

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

SEEDING REPORT – May 31, 2017

SYNOPTIC/MESOSCALE CONDITIONS:

Mostly cloudy with scattered showers from San Antonio west through hill country. These showers are developing along a warm front, and are slowly moving north. Patchy fog is also present across the region, and looks to last through the early to mid morning hours. As an upper level trough of low pressure is moving from the west over the region, with isolated showers and a few thunderstorms possible this morning, then scattered showers and thunderstorms possible in the afternoon. Areas west of San Antonio have a slightly better chance of rain today, and heavy rain with localized flooding is possible. High temperatures in the mid to upper 80's with cooler temps over hill country. Mostly cloudy overnight with scattered then isolated showers and thunderstorms. Fog is also possible in the overnight hours. Overnight low temps in the lower to mid 70's.

LIFTING MECHANISM:

Weak MCS, merging storms, daytime heating, weak warm front

THERMODYNAMIC INDICES (12Z KDRT)

KCRP Freezing Level (m)	4402.09	KDRT Freezing Level (m)	4046.67
Precipitable Water (Inches)	1.45	CAPE (J/Kg)	29.27
LCL (m)	412.58	CINH (J/Kg)	149.81
CCL (m)	2101.90	LI (degrees C)	1.68
Cloud Base (m)	963	PB	-3.3
Warm Cloud Depth (m)	3083.67	Cloud Base Temp (°C)	21
CRP ICA	-4.6	DRT ICA	-12.1

DISCUSSION: Storms started forming after 17Z in La Salle and began moving north. Launched pilot and began seeding storm in southwestern Atascosa. Storms then formed into a broken N-S line and pilot then proceeded north the line, seeding when he found inflow. Launched second pilot after 18Z to seed southern half of the line. First pilot returned when he ran out of flares, second pilot seeded the two most southern storms as the northern half of the line dissipated. Storms consolidated and stalled over central Atascosa county, thus pilot continued seeding until he also ran out of flares after 20Z. Launched first pilot again after 20:30Z. Pilot began seeding in McMullen county but flare rack problems meant all hygroscopic flares burned the first time the button was pushed. Pilot then proceeded northeast through Atascosa and Karnes counties lighting flares when updrafts occurred. The northern end of the line had rough turbulence for the pilot, so they turned and proceeded southwest back along the line of storms. More flare rack problems forced pilot to land for maintenance.

Warnings: Severe Thunderstorm Warning over Atascosa and Wilson counties.

Seeded cell ID's: 1335, 1931, 2131

Flight Information:

Time (UTC)	Plane	Flare Location	County
17:44	57AA	In air	
18:04	57AA	221 @ 18	Atascosa
18:05	57AA	220 @ 20	Atascosa
18:06	57AA	221 @ 19	Atascosa
18:07	57AA	223 @ 19	Atascosa
18:08	57AA	220 @ 20	Atascosa
18:09	57AA	224 @ 19	Atascosa
18:28	160P	In air	
18:30	57AA	265 @ 12	Frio
18:32	57AA	266 @ 19	Frio
18:33	57AA	266 @ 19	Frio
18:34	57AA	261 @ 18	Frio
18:35	57AA	256 @ 16	Atascosa
18:40	57AA	271 @ 19	Frio
18:41	57AA	274 @ 21	Frio
18:42	57AA	277 @ 22	Frio
18:45	57AA	277 @ 21	Frio
18:46	57AA	277 @ 19	Frio
18:50	57AA	290 @ 13	Frio
18:51	57AA	280 @ 18	Atascosa
18:52	57AA	274 @ 15	Atascosa
18:53	160P	204 @ 13	Atascosa
18:55	57AA	272 @ 14	Atascosa
18:56	160P	209 @ 11	Atascosa
18:57	160P	169 @ 7	Atascosa
18:58	160P	226 @ 9	Atascosa
18:59	160P	232 @ 9	Atascosa
19:00	160P	220 @ 9	Atascosa
19:08	57AA	Landed	
19:15	160P	299 @ 17	Atascosa
19:15	160P	301 @ 20	Atascosa
19:16	160P	300 @ 22	Medina
19:17	160P	298 @ 25	Medina
19:19	160P	299 @ 24	Medina
19:20	160P	302 @ 23	Medina
19:34	160P	70 @ 1	Atascosa
19:35	160P	201 @ 2	Atascosa

19:36	160P	203 @ 3	Atascosa
19:38	160P	121 @ 1	Atascosa
19:39	160P	63 @ 2	Atascosa
20:09	160P	133 @ 5	Atascosa
20:10	160P	121 @ 6	Atascosa
20:11	160P	111 @ 7	Atascosa
20:12	160P	103 @ 8	Atascosa
20:13	160P	90 @ 9	Atascosa
20:15	160P	68 @ 9	Atascosa
20:16	160P	56 @ 9	Atascosa
20:17	160P	47 @ 10	Atascosa
20:18	160P	38 @ 10	Atascosa
20:19	160P	28 @ 11	Wilson
20:43	160P	Landed	
20:48	57AA	In air	
21:14	57AA	164 @ 26	McMullen
21:15	57AA	166 @ 25	McMullen
21:17	57AA	163 @ 24	McMullen
21:18	57AA	166 @ 25	McMullen
21:19	57AA	165 @ 24	McMullen
21:32	57AA	129 @ 19	Atascosa
21:33	57AA	129 @ 18	Atascosa
21:34	57AA	125 @ 19	Atascosa
21:36	57AA	126 @ 18	Atascosa
21:37	57AA	126 @ 18	Atascosa
21:40	57AA	114 @ 20	Atascosa
21:42	57AA	105 @ 21	Atascosa
21:44	57AA	102 @ 21	Karnes
22:13	57AA	Landed	

Seeding operations were conducted over Atascosa (82 + 7H), Frio (20 + 3H), Karnes (2 + 0H), McMullen (10 + 6H), Medina (8 + 0H), and Wilson (2 + 0H) counties. 124 flares plus 16 hygroscopic flares were burned within 3 clouds. This is the 5th day for seeding in May and the 6th day for seeding during the season.