

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

**SEEDING REPORT - July 08, 2018**

**SYNOPTIC/MESOSCALE CONDITIONS:**

Upper air analysis shows a ridge of high pressure across the Rockies and Central Plains with an easterly wave over southern Texas. At the surface, the flow is generally east northeasterly with it calm at the surface. The current dew point temperature is in the low to mid 70's with scattered and broken clouds pushing trough much of the area. There are few showers and thunderstorms northeast of San Antonio and showers over the Live Oak area that will eventually shift westward impacting possibly parts of the central and western counties. For today, expect another wave from the east to pass over the target areas with an upper ridge to the north. Expect more or less of similar conditions as yesterday with only this time showers and possibly thunderstorms role in before midday. This is a mesoscale feature that is heading our way, whereas yesterday we were downwind of the inverted trough that brought significant rainfall to our area on Wednesday afternoon and evening hours. With this feature, much of the energy will be focus around the Corpus Christi before midday but as few isolated showers and thunderstorms may impact much of the target zones in the afternoon. The showers and thunderstorms across San Antonio and Live Oak is also part of the easterly disturbance with the first band moving in that is of much significance but with the rest of the a mainly mid-level moisture and day time heating could produce showers and thunderstorms to much of the target zone. I'm not expecting was complete was out from the rain event today that may possibly carry-on into early evening hours but anywhere between .10 to .25in is possible in certain areas and even higher amounts under thunderstorms. For Saturday, another low level easterly wave moves across northern Gulf of Mexico with its center remain off shore that will bring another round of showers and thunderstorms to south Texas and northeastern Mexico. Scattered to isolated showers and thunderstorms will make their way across the target zones during the day with heavy downpours at times. A broad inverted trough will develop Sunday into Monday that will bring a chance for showers and thunderstorms again to our region on both days. Sunday during the day and overnight looks to be the better chance for rainfall. High temperatures will continue to remain below the normal for this time of the year through Monday.

**LIFTING MECHANISM:**

Low Level Moisture, Warm Air Advection, Mid-Level Disturbance

**THERMODYNAMIC INDICES (12Z KCRP)**

Freezing Level (m)	4656.93	CAPE (J/Kg)	1279.5
Precipitable Water (inches)	2.37	CINH (J/Kg)	5.46
LCL	598.95	LI(°C)	-3.27
CCL	728.09	PB	-3.27
CRP ICA	-19.02	Cloud Base Temp (°C)	24.5
Cloud Base (meters)	1335.26		
Warm Cloud Depth (meters)	3321.67		

**DISCUSSION:**

Another mid level feature impacted our weather today bringing showers and thunderstorms to the area by mid-morning and afternoon hours. Showers and

thunderstorms developed mainly across the northern counties with some over the eastern and western counties. Due to active conditions, aircrafts 57AA and 160P were launched to the central, northern and western counties. 57AA was first launched across the Medina and Uvalde Counties for possible seeding opportunities. 160P was then launched across the central county as cells developed and stood out long enough for the aircraft to reach them. The cells were not aggressive like the day before so not a tremendous amount of seeding took place on this day. Aircraft 57AA successfully seeded across the Medina and Uvalde Counties while 160P seeded across the Atascosa and McMullen Counties. Both aircrafts were ordered to return back to base as storms across the much of the counties were diminishing. However, 57AA was relaunched across the Bandera County as cells began to evolve. 55AA was able to reach a few cells on-time and seeded them. When the flow rate and the cloud bases became unfavorable, 57AA returned to base. All in all, another successful day of seeding was accomplished as we were able to seed several cells.

**WATCHES/WARNINGS:**

N/A

**SEEDED CELL ID'S:**

1948	2695	2555	2920	1761	3672	1525	3320		
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**FLIGHT INFORMATION:**

TIME (Z)	Plane	Flare Location	County
18:24	57AA	In Air	
18:39	160P	In Air	
19:04	57AA	100° @ 80.0 nm	Uvalde
19:09	57AA	102° @ 81.0 nm	Uvalde
19:11	57AA	103° @ 78.0 nm	Uvalde
19:13	57AA	101° @ 77.8 nm	Uvalde
19:17	57AA	101° @ 85.3 nm	Uvalde
19:18	160P	125° @ 20 nm	Atascosa
19:18	160P	126° @ 20 nm	Atascosa
19:20	160P	127° @ 18 nm	Atascosa
19:21	160P	132° @ 19 nm	Atascosa
19:22	160P	125° @ 19 nm	Atascosa
19:42	57AA	293° @ 55 nm	Medina
19:44	57AA	293° @ 54 nm	Medina
19:50	57AA	292° @ 56 nm	Uvalde
20:20	160P	184° @ 21 nm	McMullen
20:20	160P	188° @ 20 nm	McMullen
20:21	160P	194° @ 19 nm	McMullen
20:22	160P	193° @ 20 nm	McMullen
20:23	160P	186° @ 21 nm	McMullen
20:26	57AA	Recon	
21:28	57AA	In Air	
21:27	160P	Landed	
21:33	57AA	304° @ 59 nm	Bandera
21:59	57AA	125° @ 66.2 nm	Bandera
22:01	57AA	127° @ 64.6 nm	Bandera
22:02	57AA	125° @ 66.0 nm	Bandera
22:04	57AA	126° @ 64.9 nm	Bandera
22:18	57AA	133° @ 60.0 nm	Bandera
22:20	57AA	132° @ 59.0 nm	Bandera
22:22	57AA	132° @ 59.0 nm	Bandera
23:14	57AA	Landed	

Seeding operations were conducted in Atascosa (10+0H), Bandera (16+1H), Medina (4+0H), McMullen (10+0H) and Uvalde (10+1H) Counties. 50 flares

plus 2 hygroscopic flares were burned within 8 clouds. This is the 5<sup>th</sup> day for seeding in July and the 15<sup>th</sup> day for seeding during the season.