

WEST TEXAS WEATHER MODIFICATION ASSOCIATION - SAN ANGELO, TEXAS

SEEDING REPORT - September 15, 2023

**SYNOPTIC/MESOSCALE CONDITIONS:**

Numerous showers and storms are in place across the region this morning. The heaviest is along a line from near Munday southwest to Hamlin with another cluster across parts of Schleicher, Sutton, and eastern Crockett Counties. Additional showers and storms are present moving towards both Reagan and Sterling County. Much of this activity is expected to push east and dissipate by 11AM this morning. Meanwhile, a weak surface boundary which is south of the region this morning will lift back north and stall somewhere near highway 67. This will serve as focal point for showers and storms to redevelop this afternoon and evening. Best window will be from 2PM through 8PM, but the latest HRRR keeps convection ongoing into the overnight hours with another round of heavy showers by tomorrow morning.

**LIFTING MECHANISM:**

Surface Boundary

**THERMODYNAMIC INDICES (12Z KMAF)**

Freezing Level (m)	4304	-15°C Height (m)	7100
Precipitable Water (inches)	1.23	CAPE (J/Kg)	424
LCL	1022	CINH (J/Kg)	140
CCL	2741	LI (°C)	-2.9
MAF ICA	0.76	PB	3
Cloud Base (meters)	3109	DRT ICA	-5.52
Warm Cloud Depth (meters)	1195	Cloud Base Temp (°C)	8

**DISCUSSION:**

IFR flight conditions continued into 16Z though sat imagery by 1630Z began to show some clearing. Meanwhile, showers and storms continued across parts of Sutton and Crockett Counties, which will clear to the southeast in the next hour or so. Latest HRRR has backed off significantly as far as afternoon convection goes. This is likely due to the numerous morning showers and storms, and lack of clearing thus far. Will see if the atmosphere destabilizes once clearing takes place. If so, we could still be in the hunt. Pilots did launch just prior to 20Z to investigate cells in the southern portion of the target area. Instead of dissipating and redeveloping storms took time to transform from stratiform to convective. We did some work in Sutton County, but bases were high, precipitation was limited, but cloud structure per pilots was good. After 15-20 minutes, the cloud was simply not responding to our efforts, so we pushed further west to more marginal development. No inflow was found here, so we'll let pilots do some training exercises while we await any potential additional development. No further development took place, so the plane was called RTB at 2045Z.

**WATCHES/WARNINGS:**

N/A

**SEEDED CELL ID'S:**

1329										
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**FLIGHT INFORMATION:**

TIME (Z)	Plane	Flare Location	County
1955	09P	IN AIR	
2032	09P	187° @ 45 nm	SUTTON
2039	09P	186° @ 41 nm	SUTTON
2039	09P	186° @ 40 nm	SUTTON
2045	09P	RTB	

Seeding operations were conducted over Sutton (6G+2H) County. 6 glaciogenic flares and 2 hygroscopic flares were burned within 1 cloud. This is the 1<sup>st</sup> day for seeding in September and the 22<sup>nd</sup> day for seeding during the season.