

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

**SEEDING REPORT - June 21, 2023**

**SYNOPTIC/MESOSCALE CONDITIONS:**

Strong upper-level ridge remains in place across the region today which will continue our record-breaking heat wave. Temperatures in the 100-115°F range can be expected across the region. Meanwhile, a surface dryline will mix east and provide a focal point for shower/storm development later this afternoon. Storms are expected to be high based and short-lived but may have enough support aloft via shortwave activity for some sustainability. Per the latest HRRR, will go with slight rain chances for today.

**LIFTING MECHANISM:**

Dryline

**THERMODYNAMIC INDICES (12Z KMAF)**

Freezing Level (m)	5076	-15°C Height (m)	7300
Precipitable Water (inches)	0.94	CAPE (J/Kg)	30
LCL	2926	CINH (J/Kg)	417
CCL	5257	LI (°C)	1.1
MAF ICA	8.6	PB	0
Cloud Base (meters)	3941	DRT ICA	3.04
Warm Cloud Depth (meters)	1135	Cloud Base Temp (°C)	6

**DISCUSSION:**

Record breaking heatwave continues at SJT after all-time record high of 114°F yesterday and closing in on 112°F already today as of 1930Z. With this heat, plenty of instability is in place with CAPE values in excess of 5k J/Kg, but with the dryline bifurcating the area along a line from Abilene to San Angelo to Ozona, dry air behind it is suppressing convection. East, however, we are seeing some cu fire up on sat imagery. Main issue is dew point depression nearing 60° which will put bases well over 13kft. Still, we'll try to launch and investigate what bases are and if any storms have any seedability. By 1935Z, the call to launch was made as cells are rapidly firing in Schleicher County. Pilot began approaching the cell by 2015Z with bases projected at 2015Z yet to reach cloud base. The second pilot will get airborne and head west towards the tail end of the front where sat imagery was showing some favorable development. The first pilot had bases at 14kft. We'll do quick work here as rain is hitting the ground. We'll up dosage to decrease time at this altitude. Cell was seeded through 2030Z as it moved south. However, it blew off outflow as we crossed 2030Z. The second pilot is targeting a very small, but tall shower NW of SJT, but it looks like it is raining out quickly. The first pilot will check an area SSW of Mertzon, but sat imagery was not looking favorable. The second pilot did get a burst of inflow NW of SJT. We put a quick dosage in there to see if it'll take. Unfortunately, nothing happened here. The second pilot was called RTB with no more targets. Overall, cloud bases were far too high, and seedability was low due to the short-lived nature of these cells. At 21Z, we decided to RTB.

**WATCHES/WARNINGS:**

N/A

**SEEDED CELL ID'S:**

113	193								
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**FLIGHT INFORMATION:**

TIME (Z)	Plane	Flare Location	County
2000	09P	IN AIR	
2021	09P	172° @ 38 nm	SCHLEICHER
2023	09P	172° @ 32 nm	SCHLEICHER
2025	49P	IN AIR	

2025	09P	175° @ 36 nm	SCHLEICHER
2028	09P	171° @ 35 nm	SCHLEICHER
2042	49P	288° @ 09 nm	TOM GREEN
2045	49P	288° @ 09 nm	TOM GREEN
2050	49P	294° @ 09 nm	TOM GREEN
2055	49P	RTB	
2100	09P	RTB	

Seeding operations were conducted over Schleicher (12G+1.5H) and Tom Green (7G+1H) Counties. 19 glaciogenic flares and 2.5 hygroscopic flares were burned within 2 clouds. This is the 3<sup>rd</sup> day for seeding in June and the 15<sup>th</sup> day for seeding during the season.