

SOUTH TEXAS WEATHER MODIFICATION ASSOCIATION - Pleasanton, TEXAS

SEEDING REPORT - August 14, 2019

SYNOPTIC/MESOSCALE CONDITIONS:

Upper air analysis shows a ridge of high pressure centered over the deep Southwest with a trough over the East Northeast. At the surface, low/trough axes across much of the country with multiple fronts across central and eastern parts of the country. The flow at upper levels is mainly east northeasterly with it light and variable at the surface. The current dew point temperature is in the lower to middle 70s and environmental temperature in the middle to upper 70s with clear skies to a few clouds in our area. For today, expect somewhat of a replica of yesterday's weather at least through the early have of the afternoon hours. An area of disturbed weather may move in from Central Texas along a surface boundary. The latest HRRR does suggest a few cells moving in after 3 p.m. across the Uvalde/Bandera County. The cells are expected to weaken and diminish after sunset when we begin to lose daytime heat. With afternoon heating, available moisture and low to moderate instability along the boundary isolated to scattered showers and thunderstorms are possible later in the day. I'm not expecting any severe weather as instability does not support it. For Thursday, another semi-active day is instore due to available low-level moisture and weakness in the ridge could produce a couple of widespread isolated showers and thunderstorms. The GFS continues to be more bullish with the amount of precipitation that is expected to fall while the ECMWF is much drier. Conditions are expected to settle by Thursday evening with moisture decreasing and the ridge beginning to strengthen. Friday through Saturday, conditions are forecast to be quiet with high temperature back into the triple digits. The highs for Thursday are expected to near the climatological normal courtesy increase cloud coverage and possible precipitation. Even though the environmental temperature should drop a few degrees on Thursday the dew point temperature will still play a role in our weather to cause the heat index values to be in the triple digits across much of the target area. The feel like temperature should be a couple of degrees warmer than the environmental temperature today through the rest of the week. The highs are progged to be in the middle to upper 90s and lower 100s with the lows in the middle to upper 70s through the end of the forecast period.

LIFTING MECHANISM:

Weak Upper Ridge, Warm Moist Air Advection, Outflow Boundary

THERMODYNAMIC INDICES (12Z KCRP)

Freezing Level (m)	5203.02	CAPE (J/Kg)	1155.9
Precipitable Water (inches)	1.79	CINH (J/Kg)	48.08
LCL	759.12	LI (°C)	-3.83
CCL	1578.65	PB	-3.83
CRP ICA	-21.99	Cloud Base Temp (°C)	21.4
Cloud Base (meters)	2404.11		
Warm Cloud Depth (meters)	2798.91		

DISCUSSION:

The day started off mainly quiet but turned a little unsettled in the afternoon hours over the southern Hill Country as a few cells dropped in from

Central Texas. A couple of cells moved in from the north with an outflow boundary. Most of the cells were weak and as they approached a more stable atmosphere, they became very weak to near distinct. 57AA was launched over northwestern Uvalde County as a cell dropped in. It was seeded but unfortunately, only the edge of the cell brushed the northwestern Uvalde County border. 57AA was then sent to the eastern side of the Bandera County for possible seeding opportunity. 57AA had some difficulties getting to a cell dropping in from the north as it was moving in over the non-seeding zone over the Bexar County. However, 57AA was able to release a couple of the seeding materials into the cell across both Bexar and Bandera Counties before heading to base for the evening.

WATCHES/WARNINGS:

N/A

SEEDED CELL ID'S:

612	528								
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FLIGHT INFORMATION:

TIME (Z)	Plane	Flare Location	County
23:06	57AA	In Air	
23:30	57AA	284° @ 94 nm	Uvalde
23:31	57AA	284° @ 95 nm	Uvalde
23:36	57AA	283° @ 96 nm	Uvalde
23:38	57AA	285° @ 95 nm	Uvalde
24:17	57AA	331° @ 49 nm	Bandera
24:23	57AA	334° @ 49 nm	Bexar
24:26	57AA	336° @ 47 nm	Bexar
24:38	57AA	323° @ 48 nm	Bandera
01:10	57AA	Landed	

Seeding operations were conducted in Bexar (4+0H), Bandera (4+0H) and Uvalde (8+0H) Counties. 16 flares plus 0 hygroscopic flares were burned within 2 clouds. This is the 3rd day for seeding in August and the 23rd day for seeding during the season.