## Climate and Weather Summary for April 2024

Temperatures in April averaged above normal at San Angelo and Abilene. Precipitation was above normal at Abilene and slightly below normal at San Angelo. Table 1 summarizes April 2024 temperature, precipitation, and departure from normal for Abilene and San Angelo.

Site	Average Temperature (°F)	Departure from Normal (°F)	Normal Average Temperature (°F)	Total Precipitation (In.)	Departure from Normal (In)	Normal April Precipitation (In.)
Abilene	67.9°	1.9°	66.0°	2.41″	0.55″	1.86"
San Angelo	70.3°	3.2°	67.1°	1.35″	-0.12"	1.47"

## Table 1: April Climate Data for Abilene and San Angelo.

Additional temperature and precipitation data for Abilene and San Angelo is summarized in Table 2.

Site	Warmest High Temperature (°F)	Warmest Low Temperature (°F)	Coldest High Temperature (°F)	Coldest Low Temperature (°F)	Maximum Daily Precipitation (In.)
Abilene	92° on Apr. 14	71° on Apr. 26	57° on Apr. 20	41° on Apr. 3	1.47" Apr. 20
San Angelo	101° on Apr. 18	72° on Apr. 25	63° on Apr. 20	39° on Apr. 4	0.72" Apr. 20

## Table 2: Additional April Climate Data for Abilene and San Angelo.

Maps of total precipitation and percentage of normal precipitation, for April, are shown in Figures 1 and 2 below. These maps are from the High Plains Regional Climate Center.



Figure 1: Total Precipitation for April.



Figure 2: Percentage of Normal Precipitation for April.

## **April 2024 Weather Highlights**

April began with active weather on the 1st, when a strong upper level trough over the southwestern part of the U.S. lifted northeast toward the central Plains. With south winds ahead of a dryline, warm and humid conditions occurred in the morning and early afternoon. The airmass was unstable, ahead of a dryline which entered western parts of the area in the afternoon. Scattered to numerous thunderstorms developed along the dryline and moved east across the Big Country and Concho Valley between 230 PM and 630 PM. Some of the storms were strong to severe with large hail and damaging winds. Most of the severe weather occurred in the Big Country. In Nolan County, power poles were blown down in Sweetwater and Roscoe. A cotton storage warehouse was heavily damaged by thunderstorm downburst winds 2 miles southwest of Sweetwater. In Jones County, baseball size hail damaged vehicles and broke out home windows in Hawley, and baseball size hail was reported 3 miles south of Nugent. In Shackelford County, a wind gust of 88 mph was recorded by a Mesonet site 3 miles east-northeast of Albany. Near the same location, a roof was blown off of a house. In addition, a Mesonet site at Fort Chadbourne recorded a 71 mph wind gust. A Pacific cold front moved quickly east into west-central Texas, overtook the dryline in the evening, and pushed east out of the area later in the evening. Thunderstorm coverage increased along the front across eastern and southern parts of the area. In Brown County, a 71 mph wind gust was reported in Bangs, and localized wind damage was reported just northeast of Brownwood.

Behind the Pacific cold front, strong, gusty west winds brought an intrusion of dust, mostly aloft, into the Big Country and Concho Valley. Peak wind gusts were 56 mph at San Angelo and 54 mph at Abilene. Temperatures were much cooler Apr. 2 with breezy north to northwest winds, following an early morning secondary cold frontal passage from the north. Clear skies and diminishing winds allowed temperatures to drop into mostly the upper 30s to lower 40s for morning lows Apr. 3, with a few mid 30s in low-lying areas. This occurred as a weak high pressure system settled into the area.

A warming trend followed Apr. 4-6, and was accompanied by gusty south winds on the 5th and 6th. Highs were in the lower 90s at several locations Apr. 6 behind a dryline. Seasonably warm but rather dry conditions occurred Apr. 7, with breezy southwest to west winds. Afternoon relative humidity values dropped to 5-12 percent across the area.

On the day of a total solar eclipse (across a swath of Texas) Apr. 8, low-level moisture made a quick return across the area with south to southeast winds. This resulted in some increase in clouds, with warm and more humid conditions. This helped to set the stage for scattered thunderstorms in the late afternoon and early nighttime hours across the northern Big Country. A disturbance aloft moved over the area and a cold front sagged south into the northern Big Country. Scattered to numerous strong to severe storms moved east-northeast across the Big Country mostly north of Highway 180, and mostly between 6 PM and Midnight. The largest hail (1 to 2 inches in diameter) occurred in Fisher and Haskell Counties. Near Haskell, a Mesonet site recorded 67 mph wind gust. Power poles were blown down in the vicinity of Haskell. In Sagerton, power poles and a few tree limbs were blown down. Quarter size hail was reported at a couple of locations in Throckmorton County.

An upper level storm system approached the area Apr. 9, from the border of northern Mexico and southwestern New Mexico. A southward moving strong cold front separated much cooler air to the

north, with much warmer air to the south. This was evident in the large range of temperatures in westcentral Texas at 4 PM, from 55 degrees in Sterling City to 95 at Junction. Ahead of the cold front, a small cluster of strong to severe thunderstorms occurred in the vicinity of an outflow boundary in southeastern parts of the area. This cluster of storms moved east across Mason, far southeastern McCulloch, and southern San Saba Counties in the late afternoon and early evening hours. In southeastern Mason County, hail of 2 inches in diameter (hen egg size) occurred in Loyal Valley.

In the wake of the strong cold frontal passage, temperatures were much cooler Apr. 10 with gusty north to northwest winds. Peak wind gusts were 40-45 mph at several locations across the Big Country and Concho Valley, including Abilene and San Angelo. Decreasing cloud cover later in the afternoon allowed temperatures to recover into mostly the mid 60s to mid 70s.

Temperatures trended warmer Apr. 13-17, with winds mostly from the south. Storms occurred on the evening of Apr. 18 in San Saba and Mason Counties. This date also marked the first occurrence of 100 degree temperatures at San Angelo and Junction. This was followed by a strong cold frontal passage from the north Apr. 18 into early morning hours of Apr. 19.

After the strong cold frontal passage, a <u>more widespread rain event</u> and much cooler temperatures occurred Apr. 20. Temperatures were cool Apr. 21, with cool lows morning Apr. 22.

Thunderstorms with strong and damaging winds occurred in the Big Country Apr. 23. In Taylor County 1 mile east of Trent, a partial train derailment was caused by very strong straight line winds. With estimated wind speeds of 80 mph, 20 to 25 train cars were blown over. Slow moving strong to severe storms in the southern half of San Saba County Apr. 26 caused localized flash flooding 9.7 miles south-southeast of San Saba.

<u>Severe weather</u> occurred with a band of storms which moved east across the Big Country Apr. 27 in the late evening and early nighttime hours.

Additional Tabular and Graphical Daily Climate Data