South Texas Weather Modification Association – Pleasanton, Texas
Seeding Report – March, 26, 2025

Synoptic/Mesoscale Conditions:
Midday GOES-E satellite imagery reveals a well-defined mid-level shortwave trough moving eastward across northwest mainland Mexico, set to reach the Rio Grande Valley later today. Increasingly divergent upper-level flow ahead of this feature, along with smaller-scale vorticity energy, will gradually spread across the lower Rio Grande Valley and adjacent parts of south-central Texas, interacting with a warm, moist, and unstable atmosphere.
MLCAPE values across the region are already between 1500 and 2000 J/kg, with precipitable water (PW) values ranging from 1.5 to 1.75 inches. Persistent south-southeast low-level flow will continue funneling moisture into southern Texas throughout the afternoon. Data from MIMIC-TPW indicate deep, anomalous moisture advecting into the lower Rio Grande Valley ahead of the approaching shortwave. This setup will support the development and expansion of heavy showers and thunderstorms through the afternoon. Given the abundant moisture and instability, convective cells will be highly efficient rain producers, leading to intense rainfall rates. The 12Z HREF guidance suggests that stronger, more organized storms could produce rainfall rates of 2 to 3 inches per hour. A mix of multicell clusters and isolated supercells is expected, with some storms becoming slow-moving as their motion shifts slightly right of the mean deep-layer flow. This could result in localized areas receiving 3 to 5+ inches of rain by early evening.

Lifting Mechanism: Mid/upper level shortwave
Thermodynamic Indices -12Z KDRT Sounding

Freezing Level (m)	3982	-15°C Height (m)	6299
Precipitable Water (inches)	1.15	CAPE (J/Kg)	912
LCL	864	CINH (J/Kg)	0.66
CCL (m)	923	LI(°C)	-5.19
DRT ICA	0.2	PB	5
Cloud Base (meters)	1372	CRP ICA	-
Warm Cloud Depth (meters)	2610	Cloud Base Temp (°C)	16

Discussion:
Pilot in air at 1747Z and headed from SJT to South Texas. Showers and a few thunderstorms have begun to filter in northward from the south into Uvalde, Medina, Frio, McMullen and Atascosa Counties. Bee County is almost entirely covered in rain showers. Showers and thunderstorms have moved from the south into Uvalde and Medina Counties as of 1800Z. Upon arrival, the pilot arrived in Uvalde County and seeded one cell with ten glaciogenic flares. Pilot then went to investigate another cell east of cell 1 but stated that the cells looked to be dissipating and there were a lot of downdrafts present. Pilot then continued eastward but had to land in Hodo to get more fuel. Unfortunately, showers and thunderstorms took over and he was unable to get out of the airport due to poor conditions and visibility. Operations concluded for the day.

Watches/Warnings: Flash Flood watch for McMullen and Bee Counties until Friday morning. Flash Flood Watch upgraded/updated at 1824PM to include Karnes, Atascosa and Wilson Counties which expires at 1:30AM.

Seeded Cell ID's:

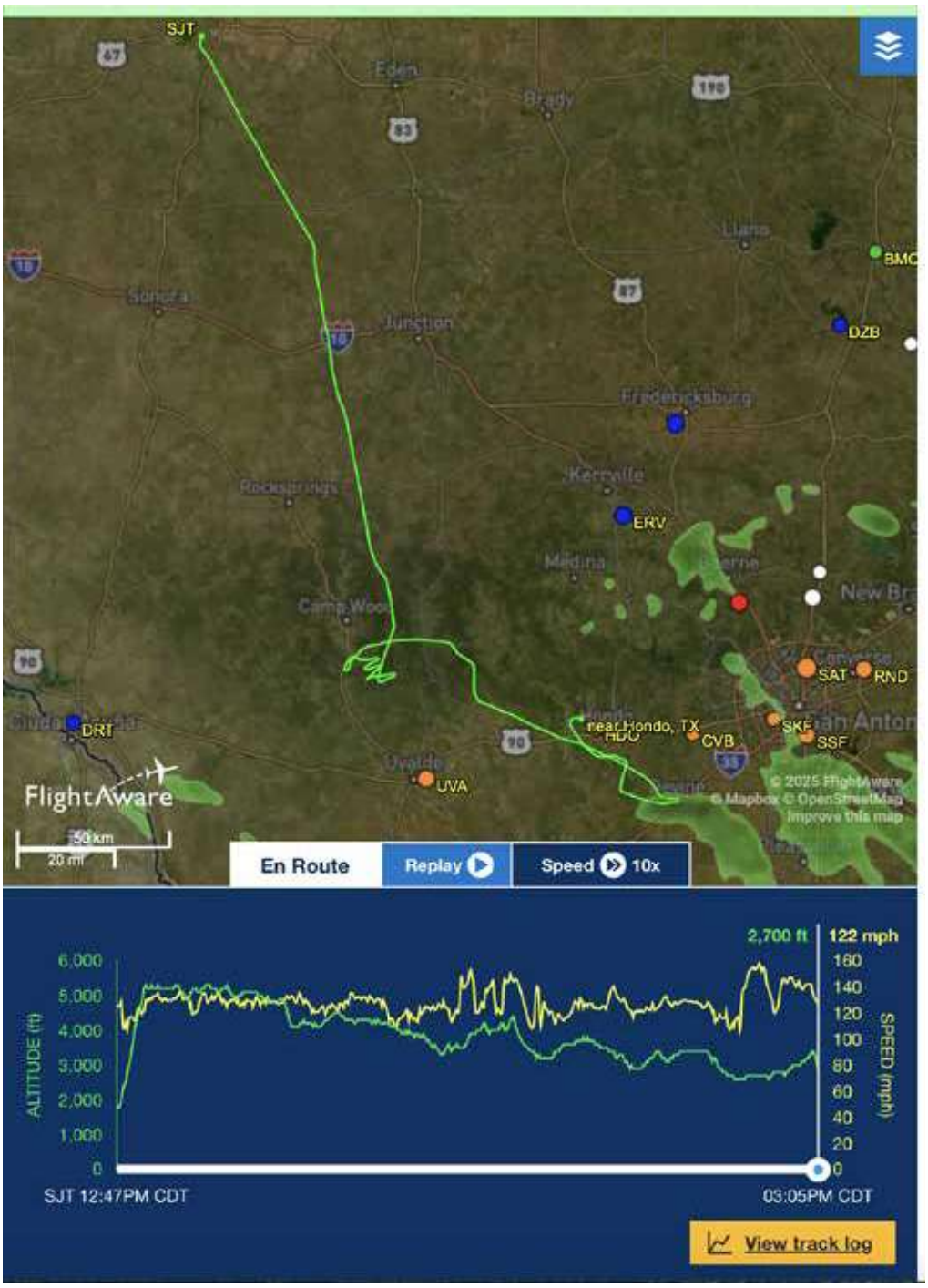
1										

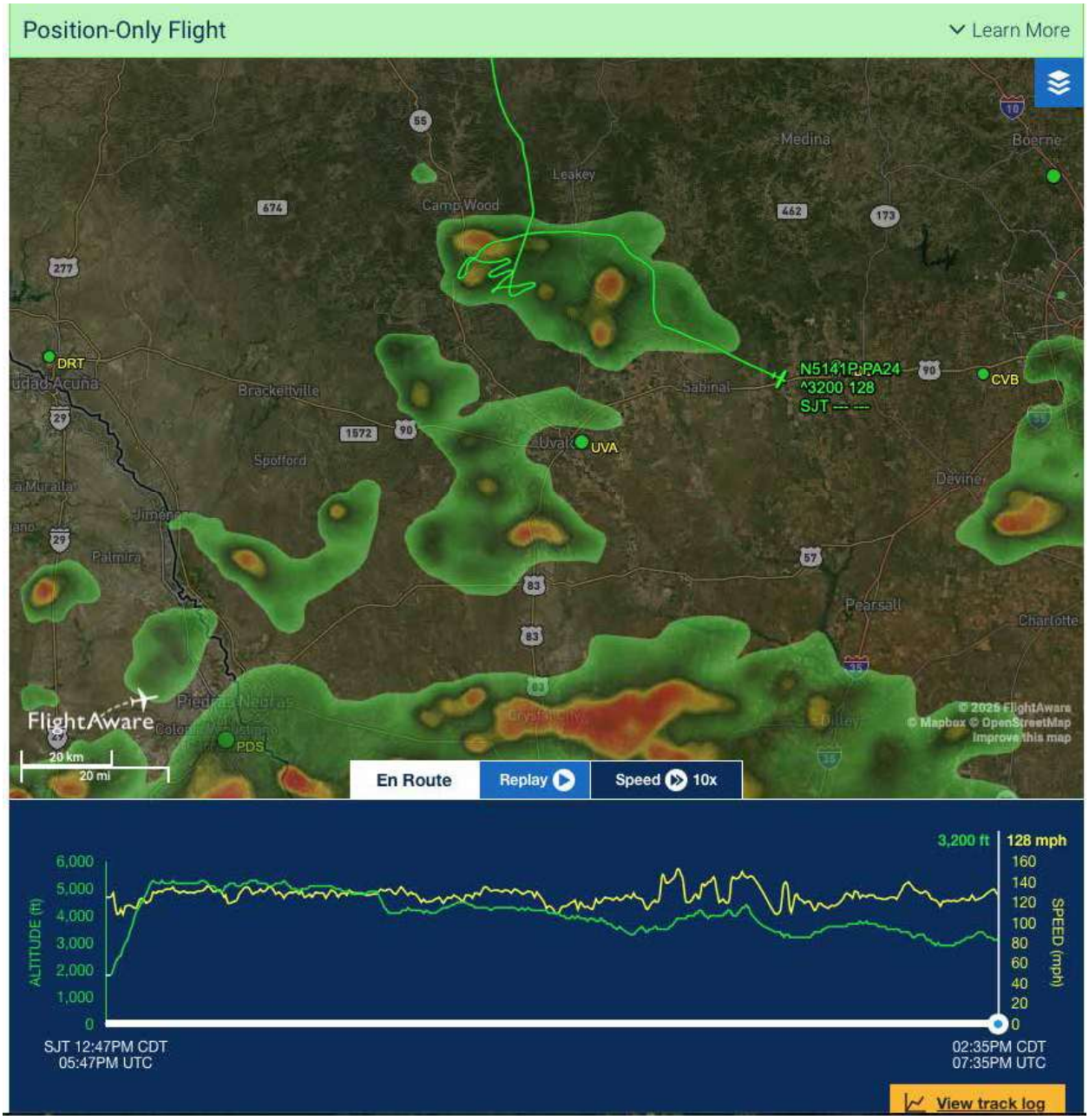
Flight Information:

TIME (Z)	Plane	Flare Location	County
1747	41P	IN AIR	
1857	41P	29.51ºN 99.93ºW	Uvalde
1858	41P	29.58ºN 99.91ºW	Uvalde
1900	41P	29.54ºN 99.92ºW	Uvalde
1901	41P	29.54ºN 99.94ºW	Uvalde
1903	41P	29.56ºN 99.93ºW	Uvalde
2005	41P	RTB	

Seeding operations were conducted over Uvalde County (10G+0H). 10 glaciogenic flares and 0 hygroscopic flares were burned within 1 cloud. This is the 1st day for seeding in March and the 1st day for seeding during the season.

** Note- 1 glaciogenic flare = 5.5 grams AgI and 1 hygroscopic flare = 500 grams NaCl **


SJT
Eden
Brady
Llano
BMC
Sonora
Junction
DZB
Fredericksburg
Kerrville
ERV
Rocksprings
Medina
New Br
SAT
RND
DRT
Hondo, TX
CVB
SKF
SSF
UVA
FlightAware
50 km
20 mi
© 2025 FlightAware
© Mapbox © OpenStreetMap
Improve this map
En Route
Replay
Speed 10x
2,700 ft
122 mph
6,000
5,000
4,000
3,000
2,000
1,000
0
ALTITUDE (ft)
160
140
120
100
80
60
40
20
0
SPEED (mph)
SJT 12:47PM CDT
03:05PM CDT
View track log



Cloud 1 seeded over Uvalde County.

South Texas Weather Modification Association – Pleasanton, Texas
Seeding Report – March, 31, 2025

Synoptic/Mesoscale Conditions:
Morning Forecast: A cold front is moving into the Hill Country, gradually shifting south throughout the day and into the evening. Meanwhile, a dryline that had pushed west of the area and will return across the Rio Grande later today. As the front progresses, the fog will lift, giving way to a stratus layer that will gradually clear to a partly to mostly sunny sky by the afternoon and evening. Temperatures will vary significantly, with highs ranging from the 80s in the northern half to 90 degrees in the southern half. While not a certainty, a few isolated showers or thunderstorms could develop over the Edwards Plateau late this afternoon where the dryline and cold front intersect, aided by some upslope flow. Later in the day, additional storms could develop near/over Atascosa County with the latest 12Z HRRR run showing a few pop ups around 7PM. By late evening, the front will push through most of the region while the dryline retreats westward.
Afternoon Update :Low-amplitude short-wave trough is digging east-southeast across far West TX early this evening. This feature is approaching the back edge of higher PW air mass that has been shunted into south central TX. Latest data suggests the boundary is draped across the San Antonio metro to north of Hondo. Surface temperatures have warmed well into the 90s south of the front and convective temperatures have been breached along this zone of low-level confluence. As a result, a few thunderstorms have recently developed and there is adequate deep-layer flow for sustaining robust updrafts. Latest radar data suggests hail is likely occurring with this activity and this may continue for the next few hours, possibly sagging south before nocturnal cooling contributes to weakening updrafts.

Lifting Mechanism: Frontal Boundary/upslope flow
Thermodynamic Indices -12Z KDRT Sounding

Freezing Level (m)	4072	-15°C Height (m)	4944
Precipitable Water (inches)	0.86	CAPE (J/Kg)	385
LCL (m)	676	CINH (J/Kg)	320
CCL (m)	2943	LI(°C)	-0.04
DRT ICA	-0.68	PB	1
Cloud Base (meters)	1764	CRP ICA	-
Warm Cloud Depth (meters)	2308	Cloud Base Temp (°C)	20.5

Discussion:
Pilot sent from Kenedy to Pleasanton to wait for the frontal boundary to move further south. Storm over SAT began to form around 2055Z and grew in intensity. 4-6 cloud to ground lightning strikes visible on Radar 15-20 minutes later. Pilot then launched again from KPEZ and headed to northern Medina County where a line of Cu was visible on GOES satellite. Pilot launched at 2129Z. By 2140Z radar showed two isolated showers/storms over northern Medina County. One directly over Lakehills and another about 5 miles west of it. Pilot arrived to cell 1 at 2200. Also at this time, Cell 1 had lightning visible on it and it began to merge with cell 2. Going to now call this one large cloud cell 1 from here on out. Pilot found inflow and seeded cell 1 with

3 glaciogenic flares at 2202Z. Uptick in lightning visible on radar. Cell 1 continues to track eastward, entering NW Bexar County. Radar showed some pink (indicative of hail) but came down after second seeding. Pilot then seeded cell 1 again with 1 glaciogenic flare around 2209Z in Medina County. Pilot found inflow again and seeded cell 1 with 2 glaciogenic flares at 2215Z. Cell became severe warned by the NWS for 1 inch hail and 50 mph winds at 2220Z (only see a ground report for pea sized hail at this time). Pilot then left the cell and headed WSW towards a cell behind cell 1 at 2222Z. We will call this cell 3. Pilot is having trouble finding inflow, trying SW side of the storm, now 2237Z. Pilot found inflow and seeded cell 3 with 2 glaciogenic at 2240Z. Found 500 inflow 3 minutes later and seeded cell 3 with another 2 glaciogenic. At 2249Z pilot found 500 inflow again and burned 2 glaciogenic and 1 hygroscopic. Storm began to enter more populated area and NW Bexar County. Pilot then RTB at 2300Z. This concludes operations for today.

Watches/Warnings: Severe Thunderstorm Warning, Medina County.

Seeded Cell ID's:

1	3									

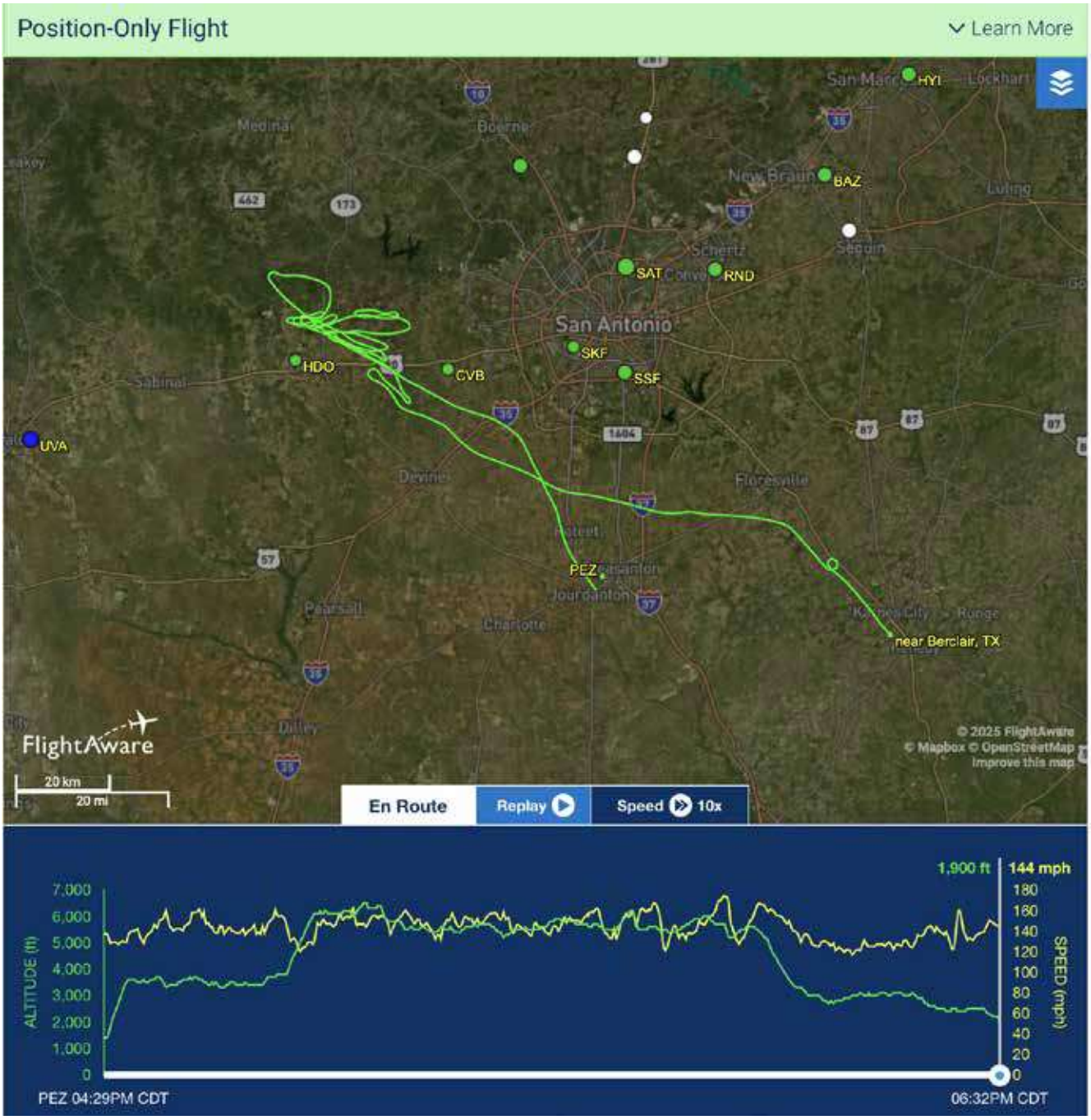
Flight Information:

TIME (Z)	Plane	Flare Location	County
2028	60P	IN AIR	
2045	60P	LANDED KPEZ	
2129	60P	IN AIR	
2202	60P	313X47	Medina
2204	60P	313X47	Medina
2209	60P	313X43	Medina
2215	60P	316X40	Medina
2240	60P	312X46	Medina
2243	60P	312X46	Medina
2249	60P	312X45	Medina
2300	60P	RTB	

Seeding operations were conducted over Medina County (12G+1H). 12 glaciogenic flares and 1 hygroscopic flare were burned within 2 clouds. This is the 2nd day for seeding in March and the 2nd day for seeding during the season.

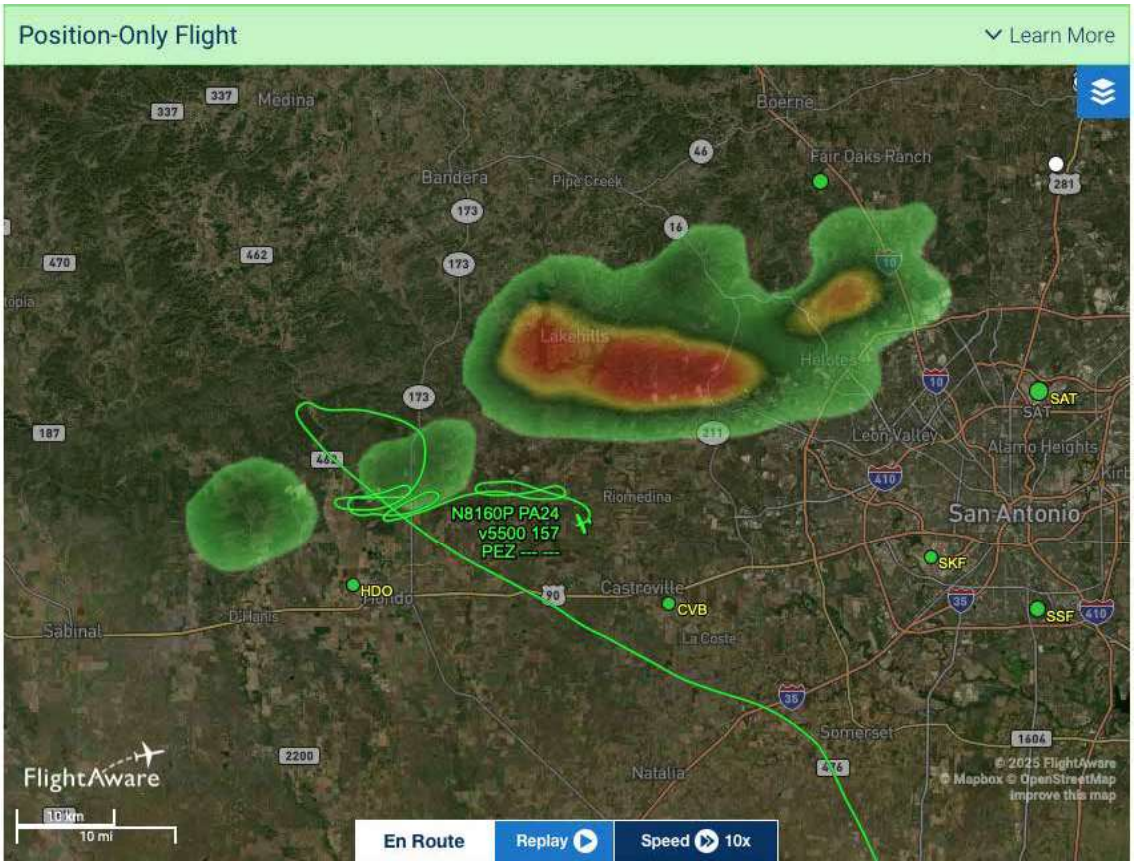
** Note- 1 glaciogenic flare = 5.5 grams AgI and 1 hygroscopic flare = 500 grams NaCl **

First flight, Kenedy to Pleasanton to get into position for storms expected in Medina County.

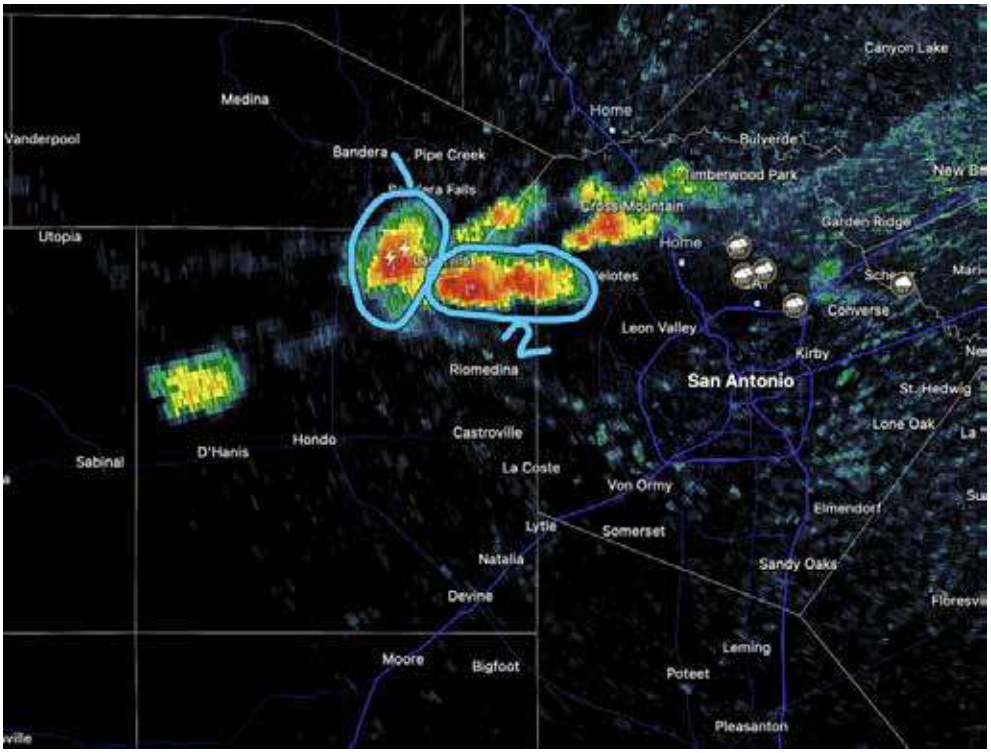


Second flight (seeding flight) Pleasanton (take off) Kennedy (landing).

Cloud 1 being seeded in northern Medina County.



Cloud 3 being seeded. (note:cloud 2 was not seeded see discussion above)



Cells 1 and 2. Eventually became one large cell.

Cell 3, WSW of Cell 1

South Texas Weather Modification Association – Pleasanton, Texas
Seeding Report – April 30, 2025

Synoptic/Mesoscale Conditions:
A lone supercell has formed in a warm, moist, and largely uncapped environment over South Texas. Due to limited large-scale forcing, storm development is expected to stay fairly isolated. Still, with MLCAPE values near 3000 J/kg and a straight, elongated wind profile as shown by the EWX VWP, conditions remain favorable for one or two sustained supercells. These storms could produce large hail and localized damaging winds. This potential should continue for the next couple of hours until surface cooling leads to a more stable boundary layer.
Lifting Mechanism: Dryline
Thermodynamic Indices -12Z KDRT Sounding

Freezing Level (m)	4287	-15°C Height (m)	6380
Precipitable Water (inches)	1.29	CAPE (J/Kg)	1428
LCL (m)	842	CINH (J/Kg)	312
CCL (m)	1092	LI(°C)	-4.5
DRT ICA	-2.02	PB	4
Cloud Base (meters)	1875	CRP ICA	-
Warm Cloud Depth (meters)	2412	Cloud Base Temp (°C)	19.4

Discussion:
Visible satellite denoted cumulus development on Frio/Atascosa County line area. Pilot notified at 2130Z to head to the airport. Pilot launched at 2216Z and headed west towards Pleasanton. However, the cell became severe warned by the National Weather Service. Pilot then headed south to north/northwest McMullen County where more cumulus were visible on satellite. Upon arrival the cell became visible on radar. Pilot then found good inflow and burned 2 glaciogenic flares into cell 534. Pilot then burned 2 glaciogenic and 1 hygroscopic flare into cell 534. Cell now on southern Atascosa/northern McMullen border. Pilot now heading south of the storm. Upon arrival cells were all within a severe thunderstorm warning. Pilot RTB 2355Z.

Watches/Warnings: Severe Thunderstorm Warnings Bexar, Atascosa, Wilson, Karnes Counties.
Seeded Cell ID's:

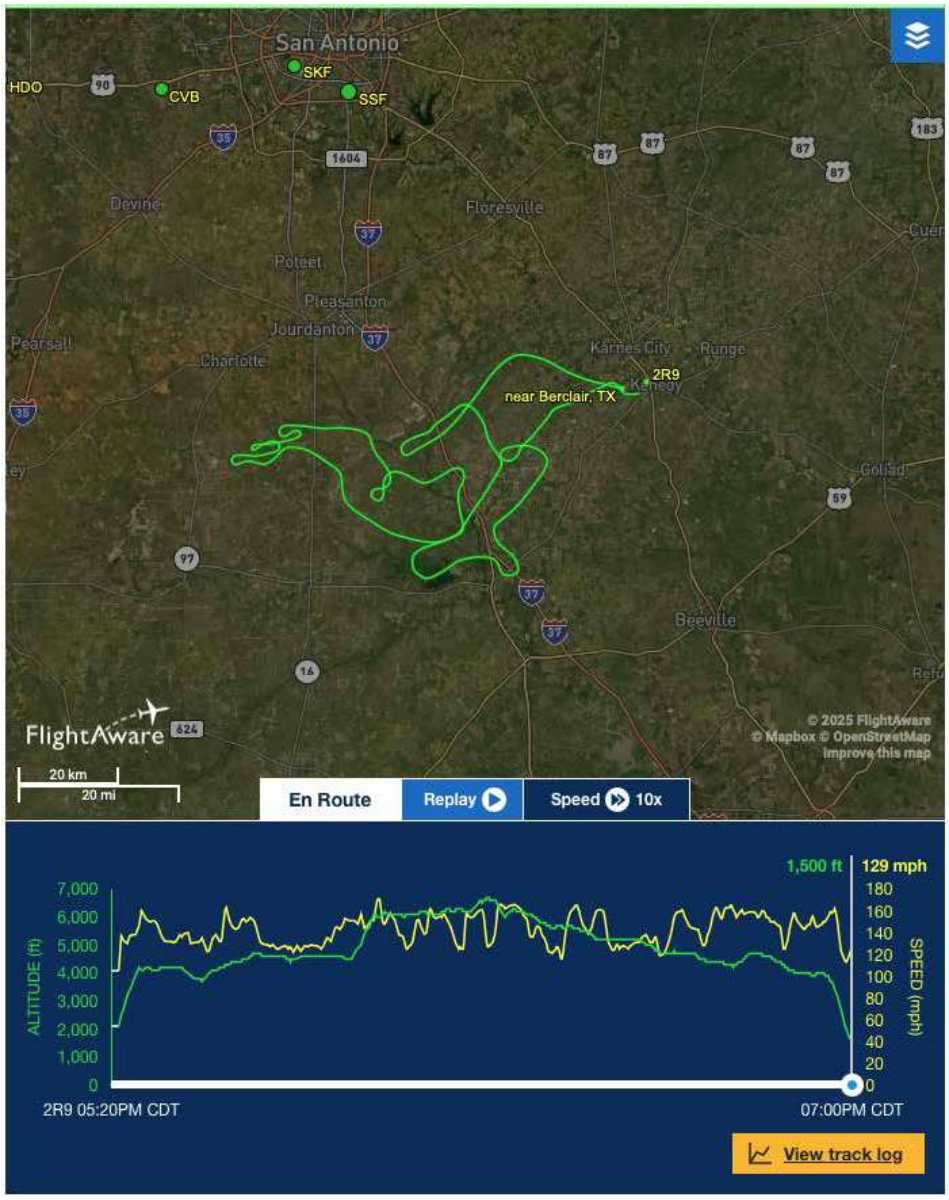
534										

Flight Information:

TIME (Z)	Plane	Flare Location	County
2220	60P	In Air	
2300	60P	172x23	McMullen
2312	60P	178x19	McMullen
2355	60P	RTB	

Seeding operations were conducted over McMullen County (3G+1H). 3 glaciogenic flares and 1 hygroscopic flare were burned within 1 cloud. This is the 1st day for seeding in April and the 3rd day for seeding during the season.

** Note- 1 glaciogenic flare = 5.5 grams AgI and 1 hygroscopic flare = 500 grams NaCl **



Flight 1 60P

South Texas Weather Modification Association – Pleasanton, Texas
Seeding Report – May 2, 2025

Synoptic/Mesoscale Conditions:
Northern/eastern zone Bexar, Wilson, Karnes Counties: Numerous strong to severe storms are ongoing or forming across central and southern Texas. Some are developing along a southward-moving cold front, while others are forming along a lingering outflow boundary from earlier activity. The most immediate severe risk, including potential for a tornado or hail over 2 inches in diameter, is focused on the supercells tracking along the outflow boundary. VAD wind profiles near Houston indicate favorable shear for storm organization. The threat is expected to continue for the next several hours across this region.

Northern/Western Zone Uvalde, Bandera Counties: A southward-moving outflow boundary, along with a secondary boundary approaching from the Stockton Plateau, is helping to destabilize the atmosphere across the region. Surface dewpoints in the upper 60s and steep mid-level lapse rates are contributing to MLCAPE values around 3000 J/kg. Meanwhile, strong upper-level westerly winds tied to a subtropical jet are enhancing deep-layer shear, with effective shear values reaching 40–50 knots. These conditions are favorable for supercell development this afternoon, with threats including severe hail, damaging winds, and the potential for a tornado. Hail over 2 inches in diameter is also possible.

Lifting Mechanism: Cold front/outflow boundaries
Thermodynamic Indices -12Z KDRT Sounding

Freezing Level (m)	4326	-15°C Height (m)	6120
Precipitable Water (inches)	1.20	CAPE (J/Kg)	601
LCL (m)	834	CINH (J/Kg)	312
CCL (m)	1843	LI(°C)	-3.45
DRT ICA	0.93	PB	3.1
Cloud Base (meters)	1006	CRP ICA	-
Warm Cloud Depth (meters)	3320	Cloud Base Temp (°C)	22

Discussion:
Pilot headed for Pleasanton and that will be the first the target. Unfortunately the cell died upon arrival. Pilot then went to Floresville where a cumuls cloud was spoted however couldnt find good inflows and reported very bumpy conditions. Pilot RTB to Pleasanton so we could reassess the situation. Pilot in air again at heading to northern Bandera County where the cold front has allowed for showers and thunderstorms to form. Upon arrival 6 glaciogenic flares were burned in cell 1204 over Medina County. Pilot reported that it was too bumpy and dangerous to keep seeding. Pilot RTB.

Watches/Warnings:

Seeded Cell ID's:

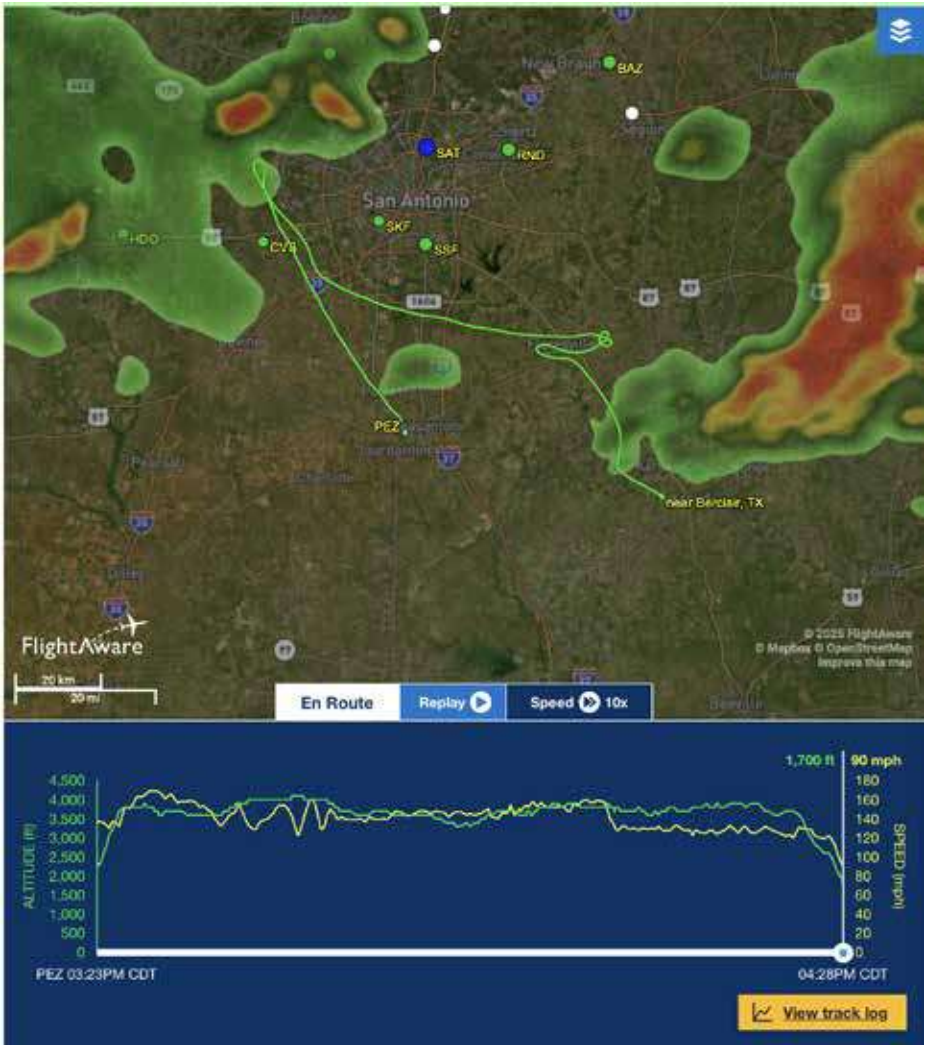
1204										

Flight Information:

TIME (Z)	Plane	Flare Location	County
2023	60P	IN AIR	
2106	60P	RTB	
2308	60P	IN AIR	
2330	60P	308X41	Medina
2344	60P	304X35	Medina
2350	60P	RTB	

Seeding operations were conducted over Medina County (5G+0H). 5 glaciogenic flares and 0 hygroscopic flares were burned within 1 cloud. This is the 1st day for seeding in May and the 4th day for seeding during the season.

** Note- 1 glaciogenic flare = 5.5 grams AgI and 1 hygroscopic flare = 500 grams NaCl **



Flight1/2: 60P

South Texas Weather Modification Association – Pleasanton, Texas
Seeding Report – May 6, 2025

Synoptic/Mesoscale Conditions:

Radar and satellite data are indicating the development of numerous thunderstorms and towering convection along a southeastward-moving cold front and outflow boundary over the Texas Coastal Plains. The surrounding environment is highly supportive of organized storm development, with mixed-layer CAPE values near 4000 J/kg and around 60 knots of effective bulk shear, according to the 00 UTC CRP sounding. These conditions are conducive to robust updrafts capable of producing large to very large hail, potentially in the 2 to 3.5 inch range. While storm coverage may be somewhat limited farther southwest due to stronger atmospheric capping, the reduced competition for instability in those areas could favor isolated, long-lived supercells. Echo tops on radar have been steadily increasing, now reaching 40,000 to 50,000 feet, which supports the likelihood of continued intensification.

Lifting Mechanism: Cold front/outflow boundaries

Thermodynamic Indices -12Z KDRT Sounding

Freezing Level (m)	4231	-15°C Height (m)	6140
Precipitable Water (inches)	1.35	CAPE (J/Kg)	2825
LCL (m)	526	CINH (J/Kg)	0.09
CCL (m)	865	LI(°C)	-8.67
DRT ICA	3.56	PB	8.7
Cloud Base (meters)	1036	CRP ICA	-
Warm Cloud Depth (meters)	3195	Cloud Base Temp (°C)	26.6

Discussion:

Pilot headed for cells developing along the boundary over Karnes and Bee Counties. Upon arrival, pilot reported haze and inflows around 400 ft. Pilot burned a total of seven glaciogenic flares into cell 1143 over Karnes County. Also reported turbulence. Cant go south ahead of the storms because the line is too long. Pilot wouldn't make it back home so having to say behind the line. Pilot reported too much turbulence over Bee County so pilot RTB.

Watches/Warnings:None

Seeded Cell ID's:

1143										

Flight Information:

TIME (Z)	Plane	Flare Location	County
0013	60P	IN AIR	
0030	60P	106x34	Karnes
0032	60P	106x34	Karnes
0100	60P	RTB	

Seeding operations were conducted over Karnes County (7G+0H). 7 glaciogenic flares and 0 hygroscopic flares were burned within 1 cloud. This is the 2nd day for seeding in May and the 5th day for seeding during the season.

** Note- 1 glaciogenic flare = 5.5 grams AgI and 1 hygroscopic flare = 500 grams NaCl **

Flight 1: 60P

South Texas Weather Modification Association – Pleasanton, Texas
Seeding Report – May 8, 2025

Synoptic/Mesoscale Conditions:
Thunderstorms have been active this afternoon across northern Mexico and parts of far western Texas. The storms in west Texas have been gradually pushing south and east toward the Rio Grande, while activity in Mexico is also beginning to shift eastward into Texas. This trend suggests that storms will likely cross the Rio Grande and impact areas of south-central Texas and the Brush Country later today.
The atmosphere in this region is highly unstable and moisture-rich, with mixed-layer CAPE values between 1000 and 2000 J/kg. Deep-layer shear in the 40–50 kt range will help sustain organized convection, including supercells capable of producing large to very large hail—up to 2 to 2.5 inches in diameter—as well as strong wind gusts.

Lifting Mechanism:
Thermodynamic Indices -12Z KDRT Sounding

Freezing Level (m)	4201	-15°C Height (m)	6100
Precipitable Water (inches)	1.24	CAPE (J/Kg)	1002
LCL (m)	950	CINH (J/Kg)	8.91
CCL (m)	1190	LI(°C)	-5.40
DRT ICA	1.68	PB	4.7
Cloud Base (meters)	1354	CRP ICA	-
Warm Cloud Depth (meters)	2847	Cloud Base Temp (°C)	17.8

Discussion:
A long line of showers and a few embedded thunderstorms have developed along an east west line from Uvalde to Falls City. Pilot launched just after 19Z/2PM and headed west towards the line of storms staying north of the line. Upon arrival in northern Atascosa County the pilot reported lightning. Pilot then found sufficient inflow and burned 6 glaciogenic flares within cell 1101 over Atascosa County. Pilot then headed east to Falls City. Upon arrival the cell died so pilot then headed back into Atascosa County south of Jourdanton to a new area of development. Upon arrival the pilot burned glaciogenic and hygroscopic flares within 3 clouds. Pilot now RTB due to mechanical issues.

Watches/Warnings: Severe Thunderstorm Watch Uvalde and Frio Counties.

Seeded Cell ID's:

1101	1235	1273	1292	1428						

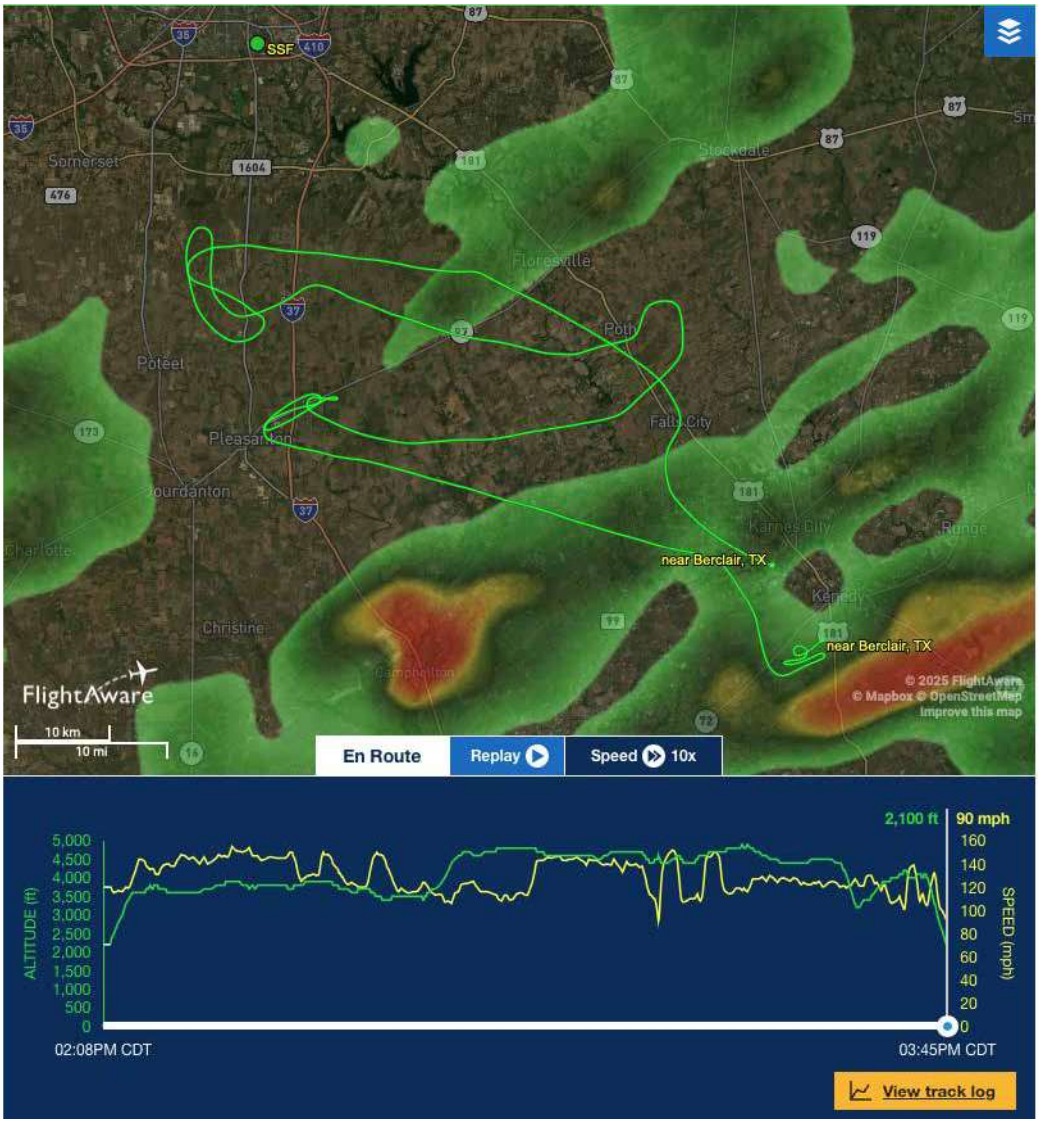
Flight Information:

TIME (Z)	Plane	Flare Location	County
1908	60P	IN AIR	
1937	60P	328X005	Atascosa
1945	60P	357X14	Atascosa

2011	60P	154X005	Atascosa
2012	60P	165X006	Atascosa
2018	60P	165X006	Atascosa
2040	60P	106X39	Karnes
2042	60P	106X39	Karnes
2045	60P	RTB	

Seeding operations were conducted over Atascosa (12G+1H) and Karnes County (4G+0H). 16 glaciogenic flares and 1 hygroscopic flare were burned within 5 clouds. This is the 3rd day for seeding in May and the 6th day for seeding during the season.

** Note- 1 glaciogenic flare = 5.5 grams AgI and 1 hygroscopic flare = 500 grams NaCl **



Flight 1: 60P

South Texas Weather Modification Association – Pleasanton, Texas
Seeding Report – May 10, 2025

Synoptic/Mesoscale Conditions:
A stationary upper-level low over Louisiana is helping to trigger scattered showers and thunderstorms across the region. Activity is expected to be widespread across the target area initially forming north and then moving south. Showers and storms will gradually diminish around sunset with the loss of diurnal heating.

Lifting Mechanism: Upper level low/Diurnal Heating
Thermodynamic Indices -12Z KDRT Sounding

Freezing Level (m)	3099	-15°C Height (m)	6100
Precipitable Water (inches)	0.94	CAPE (J/Kg)	47
LCL (m)	878	CINH (J/Kg)	95
CCL (m)	2217	LI(°C)	3.06
DRT ICA	8.12	PB	3.5
Cloud Base (meters)	2124	CRP ICA	-
Warm Cloud Depth (meters)	975	Cloud Base Temp (°C)	8.9

Discussion:
Isolated showers and a few thunderstorms have formed as of 1730Z mainly across Medina, Uvalde and Bandera Counties. The pilot launched just before 18Z and headed west. Upon arrival the pilot reported that the cells looked pretty embedded but that there was a good amount of vertical development. Upon arrival the pilot reported decent inflows and burned 4 glaciogenic into cell 52 over Frio County. Pilot then went north to a cell near Castroville. Upon arrival the pilot reported very good inflows and burned 2 glaciogenic and 1 hygroscopic flares within cell 97. Pilot then seeded cell 84 on Bexar County/Medina County line and burned 2 glaciogenic flares Pilot now headed west towards a cell nearing D'Hanis. Previous cells looked to respond well to seeding with increased reflectivities, new updraft areas with precip south of Castroville in SW Medina County. Upon arrival pilot reported well over 1000 ft/min inflow and burned 11 glaciogenic and 1 hygroscopic flare into cell 117. Similar to the cell near/over Castroville, additional updrafts and clouds with precip formed around the initial target cell 117. Pilot also reported he was just power and fully idle getting 500 fpm on his VSI so it was close to about 1400 ft/min. Pilot now headed west to a cell east of Uvalde and over Uvalde. Upon arrival pilot burned both glaciogenic and hygroscopic flares into cells 88 and 159. Pilot now headed back east towards Floresville where cells have formed just north in SE Bexar County. Upon arrival pilot found great inflow and used both glaciogenic and hygroscopic flares within cell 192. Pilot now heading just NNW of cell 192 to cell 211 just south of Stockdale over Wilson County. Pilot reported a very dark base to the cloud upon arrival with good inflows. Here cell 211 was seeded with glaciogenic flares (out of hygros). Pilot then RTB to re-fuel and re-flare. No other cells for the day by the time of second launch. This concludes operations for the day.

Watches/Warnings: None

Seeded Cell ID's:

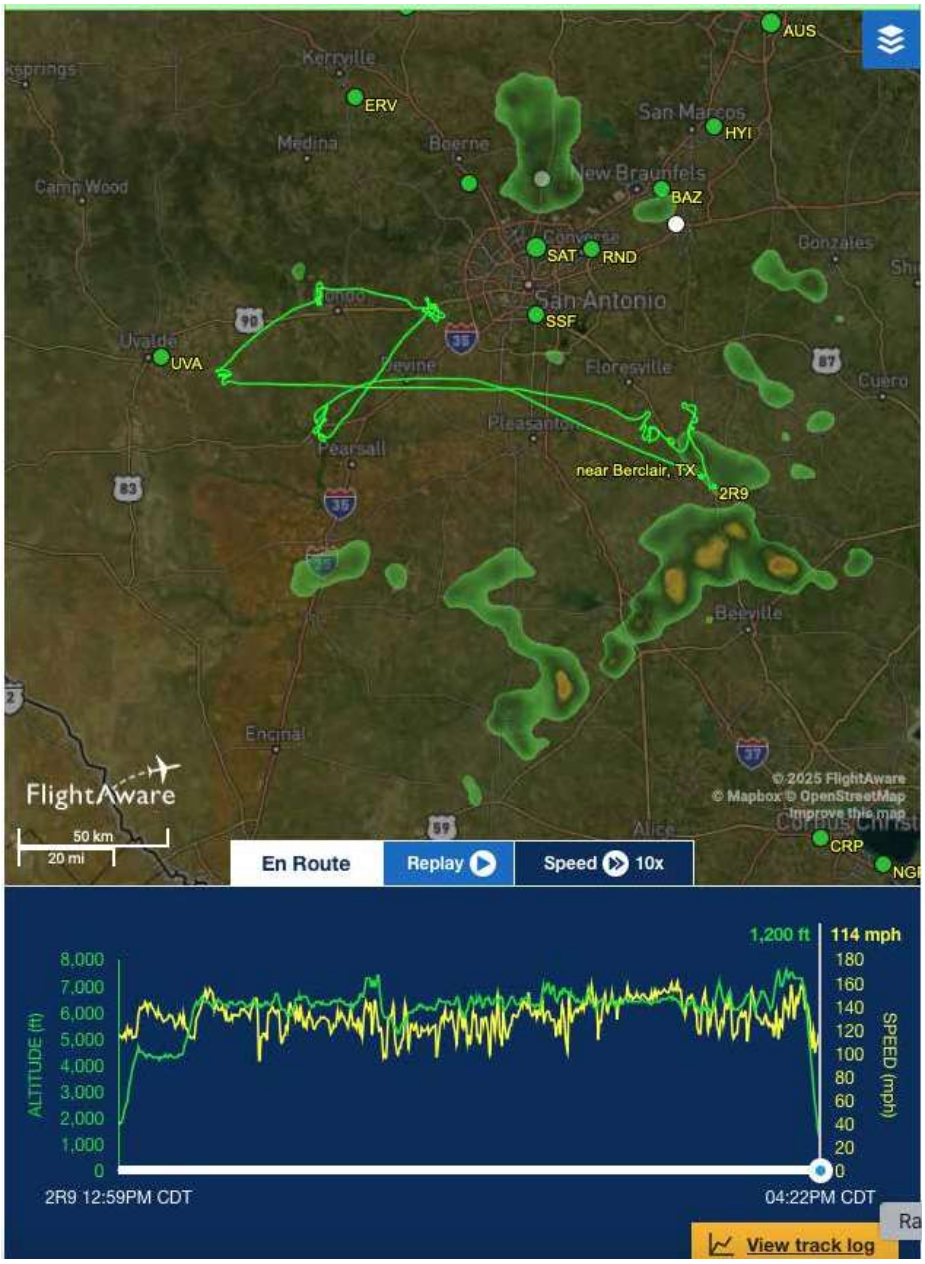
77	97	84	117	88	159	192	211			

Flight Information:

TIME (Z)	Plane	Flare Location	County
1759	60P	In Air	
1844	60P	270X35	Frio
1847	60P	260X33	Frio
1912	60P	314X32	Medina
1916	60P	314X32	Medina
1927	60P	315X32	Bexar
1938	60P	293X45	Medina
1942	60P	293X45	Medina
1944	60P	293X45	Medina
1945	60P	293X45	Medina
1946	60P	293X45	Medina
2000	60P	276X60	Uvalde
2002	60P	276X60	Uvalde
2004	60P	276X60	Uvalde
2052	60P	60X21	Wilson
2100	60P	81X22	Wilson
2110	60P	67X28	Wilson
2112	60P	67X28	Wilson
2113	60P	67X28	Wilson
2120	60P	RTB	

Seeding operations were conducted over Frio County (4G+0H), Medina County (12G+2H), Bexar County (2G+0H), Uvalde County (6G+1H) and Wilson County (13G+1H). 35 glaciogenic flares and 4 hygroscopic flares were burned within cloud. This is the 2nd day for seeding in May and the 5th day for seeding during the season.

** Note- 1 glaciogenic flare = 5.5 grams AgI and 1 hygroscopic flare = 500 grams NaCl **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© Mapbox © OpenStreetMap
Improve this map
En Route
Replay
Speed 10x
1,200 ft
114 mph
ALTITUDE (ft)
SPEED (mph)
8,000
7,000
6,000
5,000
4,000
3,000
2,000
1,000
0
180
160
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2R9 12:59PM CDT
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View track log

Flight 1: 60P

South Texas Weather Modification Association – Pleasanton, Texas
Seeding Report – June 15, 2025

Synoptic/Mesoscale Conditions:
A subtropical ridge centered from New Mexico into northern Mexico, combined with a trough situated off the Texas coast, continues to support a moist southeasterly low-level flow from the Gulf. Daytime heating and the seabreeze will help initiate isolated to scattered thunderstorms, beginning over the Coastal Plains this morning and spreading toward the I-35 corridor through the afternoon. Additional lift may come from an outflow boundary tied to earlier storms in Oklahoma and ongoing convection in northern Texas. High-resolution model guidance suggests this boundary could drift southward into the region later today into the evening, aided by favorable northerly flow aloft. This could trigger storms across areas including the Hill Country, I-35 corridor, and Coastal Plains. Forecast soundings show high instability, though mid-level lapse rates and low-level wind shear remain somewhat limited. As a result, a few storms may become strong, with gusty winds being the main concern. Still, a severe storm or two cannot be ruled out. With elevated moisture values nearly 150% of normal localized heavy rainfall is also possible.

Lifting Mechanism: Diurnal Heating
Thermodynamic Indices -12Z KDRT Sounding

Freezing Level (m)	5180	-15°C Height (m)	7200
Precipitable Water (inches)	1.57	CAPE (J/Kg)	2248
LCL (m)	658	CINH (J/Kg)	1.06
CCL (m)	1004	LI(°C)	-5.31
DRT ICA	-4.82	PB	4.7
Cloud Base (meters)	1347	CRP ICA	-
Warm Cloud Depth (meters)	2833	Cloud Base Temp (°C)	25

Discussion:
Streamer showers formed over the coastal plains this afternoon. A larget cell formed over Bee County around 18Z. Pilot launched and headed southward to Bee County. Upon arrival, the pilot reported lightning and was able to seed cell 277. Pilot then headed a little further north to stick with the storm near Kenedy and seeded cell 277 again. Pilot then RTB. A band of showers and thunderstorms is tracking south across central Texas this afternoon, with surface reports indicating scattered wind gusts between 40 and 50 mph, and isolated higher gusts approaching 55 mph. A very distinct outflow boundary was visible on radar and satellite along this line of storms. This activity entered the northern portions of the target area along an east to west line. Additional cells began to form over Frio County. Pilot launched and headed west to Frio County. Upon arrival the pilot reported good inflows and seeded cell 1142 and cell 1155. Pilot then went east and seeded cell 1205 in Atascosa County. Pilot reported that clouds to the north near Wilson County were below 2000 ft so pilot RTB and to beat the strong outflow boundary.

Watches/Warnings: None
Seeded Cell ID's:

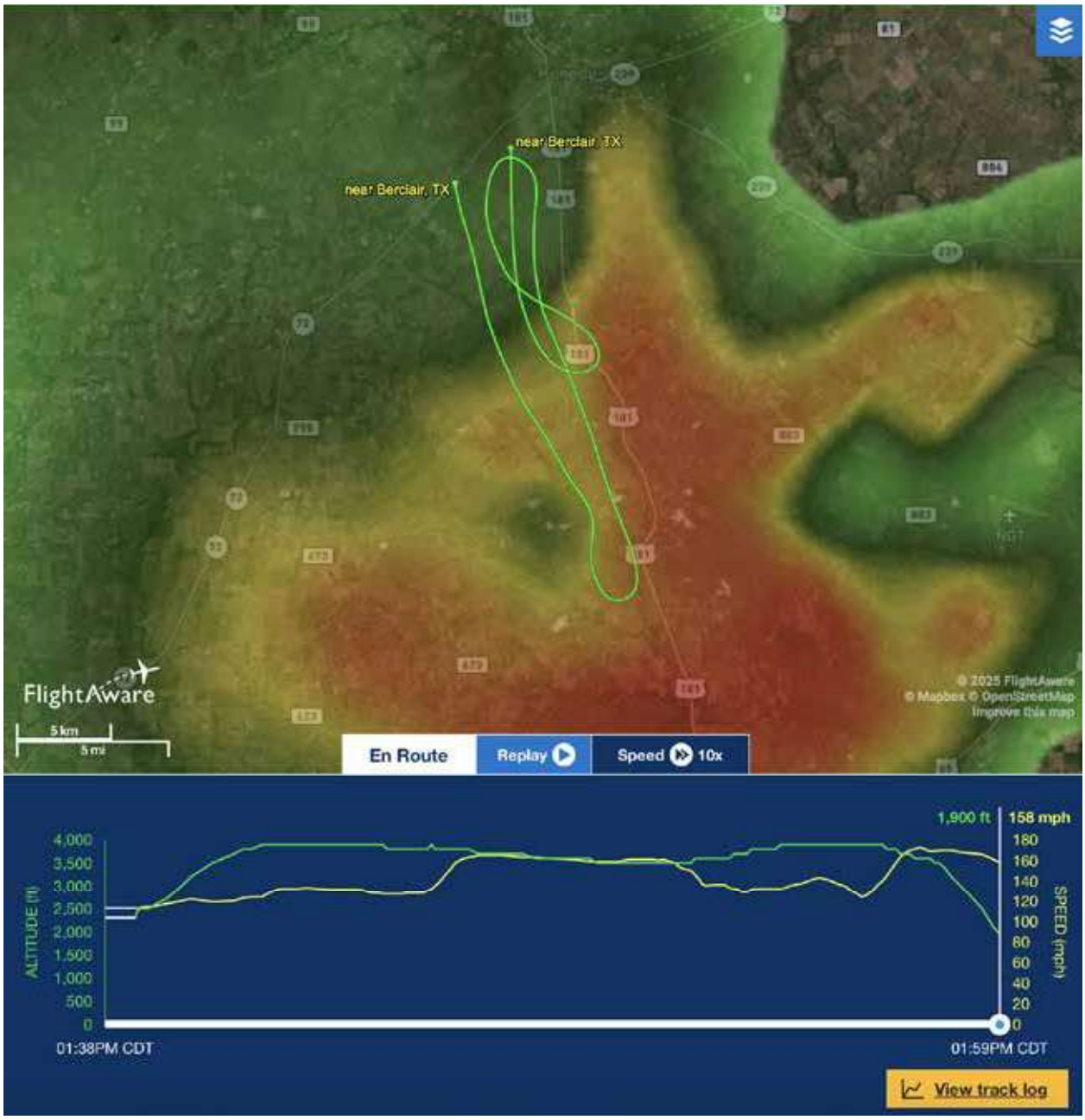
277	1142	1155	1205							

Flight Information:

TIME (Z)	Plane	Flare Location	County
1838	60P	In Air	
1847	60P	180x008	Bee
1855	60P	203X005	Karnes
1857	60P	RTB	
	60P		
2203	60P	In Air	
2225	60P	265X48	Frio
2231	60P	268X56	Frio
2246	60P	265X33	Atascosa
2258	60P	RTB	

Seeding operations were conducted over Bee (3G+0H), Karnes (3G+0H), Frio (6G+1H) and Atascosa (2G+0H) Counties. 14 glaciogenic flares and 1 hygroscopic flare were burned within 4 clouds. This is the 1st day for seeding in June and the 9th day for seeding during the season.

** Note- 1 glaciogenic flare = 5.5 grams AgI and 1 hygroscopic flare = 500 grams NaCl **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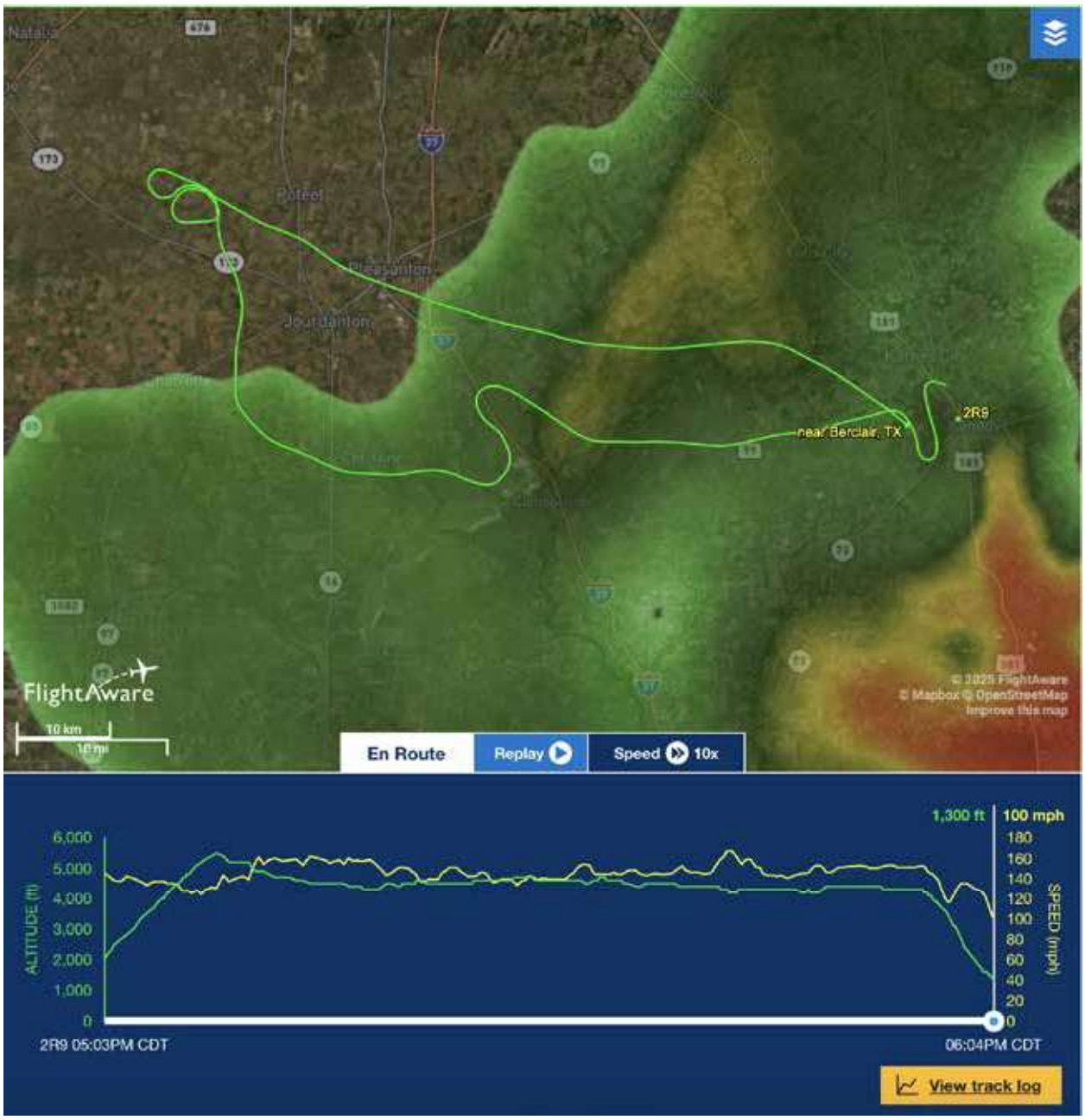
View track log

Flight 1: 60P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© 2025 FlightAware
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2R9 05:03PM CDT
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View track log

Flight 2: 60P

South Texas Weather Modification Association – Pleasanton, Texas
Seeding Report – June 21, 2025

Synoptic/Mesoscale Conditions:
A few isolated showers are pushing inland from the middle Texas coast into the coastal plains early this morning. While radar trends indicate a gradual weakening. Later today, drier air is expected to move into the upper Texas coast, though slightly deeper moisture will advance westward. With this setup, scattered afternoon and early evening showers or storms are possible along and just south of a line from Cuero to San Antonio to near Del Rio.

Southeasterly winds continue to sustain warm and humid conditions across the region. The greatest moisture, indicated by higher precipitable water values, is concentrated over the western half of the area, while slightly drier air to the east. This moisture distribution aligns with where isolated to widely scattered showers and thunderstorms have developed, with additional activity expected to continue through the evening. Storms should remain below severe limits.

Lifting Mechanism: Diurnal Heating
Thermodynamic Indices -12Z KDRT Sounding

Freezing Level (m)	4964	-15°C Height (m)	7400
Precipitable Water (inches)	1.65	CAPE (J/Kg)	120
LCL (m)	786	CINH (J/Kg)	309
CCL (m)	2039	LI(°C)	-0.82
DRT ICA	-6.28	PB	1
Cloud Base (meters)	1335	CRP ICA	-
Warm Cloud Depth (meters)	3629	Cloud Base Temp (°C)	26.7

Discussion:
49P in the air and headed south from SJT to Hondo. Upon arrival at cell 359, the pilot was able to burn both glaciogenic and hygroscopic flares into the cell (lightning visible on radar). Cell then drifted into western half of Medina County. Pilot then headed south to Atascosa County, south of Pleasanton. Upon arrival the pilot seeded cell 501 with both glaciogenic and hygroscopic flares. Cell continued into Bexar County and maybe into Kendall County as well. The pilot now headed back west to refuel. Pilot in air again for a second round of operations/ First, pilot headed south to cell 740 and dual seeded again. Further east, another cell developed and the pilot was able to seed with glaciogenic. The final cell was very large, over Atascosa County and the pilot was able to seed with glaciogenic flares. Pilot then RTB.

Watches/Warnings: None
Seeded Cell ID's:

359	501	740	787	834						

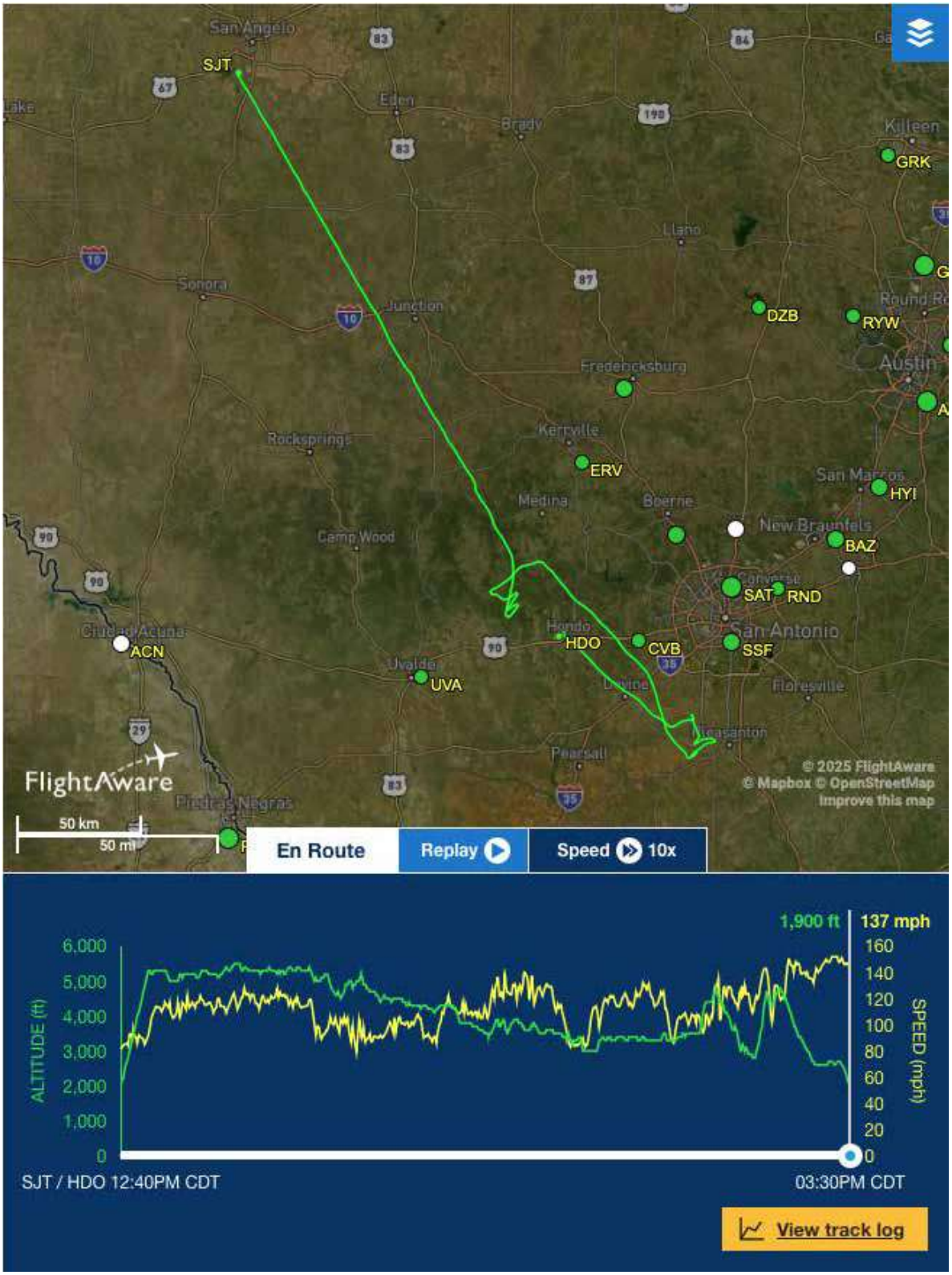
Flight Information:

TIME (Z)	Plane	Flare Location	County
1740	49P	In Air	

1907	49P	303X62	Medina
1908	49P	303X62	Medina
1910	49P	303X62	Medina
1911	49P	303X62	Medina
1911	49P	303X62	Medina
1913	49P	303X62	Medina
1958	49P	248X11	Atascosa
1959	49P	248X11	Atascosa
2003	49P	248X11	Atascosa
2010	49P	248X11	Atascosa
2013	49P	248X11	Atascosa
2016	49P	RTB	
2203	49P	In Air	
2213	49P	280X45	Medina
2214	49P	280X45	Medina
2214	49P	280X45	Medina
2216	49P	280X45	Medina
2217	49P	280X45	Medina
2229	49P	303X37	Medina
2230	49P	303X37	Medina
2231	49P	303X37	Medina
2245	49P	307X20	Atascosa
2246	49P	307X20	Atascosa
2249	49P	307X20	Atascosa
2250	49P	307X20	Atascosa
2250	49P	307X20	Atascosa
2255	49P	RTB	

Seeding operations were conducted over Medina (25G+3H) and Atascosa (19G+1H) Counties. 44 glaciogenic flares and 4 hygroscopic flares were burned within 5 clouds. This is the 2nd day for seeding in June and the day for seeding during the season.

** Note- 1 glaciogenic flare = 5.5 grams AgI and 1 hygroscopic flare = 500 grams NaCl **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Brady
Killeen
GRK
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Sonora
Junction
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Austin
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Rocksprings
Kerrville
ERV
San Marcos
HYI
Medina
Boerne
New Braunfels
BAZ
Camp Wood
SAT
RND
San Antonio
Hondo
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Improve this map
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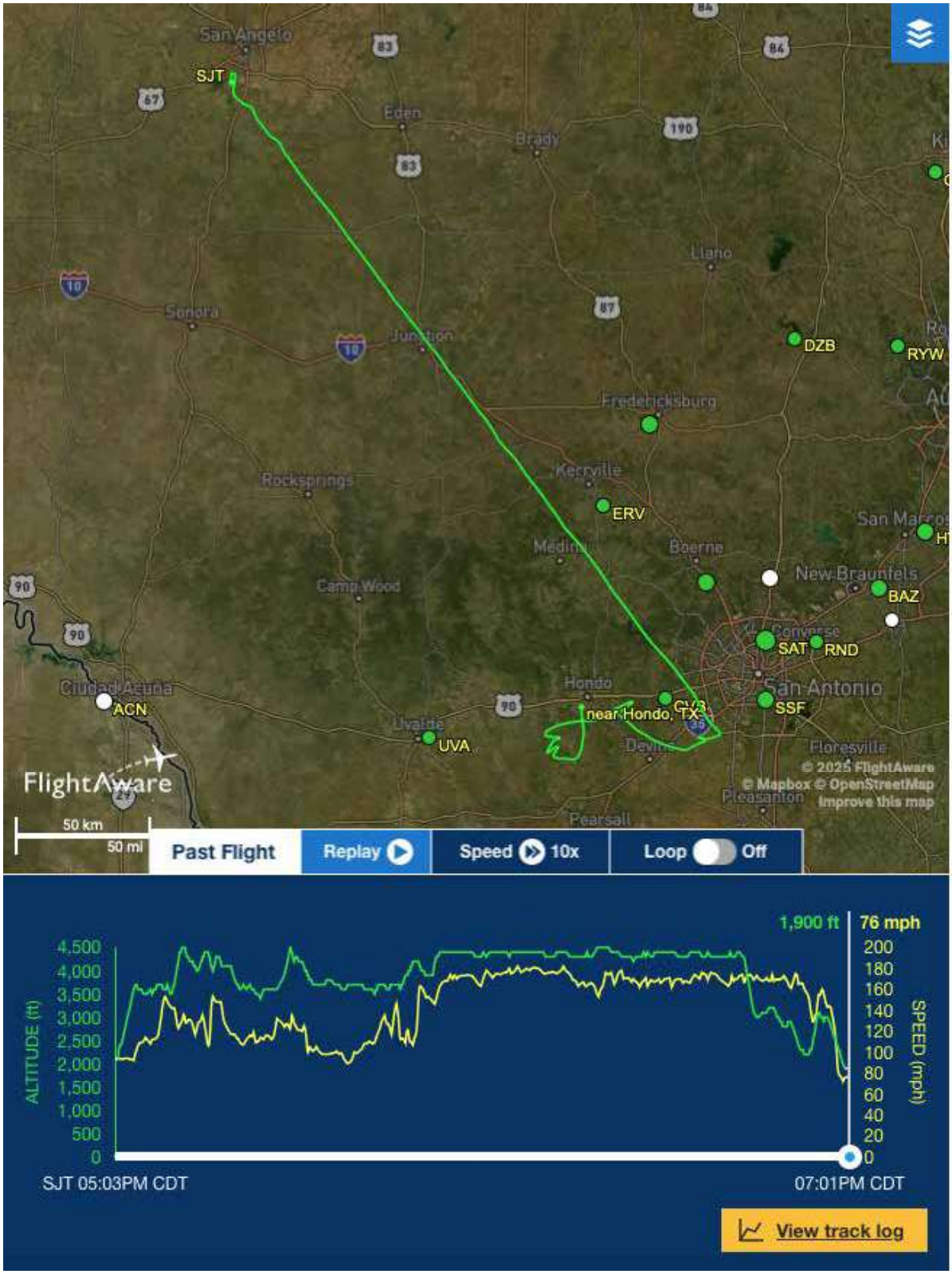
Flight 1:49P


San Angelo
SJT
Eden
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ERV
Rocksprings
Medina
Boerne
New Braunfels
BAZ
Camp Wood
Converse
SAT
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San Antonio
SSF
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near Hondo, TX
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Uvalde
UVA
Devine
Floresville
Pleasanton
Pearsall
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© 2025 FlightAware
© Mapbox © OpenStreetMap
Improve this map
50 km
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Past Flight
Replay
Speed 10x
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1,900 ft
76 mph
ALTITUDE (ft)
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SJT 05:03PM CDT
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View track log

Flight 2: 49P

South Texas Weather Modification Association – Pleasanton, Texas
Seeding Report – June 29, 2025

Synoptic/Mesoscale Conditions:
A loop of GOES-East total precipitable water imagery shows a surge of deeper moisture, around 2 inches, reaching the Coastal Plains. Forecast models suggest this moisture will continue pushing inland through the afternoon and evening, spreading into the inland Coastal Plains, Brush Country, and areas near San Antonio. In response, widely scattered showers and a few isolated thunderstorms have begun forming along the coast and are expected to move farther inland. Rain activity should gradually taper off around sunset and into the evening.

Lifting Mechanism: Diurnal Heating, sea breeze
Thermodynamic Indices -12Z KDRT Sounding

Freezing Level (m)	5008	-15°C Height (m)	7300
Precipitable Water (inches)	1.53	CAPE (J/Kg)	662
LCL (m)	888	CINH (J/Kg)	194
CCL (m)	1746	LI(°C)	-2.94
DRT ICA	-5.96	PB	2
Cloud Base (meters)	1506	CRP ICA	-
Warm Cloud Depth (meters)	3502	Cloud Base Temp (°C)	28.3

Discussion:
Showers and thunderstorms formed along the seabreeze boundary during the late morning and into the afternoon hours. Pilot launched and headed towards the line of cells. Upon arrival, the pilot reported a long/large shelf cloud and the focus was to work the line of cells from north to south. Pilot reported very good inflows, generally over 500 ft/min. Pilot was able to seed three large clouds along the boundary within Medina County. Storms began to enter drier regions as they moved further west. Pilot then RTB.

Watches/Warnings: None
Seeded Cell ID's:

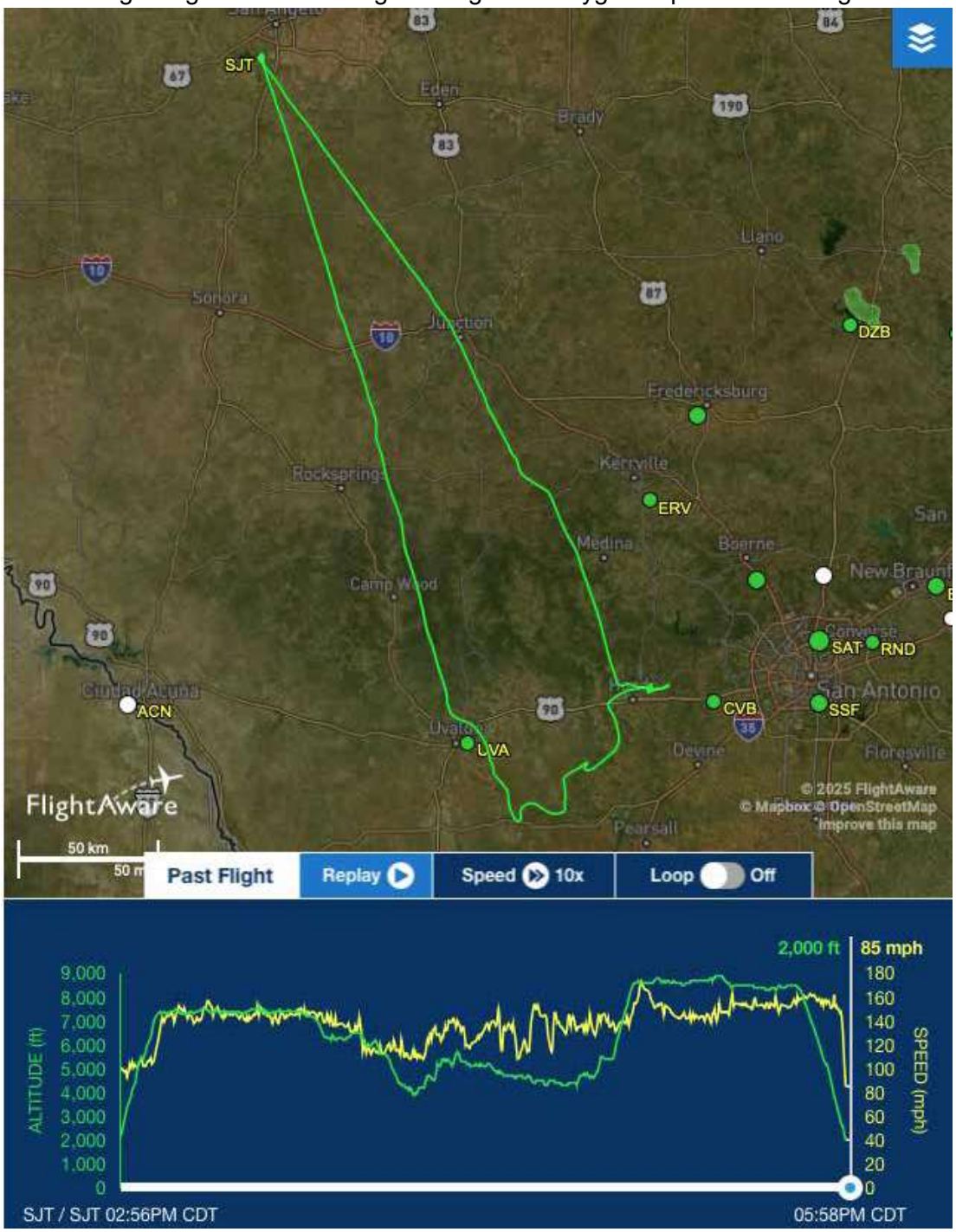
25	24	76								

Flight Information:

TIME (Z)	Plane	Flare Location	County
1956	49P	In Air	
2116	49P	305X40	Medina
2120	49P	300X42	Medina
2124	49P	285X38	Medina
2135	49P	275X47	Medina
2147	49P	279X48	Medina
2155	49P	RTB	

Seeding operations were conducted over Medina (16G+2H) County. 16 glaciogenic flares and 2 hygroscopic flares were burned within 3 clouds. This is the day for seeding in June and the day for seeding during the season.

** Note- 1 glaciogenic flare = 5.5 grams AgI and 1 hygroscopic flare = 500 grams NaCl **



Flight1:49P

South Texas Weather Modification Association – Pleasanton, Texas
Seeding Report – June 30, 2025

Synoptic/Mesoscale Conditions:
A broad subtropical ridge remains in place over eastern Texas today, while an upper-level trough continues to develop over northern Mexico and western Texas. This configuration keeps a moist air mass across much of the region, supporting low-end chances for scattered showers and thunderstorms.

Radar shows showers and a few isolated thunderstorms becoming more widespread across South Texas. This activity is expected to move into our area later this afternoon and evening, mainly affecting locations south and west of the I-10 corridor. With high moisture levels in place, precipitable water values nearing 2 inches, there's potential for locally heavy rain today. The remnants of what was once Tropical Depression Barry have now moved inland over northern Mexico, and tropical moisture is spreading northward into South Texas. With high pressure now centered to our east, mid- and upper-level winds from the southeast are helping pull this moisture farther into the region. While a few isolated thunderstorms could pop up, the main concern will be slow-moving, tropical-style downpours capable of producing localized flooding.

Lifting Mechanism: Diurnal Heating, sea breeze
Thermodynamic Indices -12Z KDRT Sounding

Freezing Level (m)	4833	-15°C Height (m)	7600
Precipitable Water (inches)	1.88	CAPE (J/Kg)	491
LCL (m)	732	CINH (J/Kg)	1.26
CCL (m)	1038	LI(°C)	-2.55
DRT ICA	-7.28	PB	2.1
Cloud Base (meters)	1303	CRP ICA	-
Warm Cloud Depth (meters)	3530	Cloud Base Temp (°C)	26.7

Discussion:
Showers and thunderstorms began to develop during the early morning hours near Corpus Christi. As the morning and early afternoon progressed, showers continued to move further inland. Pilot launched and headed south towards the line of storms. Upon arrival, pilot was able to treat cell 1389 and shortly after cell 1659 within Frio County. Pilot then headed east towards Atascosa County. Upon arrival, pilot was able to treat cell 1663 which was a very large cell with multiple flares. The final cell, 1831, was close by within Atascosa County and the pilot was able to treat it as well before RTB.

Watches/Warnings: None
Seeded Cell ID's:

1389	1659	1663	1831							

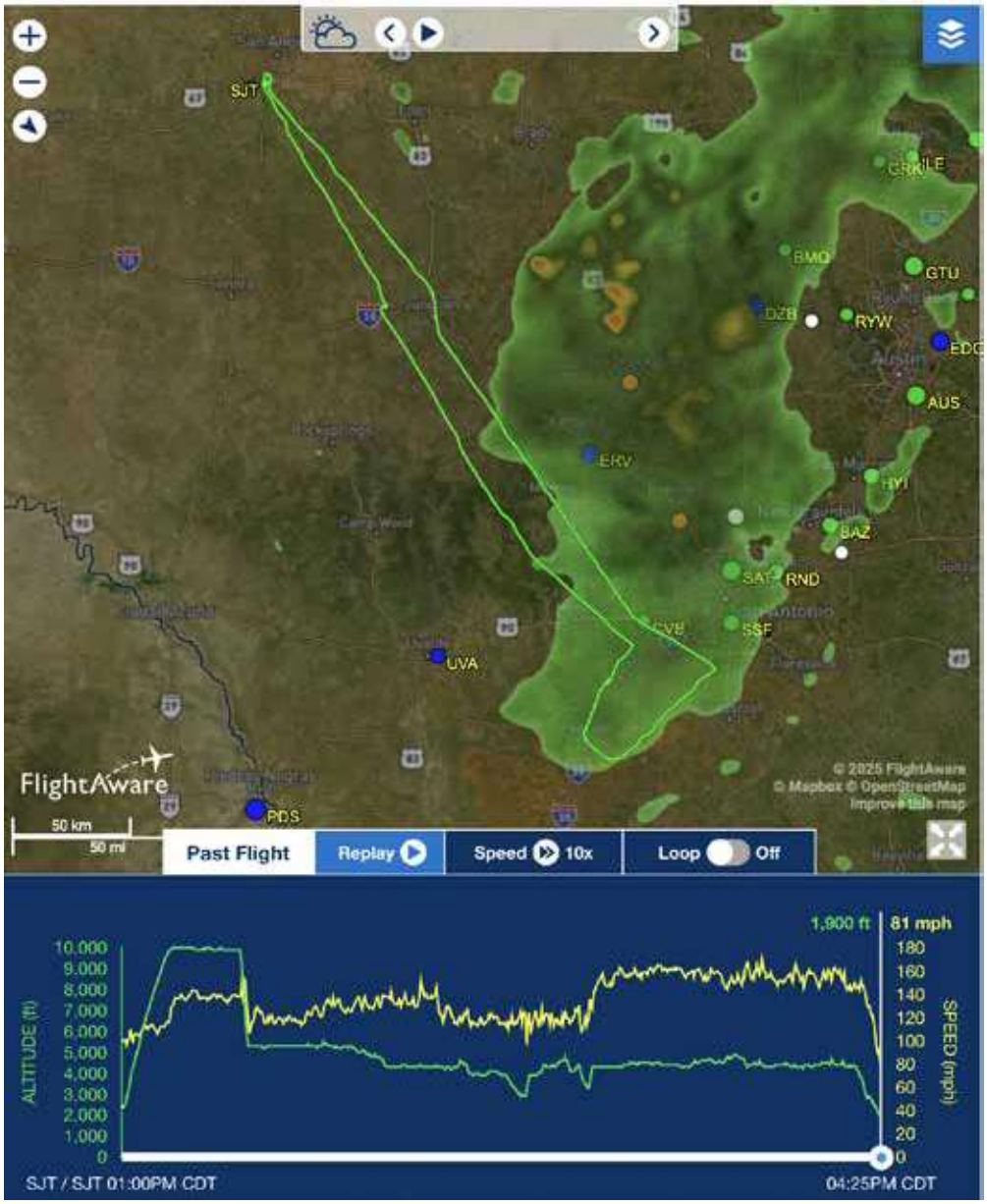
Flight Information:

TIME (Z)	Plane	Flare Location	County
1800	49P	In Air	

1930	49P	284X29	Frio
1949	49P	263X31	Frio
1955	49P	293X13	Atascosa
2001	49P	305X11	Atascosa
2010	49P	RTB	

Seeding operations were conducted over Frio (14G+1H), and Atascosa (16G+2H) Counties. 30 glaciogenic flares and 3 hygroscopic flares were burned within 4 clouds. This is the day for seeding in June and the day for seeding during the season.

** Note- 1 glaciogenic flare = 5.5 grams AgI and 1 hygroscopic flare = 500 grams NaCl **



Flight1:49P

South Texas Weather Modification Association – Pleasanton, Texas
Seeding Report – July 2, 2025

Synoptic/Mesoscale Conditions:

Since the upper-level ridge remains just to our east, a steady southeasterly wind continues to funnel in deep tropical moisture. This setup is similar to what brought widespread downpours to the western part of the region on Tuesday. Recent high-resolution model runs are now showing multiple waves of this moisture moving into the area, some even reaching as far east as the Austin metro and the Coastal Plains. This is a noticeable shift from previous forecasts, suggesting the ridge may be weaker than earlier thought. With precipitable water values rising above 2 inches, any storms that form could drop heavy rainfall in a short period.

Radar continues to indicate scattered showers and a few thunderstorms across the Rio Grande Plains, the southern Edwards Plateau, and parts of the Hill Country. New storm development is also being observed over the Coastal Plains and stretching into parts of the I-35 corridor. We've made slight updates to the forecast to reflect this, expanding low-end rain chances farther east across the rest of the I-35 corridor and much of the Coastal Plains. Moisture levels remain well above normal for this time of year, supporting the potential for additional rainfall. Winds in the lower atmosphere are generally out of the southeast, steering storms toward the northwest at around 30 mph.

Lifting Mechanism:

Thermodynamic Indices -12Z KDRT Sounding

Freezing Level (m)	4965	-15°C Height (m)	7650
Precipitable Water (inches)	2.29	CAPE (J/Kg)	36
LCL (m)	436	CINH (J/Kg)	0.78
CCL (m)	916	LI(°C)	1.40
DRT ICA	-7.82	PB	1.5
Cloud Base (meters)	777	CRP ICA	-
Warm Cloud Depth (meters)	4188	Cloud Base Temp (°C)	26.1

Discussion:

Isolated showers and storms continued into the afternoon across the target area thanks to deep tropical moisture. Visibility very poor out west, however, pilot launched and headed to a large cloud over western Karnes County. Upon arrival pilot found inflow and was able to treat it. This cloud eventually moved into Atascosa County. Pilot then headed to another cloud in eastern Karnes County and treated cell 1408. This cell continued into Wilson County. Pilot blocked in by storms and visibility/ceilings poor for flying to get to Wilson County and elsewhere so pilot RTB.

Watches/Warnings: None

Seeded Cell ID's:

1515	1408									

Flight Information:

TIME (Z)	Plane	Flare Location	County
1801	60P	In Air	
1808	60P	099X32	Karnes
1812	60P	092X40	Karnes
1820	60P	RTB	

Seeding operations were conducted over Karnes (13G+1H) County. 13 glaciogenic flares and 1 hygroscopic flare were burned within 2 clouds. This is the day for seeding in June and the day for seeding during the season.

** Note- 1 glaciogenic flare = 5.5 grams AgI and 1 hygroscopic flare = 500 grams NaCl **

Flight1: 60P