

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

SEEDING REPORT – June 4, 2017

SYNOPTIC/MESOSCALE CONDITIONS:

Mostly cloudy in the morning then partly cloudy with afternoon storms. A weak upper level low pressure is moving through northern TX, with multiple weak troughs moving through south TX. Isolated to scattered showers and thunderstorms in the afternoon. High temperatures in the upper 80's, lower 90's. Mostly cloudy with scattered showers and storms mainly south of San Antonio through the early overnight hours, then partly cloudy. Isolated showers possible west of San Antonio in the late overnight hours. Low temps in the lower to mid 70's.

LIFTING MECHANISM:

Daytime heating plus weak surface trough, and outflow boundaries later in the day.

THERMODYNAMIC INDICES (12Z KDRT)

KCRP Freezing Level (m)	4378.66	KDRT Freezing Level (m)	4117.00
Precipitable Water (Inches)	1.59	CAPE (J/Kg)	270.55
LCL (m)	463.09	CINH (J/Kg)	121.18
CCL (m)	2140.92	LI (degrees C)	-0.52
Cloud Base (m)	1342	PB	-2.3
Warm Cloud Depth (m)	2775	Cloud Base Temp (°C)	21
CRP ICA	-5.6	DRT ICA	-8.4

DISCUSSION: Isolated showers began forming north of Bandera around 18Z. As more showers started forming in northern Bandera county, launched pilot after 18:30Z. Pilot begin seeding storms in eastern Bandera, then northeastern Medina counties as these storms slowly moved to the southeast. However storms started weakening after 19:30Z and pilot had trouble finding inflow as low clouds prevented him from getting close to many of the storms. Storms began to rapidly dissipate after 20Z. Pilot traveled into Uvalde county and burned a few flare, but storms dissipated as well. Second pilot launched just after 22Z and flew to eastern Karnes county and began seeding at 22:17Z. Pilot stayed with and continued seeding as storm slowly moved southeast along the eastern side of Karnes. Sent pilot to investigate developing storms in central Bee country just after 23Z. Second pilot burned remaining flares in storms in Bee county then headed home. Launched first pilot and he started seeding not too long after second had to leave. Multiple storms developed from outflow boundaries in Bee county. Pilot continued seeding storms as the storms massed into one large complex across middle and southern Bee county. Pilot even reported 1000 ft/min updraft on one storm. Pilot experience flare rack problems just before 00:30Z and could not light the remaining flares. Pilot returned for rack maintenance.

Warnings: Severe Thunderstorm Warning for Bee, multiple others that did not affect seeding.

Seeded cell ID's: 1185, 1178, 2217, 2511, 2666, 2529

Flight Information:

Time (UTC)	Plane	Flare Location	County
18:39	57AA	In air	
19:18	57AA	326° @ 47 NM	Bandera
19:19	57AA	325 @ 47	Bandera
19:21	57AA	326 @ 47	Bandera
19:28	57AA	316 @ 46	Medina
19:36	57AA	314 @ 40	Medina
19:36	57AA	315 @ 40	Medina
19:37	57AA	315 @ 40	Medina
19:38	57AA	315 @ 39	Medina
19:39	57AA	313 @ 38	Medina
19:40	57AA	312 @ 37	Medina
20:01	57AA	304 @ 43	Medina
20:02	57AA	304 @ 42	Medina
20:04	57AA	302 @ 40	Medina
20:06	57AA	305 @ 41	Medina
20:32	57AA	285 @ 66	Uvalde
20:34	57AA	291 @ 61	Uvalde
21:15	57AA	landed	
22:06	160P	In air	
22:17	160P	74 @ 34	Karnes
22:18	160P	76 @ 34	Karnes
22:19	160P	75 @ 34	Karnes
22:20	160P	76 @ 34	Karnes
22:21	160P	77 @ 34	Karnes
22:32	160P	81 @ 37	Karnes
22:32	160P	81 @ 38	Karnes
22:33	160P	82 @ 37	Karnes
22:34	160P	84 @ 35	Karnes
22:36	160P	84 @ 37	Karnes
22:37	160P	83 @ 38	Karnes
22:48	160P	87 @ 40	Karnes
22:49	160P	87 @ 41	Karnes
22:50	160P	85 @ 42	Karnes
22:51	160P	85 @ 42	Karnes
22:53	160P	86 @ 43	Karnes
23:01	160P	88 @ 45	Karnes
23:02	160P	87 @ 45	Karnes

23:03	160P	86 @ 47	De Witt
23:04	160P	86 @ 47	De Witt
23:05	160P	89 @ 45	Karnes
23:16	57AA	In air	
23:23	160P	120 @ 54	Bee
23:24	160P	122 @ 53	Bee
23:24	160P	123 @ 51	Bee
23:25	160P	124 @ 50	Bee
23:26	160P	124 @ 51	Bee
23:29	160P	122 @ 53	Bee
23:30	160P	123 @ 51	Bee
23:31	160P	124 @ 50	Bee
23:32	160P	123 @ 52	Bee
23:33	160P	122 @ 54	Bee
23:38	160P	landed	
23:46	57AA	122 @ 37	Bee
23:47	57AA	122 @ 39	Bee
23:49	57AA	121 @ 40	Bee
23:50	57AA	121 @ 40	Bee
23:51	57AA	120 @ 42	Bee
23:55	57AA	119 @ 42	Bee
23:58	57AA	119 @ 42	Bee
0:06	57AA	127 @ 40	Bee
0:08	57AA	127 @ 37	Bee
0:09	57AA	127 @ 39	Bee
0:09	57AA	125 @ 39	Bee
0:11	57AA	127 @ 38	Bee
0:24	57AA	113 @ 47	Bee
1:00	57AA	Landed	

Seeding operations were conducted over Bandera (13 + 1H), Bee (53 + 5H), De Witt (4 + 0H), Karnes (38 + 3H), Medina (23 + 4H), and Uvalde (6 + 0H) counties. 137 flares plus 13 hygroscopic flares were burned within 6 clouds. This is the 2nd day for seeding in June and the 8th day for seeding during the season.