

SOUTH TEXAS WEATHER MODIFICATION ASSOCIATION - PLEASANTON, TEXAS

SEEDING REPORT - AUGUST 31, 2009

SYNOPTIC/MESOSCALE CONDITIONS:

Right-rear quadrant of subtle 65kt jet streak at 250mb located over south Texas moving east; abundant moisture/cirrus streaming into south Texas originating from Hurricane Jimena south of Baja California; 500mb high centered over Four Corners area with western U.S. ridge; 500mb trough eastern U.S.; dry layer of air at 700mb over south Texas; surface high extending from central Texas to Great Lakes; stationary boundary located across southern target area; weak to moderate instability, with LI's to -3 and CAPE values to 1500 J/kg; sufficient moisture over southern target area with PW 1.86" at CRP (only 1.19" at DRT).

LIFTING MECHANISM:

Moderate surface heating; convergence along quasi-stationary boundary.

DISCUSSION:

A significant amount of upper level moisture was streaming into south Texas in the form of thick cirrus clouds, the source of which was Hurricane Jimena in the eastern Pacific south of Baja California. This tempered the usual strong heating experienced in south Texas. Still, modest heating, the presence of a stationary boundary over the southern target area and sufficient moisture pooled along/south of this boundary allowed for scattered convection to develop during the afternoon, mainly south of the target area. Towards the latter portion of the afternoon, additional convection developed in Goliad County and headed west, so a plane was sent to investigate. A growing cloud with decent inflow was found in western Goliad County and seeding took place. Additional development was occurring in northern Bee County and another cloud was seeded. The pilot returned to Kenedy only to have to launch again within an hour as convection continued to develop/move west into Live Oak and McMullen counties, with three more clouds seeded before the mission ended.

WATCHES/WARNINGS/LIMITATIONS:

Nil.

The pyrotechnics were 40g AgI flares. 14 AgI flares were burned in Goliad (4), Bee (2), Live Oak (3) and McMullen (5) counties, totaling 560g of AgI.