

SOUTH TEXAS WEATHER MODIFICATION ASSOCIATION - Pleasanton, TEXAS

SEEDING REPORT - September 8, 2020

SYNOPTIC/MESOSCALE CONDITIONS:

Upper air analysis shows a longwave trough over the Rockies extending into the Great Lakes, a low over the Southeast, and a ridge over the East. At the surface, strong low pressure is across from the Southwest through the Southern Rockies with strong high pressure from Northwest through the Northern Great Plains. The flow at upper levels is mainly southwesterly with it south southeasterly at the surface. The current dew point temperature is in the lower to middle 70s and the environmental temperature more or less the same with clear skies to broken clouds across our area. For today, a trough is expected to deepen before cutting off a deep low. The low is forecast to stall across the Four Corners as an associated front move ahead of it while gradually moving into south Texas. In advance of the front expect scattered showers and thunderstorms later this morning into the afternoon hours to areas mainly east of I-35. The approaching cold front will greatly influence our weather bringing additional showers and thunderstorms to our area Tuesday night into Wednesday. With the incoming front coupled with showers and storms, expect the max temperature both today and Wednesday to be below the climatological normal. The cold front is forecast to move over the southern Hill County and south-central Texas Wednesday night into Thursday the closed low remains across the Four Corners. Showers and thunderstorms continue due to the upward forcing of the surface cold front and upper-level low jet feed. With minimal instability, shear, and mid-level lapse rate, scattered showers and thunderstorms are expected. Heavy rain and flooding could be an issue with precipitable water values ranging between 1.8 to 2.4in as well as training cells. Rainfall amounts could be between 2 and 4in with an excess of 8in by the end of the week. Both max and min temperatures Thursday through Friday will be on the cool side with the influence of enhanced cloud coverage, rain cool air as well as the frontal passage. The highs are progged to be in the upper 70s and lower 90s with the lows in the lower 60s and lower 70s through the end of the forecast period.

LIFTING MECHANISM:

Upper-level Trough, Low-Level Moisture Advection, Sea-Breeze

THERMODYNAMIC INDICES (12Z KCRP)

Freezing Level (m)	4739.90	CAPE (J/Kg)	1017.77
Precipitable Water (inches)	1.68	CINH (J/Kg)	107.71
LCL	960.46	LI (°C)	-3.65
CCL	1662.12	PB	-3.65
CRP ICA	-17.68	Cloud Base Temp (°C)	18.3
Cloud Base (meters)	794.82		
Warm Cloud Depth (meters)	3945.08		

DISCUSSION:

No data available due to internet issues.

A couple of cells developed across the eastern target area this afternoon along a sea-breeze. 60P was launched to go across the Karnes county where it seeded a few cells. Then it was ordered to go across the southern Bee county to investigate cell; however, even though the cell looked okay on screen, 60P was

unable to get anything out of it. 60P then headed to a cell that developed near the AT/BE/KA county border. 60P was able to release a few dosages of seeding materials into that cell over Karnes county. After seeding that cell, 60P returned to base as there were no other seedable cells out there at the time. 60P was relaunched to go over the northern Bee county first sometime after it landed as cells began to sprung up. After seeding a cell across the Bee county, it went over to central-eastern McMullen county where it only released a few sets of seeding materials into a cell. From there, 60P returned to base for the evening as there were no other seedable clouds across the target area. However, there were a few more seedable ones outside of the target area that was not targeted.

WATCHES/WARNINGS:

N/A

SEEDED CELL ID'S:

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FLIGHT INFORMATION:

TIME (Z)	Plane	Flare Location	County
19:33	60P	In Air	
19:35	60P	92° @ 28 nm	Karnes
19:36	60P	87° @ 27 nm	Karnes
19:38	60P	93° @ 28 nm	Karnes
19:47	60P	96° @ 37 nm	Karnes
19:48	60P	93° @ 37 nm	Karnes
19:49	60P	94° @ 36 nm	Karnes
20:35	60P	-	Karnes
20:36	60P	-	Karnes
20:50	60P	Recon	
22:40	60P	In Air	
22:54	60P	-	Bee
22:55	60P	-	Bee
22:56	60P	-	Bee
23:23	60P	-	McMullen
23:24	60P	-	McMullen
	60P	Landed	

Seeding operations were conducted in Bee (6+0H), Karnes(16+0H), and McMullen (4+0H) Counties. 26 flares plus 0 hygroscopic flares were burned within 5 clouds. This is the 6th day for seeding in September and the 37th day for seeding during the season.