

West Texas Weather Modification Association

Monthly Operations Report

June 2023 Operations Report

The month of June contained 4 days of operations.

Date	Flares	Counties seeded			
6/3	10G+2.25H	Irion			
6/17	20G+4.25H	Irion, Crockett			
6/21	19G+2.5H	Schleicher, Tom Green			
6/23	51G+8.25H	Sterling, Irion, Reagan, Crockett			
TOTAL	100+17.25H				
YTD	532+50.25H				

June 2023 was certainly not as busy as May. The atmosphere started to balance out some though we still saw a few days of convective activity. Marginal seeding days took place on the 3rd, 17th, and 21st as dryline activity did allow for a few high based shower/storms to fire up. On the 23rd, however, storms were seeded aggressive in parts of Sterling, Irion, Reagan and Crockett Counties. These seeded storms merged into a larger MCS which moved through much of Irion and Tom Green Counties bringing heavy rainfall to those areas. Overall, 100 glaciogenic flares and 17.25 hygroscopic flares were used during 9 flight hours. Meanwhile, June did produce 4 of the hottest days on record in San Angelo with two days at 114 degrees and 2 days at 112 degrees, all exceeding the previous record of 111 degrees. Overall, 20 days were over 100 degrees in San Angelo with 13 of those exceeding 105 degrees.

San Angelo's 4.19" in May exceeded the average of 3.05" for the month. This takes the year-to-date rainfall to 6.42", still falling behind the year-to-date average of 8.12". Midland and Abilene both exceeded their monthly average with only Abilene above their year-to-date average. However, numerous stations across the target area saw higher totals. Most areas in Crockett County exceeded 4" for the month, while Sutton and Schleicher Counties saw totals in the 3-6" range. Irion and Sterling County pushed in the 3.5-5" range as well. Though convective activity could be spotty at times, larger overnight events tried to smooth totals out.

Looking ahead into July and August, El Nino has officially been declared. However, the atmosphere has balanced out after a busy May and slower June. The first two weeks of July look predominate hot and dry with a streak of 100-degree days once again expected for much of the second week of the month. CPC outlooks do think that the second half of the month could bring wetter conditions as impacts from El Nino could start to be felt.

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.

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Crockett County	y	Sterling County		Area Average		
Ozona 32SW	2.09	Sterling City (TTU)	2.40	1.27		
Escondido Draw	1.97	Irion County				
Ozona 19.6S	-	Mertzon (TTU) 1.07 Out		Out of Target Ar	it of Target Area	
Ozona Airport	0.21	Mertzon (S)	NA	Junction (Kimble)	0.89	
Fort Lancaster	3.03	Barnhart	0.80	Abilene (Taylor)	4.05	
Reagan County	7	Tom Green		Midland (Midland)	0.06	
Big Lake (TTU)	0.08	Wall	1.02	St. Lawrence (GL)	1.05	
Acton Ranch	NA	San Angelo 7NW	2.78	Lomax (Howard)	2.41	
Schleicher Count	ty	Knickerbocker	1.52	Fort McKavett (MN)	0.68	
Eldorado 0.2	0.11	Carlsbad	2.87	McCamey (Upton)	0.22	
Eldorado 22.6ENE	0.62	Miles	1.50	Menard (Menard)	1.06	
Eldorado 14.5ENE	0.12	San Angelo (NWS)	1.67			
Sutton County		Christoval	1.68			
Sonora	0.05	Water Valley	1.67			
Sonora 23.9E	0.22					

Year to Date (Normal's of 5.99" from Midland to 10.43" in San Angelo)

Ten to Dute (Normal S of 3.77) from Municial to 10.73 in Sun Magero									
Crockett County	y	Sterling County		Area Average					
Ozona 32SW 7.93		Sterling City (TTU)	8.12	7.39					
Escondido Draw	8.43	Irion County							
Ozona 19.6S	ı	Mertzon (TTU) 10.62		Out of Target Area					
Ozona Airport	2.73	Mertzon (S)	NA	Junction (Kimble)	6.62				
Fort Lancaster	8.49	Barnhart	3.69	Abilene (Taylor)	13.93				
Reagan County	,	Tom Green		Midland (Midland)	1.25				
Big Lake (TTU)	2.92	Wall	7.79	St. Lawrence (GL)	6.00				
Acton Ranch	NA	San Angelo 7NW	11.77	Lomax (Howard)	7.07				
Schleicher Count	ty	Knickerbocker	12.28	Fort McKavett (MN)	9.48				
Eldorado 0.2	5.70	Carlsbad	8.68	McCamey (Upton)	3.59				
Eldorado 22.6ENE	6.94	Miles	10.24	Menard (Menard)	7.42				
Eldorado 14.5ENE	5.74	San Angelo (NWS)	8.09						
Sutton County		Christoval	7.24						
Sonora	8.04	Water Valley	7.42						
Sonora 23.9E	9.78								