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APOLLO TELESCOPE MOUNT—A PARTIAL LISTING OF SCIENTIFIC PUBLICATIONS AND PRESENTATIONS SUPPLEMENT 3

Edited by John M. Reynolds, Stanley A. Fields,
and William C. Snoddy
Space Sciences Laboratory

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NASA

*George C. Marshall Space Flight Center
Marshall Space Flight Center, Alabama*

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1. JOURNAL PUBLICATIONS

- 1.267 Prompt Solar Proton Events and Coronal Mass Ejections. S. W. Kahler, E. Hildner, and M. A. I. Van Hollebeke. *Solar Physics* 57, 1978, 429-443.
- 1.268 A Study of the Background Corona Near Solar Minimum. Kuniiji Saito, A. I. Poland, and R. H. Munro. *Solar Physics* 55, 1977, 121-134.
- 1.269 Motions and Mass Changes of a Persistent Coronal Streamer. A. I. Poland. *Solar Physics* 57, 1978, 141-153.
- 1.270 Temporal Evolution of the Equatorial K-Corona. R. M. MacQueen and A. I. Poland. *Solar Physics* 55, 1977, 143-159.
- 1.271 Expansion and Broadening of Coronal Loop Transients: A Theoretical Explanation. T. Ch. Mouschovias and A. I. Poland. *Astrophys. J.* 220, 1978, 675-682.
- 1.272 Forerunners: Outer Rims of Solar Coronal Transients. B. V. Jackson and E. Hildner. *Solar Physics* 60, 1978, 155-170.
- 1.273 $\lambda 5303$ Fe XIV Density Models of the Inner Solar Corona. R. R. Fisher. *Solar Physics* 57, 1978, 119-128.
- 1.274 Photoelectric Observations of Fe XIV Coronal Depletion: 20 Apr 1976. R. R. Fisher. *Solar Physics* 55, 1977, 135-141.
- 1.275 Photometric Calibration of the EUV Spectroheliometer on ATM. E. M. Reeves, J. G. Timothy, M. C. E. Huber, and G. L. Withbroe. *Applied Optics* 16, 1977, 849.
- 1.276 Shock Waves in the Interstellar Medium. J. C. Raymond. *Astrophys. J. Supp.* 39, 1979, 1.
- 1.277 EUV Structure of a Small Flare. R. H. Levine. *Solar Physics* 56, 1977, 185.
- 1.278 Supergranulation and the Dynamics of Gas and Magnetic Field Below the Solar Photosphere. P. V. Foukal. *Astrophys. J.* 218, 1977, 539.
- 1.279 The Thermal Phase of a Large Solar Flare. G. L. Withbroe. *Astrophys. J.* 225, 1978, 641.

- 1.280 Density Sensitivity of the Solar EUV Emission from Boron-Like Ions. J. E. Vernazza and H. E. Mason. *Astrophys. J.* 226, 1978, 720.
- 1.281 The Rapid Heating of Coronal Plasma During Solar Flares: Nonequilibrium Ionization Diagnostics and Reverse Currents. P. R. Shapiro and J. W. Knight. *Astrophys. J.* 224, 1978, 1028.
- 1.282 C III Density Diagnostics in Non-Equilibrium Plasmas. J. C. Raymond and A. K. Dupree. *Astrophys. J.* 222, 1978, 379.
- 1.283 Bowen Fluorescence in the Solar Transition Region. J. C. Raymond. *Astrophys. J.* 224, 1978, 259.
- 1.284 On Dielectronic Recombination and Resonances in Excitation Cross Sections. J. C. Raymond. *Astrophys. J.* 222, 1978, 1114.
- 1.285 Analysis of Extreme Ultraviolet Observations of a Polar Coronal Hole. J. T. Mariska. *Astrophys. J.* 225, 1978, 252.
- 1.286 Lyman Continuum Observations of Solar Flares. M. E. Machado and R. W. Noyes. *Solar Physics* 59, 1978, 121.
- 1.287 The Structure of the Temperature-Minimum Region in Solar Flares and Its Significance for Flare Heating Mechanisms. M. E. Machado, A. G. Emslie, and J. C. Brown. *Solar Physics* 58, 1978, 363.
- 1.288 The Relationship of Open Magnetic Structures to Solar Wind Flow. R. H. Levine. *J. Geophys. Res.* 83, 1978, 4193.
- 1.289 Nebular Observations and Stellar Coronae. L. W. Hartmann and J. C. Raymond. *Astrophys. J.* 222, 1978, 541.
- 1.290 Magnetic Loops, Downflows, and Convection in the Solar Corona. P. V. Foukal. *Astrophys. J.* 223, 1978, 1046.
- 1.291 The Characteristics of Impulsive Solar EUV Bursts. A. G. Emslie and R. W. Noyes. *Solar Physics* 57, 1978, 383.
- 1.292 The Collisional Interaction of a Beam of Charged Particles with a Hydrogen Target of Arbitrary Ionization Level. A. G. Emslie. *Astrophys. J.* 224, 1978, 241.

- 1.293 Optical Emission from a Fast Shock Wave: The Remnants of Tycho's Supernova and SN1006. R. A. Chevalier and J. C. Raymond. *Astrophys. J. Let.* 225, 1978, L27.
- 1.294 Further Remarks on the Analysis and Interpretation of Solar X-Ray Photographs. J. H. Underwood and D. L. McKenzie. *Solar Physics* 60, 1978, 311.
- 1.295 Thermodynamic History of a Solar Active Region Observed in X-Rays. R. G. Teske and E. B. Mayfield. *Astrophys. J. Let.* 210, 1976, L153.
- 1.296 Radio and Soft X-Ray Evidence for Dense Non-Potential Magnetic Flux Tubes in the Solar Corona. R. T. Stewart and J. A. Vorpahl. *Solar Physics* 55, 1977, 111.
- 1.297 Physical Conditions in the Corona for a Bipolar Magnetic Region. J. A. Vorpahl. *Solar Physics* 57, 1978, 297.
- 1.298 Numerical Simulation of MHD Shock Waves in the Solar Wind. R. S. Steinolfson and M. Dryer. *J. Geophys. Res.* 83, 1978, 1576.
- 1.299 Dynamic MHD Modeling of Solar Wind Corotating Stream Interaction Region Observed by Pioneer 10 and 11. M. Dryer, Z. K. Smith, J. D. Mihalov, J. H. Wolfe, R. S. Steinolfson, and S. T. Wu. *J. Geophys. Res.* 83, 1978, 4347.
- 1.300 Comparison of Measured and Calculated Potential Magnetic Fields. M. J. Hagyard and D. L. Teuber. *Solar Physics* 57, 1978, 267.
- 1.301 The Effect of Nonlinear Conduction on the Cooling of Flare Loops. K. R. Krall. *Solar Physics (Res. Note)* 55, 1977, 455.
- 1.302 Global Constant- Force Free Magnetic Fields and Coronal Structures. S. T. Wu, Y. Nakagawa, and E. Tandberg-Hanssen. *Astronomy & Astrophysics* 69, 1978, 43.
- 1.303 Morphology and Physical Parameters of a Solar Flare. J. B. Smith, Jr., R. M. Wilson, and W. Henze, Jr. *Astrophys. J. Let.* 216, 1977, L79.
- 1.304 Thermally Conductive Flows in Coronal Holes. R. S. Steinolfson and E. Tandberg-Hanssen. *Solar Physics* 55, 1977, 99.

- 1.305 Time Varying Oscillations in the Solar X-Ray Flux as Observed from Skylab. D. L. Teuber, R. M. Wilson, and W. Henze. *Astronomy & Astrophysics* 65, 1978, 229.
- 1.306 Parameters in a Long Duration X-Ray Event Observed from Skylab. J. A. Vorpahl, E. Tandberg-Hanssen, and J. B. Smith, Jr. *Astrophys. J.* 212, 1977, 550.
- 1.307 The Importance of Spectroscopy in the 80-800 Å Region for Plasma Diagnostics in the Solar Atmosphere. U. Feldman, G. A. Doschek, and W. Behring. *Space Sci. Rev.* 22, 1978, 191.
- 1.308 A Semi-Empirical Model of the Upper Flare Chromosphere. B. W. Lites and J. W. Cook. *Astrophys. J.* 228, 1979, 598.
- 1.309 EUV Continua of Solar Flares 1420-1960 Å. J. W. Cook and G. E. Brueckner. *Astrophys. J.* 227, 1979, 645.
- 1.310 Leading Atomic Lines Present in Solar Spectra: H through Ca. C. E. Moore. *Optica Puray Aplicada.* 10, 1977, 131.
- 1.311 Errors in Differential Emission Measure Solutions. K. P. Dere. *Astronomy & Astrophysics* 70, 1978, 439.
- 1.312 The Decay of the 1973 August 9 Flare. K. P. Dere and J. W. Cook. *Astrophys. J.* 224, 1978, 1017.
- 1.313 Extreme Ultraviolet Observations of Coronal Holes: II. Association of Holes with Solar Magnetic Fields and a Model for Their Formation During the Solar Cycle. J. D. Bohlin and N. R. Sheeley, Jr. *Solar Physics* 56, 1978, 125.
- 1.314 The Equatorward Extent of Auroral Activity During 1973-1974. N. R. Sheeley, Jr. *Solar Physics* 58, 1978, 405.
- 1.315 A Survey of Coronal Holes and Their Solar Wind Associations During Sunspot Cycle 20. R. M. Broussard, J. H. Underwood, R. Tousey, and N. R. Sheeley, Jr. *Solar Physics* 56, 1978, 161.
- 1.316 Analysis of Extreme Ultraviolet Observations of a Polar Coronal Hole. J. T. Mariska. *Astrophys. J.* 225, 1978, 252.
- 1.317 Measurements of Extreme Ultraviolet Emission Line Profiles Near the Solar Limb. J. T. Mariska, U. Feldman, and G. A. Doschek. *Astrophys. J.* 226, 1978, 698.

- 1.318 Electron Densities in Stellar Atmospheres Determined from IUE Spectra. G. A. Doschek, U. Feldman, J. T. Mariska, and J. L. Linsky. *Astrophys. J. Let.* 226, 1978, L35.
- 1.319 An Unstable Arch Model of a Solar Flare. D. S. Spicer. *Solar Physics* 53, 1976, 305.
- 1.320 Diagnostics of Solar Flare Hard X-Ray Sources. P. Hoyng, J. W. Knight, and D. S. Spicer. *Solar Physics* 58, 1978, 139.
- 1.321 Forbidden Lines of Fe XIX, Fe XX, and Fe XXI in Solar Flares. K. G. Widing. *Astrophys. J.* 222, 1978, 735.
- 1.322 Spectral Lines Observed in Solar Flares between 171 and 630 Angstroms. K. P. Dere. *Astrophys. J.* 221, 1978, 1062.
- 1.323 ATM Evidence for a Low Nonthermal Proton/Electron Energy Flux Ratio in Solar Flares. R. C. Canfield and J. W. Cook. *Astrophys. J.* 225, 1978, 650.
- 1.324 The Dynamical Properties of the Solar Corona from Intensities and Line Widths of the Forbidden Lines of Si VIII, Fe XI, and Fe XII. Chung-Chieh Cheng, G. A. Doschek, and U. Feldman. *Astrophys. J.* 207, 1979, 1037.
- 1.325 Electron Densities in the Solar Corona from Density Sensitive Line Ratios in the N I Isoelectronic Sequence. U. Feldman, G. A. Doschek, J. T. Mariska, A. K. Bhatia, and H. E. Mason. *Astrophys. J.* 226, 1978, 674.
- 1.326 Densities in the Quiet Sun and Polar Coronal Holes from EUV Line Ratios Involving O III (1666.15 Å). G. A. Doschek, U. Feldman, A. K. Bhatia, and H. E. Mason. *Astrophys. J.* 226, 1978, 1129.
- 1.327 Emission Line Spectra of Two Active Regions on the Solar Limb (1175-1940 Å). U. Feldman and G. A. Doschek. *Astrophys. J. Suppl.* 37, 1978, 443.
- 1.328 EUV Spectra from Skylab (1175-1940 Å): Mass Motions in the Transition Zone in Regions of Solar Activity. G. A. Doschek and U. Feldman. *Astronomy & Astrophysics* 69, 1978, 11.
- 1.329 XUV Spectra of the 1973 June 15 Solar Flare Observed from Skylab: A List of Spectral Lines from 1000-1940 Å. L. Cohen, U. Feldman, and G. A. Doschek. *Astrophys. J. Suppl.* 37, 1978, 393.

- 1.330 The Expansion Velocities of Laser-Produced Plasmas Determined from Extreme Ultraviolet Spectral Line Profiles. U. Feldman, G. A. Doschek, W. E. Behring, and L. Gohen. *Applied Physics Let.* 31, 1977, 571.
- 1.331 On the Highly Directional Expansion of Laser-Produced Plasmas. G. A. Doschek, U. Feldman, P. G. Burkhalter, O. T. Finn, and W. A. Feibelman. *J. Phys. B.* 10, 1977, L745.
- 1.332 Electron Density in Solar Flare and Active Region Plasmas from a Density Sensitive Line Ratio of Fe IX. U. Feldman, G. A. Doschek, and K. G. Widing. *Astrophys. J.* 219, 1978, 304.
- 1.333 The Electron Density at 10^5 K in Different Regions of the Solar Atmosphere Derived from an Intersystem Line of O IV. U. Feldman and G. A. Doschek. *Astronomy & Astrophysics* 65, 1978, 215.
- 1.334 Spatially Resolved EUV-Emission from Focused REB Discharges into Thin Targets. D. J. Johnson, W. F. Oliphant, G. A. Doschek, and U. Feldman. *J. Applied Physics* 49, 1978, 113.
- 1.335 Laser-Produced X-Ray Spectra of the Fluorine Isoelectronic Sequence. P. G. Burkhalter, G. A. Doschek, U. Feldman, and R. D. Cowan. *J. Optical Soc. Am.* 67, 1977, 741.
- 1.336 The Coronal Temperature and Non-Thermal Motions in a Coronal Hole Compared with Other Solar Regions. G. A. Doschek and U. Feldman. *Astrophys. J. Let.* 212, 1977, L143.
- 1.337 Picosecond Optical Gate. B. A. Ripin, U. Feldman, and G. A. Doschek. *Rev. Sci. Instr.* 48, 1977, 935.
- 1.338 Exploring Plasmas in the Sun and in the Laboratory. G. A. Doschek and U. Feldman. *Aeronautics & Astronautics*, July-August 1976, 24-30.
- 1.339 Diagnostic Forbidden Lines of Highly Ionized Elements for Tokamak Plasmas. G. A. Doschek and U. Feldman. *J. Applied Physics* 47, 1976, 3083.
- 1.340 An Atlas of Soft X-Ray Images of the Solar Corona from Skylab. M. V. Zombeck, G. S. Vaiana, R. Haggerty, A. S. Krieger, J. K. Silk, and A. Timothy. *Astrophys. J. Suppl.* 38, 1978, 69-85.

1. 341 Comparison of a Flaring X-Ray Kernel to a Resistive Merging Model. R. Petraso, M. Gerassimenko, and J. Nolte. *Astrophys. J.* 227, 1979, 299.
1. 342 The Dependence of Solar Flare Energetics on Flare Volumes. S. W. Kahler. *Solar Physics* 59, 1978, 87.
1. 343 Evolution of the Coronal and Transition Zone Plasma in a Compact Flare—The Event of 1973 August 9th. J. H. Underwood, S. K. Antiochos, U. Feldman, and K. P. Dere. *Astrophys. J.* 224, 1978, 1017.
1. 344 Comments on the "Minimum Flux Corona" Concept. S. K. Antiochos and J. H. Underwood. *Astronomy & Astrophysics* 68, 1978, L19.
1. 345 X-Ray Optics. J. H. Underwood. *American Scientist* 66, 1978, 476.
1. 346 The Temperature and Density Structure of Active Coronal Loops. I. J. D. Craig, A. N. McClymont, and J. H. Underwood. *Astronomy & Astrophysics* 70, 1978, 1.
1. 347 Evidence Linking Coronal Transients to the Evolution of Coronal Holes. D. F. Webb, P. S. McIntosh, J. T. Nolte, and C. V. Solodyna. *Solar Physics* 58, 1978, 389-396.
1. 348 A Physical Parameter Method for the Design of Broad-Band X-Ray Imaging Systems to Do Coronal Plasma Diagnostics. S. Kahler and A. S. Krieger. *Solar Physics* 56, 1978, 351-357.
1. 349 Coronal Hole Evolution by Sudden Large-Scale Changes. J. T. Nolte, M. Gerassimenko, A. S. Krieger, and C. V. Solodyna. *Solar Physics* 56, 1978, 153-159.
1. 350 Recent Advances in Coronal Physics. G. S. Vaiana and R. Rosner. *Ann. Rev. Astron. Astrophys.* 16, 1978, 393-428.
1. 351 X-Ray Analysis of Polar Plumes. I. A. Ahmad and D. F. Webb. *Solar Physics* 58, 1978, 323-336.
1. 352 Observational Evidence of Continual Heating in X-Ray Emitting Coronal Loops. M. Gerassimenko, C. V. Solodyna, and J. T. Nolte. *Solar Physics* 57, 1978, 103-110.

1. 353 The Association of Nonthermal Electrons with Nonflaring Coronal Transients. D. F. Webb and M. R. Kundu. *Solar Physics* 57, 1978, 155-173.
1. 354 Short Term Evolution of Coronal Hole Boundaries. J. T. Nolte, A. S. Krieger, and C. V. Solodyna. *Solar Physics* 57, 1978, 129-139.
1. 355 The Decay of Coronal Loops Brightened by Flares and Transients. A. S. Krieger. *Solar Physics* 56, 1978, 107-120.
1. 356 The Structure of the X-Ray Bright Corona above Active Region McMath 12628 and Derived Implications for the Description of Equilibria in the Solar Atmosphere. J. P. Pye, K. D. Evans, R. J. Hutcheon, M. Gerassimenko, J. M. Davis, A. S. Krieger, and J. F. Vesecky. *Astronomy & Astrophysics* 65, 1978, 123-138.
1. 357 Cosmic Flare Transients: Constraints Upon Models for Energy Storage and Release Derived from the Event Frequency Distribution. R. Rosner and G. S. Vaiana. *Astrophys. J.* 222, 1978, 1104-1108.
1. 358 Dynamics of the Quiescent Solar Corona. R. Rosner, W. H. Tucker, and G. S. Vaiana. *Astrophys. J.* 220, 1978, 643-665.
1. 359 Heating of Coronal Plasma by Anomalous Current Dissipation. R. Rosner, L. Golub, B. Coppi, and G. S. Vaiana. *Astrophys. J.* 222, 1978, 317-332.

2. JOURNAL PUBLICATIONS SUBMITTED

- 2.230 Analyses of a Long Duration Soft X-Ray Limb Event. K. R. Krall, J. B. Smith, Jr., and J. P. McGuire. Submitted to Solar Physics.
- 2.231 Angular Velocity Gradients in the Solar Convection Zone. P. Gilman and P. Foukal. *Astrophys. J.* - In Press.
- 2.232 Anticorrelation of X-Ray Bright Points with Sunspot Number, 1970-1978. L. Golub, J. M. Davis, and A. S. Krieger. *Astrophys. J.* - In Press.
- 2.233 Applications of the Trap-Plus-Precipitation Hard X-Ray Burst Model to the Flare of 1972 August 4. A. G. Emslie, M. G. McCaig, and J. C. Brown. Submitted to Solar Physics.
- 2.234 The Balmer 9 and Balmer 11 Lines of the He II in the Sun. J. C. Raymond, R. W. Noyes, and M. P. Stopa. *Solar Physics* - In Press.
- 2.235 CO Emission Lines in the Solar Atmosphere. C. Jordan, J. D. F. Bartoe, G. E. Brueckner, K. R. Nicolas, G. D. Sandlin, and M. E. Van Hoosier. Submitted to *Mon. N. Roy. Astr. Soc.*
- 2.236 Comparison of a Flaring X-Ray Kernel to a Resistive Merging Model. R. Petraso, M. Gerassimenko, and J. Nolte. *Astrophys. J.* - In Press.
- 2.237 A Comparison of High Resolution Soft X-Ray and Centimetric Observations of Solar Active Regions. R. Pallavicini, G. Tofani, M. Feili, and G. S. Vaiana. Submitted to *Astrophys. J.*
- 2.238 A Comparison of Models of the High-Temperature Flare with Observations and Implications for the Low-Temperature Flare. M. E. Machado and A. G. Emslie. *Astrophys. J.* - In Press.
- 2.239 Comparison of Radio and EUV Filaments: A Two-Component Model. E. J. Schmahl and M. R. Kundu. Submitted to *Solar Physics*.
- 2.240 A Comparison of the Temperature and Emission Measure of X-Ray Active Regions with Coronal Magnetic Fields. J. B. Burl, R. G. Teske, and E. B. Mayfield. *Solar Physics* - In Press.

- 2.241 Configuration and Gradual Dynamics of Prominence-Related X-Ray Coronal Cavities. S. Serio, G. S. Vaiana, G. Godoli, S. Mofta, V. Pirronello, and R. A. Zappala. Solar Physics - In Press.
- 2.242 Coronae of Rotating Interstellar Clouds. R. Rosner and T. W. Hartquist. Submitted to Astrophys. J.
- 2.243 The Coronal and Transition Region Temperature Structure of a Solar Active Region. R. H. Levine and J. P. Pye. Submitted to Solar Physics.
- 2.244 Coronal Holes and Solar Magnetic Fields. J. W. Harvey and N. R. Sheeley, Jr. Space Sci. Rev., 1978 - In Press.
- 2.245 The Decay of the 1973 August 9 Flare. K. P. Dere and J. W. Cook. Astrophys. J. - In Press.
- 2.246 Dynamics of Coronal Structures: I. Magnetic Field-Related Heating and Loop Energy Balance. A. A. Galeev, R. Rosner, S. Serio, and G. S. Vaiana. Submitted to Astrophys. J., 1979.
- 2.247 The Effects of Reverse Currents on the Dynamics of Non-Thermal Electron Beams in Solar Flares. A. G. Emslie. Submitted to Astrophys. J.
- 2.248 Electron Collisional Excitation of Si^{2+} . K. R. Nicolas and M. Blaha. Submitted to Astronomy & Astrophysics.
- 2.249 Energetic Solar Particle Events in 1965: Relationship to Coronal Magnetic Structure. E. C. Roelof, S. M. Krimigis, J. T. Nolte, and J. M. Davis. J. Geophys. Res. - In Press.
- 2.250 The Energy Balance and Pressure in the Solar Transition Zone: Network and Active Region Features. K. R. Nicolas, J. D. F. Bartoe, G. E. Brueckner, and M. E. Van Hoosier. Submitted to Astrophys. J.
- 2.251 EUV Aluminum Spectra of Laser-Produced Plasmas. G. A. Doschek and U. Feldman. Submitted to J. Phys. B.
- 2.252 EUV Limb Spectra of a Surge Observed from Skylab. G. A. Doschek, U. Feldman, and H. E. Mason. Astronomy & Astrophysics - In Press.

- 2.253 EUV Observations of Quiescent Prominences. K. O. Moe, J. W. Cook, and S. A. Mango. Solar Physics - In Press.
- 2.254 The Evolution of Soft X-Ray Emitting Flare Loops. S. K. Antiochos and K. R. Krall. Astrophys. J. - In Press.
- 2.255 Extreme Ultraviolet Limb Spectra of a Prominence Observed from Skylab. U. Feldman, G. A. Doschek, C. C. Cheng, and A. K. Bhatia. Submitted to J. Apl. Phys.
- 2.256 Extreme Ultraviolet Limb Spectra of a Prominence Observed from Skylab. J. T. Mariska, G. A. Doschek, and U. Feldman. Submitted to Astrophys. J., 1979.
- 2.257 Fe XXI as an Electron Density Diagnostic in Solar Flares. H. E. Mason, G. A. Doschek, U. Feldman, and A. K. Bhatia. Submitted to Astronomy & Astrophysics.
- 2.258 The Fe XXI 1354 Å Line in Solar Flares Observed from Skylab and Its Implication on Ionization Equilibrium Calculations. C. C. Cheng, U. Feldman, and G. A. Doschek. Submitted to Astrophys. J.
- 2.259 Further Remarks on the Analysis and Interpretation of Solar X-Ray Photographs. J. H. Underwood and D. L. McKenzie. Solar Physics - In Press.
- 2.260 The Growth of Filaments by the Condensation of Coronal Arches. J. M. Davis and A. S. Krieger. Submitted to Solar Physics.
- 2.261 H₂ Emission in the Solar Atmosphere. J. D. F. Bartoe, G. E. Brueckner, K. R. Nicolas, G. D. Sandlin, M. E. Van Hoosier, and C. Jordan. Submitted to Mon. N. Roy. Astr. Soc.
- 2.262 Hydrodynamic Simulations of Flare/Storm Events. R. Steinolfson, E. J. Schmahl, and S. T. Wu. Solar Physics - In Press.
- 2.263 Identification of Solar Wind Feature with a Nonactive Region X-Ray Transient. J. D. Sullivan and J. T. Nolte. Submitted to Geophys. Res. Lett.
- 2.264 L-Series Satellite Spectra in Ti XII and Fe XVI. P. G. Burkhalter, L. Cohen, R. D. Cowan, and U. Feldman. Submitted to J. Opt. Soc. Am.

- 2.265 Magnetohydrodynamic Models of Coronal Transients in the Meridional Plane. II Simulation of the Coronal Transient of 1973 August 21. M. Dryer, S. T. Wu, R. S. Steinolfson, and R. M. Wilson. *Astrophys. J.* - In Press.
- 2.266 Mass Flow in Loop Type Coronal Transients. U. Anzer and A. I. Poland. *Solar Physics* - In Press.
- 2.267 Material Loss in the Decay of a Solar X-Ray Flare. K. Silk, I. Little, A. Krieger. Submitted to *Solar Physics*.
- 2.268 Microwave, EUV, and X-Ray Observations of Active Region Loops: Evidence for Gyroresonance Absorption in the Corona. M. R. Kundu, E. J. Schmahl, and M. Gerassimenko. Submitted to *Solar Physics*.
- 2.269 MSFC Magnetograph Field of View Errors. E. A. West. *Appl. Opt.* - In Press.
- 2.270 New Atomic Data for O^{+2} . A. K. Bhatia, G. A. Doschek, and U. Feldman. Submitted to *Astronomy & Astrophysics (Research Note)*.
- 2.271 New Atomic Data for Si^{+6} , S^{+8} , and Ar^{+10} . A. K. Bhatia, U. Feldman, and G. A. Doschek. Submitted to *Astronomy & Astrophysics*.
- 2.272 Nonequilibrium Ionization in Solar and Stellar Atmospheres. A. K. Dupree, R. T. Moore, and P. R. Shapiro. *Astrophys. J. Lett.* - In Press.
- 2.273 Nonthermal Broadening of Extreme Ultraviolet Emission Lines Near the Solar Limb. J. T. Mariska, U. Feldman, and G. A. Doschek. *Astronomy & Astrophysics* - In Press.
- 2.274 Nonthermal Effects Associated with Steep Temperature Gradients in the Transition Zone. D. S. Spicer. *Solar Physics* - In Press.
- 2.275 Numerical Models of Quasi-Static Coronal Loops. J. F. Vesecky, S. K. Antiochos, and J. H. Underwood. *Astrophys. J.* - In Press.
- 2.276 On the Ionization Equilibrium Astrophysical Plasma. J. E. Vernazza and J. C. Raymond. *Astrophys. J. Lett.* - In Press.

- 2.277 On the Origins of Solar Magnetic Fields. D. Layzer, R. Rosner, and H. T. Doyle. *Astrophys. J.* - In Press.
- 2.278 On the Structure of the Solar Transition Zone and Lower Corona. U. Feldman, G. A. Doschek, and J. T. Mariska. Submitted to *Astrophys. J.* - In Press.
- 2.279 Physical Parameters in Long-Decay Coronal Enhancements. W. J. Maccombie and D. M. Rust. *Solar Physics* - In Press.
- 2.280 Plasma Radiation Diagnostics of the Primary Energy Release Region in Solar Flares. D. F. Smith and D. S. Spicer. Submitted to *Solar Physics*.
- 2.281 The Polarization and Directivity of Hard X-Ray Bremsstrahlung from a Thermal Source. A. G. Emslie and J. C. Brown. Submitted to *Astrophys. J.*
- 2.282 Preflare Characteristics of Active Regions Observed in Soft X-Rays. S. W. Kahler. *Solar Physics* - In Press.
- 2.283 The Pre-Onset Morphology of the 5 September 1973 Flares. E. J. Schmahl, C. V. Solodyna, J. B. Smith, and C. C. Cheng. *Solar Physics* - In Press.
- 2.284 Principal Component Analysis of Solar Flares in the Soft X-Ray Flux. D. L. Teuber, E. J. Reichmann, and R. M. Wilson. *Astronomy & Astrophysics* - In Press.
- 2.285 Production of a Collisionless Conduction Front by Rapid Corona Heating and Its Role in Solar Hard X-Ray Bursts. J. Brown and D. S. Spicer. *Astrophys. J.* - In Press.
- 2.286 The Properties of Coronal Arches. J. M. Davis and A. S. Krieger. Submitted to *Solar Physics*.
- 2.287 The Quantitative Interpretation of Solar X-Ray Images. M. Gerassimenko and J. T. Nolte. *Solar Physics* - In Press.
- 2.288 Radio and White Light Observations of the 21 August 1973 Coronal Transient. T. E. Gergely, M. R. Kundu, R. H. Munro, and A. I. Poland. *Astrophys. J.* - In Press.
- 2.289 Rapid Changes in the Fine Structure of a Coronal "Bright Point" and a Small Coronal "Active Region." N. R. Sheeley, Jr. Submitted to *Solar Physics*.

- 2.290 The Relationship between Solar Activity and Coronal Hole Evolution. J. T. Nolte, J. M. Davis, M. Gerassimenko, A. S. Krieger, C. V. Solodyna, and L. Golub. Submitted to Solar Physics.
- 2.291 Short Term Temporal Variation of X-Ray Bright Points. J. T. Nolte, C. V. Solodyna, and M. Gerassimenko. Submitted to Solar Physics.
- 2.292 Skylab Observations of a Type III Producing Active Region. M. Pick, G. Troffet, and R. MacQueen. Solar Physics - In Press.
- 2.293 Slowly Moving X-Ray Disturbances from Flares. D. M. Rust and Z. Svestka. Submitted to Solar Physics.
- 2.294 Soft X-Ray Emission and Chromospheric Flares. M. E. Machado. Solar Physics - In Press.
- 2.295 Solar Wind Stream Structure During the Early Phase of Solar Cycles 20 and 21. J. T. Nolte, J. M. Davis, and J. D. Sullivan. Solar Physics - In Press.
- 2.296 Spatial Distribution of Large-Scale Solar Magnetic Fields and Their Relation to the Interplanetary Magnetic Field. R. H. Levine. Solar Physics - In Press.
- 2.297 The Stability of Solar Coronal Loops. S. K. Antiochos. Submitted to Astrophys. J. Lett.
- 2.298 Stellar Luminosity Variations and Light Curve Period Changes in By Draconis Stars. L. Hartmann and R. Rosner. Submitted to Astrophys. J.
- 2.299 The Structure and Energetics of Active Region Loops. A. G. Emslie and M. E. Machado. Submitted to Astrophys. J.
- 2.300 Structured Coronae of Accretion Disks. A. A. Galeev, R. Rosner, and G. S. Vaiana. Astrophys. J. - In Press.
- 2.301 Study of the Post-Flare Loops on 29 July 1973 - II. Dynamics of the X-Ray Loops. J. T. Nolte, M. Gerassimenko, A. S. Krieger, R. D. Petrosso, and Z. Svestka. Solar Physics - In Press.

- 2.302 Study of the Post-Flare Loops on 29 July 1973 - III. Physical Parameters in the X-Ray Loops. R. D. Petraso, J. T. Nolte, M. Gerassimenko, A. S. Krieger, R. Krogstad, F. H. Seguin, and Z. Svestka. Solar Physics - In Press.
- 2.303 Temperature Gradients in the Inner Corona. J. T. Mariska and G. L. Withbroe. Solar Physics - In Press.
- 2.304 Thermal Instability of Closed Coronal Structures. S. Habbal and R. Rosner. Submitted to Astrophys. J.
- 2.305 Thermal Statics of Coronal Loops. B. Roberts and S. Frankenthal. Submitted to Solar Physics.
- 2.306 Transient Coronal Holes and Magnetic Reconnection. D. M. Rust. Submitted to Solar Physics.
- 2.307 XUV Electron Density Diagnostics for Solar Flares. K. P. Dere, H. E. Mason, K. G. Widing, and A. K. Bhatia. Astrophys. J. Suppl. - In Press.

3. OTHER PUBLICATIONS

- 3.123 The Analysis of High Spatial Resolution X-Ray and UV Images by Computer Modelling. J. F. Vesecky, S. K. Antiochos, and J. H. Underwood. A Close-Up of the Sun, ed. M. Neugebauer and R. Davis, JPL Publication 78-70, Proceedings of the Solar Probe Workshop, 1978, p. 118.
- 3.124 The Determination of the Structure and Heating Mechanisms of Coronal Loops from Soft X-Ray Observations with the Solar Probe. J. M. Davis and A. S. Krieger. A Close-Up of the Sun, ed. M. Neugebauer and R. Davis, JPL Publication 78-70, Proceedings of the Solar Probe Workshop, 1978, p. 94.
- 3.125 Dynamic Modeling of Coronal and Interplanetary Responses to Solar Events. S. T. Wu, Y. Nakagawa, and M. Dryer. Study of Travelling Interplanetary Phenomena 1977, eds. Shea, Smart and Wu, Astrophysics and Space Science Library, Vol. 71, D. Reidel Publishing Co., Dordrecht, Holland, 1977, 1. 43.
- 3.126 An Energy Deposition in the Earth's Atmosphere Due to Impact of Solar Activity-Generated Disturbances. S. T. Wu, L. C. Kan, E. Tandberg-Hanssen, and M. Dryer. Proc. Solar-Terrestrial Inferences on Weather and Climate, ed. B. McCormac, Pergamon Press, New York, N. Y., 1978.
- 3.127 General Principles of Spectroscopic Plasma Diagnostics. A. K. Dupree. Invited Review, Workshop on Flare Research and the Solar Maximum Mission, Michigan, November 1978.
- 3.128 A Prediction Method for the Soft X-Ray Flux of Solar Flares. D. L. Teuber, E. J. Reichmann, R. M. Wilson, and J. B. Smith, Jr. Solar-Terrestrial Predictions Proceedings, Workshop, April 23-27, 1979, Boulder, Colorado.
- 3.129 Primary Energy Release Mechanisms Associated with Reconnection Flare Models. D. S. Spicer. NRL Report 3748, 1978.
- 3.130 Solar Activity During Skylab--Its Distribution and Relation to Coronal Holes. D. M. Speich, J. B. Smith, Jr., R. M. Wilson, and P. S. McIntosh. NASA TM X-78166, April 1978.

Solar Flares--A Monograph from Skylab Solar Workshop II. P. A. Sturrock, Editor:

- 3.131 Chapter I: Introduction. Peter Sturrock.
- 3.132 Chapter II: The Preflare State. Gerry Van Hoven.
- 3.133 Chapter III: Preflare Energy Release. Steve Kahler.
- 3.134 Chapter IV: Energetic Particles in Solar Flares. Reuven Ramaty.
- 3.135 Chapter V: Impulsive Phase of Solar Flares. S. R. Kane.
- 3.136 Chapter VI: The Chromosphere and Transition Region. Richard Canfield.
- 3.137 Chapter VII: The Thermal X-Ray Flare Plasma. R. L. Moore.
- 3.138 Chapter VIII: Flare Models. Peter Sturrock.
- 3.139 Appendix A: Radiative Energy Output of the 5 September 1973 Flare. Richard Canfield.
- 3.140 Appendix B: Mechanical Energy Output of the 5 September 1973 Flare. David F. Webb.

4. PRESENTATIONS - NATIONAL AND INTERNATIONAL MEETINGS

- 4.499 Coronal Changes Associated with a Disappearing Filament. N. R. Sheeley, Jr. Annual Meeting of HAO, SPO, and KPNO, Santa Fe, New Mexico, May 23, 1975.
- 4.500 Extreme Ultraviolet Observations of a Polar Coronal Hole. J. T. Mariska and G. L. Withbroe. B.A.A.S. 8, 1975, 338.
- 4.501 Spectroscopy of Highly Ionized Atoms Produced by a Low Inductance Vacuum Spark. U. Feldman and G. A. Doschek. Proceedings 5th International Conference on Atomic Physics, July 26-30, 1976, Berkeley, California, Plenum Press, pp. 473-491.

150th AAS Meeting, Atlanta, Georgia, June 12-15, 1977:

- 4.502 The Interpretation of Polarized Intensity Measurements in Terms of Transverse Fields in Sunspots. E. A. West, M. J. Hagyard, and N. P. Cumings. B.A.A.S. 9, 1977, 340.
- 4.503 The Effect of the Initially Quiescent Coronal Magnetic Field on Coronal Transients. R. S. Steinolfson, S. T. Wu, M. Dryer, and E. Tandberg-Hanssen. B.A.A.S. 9, 1977, 368.
- 4.504 Electron Density Determination from Si III Line Intensity Ratios. K. R. Nicolas. B.A.A.S. 9, 1977, 325.
- 4.505 Axisymmetric Non-Force-Free Magnetic Fields in Sunspots. R. H. Comfort and M. J. Hagyard. B.A.A.S. 9, 1977, 341.
- 4.506 A Numerical Simulation of Flare Cooling. K. R. Krall. B.A.A.S. 9, 1977, 329.
- 4.507 The Relationship between EUV Flares and Surges. E. J. Schmahl. 151st AAS Meeting, Austin, Texas, January 8-11, 1978, B.A.A.S. 9, 1977, 568.

- 4.508 The Solar X-Ray Corona. D. M. Rust, D. F. Webb, and R. Haggerty. New England Section of the American Physical Society, March 30, 1978, B.A.P.S. 28, 1978, 705.
- 4.509 The Application of Si^{2+} Line Intensity Ratios as Density Diagnostics. K. Nicolas. B.A.P.S., 1979.

AGU Spring Meeting, Miami Beach, Florida, April 17-21, 1978:

- 4.510 The Solar Wind and Coronal Structure in January-February 1978. J. M. Davis, M. Gerassimenko, A. S. Krieger, J. T. Nolte, and J. D. Sullivan. EOS 59, 1978, 368.
- 4.511 Solar Wind Stream Structures during the Early Phase of Solar Cycles 20 and 21. J. T. Nolte, J. M. Davis, A. J. Lazarus, and J. D. Sullivan. EOS 59, 1978, 366.
- 4.512 Spatial Distribution and Interplanetary Structure of Large-Scale Solar Magnetic Fields. R. H. Levine. EOS 59, 1978, 1175.
- 4.513 Identification of Solar Wind Feature with a Non-Active Region X-Ray Transient. J. D. Sullivan and J. T. Nolte. EOS 59, 1978, 368.

International Symposium on Solar-Terrestrial Physics (COSPAR), Innsbruck, Austria, May-June 1978:

- 4.514 Structured Accretion Disk Coronae. A. A. Galeev, R. Rosner, and G. S. Vaiana.
- 4.515 Evidence for Open Magnetic Fields and Magnetic Reconnection in Long-Lived Solar X-Ray Events. W. J. MacCombie and D. M. Rust.
- 4.516 Modulation of Atmospheric Ionization Corresponding to ^{14}C Production Variations. J. B. Smith, Jr., C. A. Lundquist, and W. G. Johnson.
- 4.517 Numerical Simulation of Stream Interactions Due to Solar Coronal Holes and Flares. S. T. Wu, S. M. Han, and M. Dryer.

- 4.518 A Hydrodynamic Model for the Response of the Upper Atmosphere Following Impact of a Solar Flare Generated Shock. S. T. Wu, L. C. Kan, E. Tandberg-Hanssen, and M. Dryer.
- 4.519 Preflare Enhancements in the Soft X-Rays. J. B. Smith, Jr., D. M. Speich, M. J. Hagyard, and E. J. Reichmann.

152nd American Astronomical Society Meeting, Madison, Wisconsin,
June 26-28, 1978:

- 4.520 The Growth of Filaments by the Condensation of Coronal Arches. J. M. Davis and A. S. Krieger. B.A.A.S. 10, 1978, 439.
- 4.521 Coronal Heating and Its Relation to Magnetic Field Evolution. L. Golub, R. Rosner, and G. S. Vaiana. B.A.A.S. 10, 1978, 440.
- 4.522 Response of the Solar Atmosphere to Infalling Surge Material. D. Webb and E. Schmahl. B.A.A.S. 10, 1978, 455.
- 4.523 Prompt Solar Proton Events and Coronal Mass Ejections. S. W. Kahler, E. Hildner, and M. A. I. Van Hollebeke. B.A.A.S. 10, 1978, 456.
- 4.524 Pre-Onset Visible, EUV, and X-Ray Flare Structures. E. J. Schmahl, C. Solodyna, J. B. Smith, and C. C. Cheng. B.A.A.S. 10, 1978, 456.
- 4.525 X-Ray Analysis of the 29 July 1973 Flare. J. Nolte, M. Gerassimenko, A. Krieger, R. Krogstad, R. Petrosso, F. Seguin, and Z. Svestka. B.A.A.S. 10, 1978, 457.
- 4.526 Extremely High Resolution Photographic X-Ray Images. A. S. Krieger, J. M. Davis, and R. Haggerty. B.A.A.S. 10, 1978, 460.
- 4.527 Interpretation of the Moving Emission Front Observed with the Flare of 5 September 1973. S. F. Martin. B.A.A.S. 10, 1978, 462.

- 4.528 Nonthermal Broadening of Extreme Ultraviolet Emission Lines Near the Solar Limb. J. T. Mariska, U. Feldman, and G. A. Doschek. B.A.A.S. 10, 1978, 432.
- 4.529 EUV Observations of a Solar Active Region. K. P. Dere. B.A.A.S. 10, 1978, 440.
- 4.530 The Energy Balance and Pressure in the Solar Transition Zone. K. R. Nicolas, J. D. F. Bartoe, G. E. Brueckner, and M. E. Van Hoosier. B.A.A.S. 10, 1978, 432.
- 4.531 ATM Evidence for Low Nonthermal Proton/Electron Energy Flux Ratio in Solar Flares. R. C. Canfield and J. W. Cook. B.A.A.S. 10, 1978, 441.
- 4.532 Solar C III Line Ratios Observed from Skylab. J. W. Cook and K. R. Nicolas. B.A.A.S. 10, 1978, 439.
- 4.533 A Technique for Improved Spatial Resolution Using the MSFC Magnetograph. M. J. Hagyard and E. A. West. B.A.A.S. 10, 1978, 432.
- 4.534 Numerical Simulations of the Decay Phase of Compact Flares. K. R. Krall and S. K. Antiochos. B.A.A.S. 10, 1978, 442.
- 4.535 Hydrodynamic Simulations of Flare/Surge Events. R. S. Steinolfson, E. J. Schmahl, and S. T. Wu. B.A.A.S. 10, 1978, 729.
- 4.536 Radiative Heating in Chromospheric Flares. M. E. Machado. B.A.A.S. 10, 1978, 462.
- 4.537 Bowen Fluorescence in the Solar Transition Region. J. C. Raymond. B.A.A.S. 10, 1978, 432.
- 4.538 Effect of Emerging Magnetic Flux on the Solar Corona. R. S. Steinolfson, S. T. Wu, M. Dryer, and E. Tandberg-Hanssen. Solar Wind IV, 1978, Burghausen, West Germany, August 28 - September 1.

IAU Colloquium No. 44, Oslo, Norway, August 14-18, 1978, Physics of Solar Prominences, E. Jensen, Editor:

- 4.539 Coronal Manifestations of Eruptive Prominences-- Observations and Interpretations. D. M. Rust - invited Paper.
- 4.540 Slowly Moving Disturbances in the X-Ray Corona. D. M. Rust and Z. Svestka.
- 4.541 Activated Prominences: Mechanisms for Activation and Eruption. D. S. Spicer.
- 4.542 Formation, Support, and Stability of Quiescent Prominences. E. Tandberg-Hanssen - Invited Paper.
- 4.543 The Prominence -Corona Interface: A Review. E. J. Schmahl.
- 4.544 The Prominence-Coronal Interface and Post-Flare Loops. G. L. Withbroe.
- 4.545 Models of Stellar Coronae. S. K. Antiochos, J. H. Underwood, and J. F. Vesecky. High Energy Astrophysics Division of AAS, San Diego, California, September 12-14, 1978; B.A.A.S. 10, 1978, 510.
- 4.546 L'Atmosfera Solare Sopra Le Macchie: Implicazioni Di Osservazione X E Ultraviolette Dallo Skylab. R. Pallavicini and G. S. Vaiana. Boll. Soc. Ital. Fisica 115, 51, LXIV, Congresso Nazionale Soc. Ital. Fisica, Siena, September 19-23, 1978.
- 4.547 Transienti Nella Corona Solare: Determinazione dei Parametri Fisici del Plasma e Leggi Di Scala. G. Peres, S. Sciortino, S. Serio, and G. S. Vaiana. Mem. S. A. Ital. - In Press; XXII Riunione Della Societa Astronomica Italiana, Lidine, October 13-15, 1978.
- 4.548 Evidence for Neutral Hydrogen above the Quiet Sun Transition Region. E. J. Schmahl and F. Q. Orrall. B.A.A.S. 11, 1979.
- 4.549 Microwave, EUV, and X-Ray Observations of Active Region Loops: Evidence for Gyroresonance Absorption in the Corona. M. R. Kundu and E. J. Schmahl. B.A.A.S. 11, 1979.

AAS Solar Physics Division Meeting, Ann Arbor, Michigan, November 14-16, 1978:

- 4.550 Analysis of Mass Ejecta Accompanying the Flare of 5 September 1973. S. J. Edberg, S. F. Martin, and D. F. Webb.
- 4.551 Preflare Characteristics of Active Regions Observed in Soft X-Rays. S. W. Kahler.
- 4.552 Mass Ejections. E. Hildner.

153rd American Astronomical Society Meeting, Mexico City, Mexico, January 7-10, 1979:

- 4.553 Physical Conditions in a Limb Flare. R. R. Fisher and A. I. Poland.
- 4.554 Analyses of the Decay of a Long Duration Soft X-Ray Limb Event. K. R. Krall, J. B. Smith, Jr., and J. P. McGuire; B.A.A.S. 10, 1979, 671.
- 4.555 XUV Electron Density Diagnostics for Solar Flares. K. P. Dere, H. E. Mason, K. G. Widing, and A. K. Bhatia. American Physical Society Conference on Atomic Processes in High Temperature Plasmas, January 1979.
- 4.556 Heating of Coronal Loops by Fast Mode Waves. S. R. Habbal, T. E. Holzer, and E. Leer. American Physical Society, March 1979.
- 4.557 Coronal Transients--A Summary. R. M. MacQueen. Royal Society of London Discussion Meeting, London, England, April 3-4, 1979.

5. OTHER PRESENTATIONS

- 5.178 Acoustic Heating and Convection in the Solar Corona. P. Foukal. Colloquium, Meudon Observatory, Paris, April 1978.
- 5.179 The Arch Model of a Solar Flare. D. S. Spicer. High Altitude Observatory, Boulder, Colorado, March 3, 1977.
- 5.180 Coronal Dynamics and Convection. P. Foukal. Colloquium, Nice Observatory, February 1978.
- 5.181 Decay Phase Dynamics of a Solar Flare. K. P. Dere and J. W. Cook. Seminar on Solar Radiation, Naval Research Laboratory, 1978.
- 5.182 Density Diagnostics in the Solar Atmosphere. K. R. Nicolas. Tousey Memorial Symposium, Naval Research Laboratory, 1978.
- 5.183 Disruptive Instabilities in Solar Prominences. D. S. Spicer. University of Oslo, Norway, August 15, 1978.
- 5.184 Driving Forces in Solar Mass Ejections: New Results from the Skylab Flare Workshop. E. J. Schmahl. Colloquium, University of Maryland, March 1978.
- 5.185 The Dynamics of Electron Beams in Solar Flares. A. G. Emslie. Colloquium, Stanford University, March 1979.
- 5.186 Dynamics of Gas and Magnetic Field in the Supergranular Layer. P. Foukal. Colloquium, Arcetri Observatory, May 1978.
- 5.187 Dynamics of Rotation in the Supergranular Convective Layer. P. Foukal. PTO Colloquium, Fraunhofer Institute, Freiburg, June 1978.
- 5.188 The Effect of Reverse Currents on the Dynamics of Non-Thermal Electron Beams in Solar Flares. A. G. Emslie. Colloquium, University of Maryland, February 1977; Colloquium, University of California-San Diego, March 1979.
- 5.189 An Examination of Magnetic Field Dissipation Mechanisms Utilized in Solar Flare Theory. D. S. Spicer. Goddard Space Flight Center, Maryland, May 25, 1978.

- 5.190 Exploratory Data Analysis of Solar Flares in the Soft X-Ray Flux. D. L. Teuber. Colloquium, NASA/Marshall Space Flight Center, Alabama, April 1978.
- 5.191 Formation of Solar and Stellar Coronae. R. Rösner. Colloquium, Harvard-Smithsonian Center for Astrophysics, Cambridge, Massachusetts, November 9, 1978.
- 5.192 The Importance of Return Currents During Solar Flares. D. S. Spicer. University of Glasgow, Scotland, August 15, 1978.
- 5.193 The Magnetic Corona. R. H. Levine. Colloquium, Michigan State University, April 1978.
- 5.194 Magnetically Confined Coronal Plasmas. G. L. Withbroe. Solar Neighborhood Meeting, Cambridge, Massachusetts, May 1978.
- 5.195 Magnetohydrodynamic Simulation of Coronal Mass Ejections into the Solar Wind. M. Dryer, S. T. Wu, R. S. Steinolfson, E. Tandberg-Hanssen, and R. M. Wilson. Solar Probe Science Workshop, California Institute of Technology, Pasadena, California, May 22-23, 1978; JPL Publication 78-70, September 1978.
- 5.196 Mass and Energy Flow in Coronal Loops. G. L. Withbroe. Colloquium, University of Colorado, May 1978.
- 5.197 Mechanisms of Thermalization in Solar Flares. A. G. Emslie. SMY Workshop on Study of Energy Release in Flares, Cambridge, Massachusetts, February 1979.
- 5.198 The Models of Dynamical Response of Solar, Interplanetary, and Terrestrial Environment Due to Solar Events. S. T. Wu. Colloquium, Goddard Space Flight Center, Maryland, June 1978.
- 5.199 A New View of the X-Ray Corona. D. M. Rust. Seminar, Astronomy Department, Universität Tübingen, West Germany, November 2, 1978.
- 5.200 Nonlinear Effects Associated with Reconnection in Sheared Magnetic Fields. D. S. Spicer. Oxford University, England, August 28, 1978.

- 5.201 Observational Constraints in the Degree of Microscopic Turbulence in Active Region Loops. A. G. Emslie. Skylab Solar Workshop on Active Regions, Boulder, Colorado, March 1979.
- 5.202 On MHD Stability and Structure of Coronal Loops. D. S. Spicer. Harvard University, May 1978.
- 5.203 On the Ionization Balance. J. C. Raymond. Workshop on Flare Research and Solar Maximum Mission, Ann Arbor, Michigan, November 1978.
- 5.204 Origin and Effects of Mass Motions in Flares. E. Tandberg-Hanssen. Invited Paper, Study of Energy Release in Flares Workshop, Cambridge, Massachusetts, February 26 - March 1, 1979.
- 5.205 An Overview of Solar Flares Results from the Skylab Workshop on Solar Flares. E. Tandberg-Hanssen, J. B. Smith, Jr., and S. T. Wu. Colloquium, NASA/Marshall Space Flight Center, Alabama, March 1978.
- 5.206 The Photospheric-Chromospheric Interface. M. E. Machado. Solar Neighborhood Meeting, Cambridge, Massachusetts, May 1978.
- 5.207 Plasma Diagnostics and Models for Coronal Loops. G. L. Withbroe. Invited Review, Skylab Workshop on Active Regions, Boulder, Colorado, July 1978.
- 5.208 Plasma Instabilities Believed to Occur in Solar Flares. D. S. Spicer. American Science and Engineering, April 18, 1978.
- 5.209 The Plasma Physics of Solar Flares. D. S. Spicer. Imperial College, London, England, September 1, 1978.
- 5.210 Polarization and Directivity of Thermally Produced Hard X-Rays in Flares. A. G. Emslie. Colloquium, Lockheed Aerospace, March 1979.
- 5.211 Potential Diagnostics for Thermalization of Energy During Flares. A. G. Emslie. SMY Workshop on Study of Energy Release in Flares, Cambridge, Massachusetts, 1979.
- 5.212 Skylab Results on Disturbances in the X-Ray Corona. D. M. Rust. Colloquium, Observatoire de Paris, September 21, 1978.

- 5.213 Solar Forecast and Real-Time Monitoring Needs of the Study of Energy Release in Flares (SERF). D. M. Rust. Invited Review, Proceedings of the Workshop on Solar-Terrestrial Predictions, Boulder, Colorado, April 1979.
- 5.214 Solar Flare Models. D. S. Spicer. University of California, La Jolla, California, March 13, 1976.
- 5.215 Solar Flares. E. J. Schmahl. Invited Lecture, Amoco Research Center, Tulsa, Oklahoma, January 1978.
- 5.216 Solar Flares and Mass-Ejection Events. E. J. Schmahl. Eidgenossische Technische Hochschule, Zurich, August 1978.
- 5.217 Solar Rotation. P. Foukal. Colloquium, Catania Observatory, May 1978.
- 5.218 The Stability of a Coronal Loop Model. S. K. Antiochos. West Coast Solar Neighborhood Meeting, UCLA, December 15, 1978.
- 5.219 The Structure and Energetics of Active Region Loops. A. G. Emslie. Colloquium, NASA/Goddard Space Flight Center, Maryland, February 1979.
- 5.220 Sun, Earth, and the Space Between. E. Hildner. Lecture, Illinois College, Jacksonville, Illinois, November 1978.
- 5.221 Unstable Arch Model of a Solar Flare, Magnetic Reconnection in Space and Laboratory Plasmas. D. S. Spicer, Gordon Research Conference, Brewster Academy, Wolfboro, New Hampshire, June 20, 1977.
- 5.222 The X-Ray Corona: A New View. D. M. Rust. Seminar, Eidgenossische Sternwarte (Federal Astronomical Observatory), Zurich, Switzerland, November 3, 1978.
- 5.223 X-Ray Observations of the Solar Corona. J. H. Underwood. Invited Presentation, Jet Propulsion Laboratory, Pasadena, California, March 12, 1979.

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ERRATA

NASA TECHNICAL MEMORANDUM X-73300 APOLLO TELESCOPE MOUNT—A PARTIAL LISTING OF SCIENTIFIC PUBLICATIONS AND PRESENTATIONS

Edited by John M. Reynolds and William C. Snoddy
April 15, 1976

Section 2:

2.26 (p. 11) Delete.

Section 4:

4.38 (p. 25) Change 294 to 298.

4.130 (p. 35) Change: 300-500 Å to 240-600 Å
Vol. XVII, 1974 (in press) to Vol. XV,
1975, 651.

4.147 (p. 37) Change (in press) to 38, 1975, 359-364.

4.214 (p. 44) Add: BAAS 10, 432.

4.236 (p. 46) Correction: Proc. Twentieth Liege Int.

4.270 (p. 50) Change 457 to 456.

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ERRATA

NASA TECHNICAL MEMORANDUM X-73393

APOLLO TELESCOPE MOUNT -- A PARTIAL LISTING OF SCIENTIFIC PUBLICATIONS AND PRESENTATIONS SUPPLEMENT 1

Edited by John M. Reynolds and William C. Snoddy
May 1977

Section 1:

- | | |
|--------------|--|
| 1.93 (p. 3) | Change to read: G. L. Withbroe and J. T. Mariska. |
| 1.114 (p. 5) | Change 1175-1940 Angstroms to 1100-1940 Angstroms. |
| 1.133 (p. 7) | Delete. |

Section 2:

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|---------------|------------------------------|
| 2.124 (p. 15) | Solar Physics 56, 1978, 161. |
|---------------|------------------------------|

Section 4:

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|---------------|-------------------------|
| 4.301 (p. 24) | Delete. |
| 4.378 (p. 32) | Add: BAAS 8, 1977, 557. |

Section 5:

- | | |
|--------------|--------------------------------|
| 5.99 (p. 37) | Correction: C. Moore-Sitterly. |
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ERRATA

NASA TECHNICAL MEMORANDUM 78183 APOLLO TELESCOPE MOUNT — A PARTIAL LISTING OF SCIENTIFIC PUBLICATIONS AND PRESENTATIONS SUPPLEMENT 2

Edited by John M. Reynolds and William C. Snoddy
August 1978

Section 1:

- | | |
|---------------|---|
| 1.174 (p. 3) | Delete. |
| 1.198 (p. 5) | Delete. |
| 1.236 (p. 8) | Extreme UV Spectroheliometer on the Apollo Telescope Mount. |
| 1.261 (p. 10) | Astrophys. J. 219, 1978, 300. |

Section 2:

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|---------------|--|
| 2.169 (p. 14) | Delete. |
| 2.187 (p. 15) | Delete G. E. Brueckner. |
| 2.189 (p. 15) | Delete. |
| 2.192 (p. 15) | Delete. |
| 2.201 (p. 16) | Change Astrophys. J. to Solar Physics. |
| 2.202 (p. 16) | Delete. |
| 2.211 (p. 17) | Delete. |
| 2.213 (p. 17) | Delete. |

Section 3:

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|---------------|------------|
| 3.120 (p. 21) | Add: 1977. |
|---------------|------------|

Section 4:

- 4.431 (p. 23) Add: New Instrumentation for Space Astronomy, K. Van Der Hucht and G. S. Vaiana, Eds., Pergamon Press, 1978, pp. 177-188.
- 4.435 (p. 24) Add: Space Research, M. J. Rycroft and A. C. Strickland, Vol. 18, 1978, 341-344.
- 4.436 (p. 24) Add: Space Research, Vol. 18, 1978, 331-335.
- 4.437 (p. 24) Add: Space Research, Vol. 18, 1978, 337-339.
- 4.460 (p. 26) Delete.
- 4.467 (p. 26) Change: Analysis of Solar Flare Plasmas Using EUV and X-Ray Data.
- 4.469 (p. 27) Delete.
- 4.479 (p. 27) Add: EOS 58, 1977, 768.
- 4.496 (p. 29) Change: Clermont-Gerrand to Clermont-Ferrand.

Section 5:

- 5.130 (p. 30) Add: N. R. Sheeley, Jr.
- 5.143 (p. 31) Change: The Effectiveness of Various Mechanisms for Heating the Temperature Minimum Region in Solar Flares.
- 5.155 (p. 32) Add: p. 2.
- 5.168 (p. 33) Change: Skylab Observations of the Sun.
- 5.172 (p. 33) Add: Aerospace Report No. ATR-78(7405)-1.
- 5.173 (p. 33) Change: The Chromosphere and Transition Region.
- 5.174 (p. 33) Delete.
- 5.176 (p. 33) Change: EUV Observations of Flares and Surges.

Author Index:


- p. 35 Delete 2.223 in Brown, C. M.
 Add: Brown, C. J., 2.223.
- p. 41 Change: Wilding, K. G., to Widing, K. G.

APPROVAL

APOLLO TELESCOPE MOUNT — A PARTIAL LISTING OF
SCIENTIFIC PUBLICATIONS AND PRESENTATIONS,
SUPPLEMENT 3

Edited by John M. Reynolds, Stanley A. Fields,
and William C. Snoddy

The information in this report has been reviewed for technical content. Review of any information concerning Department of Defense or nuclear energy activities or programs has been made by the MSFC Security Classification Officer. This report, in its entirety, has been determined to be unclassified.



CHARLES A. LUNDQUIST
Director, Space Sciences Laboratory