## WEST TEXAS WEATHER MODIFICATION ASSOCIATION - SAN ANGELO, TEXAS

## SEEDING REPORT - April 20, 2023

### SYNOPTIC/MESOSCALE CONDITIONS:

A cold front will approach the area from the north this morning pushing south throughout the region. This boundary should clear highway 67 by noon before stalling near I-10 this afternoon. Favorable dynamical forcing aloft coupled with warm air advection ahead of the boundary could lead to some storms across the Hill Country this afternoon. Storms could develop along the tail end of the boundary if enough lift is present on the tail end of the boundary. Latest HRRR does suggest a few storms firing within Sutton County as a vort max embedded aloft could give just enough energy for development. Will keep slight rain chances in place for southern parts of the area. **LIFTING MECHANISM:** 

Cold Front

# THERMODYNAMIC INDICES (12Z KMAF)

Freezing Level (m)	3750	-15°C Height (m)	6000
Precipitable Water (inches)	1.12	CAPE (J/Kg)	55
LCL	3857	CINH (J/Kg)	58,000
CCL	7288	LI(°C)	2.5
MAF ICA	-9.4	PB	0
Cloud Base (meters)	2743	DRT ICA -4.24	
Warm Cloud Depth (meters)	1007	Cloud Base Temp (°C)	12

### DISCUSSION:

The tail end of the cold front was pushing through Sutton County resulting in agitated cu across the county. Met had to work remotely, so no telemetry was activated as pilot took off at 1940Z. Still, working off of ADSB, targeting looked was still nicely done. The pilot arrived at a cell in eastern Sutton County which fired up and immediately had good inflow. Cell was seeded in this area through 2020Z before pushing a bit further northeast towards another cell. Here, more inflow was found and seeding continued as the two cells merged before pushing east out of the target area. A total of 16G and 2H flares were burned.

N/A

SEEDED CELL ID'S:

123					
FLIGHT INFORMATION:					
TIME (Z)	Plane	Flare Location	County		
1940	09P	IN AIR			
2012	09P	165° @ 53 nm	SUTTON		
2014	09P	165° @ 53 nm	SUTTON		
2017	09P	168° @ 55 nm	SUTTON		
2018	09P	168° @ 55 nm	SUTTON		
2029	09P	157° @ 47 nm	SUTTON		
2031	09P	157° @ 47 nm	SUTTON		
2033	09P	153° @ 44 nm	SUTTON		
2040	09P	157° @ 46 nm	SUTTON		
2100	09P	RTB			

Seeding operations were conducted over Sutton (16G+2H) County. 16 glaciogenic flares and 2 hygroscopic flares were burned within 1 cloud. This is the  $1^{st}$  day for seeding in April and the  $1^{st}$  day for seeding during the season.