

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

SEEDING REPORT – September 25, 2017

SYNOPTIC/MESOSCALE CONDITIONS:

Mostly cloudy across south Texas this morning, with isolated showers from San Antonio west to Del Rio. The showers are slowly moving to the north. Scattered fog is also possible east of San Antonio and looks to last through the early morning hours. High moisture is moving into south Texas from the Gulf and across Mexico from a tropical system in the Pacific Ocean. Given the ample moisture already across the region, scattered to widespread showers and thunderstorms are likely across south TX today, with localized heavy rain possible. High temperatures in the mid to upper 80's with cooler temps over hill country. Scattered to widespread showers and thunderstorms continue through the overnight hours, especially west of San Antonio and through the Rio Grande Plains. Localized heavy rain continues overnight. Mostly cloudy with overnight low temps in the mid to upper 70's with cooler temps over hill country.

LIFTING MECHANISM:

Daytime heating, and outflow boundaries.

THERMODYNAMIC INDICES (12Z KCRP)

| | | | |
|-----------------------------|---------|-----------------------------|--------|
| KCRP Freezing Level (m) | 5023.57 | KDRT Freezing Level (m) | None* |
| Precipitable Water (Inches) | 1.85 | CAPE (J/Kg) | 696.08 |
| LCL (m) | 102.98 | CINH (J/Kg) | 24.24 |
| CCL (m) | 1210.23 | LI (degrees C) | -2.23 |
| Cloud Base (m) | 1042 | PB | -4.5 |
| Warm Cloud Depth (m) | 3981.57 | Cloud Base Temp (degrees C) | 21 |
| CRP -15°C height (m) | ~7700 | DRT -15°C height (m) | None |
| CRP ICA | -11.1 | DRT ICA | none |

*KDRT did not have usable sounding

DISCUSSION: Numerous showers began forming across the area after 16Z, but did not last long. By 18Z rain from MCV over Mexico was beginning to move into the Rio Grande Plains, and stronger storms were developing southeast of San Antonio. The was causing widespread stratiform rain west of Uvalde, and was nothing we could cloud seed. Launched pilot and began working isolated stronger storms in Wilson county. Storms moving from south to north. Two storms were slowly weakening when seeding began in central Wilson. After that pilot had trouble finding sufficient inflow in multiple other storms in Wilson and Atascosa counties. Pilot investigated longer lived weak storm in McMullen/Atascosa but storm did not have sufficient inflow ever though it looked ok on radar. Pilot left that storm, then returned later when storm intensified. Storm was already efficient so pilot added a few flares then landed for fuel. Extensive cloud cover from the MCV over Mexico was beginning to cover most of the northwest target area. Pilot launched again and continued seeding storm that now moved into Medina county. Storms developed into an east to west broken line, which pilot followed and burned multiple silver flares into. Storms started to enter san Antonio area so pilot broke off to investigate showers in Bandera county. Showers did not pan out so pilot ended the day.

Warnings: None

Seeded cell ID's: 1227, 1226, 1280, 1379, 1857, 1379

Flight Information:

| Time (UTC) | Plane | Flare Location | County |
|------------|-------|----------------|----------|
| 18:38 | 160P | In air | |
| 19:01 | 160P | 29 @ 19 | Wilson |
| 19:01 | 160P | 32 @ 20 | Wilson |
| 19:02 | 160P | 34 @ 24 | Wilson |
| 19:55 | 160P | 162 @ 11 | Atascosa |
| 19:57 | 160P | 164 @ 11 | Atascosa |
| 21:08 | 160P | 265 @ 16 | Atascosa |
| 21:10 | 160P | 262 @ 14 | Atascosa |
| 21:20 | 160P | Landed | |
| 21:50 | 160P | In air | |
| 22:04 | 160P | 309 @ 29 | Medina |
| 20:05 | 160P | 307 @ 31 | Medina |
| 22:07 | 160P | 304 @ 36 | Medina |
| 22:15 | 160P | 296 @ 42 | Medina |
| 22:29 | 160P | 328 @ 33 | Bexar |
| 22:31 | 160P | 325 @ 34 | Bexar |
| 22:31 | 160P | 325 @ 35 | Medina |
| 22:32 | 160P | 319 @ 36 | Medina |
| 22:34 | 160P | 316 @ 39 | Medina |
| 22:35 | 160P | 313 @ 41 | Medina |
| 00:13 | 160P | Landed | |

Seeding operations were conducted over Atascosa (8 + 1H), Bexar (3 + 0H), Medina (14 + 0H), and Wilson (6 + 0H) counties. 31 flares plus 1 hygroscopic flares were burned within 6 clouds. This is the 7th day for seeding in September and the 40th day for seeding during the season.