West Texas/Southeastern New Mexico December 2017 Climate Summary

Midland/Odessa Texas

U.S. National Weather Service Midland, TX

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December 2017 Summary

December began with high pressure and above normal temperatures across west Texas and southeastern New Mexico. From the 1st-4th, high pressure increased over the region and temperatures rose 15-20°F above normal as highs topped out in the 70s to lower 80s. A cold front arrived on the 5th which decreased high temperatures to the 50s and lower 60s. On the 6th, an upper-level system approached from the west and brought moisture to portions of the area. Rain fell initially and transitioned to snow as temperatures decreased to below freezing overnight. The snow continued through the 7th with greatest accumulations of 5-6" in Alpine, TX, Fort Davis, TX and the Big Bend region. A hard freeze occurred early on the 8th as temperatures dropped below 28°F as far south as the Rio Grande. However, the cold weather did not last as mild temperatures returned by the 9th. Highs increased well into the 60s across the Permian Basin while temperatures remained cooler than normal to the south due to melting snow. Temperatures were 3-5°F above normal on the 10th and 11th as high pressure over the western United States kept the storm track well north of the region. A dry, weak cold front that arrived on the 12th decreased temperatures to near normal. Then on the 13th, warm and dry air moved in from the southwest that allowed temperatures to climb into the upper 60s to lower 70s. Another dry cold front approached the region on the 14th which reduced temperatures to seasonal values in the 50s to lower 60s. The 15th was another cool day across west Texas and southeastern New Mexico with temperatures at or below normal.

On the 16th, an upper-level system brought cool temperatures and moisture to the region. Lows were in the 30s and highs reached the 50s across the entire area. Light rain showers occurred over the Big Bend and Trans-Pecos regions. Highest amounts included 0.20" at Marathon, TX and 0.14" at Iraan, TX. Another upper-level system followed close behind and slowly progressed through west Texas and southeastern New Mexico from the 17th-19th. Rain and above normal temperatures occurred during this period with highest rainfall amounts of 0.61" at Big Spring, TX on the 17th, 0.39" at McCamey, TX on the 18th, and 0.40" at Imperial, TX on the 19th. Much warmer temperatures were present on the 20th and 21st as a dry southwest wind increased across the region. Temperatures were 10°F above normal on the 20th and 20°F above normal on the 21st with highs peaking in the upper 70s to lower 80s in some locations. On the 22nd, light precipitation fell in some areas after a strong cold front moved through. Morning temperatures on the 23rd dropped into the teens and 20s region-wide, but warmer air returned in the afternoon with highs in the mid 60s. Christmas Eve was chilly as polar air was ushered into the region behind another cold front. On Christmas Day, temperatures recovered as highs warmed into the mid 70s in the mountains and mid 50s elsewhere. A strong polar air mass arrived on the 26th-27th causing temperatures to plummet 10-15°F below normal. Freezing drizzle and fog formed across the Permian Basin and southeastern New Mexico both mornings. A brief warm up occurred as temperatures approached normal on the 28th-29th. Then, another polar front arrived on the 30th-31st that held temperatures below freezing across most of the area.

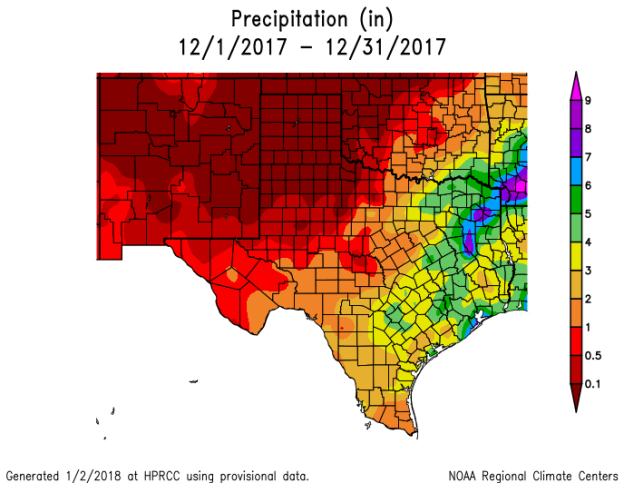
Here are some great pictures sent in from the public and some of our staff! If you've been sharing pictures, awesome! Thanks! If you haven't, consider sharing with us! We love to see weather pictures, and who knows, you may see your picture here or in our Skywarn presentations! Enjoy!

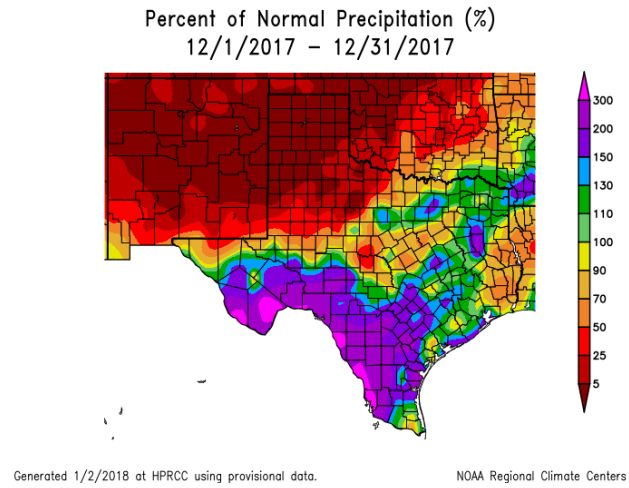
Snow at McDonald Observatory, TX on Dec 7th

Snow falling in Fort Stockton, TX on Dec 7th

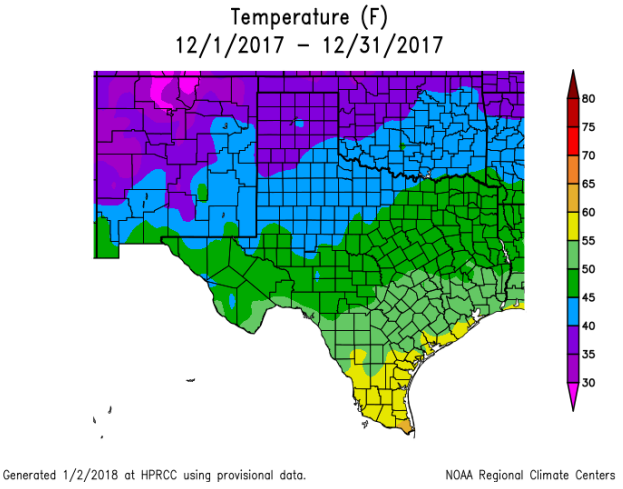
Snow in Big Bend National Park on Dec 7th

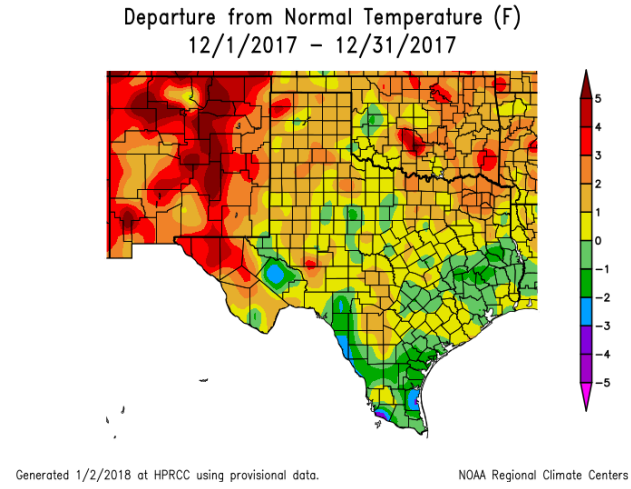
Sunrise over Scurry County on Dec 24th



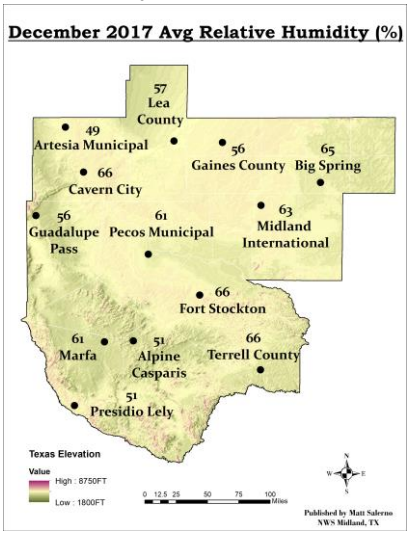


December precipitation in west Texas and southeastern New Mexico ranged from 0.00" at Artesia, NM, to 1.77" at Mt, Locke, TX. The driest locations were southeastern New Mexico and the northern Permian Basin while the wettest locations included the lower Trans-Pecos, Davis Mountains, and Big Bend Region where above normal precipitation was accredited to snowfall.

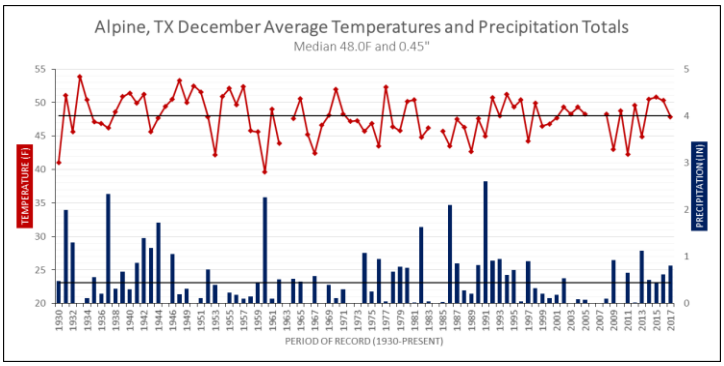


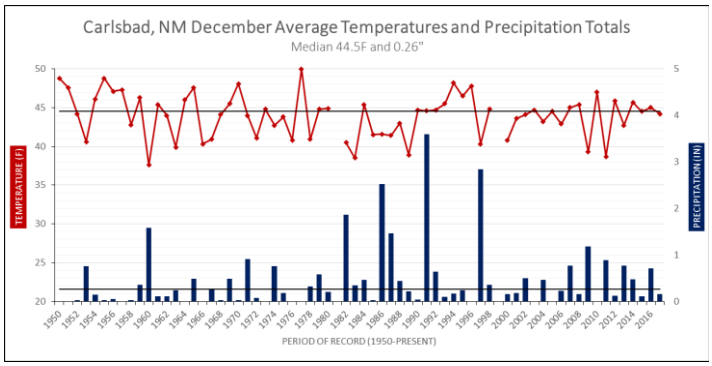


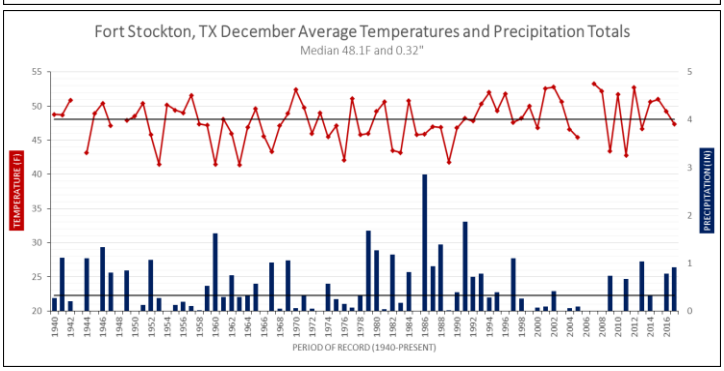
December temperatures ranged from near 41°F at Caprock, NM to about 52°F at Big Bend National Park. Coolest areas were southeastern New Mexico and the Permian Basin with temperatures around 0-2°F above normal. Conversely, the warmest locations included Pecos, Ward, Winkler, and Loving Counties and Big Bend National Park with temperatures 1-3°F below normal.

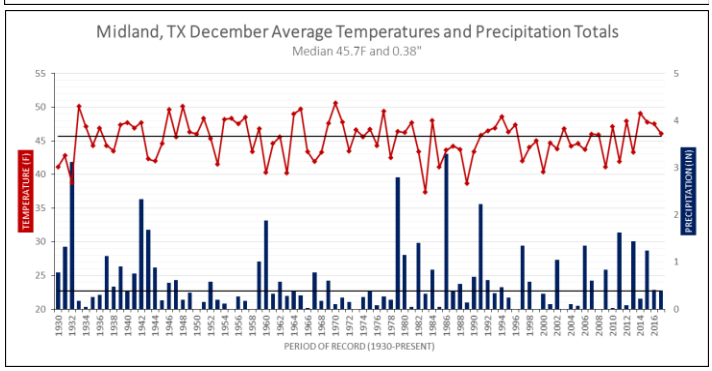


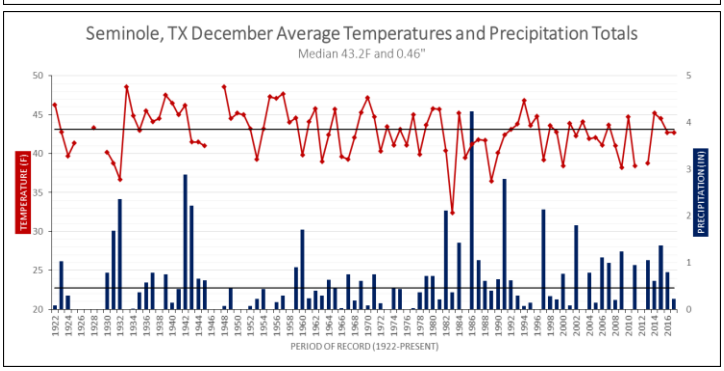
December wind speeds ranged from 5 mph in Presidio, TX to 20 mph at Guadalupe Pass, TX. The highest wind gust recorded was 66 mph at Guadalupe Pass, TX. Average relative humidity values ranged from 49% to 66%.

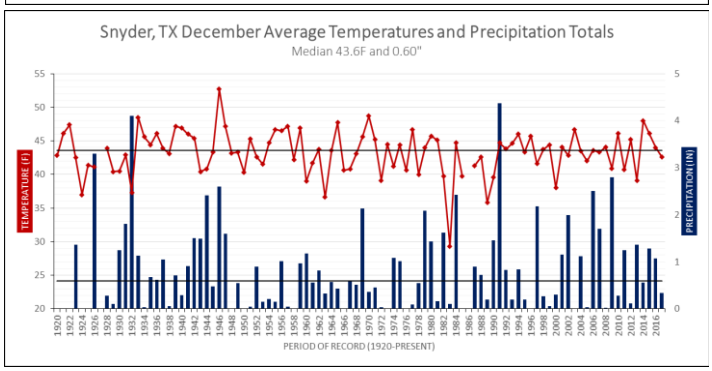












Note: Each location has a slightly different period of record. Data gaps within each graph indicate missing data for those years.

December 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	47.9	0.0	NA	0.81	+0.22	22nd Wettest
Carlsbad Airport	44.2	0.0	NA	0.16	-0.33	29th Driest
Fort Stockton COOP	47.4	-0.5	T-33rd Coolest	0.91	+0.41	17th Wettest
Midland International	46.1	+0.8	40th Warmest	0.39	-0.22	49th Driest
Seminole COOP	42.7	-0.1	T-39th Coolest	0.22	-0.41	T-33rd Driest
Snyder COOP	42.6	-0.4	T-34th Coolest	0.33	-0.54	40th Driest

The graphs above provide December temperature and precipitation data for six individual weather stations at select cities. Average temperatures ranged from 42.6°F at Snyder, TX to 47.9°F at Alpine, TX. Fort Stockton, Seminole, and Snyder, TX were slightly cooler than normal while Alpine, TX Midland, TX and Carlsbad, NM were at or slightly warmer than normal. All six locations had December temperature rankings that were insignificant. Precipitation totals ranged from 0.16" at Carlsbad, NM to 0.91" at Fort Stockton, TX. Alpine and Fort Stockton, TX were the wettest cities compared to average mainly due to snowfall that was received on the 6th-7th. Contrarily, Carlsbad, NM, Midland, Seminole, and Snyder, TX had precipitation deficits with departures from average slightly below normal. The only significant precipitation ranking inside the top 20 was at Fort Stockton, TX which recorded its 17th wettest December. In summary, all six locations experienced near normal temperatures with mainly below normal precipitation with the exception of Alpine and Fort Stockton, TX which received higher precipitation amounts due to snowfall.