

TRANS-PECOS WEATHER MODIFICATION ASSOCIATION - PECOS, TEXAS

SEEDING REPORT - May 31, 2023

SYNOPTIC/MESOSCALE CONDITIONS:

Upper-level ridging shifts a bit further east today allowing for shortwave activity to slide over the region later this afternoon. This should provide plenty of support aloft to allow for showers and storms to develop along a weak dryline which is placed in southeast New Mexico extended southwest into the western Trans-Pecos. CAPE values should approach 3k J/Kg with the convective temp expected to be reached early this afternoon. Showers and storms look likely per the latest HRRR in the 1PM - 5PM time period, but especially between 2PM and 4PM.

LIFTING MECHANISM:

Shortwave Aloft

THERMODYNAMIC INDICES (12Z KMAF)

Freezing Level (m)	4436	-15°C Height (m)	6600
Precipitable Water (inches)	0.83	CAPE (J/Kg)	421
LCL	1378	CINH (J/Kg)	512
CCL	3637	LI (°C)	-3.2
MAF ICA	3.76	PB	3
Cloud Base (meters)	2896	DRT ICA	-
Warm Cloud Depth (meters)	1540	Cloud Base Temp (°C)	12

DISCUSSION:

Development through much of 19Z was unimpressive. However, at 1950Z, a cell just SW of Pecos began to have some vertical development which was evident per latest sat imagery and radar dbz. We'll launch and head that way and work along the leading line of cells in Ward and Loving Counties. The pilot got airborne right at 20Z and will head just southwest to Pecos. This pilot arrived at the cell by 2015Z and began seeding. Bases were at 9.5kft with temps at 12C. Cells were seeded just inside Loving County east of Mentone south towards Barstow and back northwest. By 2025, this main area was sufficiently seeded so we'll push back into Loving County where a second new cell developed. This cell provided plenty of inflow as well and appeared to respond well to our efforts. By the end of seeding at 2047Z, dbz pushed into the 60's with VILS of 75.6. With this being the only game in town for the moment, we'll RTB.

WATCHES/WARNINGS:

T-Storm Watch - Reeves, Loving, Ward, Culberson

SEEDED CELL ID'S:

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FLIGHT INFORMATION:

TIME (Z)	Plane	Flare Location	County
2000	26P	IN AIR	
2015	26P	333° @ 20 nm	LOVING
2016	26P	340° @ 18 nm	LOVING
2018	26P	338° @ 18 nm	LOVING
2020	26P	351° @ 16 nm	WARD
2024	26P	009° @ 14 nm	WARD
2026	26P	007° @ 14 nm	WARD
2030	26P	017° @ 13 nm	WARD
2035	26P	006° @ 17 nm	WARD
2039	26P	350° @ 25 nm	LOVING
2041	26P	348° @ 28 nm	LOVING
2042	26P	345° @ 29 nm	LOVING

2043	26P	345° @ 29 nm	LOVING
2046	26P	353° @ 26 nm	LOVING
2047	26P	358° @ 25 nm	LOVING
2050	26P	RTB	

Seeding operations were conducted over Ward (8G+2H) and Loving (18G) Counties. 26 glaciogenic flares and 2 hygroscopic flares were burned within 2 clouds. This is the 7th day for seeding in May and the 7th day for seeding during the season.