



West Texas Weather Modification Association

Monthly Operations Report

May 2018 Operations Report

The month of May contained 4 days of operations.

Date	Flares	Counties seeded
02	36	Crockett, Reagan, Sterling, Irion
14	14+2H	Irion, Tom Green
15	47+3H	Sterling, Irion
16	31+3H	Sterling, Reagan, Irion
TOTAL		

An inactive spring was ongoing as the we moved into the month of May. However, the dryline began to finally activate by the May 2nd which resulted in the first weather modification operation flight of the year. Storms fired up along the dryline across western sections of the target area where storms were seeded in Sterling, Reagan and Crockett counties before advancing eastward into Irion County. Conditions dried up through the 13th of May but the dryline became active once again on the 14th where strong instability and sufficient moisture advection took place. Storms were seeded on the 14th in Irion and Tom Green Counties which then moved into the city of San Angelo resulting in 2-3” of rainfall across the city. On the 15th, storms fired up again in Sterling and Iron counties and were sufficiently seeded before moving over the city of San Angelo once again. 1-2” was reported across the city with heavy rain totals across Sterling County as well. The dryline remained active again on the 16th with storms developing in Glasscock County and were seeded before moving into Sterling County. This system pushed south through Irion County with more isolated storms which were seeded in Reagan County. More showers and storms engulfed the area on the 17th providing additional beneficial rain, however this development was stratiform with IFR flight conditions therefore no seeding took place. From the 18th through the end of the month, strong upper ridging took over and dominated the rest of the month resulting in dry and hot conditions.

Overall, 8 flights took place in the month of May resulting in 12.7 hours of flight time. 128 glaciogenic flares were fired along with 8 hygroscopic flares. Counties seeded included Tom Green, Irion, Sterling, Reagan and Crockett. The busiest day took place on the 15th of May where storms were seeded in Sterling and Irion Counties later impacting a large portion of Tom Green County including the city of San Angelo.

Monthly rainfall in San Angelo ended up at 6.03” which is well above normal by 3.21”. This takes the annual total at Mathis Field to 8.73” which now exceeds the average of 8.02”. Meanwhile, Abilene’s monthly total of 1.93” was below normal by 1.25”. The annual total of 6.11” in Abilene is also before the normal of 8.94” by 2.83”. As usual, Midland continues to struggle. Rainfall for the month was only 0.68” which only took the total for the year to 0.84”. Overall, area average rainfall for the target area was 3.03” with an annual average of 4.75”. May clear produced the most rainfall so far this year, but with La Nina effects dissipating, the hope is more rainy months are ahead.



West Texas Weather Modification Association

Monthly Operations Report

Monthly rain gauge measurements from nearest locations inside and out of the target area recorded either by the National Weather Service, Texas Tech University, Mesowest as well as CoCoRaHS.

May 2018 (Normal's of 1.74" from Midland to 2.82" in San Angelo)

Crockett County		Reagan County		Tom Green	
Ozona 32SW	2.65	Big Lake (TTU)	0.96	Wall	5.08
Ozona 20.9SSW	4.27	Big Lake (NWS)	1.02	San Angelo 7NW	4.53
Ozona 19.6S	7.36	Cope Ranch	-	Knickerbocker	3.52
Ozona 15SSW	3.99	Sterling County		Carlsbad	4.56
Ozona Airport	0.91	Sterling City (MES)	2.26	Miles 6.5SSE	2.53
Irion County		Sterling City (TTU)	2.45	San Angelo (NWS)	6.03
Mertzon (TTU)	2.49	Sterling City 0.7NW	2.26	Out of Target Area	
Mertzon (S)	2.22	Sutton County		Junction (Kimble)	2.92
Barnhart	0.96	Sonora Average	2.84	Midland (Midland)	0.68
Schleicher County		Sonora Airport	2.57	Abilene (Taylor)	1.93
Eldorado 0.2	3.24	AREA AVERAGE		St. Lawrence (Glasscock)	1.35
Eldorado 22.6ENE	2.20	3.03		Lees (Glasscock)	-

Year to Date (Normal's of 4.26" from Midland to 8.02" in San Angelo)

Crockett County		Reagan County		Tom Green	
Ozona 32SW	4.85	Big Lake (TTU)	2.00	Wall	6.93
Ozona 20.9SSW	5.35	Big Lake (NWS)	2.05	San Angelo 7NW	7.38
Ozona 19.6S	8.26	Cope Ranch	-	Knickerbocker	6.36
Ozona 15SSW	4.81	Sterling County		Carlsbad	6.13
Ozona Airport	2.34	Sterling City (MES)	4.08	Miles 6.5SSE	5.71
Irion County		Sterling City (TTU)	3.75	San Angelo (NWS)	8.73
Mertzon (TTU)	4.78	Sterling City 0.7NW	4.28	Out of Target Area	
Mertzon (S)	4.04	Sutton County		Junction (Kimble)	5.18
Barnhart	2.63	Sonora Average	6.44	Midland (Midland)	0.84
Schleicher County		Sonora Airport	6.04	Abilene (Taylor)	6.11
Eldorado 0.2	4.71	AREA AVERAGE		St. Lawrence (Glasscock)	1.96
Eldorado 22.6ENE	4.23	4.75		Lees (Glasscock)	-