

**WEST TEXAS WEATHER MODIFICATION ASSOCIATION - SAN ANGELO, TEXAS**

**SEEDING REPORT - June 08, 2017**

**SYNOPTIC/MESOSCALE CONDITIONS:**

Northwesterly flow aloft is currently ongoing across much of the western half of Texas. This could lead to cold air advection aloft enhancing instability across the region. However, without a surface feature, we'll have to rely on sufficient surface heating for any of the abundant moisture to get tapped into. Latest HRRR and WRF suggests things staying quiet today, but with potential of small shortwaves embedded in the flow aloft, we'll at least leave a slight chance of storms in the forecast.

**LIFTING MECHANISM:**

Sufficient Surface Heating, Upper Level Dynamics

**THERMODYNAMIC INDICES (12Z KMAF)**

Freezing Level (m)	4494	CAPE (J/Kg)	25
Precipitable Water (inches)	1.05	CINH (J/Kg)	47000
LCL	1891	LI(°C)	0
CCL	3621	PB	0
MAF ICA	0.60	DRT ICA	0.60
Cloud Base (meters)	3074	Cloud Base Temp (°C)	16
Warm Cloud Depth (meters)	1420		

**DISCUSSION:**

SCATTERED CU FIELD DEVELOPED JUST SOUTH AND EAST OF THE AREA WITH A FEW CU TRYING TO GET GOING IN SUTTON COUNTY. HOWEVER, AS TIME WENT ON, NOTHING REALLY TRANSPIRED THROUGH 18Z. A LITTLE AFTER 19Z, SOME MORE CU WERE BEGINNING TO TAKE SHAPE ACROSS REAGAN/IRION COUNTIES. AGAIN, LIMITED VERTICAL DEVELOPMENT WAS ONGOING AND DESPITE TEMPERATURES WARMING INTO THE LOW 90'S, CAPE VALUES WERE ONLY IN THE 250-750 J/KG RANGE. PLENTY FOR STORM DEVELOPMENT, BUT NOT ENOUGH WITHOUT A GOOD SURFACE FEATURE. FORECAST MODELS CONTINUE TO KEEP THINGS QUIET, BUT METEOROLOGIST WILL STANDY BY AND INFORM PILOT IF/WHEN THINGS GET MORE INTERESTING. SHOWERS CONTINUED THROUGH 19 AND 20Z, BUT NOTHING CONVECTION. IT WASN'T UNTIL JUST BEFORE 22Z WHERE SHOWERS BEGAN TO SHOW CONVECTIVE CHARACTERISTICS. THEREFORE, WE'LL LAUNCH A PILOT TO INVESTIGATE STORMS IN SCHLEICHER COUNTY. WITH CONVECTION ONGOING TO SOUTH OF SJT AND NORTH OF SJT, WE'LL FOCUS ON THE SOUTHERN CONVECTION FIRST AND THEN HEAD NORTH. INITIAL STORM WAS SEEDED IN SCHLEICHER COUNTY THROUGH 22Z WITH WHAT APPEARED TO BE GREAT RESULTS. STORM PROVIDED GREAT INFLOW AND LOOKED LIKE IT MAY DISSIPATE. HOWEVER, AFTER SEEDING, IT REGROUPED AND DID WELL. SPC MESO ANALYSIS CONTINUED TO SHOW DECENT SURFACE CONVERGENCE ALONG A LINE FROM ELDORADO TO GARDEN CITY. THIS IS WHERE THE MOST CONVECTION IS ONGOING AND WHERE OUR EFFORTS WILL STAY WITHIN. THE SECOND CELL EXTENDED FROM CENTRAL IRION COUNTY NORTH INTO STERLING COUNTY. PILOT OBSERVED A WELL DEFINED SHELF CLOUD TO THE SOUTH OF THE STORM SO HE INVESTIGATED IT FOR INFLOW. THIS COULD BE THE LEADING EDGE OF A POSSIBLE OUTFLOW BOUNDARY. NO INFLOW WAS OBSERVED HERE, SO WE'LL PUSH FURTHER NORTH. A FEW PATCHES OF INFLOW WAS FOUND BUT MUCH OF THE BASE WAS SURROUNDED BY VIRGA AND OUTFLOW. WE'LL TRY ONE MORE PASS AND THEN PERHAPS HEAD A BIT FURTHER NORTH. DOING THIS PROVED WORTHY AS WE WERE ABLE TO FIND MUCH MORE INFLOW. STORM WAS SEEDED THROUGH 2330Z. WE'LL NOW HEAD A BIT FUTHER NORTH NEAR THE GL/ST COUNTY BORDER. THIS CELL WAS MUCH MORE INTENSE, BUT WAS VERY HIGH BASED. PILOT WILL GET TO BASE, IF WORKABLE, AND BEGIN SEEDING OPERATIONS. HOWEVER, IT WAS DISCOVERED HIGH BASES WERE DUE TO THE STORM BEGINNING TO RAIN OUT. AT THIS POINT, PILOT WAS CALLED RTB.

**WATCHES/WARNINGS:**

NONE

**SEEDED CELL ID'S:**

485	598								
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**FLIGHT INFORMATION:**

TIME (Z)	Plane	Flare Location	County
2220	49P	IN AIR	
2233	49P	200° @ 18 nm	TOM GREEN
2234	49P	199° @ 19 nm	SCHLEICHER
2239	49P	208° @ 20 nm	SCHLEICHER
2242	49P	210° @ 23 nm	SCHLEICHER
2242	49P	207° @ 23 nm	SCHLEICHER
2243	49P	208° @ 24 nm	SCHLEICHER
2244	49P	209° @ 24 nm	SCHLEICHER
2245	49P	208° @ 25 nm	SCHLEICHER
2246	49P	211° @ 24 nm	SCHLEICHER
2247	49P	207° @ 25 nm	SCHLEICHER
2249	49P	205° @ 26 nm	SCHLEICHER
2309	49P	290° @ 23 nm	TOM GREEN
2314	49P	292° @ 21 nm	IRION
2315	49P	291° @ 19 nm	IRION
2316	49P	290° @ 18 nm	IRION
2318	49P	292° @ 17 nm	IRION
2320	49P	299° @ 19 nm	TOM GREEN
2340	49P	RTB	

Seeding operations were conducted over Tom Green (6) Schleicher (18+1H), and Irion (8+1H) Counties. 32 flares plus 2 hygroscopic flares were burned within 2 clouds. This is the 3<sup>rd</sup> day for seeding in June and the 6<sup>th</sup> day for seeding during the season.