

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

**SEEDING REPORT - August 4, 2018**

**SYNOPTIC/MESOSCALE CONDITIONS:**

Upper air analysis shows deep trough of low pressure across the East and a ridge of high pressure across the Central Plains and the Southern Rockies with another trough across the Northwest. At the surface, mainly ridging across much of the country with a low across the Northern Rockies. The flow at upper levels is from the north-northeast and calm to light and variable winds at the surface. The current dew point temperature is in the mid 60's with the temperature in the low 70's and under mostly clear/sunny skies. For today, expect a replica of yesterday's weather condition as we remain upwind of the trough of low pressure to our far east. The upper level ridge will influence our weather today then weaken early Saturday morning. This weakening will set up sea-breeze activities Saturday through the end of the forecast period with Sunday looking to be a little more active. Low chance for showers and thunderstorms Saturday through Sunday with a slight chance on Monday as inverted troughs moves further west Mexico. The high temperatures are not forecast to be extreme as it was a few weeks ago but still slightly above the average at least today and tomorrow. The temperature is expected to be at or slightly below the normal for this time of the year due to a less of an influence of the upper ridge and more of an influence of mid-level disturbances cooling of temperatures somewhat for the latter half of the weekend and early next week. Not expecting widespread showers with these events, but a few hit or miss is possible. Active weather may enter the inland areas on Sunday and possibly on Monday. Today, the dew point is forecast to be in the mid to upper 50's across much of the target zone this afternoon with the southeastern counties in mid 60's; thus, the feel like temperature is expected to be at or near the actual temperature across the much target zone except the for southeastern counties where the temperature may feel a few degrees higher than the actual temperature. Nevertheless, the forecast calls for settled conditions today with a few passing clouds at times and early morning fog near the coast before conditions transit to semi active this weekend.

**LIFTING MECHANISM:**

Low Level Warm Air Advection, Low level Moisture, Sea-Breeze

**THERMODYNAMIC INDICES (12Z KCRP)**

Freezing Level (m)	4771.89	CAPE (J/Kg)	1651.4
Precipitable Water (inches)	1.53	CINH (J/Kg)	8.60
LCL	731.10	LI(°C)	-4.04
CCL	996.82	PB	-4.04
CRP ICA	-19.34	Cloud Base Temp (°C)	21.4
Cloud Base (meters)	1271.45		
Warm Cloud Depth (meters)	3500.44		

**DISCUSSION:**

With a weakening upper level ridge of high pressure across the region and a weak mid-level disturbance south of the coast of Texas, showers and thunderstorms developed during the afternoon hours. Today was not tremendously active with just a few cells that developed along the coast and

over the Bee County. As cells developed, aircraft 160P was launched. 160P was sent across the Bee County where it seeded one cell across the northeast part of the county. After seeding that cell, 160P headed south but the cell was very weak and unseedable. Since there were no addition cells present, 160P headed back to base. The cell that was across the Southern Bee County gained energy and survived to the north of the county. While over there the cell looked impressive; thus, 160P was relaunched to that area. However, when the aircraft reached the cell it was only able to release a few dosages of seeding material into that cell as the flow was not that impressive and that was that. The aircraft returned to base as the conditions calmed down.

**WATCHES/WARNINGS:**

N/A

**SEEDED CELL ID'S:**

790	1025								
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**FLIGHT INFORMATION:**

TIME (Z)	Plane	Flare Location	County
19:16	160P	In Air	
19:23	160P	114° @ 43 nm	Bee
19:25	160P	113° @ 42 nm	Bee
19:26	160P	114° @ 42 nm	Bee
19:27	160P	114° @ 43 nm	Bee
19:28	160P	114° @ 42 nm	Bee
20:05	160P	Recon	
21:53	160P	In Air	
22:00	160P	91° @ 42 nm	Karnes
22:01	160P	89° @ 42 nm	Karnes
22:15	160P	Landed	

Seeding operations were conducted in Bee (10+0H) and Karnes (4+0H) Counties. 14 flares plus 0 hygroscopic flare were burned within 2 clouds. This is the 1<sup>st</sup> day for seeding in August and the 19<sup>th</sup> day for seeding during the season.