

## **RAXPOL DEPLOYMENT SUMMARY**

DATE: 13 APRIL 2014

CREW: HOWIE, KYLE, ZACH

LOCATION: LAKE THUNDERBIRD – LITTLE AXE LAKE ACCESS ROAD BOAT LAUNCH

TOTAL NUMBER OF DEPLOYMENTS: 1

**SUMMARY:** RaXPol departed Norman at approximately 1945 UTC and headed east on SH9 to the Little Axe lake access road boat launch on Lake Thunderbird. When scanning began at 2039 UTC, the dryline/cold front intersection was located near Tuttle, OK, approximately 54 km west of our deployment location. Volume scans were initially collected of the approaching squall line, changing scanning strategies as the squall approached our location (detailed below). RHIs were collected late in the deployment through mammatus in the trailing anvil. Finally, scans were performed into the water for investigation of beam reflection off of the water surface. Scanning ceased at 2234 UTC.

### **DEPLOYMENT 1:**

LAT: 35.236875° LON: -97.223097°

Scanning strategy 1 -- Began 2039 UTC

0°-20°/1° increments, 60 km range, 150 m resolution, 500 µm PRI

Scanning strategy 2 – Began 2057 UTC

0°-30°/1° increments, 60 km range, 150 m resolution, 500 µm PRI

Scanning strategy 3 – Began 2103 UTC

0°-30°/1° increments, 30 km range, 75 m resolution, 250 µm PRI

Scanning strategy 4 – Began 2118 UTC

0°-40°/2° increments, 30 km range, 75 m resolution, 250 µm PRI

Scanning strategy 5 – Began 2212 UTC

RHIs (25°, 158°, 288°, 248° azimuth), 30 km range, 75 m resolution, 250 µm PRI

### **NOTES:**

- Computer time lagged the GPS time by 78 seconds during this deployment.
- It was noted that reflectivity values were roughly 20 dBZ higher than the should be on the iRadar display, although initial viewing of the processed data in solo3 shows values much closer to normal (may be in issue with iRadar processing).
- 1 inch hail was reported in Norman at 2125 UTC.
- Small graupel fell at deployment location at 2200 UTC.
- Dish abruptly stopped scanning twice during deployment (associated with strong wind gusts? May be worth looking into).