

WEST TEXAS WEATHER MODIFICATION ASSOCIATION - SAN ANGELO, TEXAS

SEEDING REPORT - June 26, 2017

SYNOPTIC/MESOSCALE CONDITIONS:

Strong shortwave embedded in the flow aloft has led to a large complex of showers and storms that developed overnight night and into this morning. This band of storms currently extends from Sterling City southwest towards Iraan and back towards Fort Stockton. As this complex slowly moves south and east, it'll begin to dissipate as the atmosphere warms up and stabilizes. Behind this system, another series of shortwaves aloft will develop and move over the region. This will lead to additional shower and storm development this afternoon, mainly around 3PM. This convection will likely stick around through the overnight hours and looks to be confined mainly to the WTWMA area.

LIFTING MECHANISM:

Strong Dynamics Aloft

THERMODYNAMIC INDICES (12Z KMAF)

Freezing Level (m)	4887	CAPE (J/Kg)	273
Precipitable Water (inches)	1.24	CINH (J/Kg)	8
LCL	2881	LI(°C)	-1.3
CCL	2987	PB	1
MAF ICA	0.32	DRT ICA	-7.68
Cloud Base (meters)	2187	Cloud Base Temp (°C)	10.7
Warm Cloud Depth (meters)	2700		

DISCUSSION:

AT 18Z A FEW STORMS WERE DEVELOPING OVER NORTHERN TOM GREEN COUNTY AND COKE COUNTY. STORMS ARE EXPECTED TO QUICKLY SLIDE OFF THE NE INTO COKE COUNTY, SO WE WILL NOT YET LAUNCH ON THESE IN HOPES THAT OUR EXPERIMENTAL AIRCRAFT CAN SEED THESE WITHIN COKE COUNTY. OTHER THEN THAT, WE ARE STILL AWAITING A CU FIELD TO DEVELOP ACROSS THE AREA BUT RIGHT NOW MUCH OF THE ACTION IS STAYING JUST E OF THE TARGET AREA DUE TO LOW LEVEL CAPPING. LATEST HRRR MODEL CONTINUES TO SHOW BETTER COVERAGE OF SHOWERS/STORM LATER THIS AFTENOON, MAINLY FROM THE 3-5PM TIME PERIOD. AS THE CAP ERODED, PILOT WAS CALLED AIRBORNE AT 1910Z WITH DEVELOPMENT IN COKE/TG COUNTY BACKBUILDING INTO THE TARGET AREA. WE'LL LET PILOT WTWMA PILOT HANDLE LARGER CONVECTION WHILE THE RESEARCH AIRCRAFT HANDLES MORE ISOLATED STORMS. WE'LL NOTE BELOW WHERE EXPERIMENTAL SEEDING TOOK PLACE, BUT REPORT WILL BE ON REQUEST ONLY FOR MORE DETAILS. PILOT GOT AIRBORNE AND HEADED FOR NORTHERN IRION COUNTY WHERE STORMS WERE SEEDED ALONG THE WESTERN EDGE OF THE MAIN SYSTEM. THIS CELL BROKE OFF OF THE MAIN SYSTEM AND DOVE TO THE SOUTH THROUGH MUCH OF IRION COUNTY. PILOT OBSERVED THE STORM BECOMING OUTFLOW DOMINATE WHICH WAS EVIDENT BY LARGE OUTFLOW BOUNDARY ON RADAR. THEREFORE, WE DECIDED TO HEAD NORTH INTO STERLING COUNTY BUT THESE CELLS WERE VERY HARD TO WORK DUE TO LARGE AMOUNTS OF VIRGA AND DOWNDRAFTS. WE WERE STILL ABLE TO GET A FEW SPOTS OF INFLOW, BUT AFTER A WHILE WE DECIDED TO HEAD BACK TO THE MAIN CELL IN IRION COUNTY WHICH SHOWED POTENTIAL FOR REDEVELOPMENT. WITH THAT SAID, PILOT APPROACHED AND FOUND A STORM THAT WAS RAINING OUT. STORM FELL APART AND WITH NO MORE TARGETS, WE DECIDED TO RTB.

WATCHES/WARNINGS:

N/A

SEEDED CELL ID'S:

1708	1906								
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FLIGHT INFORMATION:

TIME (Z)	Plane	Flare Location	County
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1935	24P	IN AIR	
1947	24P	286° @ 22 nm	IRION
1956	24P	283° @ 18 nm	IRION
2003	24P	282° @ 22 nm	IRION
2004	24P	280° @ 23 nm	IRION
2006	24P	279° @ 21 nm	IRION
2007	24P	281° @ 19 nm	IRION
2010	24P	283° @ 19 nm	IRION
2024	24P	286° @ 17 nm	IRION
2027	24P	274° @ 19 nm	IRION
2031	24P	265° @ 33 nm	IRION
2037	24P	265° @ 21 nm	IRION
2104	24P	310° @ 39 nm	STERLING
2107	24P	310° @ 34 nm	STERLING
2130	24P	RTB	

Seeding operations were conducted over Irion (20+2H) and Sterling (4) Counties. 24 flares plus 2 hygroscopic flares were burned within 2 clouds. This is the 6th day for seeding in June and the 9th day for seeding during the season.