

WEST TEXAS WEATHER MODIFICATION ASSOCIATION - SAN ANGELO, TEXAS

SEEDING REPORT - July 16, 2017

SYNOPTIC/MESOSCALE CONDITIONS:

A warm and moist atmosphere will develop across the region today which will help fuel possible convection this afternoon. Upper level dynamics are not that favorable, but if temperatures can get into the mid to upper 90's, we could see isolated to scattered showers and storms. Best bet would be to the north of highway 67 where a cluster of showers/storms is expected to move through the Big Country with numerous outflow boundaries ahead of it. This should be enough to fire up storms this afternoon around 1-2PM. Early start is likely due to limited CINH.

LIFTING MECHANISM:

Sufficient Surface Heating

THERMODYNAMIC INDICES (12Z KMAF)

Freezing Level (m)	4632	CAPE (J/Kg)	232
Precipitable Water (inches)	1.48	CINH (J/Kg)	150
LCL	1437	LI(°C)	-1.7
CCL	3170	PB	2
MAF ICA	0.04	DRT ICA	-4.24
Cloud Base (meters)	2782	Cloud Base Temp (°C)	13.2
Warm Cloud Depth (meters)	1850		

DISCUSSION:

BETWEEN 12Z AND 18Z, A SOLID CU FIELD DEVELOPED ACROSS PORTIONS OF THE TARGET AREA. A SMALL CELL DID POP UP IN STERLING COUNTY AND ANOTHER IN IRION. THE IRION COUNTY STORM QUICKLY FIZZLED OUT, HOWEVER THE CELL IN STERLING COUNTY STUCK AROUND LONGER WITH OTHER CONVECTION TRYING TO DEVELOP AROUND IT. PILOT WAS CALLED AIRBORNE AT 18Z AND WILL GET UP AROUND 1830Z. WE'LL SEND OUR EFFORTS NORTH BOUND TO THE STERLING COUNTY CELL AND KEEP AN EYE ON AN OUTFLOW BOUNDARY THAT HAS POPPED OFF STORMS IN NOLAND AND TAYLOR COUNTIES. AS PILOT GOT AIRBORNE, A SECOND OUTFLOW BOUNDARY WAS ALLOWING FOR SMALL CELLS TO DEVELOP IN SOUTHERN STERLING COUNTY. ADDITIONALLY, OTHER ISOLATED ACTIVITY IS TRYING TO GET GOING IN CROCKETT AND SCHLEICHER COUNTIES. PILOT SEEDED ACTIVITY IN SOUTHERN STERLIGN COUNTY FROM 1854Z THROUGH THE FIRST PART OF 19Z. HE SEEDED ONE CELL BUT GOT BETWEEN VARIOUS CELLS THROUGHOUT THE SEEDING IN ATTEMPTS TO LINK ALL STORMS UP INTO A LINE. IT APPEARS OUR EFFORTS WORKED. ALTHOUGH CONVECTION EXPANDED FURTHER NORTH, WE DECIDED TO STAY ALONG THE SOUTHERN EDGE FOR NOW WHERE CONVERGENCE WAS BEST. ALSO, CONVECTION FURTHER NORTH APPEARED HEAVILY EMBEDDED. AFTER STORMS WERE SEEDED IN STERLING COUNTY, WE CHECKED OUT A BATCH OF SHOWERS IN NW IRION COUNTY. HERE, WE BEGAN SEEDING ON THE TAIL END OF AN OUTFLOW BOUDNARY WERE STORMS WERE DEVELOPING. MEANWHILE, FURTHER NORTH AND EAST, MUCH OF THE CONVECTION IS NOW HEAVILY EMBEDDED, INCLUDING THE AREA WE SEEDED. WITH THAT SAID, HEAVY RAIN WAS ONGOING IN THOSE AREAS. WE'LL CONTINUE TO TARGET STORMS SOUTH OF THIS LINE. STORMS KEPT BACKBUILDING ON THE MAIN LINE WHICH TOOK US INTO REAGAN COUNTY. ONCE A STORM FORMS, AND IS SEEDED, IT IS MERGING UP WITH THE MAIN SYSTEM. AFTER ALL THIS CONVECTION WAS SEEDED, WE BEGAN TO PRESS SOUTH INTO CROCKETT COUNTY. ALTHOUGH CONVECTION HERE IS SHORT LIVED AND VERY ISOLATED, WE'LL SEE WHAT WE CAN DO BEFORE RTB FOR FUEL/FLARES (ONLY 1 PILOT TODAY). WE DID SEED ONE CELL IN CROCKETT, BUT MUCH LIKE WE HAVE SEEN THIS FAR SOUTH, CONVECTION WAS VERY SHORT LIVED DESPITE OUR EFFORTS. WE DON'T WANT TO WRITE OFF CR/SC/SU COUNTIES JUST YET, BUT THESE AREAS JUST DO NOT HAVE THE ATMOSPHERE FOR SEEDING. WE'LL HEAD BACK NORTH AND DO RE-SEED THE MAIN LINE BEFORE RTB FOR FUEL/FLARES. WE PUSHED BACK INTO REAGAN COUNTY, BUT AFTER ONE BATCH OF

INFLOW, THE STORM HAS BECOME TOO EMBEDDED TO WORK. WE'LL GO AHEAD NAD RTB SINCE WE ARE GETTING VERY LOW ON FLARES. THIS MAY PROVIDE US A CHANCE TO RELAUNCH IF NEEDED. SEEDED STORMS AS OF 21Z WERE BEGINNING TO MAKE THEIR WAY INTO SOUTHERN REAGAN COUNTY AND CROCKETT COUNTY. NUMEROUS OUTFLOW BOUNDARIES WERE BEGINNING TO POP UP STORMS ALL OVER, BUT THESE WERE ALSO SHORT LIVED. WHEN PILOT IS COMFORTABLE WITH RELAUNCH, WE'LL LIKELY DO SO TO TARGET SOME OF THESE OUTFLOW BOUNDARY STORMS IF THEY PROVE TO LAST. STORMS CONTINUED TO DEVELOP, AND DISSIPATE THROUGH 21Z AS PILOT LANDED, HANGARED AND REGROUPED FOR RELAUNCH. HOWEVER, IT IS BEGINNING TO LOOK LIKE THAT IS UNNECESSARY AS ALL CONVECTION IS HEAVILY EMBEDDED AND SHORT LIVED. SIMPLY PUT, THE ATMOSPHERE IS NOT ORGANIZED AT THIS TIME FOR SUSTAINED DEVELOPMENT. WE'LL STANDBY FOR SOME TIME BEFORE CALLING IT A NIGHT.

WATCHES/WARNINGS:

N/A

SEEDED CELL ID'S:

1048	1132	1420	1657	1541	769				
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FLIGHT INFORMATION:

TIME (Z)	Plane	Flare Location	County
1840	09P	IN AIR	
1854	09P	297° @ 26 nm	STERLING
1857	09P	295° @ 28 nm	STERLING
1859	09P	296° @ 29 nm	STERLING
1900	09P	294° @ 31 nm	STERLING
1901	09P	292° @ 31 nm	STERLING
1902	09P	294° @ 30 nm	STERLING
1905	09P	294° @ 29 nm	STERLING
1908	09P	297° @ 28 nm	STERLING
1910	09P	303° @ 26 nm	STERLING
1917	09P	306° @ 24 nm	TOM GREEN
1918	09P	306° @ 22 nm	TOM GREEN
1920	09P	301° @ 25 nm	STERLING
1923	09P	300° @ 25 nm	STERLING
1925	09P	300° @ 25 nm	STERLING
1927	09P	299° @ 25 nm	STERLING
1929	09P	295° @ 28 nm	STERLING
1933	09P	286° @ 28 nm	TOM GREEN
1945	09P	275° @ 40 nm	IRION
1945	09P	277° @ 41 nm	IRION
1949	09P	276° @ 42 nm	REAGAN
1954	09P	271° @ 42 nm	REAGAN
1955	09P	271° @ 43 nm	REAGAN
1957	09P	268° @ 42 nm	REAGAN
2000	09P	266° @ 41 nm	REAGAN
2018	09P	236° @ 50 nm	CROCKETT
2023	09P	232° @ 52 nm	CROCKETT
2042	09P	264° @ 46 nm	REAGAN
2050	09P	RTB	

Seeding operations were conducted over Sterling (28+1H), Tom Green (6) and Irion (4), Crockett (4) and Reagan (12) Counties. 54 flares plus 1 hygroscopic flare was burned within 6 clouds. This is the 4th day for seeding in July and the 14th day for seeding during the season.