

WEST TEXAS WEATHER MODIFICATION ASSOCIATION - SAN ANGELO, TEXAS

SEEDING REPORT - July 7, 2018

SYNOPTIC/MESOSCALE CONDITIONS:

Easterly flow aloft continues today as a result of an upper level high over the four corners region. This will continue to advect moist air into all levels of the atmosphere. 12Z MAF sounding indicates a weakly capped atmosphere with high precipitable water values. Storms should trigger early today, mainly around 18Z and move in from the east. Best shot for storms should along the I-10 corridor from Junction to Iraan and areas south. A second round of showers/storms should impact the area by 21Z, but these are expected to be more stratiform in nature. Pilots will be on standby all day.

LIFTING MECHANISM:

Strong Moisture Advection

THERMODYNAMIC INDICES (12Z KMAF)

Freezing Level (m)	4648	-15°C Height (m)	7495
Precipitable Water (inches)	1.5	CAPE (J/Kg)	269
LCL	1088	CINH (J/Kg)	91
CCL	25493	LI(°C)	-2.2
MAF ICA	-0.96	PB	2
Cloud Base (meters)	2404	DRT ICA	-6.68
Warm Cloud Depth (meters)	2244	Cloud Base Temp (°C)	13.8

DISCUSSION:

Isolated showers in Crockett, Sutton and Schleicher counties were trying to develop into thunderstorms by 1630Z. Pilot will get aircraft ready and launch to investigate these showers. This is likely to be round one for the day as showers and storms are expected to push into the area from the east later this afternoon. ICA's for both DRT and MAF are in the negatives, and precipitable water values are very high for this area. Therefore, any storms that do develop should drop a good amount of rain in a hurry. Showers and storms to the west in Crockett County were still heavily embedded, so our focus will east of a line from Barnhart to Ozona. The isolated cells in Schleicher County had little to offer. Therefore, we'll push southwest into Crockett County and see what's going on down there despite radar imagery looking embedded. Seeding took place in southern Crockett County into the 18Z hour where the eastern edge of the storm provided good inflow and decent bases. After this was seeded sufficiently, we pushed back northeast towards Schleicher County again. We were not having much luck in Schleicher so far today, however pilot observed a newly developing storm. We'll investigate. This cell did produce great inflow. It was along the SC/SU/CR county line heading SW into Crockett County but not yet identified by TITAN. We'll continue to work it as if it was a mature cell. This cell was seeded until 2140Z when it seemed to lose inflow and good bases. Pilot will RTB and get ready for a second launch as more convection is expected to spread across the area from the east by 21Z. Convection from 19Z to 20Z stayed heavily embedded and/or short-lived. We are getting aircraft ready to go ahead for relaunch as more organized activity is expected to move in from Menard/Junction counties. Storms from the east began threatening some but also some intensification has taken place in parts of Crockett and Schleicher Counties. Therefore, we'll re-launch and investigate. We seeded a few storms in Crockett County efficiently before moving back into Schleicher County. We'll head even further east after a few storms were sufficiently seeded. Meanwhile, storms firing up to the north prompted second pilot to be called airborne. He should be up around 2220Z. There was a strong system in Sutton County, but this was heavily embedded under completely overcast skies. We'll attempt to get down

there once Schleicher County storms are attended to. Storms were seeded until they became very embedded. So, we'll dive south in southern Schleicher County and western Sutton County. These storms were very embedded and were starting to dissipate. Pilot RTB'd while second pilot was moving into Sterling County. Convection was not doing well with rain filled bases and was proving to be short lived. Pilot worked around Sterling and northern Irion counties into the 23Z hour with no luck. We identified a cloud that had no rain or virga coming out, so we'll see if we can get some inflow and provide some material before it precipitates. Upon seeding, this storm rapidly intensified and grew into a large system. Seeding clearly made a major impact here. Another storm to the east was seeded before it developed and after about 10 minutes we had a line of storms extending for 28 miles across Irion and Reagan counties. Seeded continued through 2330Z along this line. At 2340Z, storm was getting very low and radar was showing a small couplet on radar. Due to this, we pulled off. Pilot was called back to base and we'll regroup for another busy day tomorrow.

WATCHES/WARNINGS:

None

SEEDED CELL ID'S:

352	1512	228	2627	3411	3594	2794	3664	2389	5213	5097	2794
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FLIGHT INFORMATION:

TIME (Z)	Plane	Flare Location	County
1715	24P	IN AIR	
1751	24P	207° @ 65 nm	Crockett
1754	24P	208° @ 67 nm	Crockett
1755	24P	208° @ 67 nm	Crockett
1756	24P	208° @ 66 nm	Crockett
1759	24P	211° @ 70 nm	Crockett
1800	24P	212° @ 70 nm	Crockett
1802	24P	216° @ 75 nm	Crockett
1834	24P	199° @ 44 nm	Sutton
1836	24P	200° @ 48 nm	Sutton
1837	24P	201° @ 50 nm	Crockett
1845	24P	RTB	
2030	24P	In Air	
2055	24P	243° @ 55 nm	Crockett
2058	24P	243° @ 60 nm	Crockett
2059	24P	241° @ 60 nm	Crockett
2109	24P	229° @ 49 nm	Crockett
2120	24P	226° @ 32 nm	Crockett
2121	24P	227° @ 32 nm	Crockett
2124	24P	230° @ 34 nm	Crockett
2128	24P	223° @ 30 nm	Schleicher
2129	24P	223° @ 30 nm	Schleicher
2134	24P	220° @ 24 nm	Schleicher
2137	24P	223° @ 24 nm	Irion
2139	24P	226° @ 26 nm	Irion
2140	24P	226° @ 26 nm	Irion
2150	24P	209° @ 19 nm	Schleicher
2151	24P	200° @ 20 nm	Schleicher
2153	24P	202° @ 21 nm	Schleicher
2155	24P	211° @ 19 nm	Irion
2209	24P	160° @ 15 nm	Schleicher
2210	24P	161° @ 17 nm	Schleicher
2232	24P	200° @ 55 nm	Crockett

2233	24P	201° @ 60 nm	Crockett
2235	49P	In Air	
2245	24P	RTB	
2306	49P	269° @ 44 nm	Reagan
2306	49P	269° @ 44 nm	Reagan
2309	49P	268° @ 46 nm	Reagan
2310	49P	269° @ 43 nm	Reagan
2312	49P	269° @ 41 nm	Reagan
2313	49P	269° @ 43 nm	Reagan
2314	49P	268° @ 41 nm	Reagan
2316	49P	266° @ 41 nm	Reagan
2317	49P	266° @ 41 nm	Reagan
2321	49P	266° @ 41 nm	Reagan
2324	49P	264° @ 44 nm	Reagan
2325	49P	265° @ 46 nm	Reagan
2327	49P	265° @ 46 nm	Reagan
2328	49P	264° @ 44 nm	Reagan
2329	49P	265° @ 42 nm	Reagan
2332	49P	262° @ 39 nm	Irion
2337	49P	259° @ 38 nm	Irion
2339	49P	260° @ 43 nm	Reagan
2345	49P	RTB	

Seeding operations were conducted over Crockett (34+1H), Sutton (4), Schleicher (20+1H), Irion (12) and Reagan (32+2H) Counties. 102 flares plus 4 hygroscopic flares were burned within 12 clouds. This is the 4th day for seeding in July and the 13th day for seeding during the season.