

WEST TEXAS WEATHER MODIFICATION ASSOCIATION - SAN ANGELO, TEXAS

SEEDING REPORT - August 28, 2023

SYNOPTIC/MESOSCALE CONDITIONS:

Northwesterly flow aloft has developed over the region which will advect cooler air into the upper levels. This will enhance instability across the region this afternoon at peak heating. Meanwhile, at the surface, a weak boundary is expected to lift north back over the area. We could see storms along this boundary with some possible further north as overrunning takes place. HRRR model does not support widespread development, but all mechanisms are in place for at least isolated to scattered showers and storms. Will go with likely rain chances as a result.

LIFTING MECHANISM:

Shortwave Aloft, Weak Surface Boundary

THERMODYNAMIC INDICES (12Z KMAF)

Freezing Level (m)	4995	-15°C Height (m)	7500
Precipitable Water (inches)	1.58	CAPE (J/Kg)	169
LCL	1509	CINH (J/Kg)	137
CCL	2912	LI (°C)	-2.1
MAF ICA	-0.96	PB	2
Cloud Base (meters)	2289	DRT ICA	-0.68
Warm Cloud Depth (meters)	2706	Cloud Base Temp (°C)	17

DISCUSSION:

Widely scattered showers developed across the area as we moved near the 1830Z hour. The best cell seems to be out west to the southwest of Big Lake with more development in eastern Schleicher and Sutton Counties. Overall, conditions were rather marginal but as pilots become available, we'll launch and target these areas. The pilots got airborne at 1915Z and will head NNW into Sterling County. The second plane is getting prepped and should be airborne soon to push south into Schleicher and Sutton Counties. Areas in Sterling County were shallow, but we did find a bit of inflow on the eastern edge of the main line. We'll push further west where the central part of this system was looking better. Meanwhile, the second aircraft is airborne and southbound to Schleicher County. Storms in Sterling County have proven to be outflow dominate. We'll continue pushing west through the county as new development further west is ongoing. The second plane will make a quick diversion to near Mertzon where an isolated storm popped up. We'll make quick work of it here before we commit to the south. The first plane in Sterling County found solid inflow in the central part of a storm prompting a response. Meanwhile, the second plane did well near Mertzon. As we push into 20Z, 49P is heading into northern Reagan County while 09P is heading Schleicher County. Though, the hot spots are mainly from near Mertzon west to northern Irion. Development is spottier to the south, but we'll try to change that. 49P had success in northern Reagan County as the outflow kept popping up new storms. Further south, development was more short-lived, but we do have a good target near Eldorado as we near 2015Z. Both planes had good success across the region per latest radar. By 2030Z, widespread rain was across the region. The first plane, 49P, was in the thick of things as development across Irion County was becoming very widespread. Resources may be dwindling soon, so they may need to RTB by 21Z. The second plane was doing good work in north central Schleicher County along a line of storms. 49P got on the far east end of the development as areas west became embedded and engulfed in rainfall. Outflow only out here, so they'll RTB while 09P hangs in Schleicher County. By 2105, 09P exhausted all resources. They'll RTB as

widespread heavy showers were ongoing across much of Schleicher, Irion and parts of Crockett and Reagan Counties.

WATCHES/WARNINGS:

N/A

SEEDED CELL ID'S:

1234	1565	1714	1826	1823	2048				
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FLIGHT INFORMATION:

TIME (Z)	Plane	Flare Location	County
1910	49P	IN AIR	
1925	09P	IN AIR	
1927	49P	313° @ 26 nm	STERLING
1936	49P	291° @ 34 nm	STERLING
1939	49P	291° @ 34 nm	STERLING
1941	49P	285° @ 36 nm	STERLING
1945	09P	234° @ 17 nm	IRION
1946	49P	278° @ 34 nm	STERLING
1947	09P	243° @ 18 nm	IRION
1948	49P	272° @ 34 nm	STERLING
1949	09P	247° @ 17 nm	IRION
1951	09P	248° @ 16 nm	IRION
1952	49P	274° @ 40 nm	IRION
1952	09P	247° @ 14 nm	IRION
1953	49P	275° @ 36 nm	IRION
1955	09P	230° @ 17 nm	IRION
2001	49P	277° @ 48 nm	REAGAN
2006	49P	276° @ 46 nm	REAGAN
2019	49P	259° @ 34 nm	IRION
2020	09P	184° @ 29 nm	SCHLEICHER
2021	09P	184° @ 29 nm	SCHLEICHER
2023	09P	184° @ 29 nm	SCHLEICHER
2025	09P	188° @ 28 nm	SCHLEICHER
2028	09P	191° @ 30 nm	SCHLEICHER
2031	09P	194° @ 29 nm	SCHLEICHER
2032	49P	249° @ 24 nm	IRION
2034	09P	206° @ 26 nm	SCHLEICHER
2034	49P	246° @ 25 nm	IRION
2037	09P	202° @ 28 nm	SCHLEICHER
2039	49P	242° @ 25 nm	IRION
2045	09P	197° @ 22 nm	SCHLEICHER
2046	09P	192° @ 22 nm	SCHLEICHER
2048	09P	195° @ 23 nm	SCHLEICHER
2050	49P	RTB	
2052	09P	191° @ 22 nm	SCHLEICHER
2059	09P	173° @ 20 nm	SCHLEICHER
2102	09P	320° @ 23 nm	SCHLEICHER
2103	09P	314° @ 22 nm	SCHLEICHER
2105	09P	RTB	

Seeding operations were conducted over Sterling (11G+1H), Irion (25G+1H), Reagan (5G+2H), and Schleicher (34G+4H) Counties. 75 glaciogenic flares and 8 hygroscopic flares were burned within 6 clouds. This is the 4th day for seeding in August and the 21st day for seeding during the season.