

## WELCOME ADDRESS

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*UW-CIMSS*

Good morning Ladies and Gentlemen,

I would like to welcome you to Madison on behalf of the local organizing committee and the University of Wisconsin-Cooperative Institute for Meteorological Satellite Studies. This venue is quite appropriate for the 6<sup>th</sup> meeting of the International Winds Workshop (IWW6). Madison is, of course, the former residence of the late Verner Suomi, whom laid the foundation for cloud-tracking from satellites through his innovations in remote sensing technology and interactive computer systems (McIDAS). We are meeting in the new Monona Terrace Convention Center, designed by another pioneer in his field, architect Frank Lloyd Wright. Finally, our meeting room is called the "Hall of Ideas". A perfect setting for what should be a fruitful exchange of information on advancements and new innovations in deriving winds from satellites.

Since our last meeting in Lorne, Australia in March of 2000, we have witnessed two of the major recommendations from that meeting start to pay dividends. First, the development of a new atmospheric motion vector (AMV) file format in BUFR is allowing a freer global dissemination of large satellite-derived wind data sets with ancillary information to the user community. Second, and related to the first development, is the proliferation of the new AMV quality indicators. The EUMETSAT QI and the CIMSS/NESDIS RFF quality indicators are now being made available by most major data producers to users such as the NWP community. The first session of our workshop will focus on the current processing systems (and advances) being used to derive AMVs operationally by the major data producers.

Another area that has received attention over the past two years is in mesoscale applications, including the derivation of AMVs using rapid-scan datasets. The advancement of high-resolution objective analyses and numerical models means the divergent flow is no longer taboo. In fact, in many applications the accurate depiction of this flow is critical to local forecasts in mesoscale models. In addition, recent field experiments and demonstrations have taken advantage of intensive observing periods from GOES, Meteosat and GMS where rapid-scan operations allowed for sub-fifteen minute image sampling. Sessions II and IV are devoted to these topics.

Session III is devoted to the ongoing characterization of AMVs, and their impact on data assimilation and forecast systems. It is critical that we strive to better understand the AMV observation errors (and analysis weighting) in order to more effectively assimilate them into NWP. This is an area of active research, and we will get presentations from several of the NWP centers.

In IWW4, we decided to open up the IWWs to other space-based winds derivation platforms in order to share knowledge and ideas on retrieving winds from satellites. This input has become an important component of the IWWs as proven by the IWW6 agenda that devotes a large session (V) to this topic. From current microwave imagers to proposed Doppler wind lidar missions, it is evident the retrieval of winds from space is evolving on many fronts, and we look forward to hearing about these ventures.

The final session of IWW6 may prove to be the most exciting as we get a glimpse of new and evolving satellite-derived wind instruments, techniques and applications. Of particular note is the prospect of winds over the polar regions from the new MODIS observations. This new development is sure to be a highlight of our workshop.

We will close the workshop with our traditional working group breakout sessions in which we will consider issues with regards to processing methods, mesoscale (and rapid-scan) applications, and AMV verification/impact. These working group sessions will offer recommendations to the WMO Coordination Group for Meteorological Satellites that will be considered for action items by group representatives.

In closing, UW-CIMSS is proud to host such an elite gathering of atmospheric scientists working on the important topic of remotely-sensed wind retrievals. I hope your stay in Madison is both personally and professionally rewarding.