SOUTH TEXAS WEATHER MODIFICATION ASSOCIATION – PLEASANTON, TEXAS

SEEDING REPORT – JULY 17, 2009

SYNOPTIC/MESOSCALE CONDITIONS:
500mb high centered near Four Corners area with ridging over western half of country; 500mb low over Ontario with a trough over the eastern half of the country; shortwave at 500mb and 700mb moving southeast across Texas; sufficient moisture availability, with PW values 1.60″-1.70″; moderate instability, with CAPE values to 2500 J/kg and LI's to -5; convective temperatures around 100°F; outflow boundaries across the area.

LIFTING MECHANISM:
Intense surface heating; lift from approaching shortwave; convergence along outflow boundaries.

DISCUSSION:
Intense heating, an approaching shortwave from the northwest, residual outflow boundaries and sufficient moisture worked in concert to initiate convection over the Hill Country and adjacent areas around 1900 UTC. As this activity developed/moved toward the northern target area, a flight was dispatched to intercept and investigate the convection. Several clouds were seeded in Medina and Bandera counties. Additional convection formed in Bexar County and points east, with a southward movement noted. The plane headed to southern Bexar County. A second flight was launched to investigate and eventually seed the developing convection as it moved southward across the eastern half of the target area. A second line of convection moved into the far eastern target area, and this was also treated with AgI. Both areas of seeded convection merged into a line that traversed the central and southern target area during the mid-evening hours.

WATCHES/WARNINGS/LIMITATIONS:

Nil.

The pyrotechnics were 40g AgI flares and 1000g hygroscopic flares. 67 AgI flares were burned in Medina (19), Bandera (10), Wilson (16), Bexar (6), Karnes (10), Atascosa (4) and DeWitt (2) counties, totaling 2680g of AgI. One hygroscopic flare was burned in Atascosa County, totaling 1000g of CaCl.