

WEST TEXAS WEATHER MODIFICATION ASSOCIATION - SAN ANGELO, TEXAS

SEEDING REPORT - August 13, 2017

SYNOPTIC/MESOSCALE CONDITIONS:

Several outflow boundaries remain across the region from convection yesterday. Although dynamics aloft are not as favorable, we should see showers/storms fire up as temperatures push into the upper 90's/low 100's. We won't see organized convection like yesterday, but isolated to widely scattered showers and storms are likely. Latest HRRR suggests 3-4PM as the likely time for initiation with areas along and south of a line from Sterling City to Monahans as the best bets to see storms.

LIFTING MECHANISM:

Cold Front, Sufficient Surface Heating, Abundant Moisture

THERMODYNAMIC INDICES (12Z KMAF)

Freezing Level (m)	4938	CAPE (J/Kg)	123
Precipitable Water (inches)	1.56	CINH (J/Kg)	230
LCL	1111	LI(°C)	-0.90
CCL	3108	PB	1
MAF ICA	-2.68	DRT ICA	-2.24
Cloud Base (meters)	2588	Cloud Base Temp (°C)	15
Warm Cloud Depth (meters)	2350		

DISCUSSION:

A FEW SHOWERS IN SUTTON COUNTY CONTINUED FROM THE MORNING INTO THE AFTERNOON. RADAR RETURNS LOOKED GOOD, BUT ANY CONVECTION WITHIN WAS HEAVILY EMBEDDED. WE'LL LET THAT SLIDE IN ANTICIPATION FOR MUCH LARGER, MORE EFFICIENT DEVELOPMENT LATER THIS AFTERNOON/EVENING. BY 20Z, SAT IMAGERY WAS GETTING INTERESTING ACROSS WESTERN TG COUNTY AND EASTERN IRION COUNTY. ADDITIONALLY, A FEW STORMS FROM THE PERMIAN BASIN WERE THREATENING THE TARGET AREA. WE DECIDED TO LAUNCH PILOT AT 2030Z AS THE STORMS FURTHER WEST WERE GETTING CLOSE ENOUGH TO WARRANT LAUNCH. ALSO, AS PILOT WAS GETTING READY TO TAKE OFF, A FEW RADAR ECHOES WERE SHOWING UP IN TG AND IR COUNTIES. FIRST CELL WAS SEEDED AT 2117 IN CENTRAL IRION COUNTY. THIS CELL WAS BLOWING UP NICELY WHILE CONVECTION TO THE WEST WAS BECOMING EMBEDDED BEFORE ENTERING REAGAN COUNTY. WE'LL STAY ON THE MORE ISOLATED CONVECTION FOR NOW THAT IS MORE SEEDABLE. FIRST CELL WAS SEEDED THROUGH 2120Z. THIS CELL QUICKLY DEVELOPED AND HAD A NICE CORE AND APPEARED TO RESPOND FAVORABLY TO SEEDING. PILOT LOST INFLOW, SO WE'LL TRACK SW INTO CROCKETT COUNTY BUT KEEP AN EYE ON RG/IR/TG COUNTIES. THE CELL IN CROCKETT COUNTY DIDN'T STICK AROUND TOO LONG, SO WE'LL HEAD BACK EAST TOWARDS MERTZON. THE CONVECTION IN UPTON COUNTY REMAINED IN UPTON COUNTY BUT ALSO WAS VERY HEAVILY EMBEDDED PER RADAR. THIS SYSTEM WAS VERY EFFICIENT, SO WE'LL CONTINUE TO FOCUS ON THE SMALL CONVECTION BEFORE ATTEMPTING TO WORK THAT SYSTEM. CELL NEAR MERTZON MERGED WITH THE FIRST SEEDED CELL. PILOT WAS HEAVING A HARD TIME LOCATING INFLOW DUE TO ABUNDANT VIRGA. WE'LL CONTINUE TO INVESTIGATE, BUT WITH THE AMOUNT OF MOISTURE IN PLACE THIS COULD BE DIFFICULT. PILOT GOT AROUND STORM #3244 AND FOUND A SWEET SPOT ON THE SW CORNER OF THE STORM. WE SEEDED THIS AREA INTO THE 22Z HOUR. THIS STORM RAPIDLY DEVELOPED AND SHOWED SIGNS OF HAIL, SO WE QUICKLY PUT OUT SEVERAL GLACIOGENIC FLARES. THIS APPEARED TO WORK AS DBZ'S FELL FROM 70 INTO THE MID 60'S. WE HEADED SW TOWARDS BIG LAKE TO WORK ANOTHER STORM WITH A SECOND STORM JUST NORTH. THESE ARE OUR NEXT TWO TARGETS. CELLS IN CROCKETT AND SOUTH OF BIG LAKE HAD NO DEFINED BASES. PILOT OBSERVED STORM NORTH OF BIG LAKE THAT LOOKED MUCH SEEDABLE. WE'LL HEAD THAT WAY. THIS STORM WAS QUICKLY SEEDED THROUGH 2245Z. HOWEVER, AREA OF INFLOW BECAME RAINFILLED. PILOT LOOKED AROUND FOR MORE INFLOW BUT WAS UNABLE TO LOCATE ANY. WE'LL NE TOWARDS WATER VALLEY

AND LOOK AT ANOTHER ISOLATED CELL. MEANWHILE, STORM NEAR MERTZON WAS INTENSIFYING. WE MAY NEED TO TRY TO GET IN THERE AGAIN BEFORE WRAPPING UP. CONVECTION SOUTH OF BIG SPRING STILL WAS EMBEDDED. DYNAMICS ALOFT ARE OBVIOUSLY MUCH BETTER FURTHER NORTH OVER IR/TG COUNTIES. STORM WAS SEEDED NEAR CARLSBAD INTO THE 23Z HOUR. MUCH OF THE CONVECTION TO THE WEST APPEARED TO BE RAINING OUT AS HEATING WAS BEING LOST DUE TO EXTENSIVE CLOUD COVERAGE. WE'LL WORK THE EAST SIDE OF THE CARLSBAD STORM AND RTB FOR FUEL.

WATCHES/WARNINGS:

N/A

SEEDED CELL ID'S:

3244	3647	3801						
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FLIGHT INFORMATION:

TIME (Z)	Plane	Flare Location	County
2045	09P	IN AIR	
2116	09P	266° @ 33 nm	IRION
2118	09P	266° @ 33 nm	IRION
2119	09P	266° @ 32 nm	IRION
2120	09P	264° @ 32 nm	IRION
2159	09P	254° @ 25 nm	IRION
2200	09P	254° @ 24 nm	IRION
2201	09P	255° @ 25 nm	IRION
2204	09P	254° @ 24 nm	IRION
2205	09P	254° @ 24 nm	IRION
2207	09P	252° @ 24 nm	IRION
2208	09P	252° @ 25 nm	IRION
2231	09P	261° @ 43 nm	REAGAN
2233	09P	262° @ 43 nm	REAGAN
2235	09P	262° @ 44 nm	REAGAN
2236	09P	261° @ 44 nm	REAGAN
2240	09P	262° @ 43 nm	REAGAN
2255	09P	301° @ 21 nm	TOM GREEN
2259	09P	300° @ 21 nm	TOM GREEN
2300	09P	298° @ 21 nm	TOM GREEN
2301	09P	298° @ 21 nm	TOM GREEN
2303	09P	301° @ 22 nm	TOM GREEN
2318	09P	343° @ 24 nm	TOM GREEN
2320	09P	345° @ 23 nm	TOM GREEN
2321	09P	245° @ 23 nm	TOM GREEN
2325	09P	RTB	

Seeding operations were conducted in Irion (21+1H), Reagan (11) and Tom Green (16+1H) Counties. 48 flares plus 2 hygroscopic flares were burned within 3 clouds. This is the 5th day for seeding in August and the 24th day for seeding during the season.