

RAXPOL DEPLOYMENT SUMMARY

DATE: 16 MAY 2015

CREW: HOWIE, KYLE, ZACH

LOCATION: SOUTHWEST OK/NORTH-CENTRAL TEXAS

TOTAL NUMBER OF DEPLOYMENTS: 3

SUMMARY: RaXPol departed Norman at approximately 1730 UTC and initially headed north towards I-40 west via I-35N and I-240W. En route to I-40, the crew decided that a southwestern route was the more favorable option. RaXPol instead headed southwest towards Lawton via I-44W, and then west towards Altus via US-62. Cells began to form behind the morning convection and move eastward into Oklahoma. Despite our decision to go southwest, storms did form due west near Shamrock, TX, and Erick, OK and a number of weak tornadoes were produced. Deployment number one took place between Odell, TX and Chillicothe, TX and documented tornadogenesis to roughly peak intensity of an EF-2 (preliminary rating) tornado, which moved to the south of Elmer, OK. The MWR-05XP was also collecting data and captured the tornado up to 55°. The Doppler Lidar did not collect any data this day. Maximum wind speed in the tornado we estimated to be roughly 65-70 m/s in this tornado. The second deployment was a short, three volume, deployment near Devol, OK, but was cut short due to blockage and a dirt road that was impassible in RaXPol. The third and final deployment took place looking west near Byers, TX and documented the gust out of a tornado-warned supercell. Following this deployment, RaXPol headed west on US-70, and north on Hwy.5 and returned to Norman via I-44E.

DEPLOYMENT 1:

LAT: 34.282703° LON: -99.435348°

5 mi ENE of Chillicothe, TX

TX 924 and Co. Rd. 89N

Scanning strategy 1 -- Began ~2210 UTC

0° - 20° /2° increments, 30 km range, 75 m range resolution, 30 m gate spacing

DEPLOYMENT 2:

LAT: 34.214309° LON: -98.609756°

2 mi NNW of Devol, OK

0.6 mi N of TX N2450 and Hwy 70

Scanning strategy 1 -- Began 0034 UTC

0° -20° /2° increments, 30 km range, 75 m range resolution, 30 m gate spacing

DEPLOYMENT 3:

LAT: 34.108486° LON: -98.148344°

3 mi NNE Byers, TX

Hwy 79 and Old Fort Sill Rd.

Scanning strategy 1 – Began 0148 UTC

0° -20° /2° increments, 30 km range, 75 m range resolution, 30 m gate spacing

NOTES:

-No issues on this day