



West Texas Weather Modification Association

Monthly Operations Report

July 2018 Operations Report

The month of July contained 8 days of operations.

Date	Flares	Counties seeded
01	36+1H	Tom Green, Sterling
04	18	Tom Green, Sterling
06	60+1H	Irion, Reagan, Schleicher, Sutton
07	102+4H	Crockett, Sutton, Irion, Reagan, Schleicher
08	16	Crockett, Schleicher
09	110+2H	Irion, Schleicher, Tom Green, Sterling, Reagan
10	56+2H	Sterling
25	18+1H	Crockett
TOTAL	416+11H	

The first two weeks of July produced abnormal weather for the period. A strong upper ridge off to the west allowed for northwesterly flow aloft to advect cool air into the upper levels across West Central Texas. This enhanced instability while strong easterly waves moved over South Texas from the Gulf. Strong moisture advection took place across the region which produced numerous days of isolated to scattered showers and storms. Seeding operations took place 7 of the first 10 days of the month across a good portion of the area. However, during the latter half of the second week, the upper ridge moved east and placed itself over the area resulting in very dry conditions through the rest of the month. However, on the 25th, conditions set up favorably for a few isolate storms in Crockett County. These were seeded as they moved over the Pecos River. Overall, the trend of having a series of wet days followed by long dry spells is becoming more normal within the region. We are already seeing this take place in August with very dry weather to start followed by several days of rain chances.

Precipitation for the month at two of the three major reporting stations in the region was below average. San Angelo only received 0.64" of rainfall which is below the average the average of 1.20". This takes the annual total to 9.93", 1.88" below average (11.81"). Additionally, temperatures at Mathis Field in San Angelo were 4.3°F above average with a monthly average temperature of 87.4°F. This ties for the hottest July on record (2011). This follows the hottest June on record which means San Angelo is experiencing its hottest summer on record. It was also warm in Abilene, but not record breaking. Average monthly temperature there was 85.2°F with 1.41" of observed precipitation. The average rainfall for the month is 1.87". This pushes Abilene to 10.49" for the year which is now 3.88" below the average. Midland continues to struggle but did record rainfall for the month above average. The observed rainfall of 1.86" is 0.04" above the average for the month. However, the deficit continues for the year as the total of 5.26" is still 2.62" off the average.



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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.

July 2018 (Normal's of 1.82" from Midland to 1.20 in San Angelo)

Crockett County		Reagan County		Tom Green	
Ozona 32SW	2.17	Big Lake (TTU)	1.78	Wall	0.66
Ozona 20.9SSW	0.69	Big Lake (NWS)	2.18	San Angelo 7NW	3.11
Ozona 19.6S	0.97	Cope Ranch	2.81	Knickerbocker	0.53
Ozona 15SSW	1.49	Sterling County		Carlsbad	2.89
Ozona Airport	0.50	Sterling City (MES)	0.18	Miles 6.5SSE	0.96
Irion County		Sterling City (TTU)	0.74	San Angelo (NWS)	0.64
Mertzon (TTU)	2.12	Sterling City 0.7NW	2.10	Out of Target Area	
Mertzon (S)	2.12	Sutton County		Junction (Kimble)	0.73
Barnhart	1.12	Sonora Average	2.22	Midland (Midland)	1.86
Schleicher County		Sonora Airport	2.53	Abilene (Taylor)	1.41
Eldorado 0.2	1.69	AREA AVERAGE		St. Lawrence (Glasscock)	1.62
Eldorado 22.6ENE	2.26	1.60		Lees (Glasscock)	0.94

Year to Date (Normal's of 7.88" from Midland to 11.81" in San Angelo)

Crockett County		Reagan County		Tom Green	
Ozona 32SW	7.39	Big Lake (TTU)	4.63	Wall	8.67
Ozona 20.9SSW	6.34	Big Lake (NWS)	5.10	San Angelo 7NW	12.56
Ozona 19.6S	9.46	Cope Ranch	5.64	Knickerbocker	7.14
Ozona 15SSW	6.66	Sterling County		Carlsbad	10.22
Ozona Airport	3.44	Sterling City (MES)	5.39	Miles 6.5SSE	9.10
Irion County		Sterling City (TTU)	7.87	San Angelo (NWS)	9.93
Mertzon (TTU)	6.93	Sterling City 0.7NW	7.23	Out of Target Area	
Mertzon (S)	6.16	Sutton County		Junction (Kimble)	7.26
Barnhart	4.40	Sonora Average	9.29	Midland (Midland)	5.26
Schleicher County		Sonora Airport	9.45	Abilene (Taylor)	10.49
Eldorado 0.2	6.49	AREA AVERAGE		St. Lawrence (Glasscock)	4.40
Eldorado 22.6ENE	7.60	7.36		Lees (Glasscock)	3.95