

Lidar Working Group on Space-based Lidar Winds
August 24-26, 2010 Bar Harbor, Maine
Agenda

Tuesday, August 24

8:30 - 9:10 *Introduction and Review of Action Items and Meeting Goals-* **M. Hardesty, L. P. Riishojgaard**

Agency Perspectives

9:10 - 9:25 *NASA Headquarters Update-* **George Komar**

9:25 - 9:40 *Briefing to OSD and OST on Venture Class Study –* **L. P. Riishojgaard**

9:40 - 9:55 *NESDIS Office of Systems Development Perspective –* **J. Pereira**

9:55 - 10:10 *Update on NWS/OST Perspective –* **M. Johnson**

10:10 - 10:40 *Break*

Observing System Simulation Experiments

10:40 - 11:00 *Progress in the Joint OSSE system -* **L. P. Riishojgaard** , M. Masutani, D. Emmitt

11:00 - 11:20 *Observing System Simulation Experiments to evaluate GWOS -* **M. Masutani, L. P. Riishojgaard, J. Woollen, D. Emmitt, S. Wood, S. Greco**

11:20 - 11:50 *The Simulation and Assimilation of Doppler Wind Lidar Observations in Support of Future Instruments –* **W. McCarty**

11:50 - 12:10 *Discussion on Simulation Studies -* **L. P. Riishojgaard**

12:10 - 1:30 *Lunch*

Instrument studies

1:30 - 2:15 *Coherent Doppler Aerosol Wind lidar Instrument and GRIP Mission -* **U. Singh**

2:15 - 2:35 *OAWL IIP Development and Testing Status: Year 2.0 -* **C. J. Grund, S. Tucker, J. Howell, M. Ostaszewski, R. Pierce**

2:35 - 3:05 *Status of the Hybrid Doppler Wind Lidar Transceiver ACT project -* **C. Marx, B. Gentry, P. Jordan, M. Kavaya, E. Faust**

3:05 - 3:35 *Break*

- 3:35 - 3:55 *GEOWindSat: A Concept for Achieving Full-time Lidar Winds from GEO* - **C.J. Grund**, J. Eraker, B. Donley, and M. Dittman
- 3:55 - 4:10 *Complex terrain study using TODWL data* – **D. Emmitt**, S. DeWekker, K. Godwin
- 4:10 - 4:25 *Status of P3 DWL investigations on NOAA Aircraft* – **D. Emmitt**, R. Atlas, D. Eleuterio
- 4:25 - 4:45 Update on multi-instrument wind comparisons of GLOW at Howard University Beltsville campus - **B. Demoz**
- 4:45 - 6:00 *Off-line Discussions and Mission Design Team Meeting*

Wednesday, August 25

Venture Class Mission on ISS

- 8:30 - 8:40 *Update on Earth Venture Program* – **George Komar**
- 8:40 – 9:00 *Concept for an ISS Scatterometer Winds Mission* – **E. Rodriguez**
- 9:00 – 9:15 *Simulation studies in support of an ISS GWOS mission* – **D. Emmitt**, S. Wood, S. Greco, B. Gentry and M. Kavaya (15 minutes)
- 9:15 - 10:00 *Discussion - Preparing for a Wind Lidar Venture Class Mission* - **G. Komar, W. Baker, M. Hardesty**
- 10:00 - 10:30 *Break*

Field Studies

- 10:30 - 10:45 *Chasing Tornadoes with TODWL: VORTEX2* – **D. Emmitt**
- 10:45 - 11:15 *The Tropospheric Wind Lidar Technology Experiment (TWiLiTE): Status and future plans* – **B. Gentry**, M. McGill, G. Schwemmer, M. Hardesty, A. Brewer, T. Wilkerson, R. Atlas, M. Sirota, S. Lindemann, F. Hovis
- 11:15 - 11:35 *The impact of GLOW wind profile data on numerical simulation of a warm season convection observed during IHOP_2002* - Z. Pu, L. Zhang, **B. Demoz**, B. Gentry.
- 11:35 - 12:10 *GroundWinds Wrap Up and Discussion on Future* – **J. Ryan**
- 12:10 - 1:30 *Lunch*

The ADM/Aeolus Mission

- 1:30 - 1:45 *ADM/Aeolus Update and Status* – **G.-J. Marseille**, M. Endemann
- 1:45 - 2:00 *Update on ESA Ground Station Discussions* – **L. P. Riishojgaard**
- 2:00 - 2:20 *The Aeolus Vertical Sampling Study* – **G.-J. Marseille**, J. de Kloe, K. Houchi, H. Schyberg, H. Kornich, A. G. Straume., O. LeRille
- 2:20 - 2:40 *Discussion – improving collaboration with the ADM team* – **M. Hardesty and L. P. Riishojgaard**

Lidar Components, Tools, and Applications

- 2:40 -3:10 *Update on Single-Frequency Laser Transmitters for Airborne Wind and Aerosol Measurements* – **F. Hovis**, J. Rudd, T. Schum, K. Andes, J. Edelman, M. McGill, S. Scott, C. Grund, B. Pierce, J. Howell, S. Tucker
- 3:10 - 3:30 Break
- 3:30 - 3:45 *Advanced coherent DWL signal processing developed for tropical cyclone investigations* – **D. Emmitt**, K. Godwin
- 3:45 - 4:05 *Prospects of a Doppler Wind Lidar in PBL Applications* – **R. Brown**
- 4:05 - 4:35 *High Efficiency Laser Designs for Airborne and Space-Based Lidar Applications* - **F. Hovis**, R. Burnham, M. Storm, R. Edwards, J. Edelman, K. Andes, P. Burns, B. Walters, E. Sullivan, K. Li, C. Culpepper, J. Rudd, X. Dang, J. Hwang, T. Wysocki
- 4: 35 - 4:50 *WRF model and DWL data processing in real time on laptop* – **D. Emmitt**, S. Wood, S. DeWekker
- 4:50 - 5:00 Session Wrap-up and discussion

Thursday, August 26

- 8:30 - 9:00 *Status of BAMS article and next steps* – **W. Baker**
- 9:00 - 9:20 *Some thoughts on Doppler Wind Lidar and Scatterometer Synergies in a joint winds mission* – **R. Brown**
- 9:00 - 10:00 *Venture Class mission science discussion and planning for winter workshop* - **M. Hardesty, L. P. Riishojgaard, W. Baker**
- 10:00 - 10:30 *Review of Action Items and Next Steps*

10:30 - 10:45 *Future Meetings – sites, dates, and focus areas*

10:45 - 11:00 *Wrap-up*

11:00 *Adjourn*