TRANS-PECOS WEATHER MODIFICATION ASSOCIATION - PECOS, TEXAS

SEEDING REPORT - June 7, 2023

SYNOPTIC/MESOSCALE CONDITIONS:

An upper-level ridge is in place across parts of Central Texas into the Concho Valley. Further west, southwesterly flow aloft has developed where a weak dryline is placed. This dryline, along with the higher terrain, will be the focal point for shower and storm development this afternoon. Dew points in the mid to upper 50's will provide plenty of moisture by dynamical forcing will be lacking overall as shortwave activity is expected to be limited. With PW values of 1.14", any storms that do develop could provide brief heavy downpours. Will keep likely chances in the forecast for the Trans-Pecos.

LIFTING MECHANISM:

Dryline, Upper-Level Forcing

THERMODYNAMIC INDICES (12Z KMAF)

Freezing Level (m)	4242	-15°C Height (m)	6500
Precipitable Water (inches)	1.14	CAPE (J/Kg)	283
LCL	1640	CINH (J/Kg)	154
CCL	3048	LI(°C)	-2.4
MAF ICA	4.76	PB	3
Cloud Base (meters)	3315	DRT ICA	-
Warm Cloud Depth (meters)	927	Cloud Base Temp (°C)	10

DISCUSSION:

Showers and storms have formed over the high terrain as of 202. By 2030Z, sat imagery was blowing up a cloud south of Fort Stockton. We'll launch and head that way as it has tapped into some unstable air and could rapidly develop. The pilot will be airborne by 2040Z and head that way. We'll first intercept cells coming into Pecos County from near the Jeff Davis/Reeves line and then push our way east. The first target is 20W of Fort Stockton. Operations began just after 21Z on the NE portion of the cloud. Bases were at 11kft with temps around 10C. By 2120Z, already had a good dosage in cloud #489. We'll stay on it for now as the other two cells (east Pecos County, west Reeves County) are nearing severe limits. Western cells did get warned. By 2130Z, seeding on the main cell was completed with a dosage of 16G+2H. We'll now move east further into Pecos County and target cell #524. This cell did get warned at 2135Z. We'll head there and see if we can utilize our 20minute window. Compared to further west storms, this one is not too severe. Cell #489 was also warned at 21402. We were able to seed this cell through 2145Z but lost signal with the flare system. Only had 5 minutes left our window anyway, and with all cells warned, it's a good time to RTB and regroup.

WATCHES/WARNINGS:

T-Storm Warning - Reeves T-Storm Warning - Pecos

T-Storm Warning - Pecos

SEEDED CELL ID'S:

489	524										
FLIGHT INFORMATION:											
TIM	E (Z)		Plane	I	Flare Location			County			
2	040		26P		IN AIR						
2	112		26P		162° @ 26 nm				PECOS		
2	2115		26P		159° @ 28 nm				PECOS		
2117 26P			156° @	31 nm		PECOS					

2118	26P	157° @ 31 nm	PECOS
2122	26P	152° @ 33 nm	PECOS
2124	26P	155° @ 30 nm	PECOS
2126	26P	153° @ 34 nm	PECOS
2128	26P	149° @ 34 nm	PECOS
2129	26P	149° @ 35 nm	PECOS
2141	26P	130° @ 54 nm	PECOS
2143	26P	129° @ 58 nm	PECOS
2144	26P	128° @ 56 nm	PECOS
2155	26P	RTB	

Seeding operations were conducted over Pecos (22G+2H) County. 22 glaciogenic flares and 2 hygroscopic flares were burned within 2 clouds. This is the $1^{\rm st}$ day for seeding in June and the $8^{\rm th}$ day for seeding during the season.