

SOUTH TEXAS WEATHER MODIFICATION ASSOCIATION - Pleasanton, TEXAS

SEEDING REPORT - September 16, 2020

SYNOPTIC/MESOSCALE CONDITIONS:

Upper air analysis shows a trough over parts of Southern Plains with a ridge over the far Southeast and Hurricane Sally over the northeastern Gulf of Mexico. At the surface, a strong area of high pressure is across the far Northeast and Northern Great Plains strong low pressure across the northeastern Gulf of Mexico and parts of the Southern Mississippi Valley. The flow at upper levels is mainly calm to light with it light and northerly at the surface. The current dew point temperature is in the middle 60s and middle 70s and the environmental temperature in the lower to upper 70s with scattered clouds to clear skies across our area. For today, an upper-level trough over the northwest of our region and a mid-level shear axis coupled with daytime heating will aid in the development of isolated showers and thunderstorms mainly this afternoon. The mid to upper-level shear axis is forecast to shift eastward later in the day that will bring storms to much of the area. However, the latest TT WRF and HRRR does suggest a decrease in storm activities at least for the target area with an increase over the south and north of the target region this afternoon into early this evening. The ARW does suggest a slightly better coverage for the target area this afternoon and this evening; thus, I went ahead a just introduce a low chance for showers and thunderstorms to our area. Depending on the amount of cloud and precipitation cover, the max temperature will vary. If there will be an increase in cloud and precipitation, the max temperature will be cooler or at the normal for this time of the year and vice versa. Active weather does look to begin to dimmish as we lose heat around sunset; however, there could be one of two storms lasting around or before midnight. On Thursday, the upper-level trough will slide down into our area providing a better lift to generate daytime showers and thunderstorms across much of south-central Texas. This there will be better coverage of storms with the temperature most likely to be cooler than the normal. Given the amount of moisture and slow-moving storms, heavy downpours are anticipated. The upper-level trough will remain draped over south-central Texas Thursday night into Friday morning bringing the potential for additional showers and thunderstorms to our areas. Activity will likely diminish by Friday evening with the loss of daytime heating. The trough will gradually lift away to the east northeast into the weekend end. A cold front will pass with a northwesterly flow aloft to provide cool and pleasant (low humidity) weather on Saturday. The highs are progged to be in the upper 80s and lower 90s with the lows in the lower 60s and lower 70s through the end of the forecast period.

LIFTING MECHANISM:

Upper-Level Trough, Low-Level Moisture Advection, Tropical System

THERMODYNAMIC INDICES (12Z KCRP)

Freezing Level (m)	4869.0	CAPE (J/Kg)	853.05
Precipitable Water (inches)	2.26	CINH (J/Kg)	55.95
LCL	916.23	LI (°C)	-0.94
CCL	1354.90	PB	-0.94
CRP ICA	-13.02	Cloud Base Temp (°C)	20.1
Cloud Base (meters)	1640.69		
Warm Cloud Depth (meters)	3228.31		

DISCUSSION:

No data available due to internet issues.

Similar to other days, not much in the way of active weather with a few afternoon pop-up thunderstorms. There were a few were pop-ups across Bee county but unfortunately, we had only one pilot available at the time that was seeding across the Uvalde county. Most of the cells that were present were very weak to non-existent. However, 57AA was able to at least seed two of the cells out there that looked promising. The last cell was so very weak to near dying that 57AA was unable to release the full dosages of seeding materials into that cell. When 57AA was done, it returned to base as there were no more seedable cells across the target area at the time.

WATCHES/WARNINGS:

N/A

SEEDED CELL ID'S:

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FLIGHT INFORMATION:

TIME (Z)	Plane	Flare Location	County
19:45	57AA	In Air	
19:49	57AA	N29.12, W99.44	Uvalde
19:50	57AA	N29.12, W99.44	Uvalde
19:51	57AA	N29.12, W99.43	Uvalde
19:52	57AA	N29.13, W99.44	Uvalde
20:07	57AA	N29.27, W99.31	Uvalde
20:21	57AA	Landed	

Seeding operations were conducted in Uvalde(11+0H) County. 11 flares plus 0 hygroscopic flares were burned within 2 clouds. This is the 9th day for seeding in September and the 41st day for seeding during the season.