

**Meeting of the Working Group on Space-Based Lidar Winds  
Destin, Florida  
February 2 - 4, 2010**

**AGENDA**

**Tuesday, February 2**

8:30 – 9:10            Introductory Remarks and Review of Action Items from Previous Meetings - *M. Hardesty and L. P. Riishojgaard*

***Agency Perspectives***

9:10 – 9:30            NWS/OST Perspective - *M. Johnson*

9:30 – 9:50            NPOESS 1<sup>st</sup> Generation Status & NPOESS 2<sup>nd</sup> Generation Considerations for an NWOS - *S. Mango*

9:50 -10:10            NASA Headquarters Perspective on Space-based Global Wind Measurement - *G. Komar*

10:10 – 10:40        Break

***ADM/Aeolus***

10:40 – 11:10        The Need for a Doppler Wind Lidar in Space - ECMWF Impact Studies and Scientific Motivations - *E. Källen.*

11:10 – 11:40        ADM-Aeolus Airborne Campaign over Iceland and Greenland - *O.Reitebuch, C. Lemmerz, B. Witschas, U. Paffrath, I. Nikolaus, A. Dörnbrack, E. Nagel, U. Marksteiner, S. Rahm, Z. Li*

11:40 - 12:00        US Ground Support for the ADM Mission - *L. P. Riishojgaard*

11:50 – 1:00        Lunch

1:00 – 1:20            Spontaneous Rayleigh-Brillouin Scattering Experiment of Nitrogen, Oxygen and Air – *O. Reitebuch, B. Witschas, O.Vieitez, E.-J. van Duijn, W. van de Water, W. Ubachs*

1:20 – 1:40            Rayleigh-Brillouin Scattering Experiment with Atmospheric Lidar from a Mountain Observatory - *O. Reitebuch, B. Witschas, C. Lemmerz, E.Nagel*

1:40 – 2:10 Discussion – Exploring Synergisms and Interactions between the U. S. Lidar Working Group and the ESA Atmospheric Dynamics Mission

### ***Space-based Lidar Studies***

2:10 – 2:30 Developing an OSSE Testbed at NASA/SIVO - *D. Emmitt, M. Seabloom, R. Atlas*

2:30 – 2:50 Progress in Evaluation of Space Based DWL in Joint OSSEs - *M. Masutani, L. P. Riishojgaard, D. Emmitt (SWA), S. Greco., S. Wood., A. Stoffelen., G.-J.Marseille, J. Woollen*

2:50 – 3:10 Update on GWOS and Other hybrid DWL Concepts - *G. D. Emmitt*

3:10 – 3:40 Break

3:40 – 5:00 Discussion – Preparing for a New Doppler Wind Lidar Venture Class Mission

### **Wednesday, February 3**

### ***Airborne Wind Measurements***

8:30 – 8:50 Airborne Lidar Development Status and Plans – *M. Kavaya, J. Beyon, G. Koch, M. Petros, P. Petzar, U. Singh, B. Trieu, J. Yu*

8:50 – 9:10 Status of the Tropospheric Wind Lidar Technology Experiment (TWiLiTE) IIP project - *B. Gentry, M. McGill, G. Schwemmer, M. Hardesty, A. Brewer, T. Wilkerson, R. Atlas, M. Sirota, S. Lindemann, F. Hovis*

9:10 – 9:30 Status of the Hybrid Doppler Wind Lidar Transceiver ACT project – *C. Marx, B. Gentry, P. Jordan, M. Kavaya, E. Faust*

9:30 – 9:50 Conducting 2010 hurricane season research using ONR's P3DWL on a NOAA P3 - *D. Emmitt and F. Marks*

9:50 – 10:00 Modifying the 3-D Winds Space Concept for Aircraft Science Campaign Wind Measurements - *M. Kavaya*

10:00 – 10:30 Break

10:30 – 10:50 BalloonWinds – GroundWindsProject Summary – *J. Ryan*

- 10:50 – 11:10 Comparisons of TPARC P3DWL Wind Profiles with Dropsondes in the Presence of Clouds - *D. Emmitt, K. Godwin and S. Greco*
- 11:10 – 11:30 Impact of Airborne DWL Observations on Numerical Simulations of Formation of Typhoon Nuri: (2008) – *Z. Pu, D. Emmitt, L. Zhang*
- 11:30 – 11:50 Evaluating a Compact Commercial Lidar for ADM Validation and Boundary Layer Research – *M. Hardesty, G. Pearson, F. Davies, S. Tucker*
- 11:50 – 1:00 Lunch
- 1:10 – 1:50 Advanced Signal Processing for Airborne Data in Severe Weather - *D. Emmitt, K. Godwin and S. Greco.*
- 1:50 – 2:10 OAWL IIP Development Status: Year 2 - *C. Grund, J. Howell, M. Ostaszewski, R. Pierce, S. Tucker*

### ***Ground-based Measurements***

- 2:10 – 2:30 Goddard Lidar Observatory for Winds (GLOW) Wind Profiling from the Howard University Beltsville Research Facility – *H. Chen, B. Gentry, T. Bacha, B. Demoz, D. Venable*
- 2:30 – 2:50 Preparing for VORTEX2 using TWOLF with phased array radar - *D. Emmitt*
- 2:50 – 3:10 ValidWind: Improved Techniques and Results for Ground-Based Remote Sensing of Low Altitude Wind Profiles - *A. Marchant, T. Wilkerson*
- 3:10 – 3:30 Break

### ***Alternative Space-based Wind Measurement Techniques***

- 3:30 – 3:50 Uses of Scatterometer Data and Implications for Doppler Lidar Data for PBL Research - *R. Brown*
- 3:50 – 4:10 Progress Toward Full-time Lidar Winds from Geostationary Orbit - *C. Grund, J. Eraker, B. Donley, and M. Stephens*

### ***Future Directions***

- 4:10 – 5:00 Open Discussion on Future Directions

**Thursday, February 4**

8:30 – 9:30	Continue Discussions on Future Directions and other topics
9:30 – 10:00	Preparation of a Doppler Wind Lidar article for BAMS – <i>W. Baker</i>
10:00 – 10:30	Subcommittee Reports and Recommendations
10:30 – 11:00	Review Action Items, Next Meeting
11:00	Adjourn