TRANS-PECOS WEATHER MODIFICATION ASSOCIATION - PECOS, TEXAS

SEEDING REPORT - July 31, 2023

SYNOPTIC/MESOSCALE CONDITIONS:

Upper-level ridge that has dominated the region has shifted a bit further east today. This could allow for shortwave activity to ride the southern periphery spreading over the Big Bend region into the higher terrain of the Trans-Pecos. Some storms are expected to fire up due to the terrain, but a few storms could survive over the adjacent plains, especially this evening when dynamical forcing aloft is best. Will go with slight rain chances for after 4PM as a result.

LIFTING MECHANISM:

Forcing Aloft

THERMODYNAMIC INDICES (12Z KMAF)

Freezing Level (m)	5223	-15°C Height (m)	7600
Precipitable Water (inches)	1.30	CAPE (J/Kg)	324
LCL	2279	CINH (J/Kg)	200
CCL	3344	LI(°C)	-0.5
MAF ICA	-1.68	PB	1
Cloud Base (meters)	2743	DRT ICA	-
Warm Cloud Depth (meters)	2480	Cloud Base Temp (°C)	14

DISCUSSION:

Showers and storms over the higher terrain were drifting over the adjacent plains through the 21Z hour. However, development was shallow and short-lived until better dynamics developed later in the evening. By 2210Z, enough was seen to warrant a launch south near the PC/RV county line. Bases were lower than our usual for the season at 9kft, with temperatures at the base at 14°C. We'll work on this one cell as other development is quickly dissipating. Our cell with some flares is hanging in there at 2255Z, but we are starting to lose it per latest radar. We'll stick to it a bit longer. Radar scan just prior to 23Z showed some regrowth on the northern side of the cell. We'll stick there as we cross into 23Z. We got one last dosage in just after 2305Z and RTB'd as it appeared the cloud responded.

N/A

SEEDED CELL ID'S:

229 230											
FLIGHT INFORMATION:											
TIME (Z)	Plane	F	Flare Location			County					
2230	26P		IN AIR								
2251	26P	-	144° @	24 nm			PECOS				
2253	26P		146° @	24 nm			PECOS				
2255	26P	-	147° @	25 nm			PECOS				
2257	26P	-	141° @	24 nm			PECOS				
2259	26P		131° @	17 nm			REEVES				
2302	26P		131° @	17 nm			REEVES				
2306	26P	-	131° @	17 nm			REEVES				
2310	26P		RT	B							

Seeding operations were conducted over Pecos (7G+1H) and Reeves (6) Counties. 13 glaciogenic flares and 1 hygroscopic flare were burned within 2 clouds. This is the 2^{nd} day for seeding in July and the 11^{th} day for seeding during the season.