

WEST TEXAS WEATHER MODIFICATION ASSOCIATION - SAN ANGELO, TEXAS

SEEDING REPORT - August 26, 2023

SYNOPTIC/MESOSCALE CONDITIONS:

The upper-level ridge that has plagued West Texas for the better part of the last 3 months is beginning to break down. This will allow sufficient surface heating to allow for widely scattered showers and thunderstorms over a moderately unstable atmosphere early this afternoon and evening. Dew points are expected to surge in the mid 60's providing sufficient low-level moisture across the region. The latest HRRR is very aggressive with widespread, short-lived, storm development while other models not so much. However, the HRRR has been performing well as of late, so we'll roll with that solution.

LIFTING MECHANISM:

Shortwave Aloft, Decaying Ridge

THERMODYNAMIC INDICES (12Z KMAF)

Freezing Level (m)	4763	-15°C Height (m)	7600
Precipitable Water (inches)	1.37	CAPE (J/Kg)	298
LCL	2027	CINH (J/Kg)	184
CCL	3268	LI(°C)	-0.6
MAF ICA	-0.68	PB	1
Cloud Base (meters)	3032	DRT ICA	-5.96
Warm Cloud Depth (meters)	1731	Cloud Base Temp (°C)	14

DISCUSSION:

18Z sat imagery showed a cu field firing up along and just south of highway 67 in Irion County and further south into parts of northern Schleicher County. This is in response to a dissipating ridge, sufficient surface heating, and a weak surface boundary. Radar was quiet through 1830Z but by 1830Z we began to see some weak echoes in southeast Tom Green County and further west in southern Irion County. Pilots will be on standby with possible launch around 19Z, pending storm profiles. By 2220Z, storms in Schleicher looked good enough to launch on. Pilots will get airborne and head that way. Cell in north central Schleicher County was looking good as pilots approached. With westerly moving storms, we'll focus on the west end of this development. Most development is very short-lived, and below marginal limits. But we'll try to get to cells that show promise. So far, development has very little inflow, but the pilots are doing a good job finding small, sweet spots. We'll stick on this cell as we move across the 2015Z hour. Cell was not giving us much to work with, but we were patient and the cell on TITAN began to give us the butterfly look indicating better updrafts and overall storm health. We'll stay here until we get a sufficient dosage before moving on. The cell became outflow dominate right at 2030Z per the pilots. We'll now dive further south where the outflow boundary was trying to initiate new development near the SC/SU county line. This area fell apart quickly but pilots liked the looks of the southern part of cell #42. So we'll work here for a bit as we find other potential targets. By 2050Z, this cell was sufficiently worked so we'll push west into Crockett County where merging outflow boundaries were trying to develop new storms. These again are short-lived, so timing on much of this will be critical though much of this development only lasts a few scans. We'll move north into northern Tom Green County where a cluster of cells was looking favorable. We did investigate a cell near Mertzon, but it was already outflow dominate per the pilots. The pilots arrived at the cell right at 2130Z. The cell wasn't as good, but we may have to head back towards Mertzon as that area has developed nicely. The cell in northern Tom Green was seeded but with the lack of inflow, longevity of cells, we'll RTB and let things play out from here.

WATCHES/WARNINGS:

N/A

SEEDED CELL ID'S:

42	248	329	387	357					
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FLIGHT INFORMATION:

TIME (Z)	Plane	Flare Location	County
1945	49P	IN AIR	
1959	49P	195° @ 23 nm	SCHLEICHER
2005	49P	195° @ 22 nm	SCHLEICHER
2011	49P	203° @ 23 nm	SCHLEICHER
2014	49P	198° @ 23 nm	SCHLEICHER
2019	49P	200° @ 28 nm	SCHLEICHER
2027	49P	207° @ 26 nm	SCHLEICHER
2041	49P	206° @ 36 nm	SCHLEICHER
2043	49P	205° @ 37 nm	SCHLEICHER
2047	49P	207° @ 36 nm	SCHLEICHER
2054	49P	213° @ 39 nm	CROCKETT
2057	49P	210° @ 41 nm	CROCKETT
2134	49P	314° @ 22 nm	TOM GREEN
2136	49P	315° @ 25 nm	TOM GREEN
2138	49P	313° @ 26 nm	TOM GREEN
2140	49P	320° @ 23 nm	TOM GREEN
2145	49P	RTB	

Seeding operations were conducted over Schleicher (18G+2H), Crockett (4G) and Tom Green (8G) Counties. 30 glaciogenic flares and 2 hygroscopic flares were burned within 5 clouds. This is the 3rd day for seeding in August and the 20th day for seeding during the season.