

MAX Logbook

IOP #	5
Crew Members	Melissa Gonzalez-Fuentes & Zeb Leffler
Arrival Time/Date (UTC)	April 5, 2023 at 1022 UTC
Latitude	35.792799
Longitude	-90.584331
Heading	276 deg
Cab Blanking	N/A
Elevation (m)	70.1 meters
Fully Operational Time/Date (UTC) *List any non-operational equipment below*	April 5, 2023 at 1123 UTC
Departure Time/Date (UTC)	April 5, 2023 at 1849 UTC

Scan Strategies, Observations, Equipment Issues, Notes, etc.

Time (UTC)	Observations/Notes
1022	<p>Arrived on site Parked facing 276 deg Fire hydrant to our right, so backed up a little past 20 ft to not block it Powerlines to our west 20-70 deg blockage (house, barn, and trees) Pretty busy main road due to Nestle plant to our north</p>
1123	Fully operational
1130	<p>Began BL Clear Air Scans</p> <p><i>***Will change to rapid cycle scans when convection is within 60 km of location***</i></p> <p><i>**Scanning Strategy Listed Below**</i></p>

	<p>Scan Rate: 17/18 deg/sec (set to 19 deg/sec) Pulse Width: 0.8</p> <p>Elevation Scans: 0.7, 1.3, 2.0, 2.7, 3.7, 5.0, 7.0, 9.0 (total time = ~3:00)</p>
1130	Issues with surface station timestamp
1202	<p>10-m Surface Observations T: 23 C, Td: 19.1 C, WSPD: 8.5 m/s, WDIR: 190 deg, Sky: BKN, Partly Cloudy</p>
1139	<p>Surface station timestamp issue fixed! Prior to this, time may be incorrect (hour seemed to be ahead by 1 hour)</p>
1206	Sunrise
1237	Wind gust up to 14 m/s
1242	Winds averaging 12/13 m/s
1244	<p>Stopped scanning; inputting RHIs azimuths</p> <p>MoDLS: 180 deg (true north) RaDAPS: 96 deg (true north)</p>
1246	<p>Started Scanning Again Commenced BL clear scanning and RHIs</p>
1301	<p>10-m Surface Observations T: 23.7 C, Td: 18.9 C, WSPD: 9.0 m/s, WDIR: 205 deg, Sky: BKN, Partly Cloudy</p>
1310	<p>Stopped scanning Readjusting BL Clear Air Scan</p> <p>Changing lowest elevation from 0.7 → 0.8</p>
1312	<p>Began Scanning Again</p> <p>Modified BL Clear Air Scans</p> <p><i>***Will change to rapid cycle scans when convection is within 60 km of location***</i></p> <p><i>**Scanning Strategy Listed Below**</i></p>

	<p>Scan Rate: 17/18 deg/sec (set to 19 deg/sec) Pulse Width: 0.8</p> <p>Elevation Scans: 0.8, 1.3, 2.0, 2.7, 3.7, 5.0, 7.0, 9.0 (total time = ~3:00)</p> <p>**RHI Scans Listed below** MoDLS: 180 deg (true north) RaDAPS: 96 deg true north</p>
1334	Wind gust of 15 m/s
1339	Stopped scanning; modifying RHI parameters
1339	Wind gust of 16.5 m/s
1340	<p>Began scanning again with PPI Scan rate was already set to 5 deg/sec Adjusted elevation from 0-60 deg to 0-30 deg</p>
1400	<p>10-m Surface Observations T: 23.9 C, Td: 19.1 C, WSPD: 9.0 m/s, WDIR: 215 deg, Sky: BKN, Partly Cloudy</p>
1500	<p>10-m Surface Observations T: 24.2 C, Td: 19 C, WSPD: 8.2 m/s, WDIR: 215 deg, Sky: Mostly cloudy</p>
1544	<p>Stopped clear air scans; commencing rapid cycle scans Convection is within 60 km of vicinity</p>
1545	<p>Began Rapid Cycle Scans</p> <p>**Scanning Strategy Listed Below** Scan Rate: 23/24 deg/sec (set to 25 deg/sec) Pulse Width: 0.4 microseconds</p> <p>**Elevations Listed below** Shallow: 0.80, 1.6, 2.7, 3.9, 5.0 (~1:30 min) Deep: 0.80, 1.6, 2.7, 6.5, 9.0 (~1:30 min) Shallow Deep</p>
1549	Light precip began
1555	Moderate precip; winds: 10 m/s

1558	Winds gusting up to 12 m/s
1600	10-m Surface Observations T: 24.2 C, Td: 18.7 C, WSPD: 10.5 m/s, WDIR: 210 deg, Sky: Mostly cloudy; stopped raining
1603	Very light brief shower
1606	Light precip begins again e
1622	Stopped scanning
1626	***LOWERED SURFACE TOWER AHEAD OF CONVECTIVE LINE***
1627	Began scanning
1644	***SURFACE TOWER LOWERED*** Wind gusting up to 14 m/s
1645	Moderate precip begins
1647	Moderate precip Leading edge of QLCS arrives Visibility greatly decreased looking to the west Severe Thunderstorm Warning (winds up to 60 mph are possible)
1653	***SURFACE TOWER LOWERED*** Winds gusting to 14.5 m/s
1654	Heavy precip begins; line over MAX
1700	***SURFACE TOWER LOWERED*** 10-m Surface Observations T: 19.8 C, Td: 15.4 C, WSPD: 10.0 m/s, WDIR: 255 deg, Sky: OVC; heavy precip
1705	Thunder
1708	***SURFACE TOWER LOWERED*** Wind gust of 16 m/s Heavy precip
1711	Lightning and thunder; heavy precip
1718	Heavy rain subsides

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