

26 June 2007 Tuesday 4-7 pm CEDAR Poster Session #2

(31 of 58 posters in competition)

- MLT** Mesosphere or Lower Thermosphere General Studies (4 of 11 posters in competition)
LID Mesosphere or Lower Thermosphere –Lidar (3 of 7 posters in competition)
YEE Yee Posters: MLT Climatology (1 of 3 posters in competition)
POM Polar MLT Aeronomy (8 of 10 posters in competition)
TID Mesosphere or Lower Thermosphere – Tidal or Planetary Waves (4 of 5 posters in competition)
GWM Mesosphere or Lower Thermosphere – Gravity Waves (4 of 7 posters in competition)
SPR Sprites, Jets and Lightning (4 of 5 posters in competition)
STR Stratosphere Studies and Below (1 of 3 posters in competition)
ITM Instruments or Techniques for Middle Atmospheric Observation (2 of 7 posters in competition)

Mesosphere or Lower Thermosphere General Studies

- **MLT-01** Ashley Wiren, E-Region Ion Motion and Related Thermospheric Properties, Student IN poster competition, PhD
- **MLT-02** Pedrina Terra Santos, Long-term Meridional Neutral Wind Study over Arecibo using Incoherent Scattering Radar, Non-student
- **MLT-03** Christiano Garnett Brum – presented by Eva Roble, Behavior of the Neutral Wind Components over Arecibo during geomagnetically quiet conditions, Non-student
- **MLT-04** Chunmei Kang, A Detailed Error Analysis for Meteor Radar Systems, Student IN poster competition, PhD
- **MLT-05** Konstantinos Kalogerakis, Deactivation of Highly Vibrationally Excited OH by O Atoms, Non-student
- **MLT-06** Laura Brower, Mesospheric Joule Heating during the Halloween 2003 SuperStorm, Student IN poster competition, Masters
- **MLT-07** Xian Lu, Simultaneous Observation of Gravity Waves in Temperature by Using Rayleigh Lidar and Sodium Lidar, Student NOT in poster competition, PhD
- **MLT-08** Yonghui Yu, Simulated ducting of high-frequency atmospheric gravity waves in the presence of background winds, Student NOT in poster competition, PhD
- **MLT-09** T.-Y. Huang, The Lightning associated sudden brightness at the OH airglow altitude: Optical emissions of N₂ 1P or OH?, Non-student
- **MLT-10** Chihoko Yamashita, Characterization of stratospheric gravity waves by lidar in Antarctica, Student IN poster competition, PhD
- **MLT-11** Wentao Huang, High-Resolution Doppler-Free Spectroscopy for Doppler Lidars, Non-student

Mesosphere or Lower Thermosphere - Lidar

- **LID-01** Wentao Huang, Polar Stratospheric Clouds at Rothera (67.5°S, 68.0°W) and South Pole: Lidar Observations and Polar Vortex Effects, Non-student
- **LID-02** Paloma Farias Gutierrez, CRRL/CTC: Web-based Lidar Simulation Tool for Doppler and Rayleigh Lidars, Student IN poster competition, PhD
- **LID-03** Johannes Wiig, CRRL/CTC: New suite of DAQ and control system for lidar applications and laser spectroscopy, Student IN poster competition, PhD
- **LID-04** Chad G. Carlson, Maui/MALT Enterprise Lidar Receiver: Urbana observations and performance, Student NOT in poster competition, PhD
- **LID-05** Jia Yue, Initial progress toward an all-solid-state lidar and OH image observations with Na lidar measurements, Student IN poster competition, PhD

- **LID-06** Jonathan S Friedman, The MLT metal layer topside: LIDAR observations of micrometeor influx?, Non-student
- **LID-07** Josef Hoeffner, The new mobile scanning Fe-Doppler lidar: Spectral measurements of Resonance, Rayleigh and Aerosol scattering from the troposphere to the mesosphere, Non-student

Yee Posters: MLT Climatology

- **YEE-01** Tao Yuan, Seasonal variations of semidiurnal tidal-period perturbations in mesopause region temperature, zonal and meridional winds above Fort Collins, CO (40.6°N, 105°W), Non-student
- **YEE-02** Larisa Goncharenko, An analysis of mid-latitude neutral wind in the lower thermosphere: comparison of fall and spring equinoxes, Non-student
- **YEE-03** Amrita Vijay Masurkar, Spectral Characteristics of Neutral Wind in the Lower Thermosphere at Middle Latitudes: Comparison of September 2005 and March 2006, Student IN poster competition, Undergraduate

Polar MLT Aeronomy

- **POM-01** Qian Wu, High altitude Interferometer WIND observation (HIWIND), Non-student
- **POM-02** Jason Reimuller, Time Evolution Imaging of Polar Mesospheric Clouds Using Airborne and Spaceborne Platforms, Student IN poster competition, PhD
- **POM-03** Chen Chen, Polar Mesospheric Summer Echoes (PMSE) overshoot effect - Theory and Observations, Student IN poster competition
- **POM-04** Henry Pinedo Nava, PMSE MST Radar Statistics From Antarctic Peruvian Station, Student IN poster competition, Masters
- **POM-05** Amal Chandran, Gravity wave observations from Rayleigh scatter measurements: A comparison of OMI data variability with CIPS simulations, Student IN poster competition, PhD
- **POM-06** Jodie Barker-Tvedtnes, Comparison of Satellite and Ground-Based Data on Polar Mesospheric Clouds, Student IN poster competition, Undergraduate
- **POM-07** Katelynn Greer, Arctic Wintertime Mesospheric Coolings and Stratopause Warmings, Student IN poster competition, Undergraduate
- **POM-08** Russell Hedden, The Tristatic Alaskan Fabry-Perot Interferometer Network, Student IN poster competition Undergraduate
- **POM-09** Jeong-Han Kim An investigation on atmospheric characteristics and the height of airglow emissions inferred from SATI and VHF meteor radar instruments at King Sejong Station (62 S, 58 W), Antarctica, Student IN poster competition, PhD
- **POM-10** Takuo T. Tsuda High-speed neutral wind in the polar lower thermosphere observed by the ESR, Student IN poster competition, PhD

Mesosphere and Lower Thermosphere - Tidal or Planetary Waves

- **TID-01** Joseph Bean, Eastward Propagating Two-Day Waves Observed in the High Latitude Mesosphere and Lower Thermosphere (MLT), Student IN poster competition, Masters
- **TID-02** Loren Chang, Planetary wave induced migrating diurnal tidal variability in WACCM3, Student IN poster competition, PhD
- **TID-03** Kyle M. Johnson A Numerical Model for VHF Meteor Radars, Student IN poster competition, Masters
- **TID-04** John Meriwether, New results on the midnight temperature maximum at equatorial latitudes, Non-student

- **TID-05** Deepak B. Simkhada, Investigation of short-period ripple-type wave structures in OH and O₂ airglow emissions and associated instabilities in mesopause region over Maui, Hawaii, Student IN poster competition, PhD

Mesosphere and Lower Thermosphere - Gravity Waves

- **GWM-01** Amauri Fragoso de Medeiros An Investigation of the Occurrence of Mesospheric Bores over Bear Lake Observatory, Utah (41.6° N), Non-student
- **GWM-02** Alexander Hassiotis, Gravity wave sources and spectra appearing in a mesoscale model simulation of the Maritime Continent, Student IN poster competition, PhD
- **GWM-03** Jonathan Snively, Effects of dynamic atmospheric structure on ducted gravity wave propagation, Student IN poster competition, PhD
- **GWM-04** Phillip E. Acott, Measuring mesopause region nighttime gravity wave zonal momentum flux and tidal influence over Fort Collins, CO (41N, 105W) with Colorado State University Na lidar, Student IN poster competition, PhD
- **GWM-05** Ling Wang, Gravity Wave Instability Dynamics at High Reynolds Numbers, Non-student PhD
- **GWM-06** D. Scott Anderson, Three dimensional tomography of mesospheric airglow, Student IN poster competition, PhD
- **GWM-07** Tae-yong Yang Comparison of Atmospheric Waves Observed by All-Sky Cameras of Mt. Bohyun in Korea and Shigaraki in Japan, Student NOT in poster competition, Masters

Sprites, Jets, and Lightning

- **SPR-01**, Jeremy Andre Rioussset, Physical Mechanisms of Blue Jets and Gigantic Jets, Student IN poster competition, PhD
- **SPR-02** Matthew Bailey, Investigating Sprite Halo Optical Signatures and Associated Lightning Characteristics over South America, Student IN poster competition, PhD
- **SPR-03** Ningyu Liu, NO Chemistry and NO-gamma Emissions Associated with Sprite Streamers, Non-student
- **SPR-04** Jingbo Li, Testing of Sprite Initiation Mechanism with High Time Resolution Lightning and Sprite Measurements, Student IN poster competition, PhD
- **SPR-05** Ziad Saleh, Data Reporting and case study of a “Bright” Negative Cloud-to-Ground natural lightning event measured by the Thunderstorm Energetic Radiation Array (TERA) during summer 2005, Student IN poster competition, PhD

Stratosphere Studies and Below

- **STR-01** Danny Scipi3n, Determination of the Kinematic Momentum Flux in the Boundary Layer: Comparison between the Three-, Four-Beam Methods (DBS), Multi Radar Experiment obtained with a virtual Boundary Layer Radar, and the “ground-truth” obtained from the LES, Student NOT in poster competition, PhD
- **STR-02** Zhenhua Li, Gravity Waves in the Lower Stratosphere at South Pole, Student NOT in poster competition, PhD
- **STR-03** Brentha Thurairajah, Observational Study of the Arctic Middle Atmosphere Using Rayleigh Lidar Data, Student IN poster competition, PhD

Instruments or Techniques for Middle Atmospheric Observation

- **ITM-01** Purvesh Thakker, ION 1 & 2: Utilizing CubeSat-class Satellites to Perform Optical Remote Sensing Atmospheric Measurements, Student IN poster competition, PhD

- **ITM-02** Xinzhao Chu, Mobile Fe-Resonance/Rayleigh/Mie Doppler Lidar: Theoretical Analysis and Instrument Design, Non-student
- **ITM-03** Steven Watchorn, First Light for the Spatial Heterodyne Spectrometer to Detect Thermospheric Neutral Oxygen Density via Bowen Fluorescence at 844.6 nm, Non-student
- **ITM-04** Sean Harrell, A Faraday Filter-Based Spectrometer to Measure Sodium Nightglow D2/D1 Ratios, Student IN poster competition, PhD
- **ITM-05** Carl Schmidt, Progress Report for the Boston University Calibration Facility, Student IN poster competition, Masters
- **ITM-06** Frank Mulligan, A Comparison of SCISAT-1 ACE Temperature data in the vicinity of the mesopause with ground-based OH*(3-1) results, Non-student
- **ITM-07** Justin Ingersoll, Development of a Kalman Filter-Based Triangulation Procedure for Sounding Rocket Chemical Release Wind Measurements, Student NOT in poster competition, Masters