WEST TEXAS WEATHER MODIFICATION ASSOCIATION – SAN ANGELO, TEXAS

SEEDING REPORT – May 17, 2023

SYNOPTIC/MESOSCALE CONDITIONS:
Upper-level flow aloft is quiet this morning, however a shortwave trough is expected to move off the Caprock into western portions of the Rolling Plains this afternoon and evening. Showers and storms are expected to fire up after 19Z for areas along and west of a Stamford to Robert Lee line. Latest HRRR agrees with this thinking while more storms are possible further south into Sterling County by 21Z. Coverage here will be less, but still see enough to warrant rain chances for areas north of highway 67.

LIFTING MECHANISM:
Shortwave Trough

THERMODYNAMIC INDICES (12Z KMAF)

Freezing Level (m)	4224	-15°C Height (m)	6500
Precipitable Water (inches)	1.00	CAPE (J/Kg)	131
LCL	1245	CINH (J/Kg)	200
CCL	3054	LI(°C)	-0.2
MAF ICA	1.32	PB	1
Cloud Base (meters)	2559	DRT ICA	-2.96
Warm Cloud Depth (meters)	1665	Cloud Base Temp (°C)	10

DISCUSSION:
By 1930Z, some convection was ongoing just north of the target area in Noland and Mitchell Counties. Some of these may push south into Sterling County as we push into 20Z and beyond. Pilots are on standby, but still some time before launching. At 20Z, the cell in Mitchell County was skirting far enough south to warrant a flight. We will launch and head that way to intercept as it moves into the target aera. This cell was treated earlier by the Rolling Plains program, so we'll provide maintenance seeding here. The pilot was airborne at 2015Z heading northwest. We are having some issues with telemetry, however, which are being troubleshooted. It looks like there is no telemetry today, so we'll work off flight aware. Pilot found inflow just prior to 2040Z and began seeding in northern Sterling County. This cell was seeded into and through 21Z and began to show a strong response via radar. Telemetry did come back after a while, so we should be good to go in that aspect. We are now investigating back building storms west of the main cell. The pilot so far is only finding outflow, but we'll stick around a bit longer. By 2130Z, it was obvious these cells have become outflow dominate with outflow boundaries blowing off to the east. We'll RTB. As first pilot landed, a second pilot got airborne as a cell was forming over Sterling City. We'll launch and head there as sat imagery was looking favorable across western Sterling County too. Like earlier, telemetry is not working again, but we have ADSB so we'll be able to operate efficiently. Pilot arrived at the cell at 2250Z and began finding inflow on the southwest corner. We'll work here and push west as radar was showing an area across western Sterling County filling in. Pilot found some good inflow between two cells which and began seeding here. We were able to get some bigger inflows allowing for the use of a hygroscopic flare as well.

WATCHES/WARNINGS:
N/A

SEEDED CELL ID'S:

279	280									

FLIGHT INFORMATION:

TIME (Z)	Plane	Flare Location	County
2015	**09P**	IN AIR	

2038	**09P**	325° @ 43 nm	**STERLING**
2040	**09P**	320° @ 47 nm	**STERLING**
2042	**09P**	320° @ 51 nm	**STERLING**
2044	**09P**	319° @ 49 nm	**STERLING**
2102	**09P**	325° @ 47 nm	**STERLING**
2105	**09P**	324° @ 49 nm	**STERLING**
2106	**09P**	325° @ 49 nm	**STERLING**
2108	**09P**	325° @ 49 nm	**STERLING**
2113	**09P**	315° @ 49 nm	**STERLING**
2130	**09P**	RTB	
2230	**49P**	IN AIR	
2252	**49P**	309° @ 36 nm	**STERLING**
2253	**49P**	309° @ 36 nm	**STERLING**
2256	**49P**	308° @ 39 nm	**STERLING**
2304	**49P**	300° @ 44 nm	**STERLING**
2306	**49P**	300° @ 45 nm	**STERLING**
2309	**49P**	300° @ 44 nm	**STERLING**
2311	**49P**	300° @ 44 nm	**STERLING**
2313	**49P**	301° @ 44 nm	**STERLING**
2320	**49P**	302° @ 45 nm	**STERLING**
2322	**49P**	302° @ 45 nm	**STERLING**
2330	**49P**	RTB	

Seeding operations were conducted over Sterling (37G+3.25H) County. 37 glaciogenic flares and 3.25 hygroscopic flares were burned within 2 clouds. This is the 7th day for seeding in May and the 9th day for seeding during the season.