

West Texas/Southeastern New Mexico October 2017 Climate Summary



Midland/Odessa
Texas



U.S. National Weather
Service Midland, TX



@NWSMidland

October 2017 Summary

The first day of October was damp as rain from the previous week finally came to an end with a few lingering showers present at Big Spring, TX, and Snyder, TX. Temperatures were near normal on the 1st with highs in the 70s and 80s and lows in the 50s. Moisture remained in place across the region for a few more days with rainfall occurring in the higher elevations of southeastern New Mexico, the Davis Mountains, and the Big Bend region. The highest precipitation total from the 2nd-6th was 1.53" at Jal, NM on the 4th. A ridge of high pressure brought drier conditions to west Texas and southeastern New Mexico by the 6th and temperatures increased well above normal by the 7th and 8th. High temperatures were in the mid 90s from southeastern New Mexico into the Permian Basin and upper 90s to lower 100s along the Rio Grande. A cold front arrived by the 9th bringing much cooler air into the region. On the 10th, temperatures behind the front were down to 15°F below normal in some spots with highs in the mid 60s and lows in the 40s. This fall chill did not last long however, as high pressure returned to area. Temperatures increased well above normal from the 12th-14th. Daytime highs reached the upper 80s to mid 90s at most locations. A stronger cold front entered west Texas and southeastern New Mexico early on the 15th. Thunderstorms developed ahead of the front accompanied by heavy rain and gusty winds. Greatest rainfall amounts on the 15th were 1.05" at Crane, TX, and 0.94" at Monahans, TX.

Below normal temperatures were present on the 16th with highs in the 60s and 70s. Dry and warm weather returned to the region on the 17th and 18th with temperatures at or slightly above normal. A change in the upper level wind pattern brought clouds and precipitation to the western mountain areas and southeastern New Mexico by the 19th. Rainfall amounts included 0.20" at Carlsbad, NM, 0.18" at Artesia, NM, and 0.16" at Hobbs, NM. Showers and storms continued through the early morning hours of the 20th in the Davis Mountains and Big Bend region. Once the rain ended, temperatures increased to above normal on the 20th and 21st. On the 22nd, a dry cold front moved across west Texas and southeastern New Mexico causing temperatures to fall below normal. See-saw like temperatures continued through the 26th as a series of cold fronts progressed through the region. A northern push of arctic air through the region brought the strongest cold front of the early Fall season late on the 26th. By the 27th, high temperatures behind the front were only in the 50s to lower 60s. A Freeze Warning was issued for the northern Permian Basin, southeastern New Mexico, and the Davis Mountains for low temperatures below freezing early on the 28th. Dry air remained in place as temperatures rebounded to the mid 70s by the 29th. The final cold front of October moved into the region on the 30th dropping temperatures 5-10°F below normal. Upper-level moisture moved in from the western United States on the 31st causing light rain to fall over west Texas and southeastern New Mexico. The highest rainfall totals were 0.15" at Caprock, NM, and 0.13" at Dryden, TX. Temperatures were well below normal on the 31st with highs only reaching the 50s and 60s.

Here are some great pictures sent in from the public and some of our staff! If you've been sharing pictures, awesome! Thanks! If you haven't, consider sharing with us! We love to see weather pictures, and who knows, you may see your picture here or in our Skywarn presentations! Enjoy!



Stratus beneath altocumulus in Scurry County, TX on Oct 3rd

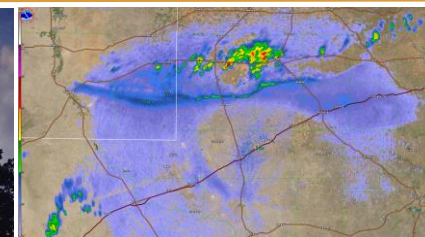


Sunset w/ high cirrus clouds over west TX on Oct 11th



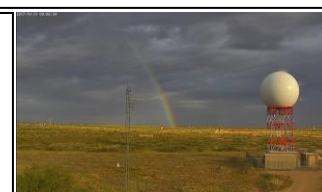
Left:
Sunset
behind
dissipating
storm near
Pecos, TX
on Oct 14th

Right:
Sunrise
w/ cirro-
stratus over
Scurry
County TX
on Oct 20th

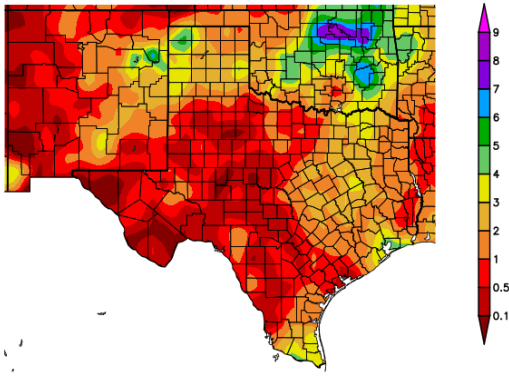


Radar image of a cold front moving through on Oct 15th

Right:
Rainbow
over
NWS
Midland,
TX on
Oct 31st



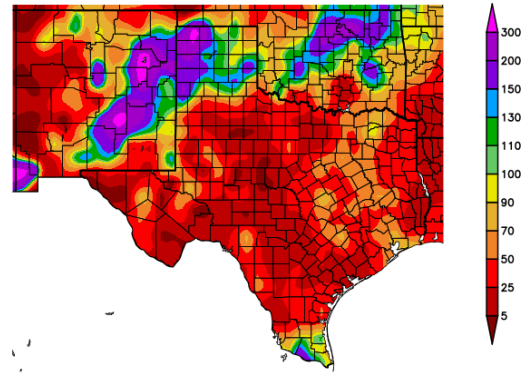
Precipitation (in)
10/1/2017 – 10/31/2017



Generated 11/1/2017 at HPRCC using provisional data.

NOAA Regional Climate Centers

Percent of Normal Precipitation (%)
10/1/2017 – 10/31/2017

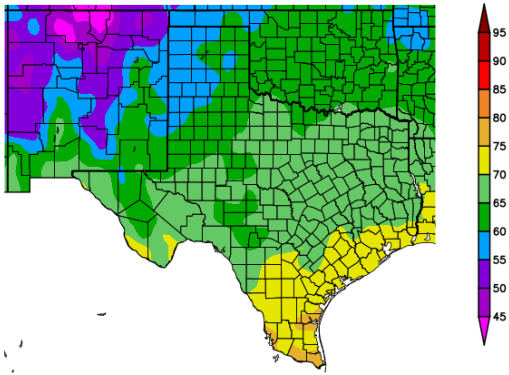


Generated 11/2/2017 at HPRCC using provisional data.

NOAA Regional Climate Centers

October precipitation in west Texas and southeastern New Mexico ranged from 0.00" at Presidio, TX and Castolon, TX to 1.86" at Big Spring, TX. Most of west Texas was drier than normal with the driest spots encompassing Big Bend National Park and the lower Trans-Pecos. The wettest locations were Lea County in southeastern New Mexico and the Davis Mountains.

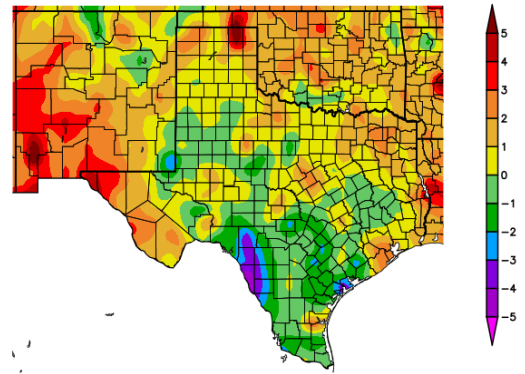
Temperature (F)
10/1/2017 – 10/31/2017



Generated 11/1/2017 at HPRCC using provisional data.

NOAA Regional Climate Centers

Departure from Normal Temperature (F)
10/1/2017 – 10/31/2017



Generated 11/1/2017 at HPRCC using provisional data.

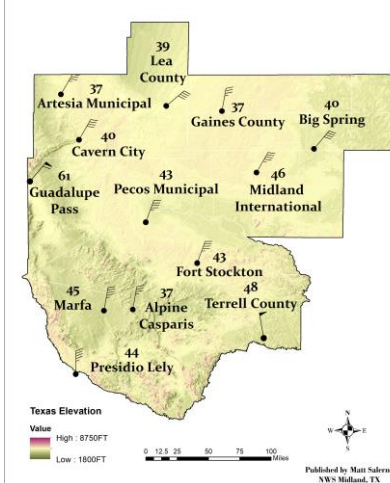
NOAA Regional Climate Centers

Average October temperatures ranged from near 54°F at Guadalupe Peak to about 76°F in Big Bend National Park. Average temperatures were both above and below normal region-wide. The Permian Basin was around 1°F below normal with the coolest spot being southern Lea County. Conversely, far southwest TX was 1°F to 2°F above normal.

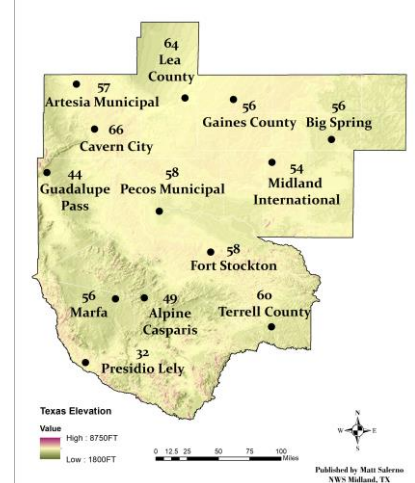
October 2017 Avg Wind Speed (mph)



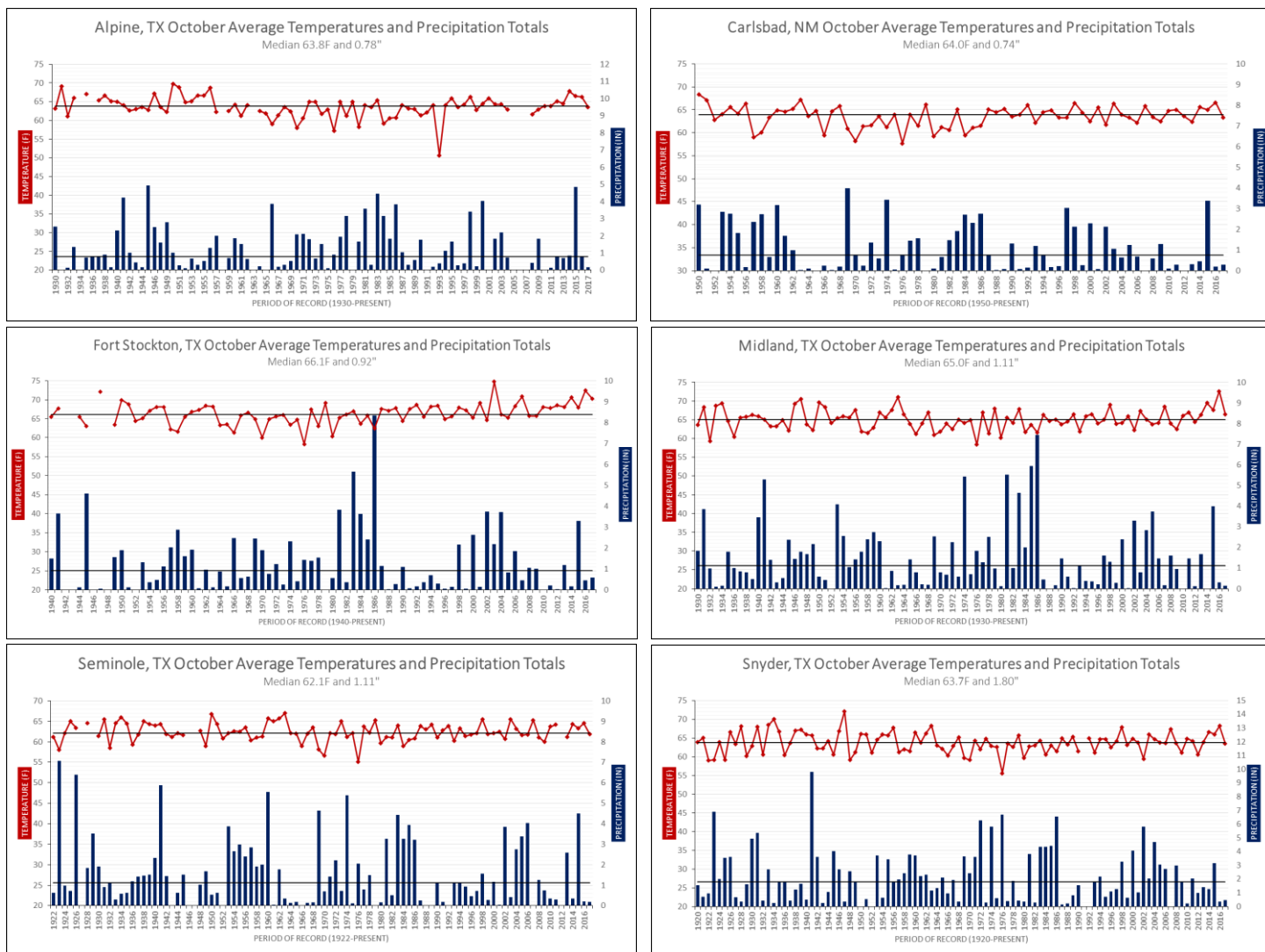
October 2017 Max Wind Gust (mph)



October 2017 Avg Relative Humidity (%)



Average October wind speeds ranged from 6 mph in Big Spring, TX to 19 mph at Guadalupe Pass, TX. The highest wind gust recorded was 61 mph at Guadalupe Pass, TX. Average relative humidity values ranged from 32% to 66%.



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

October 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	63.6	0.0	T-38 th Coolest	0.16	-1.17	T-12 th Driest
Carlsbad Airport	63.3	-0.2	T-24 th Coolest	0.29	-0.80	27 th Driest
Fort Stockton COOP	70.2	+3.9	6 th Warmest	0.60	-0.75	32 nd Driest
Midland International	66.4	+1.3	T-24 th Warmest	0.13	-1.40	T-11 th Driest
Seminole COOP	61.9	-0.5	T-35 th Coolest	0.19	-1.41	T-17 th Driest
Snyder COOP	63.5	-0.2	T-43 rd Coolest	0.45	-1.78	21 st Driest

The graphs above provide October temperature and precipitation data for six individual weather stations at select cities. Average temperatures at each location ranged from 61.9°F at Seminole, TX to 70.2°F at Fort Stockton, TX. Both Fort Stockton, TX and Midland, TX experienced a warmer than average October. Fort Stockton, TX recorded its 6th warmest October on record at 3.9°F above average, and Midland, TX was 1.3°F above average which resulted in its 24th warmest October on record. Carlsbad, NM, Seminole, TX, and Snyder, TX were all slightly cooler than average while Alpine, TX matched its monthly average of 63.6°F. All six locations received below average precipitation. Midland, TX was the driest of the six cities with a monthly rainfall total of 0.13". Snyder, TX received the least rainfall compared to average with a deficit of 1.78". In summary, October was drier than average at all six locations while temperatures varied from above average to at or below average.