

Trans-Pecos Weather Modification Association

Monthly Operations Report

May 2023 Operations Report

The month of May contained 7 days of operations.

Date	Flares	Counties seeded					
19	20G	Pecos, Reeves					
21	6G	Pecos					
22	24G+2H	Pecos, Reeves					
23	27G+2H	Pecos, Reeves					
24	23G+3H	Reeves					
26	16G+2H	Pecos					
31	26G+2H	Ward, Loving					
TOTAL	135						

The operational season kicked off on May 15, 2023, and was still one of the busier months over the last 10-years. Overall, 7 operational days were conducted with a total of 11.35 flight hours. 142 glaciogenic flares and 11 hygroscopic flares were used in all counties of the target area.

For much of the month, activity was firing along a well-defined dryline which continued to stay in place across much of the target area. This dryline was well supported by favorable dynamical forcing with southwesterly flow aloft staying in place with numerous supportive shortwaves. This pattern not only led to an active month in terms of operations and precipitation, but also in terms of severe weather.

Precipitation via rain gauge average near average across the region which for the month sits at 1.40" in Fort Stockton to 1.26" in Pecos. Areas to the southeast of Fort Stockton did well with totals nearing 3" while near Coyanosa was near 1.5". In Reeves County, areas near Pecos and Kent did well with 2"+ recorded while most of Ward and Loving County remained dry.

Looking ahead into June, a drier weather pattern is expected as high pressure looks to lock in over the region. Latest Climate Prediction Center outlooks suggest that it'll be both drier and warmer than average for the 1-month (June) and 3-month (June/July/August) period. This is surprising considering ENSO conditions are moving out of La Nina directly into an El Nino. However, we'll need to let El Nino not only develop, but sustain before impacts are being felt.



Trans-Pecos 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 2023 (Normal's of 1.26" from Pecos to 1.40" in Fort Stockton)

Pecos County		Reeves County		Ward County	
Fort Stockton Airport	0.06	Pecos Airport	2.63	Grandfalls	1.55
Fort Stockton 4W	1.29	Kent	2.14	Monahans Sandhills	0.22
Fort Stockton 38ESE	2.94	RV/PC County Line	1.72	Monahans 6ENE	0.25
Coyanosa 1.49 Balmorhea 2.1E		1.55	Loving County		
Belding	0.00	Area		Orla	0.12
John Dorris Station 2.3		Average			
Escalera Ranch 1.7		1.34			

Year to Date (Normal's of 2.98" from Pecos to 3.97" in Fort Stockton)

Pecos County		Reeves County		Ward County	
Fort Stockton Airport	0.76	Pecos Airport	2.85	Grandfalls	2.16
Fort Stockton 4W	1.65	Kent	2.68	Monahans Sandhills	0.74
Fort Stockton 38ESE	3.72	RV/PC County Line	2.75	Monahans 6ENE	0.821
Coyanosa 2.25 Balmorhea 2.1E 1.92		1.92	Loving County		
Belding	0.00	Area		Orla	0.71
John Dorris Station	3.41	Average			
Escalera Ranch	22.28	2.70			