NOAA P-3 Radar Data Status

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ABSTRACT

The NOAA P-3 instrumented aircraft provided a mobile platform to sample convective cloud systems along with the surrounding environment. The tail-mounted, X-band Doppler radar not only provides detailed weather radar measurements of convective systems, but also offers wind velocity information required for a pseudo-dual-Doppler analysis technique to study system kinematics and derive vertical wind motion. However, before such an analysis can take place, spurious data needs to be removed. Details of the automated and manual quality control methodology are presented. Discussion and examples of common non-meteorological signals contained within the raw data are presented. An overview is given of the design of various data collection modules (i.e. flight path, altitude flown) flown during the DYNAMO field experiment. Discussion is provided pertaining to the time periods and characteristics (e.g. flight module description, meteorological regime, gridded vs. native format, etc.) of data submitted to the online DYNAMO data depository, along with an update of additional cases processed since submission.