WEST TEXAS WEATHER MODIFICATION ASSOCIATION – SAN ANGELO, TEXAS

SEEDING REPORT – June 23, 2023

SYNOPTIC/MESOSCALE CONDITIONS:
An upper-level ridge will remain in place today with limited shortwave activity. However, a stationary boundary will continue to aid in moisture advection across the region as a dryline to our west sharpens with daytime heating. CAPE values should increase to nearly 3k J/Kg this afternoon, but a stronger cap is in place which will take some time to overcome. Storms are expected to fire along the dryline west of the area moving into the region by 3-4PM if not a bit later. Keeping slight rain chances in the forecast as both the HRRR and NAM produce development, though these solutions still seem a bit too aggressive considering the cap.

LIFTING MECHANISM:
Dryline

THERMODYNAMIC INDICES (12Z KMAF)

Freezing Level (m)	4984	-15°C Height (m)	7100
Precipitable Water (inches)	1.17	CAPE (J/Kg)	1470
LCL	2029	CINH (J/Kg)	715
CCL	3873	LI(°C)	-5.8
MAF ICA	7.92	PB	6
Cloud Base (meters)	3573	DRT ICA	0.92
Warm Cloud Depth (meters)	1411	Cloud Base Temp (°C)	10

DISCUSSION:
19Z analysis showed a very unstable atmosphere in place across the region with CAPE values ranging from 1,500 J/Kg upwards to 3,000 J/Kg. However, strong capping remains across the region which has suppressed cloud development at this point. Will await the erosion of the cap as the dryline sharpens and nears our western counties. Just prior to 21Z, convection over Pecos County was spread northwest. Meanwhile, sat imagery was looking a bit more favorable for areas in northern Reagan County. Everything so far looks high based, but we'll standby. The pilot launched at 2130Z and headed northwest into Sterling County where sat imagery was looking good. Some echoes were already developing but sustainability looked limited so far. A second pilot was getting airborne by 22Z to look into development in Reagan County. The first pilot's first two targets did not produce. So we'll move into eastern Glasscock County and take care of the main cell that was moving into western Sterling County. Inflow came fast and furious on this cell so we upped dosaging due to the storms developing over and around the pilot. We got out of this area by 2205 into a better environment for visibilities. We'll head towards Sterling City now and work that cell. The pilot did find a batch of inflow here, but numerous outflow boundaries have resulted in very rough flight conditions. We'll bail from this area and regroup to the south. One more cell was seeded in far southern Sterling County by the first pilot. With development in Sterling all accounted for, the first pilot will RTB while second pilot handles Reagan/Irion Counties. Storms were aggressively seeded in Reagan County, especially in a notch on radar where inflows were 2kft/min or higher. Once we were done here, we moved S into Crockett County where one remnant storm remained. This cell was seeded by 2310Z After this, all development has been taken care of so we'll RTB after what appeared to be a rather successful day.

WATCHES/WARNINGS:
T-STORM WARNING – UPTON/REAGAN

SEEDED CELL ID'S:

101	545	522	360	101						

FLIGHT INFORMATION:

TIME (Z)	Plane	Flare Location	County
2130	**49P**	IN AIR	
2155	**09P**	IN AIR	
2159	**49P**	294° @ 50 nm	**STERLING**
2200	**49P**	294° @ 50 nm	**STERLING**
2200	**49P**	295° @ 50 nm	**STERLING**
2202	**49P**	293° @ 48 nm	**STERLING**
2211	**49P**	307° @ 41 nm	**STERLING**
2217	**49P**	310° @ 35 nm	**STERLING**
2221	**49P**	301° @ 26 nm	**STERLING**
2222	**49P**	299° @ 27 nm	**STERLING**
2223	**09P**	277° @ 33 nm	**IRION**
2224	**49P**	293° @ 27 nm	**STERLING**
2225	**49P**	RTB	
2226	**09P**	277° @ 31 nm	**IRION**
2228	**09P**	280° @ 32 nm	**IRION**
2235	**09P**	269° @ 45 nm	**REAGAN**
2237	**09P**	265° @ 47 nm	**REAGAN**
2239	**09P**	262° @ 48 nm	**REAGAN**
2242	**09P**	262° @ 52 nm	**REAGAN**
2244	**09P**	262° @ 54 nm	**REAGAN**
2247	**09P**	262° @ 53 nm	**REAGAN**
2303	**09P**	248° @ 61 nm	**CROCKETT**
2306	**09P**	244° @ 62 nm	**CROCKETT**
2306	**09P**	244° @ 62 nm	**CROCKETT**
2310	**09P**	RTB	

Seeding operations were conducted over Sterling (22G+3H), Irion (6G+0.75H), Reagan (15G+3.75H) and Crockett (8G+.75H) Counties. 51 glaciogenic flares and 8.25 hygroscopic flares were burned within 5 clouds. This is the 4th day for seeding in June and the 16th day for seeding during the season.