

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

**SEEDING REPORT – August 2, 2017**

**SYNOPTIC/MESOSCALE CONDITIONS:**

Mostly clear south of San Antonio this morning, while mostly cloudy around and north of San Antonio with scattered showers across central Texas. Showers look to be slowly moving off to the southeast and weakening. The showers are part of an upper level trough of low pressure stretched from southwest to northeast, which is slowly moving to the southeast. Showers look to continue across hill country until the early afternoon. This trough looks to help generate additional showers and thunderstorms southeast of San Antonio later this afternoon; with additional isolated storms developing to the west. Locally heavy rain possible. High temperatures in the mid to upper 80's over hill country, and mid to upper 90's south of hill country. Isolated showers and storms continue through the early overnight hours, then mostly cloudy. Low temps in the mid to upper 70's with cooler temps over hill country.

**LIFTING MECHANISM:**

Daytime heating, weak trough, and outflow boundaries.

**THERMODYNAMIC INDICES (12Z KDRT)**

KCRP Freezing Level (m)	5214.09	KDRT Freezing Level (m)	5148.16
Precipitable Water (Inches)	1.86	CAPE (J/Kg)	24.23
LCL (m)	1594.45	CINH (J/Kg)	43195.54
CCL (m)	2526.10	LI (degrees C)	0.81
Cloud Base (m)	1625	PB	-4.5
Warm Cloud Depth (m)	3523.16	Cloud Base Temp (degrees C)	22
CRP -15°C height (m)	~7600	DRT -15°C height (m)	~7800
CRP ICA	-11.1	DRT ICA	-9.6

**DISCUSSION:** Scattered showers across hill country were rapidly dissipating by the early afternoon hours, while isolated showers began forming west of Uvalde county after 18Z. These showers were slowly gaining in both size and strength and started moving east. Pilot encountered first shower in Medina with updraft just at 300 ft/min. Developing shower conditions only indicated one flare per inflow would be enough. Numerous showers were forming across Uvalde and Medina, but the only area with strong enough inflow for seeding was a long-lived storm which passed across the northern edge of Bandera county. Pilot had better luck finding stronger showers across northern Bandera county, including the stronger storm continuing across northern Bandera. Storms in Bandera began to lose strength after 21Z so pilot began moving south. However widespread light rain began to cover most of Uvalde and western Medina counties, limiting where pilot could fly. Partly cloudy skies started filling in to mostly cloudy in the late afternoon, limiting the daytime heating. The morning showers from central TX generated a storm cold pool which began heading south by late afternoon, bringing in much cooler air to the eastern half of the operational area but limited storm development. Pilot did find inflow in two storms across southern Medina county. Launched second pilot when isolated showers began developing across Wilson and Karnes counties. First pilot continued to find

inflow along a broken line of showers across Medina county. Storms over Bandera and Medina eventually moved into San Antonio after 22:30Z so pilot could only fly through storms along southern Medina, which also had showers with inflow. Storms east and southeast of San Antonio never developed so had second pilot return to base. Storms over southern Medina intensified after 23Z so sent pilot off to more developing showers in Frio/Atascosa. Pilot continued seeding isolated storms along a broken line from Atascosa through Frio until after 00Z when pilot was running low on flares and rain was moving towards the airport.

**Warnings:** None

**Seeded cell ID's:** 1409, 1607, 1618, 1488, 1734, 1588, 1907, 2078, 2123, 2153, 2263, 2219, 2312, unidentified

**Flight Information:**

Time (UTC)	Plane	Flare Location	County
19:51	57AA	In air	
20:20	57AA	277 @ 41 NM	Medina
20:45	57AA	317 @ 65	Bandera
21:00	57AA	308 @ 68	Bandera
21:06	57AA	316 @ 66	Bandera
21:16	160P	In air	
21:36	57AA	291 @ 37	Medina
21:41	57AA	278 @ 40	Medina
21:59	57AA	300 @ 40	Medina
22:09	57AA	301 @ 43	Medina
22:11	57AA	302 @ 42	Medina
22:20	57AA	313 @ 43	Medina
22:24	57AA	321 @ 42	Medina
22:43	57AA	296 @ 26	Medina
22:46	57AA	295 @ 21	Medina
22:56	57AA	281 @ 20	Frio
23:06	160P	Landed	
23:08	57AA	300 @ 23	Medina
23:15	57AA	302 @ 22	Atascosa
23:36	57AA	232 @ 27	Frio
23:43	57AA	232 @ 15	Atascosa
23:51	57AA	227 @ 28	Frio
0:06	57AA	244 @ 15	Atascosa
0:24	57AA	Landed	

Seeding operations were conducted over Atascosa (5 + 0H), Bandera (4 + 0H), Frio (3 + 0H), and Medina (16 + 2H) counties. 28 flares plus 2 hygroscopic flares were burned within 13+ clouds. This is the 1<sup>st</sup> day for seeding in August and the 26<sup>th</sup> day for seeding during the season.