

**TRANS-PECOS WEATHER MODIFICATION ASSOCIATION - PECOS/BARSTOW, TEXAS**

**SEEDING REPORT - June 14, 2017**

**SYNOPTIC/MESOSCALE CONDITIONS:**

Dryline remains in place across Far West Texas. This boundary will advance eastward through the morning into the afternoon. Temperatures will push into the triple digits across the Trans-Pecos and Permian Basin likely reaching the convective temperature. At this point, convection should blossom along the dryline despite limited upper level support. CAPE values in the 2k-3k J/Kg range along with steep lapse rates and 30 knot 0-6km bulk shear could result in a few severe storms. Main threat will be downburst due to high dew point depressions. HRRR model is much more aggressive with development than the WRF. With the atmosphere set up the way it is, HRRR solution is looking more likely which initiates convection between 2 and 3PM along and south of I-20 from Big Spring to Balmorhea.

**LIFTING MECHANISM:**

Dryline, Sufficient Surface Heating

**THERMODYNAMIC INDICES (12Z KMAF)**

Freezing Level (m)	4922	CAPE (J/Kg)	793
Precipitable Water (inches)	0.93	CINH (J/Kg)	505
LCL	1509	LI(°C)	-3.1
CCL	3648	PB	3
MAF ICA	1.76	DRT ICA	-
Cloud Base (meters)	3777	Cloud Base Temp (°C)	6
Warm Cloud Depth (meters)	1144		

**DISCUSSION:**

19Z ANALYSIS SHOWED CU DEVELOPING OVER THE DAVIS MOUNTAINS AND SPREADING NORTH AND EAST. THIS IS EXPECTED TO BE THE START OF SHOWER/STORM DEVELOPMENT THAT WILL IMPACT THE EASTERN HALF OF THE TRANS-PECOS THIS AFTERNOON. THE CAP WAS BEGINNING TO ERODE AS TEMPERATURES WERE CLIMBING NEAR THE CONVECTIVE TEMPERATURES. ONCE WE HIT THAT, WE SHOULD SEE RAPID STORM DEVELOPMENT ALONG THE DRYLINE WHERE CAPE VALUES WERE OVER 3K J/KG. SURFACE CONVERGENCE WAS BETTER THEN YESTERDAY ALONG THE DRYLINE, SO THERE IS A CHANCE WE COULD SEE BETTER COVERAGE AND POSSIBLY MORE SEVERE DEVELOPMENT. PILOT WILL BE PUT ON STANDBY. STORMS BEGAN TO BLOW OFF THE MOUNTAINS AT 2030Z. THEREFORE PILOT WILL BE CALLED AIRBORNE AT THAT TIME AND HEAD TOWARDS SARAGOSA. STORM WAS SEEDED HEAVILY THROUGH 2130Z BEFORE STORM BECAME WARNED. WE PUSHED FURTHER WEST BUT WERE UNABLE TO FIND INFLOW AS STORM BECAME EMBEDDED. THEREFORE, WE MOVED NORTH INTO WARD COUNTY TO SEED AN ISOLATED STORM. WE DID SEED THIS CELL WITH 3 DOSAGES BUT IT STARTED TO BECOME ENGULFED IN THE LARGER, WARNED CELL. AT THIS POINT, WE BACKED OFF. WITH NO MORE SEEDABLE CONVECTION WITHIN THE TARGET AREA. WE DECIDED TO RTB.

**WATCHES/WARNINGS:**

T-STORM WARNING - PECOS

T-STORM WARNING - WARD

**SEEDED CELL ID'S:**

21	75						
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**FLIGHT INFORMATION:**

TIME (Z)	Plane	Flare Location	County
2035	26P	IN AIR	
2056	26P	170° @ 27 nm	REEVES
2100	26P	165° @ 31 nm	PECOS
2101	26P	160° @ 31 nm	PECOS
2102	26P	160° @ 31 nm	PECOS
2107	26P	155° @ 31 nm	PECOS

2108	26P	155° @ 30 nm	PECOS
2110	26P	160° @ 31 nm	PECOS
2121	26P	166° @ 31 nm	PECOS
2114	26P	163° @ 34 nm	PECOS
2116	26P	165° @ 33 nm	PECOS
2121	26P	175° @ 31 nm	PECOS
2124	26P	172° @ 33 nm	PECOS
2139	26P	135° @ 25 nm	PECOS
2218	26P	095° @ 28 nm	WARD
2219	26P	094° @ 24 nm	WARD
2221	26P	095° @ 25 nm	WARD
2225	26P	RTB	

Seeding operations were conducted over Ward (6), Reeves (2) and Pecos (24) Counties. 32 flares were burned within 2 clouds. This is the 5<sup>th</sup> day for seeding in June and the 6<sup>th</sup> day for seeding during the season.