SOUTH TEXAS WEATHER MODIFICATION ASSOCIATION – PLEASANTON, TEXAS

SEEDING REPORT – July 19, 2017

SYNOPTIC/MESOSCALE CONDITIONS:

Mostly clear over south Texas this morning with scattered fog across extreme south TX. Fog looks to last through the early morning hours. A strong high pressure system located over the region looks to bring partly cloudy skies and very warm temperatures this afternoon, with isolated showers and thunderstorms along the coast and coastal plains. High temps in the upper 90's, lower 100's. High heat index values possible during the afternoon and early evening hours. Partly cloudy then mostly clear overnight. Low temps in the upper 70's, lower 80's with cooler temps over hill country.

LIFTING MECHANISM:

Daytime heating, weak seabreeze, and outflow boundaries.

THERMODYNAMIC INDICES (12Z KCRP)

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KCRP Freezing Level (m)	4832.13	KDRT Freezing Level (m)	4882.28			
Precipitable Water (Inches)	2.09	CAPE (J/Kg)	2112.68			
LCL (m)	73.22	CINH (J/Kg)	30.01			
CCL (m)	1272.70	LI (degrees C)	-5.63			
Cloud Base (m)	1381	PB	5.9			
Warm Cloud Depth (m)	3451.13	Cloud Base Temp (°C)	22			
CRP -15°C height (m)	~7400	DRT -15°C height (m)	~7300			
CRP ICA	-5.3	DRT ICA	-6.8			

DISCUSSION: Scattered showers began developing east of Bee county in the early afternoon. A few started moving into Bee and Karnes counties after 18:30Z, so launched the pilot. Pilot initially found a weak updraft on a shower north of Beeville, however even with seeding a shower did not develop. Pilot then flew north and tried seeding some small showers in Karnes county. However, those did not develop much either. Pilot then flew south back to Bee county and started seeding a cluster of storms southwest of Beeville. These seemed to have a bit more success and became an elongated storm that lasted longer than most of the other storms around it. Pilot burned a few more flares in that storm until it too dissipated. Another broken line of showers was forming off to the west, so pilot began seeding in Live Oak and McMullen counties. These storms were relatively small but seeding did seem to have a short-term benefit. All storms dissipated just after 23Z.

Warnings: None

Seeded cell ID's: 245, 303, 285, 434, 521, 536, 557, undefined

Flight Information:

Time (UTC)	Plane	Flare Location	County
18:55	160P	In air	

19:09	160P	121 @ 44 NM	Bee
19:37	160P	91 @ 37	Karnes
20:04	160P	86 @ 33	Karnes
20:44	160P	129 @ 48	Bee
20:48	160P	127 @ 52	Bee
21:11	160P	122 @ 51	Bee
21:17	160P	123 @ 41	Bee
21:30	160P	118 @ 40	Bee
22:15	160P	160 @ 42	Live Oak
22:37	160P	164 @ 33	McMullen
22:45	160P	178 @ 25	McMullen
22:52	160P	172 @ 30	McMullen
22:58	160P	165 @ 29	McMullen
23:38	160P	Landed	

Seeding operations were conducted over Bee (9 + 0H), Karnes (4 + 1H), Live Oak (2 + 0H), and McMullen (4 + 0H) counties. 19 flares plus 1 hygroscopic flares were burned within 7+ clouds. This is the 9^{th} day for seeding in July and the 22^{nd} day for seeding during the season.