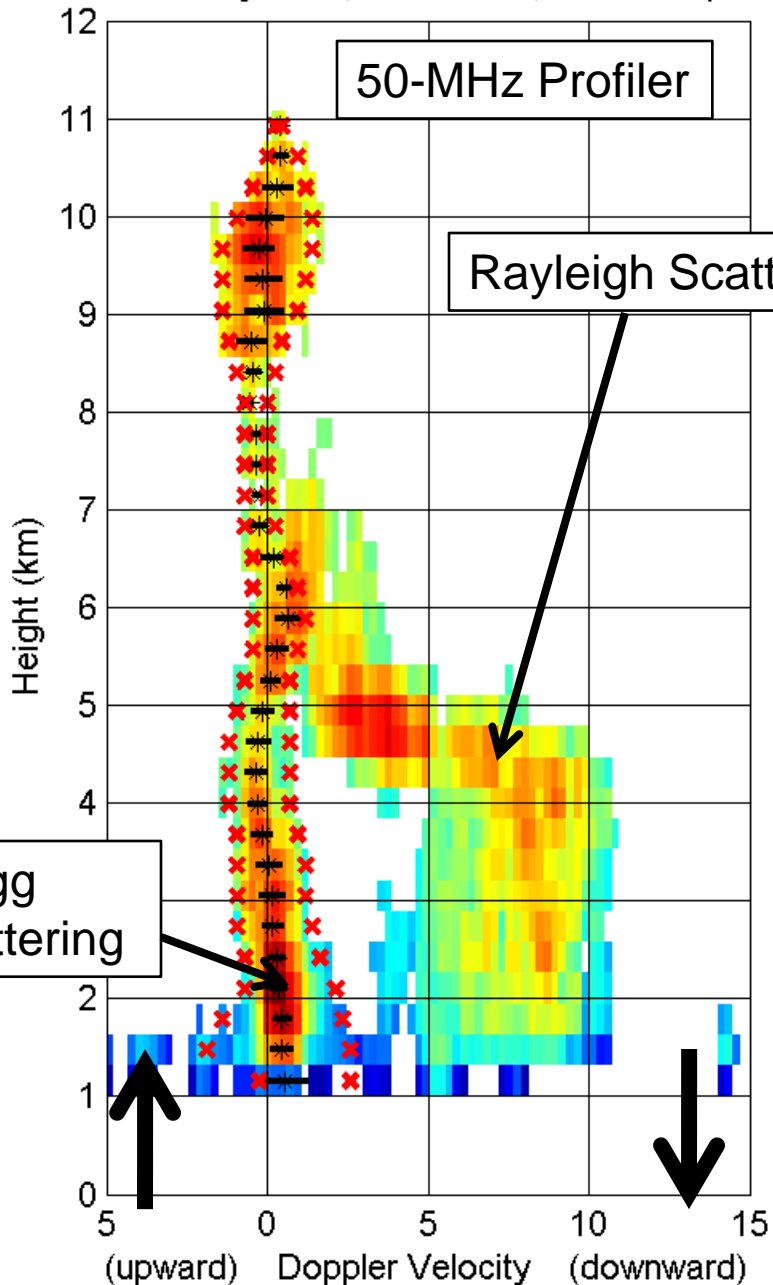


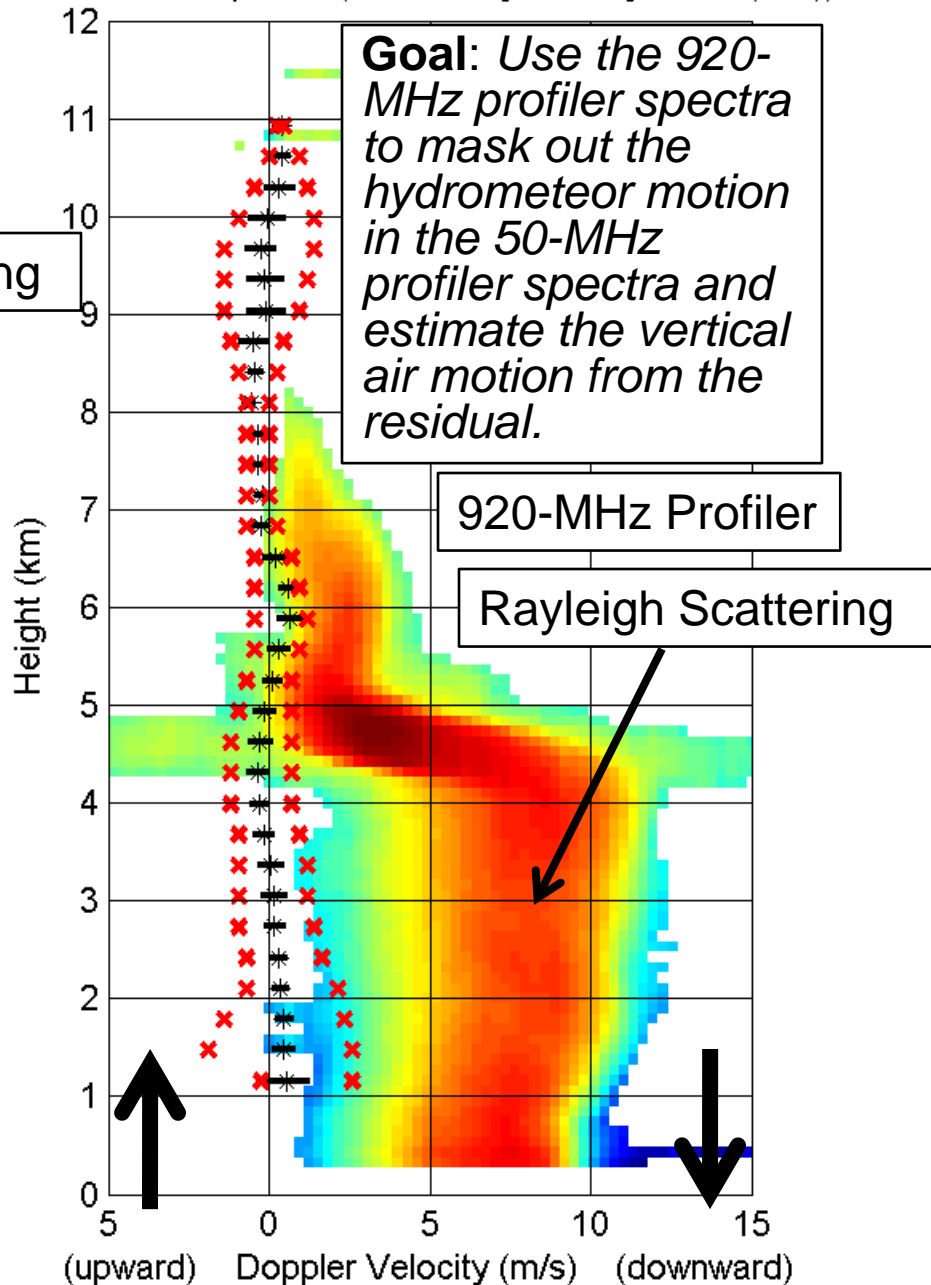
Deploying Dual-frequency Profiler Pair in Support of MC3E (0.45 & 2.8 GHz)

Christopher R. Williams
CIRES, University of Colorado at Boulder
And
NOAA Earth System Research Laboratory

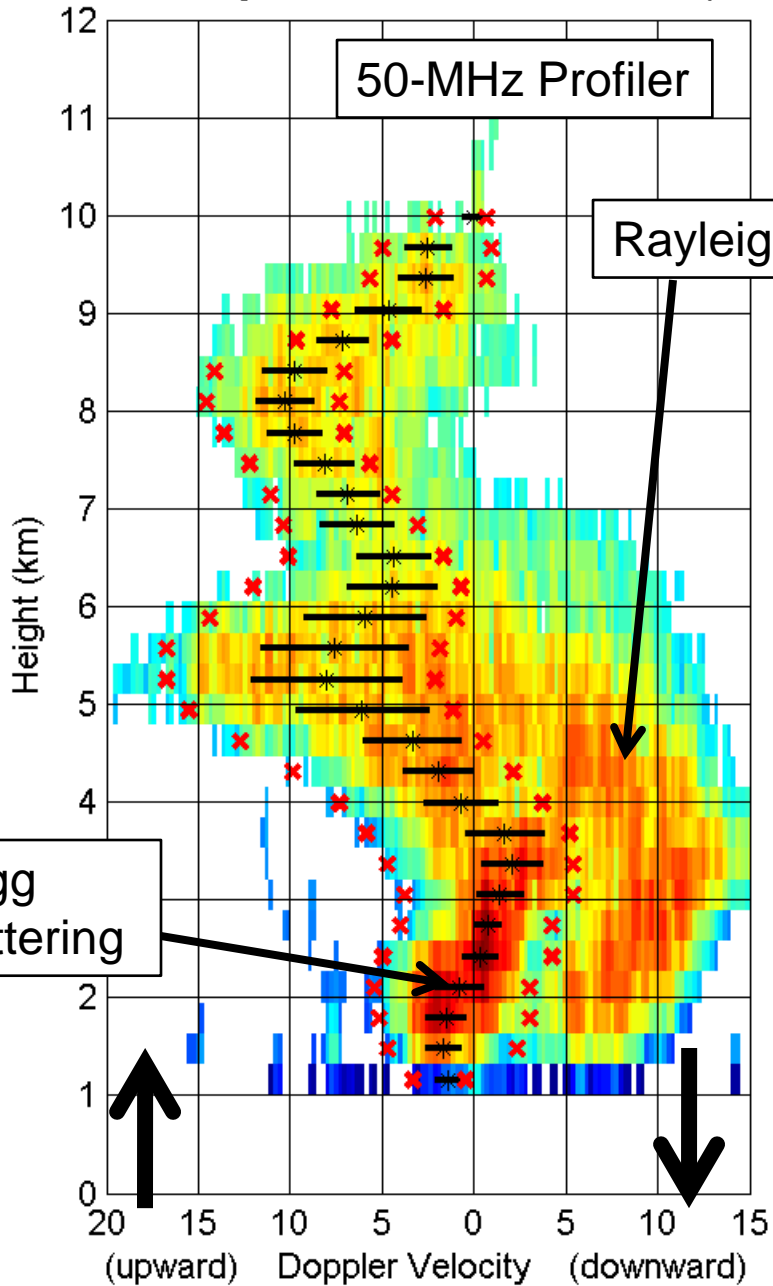
a. 20 January 2006, 03:05 UTC, 50 MHz Spectra



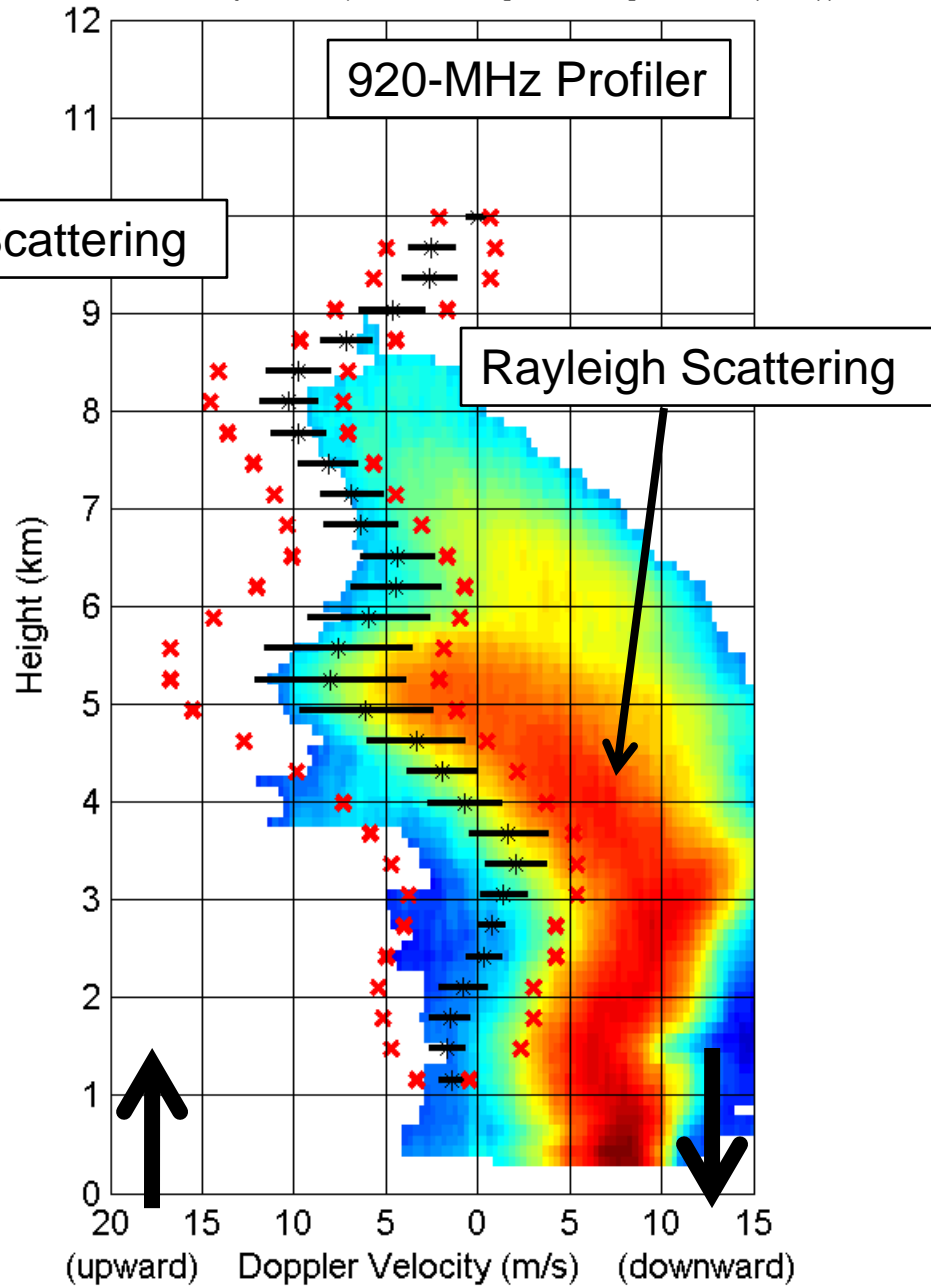
b. 920 MHz Spectra (Reflectivity Density - dBZ/(m/s))



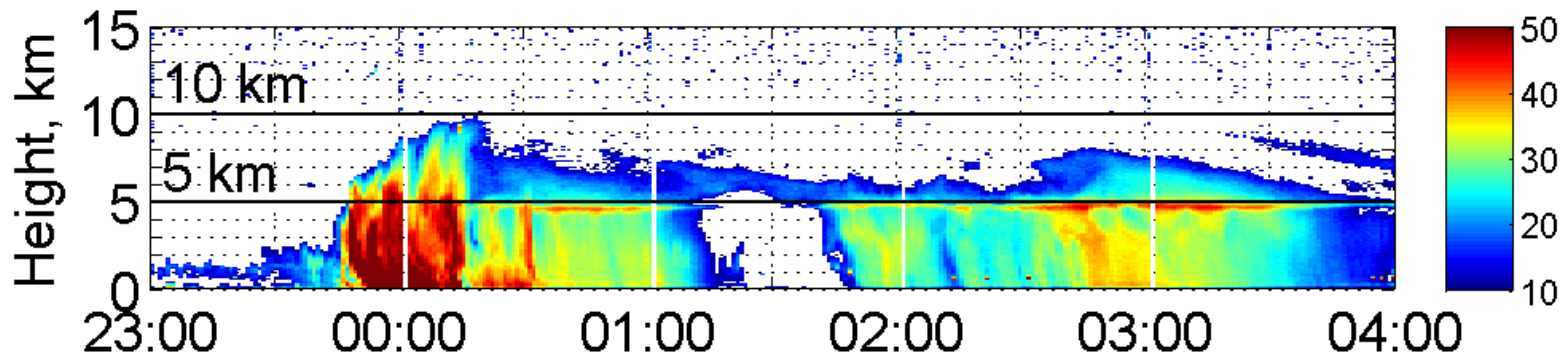
a. 20 January 2006, 00:00 UTC, 50 MHz Spectra



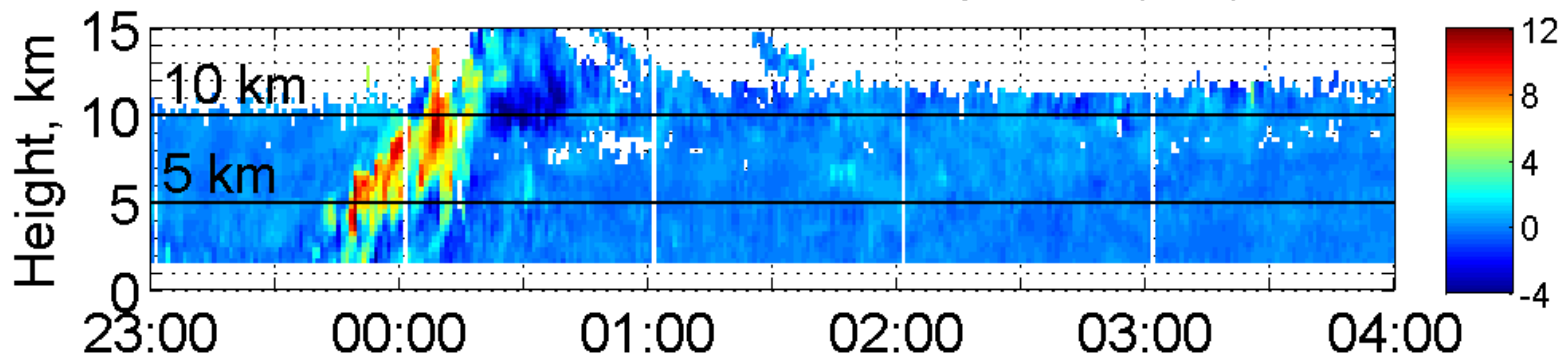
b. 920 MHz Spectra (Reflectivity Density - dBZ/(m/s))



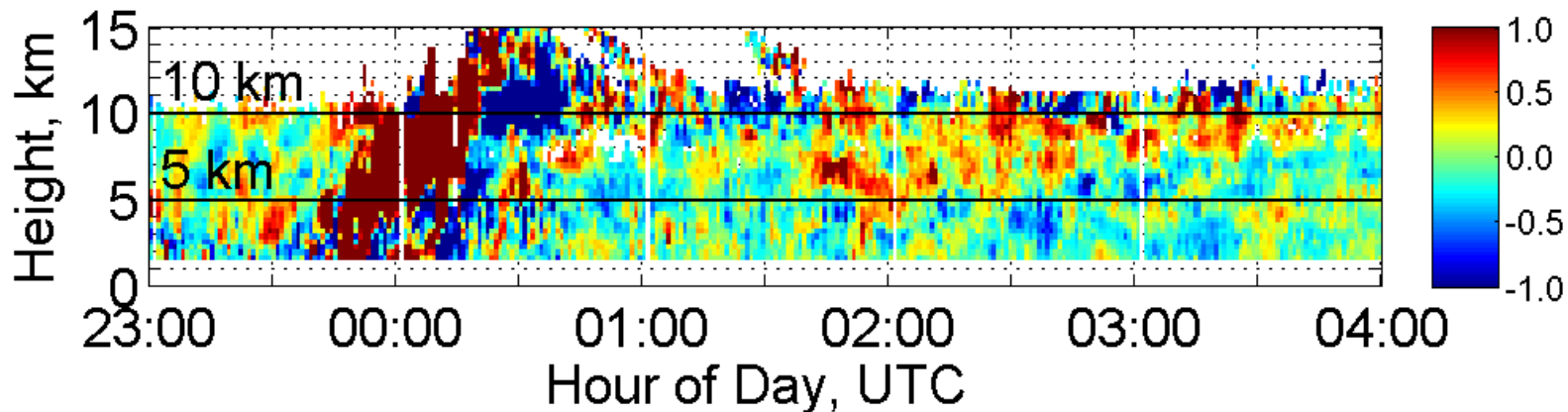
920-MHz Reflectivity, (dBZ), 19-20 January 2006

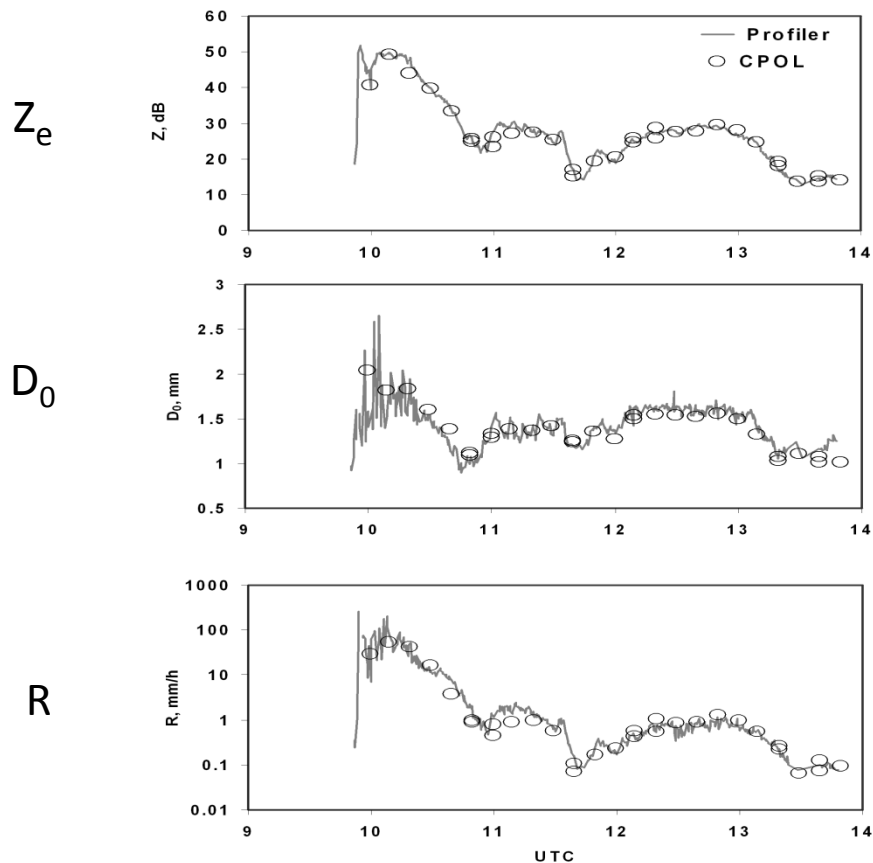
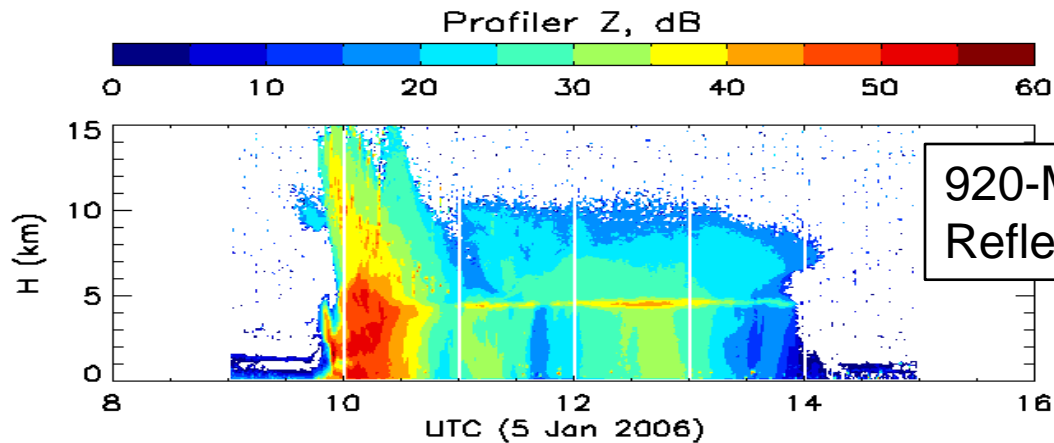


Vertical Air Motion, Positive Upward, (m/s)



Vertical Air Motion, Positive Upward, (m/s)



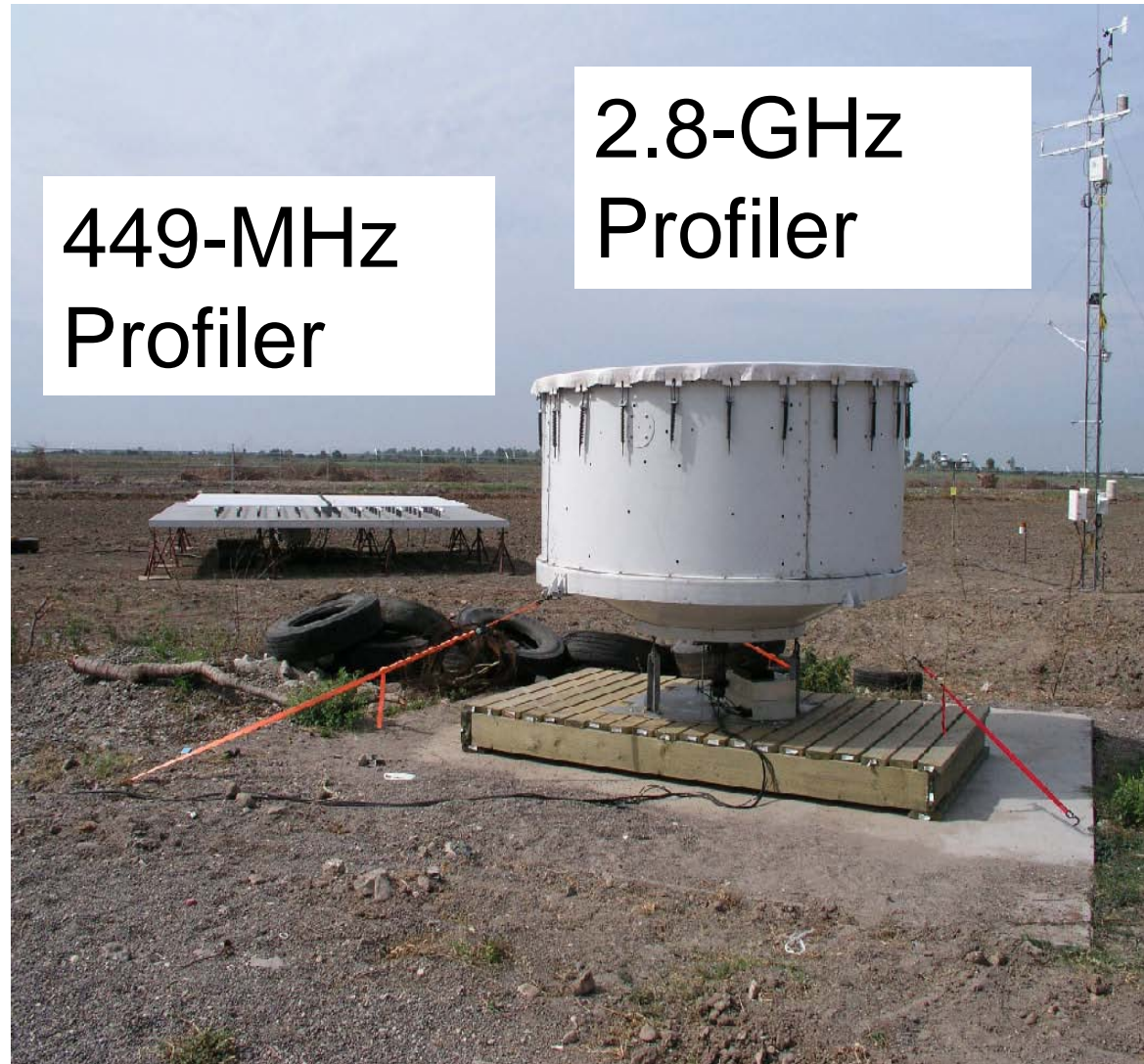


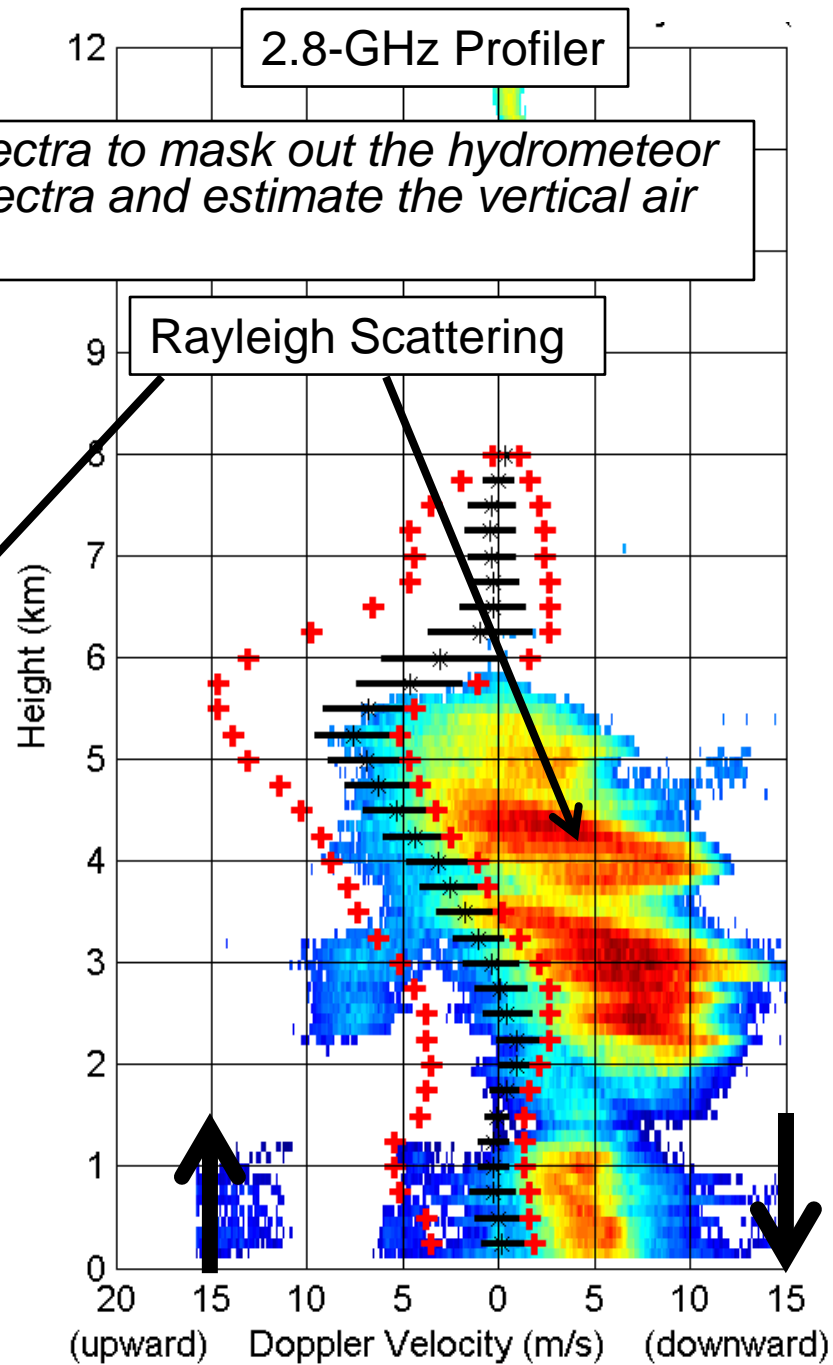
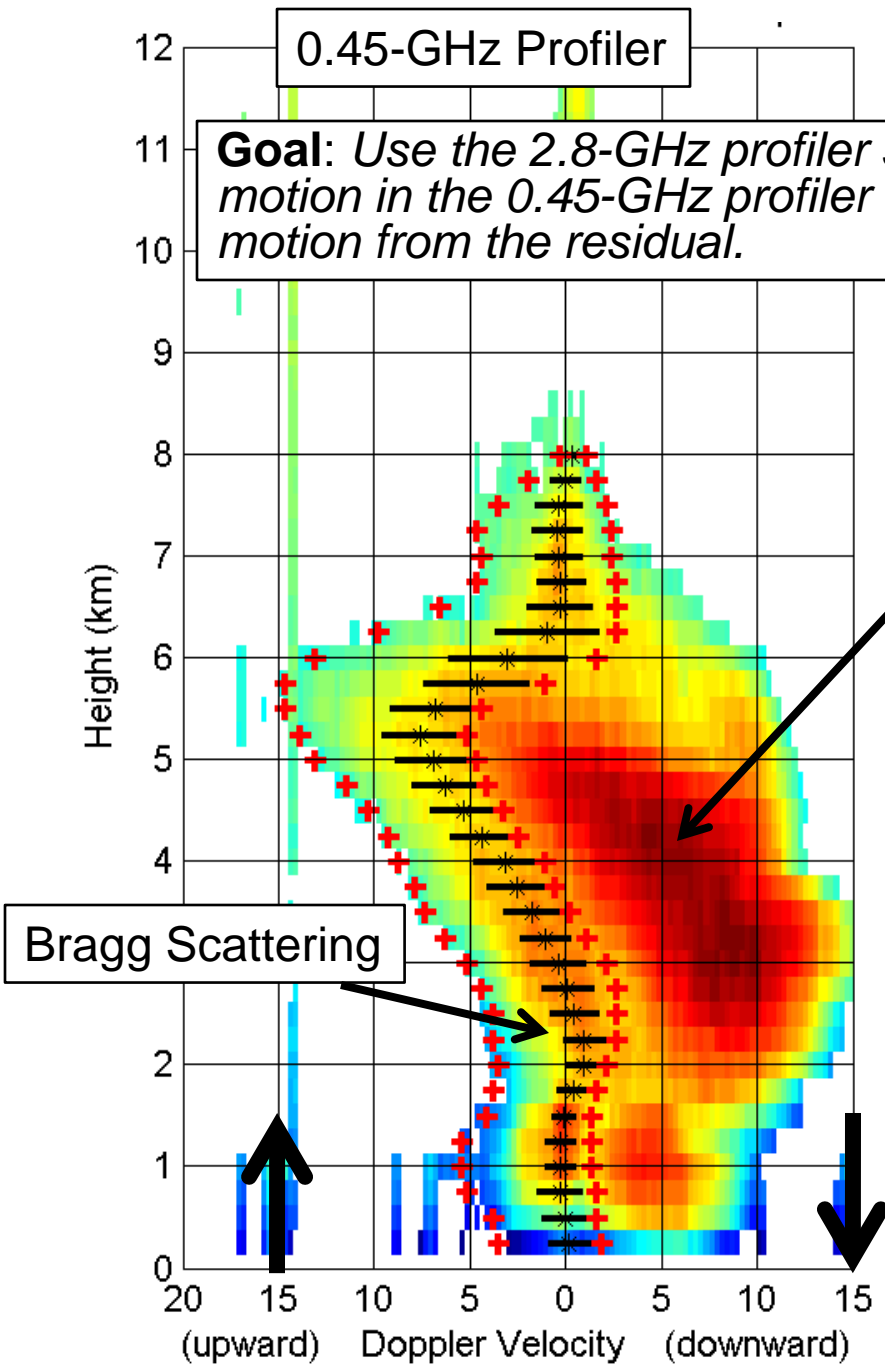
Comparison
920-MHz Profiler and
C-Pol Retrievals

Height = 2 km
Profiler = 1 minute
C-Pol = 10 minute

Profiler retrievals provides
reference for scanning
radar retrievals

Vertically-pointing 0.45-GHz (449-MHz) and 2.8-GHz profilers
North American Monsoon Experiment (NAME)
July-August 2004





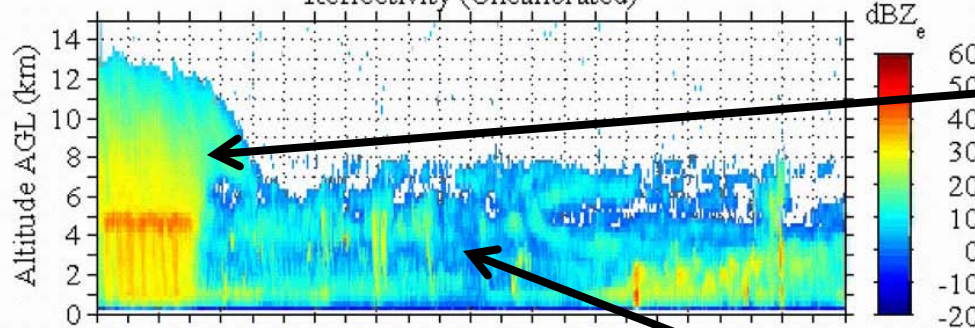
Raw Observations - No Quality Control



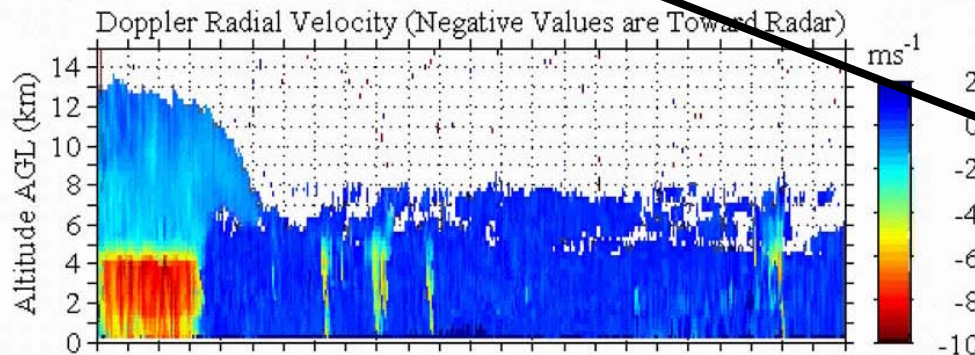
Data Collected and Processed in Collaboration with
NOAA Environmental Technology Lab and Aeronomy Lab
Estacion Obispo, MX, 449 MHz, 6 August 2004 (Day #219)



Vertical Beam, 250 m Pulse Length
Reflectivity (Uncalibrated)



Rayleigh Scattering



Bragg Scattering

