

SOUTH TEXAS WEATHER MODIFICATION ASSOCIATION - PLEASANTON, TEXAS

SEEDING REPORT - MAY 22, 2009

SYNOPTIC/MESOSCALE CONDITIONS:

Difffluence at 250mb over south and east Texas; vertically-stacked low moving NW across the east-central Gulf of Mexico with shortwave rotating around this large feature across central/south Texas; weak upper low in SW Arizona; PW values 1.40-1.60"; weak to moderate instability, with CAPE values 1000-2000 J/kg and LI's to -4; uncapped atmosphere; convective temperature ~83°F.

LIFTING MECHANISM:

Strong surface heating; lift resulting from shortwave; weak lift from difffluence aloft.

DISCUSSION:

Convection initiated during the noon hour in Bandera County and began moving SSW. A flight was dispatched to S Bandera/N Medina counties where seeding commenced; the randomization protocol could not be enacted due to close proximity of cells to each other. A second flight was launched to look at developing clouds in the eastern target area, but lack of inflow resulted in no seeding taking place. A third flight was launched to look at activity in Uvalde County; flares would not fire so the plane returned to base. A fourth flight again looked at clouds in eastern target area, but once again lack of inflow and poor cloud structure resulted in no seeding. A fifth flight was dispatched to intercept storms coming out of San Antonio, with seeding done in eastern Medina County. The plane then looked at a cell near Poteet (no inflow), south of Cotulla (no inflow) and was on its way to Live Oak County but that cell was very short-lived, so the plane RTB as no other new convection was present.

WATCHES/WARNINGS/LIMITATIONS:

Nil.

The pyrotechnics were 40g flares. 10 flares were burned in Medina County, totaling 400g of AgI.