

**WEST TEXAS WEATHER MODIFICATION ASSOCIATION - SAN ANGELO, TEXAS**

**SEEDING REPORT - August 10, 2018**

**SYNOPTIC/MESOSCALE CONDITIONS:**

Strong shortwave is placed over the Concho Valley this morning which has resulted in numerous showers and storms along and east of a San Angelo to Sonora line. The best rainfall is further east across Kimble and Menard Counties. Additionally, another disturbance aloft has allowed for showers to continue across southeast New Mexico into the western half of the Trans-Pecos. Much like yesterday, these showers/storms will dissipate through the morning before clearing by noon. As the clearing takes place, heating and instability will ramp up allowed for a second round of convection to fire up. The latest HRRR may be too early with development by 1PM with the WRF initiating storms at 3PM. I'll take the middle of the two which is exactly what we saw yesterday.

**LIFTING MECHANISM:**

Cold Front

**THERMODYNAMIC INDICES (12Z KMAF)**

Freezing Level (m)	4390	-15°C Height (m)	7310
Precipitable Water (inches)	1.35	CAPE (J/Kg)	331
LCL	1362	CINH (J/Kg)	103
CCL	2977	LI(°C)	-0.2
MAF ICA	-1.68	PB	1
Cloud Base (meters)	1981	DRT ICA	-3.24
Warm Cloud Depth (meters)	2409	Cloud Base Temp (°C)	12.2

**DISCUSSION:**

16Z analysis showed plentiful showers and thunderstorms off to the east. This was pushing off an outflow boundary to the west impacting parts of the WTWMA target area. By 1730Z, a few showers/storms began to fire despite temperatures still in the lower 70's. Pilots were put on standby as the convection was simply not yet seedable. Temperatures were still too cool and vertical development was severely lacking. These developed a bit premature, but we'll keep an eye and get going when needed. Heating began to take place which pushed clouds above 4kft. Therefore, we decided to launch at 1745Z and head west where a large cluster of showers/storms were ongoing. We will start to the south and work our way north. Pilot arrived at storm shortly before 1815Z and reported bases as low at 1-2kft. He stayed in the mid-levels near 6.5kft to see if we can get inflow on this layer. Meanwhile, NWS issues a t-storm warning for Barnhart and areas SE due to the storm bowing likely producing high winds. We'll be careful in this area. Storm was heavily seeded through 1830Z, but pilot began having some issues with the aircraft. We'll get him a bit closer to home to recover if needed. Meanwhile, research aircraft is launching and will work the northern half of this system. Pilot was called to RTB at 1830Z. Research aircraft will take care of the northern storms. We'll relaunch in a different aircraft if needed.

**WATCHES/WARNINGS:**

T-Storm Warning - Irion/Schleicher/Crockett (Barnhart, TX)

**SEEDED CELL ID'S:**

4318									
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**FLIGHT INFORMATION:**

TIME (Z)	Plane	Flare Location	County
1750	24P	In Air	
1815	24P	239° @ 33 nm	Irion
1816	24P	237° @ 33 nm	Irion
1817	24P	234° @ 35 nm	Irion

1818	24P	232° @ 37 nm	Crockett
1820	24P	230° @ 38 nm	Crockett
1825	24P	222° @ 46 nm	Crockett
1830	24P	RTB-Maint	

Seeding operations were conducted over Irion (8) and Crockett (4+2H) Counties. 12 flares plus 2 hygroscopic flares were burned within 1 cloud. This is the 2<sup>nd</sup> day for seeding in August and the 19<sup>th</sup> day for seeding during the season.