TRANS-PECOS WEATHER MODIFICATION ASSOCIATION – PECOS, TEXAS

SEEDING REPORT – October 3, 2023

SYNOPTIC/MESOSCALE CONDITIONS:

Favorable dynamical forcing remains across the region. This will continue to interact with a surface dryline that is hanging around the region which is placed a bit further east today. Clearer skies today should allow temperatures to push beyond the convective temperature which will help initiate showers and storms along the dryline. Latest HRRR suggest a 2-6PM window, and with sufficient instability and steep mid-level lapse rates, severe storms can be possible again today.

LIFTING MECHANISM:

Surface Boundary

THERMODYNAMIC INDICES (12Z KMAF)

Freezing Level (m)	4437	-15°C Height (m)	7250
Precipitable Water (inches)	1.18	CAPE (J/Kg)	612
LCL	1227	CINH (J/Kg)	146
CCL	1804	LI(°C)	-1.7
MAF ICA	-1.96	PB	2
Cloud Base (meters)	2734	DRT ICA	-
Warm Cloud Depth (meters)	1703	Cloud Base Temp (°C)	9

DISCUSSION:

Sat imagery as 1830Z showed a few towering cu firing up over parts of eastern Pecos County. By 19Z, radar echoes showed good development so pilot took off and headed for 15ESE of Fort Stockton. We'll begin work here with sat imagery showing potential further development further west. MAF radar on TITAN is still not working. Have a ticket in with Dixon. Likely not to be resolved by the end of the season. We'll work off other radar feeds. This cell ESE of Fort Stockton was seeded through the 19Z hour into the 20Z hour. We'll now push back west to just SSW of Belding Farms. This cell was seeded with a marginal dosage but appeared to not want to build. As we near 2030Z, we'll push to the NW of Fort Stockton and work one more cell. This cell was looking aggressive as the previously seeded cell became warned. We seeded this cell quickly as inflow was abundant. The pilot did report some hail in the cloud which isn't surprising considering dbz and vil levels. We'll circle back in and get another good dosage before we pull off due to this one now being warned. Seeding seemed to certainly help the hail threat as things calmed down a bit. With that cell taken care of by 2035Z, we'll move closer to Imperial and do quick work as new cells were moving NE. We'll do some work here before the storm crosses the Pecos River into Crane County.

WATCHES/WARNINGS:

T-STORM WARNING – PECOS (east)
T-STORM WARNING – PECOS (central)
FLOOD WARNING – PECOS (east)

SEEDED CELL ID'S:

456	466	461	460								

FLIGHT INFORMATION:

TIME (Z)	Plane	Flare Location	County
1915	**26P**	**IN AIR**	
1852	**26P**	115° @ 57 nm	**PECOS**
1955	**26P**	118° @ 57 nm	**PECOS**

1958	**26P**	121° @ 58 nm	**PECOS**
2001	**26P**	116° @ 59 nm	**PECOS**
2003	**26P**	145° @ 43 nm	**PECOS**
2016	**26P**	147° @ 42 nm	**PECOS**
2019	**26P**	145° @ 41 nm	**PECOS**
2028	**26P**	123° @ 41 nm	**PECOS**
2029	**26P**	121° @ 39 nm	**PECOS**
2031	**26P**	116° @ 37 nm	**PECOS**
2034	**26P**	113° @ 35 nm	**PECOS**
2035	**26P**	120° @ 34 nm	**PECOS**
2044	**26P**	100° @ 50 nm	**PECOS**
2046	**26P**	097° @ 48 nm	**PECOS**
2048	**26P**	097° @ 51 nm	**PECOS**
2051	**26P**	100° @ 46 nm	**PECOS**
2105	**26P**	RTB	

Seeding operations were conducted over Pecos (38G+3H) County. 38 glaciogenic flares and 3 hygroscopic flares were burned within 4 clouds. This is the 2nd day for seeding in October and the 18th day for seeding during the season.