

Working Group on Space-based Lidar Winds

**February 8-9, 2011
Miami, FL**

Final Agenda

Tuesday February 8

7:30 – 8:30 *Registration and Coffee*

8:30 - 9:00 Introductions, Opening Remarks, Meeting Goals - **Mike Hardesty, Lars Peter Riishojgaard**, Working Group Co-chairs

Session 1. Agency Perspectives. Chair: Lars Peter Riishojgaard

9:00 – 9:20 Update on NASA preparatory work and mission opportunities – **George Komar**

9:20 – 9:40 NOAA/NESDIS/OSD and future wind lidars – John Pereira, **Rich Fulton** and Steve Mango

9:40 – 10:00 NOAA/NWS requirements and NOAA preparations for ADM – **Jim Yoe** and Mike Johnson

10:00 - 10:20 Coffee break

10:20 – 10:50 The ORS Office: An Overview and Relevance to Civil Space Organizations - **Tom Adang**

10:50 – 11:00 Wind observations in the Global Observing System; a WMO perspective – **Lars Peter Riishojgaard**

Session 2. Impact studies. Chair: Wayman Baker

11:00 - 11:20 Status of and plans for Joint OSSE collaboration - **Michiko Masutani**

11:20 – 12:40 Initial results of Wind Lidar OSSEs – **Zaizhong Ma**

11:40 – 12:00 Implications and future plans for Wind Lidar OSSEs – **Lars Peter Riishojgaard**

12:00 – 1:20 PM Lunch break

1:20 – 1:40 The impact of GLOW wind profiles on numerical simulation of a warm season convection observed during IHOP_2002 - **Zhaoxia Pu**

1:40 – 2:00 Implications of CALIPSO observations to space-based DWL performance and impacts - **Dave Emmitt**

2:00 – 2:20 Aerosol Data Assimilation from CALIOP for Global Transport Modeling – **James Campbell**

Session 3. Technology development. Chair: Jim Yoe

2:20 – 2:40 Optimum laser PRF study for pulsed wind lidars – **Michael Kavaya**

2:40 – 3:00 First Optical Autocovariance Wind Lidar Measurements and Status of the OAWL IIP - **Chris Grund**

3:00 - 3:20 *Coffee break*

3:20 – 3:50 Update on High Efficiency Laser Designs for Airborne and Space-Based Lidar Application, **Floyd Hovis**

3:50 – 4:10 Development of Coherent 2- μ m Differential Absorption and Wind Lidar for wind measurement - **Shoken Ishii**

4:10 – 4:30 Updates on Single Frequency 2 Micron Laser Sources - **Tim Shuman**

4:30 – 4:50 Update on Langley Research Center Laser Studies - Jay Yu, Mulugeta Petros, **Upendra Singh**

4:50 – 5:00 Discussion

5:25 PM *Meeting adjourns for the day*

7:00 - ? *Group dinner (venue TBD)*

Wednesday February 9

7:30 *Coffee*

Session 4. Airborne lidars and measurement campaigns; Chair: Steve Mango

8:30 – 8:45 TWOLF results from VORTEX 2 and plans for 2011 - **Dave Emmitt**

8:45 – 9:00 Analyses of flow in complex terrain using TODWL data - **Dave Emmitt**

9:00 – 9:30 Flight Results of the Langley DAWN Coherent Wind lidar During the NASA GRIP mission - **Michael Kavaya**, Jeffrey Beyon, Garfield Creary, Grady Koch, Mulugeta Petros, Bo Trieu, and Jirong Yu

9:30 – 9:45 Plans for TWILITE airborne measurements - **Bruce Gentry**

9:45 - 10:10 *Coffee break*

Session 5 .Lidar winds and tropical cyclones; Chair: Bob Atlas

10:10 – 10:40 The Hurricane Forecast Improvement Project – **Frank Marks**

10:40 – 11:00 Regional Hurricane Modeling : NOAA's HWRF-X mesoscale model - **S. G. Gopalakrishna**

11:00 – 11:20 Data assimilation for hurricane prediction - **Tomislava Vukicevic**

11:20 – 11:40 OSSEs for Hurricanes – **Bob Atlas** and Dave Nolan

11:40 – 12:00 Lidar impact on Tropical cyclone prediction - **Zhaoxia Pu**

12:00 – 1:20 *Lunch*

1:20 - 1:35 P3DWL installation on NOAA P3 and plans for 2011 - **Dave Emmitt**

1:35 – 1:45 The JCSDA-HFIP Workshop on Satellite Data Assimilation for Hurricane Forecasting, December 2010 – **Lars Peter Riishojgaard**

Session 6. A Wind Lidar on ISS: A candidate Earth Venture mission. Chair: Mike Hardesty

1:45 – 2:15 Instrument and Mission design studies at the Goddard Space Flight Center - **Bruce Gentry** and **Mike Hardesty**

2:15 – 2:35 Expected challenges for and data products from a DWL deployed on the ISS - Dave **Emmitt**

2: 35 – 3:15 Group discussion: Science basis for an EV proposal; charter for the subsequent Science Workshop.

3:15 - 3:35 PM *Coffee break*

Session 7. Other matters; Chairs: Mike Hardesty and Lars Peter Riishojgaard

3:35 – 3:45 Status of BAMS article – **Wayman Baker**

3:45 – 3:55 Update on status of Lidar Working Group – **Lars Peter Riishojgaard**

3:55 – 4:30 Working group wrap-up discussion

4:30 - 5:00 *Any other Business*

Review of action items

Date and place of next meeting

5:00 PM *Working Group meeting adjourns*