

Space Weather Workshop
Omni Interlocken Hotel – Broomfield, CO
May 1-5, 2017

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 session on the day indicated below.

Solar and Interplanetary Research and Applications (Tuesday)

DeLuca, Edward (Smithsonian Astrophysical Observatory)

Poster Number: S1

Poster - The CORonal Spectrographic Imager in the Extreme ultraviolet (COSIE) Mission

Plunkett, Simon (Naval Research Laboratory)

Poster Number: S2

Poster - Imaging the Corona with Solar Probe Plus and Solar Orbiter

Kooi, Jason (U.S. Naval Research Laboratory)

Poster Number: S3

Poster - Enhanced Measurement of the Coronal Magnetic Field Through Simultaneous Faraday Rotation and Thomson-Scattering Brightness Observations

Hurlburt, Neal (Lockheed Martin ATC)

Poster Number: S4

Poster - Observations of the corona and solar magnetic field for space weather forecasting

Seki, Daikichi (Kyoto University)

Poster Number: S5

Poster - Increase in the amplitude of line-of-sight velocity of the small scale motion as the precursor of filament eruptions

Schooley, Alicia (University of Michigan)

Poster Number: S6

Poster - Now-casting Interplanetary Coronal Mass Ejections using Heavy Ion Charge Distributions

Lindsey, Charles (NorthWest Research Associates)

Poster Number: S7

Poster - Seismic Mapping of the Sun's Far Hemisphere and its Applications in Space-Weather Forecasting

Steward, Graham (Space Weather Services, Australia)

Poster Number: S8

Poster - Automatic recognition of complex magnetic regions on the Sun in SDO magnetogram images and prediction of flares: Techniques and Results for the revised flare prediction program Flarecast

Henney, Carl (Air Force Research Laboratory)

Poster Number: S9

Poster - Forecasting Space Weather Solar Indices with ADAPT/SIFT

de Koning, Curt (University of Colorado)

Poster Number: S10

Poster - Various Ways to Calculate CME Mass

Barnard, Luke (University of Reading)

Presented by **de Koning, Curt**

Poster Number: S11

Poster – Testing the Current Paradigm for Space Weather Prediction with Heliospheric Imagers

Cui, Yanmei (National Space Science Center, CAS)

Poster Number: S12

Poster - Statistical study of magnetic cause of confined flares

Reed, Willow (Laboratory for Atmospheric and Space Physics, University of Colorado, Boulder)

Poster Number: S13

Poster - Flare Response of the FUV Continuum

Seaton, Daniel (University of Colorado)

Poster Number: S14

Poster - First Results from the Solar Ultraviolet Imager on GOES-16

Tilton, Meg (CIRES / NOAA)

Poster Number: S15

Poster - GOES-16 Space Weather Data: Products and Access

Woods, Thomas (University of Colorado)

Poster Number: S16

Poster - GOES-16 X-Ray Sensor (XRS) New Measurements and Validation

Eparvier, Francis (University of Colorado)

Poster Number: S17

Poster - The Extreme Ultraviolet and X-Ray Sensors (EXIS) on GOES-16: Measurements, Data Products, and First Results

Snow, Martin (University of Colorado)

Poster Number: S18

Poster - Magnesium II index measurements from SORCE SOLSTICE and GOES-16 EUVS

Thiemann, Ed (University of Colorado)

Poster Number: S19

Poster - The GOES-16 Operational EUV Spectral Irradiance Model

Jackson, Bernard (University of California, San Diego)

Poster Number: S20

Poster - Low Resolution Bz Determinations and Forecasts From Field Coupling Between the Solar Wind and Geomagnetic Fields

Bisi, Mario (Science & Technology Facilities Council)

Poster Number: S21

Poster - The Worldwide Interplanetary Scintillation (IPS) Stations (WIPSS) Network: October 2016 Campaign – LOFAR and ISEE Initial Investigations

Hwang, Junga (Korea Astronomy and Space Science Institute)

Poster Number: S22

Poster - Initial Validation of KREAM (Korean Radiation Exposure Assessment Model for aviation route dose)

Rodriguez, Juan (University of Colorado)

Poster Number: S23

Poster - Satellite and Ground-Based Observations of Solar Energetic Particle Event Onsets: a Comparison of Two Critical Observational Platforms

Aminialragia-Giamini,S (Space Applications & Research Consultancy)

Presented by **Sandberg, Ingmar**

Poster Number: S24

Poster - The Virtual Time-Series Solar Proton Event Model

Meier, Matthias M. (German Aerospace Center)

Poster Number: S25

Poster - A Space Weather Index for the Radiation Field at Aviation Altitudes

Yang, Seung Bum (InSpace Company, Ltd.)

Poster Number: S26

Poster - Service Platform SAFE system(Safety during Aviation Flight Environment from radiation)

Schennetten, Kai (German Aerospace Center)

Poster Number: S27

Poster - Operational Instruments for Measuring SWx Radiation Impacts at Aviation Altitudes

Copeland, Kyle (FAA)

Poster Number: S28

Poster - Evaluating Simple Shielding Approximations for Galactic Cosmic Radiation Using OLTARIS

Young, Shawn (USAF AFMC AFRL/RVBXR)

Poster Number: S29

Poster - Specifying the Solar Energetic Particle Hazard Inside Geosynchronous

Ionosphere Research and Applications (Wednesday)

Arsov, Kirco (Australia Bureau of Meteorology)

Presented by **Steward, Graham**

Poster Number: I1

Poster - Ionospheric modelling to boost the PPP-RTK positioning and navigation in Australia

Berdermann, Jens (German Aeospace Center)

Poster Number: I2

Poster - The Ionosphere Monitoring and Prediction Center

Jacobsen, Knut Stanley (Norwegian Mapping Authority)

Poster Number: I3

Poster - ROTI as a candidate for an ionospheric activity scale -- Weaknesses, Strengths & Examples of Observations

Steele, Christopher (USAF/A)

Poster Number: I4

Poster - Measuring the Ionosphere: Calibration of the Integrated Miniaturized Electrostatic Analyzer on STPSat3 with Digisonde Data

Spann, Jim (NASA)

Poster Number: I5

Poster - The Scintillation Prediction Observations Research Task (SPORT):

Nishioka, Michi

Presented by: **Ishii, Mamoru**

Poster Number: I6

Poster – A new ionospheric storm scale based on TEC and foF2 statistics

Lee, I-Te (Central Weather Bureau)

Poster Number: I7

Poster - Investigating FORMOSAT-7/COSMIC-2 impacts on space weather monitoring

Wu, Qian (NCAR)

Poster Number: I8

Poster - COSMIC Observation of Ionosphere SAO

Hsu, Chih-Ting (National Central University of Taiwan)

Poster Number: I9

Poster - Assessment of the impact of FORMOSAT-7/COSMIC-2 GNSS RO observations on ionosphere specification and forecast using observing system simulation experiments

Watson, Chris (UCAR)

Poster Number: I10

Poster - Climatology of Small-Medium Scale Ionospheric Plasma Irregularities Observed by FormoSat-3/COSMIC GNSS Radio Occultation Receivers

Cilliers, Pierre (South African National Space Agency)

Poster Number: I11

Poster - Evaluation of HF Radio Propagation Predictions based on ICEPAC

Joshi, Dev (Boston College)

Poster Number: I12

Poster - A comparison of space and ground-based observations of equatorial plasma irregularities and implications for Spread F dynamics

Meehan, Jinni (Utah State University)

Poster Number: I13

Poster - The Inference of the Topside Ionosphere Over Millstone Hill during the 2002 Incoherent Scatter Radar Campaign

Smith, David (Utah State University)

Poster Number: I14

Poster - High-frequency radio wave absorption

Hozumi, Kornyanat (NICT)

Presented by **Ishii, Mamoru**

Poster Number: I15

Poster - HF-START: A tangible space weather application

Fernandez-Gomez, Isabel (German Aerospace Center DLR)

Poster Number: I16

Poster - Overview of the 2015 St. Patrick's day storm using CTIPe model and GNSS data

Codrescu, Mihail (NOAA/SWPC)

Poster Number: I17

Poster - On the importance of Data Assimilation for the Thermosphere Ionosphere System

Eastes, Richard (Mihail Codrescu, NOAA/SWPC)

Presented by: **Codrescu, Mihail**

Poster Number: I18

Poster – Global-scale Observations of the Limb and Disk (GOLD) Mission – Ultraviolet Remote Sensing of Earth's Space Environment

Hwang, Junga (Korea Astronomy and Space Science Institute)

Poster Number: I19

Poster – Small scale magnetospheric and Ionospheric Plasma Experiments (SNIPE) for space weather research

Fedrizzi, Mariangel (University of Colorado/CIRES and NOAA/SWPC)

Poster Number: I20

Poster - Assessing the Capabilities and Limitations of Physics-Based Models in Capturing the Ionosphere and Thermosphere Storm-Time Response

Fedrizzi, Mariangel (University of Colorado/CIRES and NOAA/SWPC)

Poster Number: I21

Poster – CTIPe Neutral Density: Recent Results and Validation Metrics

Wu, Qian (NCAR)

Poster Number: I22

Poster - Recent Progress in Thermospheric Wind Observations

Maruyama, Naomi (NOAA/SWPC)

Poster Number: I23

Poster – Transitioning a Coupled Whole Atmosphere (WAM) and Ionosphere-Plasmasphere-Electrodynamics (IPE) Model into Operations at NOAA

Hughes, Joseph (University of Colorado, Boulder)

Poster Number: I24

Poster - Electromagnetic Perturbation Effects for Geosynchronous Debris

Loucks, Diana (University of Colorado, Boulder)

Poster Number: I25

Poster-Impact of High-latitude Ionospheric E Region Enhancements on Global Positioning System Scintillations in the Alaskan Sector

General Space Weather Services and Education (Wednesday)

Gonzalez-Esparza, J. Americo (Instituto de Geofisica, Universidad Nacional Autonoma de Mexico)

Poster Number: G1

Poster – Developing a Space Weather Strategy in Mexico

Gonzalez-Esparza, J. Americo (Instituto de Geofisica, Universidad Nacional Autonoma de Mexico)

Poster Number: G2

Poster - Mexico observations of the great auroral storm of 1859

De la Luz, Victor Hugo (SCiESMEX/National University of Mexico)

Poster Number: G3

Poster - The Mexican Early Warning System of Space Weather

De Nardin, Clezio (INPE)

Poster Number: G4

Poster - Recent Development on the RWC-Brazil Space Weather products: Regional Magnetic Indices, Total Solar Irradiance, TEC Maps Extension and DIX Maps

Nndanganeni, Rendani Rejoyce (South African National Space Agency)

Poster Number: G5

Poster - Investigating the impact of space weather on the aviation sector in South Africa

Good, Gregory (American Institute of Physics)

Poster Number: G6

Poster - Recording the Oral History of Space Weather: How We Are Learning to Live with a Star

Bonadonna, Michael (NOAA – OFCM)

Poster Number: G7

Poster - Two Decades of Interagency Partnership and Accomplishments

Cade, Trey (Baylor University)

Poster Number: G8

Poster - An Inquiry-Based Approach to Teaching Space Weather to Undergraduate Non-Science Majors

Fry, Ghee (NASA Marshall Space Flight Center)

Poster Number: G9

Poster - Eclipse 2017: Partnering with NASA/MSFC to Inspire Students

Keebler, Timothy (Millersville University of Pennsylvania)

Poster Number: G10

Poster - High-altitude balloon payload design using customizable data acquisition

Stitely, Noah (Millersville University of Pennsylvania)

Poster Number: G11

Poster - High-altitude balloon payload design using customizable data acquisition

Ruangmei, Johnny (NSDMA, Gov't of Nagaland) (presenting for Noyingbeni Kikon)

Poster Number: G12

Poster - Algorithms to predict erratic weather

Magnetosphere Research and Applications (Thursday)

Olson, David (Los Alamos National Laboratory)

Poster Number: M1

Poster - Observed statistics of electron flux events related to spacecraft charging at geosynchronous orbit

Meredith, Nigel

Presented by **Sandberg, Ingmar**

Poster Number: M2

Poster - Extreme Relativistic Electron Fluxes in the Earth's Outer Radiation Belt: Analysis of INTEGRAL IREM Data

Walker, Andrew (Los Alamos National Laboratory)

Presented by: **Morley, Steven**

Poster Number: M3

Poster - DREAM: An operational prototype for radiation belt forecasting

Carver, Matthew (Los Alamos National Laboratory)

Presented by: **Morley, Steven**

Poster Number: M4

Poster – Cross-calibration of proton measurements from the Combined X-ray Dosimeter on GPS

Nagatsuma, Tsutomu (National Institute of Information and Communications Technology)

Poster Number: M5

Poster - Cross-calibration of high-energy electron observations at geostationary earth orbit

Dichter, Bronek (Assurance Technology Corporation)

Poster Number: M6

Poster - New GOES-16 Space Weather Energetic Particle Instruments

Kress, Brian (NOAA-NCEI/CIRES)

Poster Number: M7

Poster - GOES-16 Solar and Galactic Proton Sensor (SGPS) Status Report

Boudouridis, Athanasios (University of Colorado, Boulder)

Poster Number: M8

Poster - Development of a Bow-tie Inversion Technique for Real-time Processing of the GOES-R SEISS MPS-HI Electron Channels and Comparison with the Baseline Matrix Inversion Technique

Wang, Chunqin (National Space Science Center, Chinese Academy of Sciences)

Poster Number: M9

Poster - Observations of geosynchronous energetic particle environment with in situ FY-2G measurements

Katsavrias, Christos (National Observatory of Athens)

Poster Number: M10

Poster - Investigation of internal magnetospheric effects on electron acceleration and loss in the outer Van Allen belt

Yang, Xiaochao (National Space Science Center, Chinese Academy of Sciences)

Poster Number: M11

Poster - Unusual refilling of the slot region between the Van Allen radiation belts from November 2004 to January 2005

Shen, Xiaochen (Shandong University)

Poster Number: M12

Poster - Statistical study of the storm-time radiation belt evolution during Van Allen Probes era: CME- versus CIR-driven storms

Redmon, Robert (NOAA)

Poster Number: M13

Poster - New GOES High-Res Magnetic Measurements: Characterization of ULF Waves

Oh, Daehyeon (National Meteorological Satellite Center)

Poster Number: M14

Poster - The Korean Space wEather Monitor (KSEM): The First Space-based Magnetometer on the Eastern Hemisphere

Brown, Denzel (Presbyterian College)

Poster Number: M15

Poster - Superposed Epoch Analysis of Physiological Fluctuations: Possible Space Weather Connections

Cook, Michael (University of North Dakota)

Poster Number: M16

Poster - Analysis of Citizen Science Aurora Data Collected by Aurorasaurus in 2016

Heyns, Michael (South African National Space Agency)

Poster Number: M17

Poster - Ensemble Estimation of Network Parameters: Strengthening the GIC Modelling Chain

Luo, Bingxian (National Space Science Center)

Poster Number: M18

Poster - Two empirical models for short-term forecast of Kp

Sokolova, Olga

Poster Number: M19

Poster - Method of Primary Evaluation of Power Grid Robustness to Geomagnetic Disturbance

Lopate, Clifford (University of New Hampshire)

Poster Number: M20

Poster - The GOES-16 Energetic Heavy Ion Instrument Proton and Helium Fluxes for Space Weather Applications

Connell, J.J. (University of New Hampshire)

Poster Number: M21

Poster - The GOES-16 Energetic Heavy Ion Instrument Heavy Ion Fluxes for Space Weather Applications

