

TRANS-PECOS WEATHER MODIFICATION ASSOCIATION - PECOS, TEXAS

SEEDING REPORT - May 19, 2023

SYNOPTIC/MESOSCALE CONDITIONS:

An upper-level trough to the west will put the area under southwesterly flow. This will help enhances forcing aloft over a cold front which will sweep through the region later this afternoon and evening. Ahead of this boundary, sufficient surface heating will destabilize the atmosphere allowing for showers and storms to fire up. Latest HRRR suggests storms firing up around 3-4PM this afternoon becoming more widespread across the eastern Trans-Pecos into the Concho Valley. Some storms could be severe.

LIFTING MECHANISM:

Cold Front

THERMODYNAMIC INDICES (12Z KMAF)

Freezing Level (m)	4141	-15°C Height (m)	6600
Precipitable Water (inches)	1.01	CAPE (J/Kg)	366
LCL	1520	CINH (J/Kg)	222
CCL	3458	LI (°C)	-0.5
MAF ICA	2.32	PB	1
Cloud Base (meters)	3292	DRT ICA	0.48
Warm Cloud Depth (meters)	849	Cloud Base Temp (°C)	12

DISCUSSION:

18Z analysis shows a few cu firing up over the higher terrain of the Davis Mountains. Still no echoes on radar but is an indication that the atmosphere is responding to the afternoon heating. Will keep an eye on this area but the main focal point will be the tail end of the cold front which is has just passed Fort Stockton evident of the northerly winds being reported. Will keep an eye on eastern Pecos County as well. By 2120Z, sat imagery was showing a good buildup in progress near the Pecos/Reeves County line. The pilot will launch and head south of Pecos. The pilot seeded cells just south of Pecos and two more in Pecos County just east and just south of Fort Stockton. Convection was not all that impressive. We'll move back west into Reeves County and work the cell south of Pecos. A few more flares were fired here but with conditions falling apart a bit we'll RTB.

WATCHES/WARNINGS:

N/A

SEEDED CELL ID'S:

738	626	702	654								
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FLIGHT INFORMATION:

TIME (Z)	Plane	Flare Location	County
2140	26P	IN AIR	
2203	26P	205° @ 12 nm	PECOS
2205	26P	203° @ 11 nm	PECOS
2206	26P	205° @ 09 nm	PECOS
2213	26P	142° @ 22 nm	REEVES
2215	26P	132° @ 24 nm	REEVES
2218	26P	139° @ 24 nm	REEVES
2227	26P	124° @ 44 nm	REEVES
2228	26P	124° @ 44 nm	REEVES
2247	26P	222° @ 03 nm	PECOS
2249	26P	210° @ 03 nm	PECOS
2250	26P	RTB	

Seeding operations were conducted over Pecos (10G) and Reeves (10G) Counties. 20 glaciogenic flares were burned within 4 clouds. This is the 1st day for seeding in May and the 1st day for seeding during the season.