

**Space Weather Workshop
Westin Hotel– Westminster, CO
April 16-20, 2018**

Poster Abstracts

Posters may be on display from Tuesday morning through Thursday afternoon. We request that authors be in attendance at their posters during the poster sessions. If you are unable to be by your poster on the designated day, please post times/days available, at your poster.

Solar and Interplanetary Research and Applications (Tuesday)

Hurlburt, Neal (Lockheed Martin ATC)

Poster Number: S1

Poster - Preliminary results from imaging the far corona in EUV: SUVI Extended Corona Observations

Authors: Dan Seaton, Lawrence Shing, Greg Slater, Margaret Shaw, Ralph Seguin, Robin Minor, Calvin Nwachuku

Darnel, Jonathan (NOAA-NCEI/University of Colorado)

Poster Number: S2

Poster - Observations by the Solar UltraViolet Imager of the September 10, 2017 X8.2 Flare

Authors: Darnel, Jonathan M.; Seaton, Daniel B.

Jones, Andrew (University of Colorado)

Poster Number: S3

Poster - Solar EUV irradiance measurements from GOES-16

Authors: Andrew Jones

Woodraska, Donald (University of Colorado)

Poster Number: S4

Poster - Degradation Correction Proxy Modeling of GOES-16 EXIS EUVS

Authors: Donald L Woodraska, Francis G. Eparvier, Edward M.B. Thiemann, Thomas N. Woods, Andrew R. Jones, and Martin Snow

Woodraska, Donald (University of Colorado)

Poster Number: S5

Poster - The GOES-16 Operational EUV Spectral Irradiance Model

Authors: Edward M.B. Thiemann, Francis G. Eparvier, Thomas N. Woods, Andrew R. Jones, Martin Snow, Donald L. Woodraska, Janet Machol

Zhang, Yongliang (Johns Hopkins University / APL)

Poster Number: S6

Poster - Solar EUV flux proxy using multi-frequency solar radio flux

Authors: Yongliang Zhang and Larry J. Paxton

Viereck, Rodney (NOAA Space Weather Prediction Center)

Poster Number: S7

Poster - GOES Solar X-Ray Observations: Continuity vs Accuracy

Authors: Richard Grubb, Janet Machol

Eparvier, Francis (University of Colorado)

Poster Number: S8

Poster - The September 2017 Flares in EUV and Soft X-Ray Irradiance from GOES and other Platforms

Authors: F.G. Eparvier, P.C. Chamberlin, A.R. Jones, T.N. Woods, M. Snow, D.L. Woodraska, E.M.B. Thiemann, D. Didkovsky, J.P. Mason, J.L. Machol, R.A. Viereck

Eparvier, Francis (University of Colorado)

Poster Number: S9

Poster - The Magnesium II Index: Continuing Progress on the Facular Proxy in the GOES-R Era

Authors: M. Snow, J. Machol, F.G. Eparvier, A.R. Jones, and T.N. Woods

DeForest, Craig (University of Colorado)

Poster Number: S10

Poster - PUNCH: a Space-Weather-Relevant SMEX mission for 2022

Authors: C.E. DeForest and the PUNCH Team

Eccleston, Paul (STFC - RAL Space)

Poster Number: S11

Poster - Definition of the remote-sensing package for ESA's Lagrange mission

Authors: P. Eccleston, J. Davies, S. Kraft & the Lagrange remote-sensing consortium

Guedes dos Santos, Luiz Fernando (NASA - Goddard Space Flight Center/ IACS - Catholic University of America)

Poster Number: S12

Poster - Measuring CME angular width and angular position

Authors: Teresa Nieves- Chinchilla (NASA-GSFC/IACS-CUA)

de Koning, Curt (University of Colorado)

Poster Number: S13

Poster - Ensembles, CME Mass, and Space Weather Forecasting

Authors: Michele Cash

Parker, Linda (USRA)

Poster Number: S14

Poster - Comparison of Twin CME using PATH and PAMS

Authors: Gang Li, UAH

Jones, Andrew (University of Colorado)

Poster Number: S15

Poster - Machine Learning for Space Weather

Authors: Stephane Beland, Wendy Carande, James Craft, Andrew Jones, Kim Kokkonen, Laura Sandoval, Doug Smith

Leka, KD (NWRA)

Poster Number: S16

Poster - Operational Flare Forecasting Benchmarks and Initial Performance Comparisons

Authors: KD Leka, S.-H. Park, K. Kusano, and the Third International Flare Forecasting Team (J. Andries, G. Barnes, S. Bingham, S. Bloomfield, A. McCloskey, D. Falconer, M. Georgoulis, J. Jing, Y. Kubo, K. Lee, S. Lee, L. Mays, J. Mun, S. Murray, T. Hamad Nageem, R. Qahwaji, M. Sharpe, R. Steenburgh, G. Steward, M. Terkildsen)

McCloskey, Aoife (Trinity College Dublin, Ireland)

Poster Number: S17

Poster - Flare Forecasting & Sunspot Group Evolution

Authors: Aoife E. McCloskey, Peter T. Gallagher, D. Shaun Bloomfield

González, José Juan (Universidad Nacional Autonoma de Mexico)

Poster Number: S18

Poster - Development of a Magnetohydrodynamic (MHD) model in non-local thermodynamic equilibrium (NLTE) to study the upper solar atmosphere

Authors: Victor De la Luz

Gopalswamy, Nat (NASA Goddard Space Flight Center)

Poster Number: S19

Poster - FRED: Flux Rope from Eruption Data

Authors: S. Akiyama, S. Yashiro, and H. Xie

Destefano, Anthony (NASA/Marshall Space Flight Center)

Poster Number: S20

Poster - The Probability of False Go/No-Go Determined by GOES Proton Flux: Proposed Launch Constraints for Avoiding Damaging Solar Energetic Particle Events

Authors: Anthony Destefano, Michael Goodman, Robert Suggs

Kress, Brian (NOAA-NCEI and CIRES at CU Boulder)

Poster Number: S21

Poster - Observations of 2017 Solar Particle Events from Particle Detectors On-Board NOAA's Newest Space Weather Monitor

Authors: Brian T. Kress, Juan V. Rodriguez, Athanasios Boudouridis, and Bronislaw Dichter

Matthiä, Daniel (German Aerospace Center (DLR))

Poster Number: S22

Poster - Solar cosmic ray dose rate assessments during GLE 72 using MIRA and PANDOCA

Authors: Daniel Matthiä, Kyle Copeland, Matthias M. Meier

Copeland, Kyle (Federal Aviation Administration)

Poster Number: S23

Poster - Conversion of the FAA's Solar Radiation Alert Systems to CARI-7

Authors: Kyle Copeland, Ph.D

Mertens, Christopher J. (NASA Langley Research Center)

Poster Number: S24

Poster - Recent Updates and Improvements to the Nowcast of Atmospheric Ionizing Radiation for Aviation Safety (NAIRAS) Model

Authors: Mertens, Christopher J.

Tobiska, W. Kent (Space Environment Technologies)

Poster Number: S25

Poster - Analytical Representations for Characterizing the Global Aviation Radiation Environment based on Model and Measurement Databases

Authors: W. Kent Tobiska, Leonid Didkovsky, Kevin Judge, Seth Weiman, Dave Bouwer, Justin Bailey, Bill Atwell, Molly Maskrey, Chris Mertens, Yihua Zheng, Margaret Shea, Don Smart, Brad Gersey, Richard Wilkins, Duane Bell, Larry Gardner, and Robert Fuschino

Panasenco, Olga (Advanced Heliophysics)*EPOSTER

Poster Number: S26

Poster - Predicting the Orientation of the Bz Component of CMEs

Authors: Marco Velli (UCLA)

Bisi, Mario (Science & Technology Facilities Council - Rutherford Appleton Laboratory)*EPOSTER

Poster Number: S27

Poster - LOFAR4SpaceWeather (LOFAR4SW): Increasing European Space-Weather Capability with Europe's Largest Radio Telescope

Authors: Mario M. Bisi (1), René Vermeulen(2), Richard A. Fallows (2), Nicole Vilmer (3), Hanna Rothkaehl (4), Joris Verbiest (5), Peter T. Gallagher (6), Michael Olberg (7), Maaijke Mevius (1), and Stuart C. Robertson (1).

Singh, Talwinder (Univ. of Alabama in Huntsville)*EPOSTER

Poster Number: S28

Poster - CME simulations using Gibson-Low flux rope model with input parameters derived from multi-view coronagraph observations.

Authors: Mehmet S. Yalim, Nikolai Pogorelov

Pogorelov, Nikolai (University of Alabama in Huntsville)*EPOSTER

Poster Number: S29

Poster - Towards Real-time Modeling of Solar Atmosphere and Inner Heliosphere with the Multi-Scale Fluid-Kinetic Simulation Suite

Authors: David Hathaway, Tae Kim, Yang Liu, Talwinder Singh, Lisa Upton, and Mehmet Yalim

Tsiftsi, Thomai (Universidad Nacional Autonoma de Mexico (UNAM))*EPOSTER

Poster Number: S30

Poster - Statistical analysis of severe solar flare events using extreme value theory

Authors: Thomai Tsiftsi, Victor De la Luz

Lindsey, Charles (NorthWest Research Associates)*EPOSTER

Poster Number: S31

Poster - New Space-Weather Forecasting Applications of Seismic Monitoring of the Sun's Far Hemisphere

Authors: Charles Lindsey, Joseph Werne, Alina Donea

Jackson, Bernard (University of California, San Diego)*EPOSTER

Poster Number: S32

Poster - Iterative heliospheric tomography analyses using time-dependent 3-D MHD models as kernels

Authors: Hsiu-Shan Yu, P. Paul Hick, Andrew Buffington, Dusan Odstreil, and Nick

Panasenco, Olga (Advanced Heliophysics)***EPOSTER**

Poster Number: S33

Poster - The Solar Wind from Pseudostreamers and their Environs: Opportunities for Observations with Parker Solar Probe and Solar Orbiter

Authors: Marco Velli (UCLA), Aram Panasenco (UCLA), Roberto Lionello (PSI)

Ionosphere Research and Applications (Wednesday)

Matson, Liza K. (United States Air Force Academy, Department of Physics)

Poster Number: I1

Poster - The Falcon Space Weather Sensor (FalconSWS) for Polar Earth Orbits

Authors: Brandon A. Pierce, Liza K. Matson, Carlos A. Maldonado, and Matthew G. McHarg

Wilson, Gabriel (US Air Force Academy)

Poster Number: I2

Poster - Satellite Based Ion Density Measurement Calibration and Validation

Authors: Richard L Balthazor, Carlos Maldonado, Matthew G. McHarg

Cruz, Alfredo (CU-Boulder)

Poster Number: I3

Poster - Investigation into Proton-Induced Conductivity and Related Space Weather Effects

Authors: Alfredo Cruz, Stan Solomon, Liam Kilcommons, Delores J. Knipp, and Tomoko Matsuo

Pettit, Joshua (University of Colorado)

Poster Number: I4

Poster - Comparison of Two Medium Energy Electron Datasets in WACCM

Authors: Josh Pettit, Cora Randall, Ethan Peck, Dan Marsh, Craig Rodger, Xiaohua Fang

Yuan, Tianjiao (National Space Science Center)

Poster Number: I5

Poster - Prediction Model for Ionospheric Total Electron Content Based on Deep Learning RNN

Authors: Yuan Tianjiao, Chen Yanhong, Liu Siqing, Gong Jiancun

Loucks, Diana (United States Military Academy)

Poster Number: I6

Poster - GPS L1 Scintillation Detection Using a Novel 3-Dimensional PFISR Mode

Authors: Diana Loucks, Geoff Crowley, Scott E Palo, Roger Varney, Ashton Reimer, Donald Hampton, Marcin Pilinski

Fiori, Robyn (Natural Resources Canada)

Poster Number: I7

Poster - Improved Modelling of Shortwave Fadeout with 30 MHz riometer data

Authors: R. A. D. Fiori, L. Nikitina, D. H. Boteler

Fry, Ghee (NASA Marshall Space Flight Center)

Poster Number: I8

Poster - Crowd-Sourced Radio Science at Marshall Space Flight Center

Authors: Ghee Fry, Jesse McTernan, Rob Suggs, Linda Rawlins, Linda Krause, Dennis Gallagher and Mitzi Adams

Gentile, Louise (Air Force Research Laboratory)

Poster Number: I9

Poster - AFRL Field Campaign During the 21 August 2017 Solar Eclipse

Authors: AFRL Field Campaign Team

Shi, Yining (University of Colorado Boulder)

Poster Number: I10

Poster - Assimilative Mapping Method for High-latitude Field-aligned Currents (FACs)

Authors: Yining Shi, Delores Knipp, Tomoko Matsuo, Liam Kilcommons, Brian Anderson

Siddiqui, Tarique (NCAR)

Poster Number: I11

Poster - Dependence of lunar tide of the equatorial electrojet on the winter-time polar vortex, solar flux and QBO

Authors: Yosuke Yamazaki, Claudia Stolle, Hermann Luehr, Juergen Matzka, Astrid Maute, Nick Pedatella

Jones, Jim (Northrop Grumman)

Poster Number: I12

Poster - Thermospheric Effects on Low Earth Orbit

Authors: James C. Jones

De la Luz, Victor (Universidad Nacional Autonoma de Mexico)*EPOSTER

Poster Number: I13

Poster - azTEC: TEC Maps Near to Real Time over Mexico

Authors: Maria Sergeeva, Mario Rodríguez, Américo González-Esparza, Esmeralda Romero

Ghoddousi-Fard, Reza (Natural Resources Canada)*EPOSTER

Poster Number: I14

Poster - High latitude GPS and GLONASS 1Hz phase rate measurements during geomagnetic storms: Case studies

Authors: Reza Ghoddousi-Fard, Paul Prikryl, Knut S. Jacobsen, Tibor Durgonics, François Lahaye

Maruyama, Naomi (NOAA/NWS)*EPOSTER

Poster Number: I15

Poster - Impact of Lower Atmospheric Forcing on Storm Time Response of the Ionosphere-Plasmasphere-Magnetosphere Coupling

Authors: Joe Schoonover, George Millward, Tzu-Wei Fang, Tim Fuller-Rowell, Adam Kubaryk, Zhuxiao Li, Houjun Wang, Rashid Akmaev, Valery Yudin, Bob Oehmke, Cecelia Deluca, Raffaele Montuoro, Weiyu Yang, Mark Iredell, Sam Trahan, Jacques Middlecoff, Mark Govett, Mariangel Fedrizzi, Rodney Viereck, Mick Denton, Michael Henderson, Yuki Obana, Toshi Nishimura, Marc Hairston, Anthea Coster, Phil Richards, Jimmy Raeder

General Space Weather Services and Education (Wednesday)

Bonadonna, Michael (OFCM)

Poster Number: G1

Poster - The National Space Weather Program: Two Decades of Interagency Partnership and Accomplishments

Authors: Michael Bonadonna¹, Louis Lanzerotti², Judson Stailey¹

Szabo, Adam (NASA GSFC Code 672)

Poster Number: G2

Poster - Accurate 1 day solar wind forecasting with the Space Weather Flotilla

Authors: Szabo, Adam

Pankratz, Chris (Univ of Colorado / LASP)

Poster Number: G3

Poster - Facilitating Advancements in Space Weather Data Availability Through a Space Weather Testbed and Data Portal

Authors: James Craft, Thomas Berger, Thomas Baltzer, Fernando Sanchez, Daniel N. Baker, Allison Jaynes, Scot Elkington

Lauer, Chris (NOAA, Space Weather Prediction Center)

Poster Number: G4

Poster - SWPC Dissemination Modernization

Authors: Steven Hill, Marcus England, Kiley Gray, Chris Lauer, Ben Rowells

Mojica, Jonh (Utah State University)

Poster Number: G5

Poster - Tests of Radiation Damage Threshold of Raspberry Pi Zero in LEO Environment for OPAL CubeSat Project

Authors: Jonh Carlos Mojica Decena, JR Dennison, Brian Wood, Ryan Martineau, Michael J. Taylor

Cherkos, Alemayehu (Addis Ababa University)*EPOSTER

Poster Number: G6

Poster - Effect of viscosity on propagation of MHD waves in astrophysical plasma

Authors: S. B. Tessema

Poduval, Bala (Space Science Institute)*EPOSTER

Poster Number: G7

Poster - Methods of Improving Space Weather Prediction

Authors: Bala Poduval

Magnetosphere Research and Applications (Thursday)

Califf, Sam (NOAA/NCEI)

Poster Number: M1

Poster – GOES-16 Magnetometer Calibration and Validation

Authors: Sam Califf, Paul Loto'aniu, Rob Redmon

Boudouridis, Athanasios (University of Colorado at Boulder)

Poster Number: M2

Poster - Development of a Bow-tie Inversion Technique for Real-time Processing of the GOES-16 SEISS MPS-HI Electron Channels and Comparison of the Resulting Fluxes with the GOES-13 MAGED and EPEAD Electron Channels

Authors: J. V. Rodriguez, B. T. Kress

McCollough, James (Air Force Research Laboratory)

Poster Number: M3

Poster - DSX Space Weather Experiments (SWx): Capabilities and Science Plans

Authors: W. R. Johnston, J. P. McCollough, Y.-J. Su, and M. J. Starks

Sakaguchi, Kaori (National Institute of Information and Communications Technology)

Poster Number: M4

Poster - The SECURES Project: Space Environment Customized Risk Estimation for Spacecraft

Authors: Yasubumi Kubota, Tsutomu Nagatsuma, Mamoru Ishii

Parker, Linda (USRA)

Poster Number: M5

Poster - Spacecraft Charging Material Properties Database

Authors: Joseph I. Minow, NASA

Shen, Han-Wen (National central university)

Poster Number: M6

Poster - An analysis on geomagnetic activity related with Formosat-2 and Formosat-3 anomalies for space weather operations

Authors: Han-Wen Shen, Jih-Hong Shue , Tsung-Ping Lee

Winter, Lisa (Los Alamos National Laboratory)

Poster Number: M7

Poster - Background Radiation Models for DIORAMA

Authors: Elinor Mullin, Shawn Tornga

Young, Shawn (Air Force Research Laboratory)

Poster Number: M8

Poster - Comparison of MSFM, MSM and Denton models at GEO

Authors: Shawn Young, Robert Hilmer

Hosseini, Poorya (University of Colorado Denver)

Poster Number: M9

Poster - Investigating Magnetospheric Wave-Particle Dynamics with Ground based Observations

Authors: Poorya Hosseini, Mark Golkowski, Vijay Harid

Shen, Xiaochen (Shandong University)

Poster Number: M10

Poster - Foreshock transient-driven magnetospheric ULF waves with clear dawn-dusk asymmetry of wave power

Authors: Quanqi Shi, Boyi Wang, Hui Zhang, Mary Hudson, Yukitoshi Nishimura, Michael Hartinger, Anmin Tian, Qiu-Gang Zong, I. J. Rae, Alex Degeling

Kelbert, Anna (U.S. Geological Survey)

Poster Number: M11

Poster - Geoelectric field estimation and power-line integration using a 3D electrical conductivity model of the United States

Authors: Anna Kelbert, Christopher C. Balch, Greg M. Lucas, E. Joshua Rigler

Kouassi, Nguessan (Université Felix Houphouet Boigny Abidjan-Cote d'Ivoire)

Poster Number: M12

Poster - Geomagnetically Induction effects related to impulsive Space Weather events at low latitudes

Authors: Nguessan KOUASSI ,Vafi DOUMBIA, Boka KOUADIO

Rigler, E. Joshua (USGS)

Poster Number: M13

Poster - Interpolating Geomagnetic Observations

Authors: Fiori, Robyn A. D.; Pulkkinen, Antti; Wiltberger, Michael; Balch, Christopher

Denton, Michael (Space Science Institute)

Poster Number: M14

Poster - A Flux Model of the Inner Magnetosphere

Authors: Mike Henderson Juan Rodriguez

Cade, Trey (Baylor University)

Poster Number: M15

Poster - Performance of the Kp Index During Magnetic Storms

Authors: Courtney Turner

Shue, Jih-Hong (National Central University)

Poster Number: M16

Poster - Which interplanetary magnetic field orientation is for the true ground state of the magnetosphere?

Authors: Masahito Nose, Tohru Araki, Toshihiko Iyemore

Lucas, Greg (USGS)*EPOSTER

Poster Number: M17

Poster - Calculating realistic voltages across the US power grid utilizing measured impedances and magnetic fields

Authors: Greg M. Lucas, Jeffrey J. Love, Anna Kelbert, Paul A. Bedrosian, E. Joshua Rigler

Woodroffe, Jesse (Los Alamos National Laboratory)*EPOSTER

Poster Number: M18

Poster - A Global Perspective on Geomagnetic Disturbances

Authors: Jesse Woodroffe, Michael Henderson

Shekhar Sapna (Dartmouth College)*EPOSTER

Poster Number: M19

Poster - Predictive Model for the Determination of Spatial extent of Relativistic Electron Precipitation from the Radiation Belts.

Authors: Robyn Millan

Tenishev, Valeriy (University of Michigan)*EPOSTER

Poster Number: M20

Poster - Energetic particle radiation in Earth' magnetosphere and its variability in response to that of the Sun

Authors: Igor Sokolov, Tamas Gombosi

Zheng, Yihua (NASA Goddard Space Flight Center)*EPOSTER

Poster Number: M21

Poster - Assessment of Radiation and Plasma Environment Modeling Capabilities

Authors: Yihua Zheng, Natalia Ganushkina, Timothy B Guild, Pier Jiggins, Insoo Jun, Joseph E. Mazur, Matthias Meier, Joseph I Minow, Dave Pitchford, Paul O'Brien, Yuri Shprits, W. Kent Tobiska, Michael A. Xapsos, M. M. Kuznetsova