

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

SEEDING REPORT – May 23, 2017

SYNOPTIC/MESOSCALE CONDITIONS:

Partly to mostly cloudy across south TX this morning, with fog over central TX and scattered showers over extreme south TX. The rain over extreme south TX looks to move out over the Gulf by the mid-morning hours. A strong cold front looks to push south through the region during the afternoon, with isolated to scattered showers and thunderstorms mainly south of Austin. A few storms could be severe. Breezy conditions are also possible after the front passes. High temperatures in the lower to mid 80's with cooler temps north of Austin. Isolated showers and thunderstorms continue through extreme south TX through the early overnight hours, then partly cloudy across the region. Low temps in the upper 50's, lower 60's. Parts of hill county could drop into the upper 40's.

LIFTING MECHANISM:

Cold front and daytime heating

THERMODYNAMIC INDICES (12Z KDRT)

KCRP Freezing Level (m)	4435.03	KDRT Freezing Level (m)	4319.73
Precipitable Water (Inches)	1.31	CAPE (J/Kg)	928.11
LCL (m)	412.92	CINH (J/Kg)	227.59
CCL (m)	1396.02	LI (degrees C)	-4.91
Cloud Base (m)	1346	PB	3.1
Warm Cloud Depth (m)	2974	Cloud Base Temp (°C)	18
CRP ICA	-7.4	DRT ICA	-3.1

DISCUSSION: As a strong cold front makes its way south through central TX, a few pop up showers and storms began forming in the hill country after 19Z. These became scattered after 21Z. Began cloud seeding later than expected on storms in northern Atascosa county at 22:30Z. Storms quickly became a line heading southeast and seeded storms Atascosa and into McMullen county with both pilots. One pilot landed after 23:30Z to reflare and fix mechanical issues and the other proceeded to seed storms in Bee county until he ran out of flares. By this time storms were south of the operational area.

Warnings: Severe Thunderstorm Warnings for Atascosa, McMullen and Bee. In addition to numerous others.

Seeded cell ID's: 417 but storm split and merged multiple times

Flight Information:

Time (UTC)	Plane	Flare Location	County
22:11	57AA	In air	
22:25	160	In air	

22:30	57AA	314° x 16 NM	AT
22:32	57AA	315 x 16 NM	AT
22:34	57AA	322 x 15 NM	AT
22:35	57AA	317 x 14 NM	AT
22:36	57AA	313 x 13 NM	AT
22:38	57AA	327 x 13 NM	AT
22:39	57AA	320 x 13 NM	AT
22:41	57AA	312 x 13 NM	AT
22:42	57AA	324 x 12 NM	AT
22:53	57AA	277 x 10 NM	AT
22:54	57AA	291 x 8 NM	AT
22:57	57AA	280 x 7 NM	AT
23:10	160P	87 x 7 NM	AT
23:11	160P	114 x 6 NM	AT
23:12	160P	138 x 6 NM	AT
23:13	160P	156 x 6 NM	AT
23:13	57AA	233 x 14 NM	AT
23:15	160P	199 x 8 NM	AT
23:15	57AA	230 x 14 NM	AT
23:21	160P	153 x 9 NM	AT
23:23	160P	137 x 12 NM	AT
23:24	160P	128 x 15 NM	AT
23:26	160P	117 x 16 NM	AT
23:30	160P	119 x 17 NM	AT
23:31	160P	128 x 17 NM	AT
23:32	160P	138 x 17 NM	AT
23:36	57AA	landed	
23:46	160P	186 x 33 NM	MC
23:47	160P	188 x 35 NM	MC
23:48	160P	190 x 37 NM	MC
23:49	160P	189 x 37 NM	MC
23:51	160P	185 x 36 NM	MC
23:52	160P	181 x 35 NM	MC
23:53	160P	182 x 35 NM	MC
23:54	160P	184 x 37 NM	MC
23:55	160P	181 x 37 NM	MC
23:56	160P	178 x 37 NM	MC
23:58	160P	176 x 38 NM	MC
0:15	160P	134 x 48 NM	LO

0:16	160P	130 x 50 NM	BE
0:17	160P	129 x 51 NM	BE
0:18	160P	127 x 53 NM	BE
0:19	160P	127 x 55 NM	BE
0:20	160P	126 x 55 NM	BE
0:22	160P	129 x 54 NM	BE
1:07	160P	landed	

Seeding operations were conducted over Atascosa (55 + 8H), Bee (10 + 1H), Live Oak (2 + 1H), and McMullen (22 + 2H) counties. 91 flares plus 12 hygroscopic flares were burned within 1+ cloud. This is the 2nd day for seeding in May and the 3rd day for seeding during the season.