

**TRANS-PECOS WEATHER MODIFICATION ASSOCIATION - PECOS, 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)	2743	DRT ICA	-
Warm Cloud Depth (meters)	1674	Cloud Base Temp (°C)	-

**DISCUSSION:**

Sat imagery by 1830Z showed an area of interest near Fort Stockton. Pilot was called airborne at 1855Z as development looked favorable enough for a launch. The pilot will load up and head that way with the expectation that we can beat any possible warnings that may come later this afternoon and evening. Unfortunately, from the time the cloud appeared on sat imagery to the time the pilot got airborne (15 minutes, 3 scans), the storm quickly developed and became warned. We'll still head towards Balmorhea where more development was trying to take place. Fortunately, a successful troubleshoot of TITAN allowed MAF radar to return. The pilot began seeding just after 1930Z just to the southwest of Saragosa. Meanwhile, Fort Stockton cell was re-warned extending to the Pecos River. Seeding continued to the west of Balmorhea as we approached 20Z. However, this cell became warned at 1955Z, so we decided to pull off as it was also beginning to get a bit too severe. We'll RTB and regroup for a possible round two.

**WATCHES/WARNINGS:**

- T-STORM WARNING - PECOS (central)
- T-STORM WARNING - PECOS (central, extension of first)
- FLOOD WARNING - PECOS (central)
- T-STORM WARNING - REEVES (southeast)
- FLOOD WARNING - PECOS (east)

**SEEDED CELL ID'S:**

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**FLIGHT INFORMATION:**

TIME (Z)	Plane	Flare Location	County
1900	26P	IN AIR	
1934	26P	188° @ 27 nm	REEVES
1936	26P	192° @ 28 nm	REEVES
1938	26P	192° @ 28 nm	REEVES
1942	26P	191° @ 29 nm	REEVES

<b>1947</b>	<b>26P</b>	175° @ 29 nm	<b>REEVES</b>
<b>1952</b>	<b>26P</b>	179° @ 28 nm	<b>REEVES</b>
<b>1955</b>	<b>26P</b>	RTB	

Seeding operations were conducted over Reeves (15G+3H) County. 15 glaciogenic flares and 3 hygroscopic flares were burned within 1 cloud. This is the 3<sup>rd</sup> day for seeding in October and the 19<sup>th</sup> day for seeding during the season.