## **MAX Logbook**

IOP#	3	
Crew Members	Melissa Gonzalez-Fuentes & Zeb Leffler	
Arrival Time/Date (UTC)	March 24, 2023 at 1640 UTC	
Latitude	33.580853	
Longitude	-91.061535°	
Heading	180 deg	
Cab Blanking	N/A	
Elevation (m)	43	
Fully Operational Time/Date (UTC) *List any non-operational equipment below*	March 24, 2023 at 1713 UTC	
Departure Time/Date (UTC)	March 25, 2023 at 0236 UTC	

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

Time (UTC)	Observations/Notes			
1640	Arrived on site			
1713	Fully operational			
1730	Began BL Clear Air Scans			
	**Scanning Strategy Listed Below** Scan Rate: 18/19 deg/sec (set to 20 deg/sec) Pulse Width: 0.8			
	Elevation Scans: 0.7, 1.3, 2.0, 2.7, 3.7, 5.0, 7.0, 9.0 (total time = ~02:54 min)  **RHI Scans Listed below**  MoDLS 96 deg (true north)  RaDAPS 155 deg (true north)  UIUC-915 296 deg (true north)			

	****CHANGED SCAN RATE LATER ON****			
1756	Stopped BL Clear air scans with set 20 deg/sec (actual scan rate is 18/19 deg/sec) Testing scan speed set to 19 deg/sec (actual scan rate is 17/18 deg/sec)			
1800	T: 25.3 C; Td: 16.6 C; WS: 11 m/s; Wdir: 200 deg			
	Sky Conditions: Partly cloudy (cumulus clouds)			
1809	Began BL Clear Air Scans ******UPDATED******			
	**Scanning Strategy Listed Below** Scan Rate: 17/18 deg/sec (set to 19 deg/sec) Pulse Width: 0.8			
	Elevation Scans: 0.7, 1.3, 2.0, 2.7, 3.7, 5.0, 7.0, 9.0 (total time = ~03:00 min)  **RHI Scans Listed below**  MoDLS 96 deg (true north)  RaDAPS 155 deg (true north)  UIUC-915 296 deg (true north)			
1819	Water tower located to the NW (308 deg) in the town of Scott, MS, approximately 1.8 km			
1900	T: 26.0 C; Td: 16.0 C; WS: 8.5 m/s; Wdir: 185 deg			
	Sky Conditions: Partly cloudy (cumulus clouds)			
2000	T: 26.0 C; Td: 16.4.0 C; WS: 10.0 m/s; Wdir: 185 deg			
	Sky Conditions: Mostly cloudy			
2058	Starting to clear out at MAX location; partly cloudy now			
2100	T: 25.8 C; Td: 16.9 C; WS: 11.8 m/s; Wdir: 180 deg			
	Sky Conditions: Partly cloudy (cumulus clouds)			

2108	Gusted up to 15 m/s			
2110	16 m/s wind gust			
2146	Mostly cloudy skies			
2200	T: 26.2; Td: 16.4 C; WS: 11.5 m/s; Wdir: 177 deg			
	Sky Conditions: Overcast			
2203	17 m/s wind gust			
2241	Began Rapid Cycle Scans			
	**Scanning Strategy Listed Below** Scan Rate: 23/24 deg/sec (set to 25 deg/sec) Pulse Width: 0.4			
	**Elevations Listed below** Shallow: 0.7, 1.5, 2.6, 3.8, 5.0 Deep: 0.7, 1.5, 2.6, 6.0, 9.0 Shallow Deep			
	Secondary line formed ahead of primary line of interest and is within 60 km of vicinity, hence the switch to rapid cycle scans.			
	May need to lower the tower soon, as the line gets closer to MAX. May have to do it slightly early due to windy conditions. Had difficulty in a previous IOP where it was difficult to bring down the surface tower with strong winds.			
2300	***LOWERED SURFACE TOWER AHEAD OF CONVECTIVE LINE***			
2303	***RESUMED RAPID CYCLE SCANS***			
2304	***SURFACE TOWER LOWERED***			
	T: 26.0; Td: 17.0 C; WS: 11.0 m/s; Wdir: 180 deg			
	Sky Conditions: Overcast			

2313	Cloud to ground lightning observed to SW and NW			
2338	Constant cloud to ground lightning to our west			
2345	Got in Beast preparing to bail			
0000	Tornado Warning Issued			
0000	***SURFACE TOWER LOWERED***			
	Gust of 25 m/s			
0025	Returned to MAX			
0027	Surface station stopped recording except for wind data while convective line moved over MAX			
0105	***SURFACE TOWER LOWERED***			
	T: 21.0 C; Td: 20.0 C; WS: 5.0 m/s; Wdir: 235 deg			
	Sky Conditions: Overcast			
0117	***SURFACE TOWER LOWERED***  Heavy rain begins  Winds gusting up to 13 m/s  CG			
0122	***SURFACE TOWER LOWERED*** Winds gusting up to 17 m/s			
0126	***SURFACE TOWER LOWERED*** Wind gust of 19.5 m/s			
0131	***SURFACE TOWER LOWERED*** Wind gust of 21 m/s			
0203	Ends of ops declared			
	Will start tearing down once lightning and heavy precip moves out of vicinity			
0220	MAX tearing down			
0236	MAX Departing Site			
0304	MAX crew back at Motel			