

TRANS-PECOS WEATHER MODIFICATION ASSOCIATION - PECOS, TEXAS

SEEDING REPORT - September 15, 2023

SYNOPTIC/MESOSCALE CONDITIONS:

Numerous showers and storms are in place across the region this morning. The heaviest is along a line from near Munday southwest to Hamlin with another cluster across parts of Schleicher, Sutton, and eastern Crockett Counties. Additional showers and storms are present moving towards both Reagan and Sterling County. Much of this activity is expected to push east and dissipate by 11AM this morning. Meanwhile, a weak surface boundary which is south of the region this morning will lift back north and stall somewhere near highway 67. This will serve as focal point for showers and storms to redevelop this afternoon and evening. Best window will be from 2PM through 8PM, but the latest HRRR keeps convection ongoing into the overnight hours with another round of heavy showers by tomorrow morning.

LIFTING MECHANISM:

Surface Boundary

THERMODYNAMIC INDICES (12Z KMAF)

Freezing Level (m)	4304	-15°C Height (m)	7100
Precipitable Water (inches)	1.23	CAPE (J/Kg)	424
LCL	1022	CINH (J/Kg)	140
CCL	2741	LI (°C)	-2.9
MAF ICA	0.76	PB	3
Cloud Base (meters)	2896	DRT ICA	-5.52
Warm Cloud Depth (meters)	1408	Cloud Base Temp (°C)	9

DISCUSSION:

At 16Z, a few isolated showers were taking place in eastern Pecos County, but profiles show very limited tops indicating these are a bit premature. Latest HRRR continues to suggest development later this afternoon by 2 or 3PM along a surface boundary. Clear skies this morning has allowed for the atmosphere to destabilize some though we'll need more heating than the current 76F in Pecos. Pilot got airborne just after 2030Z to check out an area south of Fort Stockton. Storms fired up and moved off the mountains and we'll intercept them as they move into Pecos County. The pilot approached the cell by 21Z and began working the leading rain shaft to the north. The pilot found inflow right away as he pushed east along the northern shaft. As he got into the notch, really good inflow was found, and aggressive work was done. The pilot made it to the east side of these cells with a good dosage already in place. We'll dive south into deep southern Pecos County and work the leading edge as the system moves east. Seeding took place from the NE edge to the SE edge near the Brewster County line. We'll push back north and get more in, but the cell got warned. We were able to get a bit more in before we had to pull off the cell, but overall, this was a very good flight.

WATCHES/WARNINGS:

T-STORM WARNING - PECOS (2135Z)

SEEDED CELL ID'S:

1455											
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FLIGHT INFORMATION:

TIME (Z)	Plane	Flare Location	County
2100	26P	IN AIR	

2115	26P	140° @ 50 nm	PECOS
2116	26P	136° @ 50 nm	PECOS
2117	26P	134° @ 52 nm	PECOS
2118	26P	134° @ 52 nm	PECOS
2120	26P	130° @ 52 nm	PECOS
2124	26P	127° @ 61 nm	PECOS
2127	26P	133° @ 66 nm	PECOS
2129	26P	138° @ 72 nm	PECOS
2133	26P	143° @ 75 nm	PECOS
2135	26P	137° @ 68 nm	PECOS
2140	26P	RTB	

Seeding operations were conducted over Pecos (22G+4H) County. 22 glaciogenic flares and 4 hygroscopic flares were burned within 1 cloud. This is the 1st day for seeding in September and the 16th day for seeding during the season.