

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

SEEDING REPORT – May 21, 2017

SYNOPTIC/MESOSCALE CONDITIONS:

Mostly cloudy across south TX, with a strong upper level trough over the Big Bend region moving east. Mostly cloudy with scattered to widespread showers and thunderstorms beginning in the afternoon. A few storms west of San Antonio could be severe. Localized heavy rain is possible. High temperatures in the upper 70's, lower 80's with warmer temps across extreme south TX. Mostly cloudy overnight with scattered to widespread showers and thunderstorms before midnight, then mostly cloudy. Fog possible in the late overnight hours. Low temps in the lower to mid 70's, with cooler temps over hill country.

LIFTING MECHANISM:

Warm front and daytime heating

THERMODYNAMIC INDICES (12Z KCRP)

KCRP Freezing Level (m)	4804.04	KDRT Freezing Level (m)	4022.70
Precipitable Water (Inches)	2.24	CAPE (J/Kg)	3431.72
LCL (m)	46.27	CINH (J/Kg)	0.58
CCL (m)	647.76	LI (degrees C)	-8.57
Cloud Base (m)	1380	PB	8.9
Warm Cloud Depth (m)	3424	Cloud Base Temp (°C)	20
CRP ICA	0.9	DRT ICA	-3.7

DISCUSSION: Widespread morning convection over the Big Bend region slowly making its way east. Pop up showers started forming in northern Bee county after noon. Pilot launched and began seeding just after 18Z on small showers. The seeded storm intensified and pilot stuck with it as storms moved north through Bee and into Karnes counties. These showers are on a warm front moving north. Second pilot seeded strong storm going through Median county after 19:30Z. First pilot seeded storms in Atascosa before moving onto a northward moving storm in Live Oak county. Pilot burned flares in the Live Oak county storm because the storm was moving into Atascosa and Karnes counties. Both pilot ran out of flares and landed to refuel and reflare. Relunched Pleasanton pilot to investigate late afternoon storms east of Pleasanton after 22Z. Cloud seeding continued on a weak storm, however flare malfunctions meant many more flares were burned than anticipated.

Warnings: none that affected operations

Seeded cell ID's: 434, 775, 1529

Flight Information:

Time (UTC)	Plane	Flare Location	County
18:08	160P	In air	
18:15	160P	111° @ 35 NM	Bee

18:16	160P	111 @ 35 NM	Bee
18:17	160P	111 @ 35 NM	Bee
18:18	160P	111 @ 35 NM	Bee
18:20	160P	111 @ 35 NM	Bee
18:41	160P	97 @ 37 NM	Karnes
18:42	160P	97 @ 33 NM	Karnes
18:43	160P	98 @ 31 NM	Karnes
18:45	160P	98 @ 31 NM	Karnes
18:46	160P	94 @ 34 NM	Karnes
18:56	160P	93 @ 31 NM	Karnes
18:58	160P	90 @ 33 NM	Karnes
18:59	160P	89 @ 34 NM	Karnes
19:00	57AA	In air	
19:00	160P	88 @ 36 NM	Karnes
19:03	160P	88 @ 37 NM	Karnes
19:12	160P	87 @ 33 NM	Karnes
19:13	160P	85 @ 34 NM	Karnes
19:14	160P	88 @ 32 NM	Karnes
19:20	160P	88 @ 27 NM	Karnes
19:22	160P	86 @ 30 NM	Karnes
19:36	57AA	299 @ 29 NM	Medina
19:37	57AA	297 @ 28 NM	Medina
19:40	57AA	300 @ 29 NM	Medina
19:41	57AA	301 @ 29 NM	Medina
19:42	57AA	301 @ 28 NM	Medina
19:50	57AA	304 @ 29 NM	Medina
19:53	57AA	299 @ 30 NM	Medina
19:55	57AA	298 @ 29 NM	Medina
19:57	57AA	299 @ 31 NM	Medina
19:59	57AA	300 @ 31 NM	Medina
20:09	160P	158 @ 16 NM	Atascosa
20:10	160P	157 @ 15 NM	Atascosa
20:12	160P	158 @ 16 NM	Atascosa
20:13	160P	156 @ 16 NM	Atascosa
20:14	160P	157 @ 15 NM	Atascosa
20:34	57AA	310 @ 36 NM	Medina
20:33	160P	142 @ 29 NM	Live Oak
20:35	160P	143 @ 28 NM	Live Oak
20:36	57AA	311 @ 36 NM	Medina
20:37	57AA	314 @ 35 NM	Medina
20:38	160P	147 @ 29 NM	Live Oak
20:39	57AA	317 @ 35 NM	Medina
20:40	160P	146 @ 28 NM	Live Oak
20:41	57AA	315 @ 37 NM	Medina
20:43	57AA	318 @ 37 NM	Medina

20:59	160P	Landed	
21:20	57AA	Landed	
22:24	57AA	in air	
22:59	57AA	65 @ 28 NM	Wilson
23:01	57AA	67 @ 33 NM	Wilson
23:04	57AA	62 @ 30 NM	Wilson
23:06	57AA	57 @ 29 NM	Wilson
23:07	57AA	52 @ 28 NM	Wilson
23:27	57AA	landed	

Seeding operations were conducted over Atascosa (10 + 0H), Bee (10 + 0H), Karnes (30 + 2H), Live Oak (7 + 2H), Medina (28 + 5H), and Wilson (15 + 2H) counties. 100 flares plus 11 hygroscopic flares were burned within 3 clouds. This is the 1st day for seeding in May and the 2nd day for seeding during the season.