

# West Texas/Southeastern New Mexico July 2017 Climate Summary



Midland/Odessa  
Texas



U.S. National Weather  
Service Midland, TX

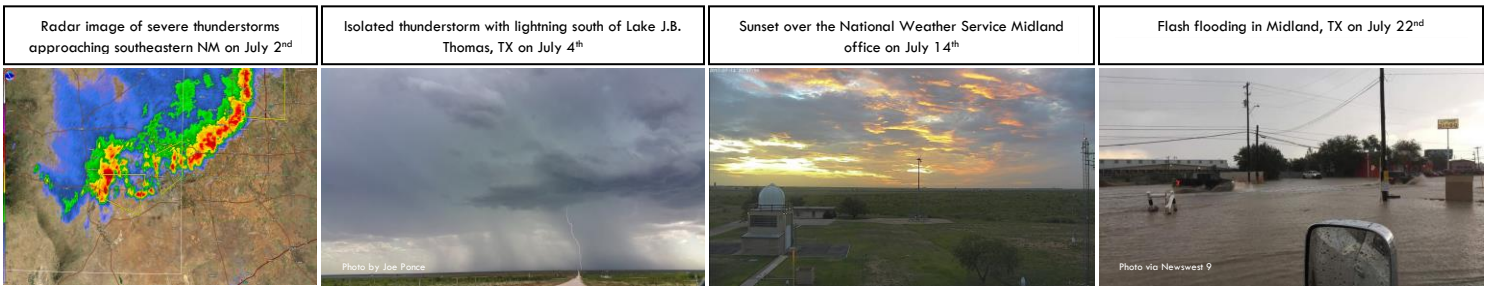


@NWSMidland

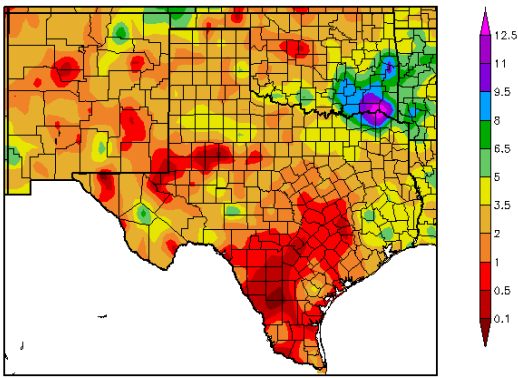
## July 2017 Temperature, Precipitation, Humidity, and Wind Summary

**July 1<sup>st</sup>-15<sup>th</sup>:** On July 1<sup>st</sup>, temperatures were near normal and humidity was elevated across west Texas and southeastern New Mexico. High temperatures on the 1<sup>st</sup> were generally in the mid 90s with lows in the 60s and 70s. Storms developed over the higher terrain in the afternoon. Rainfall totals on the 1<sup>st</sup> included 0.66" at Artesia, NM and 0.32" at Marfa, TX. During the early morning hours of the 2<sup>nd</sup>, a line of severe thunderstorms formed in southeastern New Mexico and dropped southward. Severe thunderstorm warnings were issued for wind gusts up to 70 mph in Eddy and Lea counties. Rainfall totals included 0.72" at Seminole, TX and 0.61" at Tatum, NM. Temperatures increased to well above normal on the 3<sup>rd</sup> with highs in the upper 90s to mid 100s while strong storms developed in the mountains and the central Permian Basin. Precipitation amounts on the 3<sup>rd</sup> included 0.76" at Fort Stockton, TX and 0.36" at Midland International Air & Spaceport (MAF). The 4<sup>th</sup> of July was another hot and humid day with scattered thunderstorms mainly in the mountains and the eastern Permian Basin. A line of storms moved into the Permian Basin from the Texas Panhandle after sunset. Severe thunderstorm warnings were issued for wind gusts over 60 mph in Gaines and Winkler Counties. Highest rainfall totals on the 4<sup>th</sup> included 1.47" at McCamey, 0.64" at Monahans, and 0.58" at Wink, TX. High pressure over the southern plains weakened and temperatures around the region fell below normal from the 5<sup>th</sup>-7<sup>th</sup>. Highs were in the upper 80s to lower 90s with lows in the 60s. Storms continued to develop each day due to a steady influx of Gulf of Mexico moisture. Rainfall during this period included 1.48" at Big Lake, TX on the 5<sup>th</sup>, 1.70" at Chisos Basin, TX on the 6<sup>th</sup>, and 0.30" at Mt. Locke, TX on the 7<sup>th</sup>. Regional temperatures steadily increased from the 8<sup>th</sup>-10<sup>th</sup> while precipitation was mainly confined to the eastern Permian Basin. Precipitation totals included 0.20" at Big Spring, TX on the 8<sup>th</sup>, and 0.02" at Snyder, TX on the 9<sup>th</sup>. High temperatures were near normal from the 11<sup>th</sup>-15<sup>th</sup>. Storms developed daily as moisture remained in place over the region. The Davis Mountains and Big Bend National Park measured the highest rainfall totals. Greatest precipitation amounts occurred on the 14<sup>th</sup> which included 2.48" in Dryden, 1.89" in Alpine, and 0.93" in Marfa, TX. Showers and storms expanded in coverage on the 15<sup>th</sup> to include the Permian Basin and southeastern New Mexico as temperatures remained at or below normal.

**July 16<sup>th</sup>-31<sup>st</sup>:** On the 16<sup>th</sup>, thunderstorms developed over Big Bend National Park, the Davis Mountains, and parts of the Permian Basin. Peak rainfall totals were 1.15" at Cope Ranch, TX, and 1.12" at Mt. Locke, TX. High temperatures were in the 80s across the higher terrain and mid 90s elsewhere. A similar situation unfolded from the 17<sup>th</sup>-21<sup>st</sup> with widely scattered storms developing during the afternoon hours each day. Greatest rainfall totals during this timeframe included 1.74" at Presidio, TX on the 18<sup>th</sup>, 1.19" at Valentine, TX on the 19<sup>th</sup>, 0.90" at Pine Springs, TX on the 20<sup>th</sup>, and 0.61" at Seminole, TX on the 21<sup>st</sup>. The atmosphere was particularly unstable over the central Permian Basin on the 22<sup>nd</sup> as high temperatures increased up to 5°F above normal. Strong storms formed over Midland and Ector Counties and became severe as they moved into Midland and Odessa, TX. A wind gust of 66 mph was recorded at MAF and torrential rain caused flash flooding in both cities. Carlsbad and Loving, NM also experienced a strong thunderstorm on the 22<sup>nd</sup> that produced flash flooding. Highest precipitation totals on the 22<sup>nd</sup> included 0.94" at MAF, and 0.52" at Odessa, TX. Widely scattered showers and thunderstorms continued around the area as high temperatures remained near normal on the 23<sup>rd</sup> and 24<sup>th</sup>. Precipitation amounts included 1.65" at Balmorhea, TX and 1.00" at Carlsbad, NM on the 23<sup>rd</sup>, and 0.75" at Mt. Locke, TX on the 24<sup>th</sup>. A ridge of high pressure strengthened over the region from the 25<sup>th</sup>-30<sup>th</sup>. High temperatures increased well above normal into the upper 90s and mid 100s as rainfall was confined to the higher terrain. An isolated thunderstorm produced over 2.00" of rain in one hour at Tatum, NM on the 26<sup>th</sup> and a rainfall total of 1.57" was recorded at Mt. Locke, TX on the 29<sup>th</sup>. On the 31<sup>st</sup>, moisture increased as the upper-level ridge moved west. Low pressure developed in southeastern New Mexico and a complex of storms formed and moved eastward during the overnight hours. The National Weather Service in Midland issued a Flash Flood Watch for southeastern New Mexico and the northern Permian Basin. Heavy rain and flash flooding occurred in Hobbs, and Carlsbad, NM where rainfall totaled 1.41" and 0.55" respectively.



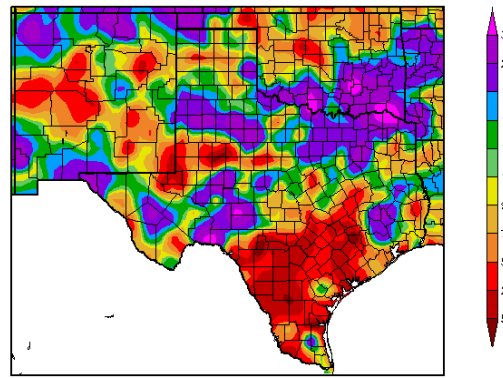
Precipitation (in)  
7/1/2017 – 7/31/2017



Generated 8/2/2017 at HPRCC using provisional data.

Regional Climate Centers

Percent of Normal Precipitation (%)  
7/1/2017 – 7/31/2017

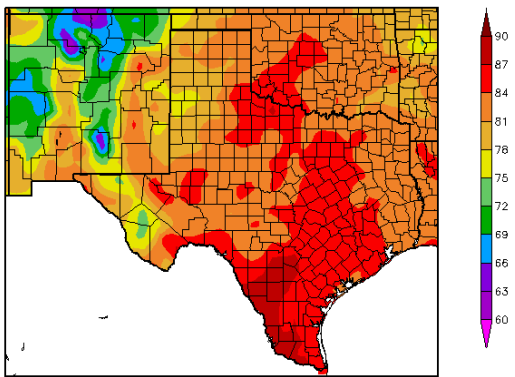


Generated 8/2/2017 at HPRCC using provisional data.

Regional Climate Centers

July precipitation in west Texas and southeastern New Mexico ranged from 0.08” at Big Spring, TX to 12.27” at Mt. Locke, TX. The wettest regions included the Davis Mountains and Glasscock, Upton, Reagan, and Terrell Counties. The driest region was the central Permian Basin which included Borden, Dawson, Martin, Howard, Loving, Ward, and Winkler Counties.

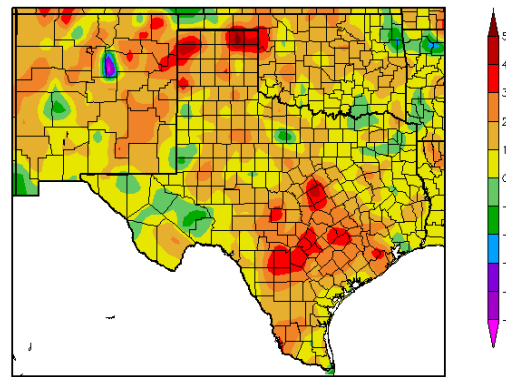
Temperature (F)  
7/1/2017 – 7/31/2017



Generated 8/2/2017 at HPRCC using provisional data.

Regional Climate Centers

Departure from Normal Temperature (F)  
7/1/2017 – 7/31/2017

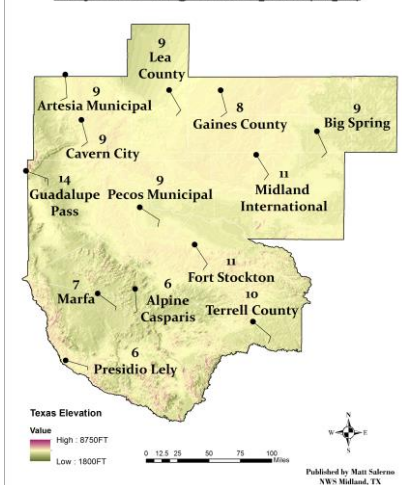


Generated 8/2/2017 at HPRCC using provisional data.

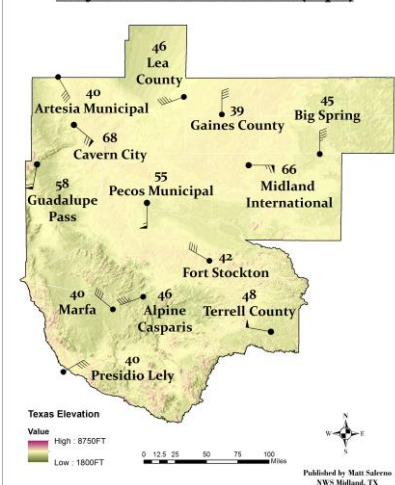
Regional Climate Centers

Average July temperatures ranged from around 71°F at Mt. Locke to nearly 90°F at Big Bend National Park. Temperatures were around 1°F below normal in Pecos, Reeves, and Terrell Counties and in the mountains. Above normal temperatures were most prevalent in the central Permian Basin, especially in Ector, Midland, and Martin Counties.

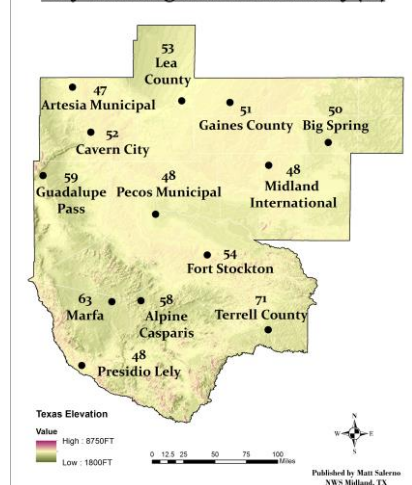
July 2017 Avg Wind Speed (mph)



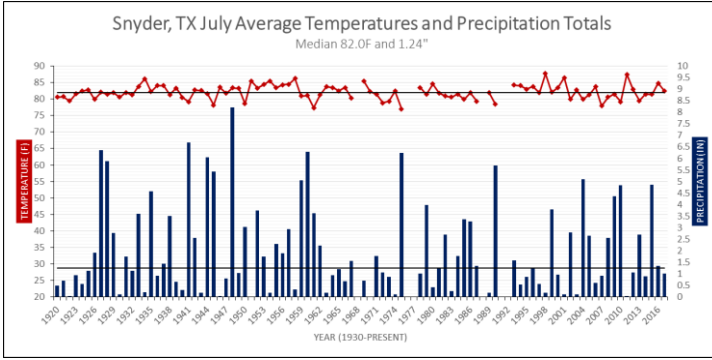
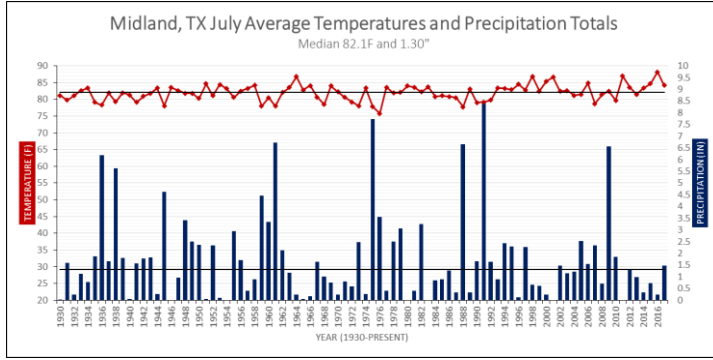
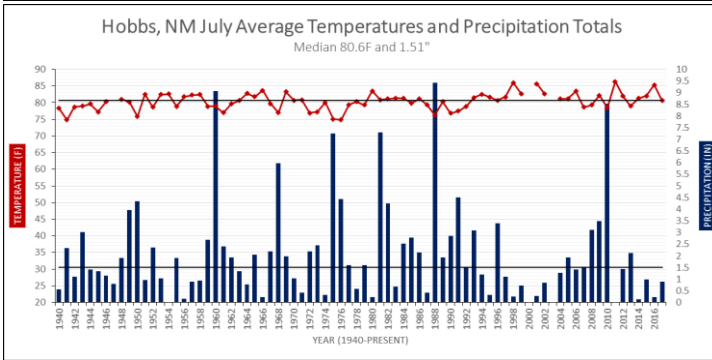
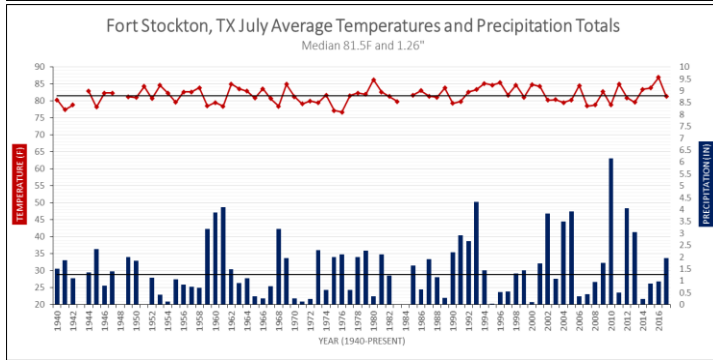
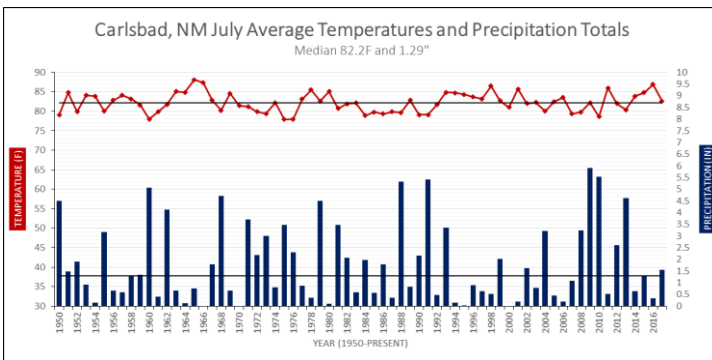
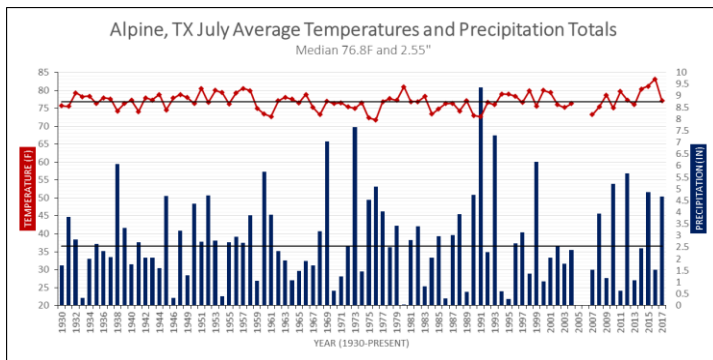
July 2017 Max Wind Gust (mph)



July 2017 Avg Relative Humidity (%)



Average July wind speeds ranged from 6 mph at Alpine, TX, and Presidio, TX to 14 mph at Guadalupe Pass, TX. The highest wind gust recorded was 68 mph at Carlsbad, NM. Average relative humidity values ranged from 47% to 71%.



Note: Each location has a slightly different period of record. Data gaps within each graph indicate missing data for those years.

July Temperature and Precipitation	Avg Temp (°F)	Departure from Avg (°F)	Temp Ranking (Period of Record)	Precip (In.)	Departure from Avg (In.)	Precip Ranking (Period of Record)
Alpine COOP	77.1	+0.2	T-38 <sup>th</sup> Warmest	4.67	+1.90	15 <sup>th</sup> Wettest
Carlsbad Airport	82.7	+1.2	T-30 <sup>th</sup> Warmest	1.56	-0.27	T-39 <sup>th</sup> Driest
Fort Stockton COOP	81.3	-0.4	T-35 <sup>th</sup> Coolest	1.95	+0.42	T-23 <sup>rd</sup> Wettest
Hobbs COOP	80.6	+0.4	T-38 <sup>th</sup> Warmest	0.90	-1.16	T-21 <sup>st</sup> Driest
Midland International	84.2	+2.1	T-12 <sup>th</sup> Warmest	1.48	-0.34	T-48 <sup>th</sup> Driest
Snyder COOP	82.5	+0.4	T-38 <sup>th</sup> Warmest	1.01	-1.00	T-38 <sup>th</sup> Driest

The graphs above provide July temperature and precipitation data for six individual weather stations at select cities. Five out of the six locations were warmer than normal. MAF had the warmest average July temperature at 84.2°F which was 2.1°F above normal and the 12<sup>th</sup> warmest on record. Fort Stockton, TX was slightly cooler than normal with an average July temperature of 81.3°F. All six locations had a decrease in average July temperatures from the previous year. Two out of six locations had above normal precipitation. The highest July rainfall total was 4.67" at Alpine, TX which was the 15<sup>th</sup> wettest on record. Fort Stockton, TX also had a wetter than normal July with a rainfall total of 1.95". Locations that were drier than normal included Carlsbad, NM, Hobbs, NM, MAF, and Snyder, TX. The driest of the four locations was Hobbs, NM which recorded under 1.00" of rainfall. In summary, Alpine, TX had the wettest and coolest July of the six locations while Hobbs, NM was the driest and MAF was the warmest.