

SH: Oral Sessions

SH: Solar & Heliospheric Phenomena

July 31

14:30–16:18 Convention Hall 200

SH 1.2

- 1 Impulsive Flare Material: A Seed Population for Large Solar Particle Events?
R. A. Mewaldt et al.

- 2 A Statistical Study of ^3He Enhancement in the High-Energy Solar Particles
Jarno Laivola, J. Torsti, and L. Kocharov

- 3 The Solar Cycle Variability of Solar Energetic Particle Composition
R. A. Leske et al.

- 4 Modelling Energy-Dependent Fe/O Ratios Observed above 12 MeV/Nucleon
C. M. S. Cohen et al.

- 5 The ^3He -Rich SEP Events of August 2002: Exceptional Elemental and Isotopic Composition Patterns at Energies above 10 MeV/Nucleon
M. E. Wiedenbeck et al.

- 6 Light Isotope Abundances in Solar Energetic Particles Measured by the NINA-2 Instrument
Vladimir V. Mikhailov for the NINA-WIZARD Collaboration

- 7 High Energy Ionic Charge State Composition in Recent Large Solar Energetic Particle Events
Allan Wayne Labrador et al.

- 8 Strong Energy Dependence of Ionic Charge States in Impulsive Solar Events
Eberhard Moebius et al.

- 9 On the Energy Dependence of Ionic Charge States
Berndt Klecker et al.

August 1

9:10–10:34 Convention Hall 200

SH 1.1

- 1 What We Know and Do Not Know about High Energy Neutral Emissions from Solar Flares (A Challenge for Future Missions)
Edward Lowell Chupp et al.

- 2 Solar Neutron Event in Association with the 24 September 2001 Flare
Takashi Sako et al.

- 3 Solar Neutron Event in Association with a Large Solar Flare on August 25, 2001
Kyoko Watanabe et al.

- 4 Gamma and X-Ray Solar Flare Emissions: CORONAS-F Measurements
Karel Kudela et al.

- 5 Solar Gamma-Ray Lines at High Resolution with *RHESSI*
Ronald J. Murphy et al.

- 6 Energetics of Nonthermal Electrons and Protons in Intense Solar Flares
Masato Yoshimori, H. Hirayama, and S. Mori

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- 7 Physical Implications of *RHESSI* Neutron Capture-Line Measurements
Ronald J. Murphy et al.
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14:30–16:18 Convention Hall 200

SH 1.1 —————

- 8 *RHESSI* Observation of the Solar Annihilation Line
Ronald J. Murphy et al.
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- 9 First Gamma-Ray Images of a Solar Flare
Robert P. Lin et al.
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SH 1.3 —————

- 1 Solar Fast Wind Regions as Sources of Gradual 20 MeV Solar Energetic Particle Events
Stephen W. Kahler
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- 2 Onsets and Release Times in Solar Particle Events
Allan J. Tylka et al.
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- 3 Energy Dispersion in Solar Ion Events over 4 Orders of Magnitude: SOHO/COSTEP and Wind/STICS
Horst W. Kunow and A. Posner
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- 4 Efficiency for RSP Acceleration in the 14.07.2000 and 15.04.2001 Events
Jorge A. Perez-Peraza et al.
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- 5 Coronal Shocks and Solar Energetic Proton Events
Edward W. Cliver, S. W. Kahler, and D. V. Reames
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- 6 Solar Energetic Particle Acceleration in Refracting Coronal Blast Waves
Rami O. Vainio and J. I. Khan
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- 7 Solar Energetic Particle Driven Alfvén Wave Growth and Consequences
Chee K. Ng, D. V. Reames, and A. J. Tylka
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17:30–19:18 Convention Hall 200

SH 1.3 —————

- 8 Some Astrophysical Aspects in the Studies of Solar Cosmic Rays
Leonty I. Miroshnichenko
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- 9 A Microwave Imaging Observation of an Electron Stream in a Solar Flare by Nobeyama Radioheliograph
Takaaki Yokoyama et al.
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- 10 Source Regions of Major Solar Energetic Particle Events
Nariaki V. Nitta et al.
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SH 1.4 —————

- 1 Further Fine Time Resolution Analysis of the Bastille Day 2000 GLE
Marc Duldig, D. J. Bombardieri, and J. E. Humble
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- 2 Search for a Muon Flux Enhancement during the Solar Flare of 14 July 2000 with the L3+C Data
Yuqian Ma on behalf of the L3 Collaboration
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- 3 Spaceship Earth Observations of the Easter GLE
John W. Bieber et al.
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- 4 Relativistic Solar Proton Dynamics in Large GLE of 23rd Solar Cycle
Eduard V. Vashenyuk, B. B. Balabin, and B. B. Gvozdevsky
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- 5 Search for Muons in Association with Large Solar Flares with the GRAPES-3 Multidirectional Muon Telescope at Ooty
Saburo Kawakami for the GRAPES Collaboration
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- 6 A Search for the 200 GeV Muon Intensity Bursts during Powerful Solar Flares of 23rd Solar Cycle
Sergei N. Karpov et al.
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August 2

9:10–10:34 Convention Hall 200

SH 2.3 (previous SH 2.3+SH 2.4+SH 2.6)

- 1 Particle Acceleration at Fluid Compressions and What That Teaches Us about Shock Acceleration
Kittipat Malakit et al.

 - 2 Finite-Time Shock Acceleration
David J. Ruffolo and Chanruangrith Channok

 - 3 Diffusive Compression Acceleration of Charged Particles
Jack R. Jokipii, J. Giacalone, and J. Kota

 - 4 Energetic Electrons Associated with Transient Interplanetary Shocks: Evidence for Weak Interaction
George C. Ho et al.

 - 5 Electron Heating Process at Quasi-Perpendicular Shocks
Tooru Sugiyama et al.

 - 6 Pitch Angle Diffusion of Energetic Particles by Large Amplitude MHD Waves
Tohru Hada et al.

 - 7 Probing the Turbulent Solar Wind with Cosmic Rays
Curt A. de Koning and John W. Bieber
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11:05–12:41 Convention Hall 200

SH 2.1

- 1 Calculation of Type III Radio Emission from a Particle Transport Model
Paul A. Evenson

 - 2 Perpendicular Diffusion and Drift of Solar Energetic Particles in Heliospheric Magnetic Fields
Ming Zhang, J. R. Jokipii, and R. B. McKibben

 - 3 Conditional Statistics of Magnetic Turbulence and the Lateral Transport of Solar Energetic Particles
Piyanate Chuychai, D. Ruffolo, and W. H. Matthaeus

 - 4 Some Statistical Properties of the Decay Phase of SEP-Events
Karoly Kecskemety et al.

 - 5 The Observational Aspects of the Three Largest Solar-Energetic Particle Fluxes: 19-20/10/1989, 14/7/2000 and 9/11/2000
Mohamed Ali El-Borie and S. S. Al-Thoyaib

 - 6 Spatial Distribution of Energetic Heavy Ions and Its Time Structure in the Radiation Belt
Daisuke Miki et al.

 - 7 Interacting and Escaping 100 MeV Solar Protons Observed on 11 and 15 June 1991
Alexei Struminsky

 - 8 Action on Cosmic Rays on Latent Energy of the Atmosphere
Vladislav E. Timofeev et al.
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14:30–16:30 Convention Hall 200

SH 3.2

- 1 Cosmic Rays and the Global Heliospheric Magnetic Field: Meridional Motion of Footpoints
Jozsef Kota and J. R. Jokipii

 - 2 Heliospheric Solar Wind Turbulence Model with Implications for Latitudinal Transport of Cosmic Rays
Shyamsundar Parhi et al.
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- 3 A Simple Model of Cosmic Ray Modulation in the Heliosphere
G. F. Krymsky, P. A. Krivoschapkin, and S. K. Gerasimova

 - 4 Long-Term Cosmic Ray Modulation by Heliospheric Parameters: Non-linear Relations
Ilya G. Usoskin et al.

 - 5 Cosmic Ray Drifts at Solar Maximum
Marius S. Potgieter and B. Heber

 - 6 Direct Evidence of Energy-Loss in Electron-Capture-Decay Secondary Isotopes in the Heliosphere
Lauren M. Scott et al.

 - 7 Heliospheric Modulation Potential from SOHO/EPHIN Observations of Protons
Raul Gomez-Herrero et al.

 - 8 Modeling a Few-MeV Jovian and Galactic Electron Spectra in the Inner Heliosphere
Vance K. Henize, S. E. S. Ferreira, and M. S. Potgieter

 - 9 Modulation of Cosmic Rays at and beyond the Heliospheric Termination Shock
Marius S. Potgieter and W. R. Webber

 - 10 Radial Intensity Profiles of Galactic Cosmic Rays in the Outer Heliosphere
Harm Moraal, R. A. Caballero-Lopez, and F. B. McDonald
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17:30–18:54 Convention Hall 200

SH 3.2 —————

- 11 Radial Intensity Gradients and Diffusion Coefficients of Cosmic Rays in the Outer Heliosphere at Solar Maximum
Zenjiro Fujii et al.

 - 12 Local Reacceleration of Galactic Cosmic Rays at the Heliosphere's Termination Shock
Frank B. McDonald et al.

 - 13 Modulation of Galactic Cosmic Rays near and beyond the Termination Shock
Ming Zhang and Bryan Ball

 - 14 Galactic Cosmic-Ray Interactions with the Outer Heliosphere: A Self-Consistent Approach
Vladimir Florinski and G. P. Zank
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SH 1.5 (previous SH 1.6+SH 2.7+SH 3.7) —————

- 1 A New Solar Neutron Telescope in Mexico
Jose F. Valdes-Galicia et al.

 - 2 Super Solar Neutron Telescope for the Next Solar Maximum
Takashi Sako et al.

 - 3 First Results of a Mobile Neutron Monitor to Intercalibrate the Worldwide Network
Harm Moraal et al.
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August 3

9:10–10:34 Convention Hall 200

SH 2.2 (previous SH 2.2+SH 1.5) —————

- 1 Coronal and Interplanetary Environment of Large Solar Energetic Particle Events
Nat Gopalswamy, S. Yashiro, and R. A. Howard

 - 2 Possible Cosmic Ray Using for Forecasting of Major Geomagnetic Storms, Accompanied by Forbush-Effects
Lev A. Pustil'nik et al.

 - 3 A Global Structure of the Magnetic Flux Rope Observed in Interplanetary Space Fitted by a Torus-Type Force-Free Model
Akifumi Ihara et al.
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- 4 CME Geometry Deduced from Cosmic Ray Anisotropy
Kazuoki Munakata et al.

 - 5 Observation of Precursory Decrease by the Narrow Angle Muon Telescope at MT. Norikura
Kazuhiko Fujimoto et al.

 - 6 Study of Cosmic Ray Short Term Variations Using GRAPES-3 Muon Telescopes
Toshiyuki Nonaka for the GRAPES Collaboration

 - 7 Directional Variation of 5 GeV Muon Flux Observed in the Underground Muon Telescope
Jacek Szabelski et al.

14:30–16:18 Convention Hall 200

SH 2.2 (previous SH 2.2+SH 1.5) —————

- 8 Cosmic Ray Intensity Variations Observed by Environmental Radiation Monitors
Stefano Cecchini et al.

- 9 Interplanetary Magnetic Field Disturbances with Particularly High Cosmic Ray Modulation Efficiency
Erwin Fluckiger et al.

- 10 Modeling and Experimental Study of Forbush Effects of Galactic Cosmic Rays
Michael V. Alania, J. Szabelski, and A. Wawrzynczak

- 11 Cosmic Ray Variability around the Geomagnetic Disturbances
Karel Kudela and M. Storini

- 12 Distribution of Solar Flares around the Sun and Their Association with Forbush Decreases
Pankaj K. Shrivastava

- 13 Study of Forbush Decrease Event and Associated Geomagnetic Field Variation during Space Radiation Storm
Subhash Chandra Kaushik and Sujeet Kumar Mishra

- 14 Time Determination of March 1991's CME Hitting Magnetosphere
Y. Q. Tang et al.

- 15 Large-Scale Heliospheric Magnetic Field and Drift Effects during Forbush Decrease
Yatendra Pal Singh and Badruddin

- 16 Geomagnetic Cutoff Variation Observed with TIBET Neutron Monitor
Hiromasa Miyasaka et al.

17:30–19:54 Convention Hall 200

SH 3.4 (previous SH 3.5) —————

- 1 Cosmic Ray Electron and Positron Observations during the A⁻ Magnetic Polarity
John Mason Clem and P. A. Evenson

- 2 Solar Modulation Effect on the Cosmic-Ray Proton Spectra Measured by BESS
Yoshiaki Shikaze for the BESS Collaboration

- 3 Atypical Cosmic Ray Propagation during the qA>0 Sunspot Minimum of 1954
Ken McCracken, J. Beer, and F. B. McDonald

- 4 Understanding Cosmic Ray Solar Modulation for Cycle 20
H. S. Ahluwalia and Margaret D. Wilson

- 5 Long-Term Cosmic Ray Intensities: Physical Reconstruction
Ilya G. Usoskin et al.

- 6 GCR Flux Decline during the Last Three Centuries: Extra-Terrestrial and Terrestrial Evidences
Giuliana Cini Castagnoli et al.

- 7 Evaluation of Gnevyshev Gap Effects on Cosmic Ray Modulation
Marisa Storini, M. Laurenza, and Z. Fujii

8 Long Term Cosmic Ray Variations in Association with Solar Magnetic Flux
Jose F. Valdes-Galicia, A. Lara, and B. Mendoza

9 The Solar Cycle and Energetic Particle Streaming Patterns in and around the Terrestrial Magnetosphere
Peter Kiraly

10 Sun Shadow in the Solar Activity Cycle 23 Observed with the Tibet Air Shower Array
Masaki Nishizawa for the Tibet ASgamma Collaboration

11 The Cosmic Ray Shadows of the Moon and the Sun Detected by the Milagro Gamma Ray Observatory
Gus Sinnis for the Milagro Collaboration

August 5

9:10–10:34 Convention Hall 200

SH 3.3 (previous SH 3.3+SH 3.4)

1 The Approach of Voyager 1 to the Termination Shock
E. C. Stone and A. C. Cummings

2 Sustained Energetic Particle Intensity Enhancements at Voyager 1 Beginning in 2002
Matthew E. Hill et al.

3 Voyager Observations of Anomalous Cosmic Ray Gradients and the Role of Diffusion and Drifts in the Outer Heliosphere
A. C. Cummings and E. C. Stone

4 Effective Energy of Neutron Monitors
Katja Maria Alanko et al.

5 Galactic Cosmic Ray Fluctuations: Long-Term Modulation of Power Spectrum
Ilya G. Usoskin and S. Starodubtsev

6 Galactic Anisotropy of Multi-TeV Cosmic-Ray Intensity Observed by the Tibet III Air Shower Array
Shigeharu Udo for the Tibet ASgamma Collaboration

7 Observation of Anisotropy of Cosmic Rays with Solar Time Using the Multidirectional Muon Telescope of GRAPES-3 Shower Array
Hiroshi Kojima for the GRAPES Collaboration

14:30–15:54 Convention Hall 200

SH 3.3 (previous SH 3.3+SH 3.4)

8 Variation of Cosmic Ray Intensity with Angular Distance from Earth to the Current Sheet
Badruddin and Y. P. Singh

9 Effect of Interplanetary Turbulences Causing Unusual Behaviour in CR Intensity
M. L. Chauhan et al.

10 Study of High/Low Amplitude Wave Trains in CR Intensity and Associated Solar Features
Sushil Kumar Dubey et al.

11 Effect of Solar Heliospheric Parameters on Different Components of Daily Variation in Cosmic Ray Intensity
Rekha Agarwal Mishra and Rajesh K. Mishra

12 Long Term Behavior of Higher Harmonics of Cosmic Ray Intensity on Quiet Days
Mahendra Kumar Richharia, B. K. Kathal, and S. K. Dubey

13 Energetic Particle Intensity Increases at Voyagers 1 and 2 during 2002–03
Robert Blair Decker et al.

14 Angular Distributions and Energy Spectra of Energetic Particles Observed by Voyager 1 at 85-88 AU
Robert Blair Decker et al.

August 6

9:10–10:10 Convention Hall 200

SH 3.1 (previous SH 3.1+SH 2.6)

- 1 Modulation of Anomalous Protons with Increasing Solar Activity
Marius S. Potgieter and U. W. Langner

 - 2 Anomalous Cosmic Rays at a Termination-Shock Crossing
Jack R. Jokipii and J. Giacalone

 - 3 Heliospheric Termination Shock Mediation by Anomalous Cosmic Rays: Insights from Recent Voyager Data
Vladimir Florinski et al.

 - 4 Unusual Enhancements of MeV Ions and Electrons as Voyager 1 Approaches the Heliospheric Termination Shock
Frank B. McDonald et al.

 - 5 Voyager 1 Observations of the Anisotropies of Enhanced MeV Ion Fluxes at 85 AU
A. C. Cummings et al.
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14:00–16:00 Convention Hall 200

SH 3.5 (previous SH 3.5+SH 3.6)

- 1 Properties of the Long Term Heliospheric Modulation - Tests to Be Met by Modulation Theory
Juerg Beer, K. G. McCracken, and F. B. McDonald

 - 2 The Accuracy of Cosmogenic ¹⁰Be as a Quantitative Measurement of the GCR
Ken McCracken

 - 3 Manifestations of Influence of Solar Activity and Cosmic Ray Intensity on the Wheat Price in the Medieval England (1259–1703 Years)
Lev A. Pustil'nik, L. I. Dorman, and G. Yom Din

 - 4 Measurements of C-14 Concentration for 22 Single-Year Tree Rings of an Old Cedar ca. 2500 Years Ago
Hirohisa Sakurai et al.

 - 5 Variation of the Radiocarbon Content of Tree Rings during the Spoerer Minimum
Hiroko Miyahara et al.

 - 6 Radiocarbon Content in Japanese Cedar during the Maunder Minimum
Hiroko Miyahara et al.
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SH 3.6

- 1 Cosmic Rays in the Mechanism of Thundercloud Production
Yuri Ivanovich Stozhkov and V. I. Ermakov

 - 2 Light Flashes Observations on Board Mir and ISS with Sileye Experiments
Marco Casolino for the Sileye Collaboration

 - 3 Effect of Disturbed Electric Field of the Atmosphere on Cosmic Rays: 1. Soft Component
Aleksandr S. Lidvansky et al.

 - 4 Effect of Disturbed Electric Field of the Atmosphere on Cosmic Rays: 2. Hard Component
Aleksandr S. Lidvansky, N. S. Khaerdinov, and V. B. Petkov
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17:00–19:00 Convention Hall 200

SH 3.6

- 5 Acceleration below Thunder Clouds at Mount Norikura
Yasushi Muraki et al.
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- 6 Estimation of the Radioactivity Level Induced by Airborne Radio-Nuclide Rainout Episodes
Stefano Cecchini et al.
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- 7 The Effect of Variable Directions of Viewing on the Interpretation of Diurnal Variations Observed by Neutron Monitors
John E. Humble and M. L. Duldig
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- 8 Geomagnetic Cutoff Rigidity Calculations at 50-Year Intervals between 1600 and 2000
Don Frederick Smart and M. A. Shea
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- 9 Preliminary Study of the 400-Year Geomagnetic Cutoff Rigidity Changes, Cosmic Rays and Possible Climate Changes
Margaret Ann Shea and D. F. Smart
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- 10 The Long-Term Variation of Galactic Cosmic Ray Flux and Its Possible Connection with the Current Trend of the Global Warming
Kunitomo Sakurai
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- 11 The Relation between Malfunctions of Satellites at Different Orbits and Cosmic Ray Variations
Lev I. Dorman et al.
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- 12 Seasonal Variations in ^7Be Radioactivity Measured at Ground Level
Masato Yoshimori et al.
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- 13 Daily Variation of Cosmogenic Nuclide Be-7 Concentration in the Atmosphere and Solar Activities
Hirohisa Sakurai et al.
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- 14 The Seasonal Dependency of the NO(Y) Impulsive Precipitation Events in Arctic Polar Ice
Margaret Ann Shea et al.
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SH: POSTER Session 1

Authors in attendance: July 31, August 1, August 2 16:30–17:30

Multi-Purpose Hall

SH 1.1

- 1-P-163 RHESSI Discovery of a Coronal Non-Thermal Hard X-Ray Source in the 23 July 2002 Gamma-Ray Line Flare
Robert P. Lin et al.
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- 1-P-164 Simultaneous Observations of Solar Neutrons in Association with a Large Solar Flare on June 6, 1991
Kyoko Watanabe et al.
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- 1-P-165 GEANT Applications for the Interpretation of Ground-Based Solar Neutron Observations
Erwin O. Flueckiger et al.
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- 1-P-166 Time Profile of the 2.223 MeV Gamma-Line Emission and Some Features of the 16 December 1988 Solar Event
Leonty I. Miroshnichenko et al.
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- 1-P-167 Solar Gamma Ray Events Detected by the GEOTAIL Plasma Instrument
Yasuhiro Takei et al.
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SH 1.2

- 1-P-168 The Unusual Solar Particle Events of August 2002
R. A. Leske et al.
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- 1-P-169 ^3He -Rich SEP Events Detected by EPHIN 1996-2000
Raul Gomez-Herrero et al.
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- 1-P-170 Possible Detection of Large Solar Particle Event at Balloon Altitudes during the 2001-2002 TIGER Flight
Sven Geier et al.
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