



Science and Technology Seminar

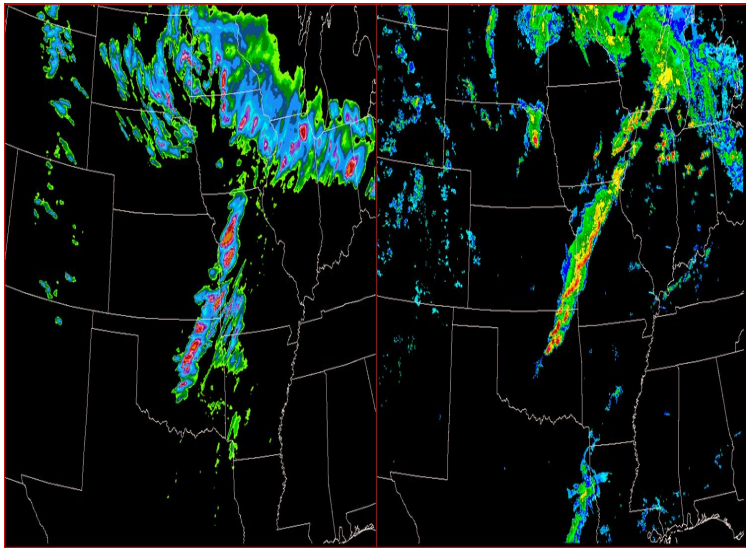


Progress on Radar Data Assimilation at the NCEP Environmental Modeling Center

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Data assimilation of WSR-88 D (NEXRAD) radial winds at NCEP has been on an evolutionary path over the past 3 years from using VAD vector winds to Level 3 radial winds (2004) to Level 2.5 “superrobbed” winds (2005) and, finally to Level 2 winds (2006). The NEXRAD radar data present unique problems for data assimilation. The wind measurements are “Line of Sight” (LOS), which means they contain only partial wind information. While LOS winds do not present a major technical problem for data assimilation, they require a dynamical constraint in the data assimilation process to enable extraction of useful information. Quality control is a second unique problem since the data can contain refracted signal, particularly near the earth’s surface, and partial beam filling can make interpretation of the observation difficult.

This seminar will present progress, problems, and applications to various weather scenarios, including the first use of Airborne Doppler Radar for improved depiction of winds in the hurricane core.



Wednesday, June 21, 2006
2:00 - 3:00 P.M.
SSMC#2, Room 2358

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