

WEST TEXAS WEATHER MODIFICATION ASSOCIATION - SAN ANGELO, TEXAS

SEEDING REPORT - September 3, 2018

SYNOPTIC/MESOSCALE CONDITIONS:

Upper trough remains in place across the western half of Texas this morning. Additionally, a mesoscale convective vortex is placed just east of the Big Bend. This will help develop additional shower and storms activity across the area today. This feature was placed a bit further northwest yesterday where we saw the best rain chances along and east of a Sterling City to Ozona line. With the placement of the MCV today, best rain chances will be a bit further east, mainly along and east of a San Angelo to Sonora line. This does not mean no one west will see rain, we just likely won't see as widespread coverage. For the Trans-Pecos, the upper trough will help initiate storms over the mountains. However, these will struggle to move over the adjacent plains, but if so, expect showers and storms across most of the region. There is plentiful moisture to work with as dew points across the region are in the upper 60's into the low 70's. Any storms that do develop will have the potential to provide heavy rainfall. Latest HRRR and WRF models fire up storms across the Concho Valley by 2PM, with more over the Trans-Pecos higher terrain areas by 3PM. Likely rain chances will stay in place for both areas today.

LIFTING MECHANISM:

Strong Dynamics Aloft

THERMODYNAMIC INDICES (12Z KMAF)

Freezing Level (m)	4956	-15°C Height (m)	7300
Precipitable Water (inches)	1.42	CAPE (J/Kg)	410
LCL	1035	CINH (J/Kg)	87
CCL	2346	LI(°C)	-1.4
MAF ICA	-2.96	PB	2
Cloud Base (meters)	1407	DRT ICA	-5.96
Warm Cloud Depth (meters)	3549	Cloud Base Temp (°C)	16.7

DISCUSSION:

At 1630Z skies were overcast across the entire target area with temperatures still in the mid 70's. A few showers have developed across parts of Sterling County, eastern Tom Green County and Schleicher County. Lesser coverage of weak showers is also taking place throughout the rest of the target area. Without additional heating, it'll be tough to get storms to grow beyond the freezing level. Latest sat imagery is not showing much in terms of clearing, and latest obs out of SJT show bases around 2.3kft. Day is still young, but we are still a little far out from launching due to conditions. 19Z obs out of SJT suggested some clearing, but bases were still low (1.9kft). Still, just by eyeballing it bases do look to be a bit higher than that. We will launch and at least investigate an area from Mertzon to Eldorado to Sonora. This area was mainly heavily embedded showers, but a few pop-up storms were trying to develop in more clear air. First cell was intercepted at 1945Z in north central Schleicher County. Bases were low, but workable. This particular cell did have a core of higher dbz at or just above the freezing level. So glaciogenic seeding here it acceptable. We got a good dosage of flares in the seedable portion of this cell before deciding to dive southeast into south central Schleicher County. We will see how the first storm responds to our efforts. A second cell was seeded near Eldorado into the 20Z hour. We got another good dosage of flares plus a hygroscopic flare in this storm and it seemed to be responding well. Pilot had to make a fast landing in Eldorado for an aircraft maintenance issue which may just shut us down for the day. Second pilot will be assisting first pilot, plus, convection was

becoming heavily embedded and very low. We'll likely end the day here and regroup for tomorrow.

WATCHES/WARNINGS:

None

SEEDED CELL ID'S:

1542	1882								
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FLIGHT INFORMATION:

TIME (Z)	Plane	Flare Location	County
1930	24P	In Air	
1945	24P	203° @ 22 nm	Schleicher
1946	24P	200° @ 22 nm	Schleicher
1947	24P	198° @ 22 nm	Schleicher
1949	24P	195° @ 22 nm	Schleicher
1952	24P	203° @ 22 nm	Schleicher
2001	24P	173° @ 30 nm	Schleicher
2002	24P	167° @ 31 nm	Schleicher
2005	24P	163° @ 30 nm	Schleicher
2006	24P	162° @ 30 nm	Schleicher
2009	24P	177° @ 30 nm	Schleicher
2010	24P	179° @ 30 nm	Schleicher
2011	24P	182° @ 29 nm	Schleicher
2015	24P	RTB-EMG	

Seeding operations were conducted over Schleicher (28+1H) County. 28 flares plus 1 hygroscopic flare were burned within 2 clouds. This is the 2nd day for seeding in September and the 22nd day for seeding during the season.