RAXPOL DEPLOYMENT SUMMARY

DATE: 19 MAY 2015
CREW: HOWIE, KYLE, ZACH
LOCATION: SOUTHWEST OK
TOTAL NUMBER OF DEPLOYMENTS: 4

SUMMARY: RaXPol departed Norman at approximately 1700 UTC and headed southwest with an initial target S of Childress, TX. A dryline was located in the western Texas panhandle with an outflow boundary across southern Oklahoma. RaXPol headed west toward Altus via US-62 to refuel and reassess our target area. Two cells went up to our east just SW of Norman, one of which produced a brief, weak tornado near Purcell. South of our location, a cluster of cells organized into two supercells, the southernmost of which began to develop more pronounced rotation and became our target storm. RaXPol backtracked on US-62 towards Lawton, and then south on I-44W. After passing through the forward flank of the storm, RaXPol headed east on OK-53 to Comanche, OK and south on US-81. Our first deployment took place 1.4 miles north of Addington, OK where we collected data on an HP supercell. After observing the surging gust front, it was determined that the cell was unlikely to produce a tornado and we headed south out of Ringling after two new supercells near the Red River. Although not tornado warned as we approached, the southernmost cell would eventually become tornado warned and RaXPol was deployed in three separate locations to observe the cell. The second deployment took place SSE of Petersburg, OK near an open field when the mesocyclone was ~45 km and the storm was propagating eastward. After collecting data for approximately 40 minutes, it was determined that the cell did have a northward component of motion as well, and would move too far from our location for our liking. RaXPol was undeployed and moved northward to 8 miles south of Ringling, OK where a third deployment captured tornadogenesis of a weak tornado from the southern supercell. The fourth deployment took place 2 miles east of Ringling as the cell moved at us, and data were collected within the hook echo of the cell. Following this deployment, RaXPol headed east on US-70 and returned to Norman via I-35.

DEPLOYMENT 1:
LAT: 34.265049 °   LON: -97.959904 °
1.4 mi N of Addington, OK
1.4 mi N of Hwy. 81 and Monument Rd.

Scanning strategy 1 -- Began ~2223 UTC
0º - 20º /2º increments, 30 km range, 75 m range resolution, 30 m gate spacing

DEPLOYMENT 2:
LAT: 33.937193º   LON: -97.560772 °
1.2 mi SSE of Petersburg, OK
0.2 mi S N3050 Rd and Hwy 89

Scanning strategy 1 -- Began 2321 UTC
0º - 15º /1º increments, 30 km range, 75 m range resolution, 30 m gate spacing

DEPLOYMENT 3:
LAT: 34.056784 °   LON: -97.578661 °
8 mi S of Ringling, OK
Hwy 89 and E2040 Rd

Scanning strategy 1 – Began 0011 UTC

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

DEPLOYMENT 4:
LAT: 34.172988 º LON: -97.557431 º
2 mi E of Ringling, OK
0.7 mi W of Hwy 70 and N3060 Rd.

Scanning strategy 1 – Began 0100 UTC
0º - 10º /1º increments, 30 km range, 75 m range resolution, 30 m gate spacing

NOTES:
-No issues on this day