

**SOUTH TEXAS WEATHER MODIFICATION ASSOCIATION – PLEASANTON,
TEXAS**

SEEDING REPORT – October 3, 2017

SYNOPTIC/MESOSCALE CONDITIONS:

Mostly cloudy over south Texas this morning, with isolated showers along the coast and coastal plains. Patchy fog is also present across the region and looks to last through the early morning hours. Abundant moisture is moving into the region this morning, and a weak trough of low pressure looks to help develop isolated then scattered showers and thunderstorms throughout the morning and through the afternoon. A few storms could produce locally heavy rain. High temps in the mid to upper 80's. Isolated showers and storms look to continue through the early overnight hours, then isolated showers overnight. Overnight low temps in the mid to upper 70's with cooler temps over hill country. Fog possible after midnight.

LIFTING MECHANISM:

Daytime heating, weak inverted trough, and outflow boundaries.

THERMODYNAMIC INDICES (12Z KCRP)

KCRP Freezing Level (m)	5330.68	KDRT Freezing Level (m)	5158.64
Precipitable Water (Inches)	2.39	CAPE (J/Kg)	871.59
LCL (m)	76.57	CINH (J/Kg)	21.80
CCL (m)	1154.01	LI (degrees C)	-1.47
Cloud Base (m)	967	PB	-2.5
Warm Cloud Depth (m)	4363.68	Cloud Base Temp (degrees C)	26
CRP -15°C height (m)	~7700	DRT -15°C height (m)	~7600
CRP ICA	-14.7	DRT ICA	-9.9

DISCUSSION: Scattered showers and storms began developing over the coast and moving northeast in the late morning hours. However low clouds prevented both pilots from launching. First pilot in Pleasanton was finally able to launch after clouds and rain broke at 18:50Z. Pilot began seeding smaller storms in Medina county with limited luck, but morning convection seems to have stabilized the air. Numerous showers developed and pilot found inflow but storms never developed storm ID or landed very long. Launched second pilot but storms moved out of the region before pilot could get to them. Showers west of San Antonio do not develop even with seeding, while more storms are entering southern Bee county after 20Z. However pilot cannot get to storms in Bee because of low clouds, so pilot investigates showers over Wilson county just before 21Z. First pilot over Frio county found storm with stronger inflow so decided to try a hygro to see if that would help. Daytime heating seemed to be generating scattered showers and storms along the coast and coastal plains after 21Z. Slightly stronger showers began developing in Frio county after 21Z so pilot began seeding multiple individual storms. Pilot returned to reflare after 21:30Z. second pilot had to land to get ahead of heavy rain heading to his base location. After reflare all storms were dissipating so day ended.

Warnings: None

Seeded cell ID's: 1292, 1492, unidentified

Flight Information:

Time (UTC)	Plane	Flare Location	County
18:51	57AA	In air	
19:14	57AA	308 @ 28	Medina
19:15	57AA	308 @ 28	Medina
19:15	160P	In air	
19:32	57AA	291 @ 27	Medina
19:39	57AA	293 @ 29	Medina
19:49	57AA	279 @ 37	Medina
19:50	57AA	278 @ 37	Medina
19:50	57AA	280 @ 37	Medina
19:55	160P	Landed	
20:19	57AA	271 @ 63	Zavala
20:20	160P	In air	
20:36	57AA	267 @ 36	Frio
20:37	57AA	267 @ 37	Frio
20:42	57AA	259 @ 36	Frio
20:56	57AA	260 @ 38	Frio
21:01	57AA	265 @ 39	Frio
21:03	57AA	265 @ 39	Frio
21:10	57AA	273 @ 43	Medina
21:15	57AA	268 @ 42	Frio
21:19	57AA	262 @ 43	Frio
21:21	57AA	266 @ 44	Frio
21:39	160P	Landed	
21:53	57AA	Landed	

Seeding operations were conducted over Frio (19 + 2H), Medina (16 + 1H), and Zavala (2 + 0H) counties. 37 flares plus 3 hygroscopic flares were burned within 2+ clouds. This is the 1st day for seeding in October and the 41st day for seeding during the season.