SOUTH TEXAS WEATHER MODIFICATION ASSOCIATION – PLEASANTON, TEXAS

SEEDING REPORT – MAY 27, 2009

SYNOPTIC/MESOSCALE CONDITIONS:
Trough from 850mb to 300mb over central U.S. with axis upper Mississippi Valley to Texas; diffluence at 250mb over south Texas; MCS moved through the area in the morning, pushing off the lower Texas coast during the afternoon hours; mesoscale high pressure southeastern target area behind departing MCS; stationary boundary across the northern target area; RAOB's showed PW values from 1.65″ to 2.05″ (latter was pre-MCS environment); strong instability by afternoon northern target area, with CAPE values in excess of 2500 J/kg.

LIFTING MECHANISM:
Strong surface heating; convergence along stationary boundary; weak lift from diffluence aloft.

DISCUSSION:
An MCS moved through south Texas but ceilings less than 1000 ft AGL prevented seeding of this system. Later in the day – once the airmass was able to recover, activity developed over the northern target area with a flight dispatched and seeding taking place; no randomization due to clusters of clouds as opposed to isolated. A few other clouds were investigated in Frio County but no seeding was done there. Plane RTB.

WATCHES/WARNINGS/LIMITATIONS:

Severe T-storm – SE Bandera/NW Bexar/NE Medina Cos.: 2156-2245 UTC.
Severe T-storm – Medina Co.: 2351-0045 UTC.
Flash Flood – S Bandera/Medina Cos.: 0000-0300 UTC.

The pyrotechnics were 40g flares. 12 flares were burned in Medina (10) and Bandera (2) counties, totaling 480g of AgI.