

SOUTH TEXAS WEATHER MODIFICATION ASSOCIATION - PLEASANTON, TEXAS

SEEDING REPORT - July 10, 2024

SYNOPTIC/MESOSCALE CONDITIONS:

CAM models and observed sounding PWAT values, which aligned well with the GFS, suggest shower and thunderstorm chances today, particularly this morning. Although there isn't a clear focusing mechanism beyond the pooled PWAT area and some expected daytime heating and mixing, we anticipate that outflow boundaries might later redirect the convective activity.

Early this morning, isolated convection started forming on the southern outskirts of the San Antonio Metro area and east of Eagle Pass. The GFS model indicates PWAT values between 2.2 to 2.3 inches in the 00Z run. The mid-level shortwave that brought substantial rainfall to some of our driest areas on Tuesday is undergoing deformation this morning. A broader trough axis extends from near Eagle Pass to the Ark-La-Tex. However, the shortwave dynamics are favoring the southwestern portion, shifting rain chances into the Rio Grande Plains and Northern Mexico. While there could be enough instability and moisture to trigger brief convection over the Hill Country today, the strong outflow winds from yesterday's storms suggest a slightly drier and more stable regime might have settled in, as indicated by most Convective Allowing Models.

LIFTING MECHANISM: Diurnal heating, seabreeze, boundary

THERMODYNAMIC INDICES -12Z KDRT SOUNDING

Freezing Level (m)	5012	-15°C Height (m)	7620
Precipitable Water (inches)	1.65	CAPE (J/Kg)	559
LCL	655	CINH (J/Kg)	90
CCL (m)	1840	LI (°C)	-1.32
DRT ICA	-7.68	PB	1
Cloud Base (meters)	1480	CRP ICA	-
Warm Cloud Depth (meters)	3532	Cloud Base Temp (°C)	22.2

DISCUSSION:

WATCHES/WARNINGS: NONE

SEEDED CELL ID'S:

132	178	302	354	405	363						
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FLIGHT INFORMATION:

TIME (Z)	Plane	Flare Location	County
1650	47P	In Air	
1732	47P	028x045	Bandera
1754	47P	089x37	Medina
1826	47P	104x80	Atascosa
1840	47P	095x102	Karnes
1913	47P	053x36	Medina
1917	47P	048x27	Medina
1932	47P	026x46	Bandera
2030	47P	RTB	

Seeding operations were conducted over Bandera (2G+0H), Atascosa (2G+0H), Karnes (2G+0H), and Medina (5G+0H) Counties. 11 glaciogenic flares and 0 hygroscopic flare were burned within 6 clouds. This is the 3rd day for

seeding in July and the 10th day for seeding during the season. EAA Flares, 7 Glaciogenic, 0 Hygro, 38.5 AgI.

Note - changes to this season reporting - 1 hygroscopic flare = 500g, not 1kg

Flight #1

