

SOUTH TEXAS WEATHER MODIFICATION ASSOCIATION - Pleasanton, TEXAS

SEEDING REPORT - May 30, 2020

SYNOPTIC/MESOSCALE CONDITIONS:

Upper air analysis shows a ridge of high pressure over the western half of the country with a trough of low pressure over the eastern half. At the surface, high pressure is across the Great Plains and off the East coast with low pressure across the Southwest. The flow at upper levels is mainly northerly with it generally light and variable at the surface. The current dew point temperature is in the upper 60s and middle 70s and the environmental temperature in the middle 60s and middle 70s with clear skies to scattered clouds across the area. For today, the remnants of mid-level outflow clouds linger across south-central Texas while showers and storms continue across deep south Texas. Much quieter weather is anticipated today. Surface high pressure will build in from the north combined with dry air subsidence should keep much of the air rain-free. There may be afternoon few convections across the Rio Grande plains south of Del Rio but they not forecast to reach the target area and will dissipate as we lose daytime heating. The daytime temperature will be below or at the climatological normal with the overnight lows below the average courtesy of dry low-level northerly flow. Saturday will continue to be dry as the surface ridge begins to weaken with pleasant temperatures. The upper-level ridge builds in across the middle of the county this weekend. The flow at low levels with shift slightly to easterly or east northeasterly overnight Saturday into Sunday keeping the weather dry and warm. A weak inverted trough will be park across central Mexico on Sunday that may bring a slight chance for showers and thunderstorms across coastal prairies by then. The inverted trough moves further north into Texas on Monday bringing a slight chance for storms to much of the target area. The good news is that there will not be any severe storm associated with this system as with other systems that pushed through our area for the past couple of weeks. The highs are progged to be in the middle 80s and lower 90s with the lows in the lower to upper 60s through the end of the forecast period.

LIFTING MECHANISM:

Inverted Trough, Cold Air Aloft, Sea Breeze

THERMODYNAMIC INDICES (12Z KCRP)

Freezing Level (m)	4551.42	CAPE (J/Kg)	388.9
Precipitable Water (inches)	1.42	CINH (J/Kg)	40.4
LCL	1012.05	LI (°C)	-1.93
CCL	1307.77	PB	-1.93
CRP ICA	-12.72	Cloud Base Temp (°C)	21.9
Cloud Base (meters)	1036.32		
Warm Cloud Depth (meters)	3515.1		

DISCUSSION:

An inverted trough is positioned more north in the Mexico that anticipated that brought a few showers and non-severe thunderstorms to the area near the coastal plains and over the parts of the target area. The cells were not that impressive and the majority of them were non-seedable and very weak. Earlier in the afternoon through early evening, the cells had very small surface areas they did not last long for a pilot to get them. Some stronger but still small cells developed mainly outside of the target area especially across the deep southern Bee County. As okay cells developed and push westward across from the eastern

Karnes county, 47P was called out to investigate that cell. It was able to seed that cell with only a couple seeding materials before it departed for better cell across the southwestern edge of the Bee County. However, that cell was mostly out of the target zone while 47P was seeding the cell across Karnes, and even while it was on its way to that cell. When it arrived, the pilot made to decision not to seed was as it was almost completely out of Bee and there was mainly mist. 47P seeded a cell east of that cells across southern Bee County but did release the full dosages of seeding materials in that cell as the cell was small and not that impressive. There were other few small cells over the Bee County that did not look good close up reported by the pilot and even on the radar. 47P did try to seed those cells but was unsuccessful. The pilot reported mist and very low inflow on the cells that were not seeded. After no luck, 47P returned to base with no intentions of it heading back out for the evening. Overall, today was not the best day for seeding.

WATCHES/WARNINGS:

N/A

SEEDED CELL ID'S:

617	671							
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FLIGHT INFORMATION:

TIME (Z)	Plane	Flare Location	County
23:28	47P	In Air	
23:33	47P	96° @ 40 nm	Karnes
23:34	47P	98° @ 40 nm	Karnes
23:35	47P	93° @ 39 nm	Karnes
23:58	47P	311, 60.7	Bee
23:59	47P	310, 61.9	Bee
24:01	47P	311, 59.7	Bee
24:29	47P	Landed	

Seeding operations were conducted in Bee (6+0H) and Wilson (6 + 0H) Counties. 12 flares plus 0 hygroscopic flares were burned within 2 clouds. This is the 7th day for seeding in May and the 8th day for seeding during the season.