West Texas/Southeastern New Mexico September 2017 Climate Summary

Midland/Odessa Texas

U.S. National Weather Service Midland, TX

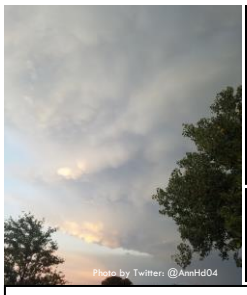
@NWSMidland

September 2017 Summary

September began with a warm week in west Texas and southeastern New Mexico. Temperatures were at or above normal across the region with highs in the mid 80s to lower 90s at most locations. A few isolated storms formed over the eastern Permian Basin on the 2nd and produced moderate rainfall in Scurry County. More storms developed south of the Pecos River along a cold front on the 5th. Temperatures cooled slightly on the 5th and 6th behind the front. High temperatures slowly increased from the 7th-12th as high pressure intensified over the southwestern United States. By the 13th-14th a ridge was positioned directly over west Texas and temperatures increased up to 10°F above normal. Highs were in the 90s to 100s and a record high temperature of 104°F was set at Midland International Air & Spaceport (MAF) on the 14th. Moisture increased on the 15th which promoted scattered shower and thunderstorm activity across the region. Precipitation was mainly confined to the higher elevations with highest rainfall amounts just over 1.00" in the Davis Mountains. Temperatures remained well above normal through the 15th.

Above average temperatures continued through the latter half of the month as daytime highs reached the mid 90s with consistent warm overnight temperatures. Dew point temperatures remained elevated with pop-up showers and storms occurring daily. Most of the rainfall was confined to the mountain areas and the eastern Permian Basin. Isolated severe thunderstorms developed on the 18th over Goldsmith, TX and Big Spring, TX. Golf ball-size hail and 60 mph winds were reported by local law enforcement in Big Spring, TX. Heavy rainfall also occurred within Big Bend National Park from the 18th-22nd. After the fall equinox on the 22nd, the weather pattern changed dramatically. An upper trough slowly progressed across the region from the 23rd-30th bringing much cooler temperatures and abundant rainfall. Strong to severe thunderstorms occurred over southeastern New Mexico and Culberson County on the 23rd with numerous hail and flash flooding reports. Heavy rainfall moved into the central Permian Basin early on the 24th and produced flash flooding along I-20. Highest amounts were 2.00" in Jal, NM on the 23rd, and 1.51" at Odessa, TX and 1.06" at MAF on the 24th. The atmosphere was unstable on the 25th and isolated severe thunderstorms formed between Pecos and Andrews, TX. One storm developed rotation in Andrews County and a Tornado Warning was issued. Widespread heavy rain continued on the 25th and 26th with more flash flooding across the Permian Basin. Highest rainfall totals between these two days were 1.87" at Odessa, TX, 1.82" at Gail, TX, and 1.23" at Midland, TX which was a daily record. Temperatures dropped well below normal from the 27th-30th as a cold front moved through the area. The month finished off with cool, cloudy, and rainy conditions with high temperatures in the 60s and 70s across the region.

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!



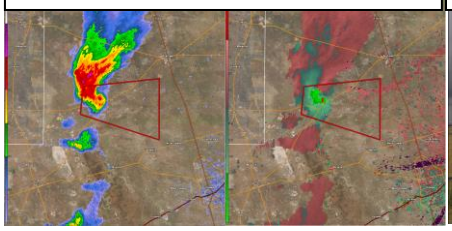
Mammatus clouds during sunset over Scurry County TX on Sep 2nd

Hail in Big Spring, TX on Sep 18th

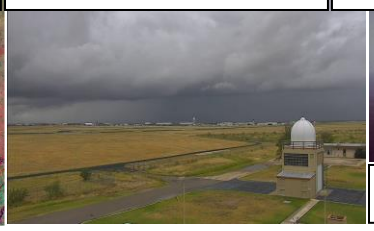
Flooded road near Carlsbad, NM on Sep 25th

Sunset at NWS Midland on Sep 30th

Radar image of tornadic storm near Andrews, TX on Sep 25th

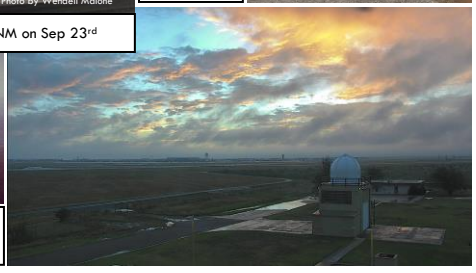


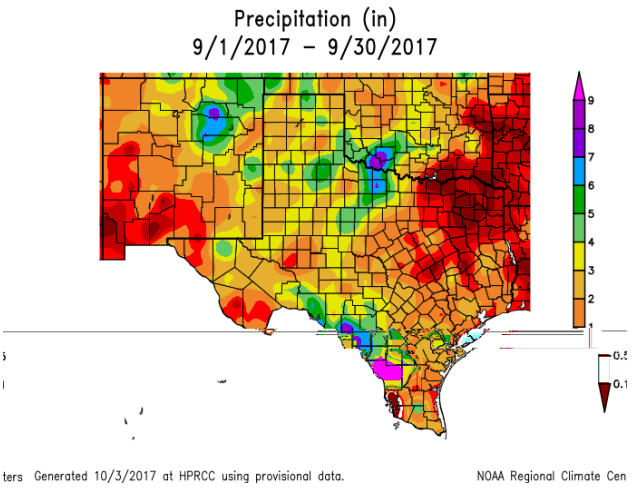
Rain approaching Midland, TX on Sep 26th

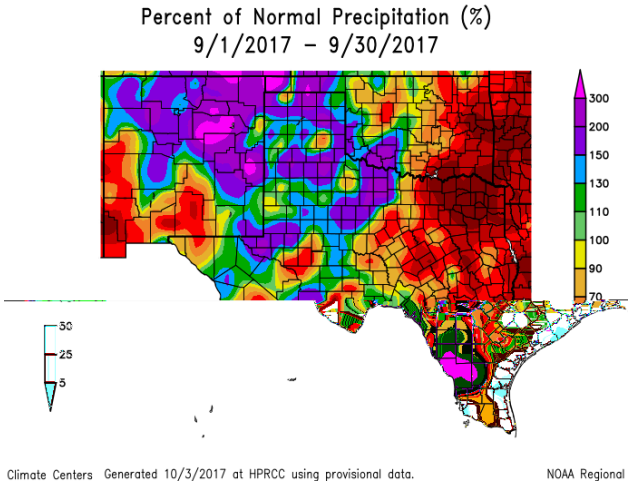


Supercell storm in Eddy County NM on Sep 23rd

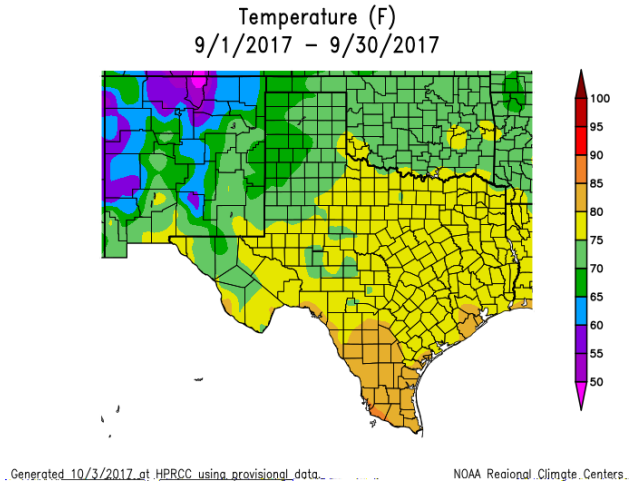
Foggy Morning in Scurry County TX on Sep 28th

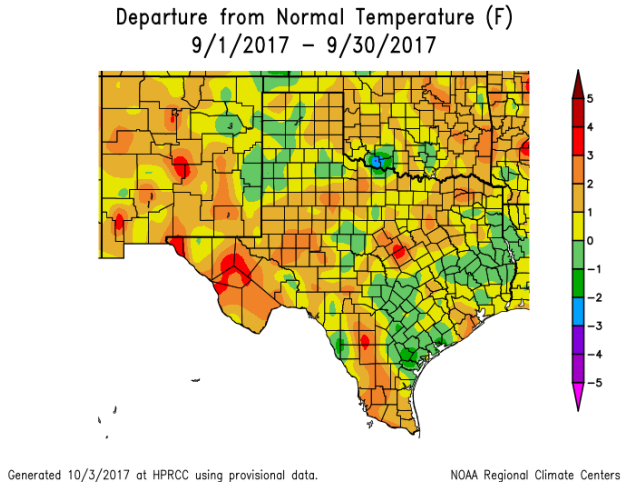




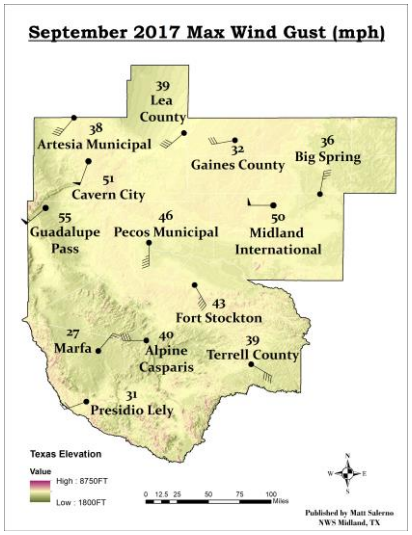


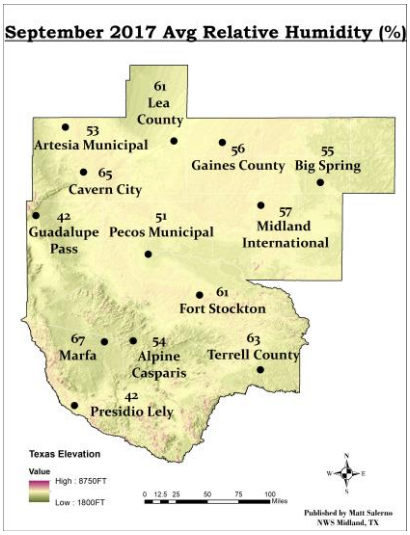
September precipitation in west Texas and southeastern New Mexico ranged from 0.18" at Big Lake, TX to 4.58" at Monahans, TX. The wettest areas included Andrews, Ector, Loving, Martin, Midland, Ward, and Winkler counties. The driest regions were the southern Permian Basin, including Reagan and Upton Counties, and across the Big Bend Region.



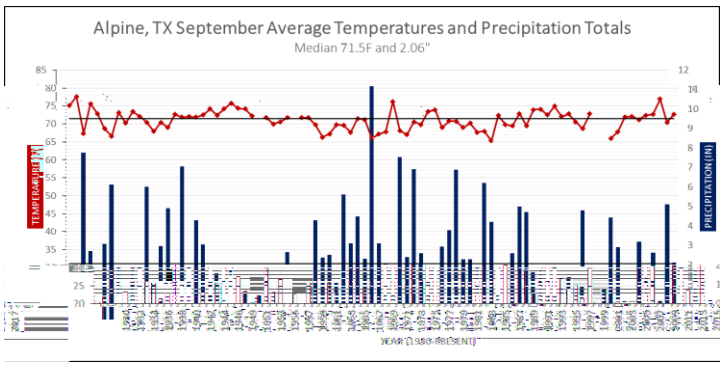


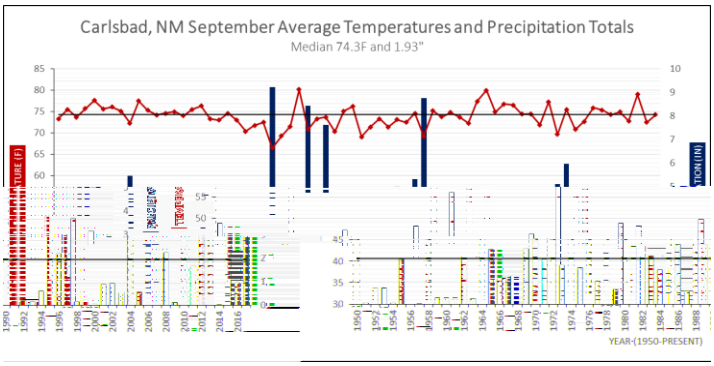
Average September temperatures ranged from near 61°F at Guadalupe Peak to 84°F at Big Bend National Park. Temperatures were warmer than normal across most of the region. The Permian Basin was mainly 2°F to 3°F above normal while the Davis Mountains were 3°F to 4°F above normal. Cooler than normal areas included northern Lea and Terrell Counties.

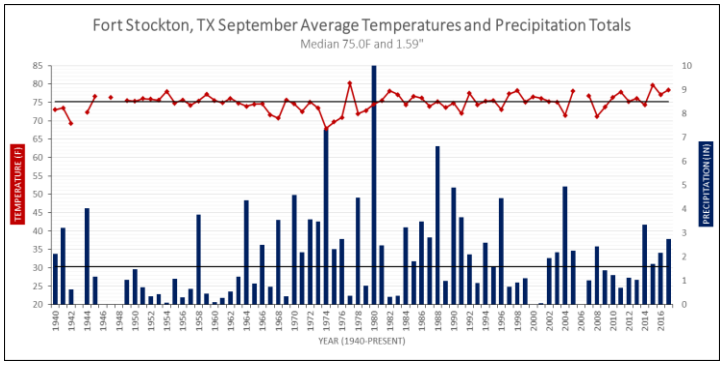


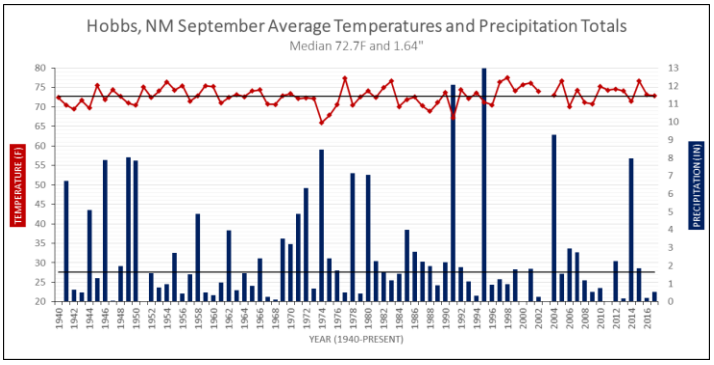


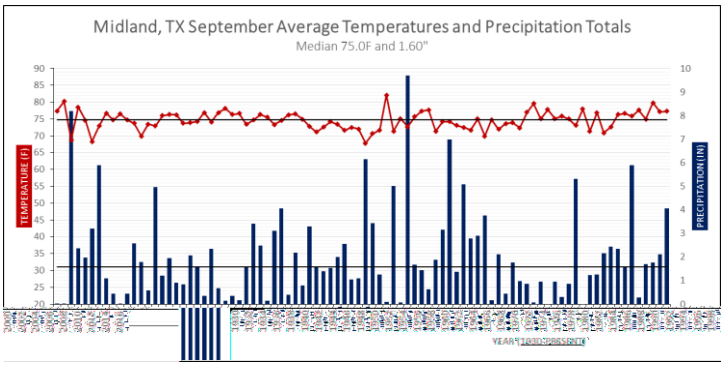
Average September wind speeds ranged from 7 mph to 15 mph. The highest wind gust recorded was 55 mph at the Guadalupe Mountains. Average relative humidity values ranged from 42% to 67%.

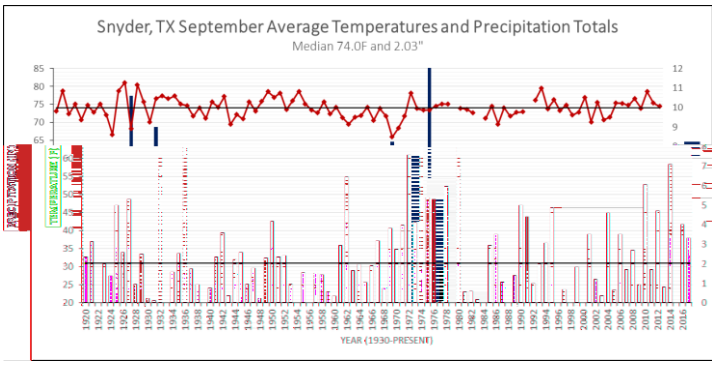












Note: Each location has a slightly different period of record. Data gaps within each graph indicate missing data for those years.

September 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	72.7	+1.6	22nd Warmest	2.12	-0.41	43rd Driest
Carlsbad Airport	74.3	+0.4	T-33rd Warmest	2.91	+0.53	22nd Wettest
Fort Stockton COOP	78.4	+3.5	3rd Warmest	2.75	+0.68	21st Wettest
Hobbs COOP	72.9	+0.3	T-36th Warmest	0.56	-1.99	16th Driest
Midland International	77.3	+2.7	12th Warmest	4.07	+2.05	11th Wettest
Snyder COOP	74.5	+0.5	43rd Warmest	3.31	+0.76	28th Wettest

The graphs above provide September temperature and precipitation data for six individual weather stations at select cities. All six locations were warmer than average. Fort Stockton, TX had the warmest monthly temperature of the six locations at 78.4°F which was 3.5°F above average. Fort Stockton, TX experienced its 3rd warmest September while Midland, TX registered its 12th warmest September on record. The other four locations were outside their top 20 rankings for warmth. Four out of the six locations had above average precipitation. Midland, TX received measurable rainfall for seven straight days bringing the monthly total to 4.07" which was its 11th wettest September on record. Alpine, TX and Hobbs, NM were both drier than average. Hobbs, NM recorded its 16th driest September on record with only 0.56" of rainfall. In summary, September was a warm and wet month overall with most locations receiving abundant rainfall.