Doppler Wind Lidar Wind Profiles in TCS-08

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Abstract

During the Tropical Cyclone Structure 2008 (TCS-08) a coherent, 2-micron Doppler wind lidar (P3DWL) was installed on the NRL P-3 aircraft. The P3DWL included a computer-controlled 2-axis scanner with a range of pre-programmed scanning modes. In the standard conical scanning mode, 2-D wind vector profiles in the boundary layer surrounding a number of incipient and mature tropical cyclones in the Western Pacific ocean. These profiles were obtained with at ~ km-scale separation along the flight track with vertical resolution of about 50 m. Most of these profiles extend from about 100 m above the sea surface to near or somewhat above the boundary layer top. We present preliminary analyses of these data with time.

Recorded Presentation