

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

**SEEDING REPORT - JULY 31, 2009**

**SYNOPTIC/MESOSCALE CONDITIONS:**

Broad trough at 500mb across eastern 2/3 of country with axis just west of the Mississippi River; strong high pressure at 500mb centered over far northwestern Mexico; vort max at 500mb moving across Rio Grande into western target area; rich moisture across target area, with PW values 1.90" at CRP and 2.25" at DRT; moderate to strong instability, with CAPE values to 3000 J/kg and LI values to -7.

**LIFTING MECHANISM:**

Intense surface heating; lift from vort max.

**DISCUSSION:**

During the morning to early part of the afternoon a vort max located near the Rio Grande between Laredo and Eagle Pass was generating convection on its forward side, with seeding of this activity taking place by SWTREA. As the convection moved into Frio County, a flight was dispatched to investigate the convection and found developing clouds in western Atascosa County, with seeding commencing. The activity propagated to the northeast, with the plane following the area of convection and continuing to conduct seeding operations. The convection exited the target area by 2230 UTC, leaving behind a diminishing area of light rain.

**WATCHES/WARNINGS/LIMITATIONS:**

Nil.

The pyrotechnics were 40g AgI flares and 1000g hygroscopic flares. 20 AgI flares were burned in Atascosa County, totaling 800g of AgI. One hygroscopic flare was burned in Wilson County, totaling 1000g of CaCl.