

WEST TEXAS WEATHER MODIFICATION ASSOCIATION - SAN ANGELO, TEXAS

SEEDING REPORT - June 18, 2018

**SYNOPTIC/MESOSCALE CONDITIONS:**

Weak southwesterly flow aloft continues across the region ahead of a strong upper level system placed over the Pacific Northwest. Meanwhile, along the Gulf Coast of Texas, a tropical wave is moving on shore which is advecting plenty of moisture into the Concho Valley. While conditions will be dry across the Trans-Pecos this week, moisture advection into the Concho Valley along with some dynamical support should result in at least isolated showers and storms. High-res models failed miserably yesterday keeping dry weather across the Concho Valley. However, we did see isolated showers with a few storms embedded. The HRRR seems to be painting a similar solution which based on the pattern seems believable. The WRF doesn't seem to be on the same page with mainly dry conditions. I don't buy that, so I'll stick with the HRRR solution and go with likely rain chances today, mainly after 2PM. Most convection that develops will dissipate by sunset with dry conditions expected during the overnight.

**LIFTING MECHANISM:**

Strong Moisture Advection

**THERMODYNAMIC INDICES (12Z KMAF)**

Freezing Level (m)	5091	-15°C Height (m)	7750
Precipitable Water (inches)	1.15	CAPE (J/Kg)	746
LCL	1165	CINH (J/Kg)	66
CCL	2548	LI(°C)	-2.1
MAF ICA	-4.96	PB	2
Cloud Base (meters)	16	DRT ICA	-5.24
Warm Cloud Depth (meters)	2705	Cloud Base Temp (°C)	2385

**DISCUSSION:**

Isolated showers started to develop in parts of West Central Texas within the 18Z hour. All activity, so far, has been very isolated and short-lived, which is the expectation of most development today. However, sat imagery will be closely monitored as will water vapor as any small disturbance aloft may allow for a shower or two to develop into a thunderstorm. Conditions are very similar to yesterday just without the enhanced support aloft. So far, seeing nothing to launch on as of 1830Z. We decided to send out a research aircraft to check out an isolated cell in Sterling County. However, a cluster of showers/storms was ongoing across Reagan and Crockett Counties. These were heavily embedded as of 1930Z. Upon completion of research, we may go look at the cells further west. Pilot got airborne at 2045Z and will head west. Convection has been marginal and heavily embedded for much of the day, but we'll give it a shot. First target was a single cell storm in Glasscock/Sterling County. Upon arrival, inflow was quickly found so we started seeding cell #492. Meanwhile, further south and west, storms were very heavily embedded, so chances are those will have to run their course. Cell #492 was seeded sufficiently so we decided to dive south towards Barnhart. Everything west of a line from Garden City to Barnhart was overcast with very low bases. So, we had to stay out of there. A few showers/storms were trying to fire along the eastern edge of this area, so we'll target those cells and may target some on the south side along I-10 just west of Ozona. This cell, #124, was heavily seeded through 2210Z. Bases were becoming rain filled with the shelf cloud gone at this point. We may move off to the NE here soon back towards SJT while observing two cells near Sterling City and another near Barnhart. However, aircraft was getting a bit low on fuel so we'll RTB. We got more fuel and will relaunch on a line of storms that

developed from near Robert Lee to west of Sterling City. We did have some aircraft issues so we did not launch. However, development dissipated anyway so it would have been recon flight.

**WATCHES/WARNINGS:**

None

**SEEDED CELL ID'S:**

492	124								
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**FLIGHT INFORMATION:**

TIME (Z)	Plane	Flare Location	County
2045	49P	IN AIR	
2115	49P	290° @ 46 nm	STERLING
2118	49P	290° @ 46 nm	STERLING
2120	49P	289° @ 48 nm	STERLING
2122	49P	290° @ 47 nm	STERLING
2155	49P	231° @ 58 nm	CROCKETT
2156	49P	232° @ 59 nm	CROCKETT
2157	49P	232° @ 61 nm	CROCKETT
2201	49P	232° @ 59 nm	CROCKETT
2202	49P	232° @ 59 nm	CROCKETT
2203	49P	230° @ 57 nm	CROCKETT
2204	49P	229° @ 59 nm	CROCKETT
2207	49P	229° @ 59 nm	CROCKETT
2215	49P	RTB	

Seeding operations were conducted over Sterling (8) and Crockett (16) Counties. 24 flares were burned within 2 clouds. This is the 4<sup>th</sup> day for seeding in June and the 8<sup>th</sup> day for seeding during the season.