

SOUTH TEXAS WEATHER MODIFICATION ASSOCIATION - PLEASANTON, TEXAS

SEEDING REPORT - JUNE 2, 2009

SYNOPTIC/MESOSCALE CONDITIONS:

Shortwave trough at 250mb from SW New Mexico to lower Rio Grande Valley; 700-500mb low over S/SE Texas inducing dry punch from the west at these levels, with another shortwave near Big Bend from 700-500mb; moist layer at 850mb over south-central Texas; surface cold front from northwestern Texas to central Oklahoma; MCS over west-central Texas in the evening hours moving south-southeast, weakening with time; eastward-moving outflow boundary from Del Rio area generating thunderstorms approaching western target area in the evening; moderately unstable, with CAPE values 1000-2000 J/kg and LI's to -4; marginal moisture, with PW values 1.20"-1.40".

LIFTING MECHANISM:

Lift from approaching shortwave; convergence along outflow boundary; convergence between outflow boundary and southward-moving MCS.

DISCUSSION:

Thunderstorms developed west and northwest of south Texas during the evening hours. Activity to the west sent out an outflow boundary that pushed east across the northern counties and sparked a short line of thunderstorms. Additionally, an MCS developed in northwest Texas and pushed to the south and southeast during the evening hours. As the thunderstorms associated with the eastward-moving outflow boundary approached western Frio and Medina counties, a flight was dispatched - our first night mission in 10 years. The eastward moving line of storms was seeded, and these eventually merged with the southbound MCS which weakened some but pushed through the target area overnight.

WATCHES/WARNINGS/LIMITATIONS:

Nil.

The pyrotechnics were 40g flares. 34 flares were burned in Frio (5), Zavala (3), Medina (14) and Bandera (12) counties, totaling 1360g of AgI.