

CEDAR MLT Poster Session – Wednesday, June 25, 2014
(46 of 73 posters in competition)

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| COUP | Coupling of the Upper Atmosphere with Lower Alts (4 of 10 posters in competition) |
| ITMA | Instruments or Techniques for Middle Atmosphere Observations (4 of 7 posters in competition) |
| LTVM | Long Term Variations of the Mesosphere and Lower Thermosphere (4 of 4 posters in competition) |
| METR | Meteor Science other than wind observations (8 of 11 posters in competition) |
| MLTG | Mesosphere and Lower Thermosphere Gravity Waves (11 of 18 posters in competition) |
| MLTL | Mesosphere and Lower Thermosphere Lidar Studies (8 of 14 posters in competition) |
| MLTS | Mesosphere or Lower Thermosphere General Studies (0 of 1 poster in competition) |
| MLTT | Mesosphere and Lower Thermosphere Other Tidal, Planetary Waves, or Sudden Stratosphere Warnings (5 of 5 posters in competition) |
| SPRT | Sprites (2 of 3 posters in competition) |

Coupling of the Upper Atmos with Lower Alts

- COUP-01** Gasperini, Federico, Student IN poster competition Daily variation of diurnal thermal tides from CHAMP and GOCE accelerometer measurements
- COUP-02** Grawe, Matthew A., Student NOT in poster competition Investigating ocean-ionospheric coupling
- COUP-03** Gu, Sheng-Yang, Student IN poster competition Ionospheric vertical plasma drift perturbations due to the quasi-2 day wave
- COUP-04** Jones, Jr., McArthur, Student IN poster competition Tidal-Induced net transport effects on the oxygen distribution in the thermosphere
- COUP-05** Kim, Jeong Han, Non-student Coupling of the northern polar vortex to mesospheric temperatures during Sudden Stratospheric Warming
- COUP-06** Salem, Mohammad A., Student NOT in poster competition The dependence of ionospheric densities on small electrostatic fields in the mesosphere and lower ionosphere
- COUP-07** Haeusler, Kathrin, Non-student Comparison of TIME-GCM/MERRA simulated tides with LEO satellite observations
- COUP-08** Drob, Douglas Patrick, Non-student Simulations of the effects of vertical transport on the Thermosphere and ionosphere using two coupled models
- COUP-09** Cook, Matthew W., Student IN poster competition Effects of the Migrating Terdiurnal Tide in the Ionosphere and Thermosphere
- COUP-10** Lin, Charles, Non-student Study of relationships between the ionospheric and thermospheric tidal signatures using theoretical models

Instruments or Techniques for Middle Atmosphere Observations

- ITMA-01** Barjatya, Aroh, Non-student Triboelectric current measurements from a multi-surface Langmuir probe in the mesosphere
- ITMA-02** Rainville, Nicholas, Student IN poster competition Multistatic Specular Meteor Radar

- ITMA-03** Robinson, Rebecca Anne, Student IN poster competition Spectral Width Calculations from Mesospheric Turbulent Layers Detected from JRO and SOUSY
- ITMA-04** Scipion, Danny Eddy, Non-student Mesospheric winds obtained from simultaneous 30MHz and 50MHz All-sky Specular Meteor Radars at Jicamarca
- ITMA-05** Stark, Johnathon, Student IN poster competition QB50 - Multipoint, In-Situ, Measurements of the Lower Thermosphere via CubeSat Constellation
- ITMA-06** Westerhoff, John, Student NOT in poster competition Lower Atmosphere/Ionosphere Coupling Experiment CubeSat Mission (LAICE)
- ITMA-07** Kristoffersen, Samuel, Student IN poster competition Wind and Temperature Observations with ERWIN-II

Long Term Variations of the Mesosphere and Lower Thermosphere

- LTVM-01** DiMenichi, Chris, Student IN poster competition The Influence of CO₂ Concentration and F10.7 Variations on Mesospheric Airglow Emissions
- LTVM-02** Gan, Quan, Student IN poster competition Temperature response to the 11-yr solar cycle in the eCMAM30 simulation and SABER observation
- LTVM-03** Nischal, Nirmal, Student IN poster competition Nonmigrating tidal impact on carbon dioxide 15 μm infrared cooling of the lower thermosphere over one solar cycle
- LTVM-04** Triplett, Colin Charles, Student IN poster competition A multi-year analysis of Rayleigh lidar measurements from the Poker Flat Research Range in Chatanika, Alaska

Meteor Science other than wind observations

- METR-01** Dawkins, Erin, Student IN poster competition The mesospheric potassium layer: updated results from the OSIRIS satellite dataset
- METR-02** Fletcher, Alexander, Student IN poster competition Assessing the threat that meteoroid generated plasmas pose to spacecraft
- METR-03** Gao, Boyi, Student IN poster competition Phase De-aliasing of Point Targets Observed with Jicamarca 50 MHz Array Radar Using Multi-Baseline Receiving Modules
- METR-04** Limonta, Lorenzo, Student NOT in poster competition Meteor detection algorithm in optical and radar measurements
- METR-05** Sugar, Glenn, Student IN poster competition Initial Results from Simultaneous Optical and Radar Meteor Observations at Poker Flat Research Range
- METR-06** Tarano, Ana Maria, Student IN poster competition Correlation Between Non-Specular Radar Meteor Trails and Corresponding Head Echo Data
- METR-07** Volz, Ryan, Student IN poster competition Freedom from Matched Filter Constraints: Sparse Decomposition of Radar Signals for Delay-Frequency Sidelobe Removal
- METR-08** Yang, I-Ching, Non-student To establish the automatic observation system for the fantastic luminous phenomena and the Taiwan Elegant Meteor and TLE Network
- METR-09** Yee, Jonathan, Student IN poster competition Implications of Aspect Sensitivity and Frequency Dependence on Nonspecular Meteor Trail Turbulence

- METR-10** Zhu, Qian, Student IN poster competition Radar Holography via joint sparsity model
- METR-11** Evans, Wayne F.J., Non-student The Altitude Distribution of Iron Monoxide in the Mesosphere

Mesosphere and Lower Thermosphere Gravity Waves

- MLTG-01** Agner, Ryan Matthew, Student IN poster competition Comparison of parameterized gravity forcing in WACCM and eCMAM and their effect on the Diurnal Tide
- MLTG-02** Aguilar Guerrero, Jaime, Student IN poster competition Mountain waves observed with an All Sky Imager at the Andes Lidar Observatory
- MLTG-03** Cao, Bing, Student IN poster competition Intermittency of Gravity Wave Momentum Flux in the Mesopause Region Observed with All Sky Imager in Maui and Cerro Pachón
- MLTG-04** Carstens, Justin Neal, Non-student UV albedo perturbations produced by gravity waves as seen from space
- MLTG-05** Cullens, Chihoko Yamashita, Non-student The 11-year Solar Cycle Signature on Gravity Waves
- MLTG-06** Fisher, Daniel J., Student IN poster competition Simulating Thermospheric Optical Observations in the Presence of a Gravity Wave
- MLTG-07** Negale, Michael R., Student IN poster competition Thermospheric Gravity Wave Observations over Alaska Using the Poker Flat Incoherent Scatter Radar
- MLTG-08** George, Richard, Student NOT in poster competition The Effects of Gravity Waves on Airglow Temperatures in the MLT Region
- MLTG-09** Guo, Yafang, Student IN poster competition Vertical Na and heat flux by gravity waves over the Andes Lidar Observatory
- MLTG-10** Hall, Stephen, Student IN poster competition Calculation of Gravity Wave Altitude Limits
- MLTG-11** Heale, Christopher, Student IN poster competition Numerical simulations of small-scale gravity wave propagation through horizontally and vertically varying background winds
- MLTG-12** Lu, Xian, Non-student Vertical Evolution of Gravity Wave Potential Energy and Spectra from 30 to 110 km at McMurdo (77.8°S, 166.7°E), Antarctica
- MLTG-13** Lu, Xian, Non-student, presented by PhD student Jian Zhao, A coordinated study of high-frequency gravity waves using lidars and temperature mapper
- MLTG-14** Mehta, Dhvanit, Student IN poster competition Gravity Wave Characterization and Ray-tracing over South Pole
- MLTG-15** Nielsen, Kim, Non-student Multi-Year Analysis of Short-Period Gravity Waves Over Alaska Under Various Stratospheric Weather Conditions
- MLTG-16** Pugmire, Jonathan, Student IN poster competition Initial Measurements of Mesospheric Gravity Waves over McMurdo, Antarctica
- MLTG-17** Vail, Christopher, Student IN poster competition Gravity Wave Parameters over Eureka, Canada in 2008-2009

MLTG-18 Vargas, Fabio, Student NOT in poster competition Uncertainties on Gravity Wave Parameters Obtained from Nightglow Image Data

Mesosphere and Lower Thermosphere Lidar Studies

MLTL-01 Barry, Ian Forest, Student IN poster competition Applications of Atomic Filters in Na Doppler Lidar

MLTL-02 Barton, David Lee, Student IN poster competition Seasonal Variations of Relative Neutral Densities between 45 and 90 km Determined from USU Rayleigh Lidar Observations

MLTL-03 Cai, Xuguang, Student IN poster competition Investigations on seasonal variations of Gravity waves forcing by Na lidar over Logan, Utah (41.7°N, 111.8°W)

MLTL-04 Fong, Weichun, Student IN poster competition Lidar observations of temperature climatology from 0 to 110 km and mechanism study of winter temperature tides of fast amplitude growth above 100 km at McMurdo (77.8S, 166.7E), Antarctica

MLTL-05 Gao, Qi, Student NOT in poster competition Thermospheric sodium layers observed by lidars at five sites over China

MLTL-06 Gerding, Michael, Non-student Daytime lidar soundings in the mesosphere: New results from IAP lidars at Kühlungsborn

MLTL-07 Huang, Wentao, Non-student Direct measurements of vertical gravity-wave and eddy heat and Na fluxes in the mesosphere and lower thermosphere at Boulder (40°N, 105°W), Colorado

MLTL-08 Li, Jintai, Student IN poster competition First lidar observation of the mesospheric nickel layer

MLTL-09 Sox, Leda, Student IN poster competition Midlatitude Mesospheric Temperature Anomalies During Major SSW Events as Observed with Rayleigh-Scatter Lidar

MLTL-10 Thomas, David Matthew, Student IN poster competition Wide Dynamic Range Acquisition for Lidar

MLTL-11 Wickwar, Vincent B., Non-student Extremely Sensitive Rayleigh-Scatter Lidar at USU

MLTL-12 Yu, Zhibin, Student NOT in poster competition Roles played by E-field, vertical wind and aurora in the source and formation of thermospheric Fe/Fe⁺ layers at high latitudes

MLTL-13 Zhang, Tiemin, Non-student Observation of Sporadic Sodium Layer at a low-latitude location, China by Lidar

MLTL-14 Smith, John A., Student IN poster competition New scientific frontiers in resonance-fluorescence Doppler lidar

Mesosphere or Lower Thermosphere General Studies

MLTS-01 Smith, Anne, Non-student Heating Efficiency from the Exothermic Reaction of H with O₃

Mesosphere and Lower Thermosphere Other Tidal, Planetary Waves, or Sudden Stratosphere Warnings

- MLTT-01** Elhawary, Reham, Student IN poster competition Planetary Wave Variability of Sq Currents
- MLTT-02** Barrett, Adam, Student IN poster competition Effects of the El Nino-Southern Oscillation and the Quasi-Biennial Oscillation on the Diurnal tides
- MLTT-03** Nguyen, Vu Anh, Student IN poster competition Simulation of the 16-day wave in the stratosphere and mesosphere using TIME-GCM and MERRA
- MLTT-04** Wang, Jack Chieh, Student IN poster competition Tidal Variability Due to the Quasi-biennial Oscillation and Ionospheric Responses
- MLTT-05** Warder, David M., Student IN poster competition Automated Computation of Hough Modes at Higher Wave-Numbers Using MATLAB

Sprites

- SPRT-01** Liu, Ningyu, Non-student Possible Sources of Ionospheric Inhomogeneities Initiating Sprite Streamers
- SPRT-02** Morrison, Michael Dwayne, Student IN poster competition GPS Timing for Simple, Automatic Camera Systems to Observe Transient Luminous Events
- SPRT-03** Spiva, Nicholas, Student IN poster competition Estimation of Locations and Altitudes of Upward Electrical Discharges Observed Above Tropical Depression Dorian