

## ISS Winds Mission Science Workshop Preliminary Agenda

### Thursday, February 10, 2011

- 7:30 Coffee
- 8:30 Welcome – **Bob Atlas**, Director NOAA Atlantic Oceanographic and Meteorological Laboratory
- 8:40 Workshop Goals – **Mike Hardesty, Lars Peter Riishojgaard**
- 8:50 The Winds on the International Space Station for Climate Research (WISSCR) mission – **Mike Hardesty, Bruce Gentry, Wayman Baker, Dave Emmitt, Michael Kavaya, Steve Mango, Ken Miller**
- 9:20 Performance Characteristics and Design Tradeoffs for an ISS Doppler Lidar - **Dave Emmitt**
- 9:40 The TwiLite Airborne Doppler Lidar – **Bruce Gentry**
- 10:10 Coffee Break
- 10:30 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**
- 11:00 The Role of High-Value Observations for Forecast Simulations in a Multiscale Climate Modeling Framework - **Gabriel J. Kooperman, Michael S. Pritchard and Richard C. J. Somerville**
- 11:30 Influence of Tropical Convection on the Extratropical Longwave Pattern via Monsoon-scale Winds Systems in the UTLS - **Matt Hitchman**
- 12:00 Lunch
- 1:20 Major Discrepancies in the Analyzed Representation of Prominent Features of the Tropical Atmosphere. – **Oreste Reale**
- 1:50 Suggestions for the Use and Value of Space-based LIDAR Remote Sensing. - **Mel Shapiro**
- 2:20 Decadal Variability and Trends in the Large-Scale Atmospheric Circulation - **Amy Clement**

- 2:50 Transport in Tropical Upper Troposphere / Lower Stratosphere – *Darryn Waugh*
- 3:20 *Coffee Break*
- 3:40 Variability of Tropical to Extra-tropical Transport in the Lower Stratosphere – *Mark Olsen*
- 4:10 A WMO perspective on spacebased winds - *Lars Peter Riishojgaard*
- 4:30 Discussion
- 5:30 *Adjourn*

### **Friday, February 11, 2011**

- 7:30 Coffee
- 8:30 Two Impact studies of Airborne DWL Data on Tropical Cyclone Track and Intensity forecasts – *Dave Emmitt*
- 8:50 Hurricane Research from an ISS mission – *Frank Marks*
- 9:20 Assessing the impact of observations in the NASA GEOS-5 forecast system using the adjoint method - *Ron Gelaro*
- 9:50 Low Level Jet Studies from the ISS - *Zhaoxia Pu*
- 10:10 *Coffee Break*
- 10:40 The Simulation and Assimilation of Observations in Preparation for ESA's Aeolus Mission – *Will McCarty*
- 11:10 Global Tropical Assimilation of LIDAR Winds Towards the Next Generation Modeling – *T. N. Krishnamurti*
- 11:30 Discussion – *Articulating Science Goals for an ISS Winds Mission*
- 12:00 Lunch
- 1:20 Discussion – *A Science Plan for the Mission*
- 2:30 *Adjourn*