### TRANS-PECOS WEATHER MODIFICATION ASSOCIATION - PECOS, TEXAS

### SEEDING REPORT - August 11, 2023

### SYNOPTIC/MESOSCALE CONDITIONS:

The upper-level ridge remains far east still we should see some impulses of shortwave activity ride the western periphery later this afternoon. This will interact with the Davis Mountains and help trigger storms later this afternoon as heating takes place. Storms will be pushed north by strong mid to upper-level winds resulting in good rain chances for the adjacent plains, mainly near Fort Stockton west towards Pecos. Will go with likely rain chances as surface support will be available due to extreme heating and decent moisture advection, though clouds are still expected to be rather high.

### LIFTING MECHANISM:

Orographic Lift

### THERMODYNAMIC INDICES (12Z KMAF)

Freezing Level (m)	5010	-15°C Height (m)	7500
Precipitable Water (inches)	1.33	CAPE (J/Kg)	144
LCL	2657	CINH (J/Kg) 377	
CCL	4171	LI(°C)	-0.4
MAF ICA 1.		PB	1
Cloud Base (meters) 3810		DRT ICA	_
Warm Cloud Depth (meters) 1200		Cloud Base Temp (°C)	8

### DISCUSSION:

Storms fired over the higher terrain prior to 21Z. These began to drift northward towards the adjacent plains by 2115Z. Pilot was called airborne at that time and will first target an isolated cell about 20 miles SW of Fort Stockton. We'll work back west from there into Reeves County where more convection was ongoing. The bases were very high, 12.5kft. And rain was not really touching the ground. We did get a burst of inflow after 22Z and did see, but inflows were very limited. We did get a bit of a response on this cell but only for a limited time. We'll now push to just south of Pecos and work in this area, though per sat imagery it was highly embedded. We'll stay on the north side. The area near Pecos never developed, so it was decided to RTB at that time.

## WATCHES/WARNINGS:

N/A

443

# SEEDED CELL ID'S:

2216

2245

26P

26P

FLIGHT INFORMATION:					
TIME (Z)	Plane	Flare Location	County		
2125	26P	IN AIR			
2206	26P	148° @ 42 nm	PECOS		
2208	26P	148° @ 42 nm	PECOS		
2214	26P	151° @ 48 nm	PECOS		

150° @ 49 nm

RTB

PECOS

Seeding operations were conducted over Pecos (8G+2H) County. 8 glaciogenic flares and 2 hygroscopic flares were burned within 1 cloud. This is the  $2^{\rm nd}$  day for seeding in August and the  $13^{\rm th}$  day for seeding during the season.