

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

**SEEDING REPORT - May 8, 2020**

**SYNOPTIC/MESOSCALE CONDITIONS:**

Upper air analysis shows troughing across the Eastern half of the country, a ridge over the Southwest, and a shortwave trough over parts of the Northwest and Northern Rockies. At the surface, low pressure across the Southern Plains, high pressure across from the Northwest through the Rockies. The flow at upper levels is mainly westerly with it southerly at the surface. The current dew point temperature is in the middle 60s and lower 70s the environmental temperature in the upper 60s and middle 70s with clear to broken clouds across our area. For today, expect gusty winds at times due to a tight pressure gradient as a front push through the region beginning around mid-morning across the northern counties before moving down south by mid to late afternoon. There may be a weak line of showers that may swipe through our today, but most of the counties may be rain-free. Much of the precipitation will be confined to near the coast as the front sags south and meets a sea-breeze. Any convection will be along the coast with much of the energy toward our far eastern counties. Overnight, the chance of showers and thunderstorms will spread a little further north from the coast with some elevated instability place behind the frontal boundary. A surface low will develop early this evening across deep South Texas near the border and northeast Mexico while getting caught up with the cold front. This will enhance precipitation across the Brownsville area through Corpus Christi late this afternoon through overnight hours. A mid-level disturbance moves out from South Texas/Northeast Mexico border by Saturday morning with showers and thunderstorms ending early to mid-morning across the target area. The temperature on Saturday will be several degrees cooler than the normal for this time of the year courtesy of a post-frontal flow and cloud cover. Clearing begins Saturday afternoon with cool overnight lows as the winds relaxing. Pleasant weather rolls through the on Sunday with cool temperatures at first with some warming from Sunday evening through Monday as a southeasterly flow returns and the flow aloft transitions from northwesterly to westerly zonal flow pattern. Come Monday night as an embedded shortwave will begin to move through that may bring another round of showers and storms as early as late Monday evening into the early Tuesday morning. The highs are progged to be in the middle 70s and middle 80s with the lows in the middle 50s and middle 60s through the end of the forecast period.

**LIFTING MECHANISM:**

Short-wave trough, Cool Air Aloft, Cold Front

**THERMODYNAMIC INDICES (12Z KCRP)**

Freezing Level (m)	4763.74	CAPE (J/Kg)	1451.5
Precipitable Water (inches)	1.12	CINH (J/Kg)	384.29
LCL	734.31	LI (°C)	-5.03
CCL	1845.3	PB	-5.03
CRP ICA	-18.05	Cloud Base Temp (°C)	21.1
Cloud Base (meters)	1463.04		
Warm Cloud Depth (meters)	3300.70		

**DISCUSSION:**

Mainly quiet for much of the day as a cold front sided south across the target areas somewhat of a replica from the last time we had seeded. By afternoon cell developed across southern Bee County. 47P was launched across that area. However, when 47P arrived, the cell was almost out of the county with just parts of it just along the southern edge of the Bee County and slightly north of the boundary for the aircraft to seed. 47P released a couple of seeding materials in that cell. Seeing as though the cell was that far south almost to exit the target area, 47P did not release the full dosages of the seeding material in that cell. There were times where cell broken up and then re-merged while seeding it. The pilot returned to base after it was done with that cell for the afternoon and evening.

**WATCHES/WARNINGS:**

N/A

**SEEDED CELL ID'S:**

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**FLIGHT INFORMATION:**

TIME (Z)	Plane	Flare Location	County
22:33	47P	In Air	
22:54	47P	315, 63.1	Bee
22:54	47P	314, 66.0	Bee
22:57	47P	313, 68.2	Bee
23:29	47P	Landed	

Seeding operations were conducted in Bee (6+0H) County. 6 flares plus 0 hygroscopic flares were burned within 1 cloud. This is the 2<sup>nd</sup> day for seeding in May and the 3<sup>rd</sup> day for seeding during the season.