

CEDAR - MLT Poster Session – Wednesday, June 22, 2016
(41 of 68 posters in competition)

COUP	Coupling of the Upper Atmosphere with Lower Altitudes (8 of 14 posters in competition)
ITMA	Instruments or Techniques for Middle Atmosphere Observations (3 of 7 posters in competition)
LTVM	Long-Term Variations of the Mesosphere and Lower Thermosphere (2 of 2 posters in competition)
METR	Meteor Science other than Wind Observations (4 of 6 posters in competition)
MLTG	Mesosphere and Lower Thermosphere Gravity Waves (6 of 10 posters in competition)
MLTL	Mesosphere and Lower Thermosphere Lidar Studies (9 of 13 posters in competition)
MLTS	Mesosphere or Lower Thermosphere General Studies (3 of 7 posters in competition)
MLTT	Mesosphere and Lower Thermosphere Other Tidal, Planetary Waves, or Sudden Stratospheric Warnings (3 of 5 posters in competition)
SPRT	Sprites (2 of 2 posters in competition)
STRA	Stratosphere Studies and Below (1 of 2 posters in competition)

Coupling of the Upper Atmos with Lower Altitudes

- COUP-01**, Cornelius Csar Jude Salinas, Student IN poster competition, Impacts of Global Mean CO₂-based Eddy Diffusion Coefficients in the Mesosphere and Lower Thermosphere Region on the Ionosphere/Thermosphere Region
- COUP-02**, Loren Chang, Non-student, Observations and modelling of quasi-biennial variations in ionospheric tidal/SPW amplitudes
- COUP-03**, Christopher Krier, Student IN poster competition, Nonmigrating tidal impacts on the [O]/[N₂] ratio in GUVI
- COUP-04**, Robert Anthony Haaser, Non-student, Exploring the atmospheric and ionospheric response to bolides in the Earth's atmosphere
- COUP-05**, Vu Nguyen, Student IN poster competition, Interannual Variability of Secondary Waves Arising from QTDW-DW1 Interaction
- COUP-06**, Joe McInerney, Non-student, Recent Enhancements of the Whole Atmosphere Community Climate Model - eXtended (WACCM-X)
- COUP-07**, Rafael Mesquita, Student IN poster competition, The midnight temperature maximum in the mid-latitude NATION network
- COUP-08**, McArthur Jones Jr., Non-student, Contributions of lower atmospheric drivers to the semiannual and annual oscillations in thermospheric global mass density
- COUP-09**, Matthew Grawe, Student IN poster competition, Observation of Tsunami-Generated Ionospheric Signatures in Hawaii from the 16 September 2015 Illapel Earthquake
- COUP-10**, Cissi Lin, Non-student, A study of the nonlinear response of the upper atmosphere to episodic and stochastic acoustic-gravity wave forcing
- COUP-11**, Federico Gasperini, Student IN poster competition, Synthetic thermosphere winds based on CHAMP neutral and plasma density measurements

- COUP-12**, Federico Gasperini, Non-student, Solar EUV effects on the vertical propagation of waves from the lower to the middle thermosphere as viewed from TIMED and GOCE
- COUP-13**, Jessica Hawkins, Student IN poster competition, WN4 Variability in the Topside Ionosphere
- COUP-14**, Greg Lucas, Student IN poster competition, Solar impacts on atmospheric electric fields

Instruments or Techniques for Middle Atmosphere Observations

- ITMA-01**, Marcos Inonan, Student IN poster competition, Inferring ratio of negative ion to electron concentration by using Arecibo Incoherent Scatter Radar
- ITMA-02**, Irfan Azeem, Non-student, Super Soaker: A Sounding Rocket Mission to Study Transport, Chemistry, and Energetics of Water in the Mesosphere and Lower Thermosphere and Implications for Polar Mesospheric Cloud Occurrence
- ITMA-03**, Jackson C. McCormick, Student IN poster competition, Spatial and Temporal Ionospheric Monitoring Using Broadband Sferics
- ITMA-04**, Jih-Chin Lai, Student NOT in poster competition, INSPIRESat-1: Introduction and Feasibility Study for a CubeSat Mission for Middle and Upper Atmosphere Wind and Temperature Observations
- ITMA-05**, Jintai Li, Student NOT in poster competition, Studies of Turbulence in the Arctic Mesosphere with PFISR
- ITMA-06**, Preston Hooser, Student IN poster competition, Thermospheric Temperature Analysis Methods for the OPAL Mission
- ITMA-07**, Jens Lautenbach, Non-student, Proposing an upgrade of the Arecibo lidar systems to enhance science capabilities

Long Term Variations of the Mesosphere and Lower Thermosphere

- LTVM-01**, Bing Cao, Student IN poster competition, Intermittency of Gravity Waves Momentum Flux in Airglow Imager Observations and Whole Atmosphere Community Climate Model (WACCM)
- LTVM-02**, Gawon Kim, Student IN poster competition, An analysis of long-term trends in mesospheric temperatures from OH airglow spectra of Kiruna FTS and Sloan Digital Sky Survey

Meteor Science other than wind observations

- METR-01**, Andrew Nuttall, Student IN poster competition, Radio-Frequency Emissions from Hypervelocity Meteoroid Impacts
- METR-02**, Liane Kathryn Tarnecki, Student NOT in poster competition, Spectra of Full 3-D PIC Simulations of Turbulent Meteor Trails
- METR-03**, Glenn Sugar, Student IN poster competition, Particle In Cell Simulation of Meteor Head Echo

- METR-04**, Freddy Ronald Galindo, Student IN poster competition, Effect of Plasma Turbulence on the evolution of Specular Meteor Echoes
- METR-05**, Diana Juarez Madera, Student NOT in poster competition, Size Distribution Of Fragmented Grains From The Intensity And Duration Of Meteor Flares
- METR-06**, Lorenzo Limonta, Student IN poster competition, Detection and Characterization of Meteoroid From Optical and Radar Observations

MLT Gravity Waves

- MLTG-01**, Ahmad Talaei, Student IN poster competition, Investigating Seasonal Mesospheric Gravity Wave Propagation and Variability
- MLTG-02**, Pattilyn Frances McLaughlin, Student NOT in poster competition, DEEPWAVE: Ground-based analysis of Mesospheric Gravity Wave Signatures
- MLTG-03**, Jaime Aguilar, Student IN poster competition, Synthetic Airglow All-Sky Imager Data for the Interpretation of Gravity Waves Imaged Over Wide Fields of View
- MLTG-04**, Thomas Lobay, Student IN poster competition, Modeling of mountain-generated gravity waves
- MLTG-05**, Dhvanit Mehta, Student IN poster competition, Mesospheric Gravity Waves and their Sources at the South Pole
- MLTG-06**, Robert Bruntz, Non-student, Modeling atmospheric gravity waves using the Transfer Function Model (TFM) and the associated ionospheric responses
- MLTG-07**, Cao Chen, Student IN poster competition, Two-dimensional Morlet wavelet transform and its application to extracting two-dimensional wave packets from lidar observations in Antarctica
- MLTG-08**, Tyler Mixa, Student IN poster competition, Gravity Wave Instability Evolution in Variable Stratification and Shear
- MLTG-09**, Andrew J. Kavanagh, Non-student, First Observations from the February 2016 World Day on Gravity Waves
- MLTG-10**, Yolian Amaro-Rivera, Student NOT in poster competition, Comparison of gravity wave induced airglow variations using MSIS-90 and NRLMSISE-00 atmospheric density models

MLT Lidar Studies

- MLTL-01**, Jonathan Price, Student IN poster competition, Obtaining Continuous Observations from the Upper Stratosphere to the Lower Thermosphere Using the ALO-USU Rayleigh-Scatter Lidar
- MLTL-02**, Leda Sox, Student IN poster competition, Simultaneous, collocated Rayleigh and sodium lidar temperature comparison
- MLTL-03**, Vincent B. Wickwar, Non-student, Seasonal Temperatures from the Upper Mesosphere to the Lower Thermosphere Obtained with the Large, ALO-USU Rayleigh Lidar

- MLTL-04**, Shayli Elliott, Student IN poster competition, Reestablishing Observations throughout the Mesosphere with the ALO-USU Rayleigh-Scatter Lidar
- MLTL-05**, David K. Moser, Student IN poster competition, Searching for Troposphere-Mesosphere Connections Using the ALO-USU Rayleigh-Scatter Lidar
- MLTL-06**, Jian Zhao, Student IN poster competition, Characterization of gravity waves in the stratosphere and lower mesosphere at McMurdo, Antarctica
- MLTL-07**, Luis Navarro, Student NOT in poster competition, First results from new observational capabilities of the Na Lidar at Utah State University
- MLTL-08**, Luis Navarro, Student IN poster competition, Latitudinal variations on winds and temperature between ALO and USU Na Lidars
- MLTL-09**, Shuai Qiao, Student IN poster competition, Variations in mesospheric densities from Rayleigh lidar observations at Golmud
- MLTL-10**, Xian Lu, Non-student, Statistical characterization of high-to-medium frequency gravity waves in vertical winds and temperatures measured by lidar in the MLT
- MLTL-11**, Yafang Guo, Student IN poster competition, Gravity Wave and Turbulence Transport of Heat and Na in the Mesopause Region over the Andes
- MLTL-12**, Chao Ban, Student NOT in poster competition, Lidar observation of thermosphere sodium layers at Andes Lidar Observatory (30.25° S, 70.74° W)
- MLTL-13**, Anthony Lima, Student IN poster competition, Investigation of vertical wavenumber and frequency and spectra of gravity wave motions using vertical wind measurements at Boulder

Mesosphere or Lower Thermosphere General Studies

- MLTS-01**, Jing Li, Student IN poster competition, Characteristics of ripple structures revealed from long-term OH airglow images
- MLTS-02**, Jaroslav Jansky, Non-student, Effects of conductivity perturbations in time dependent global electric circuit model
- MLTS-03**, Jaroslav Jansky, Non-student, Analysis of the diurnal variation of the global electric circuit using different numerical models
- MLTS-04**, Jaroslav Jansky, Non-student, Earthquake lights: Mechanism of energetic coupling of Earth's crust to the lower atmosphere
- MLTS-05**, Yi Chung Chiu, Student IN poster competition, Development and Validation of an Airglow Photometer for Upper Atmospheric Chemistry
- MLTS-06**, Jonathan S. Friedman, Non-student, Metal layers in the thermosphere at Arecibo
- MLTS-07**, Christian Tate, Student IN poster competition, Analysis of Mesospheric Inversion Layers from eCMAM30 (1979 - 2010)

MLT Other Tidal, Planetary Waves, or Sudden Stratospheric Warmings

- MLTT-01**, Ashan Vitharana, Student IN poster competition, A comparison of statistical properties of diurnal tides between eCMAM30 and SABER

- MLTT-02**, Hongping Gu, Non-student, Physical Mechanisms of Seasonal Variation of DW1 from the Stratosphere to Thermosphere in eCMAM30
- MLTT-03**, Ryan Agner, Student IN poster competition, Parameterized Gravity Wave Effects on Major Tidal Modes in eCMAM and WACCM
- MLTT-04**, Jeong Han Kim, Non-student, Vertical structures of temperature change in the mesosphere and lower thermosphere regions during stratospheric sudden warnings
- MLTT-05**, Nirmal Nischal, Student IN poster competition, Nonmigrating tidal impact on the CO₂ 15 μ m infrared cooling of the lower thermosphere over one solar cycle

Sprites

- SPRT-01**, Jacob Allen Engle, Student IN poster competition, Numerical and analytical studies of critical radius in spherical and cylindrical geometries for corona discharge
- SPRT-02**, Mohammad Ahmad Salem, Student IN poster competition, The Electrical Impact of Sprite Halos on the Nighttime Lower Ionosphere

Stratosphere Studies and Below

- STRA-01**, Chengyun Yang, Non-student, The northern stratospheric temperature response to MJO in cases SSW occurs or not
- STRA-02**, Levi Boggs, Student IN poster competition, Thunderstorm Charge Structures Producing Negative Gigantic Jets