

**Working Group on Space-Based Lidar Winds
Spring 2014 Meeting
May 13-14, 2014, Best Western Plus Boulder Inn
Boulder, Colorado**

Agenda

Tuesday, May 13, 2014

- 9:00-10:00 *Coffee and Registration*
- 10:00-10:10 *Welcome and Goals for the Meeting: Mike Hardesty*
- 10:10-10:25 *NOAA Update: John Pereira*
- 10:25-10:40 *NASA Technology Update: George Komar*
- 10:40-10:55 *NASA Science Update: Ramesh Kakar*
- 10:55-11:15 *Status report on Aeolus: Dirk Schuettemeyer*
- 11:15-11:35 *Feasibility Study for Super Low Altitude Satellite-borne Doppler LIDAR (S LIDAR): Shoken Ishii, K. Okamoto, Y. Sato, D. Sakaizawa, A. Sato, P. Baron, T. Ishibashi, T. Tanaka, K. Mizutani, M. Yasui, S. Ochiai, T. Kubota, S. Yamawaka, M. Satoh, R. Oki, and T. Iwasaki*
- 11:35-11:55 *Aeolus Calibration and Validation: Dirk Schuettemeyer*
- 11:55-12:20 *Discussion*
- 12:20-13:30 *Lunch*
- 13:30-13:50 *OSSEs for Hurricanes: Bob Atlas*
- 13:50-14:20 *Advances on 2-micron Coherent Doppler Wind Lidar: Upendra Singh*
- 14:20-14:50 *Update on Goddard Wind Studies: Bruce Gentry*
- 14:50-15:10 *Current Wind Lidar Activities at Ball Aerospace: Sara Tucker, Tom Delker, Bill Good, and Carl Weimer*
- 15:10-15:30 *Discussion*
- 15:30-15:50 *Break*
- 15:50-16:10 *Recent progress on lasers for space-based altimetry and wind lidar systems: Floyd Hovis*
- 16:10-16:30 *Frequency agile semiconductor lasers for lidar applications: Bob Menzies*
- 16:30-16:50 *Airborne DWL investigations of wing tip vortices and their dissipation: G.D. Emmitt, C. O'Handley and K. Godwin*

16:50-17:10 Discussion

17:10 Adjourn

Wednesday, May 14, 2014

8:30-9:00 *Coffee*

9:00-9:20 ATHENA-OAWL Instrument review: *Sara Tucker and Carl Weimer*

9:20-9:40 Useful aerosol returns from the mid and upper troposphere with OAWL (532): *G. D. Emmitt and S. A. Wood*

9:40-10:00 Science objectives for the ATHENA mission: *Mike Hardesty, Lars Peter Riishojgaard, Wayman Baker, Robert Atlas, Nancy Baker, Andrew Collard, Arlindo da Silva, Dave Emmitt, Mary Forsythe, Ron Gelaro, Yongxiang Hu, Shoba Kondragunta, Rolf Langland, Frank Marks, Oreste Reale, Oliver Reitebuch, Sara Tucker and Carl Weimer*

10:00-10:20 CALIPSO and ATHENA-OAWL Radiometric Modeling and Performance Comparisons: *Sara Tucker*

10:20-10:50 *Break*

10:50-11:10 Discussion

11:10-11:30 Update on Doppler Lidar Work at Lockheed Martin: *Michael Dehring*

11:30-11:50 The Doppler Wind and Temperature Sounder (DWTS) - Quantifying the Neutral Drivers of Weather and Space Weather: *Dave Fritts*

11:50-12:10 Marine boundary layer organized structures and their potential impact on fluxes: *G. D. Emmitt, R. Foster and S. Greco*

12:10-13:20 *Lunch*

13:20-13:40 Estimating offshore wind energy potential: *Yelena Pichugina*

13:40-14:00 An improved Ensemble Transformation Targeting Technique for Future Lidar Observations: *Yuanfu Xie*

14:00-14:20 Mountain waves and energy harvesting for UAVs using a DWL: *G. D. Emmitt, S. Greco, M. Costello and Z. Pu*

14:20-14:40 Discussion and plans for the next meeting

14:40 Adjourn