

**Working Group on Space-Based Lidar Winds
Summer 2011 Meeting
August 2-4, 2011, Millennium Harvest House, Boulder, Colorado**

Agenda

Tuesday, August 2, 2011

8:30 – 8:45 Registration and Check In

Status and Updates

8:45 – 9:00 Welcome: *M. Hardesty and L. P. Riishojgaard*

9:00 – 9:20 Action items: *L. P. Riishojgaard*

9:20 – 9:45 NASA ESTO update: *G. Komar*

9:45 – 10: 15 Recent Activities Related to a US Space-based mission: *W. Baker and M. Hardesty*

10:15 – 10:45 Break

Aeolus

10:45 – 11:15 Recent Aeolus Activities and Current Status: *M. Endemann*

11:15 – 12:00 Airborne direct-detection and coherent wind lidar observations above Greenland and Iceland supporting ESA's Aeolus mission: *O. Reitebuch, Ch. Lemmerz, U. Marksteiner, I. Nikolaus, S. Rahm, and B. Witschas*

12:00 – 1:15 Lunch

U. S. Space Lidar Activities

1:15 – 1:40 Overview of Ongoing and Planned Wind Lidar OSSE Work: *L. P. Riishojgaard*

1:40 – 2:10 Progress in Joint OSSE – Calibration: *M. Masutani*

2:10 – 2:40 Impact of Different Wind Lidar Configurations on NCEP Forecast Skill: *Z. Ma, L. P. Riishojgaard and M. Masutani*

2:40 – 3:00 Impact of Subvisual Cirrus on Spaced-Based DWL simulations: *D. Emmitt, S. Greco and S Wood*

3:00 – 3:30 Break

3:30 – 4:10 Status of the Hybrid Doppler Wind Lidar Transceiver ACT project: *C. Marx, B. Gentry, P. Jordan, M. Kavaya, E. Faust, and O. Martinez*

- 4:10 – 4:40 UCAR's Interest in a Global Wind Measurement Program - *Vivek*
- 4:40 – 5:30 Discussion: US – European Collaboration on Space-based Doppler Lidar
- 5:30 Adjourn

Wednesday, August 3, 2011

Applications/Field Studies

- 8:15 – 8:30 Registration and Check In
- 8:30 – 9:15 Volcanic Ash Observations with airborne in-situ instruments and Doppler wind lidar during the eruption of the Eyjafjallajökull in 2010: *O. Reitebuch, A. Minikin, S. Rahm, H. Schlager, U. Schumann, and B. Weinzierl*
- 9:15 – 10:00 Preliminary Results of Flying the DAWN Coherent Wind Profiling Lidar on NASA's DC-8 during the GRIP Campaign: *M. Kavaya, J. Beyon, G. Creary, G. Koch, M. Petros, P. Petzar, U. Singh, J. Yu and D. Emmitt*
- 10:00 – 10:20 Break
- 10:20 – 11:00 ER-2 Flight Testing of the TWiLiTE Doppler lidar: *B. Gentry, H. Chen, J. Cervantes, R. Machan, D. Reed, R. Cargo*
- 11:00 – 11:20 Advances in processing airborne DWL signals within 200 meters of the surface: *D. Emmitt, K. Godwin and S. De Wekker*
- 11:20 – 11:50 Update on the Hurricane Forecast Improvement Project (HFIP): *R. Atlas*
- 11:50 – 12:10 Evolution of MBL as Observed with P3DWL Using Nadir Stares: *D. Emmitt and K. Godwin*
- 12:10 – 1:30 Lunch
- 1:30 – 1:50 Status and Plans for TWOLF, TODWL and P3DWL: *D. Emmitt*
- 1:50 – 2:10 NCAR Driftsonde system for validating and adding values to space-based lidar winds: *J. Wang, T. Hock and S. Cohn*
- 2:10 – 2:35 Results from the OAWL IIP Ground Validation: *S. Tucker, T. Delker, and C. Grund*
- 2:35 – 3:00 Measurements of Winds Upstream of a Wind Farm with a Scanning Doppler Lidar for Improved Short-Term Wind Power Forecasts: *R. Frehlich*
- 3:00 – 3:30 Break

3:30 – 3:50 Summary of Lidar Wind Comparison at Howard University Beltsville Research Campus:
B. Demoz, K. Vermeesch, B. Gentry, H. Chen, T. Bacha, G. Koch, U. Singh, M Boquet, L. Savage

Data Assimilation

3:50 – 4:20 The impact of T-PARC dropsonde and Doppler wind lidar observations on typhoon track and mid-latitude forecasts: *M. Weissmann, C. Cardinali, R. Langland, P. Pauley, and S. Rahm*

4:20 – 4:45 A Multigrid approach for assimilating LIDAR: *Y. Xie, S. Albers and H. Jiang*

4:45 – 5:10 Data Assimilation that Includes the Spatial Variations in Total Observation Error: *R. Frehlich*

5:10 Adjourn

Thursday, August 4, 2011

8:30 – 8:45 Registration and Check In

Future Concepts

8:45 – 9:00 Lidar winds from GEO: The Photons to Winds Conversion Efficiency: *C. Grund, J. Eraker, D. Emmitt, B. Gentry*

9:00 – 9:25 Space-based Integrated Wind, Aerosol, and Chemistry Lidar: *C. Grund*

Wrap Up

9:25 – 9:45 Status of the Doppler lidar BAMS article: *W. Baker*

9:45 – 10:15 Discussion – Strategies to Move Forward Global Wind Measurements with Doppler Lidar

10:15 – 10:30 Break

10:30 – 10:45 Review of Action Items

10:45 – 11:00 Time and Place for the Winter Meeting

11:00 Adjourn