

**SOUTH TEXAS WEATHER MODIFICATION ASSOCIATION - Pleasanton, TEXAS**

**SEEDING REPORT - June 16, 2020**

**SYNOPTIC/MESOSCALE CONDITIONS:**

Upper air analysis shows a ridge over the Great Plains and Great Lakes area, a closed low over the East, and a trough across the West. At the surface, low is across the West and the Rockies, with high pressure across the Gulf and Northeast. The flow in the upper level is mainly light and south southeasterly with it generally light and variable at the surface. The current dew point temperature is in the upper 60s and lower 70s and the environmental temperature more or less the same with clear to overcast skies across our area. For today, expect somewhat similar weather pattern as yesterday; however, the moisture is forecast to be pooled across the western half of the target area. Expect a few streamers showers this morning from Atascosa County towards the Rio Grande area with a stratus deck in place. As the afternoon matures with daytime heating, showers and better thunderstorms are possible across the same area. The precipitable water values should be between 1.5 and 1.75in where some isolated areas could get a decent 10 to 20 minutes of rainfall. The temperature today will be slightly warmer than yesterday across the western half of the target area due to less cloud coverage and little to no rainfall. Overnight, conditions settle with warm low temperatures and a humid air mass. An upper-level ridge takes o with no weakness across the area bring drier and slightly warmer temperatures by then. However, I can't rule out an isolated thunderstorm or two across the Rio Grande area. Thursday should also be another quiet day as the ridge dominate the area as south-central Texas on the eastern periphery of the upper-level ridge axis. Even though both days appear to be dry, the dew point temperatures will be in the 60s and 70s with the humidity on the high side. The upper-level ridge weakens on Friday that will enhance precipitation across parts of the target. As of now, areas that will be impacted will similar to today with precipitable water values a replica of today. The highs are progged to be in the upper 80s and middle 90s with the lows in the middle 60s and lower 70s through the end of the forecast period.

**LIFTING MECHANISM:**

Warm Air Advection, Weak Ridge, Sea Breeze

**THERMODYNAMIC INDICES (12Z KCRP)**

Freezing Level (m)	4836.63	CAPE (J/Kg)	2083.67
Precipitable Water (inches)	1.88	CINH (J/Kg)	0.97
LCL	611.30	LI (°C)	-5.81
CCL	701.15	PB	-5.81
CRP ICA	-23.39	Cloud Base Temp (°C)	28.7
Cloud Base (meters)	838.20		
Warm Cloud Depth (meters)	3998.43		

**DISCUSSION:**

A few streamer showers this morning give way to better convection this afternoon. 57AA was the only aircraft available at the time and was launched from Uvalde towards parts of the eastern target area. 57AA was the first launched across the McMullen county. The pilot was able to seed a few cells down that way. He also tried to seed a cell across the southern McMullen county but could have only released a single dose of seeding material into that cell as it was entering the non-seeding zone. After finishing with southern McMullen county, I had the pilot try to put more silver iodide in the first cell that

wee seeded; however, when the aircraft arrived at that cell, it was already drying. I should also mention that there were cells over parts of the EAA counties that were too weak as well as some were in the non-seeding zone across the Bexar county. There was a fairly okay cell that moved off the northwestern Bexar county but it was unreachable. 57AA was then launched across the Frio county as a cell developed along the southern side. 57AA released several dosages of seeding materials into that cell. After seeding that cell, there was a few small cells that did not appear seedable across the McMullen county. However, 57A was able to get a few a cell to finish the day. 57AA refueled in Pleasanton before heading back to Uvalde.

**WATCHES/WARNINGS:**

N/A

**SEEDED CELL ID'S:**

488	691	797	393							
-----	-----	-----	-----	--	--	--	--	--	--	--

**FLIGHT INFORMATION:**

TIME (Z)	Plane	Flare Location	County
17:56	57AA	In Air	
18:41	57AA	177° @ 24 nm	McMullen
18:42	57AA	178° @ 24 nm	McMullen
18:44	57AA	175° @ 22 nm	McMullen
19:10	57AA	28.05N, 98.35W	McMullen
19:59	57AA	248° @ 36 nm	Frio
20:00	57AA	250° @ 40 nm	Frio
20:01	57AA	251° @ 40 nm	Frio
20:02	57AA	250° @ 39 nm	Frio
20:34	57AA	169° @ 25 nm	McMullen
20:51	57AA	166° @ 25 nm	McMullen
20:51	57AA	Landed	

Seeding operations were conducted in Frio (12+0H), and McMullen (8+0H) Counties. 20 flares plus 0 hygroscopic flares were burned within 4 clouds. This is the 4<sup>th</sup> day for seeding in June and the 13<sup>th</sup> day for seeding during the season.