

## **CEDAR Poster Session #2 – Tuesday, 30 June 2009, 4-7 pm**

(39 of 96 posters in competition)

<b>SOLA</b>	Solar Terrestrial Interactions in the Upper Atmosphere (6 of 17 posters in competition)
<b>ITIT</b>	Instruments or Techniques for Ionosphere or Thermosphere Observation (10 of 30 posters in competition)
<b>DATA</b>	Data Assimilation (0 of 4 posters in competition)
<b>EQIT</b>	Equatorial Ionosphere or Thermosphere (9 of 21 posters in competition)
<b>LTRV</b>	Long Term Variations of the Upper Atmosphere (0 of 2 posters in competition)
<b>MDIT</b>	Midlatitude Ionosphere or Thermosphere (9 of 15 posters in competition)
<b>POLA</b>	Polar Aeronomy (5 of 7 posters in competition)

### **Solar Terrestrial Interactions in the Upper Atmosphere**

- SOLA-01**, Kelly Ann Drake, High-latitude Poynting flux observations during the solar and geomagnetic activity in September 2005, Non-student
- SOLA-02**, David Gerhardt, Colorado Student Space Weather Experiment (CSSWE): In-situ Measurements of Solar Energetic Particles, Student IN poster competition PhD
- SOLA-03**, Barbara Emery, Solar Forcing of Electron and Ion Auroral Inputs, Non-student
- SOLA-04**, Yvonne Rinne, Stratification of newly reconnected flux in the polar cap ionosphere, Student IN poster competition PhD
- SOLA-05**, David Pawlowski, An investigation into the effect of solar flares on the thermosphere, Student IN poster competition PhD
- SOLA-06**, Mariangel Fedrizzi, Variability and climatology of the upper atmosphere during IPY using CTIPe physical-model, Non-student
- SOLA-07**, Ellen Pettigrew, A Statistical Model of Ionospheric Convection in the Southern Hemisphere, Student IN poster competition Masters
- SOLA-08**, Delores Knipp, Enhanced Thermospheric Density: The Roles of In-the-Ecliptic and Northward Interplanetary Magnetic Field, Non-student
- SOLA-09**, Chin Lin, Occurrence of High Latitude Neutral Density Peaks, Non-student
- SOLA-10**, Katherine Roach, Variation of the Vertical Thermospheric Wind Gradients, Student IN poster competition PhD
- SOLA-11**, Xiaoli Luan, Seasonal and hemispheric variations of the total auroral precipitation energy flux from TIMED/GUVI, Non-student
- SOLA-12**, Justin Yonker, Fluorescence of the N2 Birge-Hopfield I System in the Thermospheric Dayglow, Student IN poster competition PhD
- SOLA-13**, Tomoko Matsuo, Principal modes of thermospheric density variability: empirical orthogonal function analysis of CHAMP 2001-2008 data, Non-student
- SOLA-14**, Xianjing Liu, Altitude dependence of the thermospheric density response to the solar and geomagnetic forcing, Student NOT in poster competition PhD
- SOLA-15**, Yong Shi, Tail and ionospheric signatures of tail fast flows associated with PBIs and with Substorms, presented by Larry Lyons, Non-student
- SOLA-16**, Russell Stoneback, Effective Aperture Behavior of Open Magnetic Field Lines in the Geospace Environment and on the Sun, Non-student
- SOLA-17**, Serge Minin, Fabry-Perot measurements of H-alpha emissions at Arecibo observatory during geomagnetic storms, Student NOT in poster competition PhD

### **Instruments or Techniques for Ionospheric or Thermospheric Observation**

- ITIT-01**, Serge Minin, Uncertainties in extracted Gaussian emission line parameters: measurement setup choices in Doppler spectroscopy with continuum background, Student IN poster competition PhD
- ITIT-02**, Alexander Hackett, Multi-purpose Radar Controller, Student IN poster competition Undergraduate
- ITIT-03**, Benjamin Burnett, Statistical analysis of high-latitude F-region ionospheric composition, Student NOT in poster competition Undergraduate
- ITIT-04**, Gary Bust, Validation of IDA4D estimates of F-region electron densities using CHAMP in-situ and ground-based ionosonde observations of electron density, Non-student
- ITIT-05**, Eli Hibit, Numerical Predictions on Mid-Latitude Ionospheric Locations, Student IN poster competition PhD
- ITIT-06**, Hugh Gallagher, The NorthEast CIDR Array: A new chain of ionospheric tomography receivers for studying the equatorward edge of the auroral oval and the mid-latitude trough, presented by Allen Weatherwax, Non-student

**ITIT-07**, Trevor Garner, An Auroral Scintillation Observation using Precise Collocated GPS Receivers, Non-student

**ITIT-08**, Ayman Mahrous, The First Result of Coherent Ionospheric Doppler Receiver Measurements over Egypt, presented by Trevor Garner, Non-student

**ITIT-09**, Stephen Bayne, Observations of the auroral electrojet plasma using UHF/VHF radio beacon measurements, Student NOT in poster competition Undergraduate

**ITIT-10**, Ryan Davidson, Development, Simulations, and Validations of CubeSat Retarding Potential Analyzer, Student NOT in poster competition Masters

**ITIT-11**, Konstantinos Kalogerakis, Remote Oxygen Sensing by Ionospheric Excitation (ROSIE), Non-student

**ITIT-12**, Patrick Roddy, Initial Electron Temperature Results from the Planar Langmuir Probe on C/NOFS, Non-student

**ITIT-13**, Lei Zhang, Robust GPS Signal Tracking under Ionosphere Scintillation, Student IN poster competition PhD

**ITIT-14**, Cesar De La Jara, The LISN database: Description and initial results, Student NOT in poster competition Undergraduate

**ITIT-15**, Brady O'Hanlon, First Observations of Equatorial TEC and Scintillation with Multiple Dual-Frequency Software-Defined GPS Receivers, Student IN poster competition PhD

**ITIT-16**, Jeffrey Spaleta, Application of Bayesian Spectral Analysis to SuperDARN ACF Data, Non-student

**ITIT-17**, Richard Todd Parris, Imaging with the Kodiak Island SuperDARN HF Radar, Student IN poster competition PhD

**ITIT-18**, Rabiano Rodrigues, Simultaneous radar measurements of daytime zonal and vertical plasma drifts in Peru and Brazil, Non-student

**ITIT-19**, Fabiano Rodrigues, An alternative approach for estimating E-region density profiles from GPS radio occultation measurements, Non-student

**ITIT-20**, Romina Kiloukar, Amplitude modulation for Arecibo F-region ISR experiments, Student NOT in poster competition PhD

**ITIT-21**, Marcin Pilinski, Understanding Biases in Atmospheric Density Derived from Satellite Drag, Student IN poster competition Masters

**ITIT-22**, Steven Burr, Advanced techniques of tomographic reconstruction algorithms for observing the night time ionospheric air glow, Student NOT in poster competition

**ITIT-23**, Andres Stephan, RAIDS: A New Mission for Ionospheric and Lower Thermospheric Science, Non-student

**ITIT-24**, Matthew Sunderland, Design of a Digital Pulsed Radar Receiver: Increasing Aeronomy Observation Bandwidth at Arecibo Observatory, Student IN poster competition Undergraduate

**ITIT-25**, Sandeep Anna Kor, Optimization of GC314 Digital Receiver, Student NOT in poster competition Masters

**ITIT-26**, Padmashri Suresh, Estimation of Langmuir Probe Currents in the event of Surface Potential Variation, Student IN poster competition Masters

**ITIT-27**, Siming Zhao, The role of geomagnetic field on the occurrence of specular meteor trails, Student NOT in poster competition Masters

**ITIT-28**, Christopher Watts, Ionospheric measurements from LWA calibration, Non-student

**ITIT-29**, Yiyi Huang, Estimation of Temperature and Wind Velocity Profiles in Upper Atmosphere Using Fabry-Perot Interferometers, Student IN poster competition PhD

**ITIT-30**, Priyanka Chandrasekran, Higher Order Ionosphere Error in GPS Measurements, presented by Yu Morton, Student NOT in poster competition Undergraduate

## Data Assimilation

**DATA-01**, Nick Matteo, Ionosphere geomagnetic field: comparison of IGRF model prediction and satellite measurements, presented by Yu Morton, Student NOT in poster competition Masters

**DATA-02**, Donald Rice, An Expert System for Ionogram Reduction (ESIR), Non-student

**DATA-03**, Juan Urco Cordero, The Madrigal database at Jicamarca Radio Observatory: Data from the main instruments of Jicamarca available to the world, Student NOT in poster competition Undergraduate

**DATA-04**, Akinori Saito, Dagik: Data-showcase system for the geospace using Google Earth, presented by Michi Nishioka, Non-student

## Equatorial Ionosphere or Thermosphere

**EQIT-01**, Michi Nishioka, Preliminary Comparison of In-Situ Plasma Density Structures from C/NOFS at dusk with TEC and Scintillation Data from LISN obtained during October 2008, Student NOT in poster competition PhD

**EQIT-02**, Glenn Joyce, Atomic and molecular ion dynamics during equatorial spread F, Non-student

**EQIT-03**, Jonathan Krall, Three-Dimensional Modeling of Equatorial Spread-F Airglow Enhancements, Non-student

**EQIT-04**, Narayan Chapagain, Ionospheric OI 630 nm Airglow Depletion Zonal Velocities over Ascension Island, Student IN poster competition PhD

**EQIT-05**, Ronald Ilma, On the possibility to infer ionospheric electric fields from the bottomside equatorial F-region

Irregularities, Student IN poster competition PhD

**EQIT-06**, Yi-Jiun Su, Assimilative Modeling of Equatorial Plasma Depletions Observed by C/NOFS, Non-student

**EQIT-07**, Yann Paul Tambouret, Investigating Medium to Short Scale E-region Gradient Drift Waves Using Hybrid Simulations, Student IN poster competition PhD

**EQIT-08**, Ethan Miller, Equatorial Spread-F in the Central Pacific: Seven Years of Airglow and Radar Data, Student NOT in poster competition PhD

**EQIT-09**, Ehtan Miller, Coincidence of Equatorial and Mid-Latitude Irregularities, Student IN poster competition PhD

**EQIT-10**, Gopi Kreshna Seemala, Studies of equatorial spread F using LISN VIPIR, Non-student

**EQIT-11**, Tzu-Wei Fang, Causal link of the wave-4 structures in plasma density and vertical plasma drift in the low-latitude Ionosphere, Student IN poster competition PhD

**EQIT-12**, Joe McInerney, The Thermospheric Midnight Temperature Maximum (MTM) As Seen in the Extended Whole Atmosphere Community Climate Model (WACCM-X), Non-student

**EQIT-13**, Robert Haaser, C/NOFS Neutral Wind Meter Measurements of Neutral Thermospheric Helium Dominance at 400 km during Extreme Solar Minimum, Student IN poster competition PhD

**EQIT-14**, Patrick Alken, Modeling the day-time eastward equatorial electric field, Student NOT in poster competition PhD

**EQIT-15**, Christopher Miller, Use of Incoherent Scatter Radar Data to Study the Equatorial Midnight Temperature Maximum (MTM), Student IN poster competition Undergraduate

**EQIT-16**, John Meriwether, The detection of a secondary peak in the nighttime measurements of thermospheric temperatures at Arequipa Peru (16.5S, 71.5 W), Non-student

**EQIT-17**, Nicholas Pedatell, Inter-annual variability in the longitudinal structure of the low-latitude ionosphere due to the El-Nino Southern Oscillation, Student NOT in poster competition PhD

**EQIT-18**, Michael Olson, Equatorial Zonal Electric Fields during the 2003 Sudden Stratospheric Warming Event, Student NOT in poster competition PhD

**EQIT-19**, Pablo Reyes, Estimation of ionospheric temperatures using Jicamarca IS radar data with beams pointed perpendicular to the geomagnetic field, Student IN poster competition Masters

**EQIT-20**, Seebany Datta-Burua, Estimating Model Parameters from Ionospheric Reverse Engineering, Non-student

**EQIT-21**, Glenn Sugar, Non-specular meteor measurements of lower thermosphere winds, Student IN poster competition Undergraduate

## **Long-Term Variations of the Upper Atmosphere**

**LTRV-01**, Susan Nossal, Long Term Monitoring of Geocoronal Hydrogen, Non-student

**LTRV-02**, Eva Robles, Climatology of the antiparallel plasma drift over Arecibo Observatory, Non-student

## **Midlatitude Ionosphere or Thermosphere**

**MDIT-01**, Diana Prado, Topside ionosphere responses to a moderate geomagnetic storm, Student IN poster competition Undergraduate

**MDIT-02**, Yun Gong, Numerical simulation and observational study of ion layer formation at Arecibo, Student IN poster competition Masters

**MDIT-03**, Edgardo Pacheco, Quiet time Latitudinal Variations of Ion drifts in the Ionosphere at Low-and Middle Latitudes, Student IN poster competition PhD

**MDIT-04**, Edvier Cabassa-Miranda, Analysis of Arecibo dual beam world day data from 2006 to present – Results from the weakest solar minimum since 1928, Student IN poster competition Undergraduate

**MDIT-05**, Larisa Goncharenko, Ionospheric variations during January 2009 stratospheric sudden warming, Non-student

**MDIT-06**, Larisa Goncharenko, Joint FPI/ISR Observations at Millstone Hill Observatory, Non-student

**MDIT-07**, Peichen Lai, COSMIC Observations of TEC Enhancements during Magnetic Disturbances, Student IN poster competition PhD

**MDIT-08**, Ilgin Seker, The Properties and 3D Structure of Medium Scale Traveling Ionospheric Disturbances, Student IN poster competition PhD

**MDIT-09**, Tatsuhiro Tokoyame, Three-dimensional simulation of the coupled Perkins and Es layer instabilities in the nighttime midlatitude ionosphere, Non-student

**MDIT-10**, Jonathan Thompson, Tool for the Assessment of Ionospheric Models, Student IN poster competition Undergraduate

**MDIT-11**, Gregory Twork, Midlatitude Observations of the Thermosphere Implementing a Fabry-Pérot Interferometer, Student IN poster competition Undergraduate

**MDIT-12**, Russell Hedden, SOFDI/CASI Observations of the September 2005 Storm, Student IN poster competition PhD

**MDIT-13**, Elise Larson, Multi Line Investigations of the Hydrogen Geocorona, presented by Edwin Mierkiewicz, Student NOT in poster competition Undergraduate

**MDIT-14**, Goderdzi Didebulidze, Impulse-like increase of the nightglow [OI] 630 nm line intensity and its possible reason as a shear excited atmospheric vortical perturbations, presented by Nikoloz Gudaze, Non-student

**MDIT-15**, Yan Yin, Prompt Penetration of the Interplanetary Electric Field to the Mid Latitude Ionosphere, Student NOT in poster competition PhD

## **Polar Aeronomy**

**POLA-01**, Erik Lundberg, Preliminary Results from the CASCADES-2 Sounding Rocket, Student IN poster competition PhD

**POLA-02**, Matthew Zettergren, Dynamic variability in ionospheric composition at high latitudes, Student NOT in poster competition PhD

**POLA-03**, Carl Andersen, Measurement of E-region neutral winds with the Poker Flat all-sky imaging Fabry-Perot Spectrometer, Student IN poster competition Masters

**POLA-04**, Thomas Butler, Estimation of vector velocity field using an array of spatially distributed ISR measurements, Student NOT in poster competition PhD

**POLA-05**, Gabriel Michhue, The role of  $k_{\parallel}$  on wave heating in the auroral E region, Student IN poster competition PhD

**POLA-06**, Brent Sadler, Numerical Estimates of Polar Cusp Neutral Upwelling Using Satellite Conjunction Data, Student IN poster competition PhD

**POLA-07**, Erik Stromberg, Double Probe Electric Field Measurements, Student IN poster competition Undergraduate