

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

SEEDING REPORT - May 30, 2017

SYNOPTIC/MESOSCALE CONDITIONS:

Shortwave activity aloft along with abundant moisture advection may result in isolated to scattered showers and storms across the Trans-Pecos today. Main lifting mechanism will be topographic lift with storms forming over the mountains before spreading over the adjacent plains. Limited CINH will result in a few premature showers/storms prior to convective initiation, but once we hit peak heating we should see more convective development ongoing even within the early initiated showers/storms. Latest HRRR model suggests developing taking place by around 18Z with better development by 19/20Z.

LIFTING MECHANISM:

Strong Dynamics Aloft

THERMODYNAMIC INDICES (12Z KMAF)

Freezing Level (m)	4067	CAPE (J/Kg)	586
Precipitable Water (inches)	0.28	CINH (J/Kg)	94
LCL	1892	LI(°C)	-2.9
CCL	2356	PB	3
MAF ICA	2.76	DRT ICA	-
Cloud Base (meters)	2845	Cloud Base Temp (°C)	7
Warm Cloud Depth (meters)	1221		

DISCUSSION:

A FEW SHWOERS DEVELOPED ALONG THE REEVES/WARD COUNTY LINE JUST NW OF PECOS. ALTHOUGH THESE ARE NOT SEEDABLE AT THIS TIME, IT'LL BE WORTH WATCHING AS TEMPERATUERS PUSH INTO THE MID TO UPPER 80'S. AN ADDITIONAL AREA OF SHOWERS/STORMS ARE TRYING TO FORM ALONG BREWSTER/PECOS COUNTY AND ALSO OVER JEFF DAVIS COUNTIES. THESE ARE THE AREAS OF MOST INTEREST AS THE TOPOGRAPHY AIDS IN ADDITIONAL LIFT. PILOT WILL BE PUT ON STANDBY AND WE'LL LAUNCH AS SOON AS WE BEGIN TO SEE VERTICAL DEVELOPMENT VIA SAT IMAGERY. STARTED TO SEE POSITIVE TREND W/STORM NEAR BARSTOW. WE'LL GO AHEAD AND LAUNCH TO INVESTIGATE THIS STORM AND ANOTHER FORMING E OF MENTONE. SEEDING TOOK PLACE ON INITIAL TARGET JUST SOUTH OF MENTONE. WE WERE ABLE TO FIND A FEW BATCHES OF INFLOW BEFORE STORM BECAME VIRGA DOMINATED. PILOT REPORTED LIGHTNING AFTER SEEDING, SO WE MAY BE SEEING A GOOD RESPONSE TO OUR EFFORTS. WE'LL DIVE A BIT SOUTHEAST BACK TOWARDS PECOS WHERE ANTOHER SINGLE CELL STORM WAS DEVELOPING. DEVELOPMENT IN NORTHERN CULBERSON COUNTY WAS ONGOING, BUT TEMPS THERE WERE 10°F LESS THEN AREAS IN REEVES COUNTY. ALSO, LOOKING SW TOWARDS BREWSTER COUNTY, A FEW CELLS WERE TRYING TO DEVELOP THERE AS WELL. WE'LL MAKE ARE OUR WAY THERE ONCE THESE CELLS IN RV/WD COUNTIES ARE ADDRESSED. STORM NEAR PECOS WAS SEEDED THROUGH 1915Z BEFORE IT ALSO BECAME VIRGA DOMINATED. MOST OF THE CONVECTION SO FAR IS RAPIDLY PULSATING AND NOT HOLDING INTENSITY. THIS MAY BE BECAUSE THEY ARE FAR FROM ANY TYPE OF SURFACE FEATURE TO KEEP THEM GOING BEYOND JUST UPPER LEVEL SUPPORT. WE'LL NOW DIVE SOUTH TOWARDS PC/RV COUNTY BORDER. JUST AS PILOT WAS READY TO MOVE SOUTH, A PREVIOUSLY SEEDED CELL WAS SHOWING MORE PROMISE. THEREFORE, WE'LL SHOOT BACK TO THE NW NEAR MENTONE ONCE AGAIN. THIS STORM, HOWEVER, QUICKLY FELL APART. WITH STORMS SUFFICIENTLY SEEDED IN THE PECOS AREA, WE'LL NOW HEAD TO THE CELL FAR SOUTH NEAR THE PC/RV COUNTY BORDER. DEVELOPMENT IS NOT PROMISING, BUT SPC MESO ANALYSIS SHOWS GOOD SURFACE CONVECTION THERE. SO WE MAY SEE ADDITIONAL DEVELOPMENT AND/OR REDEVELOPMENT OF OLDER CELLS. ONE OF THE NEWER DEVELOPED STORMS WAS SEEDED, BUT DIDN'T STICK AROUND TO LONG. INFLOW WAS BECOMING LESS COMMON. WE'LL GO LOOK NEAR HIGHWAY 285 JUST W OF THE PC/RV COUNTY BORDER WHERE A SINGLE CELL SHOWER/STORM WAS DEVELOPING. RADAR/SAT IMAGERY TRENDS BEGINNING TO SHOW SKIES CLOUDING UP AND LESS CONVECTIVE DEVELOPMENT. THIS WAS EXPECTED AS MUCH OF

THIS DEVELOPMENT WAS GOING TO MERGE INTO A HEAVY RAIN EVENT. WE MAY BE HEADED IN THAT DIRECTION. AT 2020Z, WE DECIDED TO RTB AND GET A REFLARED AND REFUELED. DEVELOPMENT ACROSS THE AREA WAS VERY MARGINAL AND CLOUD COVERAGE WAS BECOMING ABUNDANT. HOWEVER, WE WANT TO BE READY TO RELAUNCH ON ANY OTHER DEVELOPMENT WHEN/IF IT DEVELOPS. PILOT WAS READY TO RELAUNCH AT 2115Z, SO WE DID JUST THAT. WE'LL TARGET CONVECTION SOUTH OF PECOS AND KEEP AN EYE ON ADDITIONAL DEVELOPMENT TO THE WEST FO TOYAH. THIS DEVELOPMENT BECAME VERY MARGINAL THEREFORE WE WENT AHEAD AND HEADED TO CULBERSON COUNTY. WE DID GET A SET OF FLARES OFF BUT THE STORM FELL APART RAPIDLY AS WE BEGAN TO LOSE HEAT. WE RTB'D FOR THE DAY AT 2215Z.

WATCHES/WARNINGS:

NONE

SEEDED CELL ID'S:

1803	1756	1944	2176	2652	2675				
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FLIGHT INFORMATION:

TIME (Z)	Plane	Flare Location	County
1835	26P	IN AIR	
1850	26P	330° @ 14 nm	REEVES
1852	26P	330° @ 14 nm	REEVES
1854	26P	330° @ 13 nm	REEVES
1906	26P	055° @ 03 nm	REEVES
1908	26P	055° @ 04 nm	REEVES
1911	26P	060° @ 05 nm	REEVES
1924	26P	090° @ 05 nm	REEVES
1927	26P	090° @ 05 nm	REEVES
1959	26P	188° @ 27 nm	REEVES
2007	26P	189° @ 25 nm	REEVES
2010	26P	190° @ 26 nm	REEVES
2020	26P	RTB	
2120	26P	IN AIR	
2142	26P	318° @ 40 nm	REEVES
2210	26P	221° @ 36 nm	Culberson
2215	26P	RTB	

Seeding operations were conducted over Reeves (24) and Culberson (2) Counties. 26 flares were burned within 6 clouds. This is the 1st day for seeding in May and the 1st day for seeding during the season.