

DSD observation of early morning rainfall near SGP 4/24/2011

Submitted by patrick.gatlin on Mon, 04/25/2011 - 00:22

- [APU](#)

Flight Date:
Sunday, April 24, 2011
Status:
Green

The APUs scattered about the SGP vicinity collected some good DSD data on the precipitation that occurred early Sunday morning. The largest concentration of rain drops greater than 2mm in diameter sampled by the Parsivel array was on south side of the SGP shortly after convective initiation.

Radar imagery from KVNK reveal that a convective cell initiated just west of APU11 around 0916 UTC and quickly developed a 50 dBz core with large ZDR (>2.5 dB, uncorrected for attenuation) as it developed and moved east over APU11 (located just south of the SGP). APU11 measured a rainfall rate of 63 mm/hr and reflectivity of 55 dBz as this cell moved over the Parsivel. A second convective cell that initiated further west of APU11 and resulted in a rainfall rate of 102 mm/hr, reflectivity of 57 dBz, and rain drops exceeding 4-5mm in diameter measured by the Parsivel as this second cell moved across the pasture on the south side of the SGP.

Images



