

**SOUTH TEXAS WEATHER MODIFICATION ASSOCIATION - Pleasanton, TEXAS**

**SEEDING REPORT - August 3, 2020**

**SYNOPTIC/MESOSCALE CONDITIONS:**

Upper air analysis shows a ridge over the western half of the country with a trough over the eastern half and tropical storm Isaias off-shore northern Florida. At the surface, high pressure is across the Northern Great Plains and low pressure across the Rockies, Southwest, and Southeast. The flow at upper levels is mainly north northwesterly with it generally light and variable at the surface. The current dew point temperature is in the upper 60s and lower 70s and the environmental temperature in the lower 70s the same with clear skies to a few clouds across our area. For today, expect somewhat of a similar weather pattern as yesterday with fewer afternoon storms. A mid to upper-level disturbance is located over New Mexico/Texas border along the eastern periphery of an amplified ridge of high pressure centered over Arizona is expected to move down into the target area by this afternoon. The timing for storms to arrive and develop is uncertain as well as the coverage but it looks to appear that active will likely take place around mid to late afternoon. Most of the target areas will be dry; however, the parts if not all of the EAA counties should see an isolated or scattered thunderstorm by this afternoon. The high temperature will be on a couple of degrees above the climatological normal for this time of the year due to lack of precipitation and cloud coverage except for areas where the storm cells impact. Rain chances will end earlier than the previous evening as a 700mb ridging pattern takes over. Overnight, conditions settle with the Tuesday morning's lows at or slightly below the normal with limited moisture. The dew point temperature in the short-term will reflect a weak offshore flow into south-central Texas today but with a slight uptick on Tuesday. The heat index values for Tuesday may be on a slight rise on Tuesday but not excessive. The Sub-tropical ridge lands over Texas by mid-week that will gradually broaden. This will continue to bring dry and hot conditions to our region through Thursday. The highs are progged to be in the middle 90s and lower 100s with the lows in the lower to middle 70s through the end of the forecast period.

**LIFTING MECHANISM:**

Weak Short Wave, Low-level Moisture Advection, Outflow Boundaries

**THERMODYNAMIC INDICES (12Z KCRP)**

Freezing Level (m)	5061.40	CAPE (J/Kg)	952.52
Precipitable Water (inches)	1.32	CINH (J/Kg)	104.78
LCL	905.03	LI (°C)	-2.53
CCL	1609.84	PB	-2.53
CRP ICA	-15.75	Cloud Base Temp (°C)	22.4
Cloud Base (meters)	2051.91		
Warm Cloud Depth (meters)	3009.49		

**DISCUSSION:**

A couple of cells developed across the Hill Country and began moving southward until they gradually ended up across parts of the EAA counties. 57AA was launched to go over the BA/ME/UV counties to try and seed the cell. There were some cells over the non-seeding zone of the Bexar county that we were not allowed to touch. There were just a few cells that were not where the pilot was not able to reach or was not able to get any good inflow. Fortunately, 57AA was able to start seeding a big cell that hovered most of the Bexar county

with its edge over eastern Median and Bandera Counties but while seeding it, 57AA ran empty of flares; thus, it had to land to reflare. 57AA returned to the skies after reflaring and was able to finish where it had left off. From there, I had 57AA head to Wilson County but on its way there, that cell merged with the BX County cell we had already seeded. The cell was a cell across the UV/ME county that looked impressive but we had already taken care of it earlier over the northern Uvalde County area. 57AA continued to Uvalde airport for the evening as there were no other seedable cells at the time. However, while on its way there I had 57AA turned around and head back to Atascosa County as cells were developing. 57AA did successfully seeded a cell before returning to Uvalde airport as the area was getting dark quickly due to thick cloud coverage and the time of the evening. Also, since storms were approaching my way, I needed to vacate the office in advance.

**WATCHES/WARNINGS:**

N/A

**SEEDED CELL ID'S:**

227	136	352	393	275	687				
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**FLIGHT INFORMATION:**

TIME (Z)	Plane	Flare Location	County
21:28	57AA	In Air	
21:45	57AA	303° @ 62 nm	Bandera
21:46	57AA	304° @ 62 nm	Bandera
21:47	57AA	304° @ 61 nm	Bandera
21:48	57AA	303° @ 61 nm	Bandera
21:48	57AA	304° @ 59 nm	Medina
21:55	57AA	297° @ 67 nm	Uvalde
21:56	57AA	297° @ 68 nm	Uvalde
21:59	57AA	298° @ 67 nm	Uvalde
22:01	57AA	298° @ 66 nm	Uvalde
22:22	57AA	316° @ 42 nm	Medina
22:22	57AA	317° @ 42 nm	Medina
22:26	57AA	313° @ 43 nm	Medina
22:26	57AA	312° @ 42 nm	Medina
22:27	57AA	311° @ 41 nm	Medina
22:48	57AA	323° @ 34 nm	Bexar
22:49	57AA	325° @ 34 nm	Bexar
22:02	57AA	Recon	
23:18	57AA	In Air	
23:25	57AA	317° @ 23 nm	Bexar
23:25	57AA	318° @ 22 nm	Bexar
23:27	57AA	314° @ 23 nm	Bexar
23:28	57AA	311° @ 24 nm	Bexar
24:21	57AA	124° @ 4 nm	Atascosa
24:21	57AA	125° @ 5 nm	Atascosa
24:21	57AA	125° @ 5 nm	Atascosa
24:22	57AA	134° @ 5 nm	Atascosa
24:22	57AA	134° @ 5 nm	Atascosa
01:02	57AA	Landed	

Seeding operations were conducted in Atascosa (10+0H), Bandera (8+0H), Bexar (11+1H), Medina (10+1H), and Uvalde (10+0H) Counties. 49 flares plus 2 hygroscopic flares were burned within 6 clouds. This is the 3<sup>rd</sup> day for seeding in August and the 26<sup>th</sup> day for seeding during the season.