SOUTH TEXAS WEATHER MODIFICATION ASSOCIATION – Pleasanton, TEXAS

SEEDING REPORT – August 2, 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 Upper-level Disturbance, Low-level Moisture Advection, Outflow Boundaries

THERMODYNAMIC INDICES (12Z KCRP)

Freezing Level (m)	4571.36	CAPE (J/Kg)	1202.64
Precipitable Water (inches)	1.67	CINH (J/Kg)	79.76
LCL	855.39	LI(°C)	-4.17
CCL	1578.16	PB	-4.17
CRP ICA	-19.52	Cloud Base Temp (°C)	21.7
Cloud Base (meters)	1788.57		
Warm Cloud Depth (meters)	2782.79		

DISCUSSION:

A few weak pop-ups across parts of the EAA counties early afternoon with better development and moving across the Bexar County non-seeding zone and moving down across the Wilson and Atascosa counties. 60P was not available at the time; thus, 57AA was called out from Uvalde to head east. Before doing that, I had 57AA release a few dosages of seeding materials in a small cell that was dropping down near the Uvalde airport. After seeding that cell, 57AA went across to the eastern target areas. While seeding over the Wilson County, 57AA ran into some technical difficulties with the flare rack and had to land at Kennedy airport to try and fix the problem. I had to call out 60P when it was available to take over for 57AA. However, when 57AA was done fixing whatever needed to be fixed, it departed Kennedy with 60P departing soon after. I had 60P finish up form where 57AA had left off with the cell over the Wilson and Karnes counties while 57AA was on its way to Medina/ Bexar county. 60p returned to base after releasing a few sets of seeding materials in the one the 57AA was targeting. While 57AA was on its way to parts of the EAA counties it had to make a quick stop at Pleasanton Airport to gas up. When 57AA reached the cell was already weakening; however, it was able to release a couple of silver. THer were small cells around 57aa who were unable to get anything. At that time there were a few cells across the southern tip of the Atascosa county and northern McMullen/Live Oak county, which I had 57AA head to next. However, while seeding a cell across McMullen county a cell developed across Frio/Medina as well as Uvalde counties; therefore I had 57AA go and take a look at them. However, while finishing seeding a cell across the Frio County, it had to refuel and reflare before it could head to Uvalde to try and seed those cells. Unfortunately, 57AA was not able to land in a nearby airport in Frio County as there were fires and people on the runway. 57AA that had to head to Uvalde airport but on the way there it fired mone hygroscopic flare in a cell that was over the southeastern Uvalde because the silver flare rack was acting up again and would not fire. 57AA finally landed in Uvalde to reflare, fix, and refuel. 60P was called out to go over the Bee County to seed a cell or two that 57AA couldn't as it had to quickly head back over the western target area. When 60P arrived at the cell it had already merged with the cell that was seeded over the AT/KA/WI counties by becoming the same cell.; thus, it made no sense adding more seeding materials in that cell. After releasing a few silver into that cell, 60P returned to base for the evening. 57AA returned to the air to a weak but okay cell across the Uvalde county then also headed back to base for the evening.

WATCHES/WARNINGS:
N/A

SEEDED CELL ID'S:

420	249	771	486	688	709	754				

FLIGHT INFORMATION:

TIME (Z)	Plane	Flare Location	County
20:20	57AA	In Air	
20:27	57AA	N29.11, W99.45	Uvalde
20:29	57AA	N29.11, W99.46	Uvalde
20:30	57AA	N29.10, W99.46	Uvalde
21:06	57AA	33° @ 9 nm	Atascosa
21:07	57AA	39° @ 9 nm	Atascosa
21:08	57AA	39° @ 9 nm	Atascosa
21:18	57AA	72° @ 2 nm	Atascosa
21:32	57AA	Recon	
21:49	57AA	In Air	
21:51	60P	In Air	
21:54	60P	88° @ 31 nm	Karnes

21:54	**60P**	**88° @ 34 nm**	**Karnes**
22:05	**60P**	**Landed**	
22:21	**57AA**	**316° @ 22 nm**	**Bexar**
22:22	**57AA**	**313° @ 22 nm**	**Bexar**
22:23	**57AA**	**309° @ 21 nm**	**Atascosa**
22:25	**57AA**	**311° @ 21 nm**	**Atascosa**
23:00	**57AA**	**169° @ 27 nm**	**Atascosa**
23:00	**57AA**	**170° @ 27 nm**	**Atascosa**
23:00	**57AA**	**171° @ 26 nm**	**Atascosa**
23:15	**57AA**	**245° @ 19 nm**	**Frio**
23:16	**57AA**	**246° @ 21 nm**	**Frio**
23:23	**60P**	**In Air**	
23:33	**57AA**	**266° @ 53 nm**	**Uvalde**
23:44	**57AA**	**Recon**	
23:45	**60P**	**122° @ 58 nm**	**Bee**
23:46	**60P**	**125° @ 59 nm**	**Bee**
24:07	**60P**	**Landed**	
24:13	**57AA**	**InAir**	
24:19	**57AA**	**276° @ 81 nm**	**Uvalde**
24:19	**57AA**	**277° @ 79 nm**	**Uvalde**
24:21	**57AA**	**276° @ 79 nm**	**Uvalde**
24:39	**57AA**	**Landed**	

Seeding operations were conducted in Atascosa (16+1H), Bee (4+0H), Bexar (4+0H), Frio (4+0H), Karnes (4+0H), Uvalde (10+2H), and Wilson (2+0H) Counties. 44 flares plus 3 hygroscopic flares were burned within 7 clouds. This is the 2nd day for seeding in August and the 25th day for seeding during the season.