

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

**SEEDING REPORT - August 30, 2018**

**SYNOPTIC/MESOSCALE CONDITIONS:**

Upper air analysis shows mainly a flight ridge of high pressure across the parts of the South with a shortwave across the parts of the Upper Mississippi Valley, South Plains and Southern Mississippi Valley and a disturbance across eastern Mexico. At the surface, mainly ridging with a front extending all the way from a low to the far northeast into parts of the South Plains. The flow at upper levels is light and variable and mainly calm at the surface. The current dew point temperature is in 70's and the environmental temperature in the mid to upper 70's with scattered to broken low clouds passing clouds across our area. For today, expected mainly quiet conditions with a ridge of high pressure across Texas. A disturbance across northeastern Mexico will linger there and not make its way into south Texas due to this blocking ridge. There will be some pulses mainly south of this ridge that may try to creep in near the coast by this afternoon, so I will go ahead and included a slight chance for precipitation at least for the southern parts of the Bee County. Much of the precipitation is expected to remain off the coast today with the precipitable water values 2 inches across the Bee County (mainly the southern parts) and less further inland. Both the WRF and HRRR has any showers and storms mainly south of the target zones with the HRRR trying to bring in an isolated storm or two across parts of the Bee County this afternoon. The dew point temperature is forecast to be in the 60's across much of the target zone; thus, the heat index values are expected to be slightly on the high side later in the day. Expect the feel like temperature to be a few degrees warmer than the actual temperature by this afternoon. Also, the highs for today should be a few degrees warmer than the normal for this time of the year especially for the inland areas. The highs for the rest of the forecast period is expected to be still above the average for much of the target zone. For Friday similar weather is expected with mainly ridging aloft and slight chance for showers and thunderstorms near the coast. Saturday through Sunday, a trough of low pressure digs south across the Southwest that will begin to break down this ridge with showers and storms moving in begin on Sunday. Most places with me dry during the day Sunday but come Sunday evening conditions is expected to change as the first series of disturbances moves in south of the ridge from east to west. Otherwise, until then mainly quiet conditions to much of the target zones with the exception for counties near the coast.

**LIFTING MECHANISM:**

Weak Upper Level Ridge, Low Level Moisture, Sea-Breeze

**THERMODYNAMIC INDICES (12Z KCRP)**

Freezing Level (m)	5006.99	CAPE (J/Kg)	933.01
Precipitable Water (inches)	1.99	CINH (J/Kg)	48.05
LCL	1265.47	LI(°C)	-3.41
CCL	1755.43	PB	-3.41
CRP ICA	-16.26	Cloud Base Temp (°C)	21.7
Cloud Base (meters)	1432.56		
Warm Cloud Depth (meters)	3574.43		

**DISCUSSION:**

Mainly showers and isolated weak thunderstorms developed by mid-morning south of the target zone. These cells tried to make their way into the Bee County

by late morning and early afternoon. Most of the cells did not survive all the way up into the Bee County. Much of the activities were off-shore, south and east of the target zone. This sea-breeze event was a weak one where we were only able to seed one cell out of a few. Aircraft 160P was launch across the Bee County where a cell developed and was a little seedable. After not putting the full dosages of seeding materials into that cell, 160P visited a couple more cells but was not lucky to find any inflow. 160P headed back to base to refuel after all of this but returned another time to the Bee County where an impressive cell was moving in from the south. However, when 160P got to it there was no inflow with mainly showers on one side of the storm even though the entire cell looked good on my end. 160P returned to base after conditions began to settle.

**WATCHES/WARNINGS:**

N/A

**SEEDED CELL ID'S:**

629									
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**FLIGHT INFORMATION:**

TIME (Z)	Plane	Flare Location	County
18:40	160P	In Air	
18:53	160P	127° @ 57 nm	Bee
18:53	160P	127° @ 55 nm	Bee
19:52	160P	Refueled	
19:59	In Air		
20:56	Landed		

Seeding operations were conducted in Bee (4+0H) County. 4 flares plus 0 hygroscopic flare were burned within 1 cloud. This is the 9<sup>th</sup> day for seeding in August and the 27<sup>th</sup> day for seeding during the season.