

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

**SEEDING REPORT – September 19, 2017**

**SYNOPTIC/MESOSCALE CONDITIONS:**

Mostly cloudy with scattered fog east of San Antonio, and partly cloudy skies over the Rio Grande Plains this morning. Fog and low clouds look to last through the early morning hours. Strong high pressure over the eastern Gulf is sending moist air into the region, with warm and humid conditions this afternoon. Isolated showers and thunderstorms are possible southeast of San Antonio from the afternoon seabreeze. In addition isolated afternoon storms are possible over the Rio Grande Plains as storms move east from the mountains. High heat index values possible this afternoon. High temperatures in the mid to upper 90's. Partly then mostly cloudy overnight with low temps in the mid to upper 70's with cooler temps over hill country. Fog possible after midnight.

**LIFTING MECHANISM:**

Daytime heating, and outflow boundaries.

**THERMODYNAMIC INDICES (12Z KDRT)**

KCRP Freezing Level (m)	5003.85	KDRT Freezing Level (m)	4790.59
Precipitable Water (Inches)	1.68	CAPE (J/Kg)	1241.26
LCL (m)	901.46	CINH (J/Kg)	220.15
CCL (m)	2018.52	LI (degrees C)	-4.54
Cloud Base (m)	2187	PB	1.1
Warm Cloud Depth (m)	2603.59	Cloud Base Temp (degrees C)	21
CRP -15°C height (m)	~7500	DRT -15°C height (m)	~7100
CRP ICA	-12.9	DRT ICA	-9

**DISCUSSION:** A complex of storms developed over the mountains in Mexico in the early afternoon hours, then slowly moved east. The storms dissipated after crossing into the US but a few isolated storms began developing ahead in Uvalde and Kinney counties. Launched pilot to investigate. Pilot began seeding a storm on the southern edge of Uvalde county. The eastern half of the storm was in Uvalde with additional cells developing to the east. The northern half which was seeded seemed to redevelop after about 20 minutes with greater dbz and pilot reported heavy rain and lightning. Seeding seemed to help. However pilot did not find inflow on second pass around storm. Pilot found inflow on the backside of the storm (northwest) which was just outside the target area but moving towards Frio county. Decided to light more flares to see if storm might redevelop. Pilot lite all 4 silver flares at once due to miscommunication. Pilot reported shelf cloud height at over 10000 feet. Storms merged into one large complex of heavy rain. Pilot continued following the eastern side of the complex as it moved southeast, but did not find any more inflow.

**Warnings:** None

**Seeded cell ID's:** 462, 301

**Flight Information:**

Time (UTC)	Plane	Flare Location	County
21:28	57AA	In air	
22:09	57AA	272 @ 60	Uvalde
22:11	57AA	273 @ 59	Uvalde
22:13	57AA	273 @ 58	Uvalde
22:51	57AA	270 @ 66	Uvalde
00:00	57AA	Landed	

Seeding operations were conducted over Uvalde (18 + 3H) county. 10 flares plus 1 hygroscopic flares were burned within 1 cloud. This is the 4<sup>th</sup> day for seeding in September and the 37<sup>th</sup> day for seeding during the season.