WEST TEXAS WEATHER MODIFICATION ASSOCIATION - SAN ANGELO, TEXAS

SEEDING REPORT - October 4, 2023

SYNOPTIC/MESOSCALE CONDITIONS:

Strong southwesterly flow aloft with embedded shortwaves will once again allow for shower and storm activity to fire up this afternoon. Storms should fire up around 20Z in two clusters, one between Snyder and Lubbock, another within Pecos County. As these storms mature though the afternoon and evening, they'll come together as a squall line as a cold front catches up pushing through the Rolling Plains and Concho Valley this evening into the overnight hours. Will stay with likely rain chances with some possible severe storms.

LIFTING MECHANISM:

Cold Front

THERMODYNAMIC INDICES (12Z KMAF)

Freezing Level (m)	4417	-15°C Height (m)	7100
Precipitable Water (inches)	1.32	CAPE (J/Kg)	1502
LCL	932	CINH (J/Kg)	167
CCL	2718	LI(°C)	-3.0
MAF ICA	-3.24	PB	3
Cloud Base (meters) 2164		DRT ICA	-3.8
Warm Cloud Depth (meters) 2252		Cloud Base Temp (°C)	22

DISCUSSION:

Showers and storms were ongoing across parts of the Trans-Pecos, Permian Basin, and western Rolling Plains. Anvil scatter has blocked any ability to see development on sat imagery and with latest HRRR models still showing good development filling in over Sterling, Reagan, and Crockett Counties, we'll send a plane up in that area to observe. As the large cell in Pecos County spread over Crockett, flood warnings were in place in Pecos County, but not Crockett County. We still wanted to push towards Big Lake first to make sure we were not missing any single cell development, but as pilots arrived no targets were in place. We'll now dive south into Crockett County and get along the leading edge of the main cell. Seeding began by 2330Z as we'll stay along the leading bow of the cell. Pilots found a good spot of inflow and stuck with that for now, but we are running out of daylight here soon, especially with the anvil cover. Cell was also becoming embedded a bit on the leading edges, but the pilots are still finding patches of inflow. Radar began to show an outflow boundary coming off the storm. The pilots were starting to get in rough air, and with the storm becoming embedded and daylight becoming an issue, we'll likely call RTB after we check one more spot.

WATCHES/WARNINGS:

FLOOD WARNING - PECOS T-STORM WARNING - CROCKETT SEEDED CELL ID'S:

12						
FLIGHT INFORMATION:						
TIME (Z)	Plane	Flare Location	County			
2235	49P	IN AIR				
2332	49P	229° @ 56 nm	CROCKETT			
2333	49P	227° @ 57 nm	CROCKETT			
2338	49P	225° @ 59 nm	CROCKETT			
2340	49P	226° @ 58 nm	CROCKETT			
2342	49P	223° @ 59 nm	CROCKETT			

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2344	49P	222° @ 57 nm	CROCKETT
2347	49P	224° @ 57 nm	CROCKETT
2348	49P	223° @ 56 nm	CROCKETT
2355	49P	217° @ 54 nm	CROCKETT
2356	49P	216° @ 55 nm	CROCKETT
2359	49P	215° @ 55 nm	CROCKETT
0005	49P	RTB	

Seeding operations were conducted over Crockett (22G+2H) County. 22 glaciogenic flares and 2 hygroscopic flares were burned within 1 cloud. This is the 1st day for seeding in October and the 25th day for seeding during the season.