

WEST TEXAS WEATHER MODIFICATION ASSOCIATION - SAN ANGELO, TEXAS

SEEDING REPORT - June 23, 2017

SYNOPTIC/MESOSCALE CONDITIONS:

A cold front is on its way through the Texas Panhandle this morning. This boundary will cause havoc across much of the state for the duration of the weekend. Ahead of this boundary is a moist atmosphere which will quickly warm up due to a potent H85 thermal ridge. Temperatures will soar into the 106-111°F range across both target areas. Additionally, a dryline has redeveloped over Far West Texas. Where the dryline intercepts with the cold front (triple point) could be problematic later today as strong instability takes over the region. The expectation is that storms initiate around I-20 by 3PM and making in into the both target areas by 6PM. We could see some strong to severe storms along what will likely be a squall line. However, at the triple point of the dryline/cold front, we could see a few rotating super cells. Likely rain chances will be added for both target areas with strong possibility of operations.

LIFTING MECHANISM:

Sufficient Surface Heating, Cold Front

THERMODYNAMIC INDICES (12Z KMAF)

Freezing Level (m)	5126	CAPE (J/Kg)	599
Precipitable Water (inches)	1.26	CINH (J/Kg)	445
LCL	2546	LI(°C)	-2.6
CCL	4347	PB	3
MAF ICA	4.76	DRT ICA	-4.40
Cloud Base (meters)	3805	Cloud Base Temp (°C)	5.9
Warm Cloud Depth (meters)	1321		

DISCUSSION:

SAT IMAGERY HAS BEEN QUIET THROUGH MUCH OF THE DAY, BUT BY 2030Z THINGS BEGAN TO GET INTERESTING. A WEAK SHOWER DEVELOPED IN STERLING COUNTY BUT COULDN'T ORGANIZE ITSELF INTO A SEEDABLE TARGET WITHOUT BETTER INSTABILITY. CAPE VALUES WERE ONLY 500 J/KG OR SO, WHICH SEEMS TO BE THE MISSING PARAMETER. HOWEVER, THIS CELL WAS WATCHED CLOSELY AND PILOT WAS CALLED AIRBORNE AT 2115Z. HE'LL GET AIRBORNE BY 22Z, WHICH MAY BE A BIT LATE FOR THIS CELL BUT SAT IMAGERY IS INDICATING MORE DEVELOPMENT BEHIND IT. THIS BIGGEST CHALLENGE IS GOING TO BE BASES WHERE SJT IS AT 106/54 AND BIG SPRING 103/52. ADDITIONALLY, STORMS WILL NOT LAST LONG DUE TO THE HIGH DEW POINT DEPRESSIONS. BASES WERE HIGH, BUT WITHIN SEEDABLE LIMITS. FIRST CELL WAS NOT IMPRESSIVE ON RADAR, BUT BEGAN TO RESPOND WELL THROUGH 2245Z. ANOTHER CELL WAS STARTING TO TAKE OFF IN STERLING. WE'LL FINISH OFF THIS FIRST STORM IN IRION COUNTY AND ADVANCE NORTHWARD SHORTLY. MEANWHILE, TO THE NW OVER THE PERMIAN BASIN, SEVERAL T-STORM AND FLOOD WARNINGS ARE IN EFFECT BUT NOT IMPACTING OUR TARGET AREA. STORMS IN STERLING COUNTY RESPONDED WELL TO SEEDING THROUGH 2330Z. PILOT IS WORKING AN AREA BETWEEN STORMS 808 AND 983 WHICH SHOULD ALL LUMP TOGETHER SOON. THIS IS EXACTLY WHAT HAPPENED, SO PILOT DOVE SOUTH TOWARDS BARNHART BUT STORMS WERE VERY HIGH AND UNSEEDABLE. HOWEVER, PILOT OBSERVED A FAVORABLE STORM A BIT FURTHER EAST JUST SOUTH OF MERTZON. WE'LL CHECK OUT THIS CELL. THIS CELL WAS SEEDED, BUT BASES LIFTED ON IT AND IT DISSIPATED. WITH STORMS THREATENING THE 24P RUNWAY, WE WENT AHEAD AND RECOVERED AS WE WERE ALREADY PAST 00Z.

WATCHES/WARNINGS:

T-STORM WARNING - STERLING

SEEDED CELL ID'S:

699	922	808	983	1090					
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FLIGHT INFORMATION:

TIME (Z)	Plane	Flare Location	County
2210	24P	IN AIR	
2232	24P	269° @ 32 nm	IRION
2233	24P	268° @ 33 nm	IRION
2234	24P	267° @ 35 nm	IRION
2236	24P	266° @ 37 nm	IRION
2237	24P	267° @ 37 nm	IRION
2239	24P	264° @ 37 nm	IRION
2254	24P	297° @ 36 nm	STERLING
2254	24P	299° @ 36 nm	STERLING
2257	24P	303° @ 39 nm	STERLING
2258	24P	302° @ 38 nm	STERLING
2259	24P	302° @ 38 nm	STERLING
2301	24P	305° @ 39 nm	STERLING
2308	24P	311° @ 45 nm	STERLING
2311	24P	311° @ 44 nm	STERLING
2313	24P	311° @ 44 nm	STERLING
2319	24P	316° @ 49 nm	STERLING
2328	24P	306° @ 50 nm	STERLING
2329	24P	303° @ 50 nm	STERLING
2332	24P	303° @ 51 nm	STERLING
2333	24P	302° @ 51 nm	STERLING
0003	24P	225° @ 25 nm	SCHLEICHER
0006	24P	214° @ 26 nm	SCHLEICHER
0010	24P	RTB	

Seeding operations were conducted over Sterling (26+3H), Irion (12) and Schleicher (4) Counties. 42 flares plus 3 hygroscopic flares were burned within 5 clouds. This is the 5th day for seeding in June and the 8th day for seeding during the season.