, *Journal of Atmospheric and Terrestrial Physics*, vol. 41, p.657-659, 1979.
- 46. Wilcox, J. M., P. B. Duffy, K. H. Schatten, L. Svalgaard, P. H. Scherrer, W. O. Roberts, & R. H. Olson, Interplanetary magnetic field polarity and the size of low-pressure troughs near 180 deg W longitude, *Science*, vol. 204, Apr.6, p.60-62, 1979. [1]**
45. Duvall, T. L., Jr., P. H. Scherrer, L. Svalgaard, & J. M. Wilcox, Average photospheric poloidal and toroidal magnetic field components near solar minimum, *Solar Physics*, vol. 61, March, p.233-245, 1979. [13]
44. Svalgaard, L., P. H. Scherrer, & J. M. Wilcox, The equatorial rotation velocity of the photosphere is measured to be the same as sunspots, Workshop on Solar Rotation Catania, Sicily, Italy, 26-28 Sep. 1978.
43. Svalgaard, L., T. L. Duvall Jr., & P. H. Scherrer, The strength of the sun's polar fields, *Solar Physics*, vol. 58, July, p.225-239., 1978. [58]
42. Mayaud, P. N. & L. Svalgaard, Comment on 'Evidence for strong artificial components of the equivalent linear amplitude geomagnetic indices' by D. M. Bubenik and A. C. Fraser-Smith, *Journal of Geophysical Research*, vol. 83, June 1, p.2723-2724, Reply, p.2725, 1978.
41. Schatten, K. H., P. H. Scherrer, L. Svalgaard, & J. M. Wilcox, Using dynamo theory to predict the sunspot number during solar cycle 21, *Geophysical Research Letters*, vol. 5, May, p.411-414, 1978. [36]
40. Scherrer, P. H., K. H. Schatten, L. Svalgaard, & J. M. Wilcox, Using Dynamo Theory to Predict the Sunspot Number During Solar Cycle 21. *Bulletin of the American Astronomical Society*, vol. 10, p.415, 1978.
39. Duvall, T. L. Jr. & L. Svalgaard, On the supposed anticorrelation of solar polar and equatorial rotation rates, *Solar Physics*, vol. 56, Feb., p.463-466, 1978. [6]
38. Svalgaard, L. & J. M. Wilcox, A view of solar magnetic fields, the solar corona, and the solar wind in three dimensions, *Annual review of astronomy and astrophysics*. Volume 16. (A79-14551 03-88) Palo Alto, Calif., Annual Reviews, Inc., p.429-443, 1978. [25]
37. Duvall, T. L. Jr., J. M. Wilcox, L. Svalgaard, P. H. Scherrer, & P. S. McIntosh, Comparison of H-alpha synoptic charts with the large-scale solar magnetic field as observed at Stanford, *Solar Physics*, vol. 55, Nov., p.63-68, 1977. [7]

36. Scherrer, P. H., J. M. Wilcox, L. Svalgaard, T. L. Duvall Jr., P. H. Dittmer, & E. Gustafson, The mean magnetic field of the sun - Observations at Stanford, *Solar Physics*, vol. 54, Oct., p.353-361, 1977. [34]

35. Svalgaard, L., Geomagnetic activity: Dependence on solar wind parameters, in *Coronal Holes and High Speed Wind Streams*, ed. J. B. Zirker, Colorado Associated University Press: Boulder, p 371, 1977. [26]

34. Svalgaard, L., *Solar Wind and Interplanetary Medium*, Illustrated Glossary for Solar and Solar-Terrestrial Physics, Edited by A. Bruzek & C.J. Durrant. ISBN 90-277-0825-8, *Astrophysics & Space Science Library*, vol. 69, p.149, 1977. [5]

33. Svalgaard, L., Recalibration of Bartels' geomagnetic activity indices Kp and ap to include universal time variations, *Journal of Geophysical Research*, vol. 81, Oct. 1, p.5182-5188, 1976. [3]

**32. Svalgaard, L. & J. M. Wilcox, Structure of the extended solar magnetic field and the sunspot cycle variation in cosmic ray intensity, *Nature*, vol. 262, Aug. 26, p.766-768, 1976. [29]**

31. Svalgaard, L. & J. M. Wilcox, The Hale solar sector boundary, *Solar Physics*, vol. 49, July, p.177-185, 1976. [3]

30. Svalgaard, L. & J. M. Wilcox, Long Term Evolution of Solar Sector Structure, in *Basic Mechanisms of Solar Activity*, Proceedings from IAU Symposium no. 71, Prague, Czechoslovakia, 25-29 August 1975. Edited by Vaclav Bumba and Josip Kleczek. International Astronomical Union. Symposium no. 71, Dordrecht-Holland; D. Reidel Pub. Co., p.135, 1976.

29. Wilcox, J. M., L. Svalgaard, & P. H. Scherrer, On the reality of a sun-weather effect. *Journal of Atmospheric Science*, vol. 33, p.1113-1116, 1976. [9]

28. Svalgaard, L., Comment on 'Kp dependence on sectors, by I. B. McDiarmid and E. E. Budzinski, *Journal of Geophysical Research*, vol. 81, p.xxxx, 1976.

27. Wilcox, J. M. & L. Svalgaard, The sun as a magnetic star, in *Physics of Ap-stars*, Proceedings of the Colloquium, Vienna, Austria, September 8-11, 1975. (A77-15213 04-89) Vienna, Universitaetssternwarte and Leopold Figl-Observatorium fuer Astrophysik, p.457-463, 1976.

26. Heath, D. F., J. M. Wilcox, L. Svalgaard, & T. L. Duvall Jr., Relation of the observed far ultraviolet solar irradiance to the solar magnetic sector structure, *Solar Physics*, vol. 45, Nov., p.79-82, 1975.

25. Svalgaard, L., J. M. Wilcox, P. H. Scherrer, & R. Howard, The sun's magnetic sector structure, *Solar Physics*, vol. 45, Nov., p.83-91, 1975. [21]

24. Wilcox, J. M., L. Svalgaard, & P. C. Hedgecock, Comparison of inferred and observed interplanetary magnetic field polarities, 1970-1972, *Journal of Geophysical Research*, vol. 80, Sept. 1, p.3685-3688, 1975. [2]

23. Svalgaard, L., On the use of Godhavn H component as an indicator of the interplanetary sector polarity, *Journal of Geophysical Research*, vol. 80, July 1, 1975, p.2717-2722, 1975. [3]

**22. Wilcox, J. M., L. Svalgaard, & P. H. Scherrer, Seasonal variation and magnitude of the solar**

**sector structure-atmospheric vorticity effect, *Nature*, vol. 255, June 12, p.539, 540, 1975. [7]**

21. Svalgaard, L. & J. M. Wilcox, Long-term evolution of solar sector structure, *Solar Physics*, vol. 41, Apr., p.461-475, 1975. [44]

20. Scherrer, P. H., J. M. Wilcox, L. Svalgaard, P. H. Dittmer, & T. L. Duvall Jr., The Stanford Solar Observatory, *Bulletin of the American Astronomical Society*, vol. 7, p.350, 1975.

19. Svalgaard, L., Solar Sectors in Photospheric Magnetic Fields, *Bulletin of the American Astronomical Society*, vol. 7, p.364, 1975.

**18. Svalgaard, L., Geomagnetic Responses to the Solar Wind and to Solar Activity, in Possible Relationships between Solar Activity and Meteorological Phenomena, Proceedings of a symposium held 7-8 November, 1973 at Goddard Space Flight Center, Greenbelt, MD. Edited by William R. Bandeen and Stephen P. Maran. NASA SP-366. Washington, DC: National Aeronautics and Space Administration, p.119, 1975. (Invited).**

17. Wilcox, J. M., L. Svalgaard, & P. H. Scherrer, Seasonal Variation and Magnitude of the Solar Sector Structure - Atmospheric Vorticity Effect, in *The Solar Constant and the Earth's Atmosphere*, Proceedings of the Workshop held at Big Bear Solar Observatory, Big Bear City, CA, 19-21 May 1975. Big Bear Solar Observatory #0149. Edited by H. Zirin and J. Walter, p.294, 1975.

**16. Svalgaard, L. & J. M. Wilcox, The Spiral Interplanetary Magnetic Field: A Polarity and Sunspot Cycle Variation, *Science*, Volume 186, Issue 4158, pp.51-53, 1974. [6]**

15. Svalgaard, L., A Possible Link Between Sunspot Magnetism and Solar Sector Magnetism, *Bulletin of the American Astronomical Society*, vol. 6, p.294, 1974.

14. Wilcox, J. M., P. H. Scherrer, L. Svalgaard, W. O. Roberts, R. H. Olson, R. L. Jenne, Influence of Solar Magnetic Sector Structure on Terrestrial Atmospheric Vorticity. *Journal of Atmospheric Sciences*, vol. 31(2), p.581-588, 1974. [20]

13. Antonucci, E. & L. Svalgaard, Rigid and Differential Rotation of the Solar Corona, *Solar Physics*, vol. 34, p.3, 1974. [38]

12. Wilcox, J. M. & L. Svalgaard, Coronal Magnetic Structure at a Solar Sector Boundary, *Solar Physics*, vol. 34, p.461, 1974. [15]

11. Antonucci, E. & L. Svalgaard, Green Corona and Solar Sector Structure, *Solar Physics*, vol. 36, p.115, 1974. [4]

10. Svalgaard, L., J. M. Wilcox, & T. L. Duvall Jr., A Model Combining the Polar and the Sector Structured Solar Magnetic Fields, *Solar Physics*, vol. 37, p.157, 1974. [32]

**9. Svalgaard, L., The Relation between the Azimuthal Component of the Interplanetary Magnetic Field and the Geomagnetic Field in the Polar Caps, in Correlated Interplanetary and Magnetospheric Observations, Proceedings 7th ESLAB Symposium, Saulgau, W. Germany, May 22-25, 1973, Dordrecht: Reidel, edited by D. Edgar Page. *Astrophysics and Space Science Library*, vol. 42, p.61, 1973. (Invited) [1]**

8. Svalgaard, L., Solar Activity and the Weather, in *Correlated Interplanetary and Magnetospheric Observations*, Proceedings 7th ESLAB Symposium, Saulgau, W. Germany, May 22-25, 1973, Dordrecht: Reidel, edited by D. Edgar Page. *Astrophysics and Space Science Library*,

vol. 42, p.627, 1973. [2]

7. Svalgaard, L., Solar Magnetic Field at Sunspot Minima, Bulletin of the American Astronomical Society, vol. 5, p.280, 1973.

**6. Wilcox, J.M., P. H. Scherrer, L. Svalgaard, W. O. Roberts, & R. H. Olson, Solar magnetic sector structure: Influence on stratospheric circulation, Science, vol. 180, p.185-186, 1973. [16]**

**5. Svalgaard, L., The Relation Between the Polarity of the Interplanetary Magnetic Field and the Polar Geomagnetic Field, Solar Terrestrial Relations, Proceedings of the conference August 28 - September 1, 1972 Calgary, Alberta, Canada. Director: D. Venkatesan. University of Calgary, p.231, 1973. (Invited)**

4. Svalgaard, L., Polar cap magnetic variations and their relationship with the interplanetary magnetic sector structure, Journal of Geophysical Research, 78, p.2064-2078, 1973. [35]

3. Svalgaard, L., Interplanetary magnetic-sector structure, 1926-71, Journal of Geophysical Research, 77, p.4027-4034, 1972. [23]

2. Svalgaard, L., Interplanetary Sector Structure during 4 Solar Cycles, Bulletin of the American Astronomical Society, vol. 4, p.393, 1972.

1. Svalgaard, L., Sector Structure of the Interplanetary Magnetic field and Daily Variation of the Geomagnetic Field at High Latitudes, Geofysiske Meddelelser, R-6, Danish Meteorological Institute, 1968. [30]