

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

**SEEDING REPORT - JULY 6, 2009**

**SYNOPTIC/MESOSCALE CONDITIONS:**

500mb high centered over northwestern Mexico with ridging eastward into Texas and northward into the Canadian Rockies; 500mb low over the Great Lakes with trough over the eastern half of the country; outflow boundary from dissipating MCS in west-central Texas moving through target area from NW to SE; good moisture availability, with PW values 1.60"-2.00"; moderate to strong instability, with CAPE values to 3500 J/kg and LI's to -8; convective temperatures near 100°F; seabreeze front moving inland during the late afternoon hours.

**LIFTING MECHANISM:**

Intense surface heating; convergence along seabreeze boundary; convergence along outflow boundary.

**DISCUSSION:**

An MCS moved across west-central Texas early in the day, leaving behind an outflow boundary that continued to move southeast toward the northern target area. Once convective temperatures were reached at mid-afternoon, scattered showers and thunderstorms developed along the boundary and began to enter the northwestern target area. A flight was sent to Bandera County but initially convection looked poor, so the plane headed to Uvalde County where better clouds were located, and seeding began there. The plane returned to the STWMA target area and continued to seed clouds along the boundary as it moved toward the I-35 corridor. Meanwhile, the seabreeze was becoming active once again, with scattered convection developing along it as it entered the southeastern target area. Another plane was dispatched to the area to investigate, with convection being seeded in a few areas. As the two areas of convection approached each other (seabreeze moving NW, convection along old MCS outflow moving SE), it was thought that the collision of these two areas would produce additional convection. The areas did collide, but new convection did not form.

**WATCHES/WARNINGS/LIMITATIONS:**

Nil.

The pyrotechnics were 40g flares. 44 flares were burned in Medina (22), Uvalde (4), Bee (8), Frio (2), Zavala (6) and Goliad (2) counties, totaling 1760g of AgI.