SOUTH TEXAS WEATHER MODIFICATION ASSOCIATION – Pleasanton, TEXAS

SEEDING REPORT – August 5, 2019

SYNOPTIC/MESOSCALE CONDITIONS:

Upper air analysis shows a broad ridge centered over Arizona, shortwave trough over the parts of the Northern Great Plains and a trough over the East. At the surface, low/trough axes across the Western parts of the country and the southern Great Plains with high pressure across much of the country. The flow at upper levels is northeasterly with it calm to light and southeasterly at the surface. The current dew point temperature is in the lower 70s and environmental temperature in the upper 70s with clear skies to broken clouds in our area. For today, the upper-level ridge of high pressure will remain over the four corners leaving us downwind of it. The energy within the upper-level northeasterly flow coupled with precipitable water values ranging from 1.8 to 2.0in will allow for some afternoon and possibly early evening showers and thunderstorms over south-central Texas. The latest HRRR has mainly weak isolated to scattered cells over the area whereas the ARW has much stronger cells near the Bee County and counties east of it. Convection should diminish after sunset as weak begin to lose daytime heat. Overnight, expect mainly settled conditions with warm Tuesday morning lows and high humidity values. Tuesday's weather looks to be more settled than today. However, can't rule out an isolated cell or two over the area due to possibly a weak sea-breeze event as the upper-level ridge starts shifting eastward while influencing our weather. Hot and dry conditions are expected for Wednesday and Thursday. Due to the hot temperatures and high dew point temperature values, the heat indices are forecast to range between 103 and 108 degrees in many locations with some areas east of I-37 and I-35 possibly reaching near 110 degrees by Thursday and beyond. The highs are progged to be in the upper t 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, Sea-Breeze

THERMODYNAMIC INDICES (12Z KCRP)

Freezing Level (m)	4856.73	CAPE (J/Kg)	1935.1
Precipitable Water (inches)	2.18	CINH (J/Kg)	62.21
LCL	649.81	LI(°C)	-1.84
CCL	717.86	PB	-1.84
CRP ICA	-17.56	Cloud Base Temp (°C)	23.3
Cloud Base (meters)	1402.08		
Warm Cloud Depth (meters)	3454.65		

DISCUSSION:
Today started off quiet but with low-level moisture moving in from the coast, sufficient heating and weakness in the upper levels, storms developed over the Bee County and parts of the Uvalde County. Just as yesterday, a couple of small area cells developed along a sea-breeze and moved over the Bee County and a few over the Uvalde County. In due time 60P was launched across the Bee County and 57AA was launched across the Uvalde County. 6OP flew over Bee County a few times but was only able to seed a small cell there. Also, the cell/cells across the Uvalde County was not that impressive and weak for

seeding that 57AA was unable to seed it. Today similar to yesterday was not a good day for operations. However, we tried to seed as much as we could due to a lot of dry weather across the target zone. Both 60P and 57AA returned to base cells were non-seedable refused to develop.

WATCHES/WARNINGS:
N/A

SEEDED CELL ID'S:

622									

FLIGHT INFORMATION:

TIME (Z)	Plane	Flare Location	County
21:40	**60P**	**In Air**	
21:54	**60P**	**120° @ 55 nm**	**Bee**
21:55	**60P**	**121° @ 56 nm**	**Bee**
21:56	**60P**	**120° @ 55 nm**	**Bee**
21:59	**60P**	**120° @ 55 nm**	**Bee**
21:04	**57AA**	**In Air**	
22:39	**57AA**	**Landed**	
23:31	**60P**	**Landed**	

Seeding operations were conducted in Bee (8+0H) County. 8 flares plus 0 hygroscopic flares were burned within 1 cloud. This is the 2nd day for seeding in August and the 22nd day for seeding during the season.