UAHuntsville DC3 2012 Field Science Log: Ground Based Platforms
Author: L. Carey/M. Scott/L. Bain/C. Schultz
Start Date/Time: 5/18/2012 1700 UTC
Stop Date/Time: 5/18/2012 0218 UTC
Platform: ARMOR
DC3 Operational Status: Ground operations (no aircraft)
Log Entries (all times UTC)

1645 UTC ARMOR running 5-tilt surveillance
1700 UTC Mobile sonde unit in Fayetteville
1800 MAX at New Market site and setting up; MAX wireless comms not working-no IRCchat
1802 UTC Pre-convective sonde launch in Fayetteville at Walmart Parking lot
1811 MAX in 5-tilt surveillance; checking scan speed.  At 1830 UTC, MAX testing 120 sector volume for scan speed.
1851 UTC added two more elevation angles to full volume scan.
1859 UTC added one more to 7.5, full volume now takes 3:00 to run.  Covering echo within ARMOR-KHTX SE lobe in Jackson county with lightning.  Topping with 7.5 deg.
1940 UTC added a 8.7 degree elevation angles to top all storms in ARMOR domain. Full volume now takes 3:24
1954 UTC MAX-ARMOR NW domain is dead.  Looks like southern lobe is best bet today. Sending MSONDE back to NSSTC to wait for cells in Jackson County moving into southern lobe moving west.  Turning MAX to face the cab north to focus on southern lobe.
2002 UTC RHIs over the storm at New Market.  (popped up right over MAX)
2011 UTC began doing a 180 degree sector volume to top the storm over New Market and Jackson County.
2020 UTC RHIs over the storm at New Market.
2021 UTC Rain1 for the domain
2035 UTC changed sector volumes from 180 degrees to 120 degrees, focusing further on the storms to our east including the Madison, Jackson, and Marshall counties. Second storm in NE Madison county just produced lightning.
2043 and 2046 UTC started RHIs over storms near New Market. 60 dBZ echoes over 2-4 km.
2100 UTC began a new sector volume from 0-120 degrees and up to 18.15 elevation angle.
2120 UTC switched to a back-to-back SV from 0-120 degrees and going to 28.8 elevation angle to top storms in central Madison county.
2151 UTC Shifted ARMOR sector 30 degrees to the left.  330 to 90 degrees up to 28.8 deg elevation
2158 UTC MAX sector was 345-
2203 UTC Shifted ARMOR sector another 30 degrees to the left. 300-60 degrees up to 28.8 deg elevation.
2225 UTC MAX changes the sector to 200-320 degrees.
2231 UTC 3-body scatter signature observed by ARMOR.
2235 UTC ARMOR added 31.0 degree elevation scan. Scan time just over 4 minutes. New cell north of Athens.
2241 UTC MAX scanning 180-300
2245 UTC TBSS from ARMOR, ZDR hole from Hytop.  SVR issued by NWS Hun
2314 UTC New cell NW of Athens.
2317 UTC Shifted ARMOR sector to 285-45 degrees.
2330 UTC shifted ARMOR sector to 270-30 degrees.
2346 UTC Jiles county new cell development.
0021 UTC Lightning cessation in SE Limestone Co.
0031 UTC Three-body scattering signature for storm in northeastern Giles county TN seen from Hytop (KHTX).
0130 UTC Reduced the number of elevation angles on the sector to 19 angles. Still more than topping cells in northern portions of northern KHTX-ARMOR dual-Doppler lobe. Scan time now closer to 3:30.
0148 UTC Further reduced number of elevation angles on sector to 15 angles (top angle 15.5). Volume time about 2:50. At least 2 cells still producing lightning within range of NA-LMA and ARMOR.
0201 UTC cells weakening on radar and NA-LMA. Will move out of ARMOR-KHTX lobes soon too.
0218 UTC terminated sector volumes. cells dissipated in DD lobes. no lightning