CEDAR - MLT Poster Session – Wednesday, June 26, 2013

(46 of 74 posters in competition)

COUP Coupling of the Upper Atmosphere with Lower Altitudes (2 of 4 posters in competition)
ITMA Instruments or Techniques for Middle Atmosphere Observations (2 of 9 posters in competition)
LTVM Long-Term Variations of the Mesosphere and Lower Thermosphere (0 of 1 posters in competition)
METR Meteor Science other than Wind Observations (11 of 11 posters in competition)
MLTG Mesosphere and Lower Thermosphere Gravity Waves (12 of 19 posters in competition)
MLTL Mesosphere and Lower Thermosphere Lidar Studies (7 of 11 posters in competition)
MLTS Mesosphere or Lower Thermosphere General Studies (1 of 3 posters in competition)
MLTT Mesosphere and Lower Thermosphere Other Tidal, Planetary Waves, or Sudden Stratospheric Warnings (4 of 8 posters in competition)
SPRT Sprites (7 of 8 posters in competition)

Coupling of the Upper Atmosphere with Lower Altitudes

COUP-01, Greg Lucas, Student IN poster competition Analytic Model of the Global Electric Circuit

COUP-02, Sotirios A. Mallios, Student IN poster competition Time-Dependent Model of the Global Electric Circuit

COUP-03, Brentha Thurairajah, Non-student Downward Transport of Nitric Oxide during recent Arctic Winters

COUP-04, Houjun Wang, Non-student Coupling the Whole Atmosphere Model (WAM) with the Global Ionosphere-Plasmasphere (GIP) Model

Instruments or Techniques for Middle Atmosphere Observations

ITMA-01, Tao Li, Non-student System design of a mobile ozone DIAL lidar

ITMA-02, Jonathan S. Friedman, Non-student MRI PR-LASER Upgrade to the Arecibo Resonance Doppler LIDAR

ITMA-03, Marcos Inonan, Student IN poster competition New capabilities of Jicamarca incoherent scatter radar system

ITMA-04, Kasey Johnson, Student NOT in poster competition A New Opportunity for Passive Optical Measurements Inside US National Parks in Utah

ITMA-05, Alessandra Abe Pacini, Non-student The role of the transient solar radio emission on the estimation of 30 MHz D-region absorption using riometers

ITMA-06, John P. Swoboda, Student IN poster competition Optimal Beam-Space Sampling Methods for Electronically Steerable ISR

ITMA-07, Cheng Xuewu, Non-student Daytime observation of sodium layer using Faraday filter lidar technique

ITMA-08, Jia Yue, Non-student Joint observations of concentric convectively-excited gravity waves using ground-based airglow imagers, AIRS on Aqua, CIPS on AIM and VIIRS on Suomi NPP measurements

ITMA-09, Ting-Han Lin, Student NOT in poster competition Vertical Shear of Mean Doppler Velocity in Sporadic E Layer Structure

Long Term Variations of the Mesosphere and Lower Thermosphere

LTVM-01, Jens Lautenbach, Non-student 10-years of potassium lidar measurements at 54°N

Meteor Science other than Wind Observations

METR-01, Alexander Fletcher, Student IN poster competition Simulation of Meteoroid Impact Induced Electrical Anomalies on Spacecraft

METR-02, Freddy Galindo, Student IN poster competition On the Effect of Turbulence on Specular Meteor Echoes

METR-03, Boyi Gao, Student IN poster competition Phase and Amplitude Calibration of the Jicamarca Radar Using Satellites

METR-04, Lorenzo Limonta, Student IN poster competition Inference of thermosphere density from metor ablation

METR-05, Steven Pifko, Student IN poster competition Meteoroids and Space Weather: A Probabilistic Approach to Modeling the Large-Scale Distribution in Geospace

METR-06, Ana Maria Tarano, Student IN poster competition Characterization of Nonspecular Radar Meteor Trails and Correlation to Corresponding Head Echo Data

METR-07, Cody Vaudrin, Student IN in poster competition Numerical Calculation of Ground Illumination Patterns from Specular Meteor Trail Scatter Under Arbitrary Transmitter, Receiver and Trail Geometries

METR-08, Ryan Volz, Student IN poster competition Error bars and statistics for meteor head echoes measured with the Millstone Hill Radar

METR-09, Jonathan Yee, Student IN poster competition Detection Dependence of Nonspecular Meteor Trail Turbulent Diffusion Structure on Radar Frequency and Polarization

METR-10, Qian Zhu, Student IN poster competition Radar Interferometric Imaging using compressed sensing for the Case of Point Targets

METR-11, Theresa Johnson, Student IN poster competition A Micro-Scale Radar Study of Hypervelocity Micrometeoroid Impact Plasma for Localising Instability Driven RF Emission
Special Note: Poster will be located in IRRI – 15 location due to cancelation

MLT Gravity Waves

MLTG-01, Jaime Aguilar Guerrero, Student IN poster competition Cancellation Effect in All Sky Imager Observation of Gravity Waves and Its Implications for Wave Analysis

MLTG-02, Ryan Matthew Agner, Student IN poster competition Comparison of gravity wave momentum flux from observations and GCMs

MLTG-03, Katrina Bossert, Student IN poster competition Measurements of a gravity wave ducting environment in the Arctic mesosphere using combined lidar and Advanced Mesospheric Temperature Mapper data

MLTG-04, Michael Laurence Buzbee, Student IN poster competition Climatology and Characteristics of Mesospheric Inversion Layers Over Utah

MLTG-05, Justin N. Carstens, Non-student Case study of a gravity wave observation near the stratopause using UV satellite imagery

MLTG-06, Cao Chen, Student NOT in poster competition Characteristics of the Inertia-Gravity Waves in Antarctic MLT Revealed by Lidar, Radar and OH Imager

MLTG-07, Neal Criddle, Student IN poster competition Mesospheric Mountain Wave Temperatures at Cerro Pachon, Chile

MLTG-08, Geoff Crowley, Non-student Acoustic Waves Detected by the TIDDBIT (TID Detector Built in Texas) System

MLTG-09, Margit Elisabet Dyrland, Non-student Propagation of mesospheric gravity waves at 78°N

MLTG-10, Stephen Hall, Student IN poster competition Estimation of Atmospheric Gravity Wave Parameters from Airglow Imagery

MLTG-11, Christopher James Heale, Student IN poster competition Simulations of reflected and partially ducted waves over Halley, Antarctica

MLTG-12, Xiao Liu, Non-student Large winds/wind shears in the MLT region induced by Gravity wave breaking and its interactions with tides

MLTG-13, Takashi Matsuda, Student IN poster competition New statistical processing of airglow imaging data using 3D spectral analysis

MLTG-14, Michael Negale, Student IN poster competition Winter climatology of short period mesospheric gravity waves over Alaska

MLTG-15, Jonathan R. Pugmire, Student IN poster competition Observations of Mesospheric Temperature Variability Over the Andes

MLTG-16, Lynsey B. Schroeder, Student IN poster competition Adaptation and Validation of an Atmospheric Model to Simulate Acoustic and Gravity Waves in the Martian MLT

MLTG-17, Christina Wittwer, Student IN poster competition Infrared imaging of short-period mesospheric gravity waves under adverse light conditions from Utah State campus

MLTG-18, Chihoko Yamashita, Non-student Responses of Global Gravity Waves to Planetary Wave Anomalies Using SABER Observations

MLTG-19, Nikolay Zabotin, Non-student Infragravity Waves in the Ocean as a Source of Acoustic-Gravity Waves in the Atmosphere

MLT Lidar Studies

MLTL-01, Ian Forest Barry, Student IN poster competition Expansion of Na Doppler lidar to lower atmospheric and daytime observations

MLTL-02, Xuguang Cai, Student IN poster competition Concurrent observation of USU Sodium Lidar and Advanced Mesosphere Temperature Mapper (AMTM) on gravity wave breaking over Logan, North Utah

MLTL-03, Wentao Huang, Non-student Simultaneous Lidar Observations of Fe, Na, Temperature and Wind: Modeling Correlation in Density Perturbations and Computing Vertical Fluxes

MLTL-04, Caitlin Kerr, Student NOT in poster competition Thermospheric K layer observed over Arecibo

MLTL-05, John Anthony Smith, Student IN poster competition Direct measurement of MLT Eddy flux made possible by significant gains in resonance-fluorescence signal levels

MLTL-06, Leda Sox, Student IN poster competition Rayleigh Lidar Temperature Studies in the Upper Mesosphere and Lower Thermosphere

MLTL-07, Eric Garcia Torche, Student NOT in poster competition Correlative studies between sodium and electron concentrations over Arecibo

MLTL-08, Takuo T. Tsuda, Non-student A case study on sodium atom layer variation induced by auroral particle precipitation

MLTL-09, John Westerhoff, Student IN poster competition Development of High Power-Aperture Rayleigh Lidar for Middle and Upper Atmospheric Studies

MLTL-10, Robin Wing, Student IN poster competition Rayleigh Lidar Measurements of Temperature and Gravity Waves in the Arctic Middle Atmosphere

MLTL-11, Zhibin Yu, Student IN poster competition Preliminary Results of Modeling Thermospheric Fe Layers

Mesosphere or Lower Thermosphere General Studies

MLTS-01, Heiner Asmus, Student NOT in poster competition Charged Mesospheric Ice Particles: In situ measurements during the PHOCUS 2011 rocket campaign and comparison of the results with a microphysical model

MLTS-02, Padma L. Carstens, Student IN poster competition Observations and solar cycle variation of SOFIE NO in the lower thermosphere

MLTS-03, Tao Yuan, Non-student Coordinated investigation of mid-latitude Upper Mesospheric Temperature inversion layer and the associated gravity wave forcing by Na lidar and Mesospheric Temperature Mapper at Logan, Utah (42 □N, 112□W)

MLT Other Tidal, Planetary Waves, or Sudden Stratospheric Warmings

MLTT-01, Thomas Stephen Ehrmann, Student IN poster competition Identification and Classification of Stratospheric Sudden Warming Events

MLTT-02, Larisa P. Goncharenko, Non-student Timeline of January 2013 Sudden Stratospheric Warming Event as seen in Real-Time Assimilative IRI and GPS Data

MLTT-03, Katelynn Greer, Student IN poster competition Planetary Wave Breaking and Extreme Temperature Excursion in the Polar Winter Middle Atmosphere

MLTT-04, McArthur Jones Jr., Student IN poster competition Impact of Tropospherically-Generated Tides on the Mean State of the Ionosphere-Thermosphere System

MLTT-05, Andrew J. Kavanagh, Non-student Mesospheric Planetary Waves over Antarctica from 2002 to 2010

MLTT-06, Xian Lu, Non-student Thermal Tides and Eastward Propagating Planetary Waves in the Winter Antarctic

MLTT-07, Vu Nguyen, Student IN poster competition Is the Day-to-Day Variability of the Migrating Diurnal Tide Stochastic or Deterministic?

MLTT-08, Qian Wu, Non-student Mesospheric and Thermospheric Observations of the January 2010 Stratospheric Warming Event

Sprites

SPRT-01, Caitano L. da Silva, Student IN poster competition Model of streamer-to-leader transition in the Earth's atmosphere

SPRT-02, Rasoul Kabirzadeh, Student IN poster competition Parallel 3D modeling of quasi-electrostatic fields above thunderstorms

SPRT-03, Burcu Kosar, Student IN poster competition Characteristics of optical emissions from streamer formation from ionospheric patches at subbreakdown conditions

SPRT-04, Jeremy Pachter, Student IN poster competition Investigation of Long-delayed Sprite Inception Mechanism and the Role of Electron Detachment

SPRT-05, Victor P. Pasko, Non-student Earthquake Lights: Time-dependent Earth surface-ionosphere coupling model

SPRT-06, Jianqi Qin, Student IN poster competition Mechanism of Column and Carrot Sprites Derived from Optical and Radio Observations

SPRT-07, Samaneh Sadighi, Student IN poster competition The Effects of Ambient Density on Streamer Emission from Hydrometeors in Subbreakdown Electric Fields

SPRT-08, Wei Xu, Student IN poster competition Monte Carlo Simulation of X-ray Emissions Produced by Stepping Lightning Leaders