WEST TEXAS WEATHER MODIFICATION ASSOCIATION – SAN ANGELO, TEXAS

SEEDING REPORT – May 4, 2023

SYNOPTIC/MESOSCALE CONDITIONS:
Southwesterly flow aloft across Far West Texas will spread further east today bringing along the surface dryline with it. Ahead of the dryline, isentropic ascent will result in a few morning showers but as we move into the afternoon hours clearing to the west will allow for heating to take place. This will allow for the dryline to sharpen as a shortwave move over the area enhancing forcing aloft. Showers and storms are expected to fire in the 4-8PM range along a line from Lubbock to Big Spring to Ozona with movement further east during the late afternoon and evening hours.

LIFTING MECHANISM:
Dryline

THERMODYNAMIC INDICES (12Z KMAF)

Freezing Level (m)	4094	-15°C Height (m)	6500
Precipitable Water (inches)	1.02	CAPE (J/Kg)	309
LCL	1353	CINH (J/Kg)	257
CCL	3081	LI(°C)	-2.4
MAF ICA	2.04	PB	2
Cloud Base (meters)	2992	DRT ICA	-3.24
Warm Cloud Depth (meters)	1102	Cloud Base Temp (°C)	8

DISCUSSION:
At 18Z, the dryline was beginning to sharpen up just west of Glasscock and Reagan Counties. This is in response to clearing skies to the west along with better dynamic forcing as a shortwave is spreading over the region. The latest HRRR suggests a 4-8PM window, but based on sat trends, that could be sooner. Sat imagery at 19Z was far more interesting. Cu development in Glasscock County was getting more intense resulting in pilots on standby. One small cell fired up in northern Irion County but was very small and shallow. Will keep an eye on it but won't immediately launch on it as it is displaced from the dryline and may not last long. Cluster of storms did develop in Coke County just NE of the area. We'll hold off for now but sat imagery was starting to not look good for us, though still early at 2030Z. By 21Z, sat imagery in Irion County was looking more favorable. Did get a radar echo north of Barnhart, and with conditions in place, we'll go ahead and launch a pilot. Pilot got airborne just prior to 22Z and will head for the Irion/Tom Green County line. This cell was seeded as it moved over NW outskirts of San Angelo. The storm responded well to efforts both increasing in size and intensity. We backed further west and seeded another cell which moved over the city of San Angelo, again with a good response. The last cell seeded was marginal and never really responded. By 2315Z, on our way south to Schleicher/Sutton Counties, clouds began to fill in with low visibilities. The radar looked good, but sat imagery was showing complete overcast. Decided to RTB at this time.

WATCHES/WARNINGS:
T-Storm Watch

SEEDED CELL ID'S:

477	557	595								

FLIGHT INFORMATION:

TIME (Z)	Plane	Flare Location	County
2155	**09P**	IN AIR	
2208	**09P**	336° @ 08 nm	**TOM GREEN**
2209	**09P**	346° @ 08 nm	**TOM GREEN**
2212	**09P**	352° @ 09 nm	**TOM GREEN**

2213	**09P**	000° @ 09 nm	**TOM GREEN**
2215	**09P**	003° @ 11 nm	**TOM GREEN**
2217	**09P**	007° @ 12 nm	**TOM GREEN**
2227	**09P**	290° @ 07 nm	**TOM GREEN**
2228	**09P**	302° @ 07 nm	**TOM GREEN**
2235	**09P**	342° @ 07 nm	**TOM GREEN**
2236	**09P**	357° @ 07 nm	**TOM GREEN**
2237	**09P**	359° @ 07 nm	**TOM GREEN**
2246	**09P**	353° @ 16 nm	**TOM GREEN**
2247	**09P**	357° @ 17 nm	**TOM GREEN**
2315	**09P**	RTB	

Seeding operations were conducted over Tom Green (23G+3H) County. 23 glaciogenic flares and 3 hygroscopic flares were burned within 3 clouds. This is the 1st day for seeding in May and the 3rd day for seeding during the season.