

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

SEEDING REPORT – July 17, 2017

SYNOPTIC/MESOSCALE CONDITIONS:

Partly cloudy over south Texas this morning, with isolated showers off the coast and through extreme south TX. Patchy fog is present east and northeast of San Antonio, and looks to last through the early morning hours. Ample moisture resides across the south TX region this morning, and along with daytime heating looks to help develop isolated to scattered showers and thunderstorms this afternoon. Some storms could produce locally heavy rain. High temperatures in the lower to mid 90's with warmer temps over the Rio Grande Plains. Isolated showers and storms continue through the evening, then partly cloudy overnight with patchy fog possible. Overnight low temps in the mid to upper 70's with cooler temps over hill country.

LIFTING MECHANISM:

Daytime heating, weak seabreeze, and outflow boundaries.

THERMODYNAMIC INDICES (12Z KDRT)

KCRP Freezing Level (m)	5079.58	KDRT Freezing Level (m)	4748.07
Precipitable Water (Inches)	1.70	CAPE (J/Kg)	367.57
LCL (m)	477.89	CINH (J/Kg)	148.93
CCL (m)	2238.21	LI (degrees C)	-1.38
Cloud Base (m)	1750	PB	-2.3
Warm Cloud Depth (m)	2998.07	Cloud Base Temp (°C)	22
CRP -15°C height (m)	~7400	DRT -15°C height (m)	~7500
CRP ICA	-11.8	DRT ICA	-13.4

DISCUSSION: Scattered small showers began developing across hill county after noon. Pilot was sent to investigate. Pilot began seeding small developing showers in central Medina county after 18:30Z. The first two showers the pilot seeded did not develop a storm ID on titan. Pilot continued seeding developing showers and storms in Medina and Uvalde. By 20Z additional clouds were developing in Bandera and McMullen counties. Launched second pilot and sent him to investigate developing showers in McMullen county. Sent first pilot to another cluster of developing showers over Bandera county. All showers dissipated in McMullen county so sent second pilot up to Medina county to take the place of the first pilot. First pilot seeded a few more storms in Bandera and Medina counties before returning for fuel. Second pilot seeded multiple storms in southern Uvalde and Medina counties, but these storms were moving out of the operational area. Send second pilot northwest to still ongoing cluster of storms in Bandera/Medina counties. These storms were beginning to develop into a broken line of showers and storms. Second pilot continued seeding storms as they formed a broken line through Medina into Uvalde county. However, storms did not seem to respond to seeding very well and every storm had inflow in a different area. As storms moved further into Uvalde communication with pilot became very difficult. After 22Z storms stalled over eastern Uvalde and began losing strength. First pilot took off again and found small storm in southern Atascosa

county. Pilot burned 2 flares in the storm but storm did not develop. Second pilot did not find any more inflow and left the storm at 23Z. All seeding ended after 23Z as all storms dissipated.

Warnings: None

Seeded cell ID's: 658, 752, 869, 941, 993, 1160, 1278, 1280, 352, 1140, 1513, 2143, 1815, 1692, 1690, 1689, 1764, 1804, 1814, 1950, 2060, undefined

Flight Information:

Time (UTC)	Plane	Flare Location	County
17:57	160P	In air	
18:43	160P	307 @ 41 NM	Medina
18:44	160P	304 @ 43	Medina
18:47	160P	298 @ 45	Medina
18:52	160P	297 @ 52	Medina
18:58	160P	295 @ 57	Medina
19:12	160P	279 @ 73	Uvalde
19:40	57AA	In air	
19:41	160P	284 @ 76	Uvalde
19:46	160P	286 @ 79	Uvalde
19:56	160P	278 @ 78	Uvalde
20:07	160P	278 @ 72	Uvalde
20:17	160P	281 @ 55	Uvalde
20:20	160P	284 @ 50	Medina
20:38	160P	306 @ 57	Medina
20:41	160P	305 @ 65	Bandera
20:52	160P	309 @ 68	Bandera
21:06	160P	293 @ 54	Medina
21:12	160P	294 @ 55	Medina
21:12	57AA	286 @ 45	Medina
21:16	57AA	284 @ 48	Medina
21:18	160P	300 @ 60	Medina
21:20	57AA	280 @ 51	Uvalde
21:26	57AA	275 @ 52	Uvalde
21:28	57AA	275 @ 54	Uvalde
21:42	57AA	291 @ 56	Uvalde
21:46	57AA	293 @ 53	Medina
21:52	57AA	292 @ 49	Medina
21:56	160P	Landed	
22:06	57AA	278 @ 51	Uvalde

22:23	57AA	286 @ 58	Uvalde
22:29	57AA	286 @ 63	Uvalde
22:26	160P	In air	
22:51	160P	174 @ 16	Atascosa
23:32	160P	Landed	
23:37	57AA	Landed	

Seeding operations were conducted over Atascosa (2 + 0H), Bandera (4 + 0H), Medina (24 + 4H), and Uvalde (24 + 1H) counties. 54 flares plus 5 hygroscopic flares were burned within 21 clouds. This is the 8th day for seeding in July and the 21st day for seeding during the season.