

TRANS-PECOS WEATHER MODIFICATION ASSOCIATION - PECOS, TEXAS

SEEDING REPORT - July 7, 2016

SYNOPTIC/MESOSCALE CONDITIONS:

MORE INTENSE HEAT IS ON ITS WAY FOR THE TRANS-PECOS VALLEY THIS AFTERNOON. MEANWHILE, UPSLOPE FLOW ALONG THE DAVIS AND GUADALUPE MOUNTAINS WILL LEAD TO HIGH BASED CU AND POSSIBLE SHOWER AND T-STORMS THIS AFTERNOON. CAPE VALUES WILL BE IN EXCESS OF 3K J/KG BUT LIMITED UPPER LEVEL SUPPORT SHOULD KEEP STORMS FROM BECOMING SEVERE. BASES WILL BE VERY HIGH TODAY AS DEW POINT DEPRESSIONS REACH 60°, BUT THERE WILL BE A SHOT FOR SEEDING IF MOISTURE IS ABLE TO ADVECT INTO THE REGION.

LIFTING MECHANISM:

Sufficient Surface Heating

THERMODYNAMIC INDICES (12Z KMAF)

Freezing Level (m)	5022	CAPE (J/Kg)	677
Precipitable Water (inches)	1.23	CINH (J/Kg)	500
LCL	2160	LI(°C)	-2.5
CCL	4042	PB	3
MAF ICA	3.76	DRT ICA	-
Cloud Base (meters)	4267	Cloud Base Temp (°C)	4
Warm Cloud Depth (meters)	755		

DISCUSSION:

ALTHOUGH CLOUD BASES HAVE BEEN PROBLEMATIC THE LAST FEW DAYS, WE WILL DECIDED TO CONTINUE TO STAY AGGRESSIVE AND DO ANOTHER RECON FLIGHT IF NEEDED TODAY. HOWEVER, THE BIG DIFFERENCE TODAY IS DEW POINTS IN THE LOW 50'S RATHER THE MID TO HIGH 40'S. THIS SHOULD HELP LOWER BASES SOME, BUT PERHAPS NOT ENOUGH. REGARDLESS, CONVECTION BEGAN TO FIRE ACROSS THE MOUNTAINS BY 19Z WITH OTHER CONVECTION DEVELOPING IN NORTHERN CULBERSON COUNTY INTO PART OF CENTRAL REEVES COUNTY. WE DECIDED TO LAUNCH AT 1930Z WITH DEW POINT DEPRESSIONS OF 50°. THE EXPECTATION IS WE MAY RUN INTO A FEW SEEDABLE BASES BELOW 13KFT. ANOTHER STRUGGLE WE HAVE HAD IS VERTICAL DEVELOPMENT. VERY LIMITED UPPER LEVEL SUPPORT HAS BEEN PRESENT AND THIS IS ALREADY BEING SEEN WITH TODAY'S CONVECTION AS WELL. WITH FREEZING LEVELS SO HIGH, THIS COULD LIMITE THE EFFECTIVENESS OF GLACIOGENIC SEEDING. PILOT GOT TO STORMS IN NW REEVES COUNTY AND REPORTED BASES OVER 13.5KFT. BASES ACTUALLY ENDED UP AT 14.5KFT, BUT WE STILL SEEDED THROUGH THE 2045Z HOUR. WE WERE ABLE TO SEED A LARGE STORM WHICH WAS JUST WEST OF THE RED BLUFF RESEVOIR WHICH LATER CROSSED THE RESEVOIR INTO LOVING COUNTY. AFTER 30 MINUTES OF WORKING AT HIGH ALTITUDE, WE DECIDED TO DECSEND AND MOVE INTO A DIFFERENT AREA. WE PUSHED NEAR I-10 AND THE TOWN OF BALMORHEA WHERE CONVECTION WAS ROLLING OFF OF THE MOUTNAINS. BASES WERE A BIT LOWER, BUT VERTICAL DEVELOPMENT WAS VERY LIMITED. STILL, WE SHOULD HAVE SOME OPPORTUNITY TO SEED HERE. SEEDING DID TAKE PLACE ALTHOUGH BASES WERE ONCE AGAIN 14.5KFT. WE MOVED FURTHER NE AND SEEDED ANOTHER CELL THROUGH 2130Z BUT HAD TO PULL OFF AS IT GOT CLOSE TO OUR NO-SEED AREA AROUND COYANOSA. AT THIS POINT, WE DECIDED TO RTB AS WE SPENT A LOT OF TIME OVER 12KFT. PILOT WILL REFUEL/REFLARE AND GET READY IF NEEDED TO GO UP AGAIN.

ADDITIONAL NOTES:

Per management, a 20-mile radius around Coyanosa should not be seeded, as well as any storms that may impact that area from any direction. Farmers will be harvesting over the next 2 weeks and requested this.

WARNING/WATCHES:

None

SEEDED CELL ID'S:

130	121	239							
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FLIGHT INFORMATION:

TIME (Z)	Plane	Flare Location	County
1935	26P	IN AIR	
2016	26P	300° @ 26 nm	REEVES
2019	26P	310° @ 25 nm	REEVES
2023	26P	310° @ 25 nm	REEVES
2030	26P	310° @ 25 nm	REEVES
2102	26P	180° @ 28 nm	REEVES
2104	26P	180° @ 28 nm	REEVES
2106	26P	180° @ 29 nm	REEVES
2107	26P	180° @ 28 nm	REEVES
2108	26P	180° @ 28 nm	REEVES
2110	26P	180° @ 28 nm	REEVES
2115	26P	175° @ 22 nm	REEVES
2116	26P	175° @ 22 nm	REEVES
2118	26P	165° @ 21 nm	REEVES
2121	26P	165° @ 20 nm	REEVES
2123	26P	165° @ 22 nm	REEVES
2127	26P	160° @ 21 nm	REEVES
2130	26P	RTB	

Seeding operations were conducted in Reeves (37) County. 37 flares were burned within 3 clouds. This is the 2nd day for seeding in July and the 4th day for seeding during the season.