

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

**SEEDING REPORT - August 1, 2020**

**SYNOPTIC/MESOSCALE CONDITIONS:**

Upper air analysis shows a ridge over the West and northcentral Gulf and a trough over the parts of the Southern Great Plains and Southern Mississippi Valley. At the surface, high pressure is across the Rockies and Northern Central Great Plains with low pressure across the East trough parts of the South Plains. The flow at upper levels is mainly southerly with it generally light and south southeasterly at the surface. The current dew point temperature is in the lower to upper 70s and the environmental temperature more or less the same with clear skies to broken clouds and some mist across our area. For today, expect mainly quiet weather for much of the day; however, a cold front to near the target area and begin aided by convective outflow and a northerly flow aloft could bring some active weather across the southern Hill Country by late afternoon and early evening. Expect the cold front to enter central Texas and Hill Country by around midday/afternoon then the Coastal Plains on Saturday. Upward forcing the frontal boundary and the upper trough coupled with a precipitable water value around 2.0in will bring showers and thunderstorms across the northern target areas later in the day most of tonight into Saturday with daytime heating adding to the forcing. The Storm Prediction Center places areas to the north of Del Rio and San Antonio under a marginal risk for strong to severe storms today through the night due to moderate instability and steep mid-level lapse rates. Hail and strong winds plus heavy downpours will be the main threat that could take place outside of the target area. Another batch of storms arrives on Saturday that should move into the southern target area and along the coast through the evening. Rain chances decrease Saturday night into Sunday morning. There may be a few random storm clusters moving withing the northwesterly flow into south-central Texas Sunday night into Monday morning. However, the confidence and probability are low and there are no good trends through the same time frame. The highs are progged to be in the middle 90s and lower 100s with the lows in the lower to middle 70s through the end of the forecast period.

**LIFTING MECHANISM:**

Weak front, Upper-level trough, Low-level Moisture Advection

**THERMODYNAMIC INDICES (12Z KCRP)**

Freezing Level (m)	4754.68	CAPE (J/Kg)	1398.48
Precipitable Water (inches)	1.89	CINH (J/Kg)	193.89
LCL	961.40	LI (°C)	-5.18
CCL	1982.30	PB	-5.18
CRP ICA	-20.31	Cloud Base Temp (°C)	24.9
Cloud Base (meters)	1452.15		
Warm Cloud Depth (meters)	3302.53		

**DISCUSSION:**

Mainly quiet weather this morning and afternoon with just a cell or two that popped up across the Uvalde area. 57AA was launched to go across the Uvalde area to target the first cell. It successfully seeded that cell and was able to land on time before the storm moved over the airport. When the storm that 57AA seeded had passed, it became airborne to head to another cell across the northwestern Uvalde County. When it got to that cell it was able to release the full dosage of seeding materials into the cell. On the way back to Uvalde airport, I had 57AA take a look at a weak smaller cell that developed behind the cell it was seeding but the pilot was unable to get anything out of it. After investigating that cell, 57AA returned to base. A couple of cells began to develop across the Bee County where I had 60P go and try to seed them. A couple of the cells merged and became one big cell with a few other weak loose ones around it. 60P successfully seeded that good cell before investigating the others. However, when 60P visited the others, it was unable to get any good inflow especially with the one that had somewhat of a good reflectivity. From there 60P headed back to base for the evening.

**WATCHES/WARNINGS:**

N/A

**SEEDED CELL ID'S:**

1759	1813	1864							
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**FLIGHT INFORMATION:**

TIME (Z)	Plane	Flare Location	County
19:45	57AA	In Air	
19:49	57AA	279° @ 70 nm	Uvalde
19:50	57AA	279° @ 71 nm	Uvalde
19:51	57AA	278° @ 71 nm	Uvalde
19:51	57AA	278° @ 71 nm	Uvalde
19:52	57AA	278° @ 70 nm	Uvalde
19:57	57AA	Recon	
19:41	57AA	In Air	
20:53	57AA	283° @ 80 nm	Uvalde
20:53	57AA	283° @ 80 nm	Uvalde
20:54	57AA	282° @ 80 nm	Uvalde
20:56	57AA	280° @ 81 nm	Uvalde
21:22	60P	In Air	
21:24	57AA	Landed	
21:31	60P	280° @ 81 nm	Bee
21:32	60P	280° @ 81 nm	Bee
21:33	60P	279° @ 81 nm	Bee
21:33	60P	279° @ 80 nm	Bee
21:34	60P	280° @ 80 nm	Bee
22:22	60P	Landed	

Seeding operations were conducted in Bee (10+0H), and Uvalde (15+2H) Counties. 25 flares plus 2 hygroscopic flares were burned within 3 clouds. This is the 1<sup>st</sup> day for seeding in August and the 24<sup>th</sup> day for seeding during the season.