

**INCLEMENT / SEVERE  
WEATHER  
AND EXTREME  
TEMPERATURE / PRECIPITATION  
WILDFIRE / WIND / PRESSURE / FOG / SUNSHINE  
CLIMATOLOGY  
FOR THE  
GREATER AUSTIN METROPOLITAN AREA  
(TRAVIS, WILLIAMSON AND HAYS COUNTIES)**

**5th Edition  
February 2012**

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# ACKNOWLEDGMENTS

Thanks go to many people for help in gathering and reviewing this data.

In particular, thanks go out to...

- ... Dusty Viebrock and Lauren Johnson, 2011-12 UT Student Research Assistants (assistance in updating the 5th edition)
- ... Jason Joiner and Daniel Frias, 2006 Student Research Assistants / Interns  
from the University of Texas (updating of data, editing and assistance with the 4th edition)
- ... Matt Miller, Summer 1997 KTBC-TV Intern and Robert Parks, 1995 University of Texas  
student, for their initial gathering of tornado and severe weather data for the 1st edition
- ... Jason Seale, 2002 Student Research Assistant / Intern  
from the University of Texas (updating data, editing and assistance with 3rd edition)
- ... Robert Blaha, National Weather Service (Austin-San Antonio) Lead Forecaster and Climate Focal Point (updating 5th Edition)
- ... Larry Eblen, Retired, National Weather Service (Austin-San Antonio) Warning Coordination  
Meteorologist, for his assistance in gathering and verifying data
- ... Larry Peabody, Retired, National Weather Service (Austin-San Antonio) Lead Forecaster  
and Climate Focal Point, for his assistance in gathering and verifying data
- ... Jenny Pressley and the staff of the National Climatic Data Center (Asheville, NC)  
for their data gathering assistance
- ... John (Jay) Grimes III, formerly with the Southern Regional Climate Center at  
Louisiana State University, Baton Rouge, LA, for his assistance in gathering data
- ... George Bomar, Meteorologist and Author of **Texas Weather**, for data used in this report
- ... Tom Grazulis, Author of **Significant Tornadoes**, for his hard work in preparing this  
indispensable work documenting tornadoes in the United States since the 1880s  
and for data used in my publication
- ... Ken Neafcy, Deputy Director, Seattle (WA) Office of Emergency Management for his invaluable  
assistance in preparing the severe weather climatology graphics for the Travis, Hays  
and Williamson County area
- ... Victor Murphy, Southern Region Climate Focal Point, National Weather Service for data used in this report
- ... Scott Mount, Deputy, Williamson County Sheriffs Office for his help in preparing graphics
- ... The staff of the National Weather Service Office in Austin, Texas (now closed and consolidated  
into the modernized Austin-San Antonio National Weather Service Forecast Office) for the  
attention and documentation of inclement and severe weather events and records from the  
1920s through the closure of the local office in the middle 1990s.
- ... The Austin Bergstrom International Airport ASOS Federal Aviation Administration Contract  
Weather Observers, as well as the FAA Tower personnel in Austin, for their dedication  
in maintaining the documentation of inclement and severe weather events for the Austin  
area since the closure of the local National Weather Service office
- ... The City of Austin Department of Aviation, the city's Airport Advisory Board (in particular, Joe Trochta)  
and the Austin City Council for their commitment in maintaining full time weather observers at  
Austin's former Robert Mueller Municipal Airport and Austin Bergstrom International Airport

A special thanks to the following current and past reviewers of this document:

- William (Bill) Runyon, Retired, Observation Program Leader, National Weather Service Forecast Office, Austin-San Antonio
- Dennis Cook, Retired, Hydrometeorological Technician, National Weather Service Forecast Office, Austin-San Antonio
- Victor Murphy, Climate Focal Point, National Weather Service Southern Region Headquarters
- Bob Rose, Chief Meteorologist, Lower Colorado River Authority
- Kenneth Neafcy, former Operations Plans Officer, City of Austin Office of Homeland Security / Emergency Management
- Dr. Robert Holz, Retired, Professor of Geography, University of Texas at Austin
- Joe Trochta, former Board Member, City of Austin Airport Advisory Board
- John (Jay) Grimes III, formerly with the Southern Regional Climate Center, Louisiana State University
- Larry Peabody, CCM, Retired, Lead Forecaster, National Weather Service Forecast Office, Austin-San Antonio
- Dan Smith, Retired, Chief, Scientific Services, National Weather Service, Southern Region Headquarters

# DATA SOURCES

National Weather Service Forecast Office, Austin-San Antonio, TX

Southern Regional Climate Center, Louisiana State University, Baton Rouge, LA

Office of State Climatologist, Texas A & M University, College Station, TX

National Climatic Data Center, Asheville, NC

Base Weather Personnel, Bergstrom U. S. Air Force Base (Closed), Austin, TX

Air Weather Service Climatic Brief, Bergstrom U. S. Air Force Base (1942-1995), Austin, TX

Lower Colorado River Authority (WaterCo), Austin, TX

**Storm Data**, NOAA, National Weather Service

**Significant Tornadoes**, Tom Grazulis (Environmental Films), St. Johnsbury, VT, 1991

**Texas Weather** (2nd Edition), George Bomar (University of Texas Press), Austin, TX, 1995

Austin American Statesman (Cox Newspapers), Austin, TX

## 5th Edition

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# INTRODUCTION

This reference document had its beginnings back in the late 1980s into the early 1990s after it was decided to close the local Austin National Weather Service office (WSO). The office, as part of a national reorganization, was consolidated with other offices, in August 1995, into the National Weather Service Weather Forecast Office (WFO) Austin/San Antonio, TX, with its offices at the municipal airport in New Braunfels, Texas.

The local National Weather Service office worked especially hard over the years to create a very exact and precise local climatology, both in the sense of temperatures, precipitation and other numerical presentations as well as narrative reports of severe and inclement weather. Their reports and summaries captured data on weather conditions that occurred not only over the Austin/Travis County area but the WSO county warning area, which originally included 16 counties.

It is the intent of this report to preserve this information and to present it, as completely as possible, in one concise document. It is understood that this is a living document; this is, new data will require updates on a regular and frequent basis.

A couple of notes regarding this document. This report is simply a summation of various types of data for the greater Austin Metropolitan area; if you will, a sort of "all you ever wanted to know about the greater Austin metropolitan area weather and climate." There is plenty of room for future research through some of the data presented (i.e., warming of local temperatures that may or may not be related to global warming). It is not my intention to research these issues but there could be some interesting work done.

Another issue for the reader to be aware of is the May 23, 1999 move of the city's airport to the former site of Bergstrom Air Force Base in southeast Austin (about 6 miles southeast of the downtown area). The new facility, Austin Bergstrom International Airport, has a distinctly different siting as far as the meteorology is concerned, particularly temperatures, that the former Robert Mueller Municipal Airport. The new airport is in a more rural and low lying location (being in the Onion Creek watershed) that the former airport "in city" observation site.

After examination of the issue, the National Weather Service, working in unison with local meteorologists, decided to move the former Robert Mueller Municipal Airport Automated Surface Weather Observing System (ASOS) to Camp Mabry (about three miles north northwest of the downtown area), which mirrors closely the "in city" site as formerly seen at Robert Mueller Municipal Airport. The 100 years plus climate data base was moved to Camp Mabry as well.

The Austin Bergstrom International Airport uses the military climate data base which was established when Bergstrom Air Force Base was opened at the location of the new airport in October of 1942.

In conclusion, as indicated and mapped on the next page, we are fortunate to have two hourly weather observation sites, and, in addition, two sets of "first order" climate data, in the Austin area.

Please note that the National Weather Service, when submitting storm reports and finalizing reports for Storm Data, completes all reports in standard time. I will maintain this convention in this publication as well. When we are observing central standard time, the actual occurrence times are as indicated in this publication; however, when we are observing central daylight time, you'll need to add an hour to the standard times indicated in this publication.

Troy Kimmel  
February 2012

There are two NWS/FAA “first order” weather/climate reporting locations in Austin.  
They are associated with these 24 hour a day ASOS locations...

**Austin City / Camp Mabry Army National Guard - NWS ASOS**

ID: KATT                      WBAN: 13958                      ISSN#: 1528-7440  
Lat: 30 ° 19'N                      Long: 97 ° 46'W                      Elev (Ground) 655 Feet

Stand alone ASOS with a stand alone thunderstorm sensor but no real time human augmentation

Climate data set:

Supports 154 years of temperature data (1856 to current NWS)

Supports 85 years of precipitation data (1925 to current NWS)

**Austin Bergstrom International Airport - FAA ASOS**

ID: KAUS                      WBAN: 13904                      ISSN#: 1528-7459  
Lat: 30 ° 10'N                      Long: 97 ° 40'W                      Elev (Ground) 487 Feet

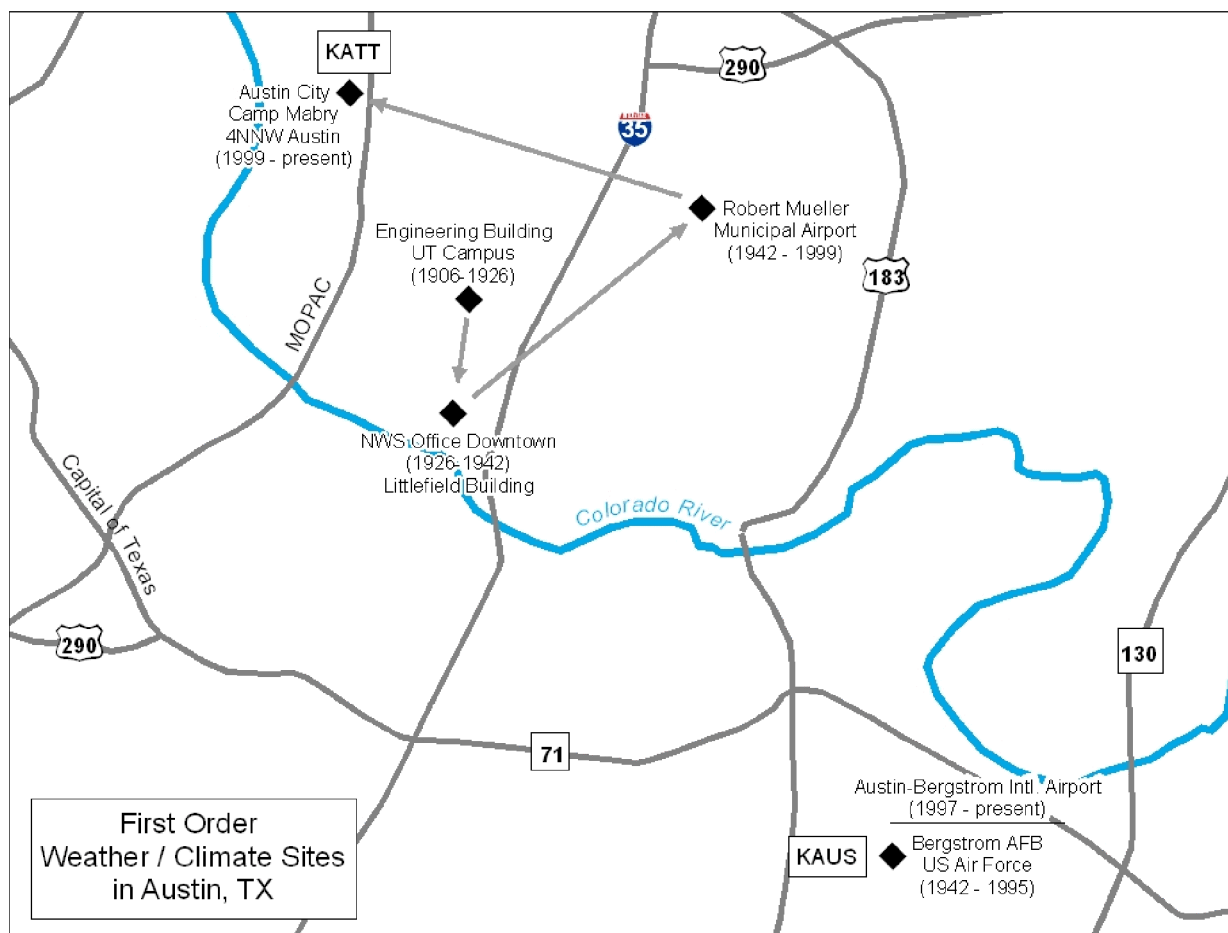
FAA service level “A” 24 hour a day human weather augmentation

Climate data set:

Supports 66 years of temperature data (1942 to 1995 U S Air Force Base and 1997 to current NWS)

Supports 66 years of precipitation data (1942 to 1995 U S Air Force Base and 1997 to current NWS)

Here is a mapped history of the two “first order” weather/climate reporting sites in Austin...



# GREATER AUSTIN METROPOLITAN AREA

## CLIMATOLOGICAL SUMMARY

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Summary prepared by Meteorologist Troy Kimmel

Austin and south central Texas are located on the westernmost fringes of the humid subtropical climate type (Cfa as defined by Koppen) that covers the southeastern quarter of the United States. This climate type is strongly influenced by the maritime tropical air masses that emerge from the Gulf of Mexico to the southeast. Although this is the dominant air mass, south central Texas and the Austin area is frequented at different times of the year, as well, by other air masses that emerge from areas such as northern Mexico, Canada, the Pacific Ocean and even occasionally from the arctic regions. All in all, it is an area of weather variety.

With the close proximity of the semiarid climate (BS as defined by Koppen) to our west, south central Texas is in an area of great variety as far as precipitation amounts are concerned. We can and do see years of drought, years of near normal rainfall and, yes, years of flood.. all depending on weather patterns in place across our area of the country.

The winter season is normally the most cloudy and humid time of the year although that moisture doesn't necessarily find its way into the rain gauge as precipitation. Fog and low clouds are quite common. Temperatures do cool with cold frontal passages, but those fronts are most often of modified Pacific or Canadian origin. Occasionally, perhaps once or twice a year, the much colder Arctic air masses proceed southward across Texas. Freezing or frozen precipitation is infrequent, but when it does occur, travel difficulties result as the area is unaccustomed to such events. Freezing rain, freezing drizzle and sleet (ice pellets) are most common since the depth of the cold air needed for more significant snow events doesn't occur very often.

The spring and fall seasons are, of course, seasons of change. Convective activity, namely rain showers and thunderstorms, become more frequent during the spring months with most of the severe and inclement weather (large hail, damaging thunderstorm wind, flash flooding and tornadoes) occurring during these months. Although severe weather is not an everyday event, it most commonly occurs in advance of southeastward moving cold fronts and/or upper level low pressure disturbances as they move sluggishly through increasingly warm and unstable air masses that become more established during the mid and late spring months. Although the fall months exhibit a secondary surge in precipitation amounts, the spring months contain most of the real stormy weather. Many Austinites consider the fall months, especially October and November, as the most pleasant time of the year.

The summer months are fairly consistent as far as weather is concerned. Cold frontal passages are very infrequent as maritime tropical air masses dominate. Normally, summertime in south central Texas is made up of mostly sunny or partly cloudy days with highs in the 90s with overnight lows in the 70s. Air mass rain showers and thunderstorms do occur in association with maximum daytime heating. Occasionally, tropical cyclones do emerge from the Gulf of Mexico in mid and late summer into the early and mid fall months, but the events are usually few and far between. The last tropical cyclones to directly affect the area were Hurricane Allen in 1980, Hurricane Celia in 1970 and Hurricane Carla in 1961. Even though we are a little more than 100 miles inland from the Texas gulf coast, these tropical cyclones are still a force to be reckoned with locally as they can produce sustained high winds, torrential rains and flooding as well as tornadoes.

### **Editors Note:**

For more information, please see the National Weather Service NCDC Local Climatological Data Weather Brief and Station History on page 90 of this report.



# GREATER AUSTIN METROPOLITAN AREA

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## PART 1: TORNADOES AND WINDSTORMS

Although south central Texas and the greater Austin metropolitan area aren't considered to be in "tornado alley," the area has, over the years, seen its share of tornadoes and convective (thunderstorm) windstorms.

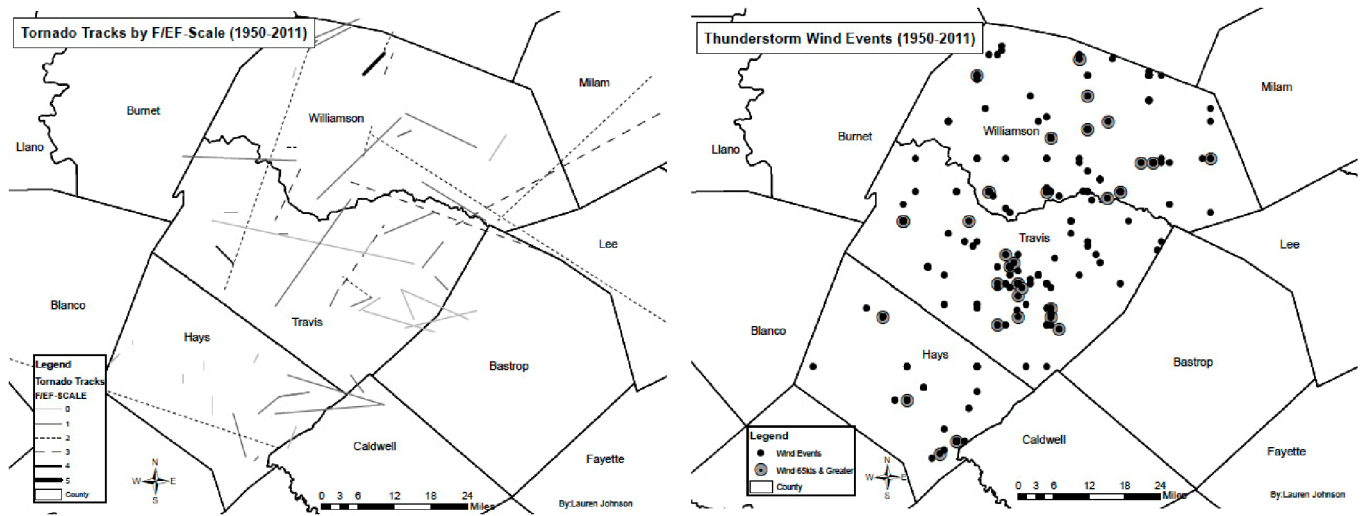
An interesting point is made by looking at the top three deadliest tornadoes in Texas since 1900.. namely the Rocksprings, TX tornado of April 12, 1927 (F5, 74 dead, 205 injured), the Goliad, TX tornado of May 18, 1902 (F5, 114 dead, 250 injured) and the Waco, TX tornado of May 11, 1953 (F5, 114 dead, 597 injured). When you connect these points, you find that south central Texas falls almost equal distance between these three points.

Thunderstorms fundamentally require moisture, atmospheric lift and atmospheric instability. Upper level winds, in many cases, make the difference between a garden variety thunderstorm and a severe thunderstorm that may produce large hail, damaging convective straight line winds and even tornadoes. With our latitude of about 30 degrees North, better dynamics and stronger upper air winds often pass north of the area (through the traditional "tornado alley" area). Even so, stronger upper air disturbances with more southward tracks and even land falling tropical cyclones can produce atmospheric environments favorable for tornadoes locally. Still considered one of the nation's worst urban hurricane related tornadoes, Austin saw a significant tornado in association with land falling Hurricane Allen back in August of 1980 (see listing below).

You will notice that I am careful to distinguish between tornado and straight line thunderstorm events. Many times there is a rush to associate thunderstorm wind damage with tornadoes. Most thunderstorm wind damage in the United States is associated with straight line (or downdraft) thunderstorm winds which produce a more widespread divergent damage pattern while tornadoes produce a more convergent damage pattern along a much more well defined path.

Listed here, as well, are non-convective wind storms that can occur as the result of deep low pressure crossing the state.

Convective wind storms and tornadoes are most common locally in mid and late spring with another early and mid fall smaller peak. Non convective wind storms most commonly occur in the spring and the fall months.



This summary lists significant tornado and windstorm events as they have occurred in the Austin metropolitan area as well as other areas in Hays, Williamson and Travis Counties.

In case of multiple tornadoes on a given day, a data set will be given for each tornado.

In case of unknown or unavailable data, "----" is listed.

Year	Date / Time	Event	County
Storm Data and Remarks (Tornado Fujita Scale Designation, Deaths (if any), Injuries (if any), Tornado Path Width, Tornado Path Length)			
<b>1897</b>	<b>28 Mar / 2:30pm</b>	Tornado	Travis
A tornado, with a 2 mile path length, near the University of Texas campus. "B" Hall, a dormitory, was unroofed with trees uprooted all across the campus. (F2, 0 deaths, 0 injuries, 50 yards wide, 2 miles long)			
<b>1902</b>	<b>18 May / 2:00pm</b>	Tornado	Hays
Two tornadoes moved north northwestward in northern Hays County. Tornado #1 moved from three miles west of Kyle to 6 miles northwest of Kyle around 2:00pm with tornado #2 occurring around Walters Park about 2:30pm. (Tornado #1: F2, 0 deaths, 1 injury, 50 yards wide, 10 miles long) (Tornado #2: F2, 0 deaths, 0 injuries, 50 yards wide, <1 mile long)			
<b>1912</b>	<b>20 Apr / ----</b>	Tornado	Williamson
A tornado occurred near Taylor. (F1, 1 death, 1 injury, ---- yards wide, ---- miles long)			
<b>1921</b>	<b>09 Sep / 2:30pm</b>	Tornado	Travis, Williamson
A tornado, with a fifteen mile path length, from north Austin northward to Pflugerville and Hutto. The hurricane spawned tornado injured ten people, destroyed ten homes and damaged 35 others in the Pflugerville and Hutto areas. (F2, 0 deaths, 10 injuries, 100 yards wide, 15 miles long)			
<b>1922</b>	<b>04 May / 3:50pm</b>	Tornado	Travis
The first of two tornadoes on this date formed over the Austin area at 3:50pm. It was referred to as the "western cloud" and originated six miles north northwest of the State Capitol and moved south southeastward, damaging property at the state hospital and injuring five people. Turning then southwestward, it destroyed camps at Deep Eddy on the Colorado River, injuring two people. After crossing the river, the tornado dissipated. The tornado was photographed with the capitol dome in the foreground. The second tornado, referred to as the "eastern cloud," developed at 3:55pm and was far more violent and deadly and about three miles east of the previous tornado. The first damage from this second tornado was noted about two miles southeast of the State Capitol. The tornado moved southward to near the St. Edwards University campus where one student was killed in a dormitory and there was \$200,000 in damage. A manufacturing plant was destroyed and three deaths occurred in three nearby homes in the Penn Field area off of South Congress Avenue in south Austin. Buildings were leveled on St. Elmo. Six people died in one home in Davis Hill which is between Manchaca and Oak Hill. Two other people died in small homes northwest of Manchaca. (Tornado #1: F2, 0 deaths, 5 injuries, 70 yards wide, 9 miles long) (Tornado #2: F4, 12 deaths, 50 injuries, 200 yards wide, 15 miles long)			
<b>1922</b>	<b>15 May / 3:30am</b>	Tornado	Williamson
A tornado occurred just northeast of Taylor. (F2, 0 deaths, 0 injuries, 70 yards wide, 2 miles long)			
<b>1924</b>	<b>26 Apr / 4:30am</b>	Tornado	Travis
An early morning tornado, ten miles south of Austin, destroyed tenant homes and barns between Carl and Colton. Five people died as frail, rural houses were scattered for a mile. (F2, 5 deaths, 15 injuries, 50 yards wide, 4 miles long)			
<b>1924</b>	<b>28 Apr / 6:00pm</b>	Tornado	Hays
A tornado occurred about three miles east of Kyle during the evening hours. (F2, 3 deaths, 40 injuries, 200 yards wide, 3 miles long)			

<b>1926</b>	<b>16 Jan / 4:00pm</b>	Tornado	Williamson
A tornado occurred east of Taylor during the mid and late afternoon hours. (F2, 0 deaths, 0 injuries, ---- yards wide, 2 miles long)			
<b>1927</b>	<b>18 Apr / 10:00pm</b>	Tornado	Williamson
A tornado moved northeastward from west of Granger into Bell County to the north. (F2, 2 deaths, 5 injuries, 70 yards wide, 15 miles long)			
<b>1934</b>	<b>24 Jul / 7:00pm</b>	Tornado	Williamson
An evening tornado moved through the communities of Walburg and Weir. (F2, 0 deaths, 4 injuries, ---- yards wide, ---- miles long)			
<b>1944</b>	<b>01 May / 4:00pm</b>	Tornado	Travis, Williamson
A tornado moved north northeastward along a path through the Hutto area. (F2, 3 deaths, 8 injuries, ---- yards wide, 9 miles long)			
<b>1946</b>	<b>24 May / 5:00pm</b>	Tornado	Williamson
A violent tornado moved southeastward about 4 miles west of Granger. (F4, 1 death, 1 injury, 400 yards wide, 7 miles long)			
<b>1947</b>	<b>31 Dec / 3:30pm</b>	Windstorm	Travis
76 mph wind gusts, associated with rain shower and thunderstorm activity to the south of the airfield, were recorded at Bergstrom Air Force Base.			
<b>1949</b>	<b>14 Jun / ----</b>	Windstorm	Travis
79 mph thunderstorm wind gusts were recorded at Bergstrom Air Force Base.			
<b>1953</b>	<b>31 Jan / 12:19pm</b>	Windstorm	Travis
73 mph thunderstorm wind gusts were recorded at Bergstrom Air Force Base.			
<b>1953</b>	<b>31 Mar / 6:20am</b>	Windstorm	Travis
73 mph thunderstorm wind gusts were recorded at Bergstrom Air Force Base.			
<b>1954</b>	<b>30 Apr / 6:10am</b>	Tornado	Travis, Williamson
A tornado, beginning in eastern Travis County, moved northeastward through extreme eastern Williamson County and then finally into Milam County. The tornado moved through the Beyersville community just southeast of Taylor. (F2, 0 deaths, 6 injuries, 400 yards wide, 40 miles long)			
<b>1956</b>	<b>20 Oct / 12:56pm</b>	Tornado	Travis
A small tornado was observed north northeast of the Robert Mueller Municipal Airport U. S. Weather Bureau station by the weather observers. Damage was reported to trees and to oat fields. The tornado dissipated quickly after touching down. (F1, 0 deaths, 0 injuries, 33 yards wide, 1/8 mile long)			
<b>1957</b>	<b>31 Mar / 9:05am</b>	Tornado	Travis
A tornado was observed about three miles northwest of Robert Mueller Municipal Airport by U. S. Weather Bureau weather observers. Considerable damage to power lines and roofs in the area as it moved north northeastward. (FF1, 0 deaths, 0 injuries, 100 yards wide, 1/2 mile long)			
<b>1957</b>	<b>31 Mar / 10:30am</b>	Tornado	Travis
A tornado was reported in the Pflugerville area tearing a 40 foot "gap" in the wall of a brick school building and causing damage to trees and antennas in the area. (F2, 0 deaths, 0 injuries, 70 yards wide, 10 miles long)			
<b>1959</b>	<b>10 May / 2:20pm</b>	Tornado	Travis, Williamson
A tornado occurred in the northwest part of Austin during the afternoon with two commercial buildings destroyed and several residences damaged. \$250,000 in damage. The tornado moved to near Round Rock. (F2, 0 deaths, 0 injuries, 70 yards wide, 10 miles long)			
<b>1962</b>	<b>29 May / 12:50am</b>	Windstorm	Travis
71 mph thunderstorm wind gust at Bergstrom Air Force Base.			

<b>1965</b>	<b>16 May / 3:40pm</b>	Windstorm	Travis
78 mph thunderstorm wind gust at Bergstrom Air Force Base.			
<b>1966</b>	<b>18 May / 4:00pm</b>	Tornado	Williamson
A tornado moved north northeastward a path from about nine miles to about two miles southwest of Florence. (F2, 0 deaths, 0 injuries, 50 yards wide, 7 miles long)			
<b>1970</b>	<b>04 Jul / 6:15pm</b>	Tornado	Travis
Dubbed the "Lake Travis Tornado," this tornado was relatively weak. It moved east from Lakeway to near Lake Travis. At Hurst Creek Dock, it overturned the dock resulting in the drowning death of one man. Three people in the area were injured by flying broken glass. The tornado then unroofed a couple of homes in the Lakeway area. A marina was also damaged. (F1, 1 death, 4 injuries, 50 yards wide, 2 miles long)			
<b>1971</b>	<b>17 Nov / 3:30pm</b>	Tornado	Williamson
A tornado moved north northeastward through San Gabriel and Coupland before continuing northeastward into Milam County. (F2, 0 deaths, 0 injuries, 35 yards wide, 25 miles long)			
<b>1976</b>	<b>30 Mar / 3:45am</b>	Tornado	Travis
A tornado moved eastward through Garfield. (F2, 0 deaths, 8 injuries, 100 yards wide, 5 miles long)			
<b>1977</b>	<b>14 Apr / 6:00pm</b>	Tornado	Travis, Williamson
A dozen funnel clouds as well as one confirmed tornado were sighted southwest through west of the Austin area in the vicinity of SH 71 and RR 620 and also near Lake Travis. The tornado initially developed near Bee Cave then moved north northeastward across Lake Travis and Volente and then into Williamson County. At the Austin Yacht Club, on the west side of Lake Travis, free floating docks were pulled loose. In addition, golf ball size hail occurred. (F2, 0 deaths, 1 injury, 200 yards wide, 16 miles long)			
<b>1980</b>	<b>07 Apr / 4:48pm</b>	Tornado	Travis, Williamson
A rather strong late afternoon tornado developed near Round Rock and moved east southeastward into northeastern Travis County and then east southeastward into Lee and Bastrop Counties. The tornado was particularly visible and was photographed during its lifetime through Williamson and Travis Counties. Homes and businesses were damaged and destroyed in the Round Rock area and also in the community of Lund in eastern Travis County. Otherwise, most damage was to farm and agricultural land and equipment. (F3, 1 death, 5 injuries, 200 yards wide, 25 miles long)			
<b>1980</b>	<b>28 Jul / 1:40pm</b>	Windstorm	Travis
Thunderstorm winds of 40 mph with gusts to 69 mph reported by weather observers at the Robert Mueller Municipal Airport National Weather Service Office.			
<b>1980</b>	<b>10 Aug / 1:14pm</b>	Tornado	Travis
A tornado, produced by westward moving rain bands associated with land falling Hurricane Allen, moved in a northwestward path near Lytton Springs, in Caldwell County, and then moved into extreme southeastern Travis County. (F2, 0 deaths, 0 injuries, 80 yards wide, 14 miles long)			
<b>1980</b>	<b>10 Aug / 1:40pm</b>	Tornado	Travis
In association with land falling Hurricane Allen, this tornado was produced within rapidly moving west and northwestward moving rain bands. This tornado is commonly referred to as the "Austin Airport Tornado" as it developed just southeast of Robert Mueller Municipal Airport and then moved northwestward crossing the northeastern side of the airport causing extensive damage to small airplanes and buildings (and military aircraft evacuated from coastal military bases) at and near the airport and then tossing widespread debris northwestward across the intersection of Interstate 35 and 51st Street on the northwest side of the airport. A couple of Austin weather legends are associated with this tornado: Austin National Weather Service employees Jim Dugan and Mel Dunagin covered the tornado live ("play-by-play") on NOAA Weather Radio as they watched it move northwestward only about a quarter to a half mile north of their building; A Texas International Airlines DC-9 jet aircraft, on final southeastward approach to the airport, broke out of a cloud ceiling a few miles northwest of the airport to see the tornado coming right at them. A quick aborted land and diversion to another airport by the DC-9 pilot avoided a "head-on" collision with the tornado. Damage at the airport was said to be the worse ever (to that time) from a tropical cyclone related tornado; the final damage at the airport alone was estimated at \$250 million. (F2, 0 deaths, 4 injuries, 150 yards wide, 3 to 5 miles long)			



**1980                      10 Aug / 4:02pm                      Tornado                      Hays**  
 Another hurricane Allen related tornado developed just east northeast of San Marcos over Caldwell County and continued on an intermittent path westward (with five distinct segments) through the northern sections of San Marcos and westward to near Wimberley and Dripping Springs and into eastern Blanco County. Damage in San Marcos alone was estimated at \$15 million.  
 The first segment touched down near San Marcos Municipal Airport and state highway 142 at 4:02pm and struck the Gary Job Corp Center causing extensive damage. It moved west northwestward across state highway 21 destroying a house and continued to the northeast corner of the intersection of Interstate 35 and Loop 82. At this intersection, the northeast wing of the Care Inn nursing care facility was destroyed. On the west side of Interstate 35, it damaged a hotel and a restaurant. As it moved westward near Uhland Road, it damaged several homes and passed very close to the KCONY Radio Station studios. From there, the tornado removed part of the roof of Travis Elementary School and then moved to near the intersection of Loop 82 and the San Marcos River near Aquarena Springs. After that it lifted and moved westward where segment number two caused a major power line break along Ranch Road 12 west of San Marcos. Segment three ran near Wimberley (an 8 mile path length) and the tornado went into its fourth and segments into Blanco County. Most injuries were in the San Marcos area.  
 (F2, 0 deaths, 20 injuries, 200 yards wide, 47 miles long - intermittent)

**1981                      10 Feb / 1:13am                      Tornado                      Williamson**  
 A tornado moved northeastward on a short path 1 mile northwest of downtown Georgetown. Substantial building, home and automobile damage.  
 (F2, 0 deaths, 200 yards wide, 1 mile long)

**1983                      01 Apr / 11am-1pm                      Windstorm                      Travis**  
 High winds, associated with an intense low pressure area moving across north Texas, resulted in northwest winds at 40 with gusts to 58 mph causing extensive blowing dust at Robert Mueller Municipal Airport National Weather Service observing station.

**1983                      04 Jun / 9:30 pm                      Tornado                      Williamson**  
 A tornado moved through the Taylor area in eastern Williamson County. It first touched down in northwestern Taylor then moved eastward across the northern parts of the city narrowly missing the hospital and a school. Trees and power lines were downed. Large hail accompanied the storm breaking many windows in the city.  
 (F1, 0 deaths, 0 injuries, 50 yards wide, 1/2 mile long)

**1983                      22 Nov / 11:11 pm                      Windstorm                      Travis**  
 High winds at Robert Mueller Municipal Airport National Weather Service observing station, associated with an eastward moving cold front resulted in northwest winds of 41 mph with gusts to 58 mph.

**1984                      26 Feb / 3:37 pm                      Windstorm                      Travis**  
 High winds at Robert Mueller Municipal Airport National Weather Service observing station, caused by an intense low pressure area across north Texas, resulted in northwest winds gusting to 47 mph.

**1984                      28 Mar / 5:39 am                      Windstorm                      Travis**  
 High northwest winds at Robert Mueller Municipal Airport National Weather Service observing station of 38 mph with gusts to 56 mph.

**1985                      19 Jan / 11:01 pm                      Windstorm                      Travis**  
 High north winds at Robert Mueller Municipal Airport National Weather Service observing station of 32 mph with gusts to 52 mph.

**1987                      25 Jun / 3:45 pm                      Windstorm                      Travis**  
 Thunderstorm winds at the Robert Mueller Municipal Airport National Weather Service observing station were from the west at 24 mph gusting to 52 mph. About 200 trees were blown down across the city. Some power lines down and windows blown out of some buildings on the north side of Austin. 2 injuries from windows blown out of residence were reported in same area.

**1987                      10 Sep / 3:30-4:00 pm                      Windstorm                      Travis**  
 Thunderstorm winds at the Robert Mueller Municipal Airport National Weather Service observing station were from the north at 52 mph with gusts to 81 mph. There was heavy damage to small aircraft and to buildings on north and east side of airport.. including some damage to the National Weather Service building. Damage photo from building was on the cover of **Storm Data** for September.

**1987                    14 Dec / 10:05 pm                    Windstorm                    Travis**  
High winds at Robert Mueller Municipal Airport National Weather Service observing station from the northwest at 44 mph with gusts to 63 mph.

**1989                    17 May / 4:02 am                    Tornado                    Williamson**  
A strong predawn tornado moved north northeastward through Jarrell. 18 wheel trucks were overturned along Interstate 35. Extensive damage to buildings along IH35 in Jarrell. A female was killed when the trailer she and her husband were living in was heavily damaged. She was killed when the waterbed in which she was sleeping overturned, suffocating her.  
(F3, 1 death, 28 injuries, 1500 yards wide, 3 miles long)

**1990                    01 Feb / 4:15 pm                    Windstorm                    Travis**  
Thunderstorm winds at Robert Mueller Municipal Airport National Weather Service observing station gusted to 61 mph. There was damaged reported in scattered areas of the city of Austin.

**1991                    14 Apr / 4:04 am                    Windstorm                    Travis**  
Thunderstorm winds at Bergstrom Air Force Base gusted to 60 mph. Several trees downed. Estimated winds of 75 mph were reported by observers in the Oak Hill area.

**1992                    03 Mar / 9:52 pm                    Windstorm                    Travis**  
Thunderstorm winds at Bergstrom Air Force Base gusted to 68 mph. The winds resulted in five downed utility poles near the entrance to the base. Power outages were reported across the city of Austin. Several homes in the Circle C area of south Austin sustained roof damage.

**1992                    27 May / 5:00-7:00 pm                    Windstorm                    Travis**  
Thunderstorm winds at Robert Mueller Municipal Airport National Weather Service observing station gusted to 63 mph. Several trees were uprooted and power lines downed throughout the area.

**1992                    03 Sep / 7:10 pm                    Windstorm                    Travis**  
Thunderstorm winds at Bergstrom Air Force Base gusted to 60 mph. Winds tore roofs off several mobile homes in Pflugerville.

**1994                    29 May / 10:52 pm                    Windstorm                    Travis**  
Thunderstorm winds at Robert Mueller Municipal Airport National Weather Service observing station gusted to 61mph. Numerous large tree limbs broken, which in turn, downed a number of power lines. About 10,000 residents were without power for up to 24 hours.

**1995                    07 Sep / 7:45-8:05 pm                    Windstorm                    Travis**  
Thunderstorm winds at Robert Mueller Municipal Airport National Weather Service observing station gusted to 64 mph. Thunderstorm winds at Bergstrom Air Force Base gusted to 75 mph. This was a major convective windstorm event for the Austin metropolitan area with a swath of damage that started near Robert Mueller Airport and the University of Texas campus and extended southward across the downtown area and then southward across Town Lake into south Austin along and west of IH35. Power was out to some 75,000 utility customers.. and remained out in some areas for five days. Numerous structure fires due to lightning. Since it was a Friday night, many high school football games saw crowds scatter for shelter.. many games were cancelled or terminated early. A boatload of tourists on Lake Travis had to be rescued due to rough waters stirred by the high winds.

**1996                    20 Sep / 8:58 pm                    Tornado                    Travis**  
A tornado was spotted by the public and by law enforcement near Lake Travis south of Lago Vista. It then moved eastward over the lake and crossed it causing damage to the roof of a home as it emerged on the southeast side of the lake before dissipating.  
(F1, 0 deaths, 0 injuries, 50 yards wide, 1.7 miles long)

**1997                    27 May / 3:30-4:50 pm                    Tornadoes                    Williamson / Travis**  
Beginning at about 3:30 pm, the first tornado moved south southwestward from Bell County into Williamson County near Jarrell, with an extremely violent tornado developing just north of Jarrell and moving into the Double Creek subdivision just west of Jarrell. The second strong tornado developed at 4:05 pm around the Cedar Park area and caused extensive damage and injuries. The third violent tornado developed at 4:50 pm in Travis County, just southwest of Lake Travis in the Pedernales Valley in the Hazy Hills subdivision. One man was killed.  
Tornado #1: (F5, 27 deaths, 12 injuries, 650 yards wide, 5.1 miles long)  
Tornado #2: (F3, 0 deaths, 15 injuries, 200 yards wide, 6 miles long)  
Tornado #3: (F4, 1 death, 5 injuries, 440 yards wide, 6 miles long)

**1997                    27 May / 5:20 pm                    Windstorm                    Travis**  
Thunderstorm winds at Robert Mueller Municipal Airport National Weather Service observing station were from the north at 52 gusting to 71 mph. FAA air traffic control tower weather observers reported a tornado northwest.. the tornado continued in the official weather observations for over an hour (officially from 4:39pm to 5:51pm). In the author's opinion, there is doubt that the observers actually observed a tornado (see above report) from their vantage point.. since the tornado was about 12-16 miles to the northwest.. and visibility in heavy rain was less than 5 miles most of the time.

**1998                    07 Mar / 5:50-6:00 pm                    Windstorm                    Travis**  
Thunderstorm winds in the Austin area caused damage to roofs, trees, and power lines.

**1998                    08 Apr / 4:00-4:30 am                    Windstorm                    Travis**  
Thunderstorm wind gusts damaged trees and houses (along with periods of hail in the Creedmoor area). Winds were estimated well in excess of 60mph.

**1998                    26 Apr / 1:45-3:00 pm                    Windstorm                    Travis**  
Thunderstorm winds, in the 70 mph range, in western Travis County, caused damage to trees and power lines.

**1998                    29 Aug / 5:45 pm                    Tornado                    Travis**  
A short lived F1 tornado observed by the public at Lake Travis. It took a roof off a mobile home and caused other damage before lifting and dissipating. Straight-line thunderstorm damage reported from same parent storm extending from Lake Travis to Jonestown eastward to Pflugerville.  
(F1, 0 deaths, 0 injuries, 100 yards wide, 0 miles long)

**1999                    17 May / 9:45 pm                    Windstorm                    Travis**  
Thunderstorm wind gusts of 60 knots at Austin Bergstrom International Airport. Wind gust to 60 mph reported at Del Valle.

**1999                    24 May / 2:30 pm                    Windstorm                    Travis**  
Thunderstorm winds southwest of Oak Hill; trees and power lines down

**1999                    26 May / 5:25 pm                    Windstorm                    Travis**  
Thunderstorm winds at Austin Bergstrom International Airport. Winds blew down several trees and tossed objects through the air causing some damage to automobiles. At about 5:26pm, thunderstorm wind gusts to 51 knots were recorded by the Automated Surface Weather System (ASOS) at the closed Austin Robert Mueller Municipal Airport.

**2000                    16 Mar / 4:00 pm                    Tornado                    Williamson**  
A tornado moved east southeastward from near Leander to southeast of Leander. 25 homes and several other buildings damaged.  
(F2, 0 deaths, 0 injuries, 200 yards wide, 1.5 miles long)

**2000                    16 Mar / 4:20 pm                    Tornado                    Travis**  
A small and short lived tornado was observed by FAA tower personnel at Austin Bergstrom International Airport.  
(F0, 0 deaths, 0 injuries, 30 yards wide, 0.2 miles long)

**2000                    12 Apr / 12:30-2:00 am                    Windstorm                    Travis**  
Thunderstorm winds into the north and western areas of the Austin Metropolitan area during the early morning hour...50 to 60 mph winds were quite common with damage to trees and power lines with power outages reported.

**2000                    02 Sep / 5:20 pm                    Windstorm                    Travis**  
Thunderstorms produced a downburst in Pflugerville that tore roofs off a few buildings and knocked over two mobile homes. (\$80,000 damage).

**2001                      12 Mar / 1:30 am                      Windstorm                      Travis**  
Thunderstorm winds resulted in two apartment complexes receiving heavy roof damage (\$150,000 damage).

**2001                      12 Mar / 2:15 am                      Windstorm                      Williamson**  
Thunderstorm winds resulted in damage to roofs and sheds in the Taylor area.

**2001                      20 May / 8:00 pm                      Windstorm                      Travis / Williamson**  
A thunderstorm related downburst event.. associated with a bow echo.. moved from west to east across the extreme north central and northeastern part of Travis County (Pflugerville) and south central and southeastern part of Williamson County (Round Rock). The NWS reported that anemometers recorded wind gusts to 57 knots in northeastern parts of the Austin area and 63 knots in the Pflugerville area. Up to 20,000 people were without power as a result of power lines being damaged and downed. 300 mobile homes were damaged... windows broken throughout the area. A theater (on IH35 in the Pflugerville area).. full of people for Sunday night movies.. had extensive glass damage. 10 people received injuries in this event with damage estimated at 2 million dollars.

**2001                      12 Oct / 10:27 pm                      Windstorm                      Travis**  
Thunderstorm wind gust of 61 knots reported in Pflugerville by the National Weather Service.

**2001                      15 Nov / 9:45 am                      Tornado                      Hays**  
A weak tornado moved northeastward from 8 to 6 miles south southwest of Henly.  
(F0, 0 deaths, 0 injuries, 100 yards wide, 2 miles long)

**2001                      15 Nov / 10:20 am                      Tornado                      Hays**  
A tornado move from 1 mile southeast to 1 mile northeast of Wimberley.  
(F1, 0 deaths, 3 injuries, 500 yards, 4 miles long)

**2001                      15 Nov / 3:20 pm                      Tornado                      Hays**  
A tornado moved north northeastward from 2.5 miles north of Kyle to 5 miles northeast of Kyle.  
(F1, 0 deaths, 3 injuries, 500 yards, 4 miles long)

**2001                      15 Nov / 3:50 - 6:00 pm                      Tornado                      Travis / Williamson**  
Dubbed the "Austin Bergstrom International Airport Tornado," this was actually a series of tornadoes that started out earlier in the day near Dripping Springs (Hays County) and then in the Buda/Kyle area (Hays County) at mid afternoon. This was not a classic severe weather event with temperatures in the 60's and dew point temperatures around 60 degrees. The first tornado (F1) in Travis County was reported about 3:50pm in the vicinity of William Cannon and IH35 (800 yards wide, 3 miles long) with two dozen mobile homes in the Norther Bluff Estates Mobile Home Park had up to extensive damage.  
The second tornado (F0) occurred along Yager Lane (around IH35) in north Austin (7 miles northeast to 9 miles northeast of Austin) at 4:45pm; it damages several car ports and mobile homes in addition to downing trees.  
A third tornado (F0) moved northeast from 3 miles east of Taylor to 7 miles northeast of Taylor in Williamson County around 4:45pm.  
The fourth tornado (F1) occurred about 5:25 to 5:45pm just to the west through northwest and north of Austin Bergstrom International Airport (2 miles northwest to 4 miles north northeast of Austin Bergstrom International Airport). It was observed by both FAA tower personnel (who evacuated the tower cab) as well as by Pat Egan, who was the certified weather observer on duty at the FAA airport weather observatory. As the tornado passed to the northwest of the airport, the Austin Bergstrom International Airport ASOS recorded thunderstorm wind gusts to 54 knots at 5:39pm. Passengers were evacuated from the ABA Barbara Jordan terminal into interior hallways within the baggage claim area. The tornado resulted in damage to the Monopolies/Riverside area (just north of the airport) where part of the roof of the Monopolies Community Center was blown off while 50 people were inside.  
A fifth tornado (F0) was briefly reported 3 miles northeast of Pflugerville at 6:02pm by a NWS certified spotter.  
No injuries were reported in any of these tornado events. Structural damage for the entire event was estimated at \$225,000.  
(Tornado #1: F1, 0 deaths, 0 injuries, 800 yards wide, 3 miles long)  
(Tornado #2: F0, 0 deaths, 0 injuries, 30 yards wide, 2 miles long)  
(Tornado #3: F0, 0 deaths, 0 injuries, 30 yards wide, 4 miles long)  
(Tornado #4: F1, 0 deaths, 0 injuries, 500yards wide, 3 miles long)  
(Tornado #5: F0, 0 deaths, 0 injuries, 30 yards wide, 1/3 miles long)

**2002                      26 Jun / 7:00 pm                      Windstorm                      Travis**  
Thunderstorm winds caused damage across the Austin area (\$100,000 damage) and the Lake Travis area where large hail was reported (1" diameter). Wind blew a boat located in the lake into a wall near Mansfield Dam; as a result, it sunk (damage near Mansfield Dam estimated at \$300,000). The National Weather Service reported that an anemometer, in the Austin area, recorded a wind gust to 56 knots. In the Austin area, winds downed trees and power lines between 7:05 and 7:20pm.

**2002                      08 Oct / 10:20 am                      Tornado                      Hays**  
A tornado moved northeastward from 6 miles southwest to 5 miles southwest of Driftwood.  
(F0, 0 deaths, 0 injuries, 200 yards wide, 1 mile long)

**2002                      23 Dec / 6:25 pm                      Windstorm                      Travis**  
Thunderstorm winds caused damage on the south side of Austin Bergstrom International Airport near General Aviation Boulevard and Burleson Road.. where trees and power poles were damaged.

**2002                      23 Dec / 7:04 am                      Tornado                      Travis**  
A tornado moved north northeastward from 1 mile southeast to 5 miles northeast of Manor. Damage to homes and a service station east of Manor on U.S. Highway 290.  
(F1, 0 deaths, 1 injury, 200 yards wide, 6 miles long)

**2002                      30 Dec / 3:25 pm                      Tornado                      Hays**  
A tornado moved north northeast from 3 miles east to 5 miles northeast of San Marcos Municipal Airport.  
(F0, 0 deaths, 0 injuries, 50 yards wide, 1 mile long)

**2003                      02 Jun / 3:45 pm                      Windstorm                      Hays**  
A line of thunderstorms.. along a cold front.. produced a downburst event in the San Marcos area. Many business signs and awnings were damaged, many trees were blown over. A semi-trailer truck was overturned. Estimates are that the winds were 65 mph or higher. Damage in the San Marcos area was estimated at \$7 million.

**2003                      13 Jun / 3:20 pm                      Windstorm                      Travis / Williamson**  
Strong thunderstorm winds struck the Austin area. 64 mph winds were recorded at 3:34pm at the Texas school for the Deaf. Wind damaged buildings at the intersection of U.S. Highway 183 and Burnet Road in north Austin. In Williamson County, 58 mph winds were recorded at Liberty Hill Elementary School. Trees were blown down in the Bartlett area by 69 mph winds. This event resulted in \$100,000 property damage.

**2003                      08 Aug / 3:23 pm                      Windstorm                      Travis / Williamson**  
A line of thunderstorms were triggered by a late season cold front. The thunderstorms produced a downburst over south Austin with 66 mph wind gusts at Bedicheck Middle School. Roof damage to the school with some trees down in the area. In Williamson County, windows and roofs were damaged in the Coupland area where, in addition, a trailer was overturned in the area.

**2003                      11 Aug / 7:05 pm                      Windstorm                      Travis / Hays**  
Severe thunderstorm winds, as high as 80 mph, struck Austin causing extensive damage in north Austin bounded by Parmer Lane, Dessau Lane, Metric Boulevard, and Interstate 35. Large trees were downed along with extensive roof damage to several apartment complexes were trees fell on the roofs. 130 residents were displaced in one apartment complex. The storms cut power to about 30,000 persons at one time. Interstate 35 near Yager Lane was closed briefly due to debris and downed power lines.  
Strong thunderstorm winds caused damage, as well, near San Marcos where power lines were downed and power outages were reported for several hours.

**2004                      08 Jun / 7:45 pm                      Tornado                      Travis**  
A small tropical tornado.. associated with a northwest moving rain shower.. touched down near Hayride Road and Pearce Lane about 5 miles east of Austin Bergstrom International Airport. It initially developed along Hayride Road and moved north northwest about ½ mile before dissipating just north of Pearce Lane. One home was totally destroyed, several others were damaged. Trees and power lines downed.  
(F0, 0 deaths, 0 injuries, 100 yards wide, 1 mile long)

**2004                      27 Jun / 10:13 am                      Windstorm                      Travis**  
58 mph thunderstorm wind gusts at Austin Bergstrom International Airport.

**2004                      28 Jun / 4:40 pm                      Windstorm                      Travis**  
Severe thunderstorm winds in Oak Hill caused trees to be blown down.

**2004                      13 Oct / 4:10 pm                      Windstorm                      Hays**  
The Hays County Sheriff's Office reported that 69 mph thunderstorm winds in Dripping Springs caused power lines to be blown down,

**2004                      16 Nov / 4:24 pm                      Tornado                      Travis**  
A small tornado observed near Bee Cave at Loop 360 and FM 2244. The tornado touched down in a wooded area and damaged several trees before lifting and dissipating.  
(F0, 0 deaths, 0 injuries, 100 yards wide, 1 mile long)

**2004                      23 Nov / 10:40 am                      Tornado                      Williamson**  
A series of tornadoes touched down on the morning of 23 November 2004. The first tornado, at 10:40 am, was spotted by the public as it dropped to the ground in open country just northwest of Taylor.  
The second tornado, at 10:51am, was spotted by the public just northwest of Round Rock. It touched down in open country and lifted/dissipated quickly.  
The third tornado, at 11:05am, was spotted by a SkyWarn certified spotter just north of Hutto. It remained on the ground for about a quarter of a mile in open country before lifting/dissipating.  
The fourth tornado, later in the day at 6:08pm, was spotted and filmed by two SkyWarn certified spotters near Jarrell. The rather large, but weak tornado moved through open country and resulted in damage only to vegetation.  
(Tornado #1: F0, 0 deaths, 0 injuries, 20 yards wide, 0 miles long)  
(Tornado #2: F0, 0 deaths, 0 injuries, 20 yards wide, 0 miles long)  
(Tornado #3: F0, 0 deaths, 0 injuries, 300 yards wide, 1/4 mile long)  
(Tornado #4: F0, 0 deaths, 0 injuries, 400 yards wide, 0 miles long)

**2005                      25 Mar / 9:56 pm                      Tornado                      Travis**  
A tornado moved east southeast from the community of Littig in eastern Travis to south and east of Elgin. This was a combination of a downburst, tornado, and hail damage. Just northwest of Littig, however, damage signatures suggest a tornado that continued southeastward. Many homes in Littig were damaged with several buildings and trailers destroyed.  
(F1, 0 deaths, 0 injuries, 200 yards wide, 3 miles long)

**2005                      31 Mar / 6:15 pm                      Windstorm                      Travis**  
Severe thunderstorm winds downed trees and power lines in central and south Austin. Damage was most pronounced from West Lake Hills across Austin Bergstrom International Airport to near Del Valle. Power was out to about 3500 people for several hours.

**2005                      29 May / 8:25 pm                      Windstorm                      Travis**  
81 mph thunderstorm winds blew down trees near Manchaca Road and FM 1626.

**2005                      07 Jul / 7:00 pm                      Windstorm                      Travis**  
Thunderstorms moved southeastward into the area with damaging wind blowing down trees and power lines northwest of Georgetown. 69 mph thunderstorm wind blew down trees and an out building was damaged just northwest of Manor.

**2005                      14 Jul / 1:40 pm                      Windstorm                      Williamson**  
Severe thunderstorm wind downed trees and power lines and damages a garage and an outbuilding near Bartlett.

**2006                      20 Apr / 8:25 pm                      Windstorm                      Travis / Williamson**  
Severe thunderstorm wind of 69 mph or higher blew down trees and power lines in northwest Austin around Steck Avenue and Mesa Drive. Homes near Lake Georgetown were damaged by thunderstorm wind. 81 mph thunderstorm wind damaged the roofs of barns, flattened outbuildings and destroyed a mobile home in the Walberg area. Power lines just east of dripping springs were blown down and power was out to some residents for three hours.

**2006                      04 May / 10:30 pm                      Windstorm                      Travis**  
74 mph thunderstorm wind gusts at Austin Bergstrom International Airport. Northwest Airlines regional jet blown away from jetway and through a security fence just north of the eastern passenger terminal.

**2006                      22 July / 3:40 pm                      Windstorm                      Williamson**  
Damaging straightline thunderstorm wind gusts in the Georgetown area particularly in a 1/2 mile swath near Sun City on Williams Drive and Country Club Road. Trees and power lines downed. The AWOS at Georgetown Municipal Airport.. located less than 1 mile north northeast of the damage area.. measured a peak thunderstorm wind gust of 46 mph at 3:35pm.

**2006                      10 Oct / 6:17am                      Windstorm                      Travis**  
A line of thunderstorms that formed in the early morning hours of October 10 due to the lifting mechanism of a cold front moved southeastward into the I-35 corridor producing heavy rainfall throughout with strong straight line thunderstorm wind. As a result, near IH-35 and Rundberg Lane, the wind tore gables off roofs and there were multiple reports of missing shingles and fences being blown over in other locations. There was also one report of a pole being uprooted and blown into the yard of a residence yards away. Resulted in approximately \$100,000 property damage.

**2007                      13 Jan / 7:00am                      Tornado/Windstorm                      Hays**  
A severe thunderstorm event that originated south southwest of San Marcos created strong straightline thunderstorm winds estimated to near 80 mph. Damage included tin roofs blown off sheds, minor roof damages, and a wooden deck blown away from a residential home. This event also led to flash flooding in the area. The NWS storm survey revealed that at about 7:08am, just behind the strongest straightline winds, a tornado touched down in the parking lot of the San Marcos Police Department headquarters on IH35. Just to the south of the police department building and the parking lot, a metal building was heavily damaged and three telephone poles were blown down (one downed to the west, another to the north and another to the south). An officer in his patrol car in the parking lot at the time stated that very high winds and heavy rain began blowing from north to south then abruptly changed direction and began blowing from south to north accompanied by penny-sized hail. His car sheltered him but was severely damaged by debris; thirty five other vehicles in the San Marcos Police Department parking lot were damaged (windshields cracked, car body damage). Portion of a brick wall on the north side of the police department building collapsed. Shortly thereafter, after lifting briefly, the tornado touched down about 200 yards north of the police department at a lightning manufacturing business. Damage was confined to a dumpster which was spun completely around and to several trailers which were moved and crashed together. In the lighting manufacturing building itself, windows and doors were broken out with evidence that some were blown inward and some were blown outward.  
(F1, 0 deaths, 0 injuries, 200 yards wide, 1 mile long)

**2007                      30 Mar / 9:03am                      Tornado                      Hays**  
The tornado was observed to have touched down 14 miles northwest of Wimberley in an open field by the Texas Department of Public Safety; it quickly dissipated. There were no reports of damage.  
(F0, 0 deaths, 0 injuries, N/A yards wide, N/A miles long)

**2007                      30 Mar / 9:25am                      Tornado                      Hays**  
Several members of the public reported a brief tornado touchdown on Mt. Sharp Road about 8 miles southwest of Dripping Springs. It dissipated quickly with no reports of damage.  
Tornado #2 (F0, 0 deaths, 0 injuries, N/A yards wide, N/A miles long)

**2007                      13 Apr / 8:30pm                      Windstorm                      Travis**  
Thunderstorms, accompanied by hail and with straightline thunderstorm with winds of 55 knots, produced strong to damaging wind across much of south central Texas downed several trees and power lines along Riverside Drive in southeastern part of the Austin metropolitan area. The damage extended to the eastern parts of the Austin area with other reports of downed power lines. Total property damage of near \$50,000.

**2007                      25 Apr / 12:10am                      Windstorm                      Hays**  
A line of thunderstorms that originated in Bexar County, to the south southwest, began to bow out as a bow echo and accelerate northward. Along the line, there were consistent reports of wind gust near 40 to 50 mph with some gust reaching 70 mph. Most of the damage was downed trees in southern Hays County.

**2007                      22 May / 1:59am                      Windstorm                      Williamson**  
Straightline thunderstorm winds of nearly 60 mph damaged the roofs of 5 homes in a small subdivision just east of the city of Round Rock. \$50,000 dollars in damage.

**2007                      3 June / 8:10pm                      Windstorm                      Travis/Hays**  
Thunderstorms that formed over the northwestern Hill Country began to move southeastward in the early evening hours. The straightline thunderstorm winds blew down trees and power lines in western parts of the Austin metro area and left thousands without power for several hours.

<b>2008</b>	<b>25 Apr / 8:00pm</b>	Windstorm	Williamson
Thunderstorms erupted along a weak cold front. Straightline thunderstorm winds resulted in roof and wall damage along Farm to Market Road 1331 south of Laneport (just east of Granger Lake). Damage estimated at \$5,000.			
<b>2008</b>	<b>14-15 May / 9:10-1:00am</b>	Windstorm	Williamson/Travis
A severe thunderstorm with straightline winds of 70 to 80 mph produced widespread damage about 9:10 pm near the Lookout at Brushy Creek Subdivision about 5 miles northeast of Pflugerville along the Travis/Williamson county line. Reports of damaged roofs, shingles, damaged play scape equipment and fences blown over. There were also a few reports of windows and doors that had been blown in by the straight line winds. Nearly \$200,000 in damages were reported from this thunderstorm.			
Another cluster of eastward moving rapidly intensifying thunderstorms, later in the night (about 11:30pm), moved into the Austin area from the west southwest and affected areas around Hyde Park, the University of Texas campus and Tarrytown and had observed winds of near 70 to 80 mph with up to baseball/grapefruit size hail causing extensive damage. There were numerous reports of large trees and branches down across this area of the city along with windows of apartment buildings in the west campus area of UT being completely broken out. The state capitol building saw a number of windows shattered. On the University of Texas main campus, over 500 windows were broken out of buildings by wind blown hail. Both the Lions Municipal Golf Course and Morris Williams Golf Course reported damage to the courses that prompted a brief shut down period. A KVUE-TV weather station on top of the UT Geography Building recorded a peak thunderstorm wind gust of 73 mph at 11:38 pm CDT. Wind gusts of 51 knots and large hail were reported near the Huston Tillotson University. Power to nearly 20,000 Austin energy customers was knocked out. The City of Austin spent almost 2 million dollars in cleanup response and total monetary property damage was estimated at near 50 million dollars.			
<b>2008</b>	<b>21 June / 1:00pm</b>	Windstorm	Travis
Thunderstorms formed over south Austin. Near the interchange of I-35 and SH-71, straightline thunderstorm winds caused damaged or downed power lines and power poles. Damage estimated at \$5,000.			
<b>2009</b>	<b>10 Feb / 9:55pm</b>	Windstorm	Travis
A cold front moved through southcentral Texas in the evening hours and produced a strong line of severe thunderstorms with strong straightline winds. The Travis County Emergency Manager reported numerous large trees downed. Downed trees blocked the intersection of Bluff Bend Drive and Newport Avenue in northeast Austin just northeast of the IH35 and East Rundberg Lane intersection.			
<b>2009</b>	<b>25 Mar / 4:45pm</b>	Windstorm	Travis
Thunderstorms formed along a cold front as it stalled out over the area. The City of Austin Office of Emergency Management reported power lines downed in the 12000 block of Dringenberg Drive. Aside from the wind damage, this storm had an estimated damage cost of \$160 million mainly due to an associated hailstorm.			
<b>2009</b>	<b>02 Apr / 10am-3pm</b>	Windstorm	Travis
A dry line and cold front moved across the area with very strong post frontal gradient high winds under a clear to partly cloudy sky. There were multiple reports of damage across the Austin area. Power lines were blown down near Western Hills Drive at the entrance of Loop 1. Downed trees blocked Aurora Drive near Koenig lane in the northern parts of Austin. Large broken tree limbs blocked Parkfield Drive just north of Braker Lane in north Austin. Tree limbs littered the parking lot of Capital Metro Pavilion Park and ride in northwest Austin near US Highway 183 and Oak Knoll. Downed tree limbs blocked William Cannon Drive between Beckett Drive and Escarpment Blvd. Austin Energy reported 8000 customers without power due to tree limbs brushing up against power lines. Total property damage was \$150,000.			
<b>2009</b>	<b>27 Apr / 3:10am</b>	Tornado	Williamson
A tornado that originated 3 miles west southwest of Jonah moved northeast and dissipated 1 mile west of Jonah. Damage included small storage shed and small out buildings destroyed along with minor roof damage to 20 homes. Three power poles were destroyed along with a travel trailer being turned on its side. \$1 million in property damage. (EF1, 0 deaths, 0 injuries, 50 yards wide, 2 miles long)			
<b>2009</b>	<b>11 Jun / 8:42pm</b>	Windstorm	Hays
A large cluster of thunderstorms formed to the west and moved southeastward through the area along a dryline. Strong winds and hail was reported. The San Marcos Police Department reported a number of power lines downed in the city. Damage was estimated at \$50,000.			



- 2009                      12 Aug / 2:55pm                      Windstorm                      Travis**  
A weak cold front moved into the area with multiple isolated thunderstorms. Strong straightline thunderstorm winds knocked down tree limbs and power lines in the 1500 block of Enfield Road in Austin. There were also multiple reports of tree limbs that fell into the streets of downtown Austin that forced temporary street closures.
- 2009                      22 Aug / 5:30pm                      Windstorm                      Williamson**  
Thunderstorms, that formed ahead of an upper air low pressure disturbance, moved southward through Williamson County and into western Bastrop County and had straightline thunderstorm winds estimated near 45mph. The thunderstorms produced heavy rain and damaged multiple highway signs about 4 miles south southwest of Liberty Hill.
- 2009                      25 Aug / 4:30pm                      Windstorm                      Williamson**  
Thunderstorms, associated with a passing weak upper level low pressure disturbance, moved through the area. Straight line thunderstorm winds were reported in Taylor. Wind unofficially clocked at 80 mph tore the metal roof off of a building near Jones and Marsh Streets. Some businesses in downtown Taylor also received minor roof damage.
- 2009                      26 Aug / 7:32pm                      Windstorm                      Travis**  
Thunderstorms, that formed along a cold front, resulted in straightline thunderstorm wind gusts estimated at 60mph in the area just northeast of the intersection of State Highway 45 tollway and State Highway 130 tollway about 4 miles northeast of Pflugerville. \$2,000 in property damage reported.
- 2009                      27 Aug / 4:40pm                      Windstorm                      Travis**  
Isolated thunderstorms developed along a cold front as it moved through south central Texas. Near Lake Travis at Marshall Ford, these thunderstorms produced straightline winds that blew down a 30 foot high, 12 inch diameter base maple tree. The tree damaged a parked car that resulted in 10k dollars in damage.
- 2009                      27 Aug / 10:08pm                      Windstorm                      Williamson**  
Isolated thunderstorms developed along a cold front as it moved through south central Texas. Seven miles west of Liberty Hill, near the intersection of highways 295 and 1869, it blew down numerous trees. A short time later, at 10:30pm, about one mile north of Round Rock, the city of Round Rock also reported downed trees and estimated winds of 60 mph.
- 2010                      24 Aug / 5:15pm                      Windstorm                      Travis/Hays**  
Isolated thunderstorms developed in advance of a cold front with strong straightline winds in southeastern parts of the Austin metro area. The most damage was at Austin Bergstrom International Airport where winds bent a metal pole supporting a lighted midfield windsock to a 45 degree angle and knocked down trees and temporary fencing. A 4"x 4" wooden post supporting a satellite dish at the airport's FAA meteorological observatory was also damaged due to the high winds.
- 2011                      01 Feb / 3:15am                      Windstorm                      Travis**  
A strong line of thunderstorms preceded an arctic cold front as it moved through the area. A weather observer clocked winds of 61 mph just northeast of Pflugerville in the area east of the State Highway 130 tollway. The winds caused minor damage in the northern portions of Travis County.
- 2011                      11 Apr / 4:05am                      Windstorm                      Travis**  
Thunderstorms moved into the area from the west northwest as a cold front advanced southeastward through the area. A few storms became severe in Williamson and Travis County producing larger hail and strong winds. A estimated straightline thunderstorm wind gust of 58mph blew over a 15 foot section of a sturdy fence near Manor with other reports of downed 5 inch diameter tree limbs in the same area.

(Updated through December 2011)

## REFERENCE:

.... For Use with Data Before 1 February 2007 ....

### FUJITA DAMAGE SCALE

(Taken, in part, from page "v", volume 2, Significant Tornadoes, Grazulis, November 1990)

F Scale	Wind Range Speed	Basic Damage Description
F0	40 - 72 mph	Minor roof, tree and sign damage.
F1	73 - 112 mph	House roofs damaged; garages destroyed; barns torn apart; farm machinery and outbuildings destroyed; trailers flipped and torn apart; cars moved off roadways; weak warehouses and sheet metal buildings destroyed.
F2	113 - 157 mph	Strongly built schools, homes, apartments and businesses unroofed; barns and stronger warehouses torn apart and scattered; trailers disintegrated; concrete block buildings, weak homes and schools destroyed.
F3	158 - 206 mph	Strongly built homes, schools, apartments and businesses have outside walls blown away; weaker homes completely swept away.
F4	207 - 260 mph	Strongly built homes have all interior and exterior walls blown apart; cars thrown 300 yards or more in the air.
F5	261 - 318 mph	Strongly built structures completely blown away at a considerable distance. Human survivability above ground is greatly reduced.

.... For Use with Data 1 February 2007 to Current ....

### ENHANCED FUJITA DAMAGE SCALE

(Courtesy: NWS / Storm Prediction Center)

F Scale	Wind Range Speed	Basic Damage Description
EF0	65 - 85 mph	Causes some damage to siding and shingles.
EF1	86 - 110 mph	Considerable roof damage. Winds can uproot trees and overturn single-wide mobile homes. Flagpoles bend.
EF2	111 - 135 mph	Most single-wide mobile homes destroyed. Permanent homes can shift off foundation. Flagpoles collapse. Softwood trees debarked. Vehicles can be dragged along the ground.
EF3	136 - 165 mph	Hardwood trees debarked. All but small interior portions of houses/buildings destroyed. Vehicles airborne for short distances.
EF4	166 - 200 mph	Complete destruction of well-built residences, large sections of buildings; cars thrown 300 yards or more in the air. Dangerous/deadly flying debris. Human survivability above ground is reduced.
EF5	> 200 mph	Significant structural deformation of mid- and high-rise buildings. Most buildings swept away with debris widely scattered and not identifiable back to source structure. Vehicles disintegrate into small pieces and are airborne for considerable distances. Human survivability above ground is greatly reduced. Dangerous/deadly flying debris.

# GREATER AUSTIN METROPOLITAN AREA

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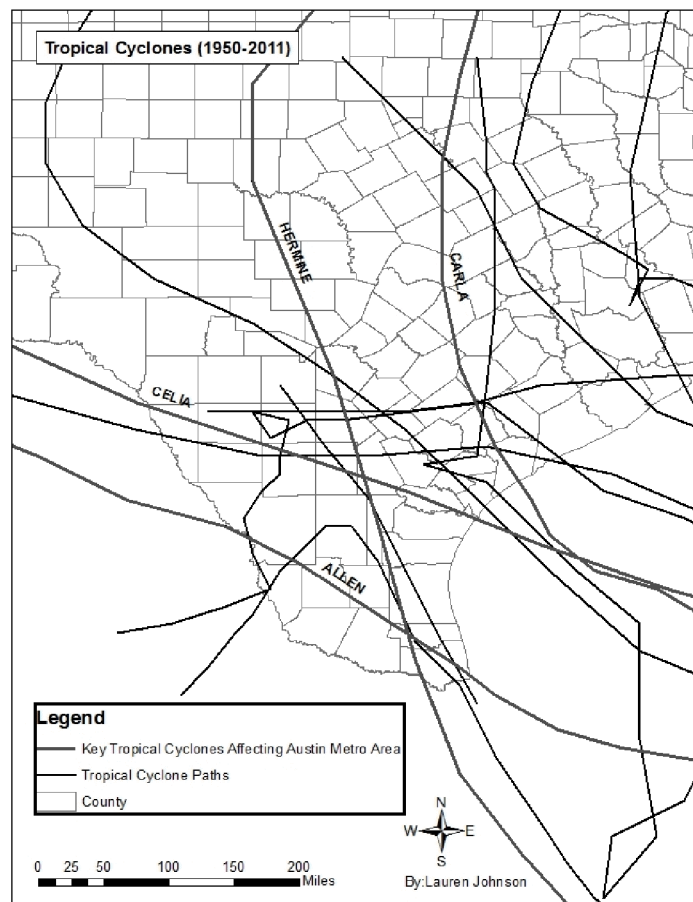
## PART 2: TROPICAL CYCLONES

Although south central Texas and the greater Austin metropolitan area is about 150 miles from the Texas coast and the northwest part of the Gulf of Mexico, one must realize the threat presented on a yearly basis by tropical cyclones. Tropical cyclones, such as the storm of 1942 and Celia (1961), have had a great impact on south central Texas and the Austin metro area.

In general, in order for a land falling tropical cyclone to have a major effect on the greater Austin metropolitan area, the path of the system must be such that it makes landfall and the center of the system passes south through west of the local area. Tropical cyclones that make land fall and then pass east of the local area often places the Austin area in the drier part of the system especially the greater the distance.

The major impacts of land falling tropical cyclones locally is flooding, strong straight line winds and tornadoes. A strong tropical cyclone (category 5 hurricane) theoretically making land fall on the middle Texas coast and then moving inland to immediately south through west of the Austin area would produce hurricane conditions with winds to near 100 miles per hour in the Austin metro area.

The tropical cyclone season for the Atlantic Ocean basin (including the Gulf of Mexico) is June 1st through November 30th.



This summary details tropical cyclones with some substantial measurable effects (precipitation and/or wind) on the greater Austin metropolitan area.

<b>Year</b>	<b>Storm Lifetime Date(s)</b>	<b>Storm Cyclone Name</b>
<b>Storm Data and Remarks</b>		
<b>1912</b>	<b>11 - 17 Oct</b>	<b>Hurricane</b>
A hurricane, the fifth of the season, made landfall on 15 October between Corpus Christi and Brownsville. Austin recorded 2.46" of rain during a three day period (15-17 October).. 2.16" of that rainfall fell on 16 October.		
<b>1921</b>	<b>9 - 10 Sep</b>	<b>Tropical Storm</b>
Land falling tropical storm in northern Mexico (south of Brownsville) meandered westward then northward after moving onshore. As the system moved northeastward across the south central Texas area on 9-10 September, torrential rains produced 19.03" of rain in Austin for the two day period of 9-10 Sep (15.00" fell on the 9 <sup>th</sup> , 4.03" on the 10 <sup>th</sup> ). Taylor recorded 23.11" of rain in a 24hour period from the 9 <sup>th</sup> to the 10 <sup>th</sup> .		
<b>1932</b>	<b>11 - 14 Aug</b>	<b>Hurricane (Category 4)</b>
Major hurricane, second of the season, made landfall on 13 August 1932 near Freeport with 40 persons killed and an estimated \$7.5 million in damages. Austin recorded 1.62" of rain on 14 August.		
<b>1942</b>	<b>29 - 31 Aug</b>	<b>Hurricane</b>
Hurricane made landfall August 29, 1942 between Freeport and Velasco as the storm turned inland over the Matagorda Bay and Port Aransas areas. The worst damage to the coastal region was caused by a tremendous storm surge associated with this storm. As the hurricane moved inland, 3 lives were lost as the storm wreaked havoc on the South Central TX area. Austin experienced winds of 40-50mph as the system moved through on Saturday night and Sunday, which resulted in the destruction of major power lines across the city. Significant power losses were reported at Brackenridge at East Live Oak, Chicon and Canterbury, 30 <sup>th</sup> and Speedway, 30 <sup>th</sup> and Guadalupe, the 2000 block of East First, and the 400 block of West 6 <sup>th</sup> . Snapped and uprooted trees were reported across Austin, and numerous street signs, lights, and windows were broken. A rainfall total of .020 inches was recorded at the newly opened Robert Mueller Airport on August 30 <sup>th</sup> , and trace amounts were observed on the 31 <sup>st</sup> .		
<b>1943</b>	<b>25 - 29 Jul</b>	<b>Hurricane</b>
Hurricane, first of the season, made landfall near Port Bolivar on 27 July 1943. Wind gusts to 100 mph were recorded in the Houston/Galveston area. Estimated \$17 million in damages. Austin recorded 2.17" of rainfall on 27 July.		
<b>1945</b>	<b>24 - 29 Aug</b>	<b>Hurricane</b>
Hurricane, fifth of the season, made landfall on 27 August around Matagorda Bay. Wind gusts in excess of 100 mph were recorded from Port Aransas to Port O'Connor with rainfall amounts along the coast in excess of 30 inches. Estimated \$20.1 million in damages. Three day rainfall for Austin, for 28 through 30 August, was 5.48"..4.00" of that fell on 29 August.		
<b>1961</b>	<b>03 - 15 Sep</b>	<b>Hurricane Carla (Category 4)</b>
Hurricane Carla made landfall on the Texas coast near Port O'Connor on 11 September 1961. Wind gusted to 174 mph at Port Lavaca before the wind equipment was blown away. \$408 million of damage. 250,000 people fled inland before the storm struck. The Austin area was affected 11 through 12 September with a two day rainfall total of 3.68" at Robert Mueller Municipal Airport (1.38" on the 11 <sup>th</sup> , 1.85" on the 12 <sup>th</sup> ). And 4.35" at Bergstrom Air Force Base (2.27" on the 11 <sup>th</sup> , 2.08" on the 12 <sup>th</sup> ). The average wind speed at Robert Mueller Municipal Airport (1.83" on the 11 <sup>th</sup> , 2.08" on the 12 <sup>th</sup> ). The average wind speed at Robert Mueller Municipal Airport was 29.4 mph with a peak wind gust of 45 mph from the north northeast around midnight on the night of the 11 <sup>th</sup> .		
<b>1967</b>	<b>05 - 22 Sep</b>	<b>Hurricane Beulah (Category 4)</b>
Hurricane Beulah made landfall near Brownsville on 20 September 1967. Wind gusts to 136 mph in Brownsville. A record 155 hurricane induced tornadoes were reported in south Texas. Rainfall in south Texas ranged from 10 to 20 inches. Robert Mueller Municipal Airport experienced a three day rainfall total for 19-21 September of 2.92 inches (0.65" on 19 <sup>th</sup> , 1.03" on 20 <sup>th</sup> and 1.27" on 21 <sup>st</sup> ).		

- 1970                      30 Jul - 05 Aug                      Hurricane Celia (Category 3)**  
Hurricane Celia made landfall near Corpus Christi on 3 August 1970. Wind gusts to near 180 mph were recorded before wind equipment was destroyed at Port Aransas. Corpus Christi recorded sustained winds to 125 mph. \$500 million in damage. The storm's more westerly track kept effects in Austin to a minimum.. rainfall was less than 1/4 inch and the highest wind gust recorded at Robert Mueller Airport was 21 mph on 3 August 1970.
- 1978                      30 Jul - 01 Aug                      Tropical Storm Amelia**  
Tropical Storm Amelia developed rapidly off the south Texas coast near Brownsville and moved ashore south of Corpus Christi on 30 July 1978. It was a minimal storm until the remnants emerged over the Texas Hill Country 1 through 2 August 1978 with devastating floods killing 25 people on the Guadalupe, Sabinal and Medina Rivers. Even though the flooding was greatest south and west of Austin, a three day rainfall total of 1.92" was recorded at Robert Mueller Municipal Airport (0.48" on 31 July, 1.43" on 01 August and 0.01" on 02 August).
- 1979                      24 - 27 Jul                      Tropical Storm Claudette**  
Tropical Storm Claudette made Landfall on the Upper Texas coast on 24 Jul 1979 with extensive flooding around the Houston / Galveston area as the system weakened and meandered around the area for about 24 hours before moving northward. Alvin, in Brazoria County (south of Houston), recorded a one day rainfall total of 25.75" and a record of 35.70" of rainfall for July 1979. Robert Mueller Municipal Airport (0.48" on 31 July, 1.43" on 01 August and 0.01" on 02 August).
- 1980                      30 Jul - 11 Aug                      Hurricane Allen (Category 3)**  
Hurricane Allen made landfall on the Texas coast between Corpus Christi and Brownsville on August 9, 1980. A storm surge of 12 feet and a wind gust of 138 mph were recorded near Port Mansfield. Distinct northeast to southeast oriented rain bands rotated westward across the Austin metropolitan area on August 10 with a damaging tornado occurring midday along a path from San Marcos to near Wimberley. In what some sources refer to as the costliest tropical cyclone relate tornado damage ever (at least to that point), a strong tornado moved north westward over Robert Mueller Airport from 1:40pm until 1:51pm causing over \$100 million in damages on the northeast side of the airport. Rainfall at Robert Mueller Airport for 10 August was 0.74".
- 1980                      04 - 07 Sep                      Tropical Storm Danielle**  
Tropical Storm Danielle moved ashore the Texas coast.. southwest of Galveston.. on 6 September 1980. It continued to move westward to near Del Rio as it weakened. Even so.. it produced rainfall of 5-10 inches in a broad area from San Antonio to San Angelo. At Robert Mueller Municipal Airport, a four day (6-9 September) rainfall of 3.57" was measured (1.07" on 6<sup>th</sup>, 1.75" on 7<sup>th</sup>, 0.29 on 8<sup>th</sup> and 0.46" on 9<sup>th</sup>).
- 1995                      28 Jul - 02 Aug                      Tropical Storm Dean**  
Tropical Storm Dean made landfall near Freeport during the nighttime hours of 30 July 1995 and continued to move north westward to near Waco as it weakened. In the two day period 01-02 August, Robert Mueller Municipal Airport recorded a little over 3 inches of rain with 2.00" falling on 2 August 1995.
- 1998                      08 - 13 Sep                      Tropical Storm Frances**  
Tropical Storm Frances made landfall just north of Port Aransas in the early morning hours of 11 September 1998 and drifted northward to south of Bryan/College Station. The three day (10-12 September) rainfall for Robert Mueller Municipal Airport was 2.81" with the heaviest of this (2.35") occurring on 11 September.
- 2002                      5 - 11 Sep                      Tropical Storm Fay**  
Northwestward moving Tropical Storm Fay made landfall on the middle Texas coast then curved westward to south of San Antonio on the 7th and 8th of September and then recurved southwestward across the Rio Grande River near Laredo. In general, it produced 1 to 5 inch rainfall amounts over south central Texas. Specific local totals for the 5-11 September period included 5.11" at Austin Great Hills - AGHT2 (NWS Coop), 4.94" 5 miles southwest of Leander, 3.79" at Lake Georgetown, 3.53" at Georgetown Municipal Airport, 2.94" at Austin/City Camp Mabry ASOS (KATT) and 2.07" at Austin Bergstrom International Airport ASOS (KAUS).
- 2003                      8 - 17 Jul                      Hurricane Claudette**  
Hurricane Claudette made landfall, as a category 1 hurricane, just east of Port O'Connor, TX at mid and late morning on 15 July. It quickly moved west after landfall limiting rainfall amounts. Peak wind gusts to 20 to 30 mph were observed locally with rainfall quite limited: Austin/City Camp Mabry ASOS (KATT) reporting .32" and Austin Bergstrom International Airport ASOS (KAUS) reporting .93" for the period 15-16 July.

**2007                      15 - 17 Aug                      Tropical Storm Erin**

Tropical Storm Erin made landfall in the predawn hours on 16 August just north of Port Aransas, TX (30 miles east northeast of Corpus Christi) as it moved northwest. By daybreak on 17 August, the remnants were located about 50 miles south of San Angelo, TX. As this system passed by to our southwest, it produced rainfall of .89" on 16 August and .12" on 17 August (total 1.01") at Austin/City Camp Mabry ASOS (KATT) and 1.38" on 16 August and .01" on 17 August (total 1.39") at Austin Bergstrom International Airport ASOS (KAUS).

One interesting note about this system is a brief intensification, as probably a "subtropical cyclone" with tropical storm force winds, over Oklahoma – of all things – the 19th and 20th of August.

**2008                      1 - 14 Sep                      Hurricane Ike**

With this system did not have major direct meteorological impacts on our area, the system, after landfall as a 95 knot hurricane in the predawn hours on the north end of Galveston Island, moved north northwestward into east central Texas. North northeasterly winds locally gusted to above 20 miles per hour at times with afternoon high temperatures locally (in the western outlying atmospheric subsiding zone) reaching at or above 100 degrees on 13 and 14 September at both the Austin/City Camp Mabry ASOS (KATT) and the Austin Bergstrom International ASOS (KAUS). On the 13th of September, .19" rainfall was observed at KAUS while .01" rainfall was observed at KATT.

**2010                      5 - 9 Sep                      Tropical Storm Hermine**

Tropical Storm Hermine made landfall about 25 miles south of Brownsville, TX during the mid evening hours on the 6th of September. The system weakened and continued northward to southwest and then west of San Antonio to near Burnet during the evening/night of the 7th of September and the early morning hours of the 8th of September. As the system passed to the immediate west of the area, feeder band precipitation developed on the east side with the feeder bands extending southward into the Gulf of Mexico and, of course, rotating northward around the center of the northward moving remnants. These feeder bands parked themselves along the IH35 corridor and the Balcones Escarpment and did not move as individual rain showers and thunderstorm cells moved northward within the feeder band. This produced classic "training effect" with rapidly accumulating rainfall amounts especially in Travis County northward into Williamson County. Rainfall amounts rose dramatically after sunset on the 7<sup>th</sup> of September and continued into the morning hours of the 8<sup>th</sup> of September producing a dramatic and dangerous flash flood event that claimed 3 lives, two in Williamson County and one in Travis County, as drivers drove around barricaded flooded low water crossings. Local rainfall amounts for the 5-9 September period include: Lake Georgetown (Williamson Co) 16.37", Florence (Williamson County) 14.56", Cedar Park (Williamson County) 13.77", Jollyville (Williamson County) 13.77", Austin Great Hills (AGHT2/NWS Coop) 11.37", Wimberley (Hays County) 9.60", Austin/City Camp Mabry ASOS (KATT) 7.57" and Austin Bergstrom International Airport ASOS (KAUS) 4.34".

(Updated through December 2011)

# GREATER AUSTIN METROPOLITAN AREA

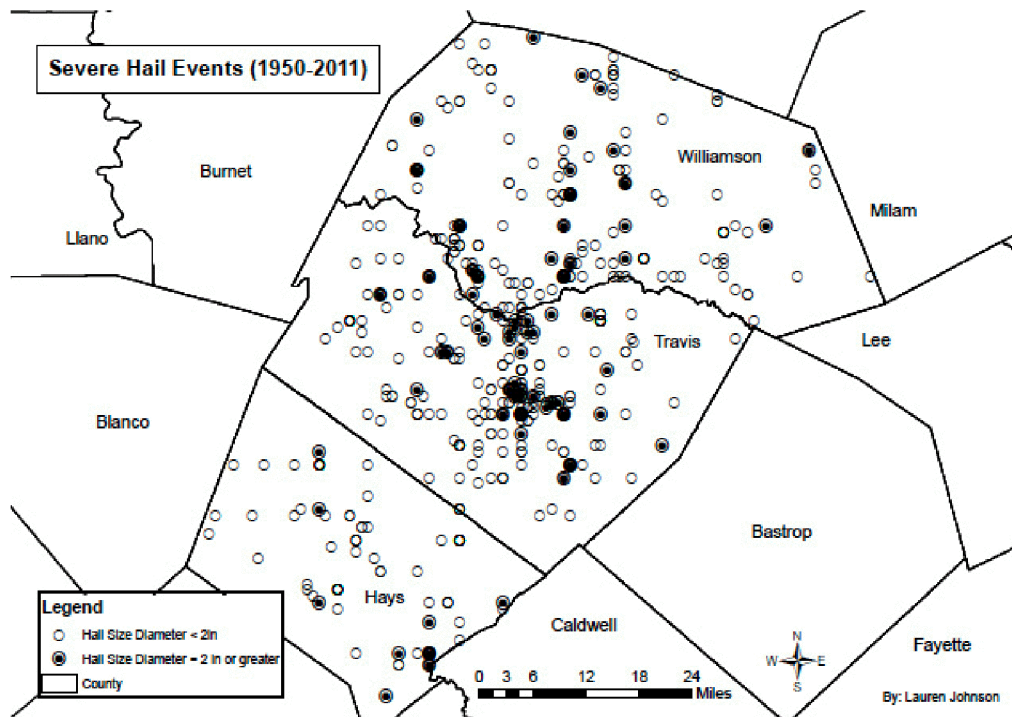
## PART 3: HAIL

Hail producing thunderstorms do occur across south central Texas and the greater Austin metropolitan area but the hail size is limited in most cases.

Contrary to what many of us learned in school, hailstones do not travel in a neat little pattern in the updraft until an ice particle forms in sub freezing air high in the atmosphere then descends through the downdraft back into the above freezing air where water gathers on it only to be lifted again by the updraft back into the sub freezing air where that coating of water freezes. Research into the dynamics of thunderstorms has let us know that there are plenty of small pure supercooled water droplets in liquid form in the sub freezing air in the upper air of the thunderstorm. In fact, small supercooled water droplets may not freeze until air temperatures reach  $-20^{\circ}$  to  $-30^{\circ}$  C!! Hailstones originate and grow larger in the very violent and turbulent wind environment in the subfreezing upper part of the thunderstorm. They continue to grow as the hailstone comes in contact with supercooled water droplets and then freeze additional layers onto the hailstone.. all in the upper sub freezing part of the thunderstorm. It is only when the hailstone grows to a size that can no longer be held aloft by the updraft does it then fall down through the thunderstorm and to the ground below.

Stronger atmospheric dynamics and stronger wind aloft (potential stronger updrafts), in association with supercell thunderstorms, can produce much larger hail such as the April 20, 2006 event in Hays County just south of nearby San Marcos where hail was grapefruit size (4.75") in diameter. It's relatively simple, the stronger the thunderstorm updraft/downdraft complex, the larger the hail can be. The latest scientific knowledge supports the fact that softball or larger hail stones require vertical updraft velocities of 125 miles per hour or more.

In Texas, as a whole, hail produces agricultural, personal property (car and home) as well as commercial building damage. Injuries and deaths are rather infrequent, however, they have occurred.



This summary includes hail reports by weather observers in greater Austin metropolitan area. In the reports through 22 May 1999, unless otherwise stated, the reports are from observers at the Robert Mueller Municipal Airport U. S. Weather Bureau/ National Weather Service office. After 22 May 1999, the reports, unless otherwise stated, are from the FAA Meteorological Observatory at Austin Bergstrom International Airport or the Camp Mabry Weather Observation site.

<b>Year</b>	<b>Date - Size / Amount / Remarks</b>
<b>1949.....</b>	03 Dec - Light
<b>1950.....</b>	23 Apr 19 May 05 Jun
<b>1951.....</b>	27 Mar 23 May 24 May 12 Jun
<b>1952.....</b>	02 May
<b>1953.....</b>	11 Mar - 1" diameter hail; \$65,000 damage in northwest part of city 12 Apr - Light 24 Apr - Light
<b>1954.....</b>	11 May - Light; No damage
<b>1955.....</b>	17 Jan - Light; no damage 31 Mar - Light; no damage 12 Apr - Light; no damage 18 May - Light; no damage 08 Jun -- Light
<b>1956.....</b>	02 Feb - Light 20 Oct - 1/4" diameter; heavier over northwest parts of Austin
<b>1957.....</b>	11 Mar - Damage to aircraft at Robert Mueller Municipal Airport 24 Apr - Light
<b>1959.....</b>	10 Apr - 1" diameter occurred over the west side of Austin during afternoon hours, no damage
<b>1961.....</b>	16 Mar
<b>1962.....</b>	11 Mar 30 Apr 10 Jun
<b>1965.....</b>	24 Feb 16 Mar
<b>1966.....</b>	09 Feb



<b>1967.....</b>	23 Apr
<b>1968.....</b>	23 Apr 03 May 17 May
<b>1969.....</b>	08 May
<b>1970.....</b>	26 May 30 May 29 Aug 27 Oct
<b>1971.....</b>	12 Mar
<b>1972.....</b>	01 May 13 May - 1/2" diameter; lasted 12 minutes
<b>1975.....</b>	04 Mar - 1/4" diameter; lasted 12 minutes 08 Apr - 1/8" diameter, lasted 6 minutes 23 May - 1/2 "diameter, lasted 9 minutes
<b>1976.....</b>	17 Feb - 1/2" diameter, 5:23am lasted 5 minutes; golf ball size hail north and south Austin 26 May -1/4" diameter, lasted 15 minutes 2" diameter west northwest of airport weather station 26 Aug - 1/4" diameter, lasted 4 minutes
<b>1977.....</b>	13 Sep - 1/4" diameter, lasted 9 minutes
<b>1979.....</b>	23 Feb - 1/4" diameter, lasted 5 minutes
<b>1983.....</b>	09 Feb - 3/4" diameter, lasted 17 minutes 04 Mar - 1/4" diameter, lasted 3 minutes 04 Jun - Large hail in the Taylor area associated with a late evening tornado resulted in broken windows
<b>1984.....</b>	12 Feb - 1/2" diameter, lasted 5 minutes 12 Mar - 1/4" diameter, lasted 11 minutes 21 Oct - 1 1/4" diameter, lasted 8 minutes; much larger in north and west Austin, \$90 million damages
<b>1986.....</b>	19 Apr - 1" diameter; just northwest of Robert Mueller Municipal Airport, Highland Mall area 15 May - 1 1/4" diameter over much of the city of Austin
<b>1987.....</b>	03 May - 1" diameter 25 Jun - 1 1/2" diameter over northwest Austin 15 Nov - 1" diameter at Bergstrom Air Force Base
<b>1989.....</b>	01 Mar - 1/4 to 1/2" diameter over North Austin 21 Mar - 1/4 to 1/2" diameter; 1.5" diameter in Manchaca area in southern Travis County 19 Apr - 1/4" diameter 05 May - 1 3/4" diameter hail and wind damage San Marcos Municipal Airport 13 May - 3/4" diameter

**1990.....** 21 May - 1" to 1 3/4" diameter in northwest Austin

**1991.....** 18 Feb - 1/4 to 1/2" diameter near lake Travis and 620/183 area  
 13 Apr - 2 1/2" diameter near Loop 620 and Anderson Mill in northwest Austin  
           1/2" diameter at Lake Travis  
 28 Apr - 1 3/4" diameter at Hutto  
 04 May - 1/2" diameter in southwest Austin near Oak Hill  
 05 Aug - 1/2" diameter in northwest Austin  
 01 Oct - 1/2" diameter over the city

**1992.....** 22 Feb - 1/2" diameter in south Austin  
 03 Mar - 1 1/2" diameter in Liberty Hill and Georgetown areas  
 16 Apr - 2" diameter in Round Rock area  
 19 Apr - 1/2" to 1" diameter; 2 - 2 3/4" diameter in San Marcos  
           2 3/4" diameter at Cedar Creek  
 11 May - 1 1/2" diameter in Williamson County  
 12 May - 1/2" - 1 1/2" diameter in parts of Travis, Williamson and Hays Counties  
 27 May - 1 1/2" diameter in parts of Travis and Hays Counties  
 21 Jun - 1" diameter in Williamson County  
 03 Sep - 1/2" - 1" diameter in northwest Austin and 3/4" diameter in Elgin, Round Rock and  
           Lago Vista  
 16 Oct - 1" diameter in Bastrop area

**1993.....** 25 Mar - 2"+ diameter in north/ west Austin (with \$125 million damage)  
           2 1/4" diameter Webberville area  
 09 May - Small diameter in Austin area  
 30 May - Small diameter in Austin area

**1995.....** 12 Jan - Small diameter in Austin area  
 20 Apr - 1 3/4" diameter in Georgetown  
 11 May - 1 1/2" diameter in Austin area  
 01 Nov - 3/4" diameter Austin / Travis County

**1996.....** 20 Apr - 3/4" diameter Austin / Travis County  
 27 May - 1 3/4" diameter in Niederwald in Hays County and Martindale in Caldwell County  
 19 Sep - .88" diameter in Lago Vista  
 20 Sep - 1" diameter in Austin / Travis County just after midnight; 2" diameter fell later in the  
           day between 8 and 9 p.m  
 17 Oct - 1/2 -1" diameter northwest of Austin  
 07 Nov - Hail size unknown, northwest Austin into adjoining Williamson County)

**1997.....** 17 Jun - 1" diameter just north through west of Airport

**1998.....** 21 Jan - 1/8 diameter at Austin Bergstrom International Airport  
 25 Feb - 3/4" diameter in the Austin area  
 26 Feb - 3/4" diameter in the San Marcos area  
 08 Apr - 3/4 diameter, along with strong winds, about 3:00 am in the Jarrell area  
 01 May - 1" diameter reported in Cedar Park (Williamson Co) between 3:00 - 4:00pm  
           3/4" diameter in parts of the Austin area (Travis Co.) from 4:00-4:20 pm  
           1" diameter 4 miles south of Austin between 4:00-4:30 pm  
           1 1/2" diameter 5 miles SE of Cedar Park at 4:00-4:15pm  
           1" diameter in Jarrell (Williamson Co) between 5:15-5:20 pm  
 05 Jun - 3/4" diameter in San Marcos (Hays Co) from 3:00-3:30 pm  
           3/4" diameter in Georgetown (Williamson Co) 3:00-3:05 pm and again 4:35-4:40 pm

**1999.....**

- 12 Mar - 1 1/2" diameter in Liberty Hill (Williamson Co) 11:00-11:15am
- 1 3/4" diameter in Lago Vista and Sprinkle (Travis Co) 6:00-6:30 pm
- 1 1/2" diameter in Cedar Park (Williamson Co) 6:20 pm
- 1 3/4" diameter 3 miles SW of Cedar Park (Williamson Co) 6:25 pm
- 1 3/4" diameter in Jollyville (Williamson Co) 6:30 pm
- 1 3/4" diameter in Pflugerville (Travis Co) 6:32 pm
- 7/8" diameter in Round Rock (Williamson Co) 6:45 pm.
- 07 May - 1" diameter 3 miles NE of Jonestown (Travis Co) at 4:20 pm
- 1" diameter in Cedar Park (Williamson Co) 4:20 pm
- 24 May - 1 3/4" diameter in Dripping Springs (Hays Co) 1:48 pm
- 1" diameter Cedar Park (Williamson Co) 4:20 pm
- 29 May - 1" diameter 2 miles SW of Andice (Williamson Co) 6:30 pm

**2000.....**

- 13 Mar - Large hail reported in northern Travis and Williamson Counties
- 1/4 to 1/2" diameter in Great Hill area of Austin between 4:00-5:00pm
- 01 May - 1" diameter reported by the NWS Coop Observer in Taylor/Williamson County 815pm
- 12 May - 1 3/4" diameter in Liberty Hill (Williamson Co) 7:47 pm
- 1 3/4" diameter 8 miles N of Lago Vista (Travis Co) 7:50 pm
- 22 Oct - 1 3/4" diameter over South Austin/Travis County around William Cannon/IH35 425pm

**2001.....**

- 06 May - 1 3/4" diameter in Dripping Springs (Hays Co) between 9:15-9:25 pm
- 20 May - 3 1/2" diameter in Round Rock (Williamson Co) 9:10 pm
- 15 Nov - 1/2" diameter at KAUS/Austin Bergstrom International Airport 5:50pm w/ tornado
- 28 Nov - 3/4" diameter in Pflugerville (Travis Co) 3:30 am
- 3/4" diameter 3 miles SE of Hutto (Williamson Co) 3:45 am

**2002.....**

- 27 May - 1 3/4" diameter in Weir (Williamson Co) 8:55 pm
- 1" diameter in Georgetown (Williamson Co) 9:15 pm
- 26 Jun - 1 3/4" diameter 5 miles SSW of Taylor (Williamson Co) 5:46 pm
- 2" diameter in Georgetown (Williamson Co) 6:20 pm
- 2" diameter in Cedar Park (Williamson Co) 6:30 pm
- 1" diameter in Round Rock (Williamson Co) 6:37 pm
- 1" diameter at Lake Travis (Travis County) 6:55 pm
- 20 Oct - 3/4" diameter in south Austin (Travis Co) 11:05 pm
- 3/4" diameter in Kyle (Hays Co) 11:05pm
- 26 Nov - 1" diameter at Lake Travis (Travis Co) 3:45 am
- 1" diameter in Leander (Williamson Co) 4:45 am
- 30 Dec - 1 1/2" diameter 7 miles WNW of San Marcos (Hays Co) 3:43 pm
- 3/4" diameter 5 miles NW of Georgetown (Williamson Co) 4:10 pm

**2003.....**

- 20 Feb - 1/8" diameter KAUS/Austin Bergstrom Intl Airport 5:25 am
- 25 Mar - 3/4" diameter KAUS/Austin Bergstrom Intl Airport 9:10 pm
- 13 Jun - 3/4" diameter KAUS/Austin Bergstrom Intl Airport 4:55 pm
- 1/4" diameter hail Anderson Mill in NW Austin 5:00 pm
- 11 Aug - 1.75" diameter over north Austin in the area bounded by IH35, Parmer Lane, Dessau Lane and Metric Boulevard; associated with extensive downburst wind damage 7:10-7:40 pm

**2004.....**

- 06 Apr - 1.75" diameter in the Lago Vista area; lasted 10 minutes
- 10 Apr - 3/4" diameter over parts of Austin 3:15 pm, lasted 15 minutes
- 13 Apr - 1" diameter in the Lago Vista area 3:00 am, lasted 20 minutes
- 31 May - 1" diameter Ben White Boulevard and Lamar Boulevard
  - 1 3/4" diameter at Ben White and IH35
  - 1" diameter near Stassney and William Cannon
- 28 Jun - 3/4" diameter in Anderson Mill Road area beginning 4:37 pm, lasted 20 minutes
- 13 Oct - 1" diameter in Dripping Springs 4:05 pm
- 23 Nov - 3/4" diameter reported in the Austin area 8:55 am
  - 2 1/2" diameter 2 miles north of Georgetown and 3 miles WNW of Jarrell 6:35 pm
  - 3/4" diameter reported in Leander 6:35 pm

**2005.....**

- 09 Mar - 3/4 - 1" diameter over southeast Austin 4:55 to 5:10pm
- 19 Mar - 3/4" diameter hail in Liberty Hill toward Georgetown 4:20 to 4:40pm
  - 1" diameter KAUS/Austin Bergstrom Intl Airport 5:00pm
  - 7/8" diameter William Cannon and IH35
  - 1" diameter 6 miles southeast of Georgetown 5:20pm
- 25 Mar - 1 3/4" diameter Lake Travis and Lakeway 9:08 pm
  - 3/4" diameter KATT/Austin City-Camp Mabry 9:23pm
  - 1 - 1 3/4" diameter over central Austin, 9:25 pm to 9:40 pm
  - 2" diameter Travis County Exposition Center 9:40pm
  - 1"diameter in 3 to 6 inch drifts in Manor area around 10:00pm
  - (Note: This was the most destructive hailstorm (\$100 million in damage) to strike the Austin area since the 25 March 1993 storm; it was responsible for shattering thousands of car, home and business windows as well as denting thousands of cars in the city)
- 31 Mar - 1" diameter 1 mile southwest of Round Rock 5:55 pm
- 05 Apr - 3/4" diameter along Mopac 1 mile SW of Sunset Valley 7:45 pm
  - 1" diameter 2 miles SE of Austin Bergstrom International Airport 7:55pm
  - 1/8" diameter KATT/Austin City-Camp Mabry 8:48 pm
  - 1/8" diameter KAUS/Austin Bergstrom Intl Airport 8:55 pm
- 10 Apr - 3/4" diameter in vicinity of Loop 360 and SH2222 11:25pm
- 11 Apr - 1" diameter just east of Pflugerville 12:20 am
  - 3/4" diameter in Hutto 12:57 am
- 29 May - 1/4" diameter Austin City-Camp Mabry 8:57 pm
  - 1 3/4" diameter Slaughter Lane and Manchaca Road 7:40 pm
  - 1 3/4" diameter FM 1626 and Manchaca Road 8:09 pm
  - 1" diameter Brodie Lane and William Cannon 8:02 pm
  - 1 3/4" diameter 7 miles north northeast of Wimberley 8:26 pm
- 07 Jul - 1" diameter 2 miles SW of Florence 6:51 pm
- 31 Oct - 3/4" diameter 5 miles W of Georgetown 1:20 pm
  - 3/4" diameter 3 miles SW of Taylor 1:56 pm

**2006.....**

- 08 Mar - 3/4" diameter 10 miles NW of Bee Cave 11:40 pm
- 09 Mar - 1/8" diameter Austin City - Camp Mabry 1:05 am
- 20 Apr - 1/2" diameter Austin City - Camp Mabry 3:12 pm
  - 4 3/4" diameter 3 miles S of San Marcos 4:45 pm - one injury with 17,000 vehicles damaged (10,000 at Outlet malls, 7,000 at residences in area), \$100 million damage
- 04 May - 1/4" diameter Austin City - Camp Mabry 10:22 pm
- 23 Sep - 1" diameter Parmer Lane and MoPac (Loop 1) in north Austin 4:35 pm

**2007.....**

30 Mar - 7/8" diameter 12 miles NW of Wimberley 9:10 am  
 13 Apr - 3/4" diameter near Kyle 6:38 pm  
 02 May - 2 3/4" diameter 7 miles north of Georgetown 7:25 pm  
 03 May - 7/8" diameter 14 miles NW of Austin 12:11 am  
     1/4" diameter KAUS/Austin Bergstrom International Airport 225am-231am  
 24 May - 1" diameter Liberty Hill 7:59 pm (Williamson Co)  
 04 Jun - 2 3/4" diameter in Leander and Cedar Park between 2:05pm - 2:25pm  
 15 Dec - 1/4" diameter KAUS/Austin Bergstrom International Airport 423am-429am

**2008.....**

16 Feb - 1/4" diameter KAUS/Austin Bergstrom International Airport 353pm-410pm  
 18 Mar - 0.88" diameter 4 miles SSE of Florence 12:12 pm  
 04 Apr - 1" diameter 2 miles South of Liberty Hill 4:56 am  
     0.88" diameter 2 miles ENE of Georgetown Municipal Airport 05:05 am  
     1" diameter 2 miles SSW of Georgetown Municipal Airport 05:10 am  
     1" diameter 1 mile WSW of Georgetown 05:15 am  
     1" diameter 1 mile W of Weir 05:30 am  
     1" diameter 2 miles S of Leander 06:24 am  
     3/4" diameter 1 mile W of Leander 06:28 am  
     3/4" diameter 1 mile NW of Austin Camp Mabry 6:50 am  
     3/4" diameter 1 mile west of West Lake Hills 6:56 am  
     3/4" diameter 1 mile SE of Austin 7:00 am  
     3/4" diameter KATT/Camp Mabry 703am-808am  
     3/4" 3 miles NNW of Austin Camp Mabry 7:03 am (two reports within Camp Mabry)  
     0.88" diameter 1 mile ENE of Austin Camp Mabry 7:07 am  
     3/4" diameter 2 miles ENE of Mueller development 7:10 am  
 25 Apr - 1 3/4" diameter near Schwertner 6:28 pm  
     1 3/4" diameter 1 mile W of Weir 7:03 pm  
     1 1/4" diameter 1 mile W of Weir 7:13 pm  
     1" diameter 1 mile N of Pflugerville 8:27 pm  
     0.88" diameter 2 miles NNE of Four Points 8:32 pm  
     0.88" diameter 2 miles NNE of Austin Camp Mabry 8:50 pm- 9:02 pm  
     1/4" diameter KATT/Camp Mabry 846pm-852pm  
     3/4" diameter 5 miles NE of Wimberley 10:11 pm  
 27 Apr - 3/4" diameter 1 mile E of Lake Travis  
     1" diameter 2 miles SE of Lake Travis 5:23am- 5:30 am  
 10 May - 1" diameter 1 mile NW of Oak Hill 6:14 pm  
     1 3/4" diameter 2 miles SSW of Austin Camp Mabry 6:15 pm  
     2 1/4" diameter KATT/Camp Mabry 616pm-625pm (Damaged Windshields,Cars)  
     1 1/4" diameter 1 mile N of Austin 6:20 pm  
     1 1/4" diameter 2 miles NNE of Austin 6:20 pm  
     1 1/2" diameter 1 mile N of Austin at 6:22 pm  
     1" diameter 1 mile WNW / 2 miles ENE of the Mueller development 625 pm-627pm  
     2" diameter 1 mile NE of Austin Camp Mabry 6:27 pm  
     2 1/4" diameter 1 mile SE of Austin Camp Mabry 6:27 pm  
     1 3/4" diameter 1 mile ESE of Austin Camp Mabry 6:30 pm  
     1 3/4"/ 2 1/2" / 1 3/4" diameter 2 miles NW of Mueller development 6:38pm-641 pm  
     1 3/4" diameter 1 mile W of Del Valle 6:45 pm  
     1/8" diameter KAUS/Austin Bergstrom International Airport 656pm-709pm

14 May - 3/4" diameter 2 miles SW of Leander 8:00 pm  
           1" diameter 2 mi NNE of White Stone 8:01 pm  
           1" diameter 2 miles SSW of Leander 8:05 pm  
           1" diameter 1 mile W of White Stone 8:11 pm  
           1 1/4" diameter 4 miles NE of Jonestown 8:16 pm  
           2 1/2" diameter 1 mile ESE of Austin Camp Mabry 8:30 pm  
           1 1/4" diameter 2 miles S of Leander 8:31 pm  
           1" diameter 2 miles N of Old Round Rock 8:33 pm  
           1" diameter 3 miles SW of Hutto 8:45 pm  
           1 3/4" diameter 3 miles WSW of Hutto 8:54 pm  
           1 1/4" diameter near Old Round Rock 9:00 pm  
           3/4" diameter 1 mile E of Norman Crossing 9:10 pm  
           1" diameter 1 mile WNW of Coupland 9:16 pm  
           1" diameter 1 mile WNW of Bee Caves 11:14 pm  
           1" diameter 1 mile SE of Austin Camp Mabry 11:27 pm  
           2 3/4" diameter 1 mile E of the Mueller Development 11:30 pm that damaged 26 cars at CTECC / Austin Travis County Office of Emergency Management that resulted in nearly \$100K in damage  
           1 3/4" diameter 2 miles NNW of Austin 11:30 pm that broke an apartments windows in the west campus area of the University of Texas (at 25th and Leon Street) that resulted in \$1,000 in damages  
           2" diameter 1 mile E of Austin Camp Mabry 11:30 pm that caused broken windows on and near the UT campus resulting in \$100,000 in damages,  
           3/4" diameter 2 miles WSW of McNeil 11:30 pm  
           1" diameter KATT/Camp Mabry 11:30pm -1135pm  
           1 3/4" diameter 1 mile W of Mueller Development 11:35 pm -11:45 pm  
           4" diameter 1 mile SW of Mueller Development 11:45 pm caused extensive damage that resulted in \$1,000 in damages  
 15 May - 1" diameter 1 mile ESE of Austin Camp Mabry 12:15 am so much hail dropped that it drifted up/stacked up on the side of buildings to nearly a foot in some places  
 20 Jun - 1/8" diameter KAUS/Austin Bergstrom International Airport 618pm - 623pm  
 21 Jun - 2" diameter 1 mile E of Sprinkle 3:55 pm that destroyed some fences in the area  
           0.88" diameter 2 miles NNW of Manor 4:10 pm  
 11 Nov - 3/4" diameter fell near Austin Executive Airport (KEDC) at 5:05 pm

2009.....

- 10 Feb - 3/4" diameter 4 miles NW of Liberty Hill 9:10 pm  
1" diameter 8 miles SSW of Henly 9:30 pm  
3/4" diameter 3 miles WNW of Wimberley 9:35 pm  
0.88" diameter 2 miles ENE of Cedar Park 9:35 pm  
3/4" diameter near Pflugerville 9:55 pm
- 25 Mar - 1" diameter 1 mile W of Lago Vista 4:30 pm  
1" diameter 4 miles NE of Four Points 4:40 pm  
1 3/4" diameter in Austin 4:42 pm that resulted total property damage \$160 million  
3" diameter 4 miles E of Jonestown around 4:30 pm  
1 3/4" diameter 1 mile S of Cedar Park 4:39 pm  
2" diameter 1 mile N of Old Round Rock 4:39 pm  
1" diameter 2 miles NNE of White Stone 4:39 pm  
0.88" diameter 2 miles SSW of Leander 4:40 pm  
1" diameter 2 miles S of Leander 4:40 pm  
1 3/4" diameter 1 mile S of White Stone 4:40 pm, 1" diameter 1 mile N of Cedar Park 4:42 pm, 1 3/4" diameter 3 miles NNE of Four Points 4:44 pm  
1 3/4" diameter 1 mile S of White Stone 4:44 pm  
2 1/2" diameter 2 miles E of Four Points 4:45 pm  
2" to 2 1/2" diameter 1 mile ESE of McNeil 4:45 pm  
2 3/4" diameter 2 miles WSW of Waters Rock 4:45 pm  
3/4" diameter 6 miles WSW of Georgetown Municipal Airport 4:45 pm  
1" diameter 3 miles NNE of Jollyville 4:50 pm  
2" diameter 1 mile SE of Three Points 4:55 pm  
2 1/2" diameter 2 miles WSW of Waters Rock 4:55 pm  
1 3/4" diameter 1 mile N of Old Round Rock 5:00 pm  
2" diameter 3 miles SW of McNeil 5:00 pm  
1 3/4" diameter near Old Round Rock 5:01 pm  
3/4" diameter near Coupland 5:30 pm
- 11 Jun - 3/4" diameter 6 miles WNW of Georgetown Municipal Airport 7:18 pm  
0.88" diameter 2 miles SSW of Leander 7:21 pm  
1 3/4" diameter 1 mile SSW of Leander 7:21 pm  
1 1/4" diameter 2 miles NNE of White Stone 7:24 pm  
0.88" diameter 1mi N of Old Round Rock 7:30pm  
1 1/4" diameter 3 miles NNE of Jollyville 7:35 pm  
1" diameter 1 mile S of White Stone 7:35 pm  
1/4" diameter KATT/Camp Mabry 800pm - 805pm  
1" diameter 2 miles W of McNeil 7:40 pm  
1 3/4" diameter 2 miles NE of Cedar Park 7:41 pm  
1" diameter near White Stone 7:41 pm  
3/4" diameter 1 mile ESE of Marshall Ford 7:45 pm  
1" diameter 3 miles NNE of Jollyville 7:45pm  
3/4" diameter 1 mile ESE of Marshall Ford 7:49 pm  
1 3/4" diameter 1 mile N of Pflugerville 8:07 pm  
0.88" diameter 3 miles WNW of Richland 8:07 pm  
1 3/4" diameter 1 mile N of Pflugerville 8:22 pm  
1 3/4" diameter 2 mi NNW of West Lake Hills 8:25 pm
- 04 Sep - 3/4" diameter 4 miles NW of Liberty Hill 6:20 pm
- 01 Oct - 0.88" diameter 1 mile N of Jarrell 8:00 pm  
0.88" diameter 5 miles SW of Liberty Hill 8:36 pm  
0.88" diameter 3 miles NNE of Nameless, TX 9:00 pm

**2010....**

- 23 Apr - 1" diameter N of Briarcliff (pea to quarter size) 5:28 pm
- 0.88" diameter 2 miles NNW of White Stone 5:58pm
- 20 Mar - 1/8" diameter KAUS/Austin Bergstrom International Airport 706am - 711am
- 17 May - 1" diameter Dripping Springs along Ranch Road 12 5:15 to 5:18 pm
- 0.88" diameter near Bee Cave 5:45 pm
- 0.88" diameter 2 SSW of Mansfield Dam 5:45 pm

**2011....**

- 04 Apr - 1" diameter 1 mile S of White Stone 6:15 am
- 3/4" diameter 4 miles NNE of Old Round Rock 6:35 am
- 1" diameter 3 miles NNE of Old Round Rock 6:35 am
- 3/4" diameter 2 mi SW Waters Rock 6:45 am
- 11 Apr - 0.88" diameter 2 miles NNE of Old Round Rock 3:42 am
- 1" diameter 4 miles NE of Old Round Rock 3:45 am
- 0.88" diameter KATT/Camp Mabry 400am - 408am
- 0.88" diameter 3 miles NNW of Austin Camp Mabry 3:53 am
- 11 May - 1" diameter 2 miles WNW of Florence 8:41 pm
- 1" diameter 1 mile N of Jarrell 9:09 pm
- 1" diameter near Corn Hill 9:15 pm
- 1" diameter 2 miles N of Jarrell 9:15 pm
- 1 3/4" diameter 4 miles SSW of Driftwood 9:56 pm
- 12 May - 1" diameter 3 miles W of Bluff Springs 7:55 am
- 3/4" diameter 2 mi NNE Austin Camp Mabry 8:37 am
- 1/4" diameter KATT/Camp Mabry 800am - 802am
- 0.88" diameter 2 miles SSW Austin Executive Airport 9:08 am
- 0.88" diameter 2 miles E of Williamson 9:08 am
- 1/4" diameter KATT/Camp Mabry 914am - 921am
- 20 May - 0.88" diameter 1 mile NW of Bee Caves 6:51 pm
- 3/4" diameter 2 miles SSE of Mt. Gaynor 6:54 pm
- 1" diameter 2 miles W of Driftwood 6:55 pm
- 3/4" diameter 1 mile E of Bee Caves 7:11 pm
- 1" diameter 2 miles SE of Driftwood 7:18 pm
- 1/4 - 1/8" diameter KATT/Camp Mabry 718pm - 722pm
- 1" diameter 2 miles SE of Mt. Gaynor 7:20 pm
- 1" diameter 2 miles SE of Driftwood 7:32 pm
- 0.88" diameter 4 miles S of Driftwood 7:50 pm
- 21 May - 0.88" diameter 3 miles NNW of Florence 5:54 pm
- 25 May - 1" diameter 1 mile S of Corn Hill 1:54 am
- 1 3/4" diameter 2 miles E of Taylor 3:15 am
- 1" diameter 1 mile WNW of Fiskville 4:05 am
- 1 1/2" diameter 1 mile WNW of Fiskville 4:07 am

(Updated through August 2011)

#### **Very Interesting Austin Hail Note:**

The top three most costly (damage wise) hailstorms in history in and around the Austin, TX metropolitan area have all occurred on March 25.

Most costly: 25 March 2009 ... \$160 million hail loss

2nd most costly: 25 March 1993 ... \$125 million hail loss

3rd most costly: 25 March 2005 ... \$100 million hail loss

4th most costly: 14 May 2008 ... \$50 million hail loss



# GREATER AUSTIN METROPOLITAN AREA

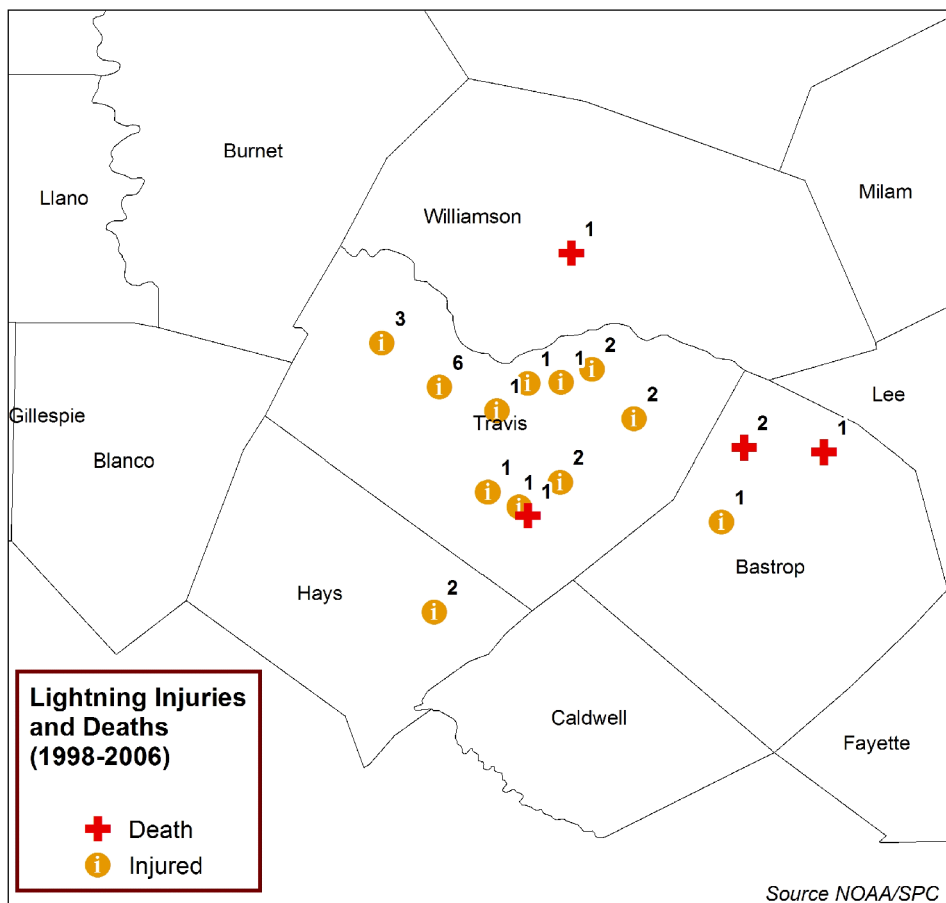
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## PART 4: LIGHTNING INJURIES AND DEATHS

Lightning is a mysterious yet quite dangerous facet of the thunderstorm. A thunderstorm doesn't have to be especially well organized or strong in order to kill you with lightning; it simply has to be a thunderstorm. In other words, any thunderstorm can kill with lightning. More so, you don't have to be directly under the thunderstorm (in the precipitation) to be struck by lightning. Lightning has been documented to have traveled and struck people and objects 10 to 20 miles or more from the parent thunderstorm.

Regarding the climatology of lightning injuries and deaths, it should be noted that record keeping through the years has been incomplete, at best. It wasn't really until the 1990s that the National Weather Service made lightning injury and death documentation a consistent priority across the National Weather Service and through their Storm Data publication.

Across south central Texas, lightning is at its peak during the thunderstorm season which is primarily during the spring, summer and early fall months. The greater Austin metropolitan area sees, based on a 30 year average, an average of 40 to 45 thunderstorm days per year.



This summary details lightning injuries and deaths that have occurred in the greater Austin metropolitan area (Travis, Hays and Williamson Counties) as well as immediately adjacent areas within about 50 miles of downtown Austin since 1988. All times local.

<b>Year</b>	<b>Date</b>	<b>Time</b>	<b>Location (County)</b>	<b>Remarks</b>
<b>1988</b>	<b>03 Aug</b>	<b>4:40 pm</b>	Austin (Travis)	Golfer struck and knocked unconscious. He was treated and released from the hospital within two days.
<b>1990</b>	<b>11 May</b>	<b>4:20 pm</b>	McDade (Bastrop)	10 year old male struck and killed while hoeing weeds in a garden near his house. Reportedly rain and hail had just ended and sun had just reappeared following the thunderstorm.
<b>1992</b>	<b>22 Feb</b>	<b>1:10 am</b>	3 S Elgin (Bastrop)	Lightning struck a large tree causing a large limb to crash down on a pickup truck below. Two persons were killed.
<b>1994</b>	<b>28 Apr</b>	<b>11:30 am</b>	Austin (Travis)	16 year old male struck in the back of the head as he was loading garbage from a construction site into a large metal demister... man survived.
	<b>07 Apr</b>	<b>12:00noon</b>	Near Buda (Hays)	2 Hays High School students... 16 year old female and 18 year old male struck while walking to class during a violent thunderstorm. Both students survived
	<b>14 Sep</b>	<b>4:30 pm</b>	Austin (Travis)	29 year old and 19 year old males were struck while working in a field... both survived.
<b>1995</b>	<b>28 Aug</b>	<b>8:00 pm</b>	Austin (Travis)	18 year old male student struck while changing his tire in his front yard. He was holding an umbrella at the time... witnesses report that the lightning struck the umbrella. Man survived.
<b>1996</b>	<b>05 Apr</b>	<b>2:20 pm</b>	SE Austin (Travis)	51 year old male visitor from Scotland struck while playing golf. Died on 13 Apr 96.
	<b>12 May</b>	<b>8:00 pm</b>	Manor (Travis)	A man and his mother were on a porch in front of their home talking to a friend, when lightning struck a tree 20 ft away and was deflected and struck the son in the chest.. then exited his groin.. before striking his mother in the foot. All survived.
<b>1998</b>	<b>04 Jul</b>	<b>1:00 pm</b>	Lake Travis (Travis)	Lightning struck a group of swimmers, injuring six at a park on Lake Travis; all were treated and released.
	<b>19 Jul</b>	<b>5:00 pm</b>	Georgetown (Williamson)	Lightning struck a 38 year old male as he was cleaning his swimming pool; he died about 1 hour later.
	<b>16 Aug</b>	<b>5:00 pm</b>	10NE Austin (Travis)	Lightning struck a 22 year old male and his uncle. Uncle was treated and released. The young man was taken to a hospital and recovered a few days later.

**2000 23 Jul 4:00 pm Austin (Travis)**

Lightning struck a 34 year old white male while he as cleaning out his gutters during a thunderstorm. He was taken to a hospital where he recovered.

**2002 08 Aug 3:00 pm Lago Vista (Travis)**

Lightning struck a building under construction. 3 workers received electrical charges but refused EMS treatment.

**2003 06 May 10:46 am Austin (Travis)**

Lightning struck near an Austin Energy Crew near IH35 and Parmer Lane. One person was taken to Brackenridge Hospital where he was treated.

**2004 04 Oct 7:15 pm Austin (Travis)**

Lightning struck a 40 year old male in the 5200 block of FM 2222 (near intersection with Loop 360). He survived.

(Updated through December 2011)



# GREATER AUSTIN METROPOLITAN AREA

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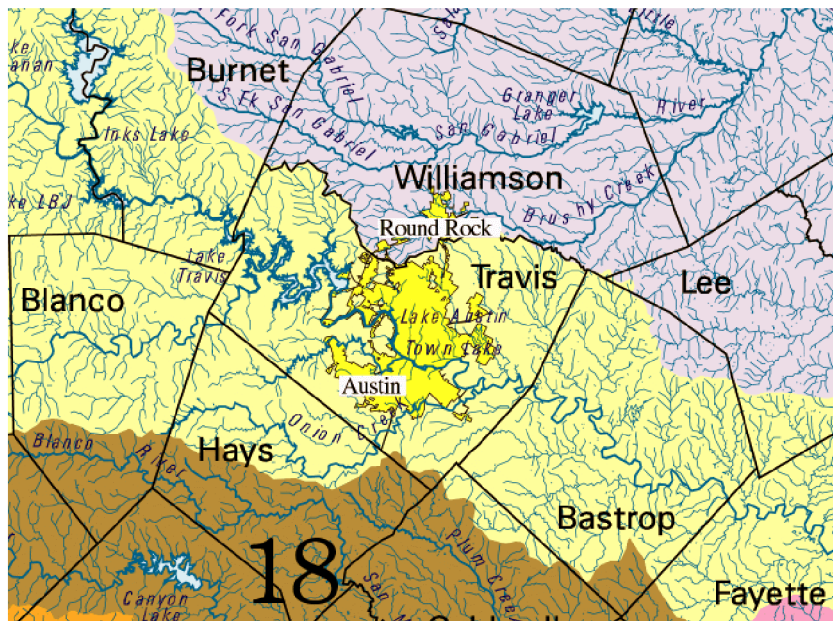
## PART 5: SIGNIFICANT FLOODS

South central Texas lies in what is referred to as “flash flood alley” - one of the most flash flood prone areas of the United States. Every year, in our area of Texas (including the adjacent Texas Hill Country to our west), flash floods kill and/or injure people. Most people are killed, injured or must be rescued when they drive vehicles into flooded low water crossings and their vehicles are washed away.

There are three primary reasons that this area of Texas is so flash flood prone. First, the rapid increase in urbanization along the Interstate 35 corridor around the Austin area is a big factor since concrete and asphalt of the urban area cause rapid and continuous runoff during periods of heavy rain. Secondly, a rather extensive sub-soil limestone layer is present in areas along and west of the Balcones Escarpment which is roughly along and west of Interstate 35. This does not allow much ground infiltration of rainfall particularly when that rainfall is heavy. Lastly, the presence of hills along and west of the Balcones Escarpment (the Texas Hill Country) promotes rapid runoff especially given the sub-soil limestone layers.

With a large part of the Austin metropolitan area in the Colorado River basin, flash flood events can lead to more extensive river flood events along the Colorado River downstream toward the Texas coast.

Flooding is most common during the thunderstorm season particularly in the mid and late spring into early summer months and again in the fall when weak stationary fronts sit overhead and promote extended periods of slow moving thunderstorms and heavier rain. In the late summer as well as early and mid fall, land falling tropical cyclones along the mid and lower Texas coast can move overhead and produce torrential flooding rains as they pass northward.



### South Central Texas River (Drainage) Basins

Brazos River Watershed - North / northeast of area

Colorado River Watershed - Running through Austin Area

Guadalupe River Watershed - South / southwest of area

(Courtesy: Texas Commission on Environmental Quality)

This summary briefly describes floods that have occurred in the greater Austin metropolitan area (Travis, Hays and Williamson Counties) since the mid 1800s.

<b>Year</b>	<b>Date</b>	<b>Remarks</b>
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<b>1869</b>	<b>July</b>	
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Reports refer to this being the worst flooding ever along the Colorado River. The river stage, near Austin, were said to be between 40 to 60 feet above the river bed. Bastrop was reported to be completely under water and LaGrange was "swamped." Buffalo carcasses, picked up originally in west Texas, reportedly floated down the river through the Austin area.

<b>1900</b>	<b>5-9 April</b>	
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As a result of heavy rain and flooding, the McDonald Dam, along the Colorado River (in the current location of the Tom Miller Dam in Austin), broke. A wall of water surged down the river into the city killing 23 people and resulting in millions of dollars in damage. The dam was rebuilt in 1912.

<b>1915</b>	<b>April</b>	
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Flash floods strike Austin, killing 35 people. McDonald dam, rebuilt three years previously, collapsed again. Of the 35 people killed, 13 died along Waller Creek.

<b>1921</b>	<b>6 Sep</b>	
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The worst flooding ever to strike south central Texas, as far as deaths are concerned, as a tropical system moved onshore into Mexico and south Texas. In the 24 hours ending just after daybreak on the 10<sup>th</sup>, Taylor recorded 23.11" of rain, while a USDA weather observation station at Thrall recorded 38.2" of rain. 215 people perished in the flooding, including 93 in Williamson County. Flood waters stood about 4 feet deep in Taylor. The worst flooding occurred on the Little River, which drains into the Brazos.

<b>1935 / 1936 / 1938</b>		
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Extensive river floods along the Colorado River. These years of flooding provided the important "push" to create a flood control authority.. later known as the Lower Colorado River Authority (LCRA). This "push" included the provision of money to complete a network of flood control dams that had been started back in 1931.. but had run out of money several times. Buchanan Dam, along the Colorado River about 60 miles northwest of Austin, would be completed in 1937.

Meanwhile, during these flood events, water reaches very high levels in the Austin area. A famous photo from the 1935 floods shows a house, mostly intact, moving with the flood waters over the Austin Dam (same location of the former McDonald Dam). A high water mark from this flood is still evident and well marked at Iron Works Barbeque just north of Town Lake on First Street in Austin.

<b>1952</b>	<b>17 Sep</b>	
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After a very wet previous week, a land falling tropical cyclone produced excessive flooding in along the Pedernales, San Saba and Llano Rivers. This water, in turn, moved downstream and produced an incredible rise in Lake Travis. The lake rose 56 feet in a 24 hour period ending on September 17.

<b>1960</b>	<b>28 Oct</b>	
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Flooding, centered over Austin, resulted in 2 deaths in a low water crossing on the west side of the city.

<b>1969</b>	<b>27 Aug</b>	
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Flash flooding, in western Travis County around Jonestown, resulted in 1 death.

<b>1970</b>	<b>15 May</b>	
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Severe flash flooding in San Marcos (Hays County) resulted in 2 deaths.

**1972                    16 Jun**

Flooding in Austin, just after the noon hour, resulted in 2 deaths.

**1974                    23-24 Nov**

Flooding in Travis and Hays Counties during the nighttime hours, resulted in ten deaths in Austin and two deaths in nearby San Marcos. 3 persons drowned near Oltorf/St. Marys Streets in south Austin around 10:30pm on the 23<sup>rd</sup>... the first floor of Clear Springs Apartments on the banks of the San Marcos River in San Marcos was evacuated around 10:30pm on the 23<sup>rd</sup>; later, 5 feet of water of water from the river would fill the first floor. Rainfall totals included 4.6" in Rollingwood 5:00-11:30pm on the 23<sup>rd</sup>, Robert Mueller Airport in Austin 4.45" at 12 midnight on the 23<sup>rd</sup>.

**1977                    10-12 Apr**

Heavy rains resulted in flooding throughout the Hill Country. This flooding caused Lake Travis to rise 5 feet within 24 hours. Roads were washed out.

**1979                    18 Apr**

Flooding, during the evening hours, across the City of Austin, resulted in one death.

**1981                    24 May**

13 people died within the Austin City Limits as 5 to 7 inches of rain fell ver the west and northwest side of the city during a four hour period. Two inches of rain fell in 30 minutes at the Austin airport. One unofficial 12 inch rainfall total was reported on the upper Shoal Creek watershed near the U.S. Highway 183/MoPac Expressway (Loop 1) interchange in northwest Austin. Called the worst flood in Austin since 1915, flooding was most extensive along the Shoal Creek from northwest Austin to Town Lake.

**1981                    13 Jun**

Flooding, late in the day, across Williamson, Travis, and Hays Counties. One death 5 miles north of Hutto.

**1985                    23 Feb**

In the predawn hours, flash flooding in the City of Austin resulted in one death.

**1986                    12 Oct**

In the morning hours, flash flooding resulted in one death.

**1991-1992            Christmas and New Years**

After a week-long episode of heavy rains, flash floods occurred along Shoal Creek during the period of 19-20 December with 2 deaths in the Austin area.. and an additional death in Dripping Springs (Hays County). This flash flood event became a river flood event over the New Years Holiday into January 1992 as heavy rains continued up and down the Colorado River. The Lower Colorado River Authority measure a record level of 710 feet on Lake Travis in late December 1991. Flooding would continue on and off into January and February 1992.

**1992                    16 May**

Flash flooding, as a result of 4 inches of rain, in Austin in the late afternoon and early evening hours resulted in the death of a 19-year-old male and over \$50,000 in damages

**1994                    07 Oct**

Two, to as much as nine, inches of rain occurred in the Austin metropolitan area on this Friday night resulting in extensive flash flooding. Fifty high water rescues were reported throughout the city. The nine inch rain total was reported by the AGHT2/Austin Great Hills NWS Cooperative Weather Observer in the Bull Creek watershed in northwest Austin.

**1994                    28 Dec**

2 to 4 inches of rain fell in the eastern parts of Travis County resulting in flash flooding on the Llano River into Lake LBJ. Record and fast moving water flows resulted in damage along Lakes LBJ and Travis.

**1996                    28-29 Oct**

Up to 13 inches of rain fell west of Llano resulted in severe flash flooding on the Llano River into Lake LBJ. Record and fast moving water flows resulted in damage along Lakes LBJ and Travis.

**1998                    17-18 Oct**

Great October '98 Flood. Major flash and river flooding on south central Texas streams.. namely the San Marcos and Guadalupe Rivers... 18 floods of record were noted on rivers and streams. Shoal Creek at W 12<sup>th</sup> Street in Austin crested at 15.4 feet flooding two businesses downstream with 2 feet of water. In south and south central Texas, 25 people drowned, 1000 houses were destroyed, 3000 damaged with a total of \$1.5 million in flood damage. 15 to 30 inches of rain fell over most of Comal and southern parts of Hays County. Rainfall at Robert Mueller Municipal Airport was 6.24" for 17 October and 1.46" for 18 October. Death tolls in the immediate area: 1 death Hays County, 1 death Travis County.

**2001                    15-16 Nov**

An upper level low pressure disturbance stalled to our west sending waves of rain showers and thunderstorms northward over the area. The heaviest rainfall fell during the mid and late afternoon hours of 15 November.. when 9 weak tornadoes also affected the area. Rainfall of 8 to 10 inches was reported over southern Travis and northern Hays Counties. Most low water crossings were flooded and dozens of water rescues occurred in the Austin Metropolitan area and in Travis County. More than 60 people were evacuated around Onion Creek south and southeast of Austin where the flooding was as bad as it was back in October 1998. 50 injuries, 4 deaths, and over \$500,000 in flood damage was reported in the local area. In Travis County, a 17 year old male drowned after he tried to walk through 3-4 feet deep moving flood waters after his stalled in a low water crossing; he was washed off his feet and swept under his vehicle. In southeast Travis County, a 51 year-old female drowned after her car stalled in a low water crossing in the Mustang Ridge area. She left the vehicle and called home on her cell phone to say she was on her way home. Her body was later recovered 1/4 mile downstream. In the Brushy Creek area of Williamson County, a 27 year-old man drowned after his car stalled in another low water crossing across Brushy Creek. He left the vehicle and was last seen standing on top of the vehicle talking on a cell phone. Shortly afterwards, a 59 year-old woman drowned after her car stalled in another low water crossing across Brushy Creek. Her body was recovered after being swept 600 yards downstream.

**2002                    2-3 Jul**

A non-tropical area of low pressure moved inland from the Gulf of Mexico and stalled over the southern Texas hill country and south central Texas pulling tropical moisture northward into the area. Waves of heavy rain trained over the area producing heavy rainfall amounts. For the first three days of July, Camp Mabry recorded 3.81" of rainfall while Austin Bergstrom International Airport recorded 2.48" of rainfall. Barton Creek crested at Loop 360 in Austin at 17.9 feet on July 2. An off duty Austin firefighter drowned in flooded Barton Creek, which had been officially put off limits for recreation by city officials due to flooding; he was kayaking near loop 360.

**2004                    15-29 Nov**

A very moist flow off of the Pacific Ocean generated by a weak El Nino and a few moist flow north off the Gulf of Mexico combined to produce periods of very heavy rain and severe thunderstorms. A nearly stationary trough of low pressure located over New Mexico pulled numerous waves of rain and thunderstorms across the area resulting in periods of very heavy rain. Rainfall totals of 10 to 15 inches made this the wettest November on record at Camp Mabry (14.10"). Camp Mabry recorded 4.61" of rain fell on 22 November and over 5 inches of rain fell on 16-17 November while Austin Bergstrom International recorded 4.36" on rainfall on 22 November. Three separate periods of heavy rain across the Highland Lakes region put most tributaries and the main stem of the Colorado River into flood. The level of Lake Travis also reached its highest level since 1997.

**2007                    13 Jan**

Six to seven inches of rain fell in and around the City of Austin in roughly a 6-hour period of time, as an arctic cold front moved through the area. The heavy rain produced flooding in and around the city. Many area creeks flooded, producing major surge of water into the Colorado River below Austin.



**2007                    27 Jun**

Rain, in the westernmost parts of Travis and Williamson Counties, produced flooding and resulted in high water rescues. Just outside of the area, in southern Burnet County, a rain gauge near Marble Falls recorded over 19 inches of rain in about 8 hours, resulting in widespread flooding in the city of Marble Falls. 100 homes received flood damaged and there were 32 high water rescues in the city. Two young men died in the event when their vehicle was swept into Hamilton Creek off FM1431. One body was later recovered in Lake Travis (in Travis County) but the other body was never found. The heavy rain drained into Lake Marble Falls and Lake Travis, sending the level of Lake Travis well into its flood pool. Lake Georgetown, in Williamson County, recorded 3.24 inches of rain in the two day period 26-27 June 2007.

**2009                    11-12 Sep**

4 to 6 inches of rain fell across parts of the area resulting in widespread street and creek flooding across metro Austin.

**2009                    19-22 Oct**

Widespread rains of 1 to 3 inches affected much of Central Texas as the remnants of Pacific tropical storm Keith Rick moved across the area out of Mexico. Just west of Austin, totals were higher, generally in the range of 4 to 6 inches. The heavy rain resulted in considerable creek and street flooding across parts of Blanco, Burnet and western Williamson County. One flood fatality occurred on the night of October 21 outside of Burnet (in Burnet County) when the driver drove through a low water crossing.

**2010                    7 Sep**

The remnants of tropical storm Hermine, that moved ashore into south Texas, trekked north northwestward and produced a persistent inflow band along the IH35 corridor beginning Tuesday evening and persisting through Wednesday morning. Widespread rain totals of 10-12 inches were reported across northern Travis, and the southern half of Williamson county. The heavy rains produced a major flood along Bull Creek in Travis County. The rains also produced major flooding along Brushy Creek, Lake Creek and the southern branch of the San Gabriel River in Williamson County. Numerous homes were flooded along Brushy and Lake Creeks in southern Williamson County. Streets and creeks throughout the region flooded. One flood fatality occurred in Austin along Bull Creek at RR222 when a car was swept into the raging waters of Bull Creek. The vehicle occupant was swept into creek and drowned. The body was discovered in Lake Austin a couple of days later. Two fatalities were reported in Williamson County. Interstate 35 was closed in northern Williamson County due to flooding for a period late September 7 through the morning of September 8. Storm total rainfall amounts included 16.37" at Lake Georgetown (3 day total), 7.04" at Austin/City (Camp Mabry) on September 7, 11.35" at Austin Great Hills (10NNW Austin) over the September 7-8 time period. The heavy rain was considered a 100-year rain event across northern Travis County where the area received more than 10.2 inches of rain in a 24-hour period. The rain event was considered a 500-year flood event in Georgetown where more than 15 inches of rain fell within 24 hours.

(Updated through December 2011)



# GREATER AUSTIN METROPOLITAN AREA

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## PART 6: WINTER PRECIPITATION EVENTS

With Austin being as such as low latitude (around 30° north), winter precipitation events (freezing rain and freezing drizzle, sleet/ice pellets and snow) are fairly infrequent to the area.

On average, accumulating snow occurs once or twice every ten years. The heaviest 24 hour snowfall locally is 9.7 inches back in November of 1937.

More commonly, freezing rain and/or drizzle or ice pellets/sleet occurs since the cold sub freezing air overhead is usually in a very shallow layer.

Winter weather events, if they occur at all, will mainly happen in the period from mid and late November through December, January and early and mid February.

This summary contains winter weather events as noted by weather observers at the official reporting stations in Austin (unless otherwise noted) on dates indicated with types of precipitation/amounts/remarks when available through official U. S. Weather Bureau/National Weather Service records. Trace amounts indicate amounts too small to be measured.

Year	Date (Amounts/Precipitation Type/Remarks)
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1906.....	18 Dec (light snow in Austin)
1909.....	18 Dec (light snow in Austin)
1925.....	28 Dec (1.0" snow)
1929.....	21-22 Dec (5.5" snow)
1937.....	11 Nov (9.7" snow; greatest Austin one day snowfall on record)
1944.....	13 Jan (3.9" snow)
	14 Jan (3.1" snow)
1949.....	25 Jan (Trace, ice/snow)
	29 Jan (Trace, ice/snow)
	30 Jan (6.5" snow)
1950.....	04 Jan (Trace Ice/Snow)
1951.....	29-30 Jan (Trace Ice/Snow)
	31 Jan (0.6" Snow)
	13 Feb (Trace Ice/Snow)
	14 Feb (1.0" Snow)
	12 Mar (Trace)
1953.....	16 Jan (Trace Ice/Snow)
1954.....	21 Jan (Trace Light Frzg Rain)
	04 Mar (Trace Ice Pellets)
	16 Mar (Trace Ice Pellets)
1955.....	20 Feb (Ice Pellets, Frzg Rain)
	08 Nov (1-3" Snow; west edge of Austin and more west and north of Austin)
1956.....	02 Feb (Trace Sleet/Snow)
	13 Mar (Light Frzg Drzl early morning hours)

**1957**.....22 Nov (Trace Snow)  
                   23 Nov (Trace Snow)  
                   24 Nov (Trace Snow)  
                   31 Dec (Trace Ice Pellets)  
**1958**.....11 Jan (Trace Ice/Snow)  
                   11 Feb (Trace Ice/Snow)  
                   30 Dec (Trace Ice Pellets; Glaze, Sleet over hill country just northwest of Austin)  
**1959**.....21 Jan (Trace Ice Pellets/Snow)  
                   19 Feb (Trace Ice Pellets/Snow)  
                   14 Nov (1" Snow, also, Ice Pellets, Frzg Rain)  
**1960**.....24 Feb (Trace Ice Pellets, Snow)  
                   29 Feb (Trace Frzg Rain/Glaze)  
**1961**.....25 Jan (Trace, Frzg Rain)  
                   26 Jan (Trace Snow/Frzg Rain/Ice Pellets)  
                   28 Jan (Trace Ice Pellets/Snow)  
                   06 Feb (Trace Ice Pellets/Snow)  
**1962**.....09 Jan (Trace, Ice Pellets/Snow)  
                   20 Jan (Trace, Frzg Rain)  
                   22 Jan (Trace, Frzg Rain)  
                   23 Jan (Trace, Frzg Rain)  
                   24 Jan (Trace, Frzg Rain)  
                   28 Feb (Trace Frzg Rain, Ice Pellets, Snow)  
                   14 Mar (Trace Snow, Ice Pellets)  
**1963**.....19 Jan (Trace Snow)  
                   20 Jan (Trace, Frzg Rain)  
                   25 Jan (Trace, Frzg Rain)  
                   11 Feb (1" Snow, also Ice Pellets)  
                   13 Dec (Trace Snow, Ice Pellets)  
                   14 Dec (Trace Ice Pellets, Frzg Rain, Snow)  
                   21 Dec (Trace, Frzg Rain)  
                   22 Dec (Trace Snow, Frzg Rain)  
**1964**.....13 Jan (Trace Ice Pellets, Frzg Rain)  
                   16 Jan (.6" Snow, Ice Pellets, Frzg Rain)  
                   21 Feb (4" Snow)  
                   17 Dec (Trace, Frzg Rain)  
                   18 Dec (Trace, Frzg Rain)  
**1965**.....23 Feb (Trace Frzg Rain, Ice Pellets)  
                   24 Feb (.5" Snow, also Frzg Rain, Ice Pellets)  
                   03 Mar (2" Snow, Ice Pellets)  
**1966**.....21 Jan (Trace Ice Pellets)  
                   22 Feb (6" Snow)  
**1967**.....09 Jan (Trace Ice Pellets)  
                   06 Feb (2" Snow, Ice Pellets, Frzg rain)  
**1968**.....08 Jan (Trace, Frzg Rain)  
                   09 Jan (Trace, Frzg Rain)  
                   21 Mar (Trace Ice Pellets)  
**1969**.....29 Dec (Trace, Frzg Rain)  
                   30 Dec (Trace, Frzg Rain)  
**1970**.....02 Jan (Trace, Ice Pellets)  
                   09 Jan (Trace, Frzg Rain, Ice Pellets)  
                   18 Jan (1.5" Snow, also Frzg Rain, Ice Pellets)  
                   19 Jan (Frzg Rain)  
                   21 Jan (Frzg Rain)  
                   20 Feb (Trace, Ice Pellets)  
**1971**.....02 Dec (Trace, Ice Pellets, Snow)

**1972**.....04 Jan (Trace, Snow, Ice Pellets, Frzg Rain)  
                   05 Jan (Trace)  
                   31 Jan (Trace, Ice Pellets)  
                   10-11-12 Dec (Frzg Rain)  
**1973**.....09 Jan (Frzg Rain, Ice Pellets)  
                   10 Jan (Frzg Rain, Ice Pellets)  
                   11 Jan (Frzg Rain)  
                   08 Feb (.6" Ice Pellets)  
                   17 Feb (Trace, Ice Pellets)  
**1974**.....2-3 Jan (Frzg Rain)  
**1975**.....12 Jan (Trace, Snow)  
                   22-23 Feb (Trace, Ice Pellets, Snow)  
**1976**.....28 Nov (Trace, Snow, Ice Pellets, Frzg Rain)  
**1977**.....1-2 Jan (Trace, Frzg Rain, Ice Pellets)  
                   01 Feb (Trace, Ice Pellets, Snow)  
**1978**.....1-2 Jan (Trace, Ice Pellets, Frzg Rain)  
                   11-12 Mar (Frzg Rain)  
                   18 Jan (Trace, Frzg Rain, Ice Pellets)  
                   19 Jan (Trace, Ice Pellets)  
                   21 Jan (Frzg Rain)  
                   08 Feb (Frzg Rain)  
                   15 Feb (Trace, Snow, Ice Pellets)  
                   03 Mar (Trace Snow, Ice Pellets, Frzg Rain)  
                   04 Dec (Trace, Ice Pellets)  
                   08 Dec (Frzg Rain)  
                   31 Dec (Frzg Rain)  
**1979**.....01 Jan (Trace, Ice Pellets)  
                   02 Jan (Frzg Rain)  
                   06-07 Jan (Frzg Rain)  
                   29 Jan (Trace, Ice Pellets)  
                   17 Feb (Trace, Snow, Ice Pellets, Freezing Rain)  
                   22 Nov (Trace, Snow, Ice Pellets)  
**1980**.....31 Jan (Trace, Ice Pellets)  
                   09 Feb (Trace, Ice Pellets)  
                   17 Feb (Trace, Ice Pellets)  
                   25 Nov (1" Ice Pellets)  
                   26 Nov (Additional 1" Snow)  
**1981**.....18 Jan (Trace, Ice Pellets)  
**1982**.....11 Jan (Frzg Rain)  
                   12 Jan (Ice Pellets, Frzg Rain)  
                   13 Jan (2" Snow, also Frzg Rain, Ice Pellets)  
                   05 Feb (Frzg Rain, Frzg Drzl, Ice Pellets)  
                   06 Feb (Frzg Rain)  
                   06 Mar (Trace, Ice Pellets)  
                   10 Mar (Trace, Ice Pellets)  
**1983**.....26 Dec (Frzg Rain)  
                   27 Dec (Frzg Rain)

**1985**.....01 Jan (Frzg Rain)  
                   02 Jan (3.9" Snow, also Frzg Drzl)  
                   03 Jan (Frzg Rain)  
                   11 Jan (Trace Snow, Ice Pellets)  
                   12 Jan (3" Snow)  
                   13 Jan (.6" Snow, also Frzg Drzl)  
                   31 Jan (Trace, Snow Grains)  
                   01 Feb (Snow, Snow Grains, Ice Pellets)  
                   03 Feb (Frzg Drzl)  
                   04 Feb (Frzg Rain)  
**1986**.....08 Jan (Ice Pellets, Frzg Rain)  
**1987**.....29 Mar (Trace Ice Pellets)  
**1988**.....11 Feb (Frzg Rain)  
**1989**.....04 Feb (Frzg Drzl)  
                   05 Feb (Frzg Drzl)  
                   06 Feb (Trace, Snow)  
                   04 Mar (Trace Frzg Rain)  
                   22 Dec (Frzg Rain, Trace Snow)  
**1990**.....22 Dec (Ice Pellets, Frzg Rain)  
                   23 Dec (Frzg Rain, Trace Snow)  
                   30 Dec (Ice Pellets, Frzg Rain, Frzg Drzl)  
**1992**.....04 Nov (Trace, Ice Pellets)  
**1993**.....13 Jan (Trace, Ice Pellets)  
                   19 Jan (Trace, Ice Pellets)  
                   25 Jan (Trace, Ice Pellets)  
                   25 Nov (Frzg Rain, Frzg Drzl)  
                   26 Nov (Frzg Rain)  
                   21 Dec (Trace, Ice Pellets)  
**1994**.....28 Jan (Trace, Ice Pellets)  
                   29 Jan (Trace, Ice Pellets)  
                   31 Jan (Trace, Ice Pellets, Snow)  
                   01 Feb (Frzg Rain, Trace Snow)  
                   09 Feb (Frzg Rain)  
                   10 Feb (Ice Pellets, Frzg Rain)  
                   09 Mar (Trace Snow)  
**1995**.....02 Jan (Trace, Ice Pellets)  
                   11 Apr (Trace, Ice Pellets)  
**1996**.....01 Feb (Frzg Rain)  
                   02 Feb (Frzg Rain)  
                   03 Feb (.3" Snow, heavier amounts in northern Travis/southern Williamson counties)  
                   29 Feb (Frzg Rain)  
                   24-25 Nov (Trace, Snow at AUS airport; up to 12" in surrounding Hill Country areas)  
                   16 Dec (.2" Snow at Aus airport; 1-2" Snow in northwest Austin)  
**1997**.....06 Jan (Trace, Snow)  
                   07 Jan (Trace, Snow; also Frzg Rain)  
                   12 Jan (Frzg Rain, Frzg Drzl, Ice Pellets, Snow)  
                   13 Jan (Frzg Rain, Trace, Ice Pellets)  
                   14 Jan (Frzg Rain)  
                   15 Jan (Frzg Rain, Ice Pellets)  
                   15 Nov (Trace, Snow, Ice Pellets)  
                   26 Dec (Trace, Snow, Snow Grains)  
**1998**.....08 Jan (Trace, Snow)  
                   23-24 (Frzg Rain started 2am on the 23<sup>rd</sup> with extensive icing; Trace, Ice Pellets/Snow;  
                           400 vehicle accidents were reported in the Austin area over the two day period)

**Beginning on Sunday, 23 May 1999, with the opening of Austin Bergstrom International Airport, Austin has two surface weather observation sites. Below this point.. reports denote whether they are from Austin Bergstrom International Airport (KAUS) or Austin City/Camp Mabry (KATT)**

**2000**.....27 Jan (Trace, Snow, KAUS)  
28 Jan (Trace, Snow, KAUS)  
12 Dec (Trace, Snow, Frzg Drzl, KAUS) (Ice Pellets, KATT)  
13 Dec (Frzg Rain, Frzg Drzl, KAUS) (Ice Pellets, KATT)  
26 Dec (Trace, Snow, KAUS)  
**2001**.....28 Nov (Trace, Snow, Frzg Rain, Ice Pellets, KAUS) (Trace, Snow, Frzg Rain, KATT)  
29 Nov (Trace, Snow, Frzg Rain, KAUS) (Trace, Snow, Frzg Rain, KATT)  
31 Dec (Ice Pellets, KAUS)  
**2002**.....01 Jan (Trace, Snow, KAUS) (Trace, Snow, KATT)  
02 Jan (Trace, Snow, KAUS)  
**2003**.....08 Feb (.4" Snow KAUS) (Trace, Snow, Ice Pellets, KATT)  
24 Feb (.4" Snow, Frzg Drzl, Ice Pellets KAUS) (.6" Snow, Frzg Rain, Ice Pellets KATT)  
25 Feb (Trace, Snow, Frzg Rain, Frzg Drzl, Ice Pellets, KAUS)  
(Trace, Snow, Frzg Rain, Ice Pellets, KATT)  
**2004**.....13 Feb (Trace, Snow, Ice Pellets KAUS) (Frzg Rain, Ice Pellets, KATT)  
14 Feb (.7" Snow, KAUS) (1.6" Snow, Ice Pellets KATT)  
**2005**.....07 Dec (Trace, Frzg Rain, Frzg Drzl, Ice Pellets, KAUS) (Trace, Frzg Rain, Ice Pellets, KATT)  
08 Dec (Frzg Drzl, KAUS) (Trace, Frzg Rain, Ice Pellets, KATT)  
16 Dec (Trace, Ice Pellets, KAUS) (Trace, Ice Pellets, KATT)  
**2006**.....18 Feb (Frzg Drzl, KAUS) (Frzg Rain, KATT)  
19 Feb (Frzg Drzl, KAUS) (Frzg Rain, KATT)  
30 Nov (Trace, Ice Pellets, KATT)  
**2007**.....15 Jan (Trace, Frzg Rain, Snow, Ice Pellets, KAUS) (Trace, Frzg Rain, Ice Pellets, KAUS)  
16 Jan (Trace, Frzg Rain, Snow, Ice Pellets, KAUS) (Trace, Frzg Rain, Snow, Ice Pellets, KATT)  
17 Jan (Trace, Frzg Rain, Snow, Ice Pellets, KAUS) (Trace, Frzg Rain, Snow, Ice Pellets, KATT)  
07 Apr (Trace, Ice Pellets, Snow, KAUS) (Trace, Ice Pellets, KATT)  
**2008**.....09 Dec (Trace, Snow, Ice Pellets, KAUS) (.1" Snow, Ice Pellets, KATT)  
10 Dec (Trace, Snow, Ice Pellets, KAUS) (Trace, Snow, Ice Pellets, KATT)  
15 Dec (Trace, Ice Pellets, KATT)  
22 Dec (Frzg Rain, KATT)  
**2009**.....27 Jan (Frzg Rain, KAUS) (Frzg Rain, KATT)  
28 Jan (Frzg Rain, KAUS) (Frzg Rain, KATT)  
04 Dec (Trace, Snow, Ice Pellets, KAUS) (Trace, Snow, KATT)  
29 Dec (Trace, Ice Pellets, KATT)  
**2010**.....23 Feb (.3" Snow, Ice Pellets, KAUS) (.6" Snow, KATT)  
**2011**.....01 Feb (Trace, Ice Pellets, KATT)  
03 Feb (Trace, Snow, KAUS) (Trace, Ice Pellets, KATT)  
04 Feb (.6" Snow, Ice Pellets, KAUS) (.9" Frzg Rain, Snow, KATT)  
09 Feb (Trace, Ice Pellets, KATT)

(Updated through December 2011)

# Austin Area Daily Snowfall Records

KATT - Austin City / Camp Mabry (1892 to current)

KAUS - Austin Bergstrom International Airport (1942 to 1995 and October 1997 to current)

.... NOVEMBER ....		.... DECEMBER ....		.... JANUARY ....	
KATT	KAUS	KATT	KAUS	KATT	KAUS
1		1		1	Trace / 2002
2		2		2	3.9" / 1985
3		3		3	Trace / 1911
4		4	Trace / 2009	4	Trace / 1950,72
5		5		5	Trace / 1972
6		6		6	0.1" / 1910
7		7	Trace / 2005	7	Trace / 1913,75
8	Trace / 1955	8	Trace / 2005	8	Trace / 1998
9		9	3.0" / 1898	9	Trace / 1962
10		10	Trace / 2008	10	Trace / 1918
11		11		11	2.0" / 1918
12		12		12	3.0" / 1985
13		13	Trace / 1963	13	3.9" / 1944
14	1.0" / 1959	14	Trace / 1963	14	3.1" / 1944
15		15		15	Trace / 1946,64,07
16		16	0.2" / 1996	16	0.6" / 1964
17		17		17	0.1" / 2007
18		18	0.4" / 1906	18	1.5" / 1970
19		19		19	Trace / 1963
20		20	1.0" / 1929	20	
21		21	4.5" / 1929	21	0.3" / 1928
22	5.5" / 1937	22	Trace / 1963	22	2.0" / 1940
23	4.2" / 1937	23	Trace / 1990	23	Trace / 1915
24		24		24	3.0" / 1926
25	1.0" / 1980	25		25	2.0" / 1926
26	1.0" / 1980	26		26	Trace / 1961
27		27		27	Trace / 1948
28	Trace / 1976	28	1.0" / 1925	28	Trace / 1948,61
29		29		29	Trace / 1948,49,51
30	Trace / 2006	30	Trace / 1990	30	**6.5" / 1949**
31		31	0.6" / 1946	31	0.6" / 1951

.... FEBRUARY ....		.... MARCH ....		.... APRIL ....	
KATT	KAUS	KATT	KAUS	KATT	KAUS
1	Trace / 1977,85,94	1		1	
2		2	2.0" / 1965	2	
3	0.3" / 1996	3		3	
4	0.9" / 2011	4		4	
5		5		5	
6	2.0" / 1967	6		6	
7		7		7	Trace / 2007
8	Trace / 2003	8		8	
9		9	2.0" / 1915	9	
10		10	0.3" / 1932	10	
11	1.0" / 1963	11		11	
12	0.3" / 1958	12	Trace / 1948	12	
13	Trace / 1951	13		13	
14	1.6" / 2004	14		14	
15	Trace / 1978	15		15	
16		16		16	
17	Trace / 1980	17		17	
18		18		18	
19	Trace / 1959	19		19	
20		20		20	
21	4.0" / 1964	21		21	
22	5.0" / 1966	22		22	
23	1.0" / 1966	23		23	
24	0.6" / 2003	24		24	
25	Trace / 2003	25		25	
26		26		26	
27		27		27	
28	Trace / 1962	28		28	
29		29		29	
		30		30	
		31			

(Updated through December 2011)



**EARLIEST FALL FREEZING/FROZEN PRECIPITATION EVENTS EVER RECORDED**

<b>KATT/Austin Camp Mabry</b>		<b>KAUS/Austin Bergstrom International Airport</b>	
02 Nov 1992.....	Sleet / Ice Pellets	08 Nov 1955.....	Snow
08 Nov 1955.....	Snow (West Austin) (Earliest Snow Ever Recorded)	26 Nov 1980.....	Snow
11 Nov 1937.....	Snow (Greatest One Day Total)	28 Nov 1976.....	Snow
14 Nov 1959.....	Snow, Sleet / Ice Pellets, Freezing Rain		
15 Nov 1997.....	Snow, Sleet / Ice Pellets		
22 Nov 1979.....	Snow, Sleet / Ice Pellets		
22 Nov 1957.....	Snow		
23 Nov 1957.....	Snow		
24 Nov 1957.....	Snow		
24 Nov 1996.....	Snow		

**LATEST SPRING FREEZING/FROZEN PRECIPITATION EVENTS EVER RECORDED**

<b>KATT/Austin Camp Mabry</b>		<b>KAUS/Austin Bergstrom International Airport (Snow Only)</b>	
11 Apr 1995.....	Sleet / Ice Pellets	7 Apr 2007.....	Snow / Ice Pellets
07 Apr 2007.....	Sleet / Ice Pellets	2-3 Mar 1965....	Snow
29 Mar 1987.....	Sleet / Ice Pellets		
21 Mar 1968.....	Sleet / Ice Pellets		
16 Mar 1954.....	Sleet / Ice Pellets		
14 Mar 1962.....	Snow, Sleet / Ice Pellets (Latest Snow Ever Recorded)		

**SINCE 1970, WINTERS WITH GREATEST RECORDED SNOWFALLS**

<b>KATT/Austin Camp Mabry</b>		<b>KAUS/Austin Bergstrom International Airport</b>	
8.7" Snow.....	1984-1985 (Jan 7.5", Feb 1.2")	7.3" Snow.....	1984-1985 (Jan 6.8", Feb 0.5)
2.0" Snow.....	1980-1981 (Nov 2.0", Jan T, Feb T)	6.6" Snow.....	1972-1973 (Dec T, Jan 4.3", Feb 2.3")
2.0" Snow.....	1981-1982 (Jan 2.0", Feb T, Mar T)	1.9" Snow.....	1980-1981 (Nov 1.9", Jan T, Feb T)
1.7" Snow.....	1972-1973 (Jan 0.8", Feb 0.9")	1.2" Snow.....	1971-1972 (Jan 1.2")
1.6" Snow.....	2003-2004 (Feb 1.6")	1.0" Snow.....	1981-1982 (Jan 1.0", Feb T, Mar T)

**SNOW OCCURRENCE (BY SEASON) SINCE 2001**

Season		Nov	Dec	Jan	Feb	Mar	SEASONAL TOTAL
2001-2002	KAUS/Bergstrom	T	0.0	T	0.0	T	T
	KATT/Mabry	T	0.0	T	0.0	T	T
2002-2003	KAUS/Bergstrom	0.0	0.0	0.0	0.8	0.0	0.8
	KATT/Mabry	0.0	0.0	0.0	0.6	0.0	0.6
2003-2004	KAUS/Bergstrom	0.0	0.0	0.0	0.7	0.0	0.7
	KATT/Mabry	0.0	0.0	0.0	1.6	0.0	1.6
2004-2005	KAUS/Bergstrom	0.0	0.0	0.0	0.0	0.0	0.0
	KATT/Mabry	0.0	0.0	0.0	0.0	0.0	0.0
2005-2006	KAUS/Bergstrom	0.0	T	0.0	0.0	0.0	T
	KATT/Mabry	0.0	0.0	0.0	0.0	0.0	0.0
2006-2007	KAUS/Bergstrom	0.0	0.0	0.1	0.0	0.0	0.1
	KATT/Mabry	0.0	0.0	0.2	0.0	0.0	0.2
2007-2008	KAUS/Bergstrom	0.0	0.0	0.0	0.0	0.0	0.0
	KATT/Mabry	0.0	0.0	0.0	0.0	0.0	0.0
2008-2009	KAUS/Bergstrom	0.0	T	0.0	0.0	0.0	T
	KATT/Mabry	0.0	0.1	0.0	0.0	0.0	0.1
2009-2010	KAUS/Bergstrom	0.0	T	0.0	0.3	0.0	0.3
	KATT/Mabry	0.0	T	0.0	0.6	0.0	0.6
2010-2011	KAUS/Bergstrom	0.0	0.0	0.0	0.6	0.0	0.6
	KATT/Mabry	0.0	0.0	0.0	0.9	0.0	0.9
2011-2012	KAUS/Bergstrom	0.0	0.0	0.0			
	KATT/Mabry	0.0	0.0	0.0			

(Updated through December 2011)

# **THE MOST SIGNIFICANT INDIVIDUAL SNOWFALL EVENTS EVER RECORDED IN AUSTIN**

## **KATT/Austin Camp Mabry**

9.7" Snow.....22-23 November 1937  
6.5" Snow.....30 January 1949  
6.0" Snow.....22 February 1966  
5.5" Snow.....10-11 December 1929  
4.0" Snow.....21 February 1964  
3.9" Snow.....02 January 1985  
3.9" Snow.....13 January 1944  
3.1" Snow.....14 January 1944  
3.0" Snow.....12 January 1985  
2.0" Snow.....13 January 1982  
2.0" Snow.....06 February 1967  
2.0" Snow.....03 March 1965  
1.6" Snow.....14 February 2004  
1.5" Snow.....18 January 1970  
1-3" Snow.....08 November 1955 West Austin  
1.0" Snow.....28 December 1925  
1.0" Snow.....14 February 1951  
1.0" Snow.....11 January 1973  
1.0" Snow.....11 February 1963  
1.0" Snow.....26 November 1980  
0.9" Snow.....04 February 2011  
0.6" Snow.....23 February 2010  
0.6" Snow.....31 January 1951  
0.6" Snow.....13 January 1985  
0.6" Snow.....16 January 1964  
0.5" Snow.....24 February 1965  
0.3" Snow.....03 February 1996  
0.2" Snow.....16 December 1996  
0.2" Snow.....16-17 January 2007  
0.1" Snow.....09 December 2008

## **KAUS/Austin Bergstrom International Airport**

5.5" Snow.....30 January 1949  
4.0" Snow.....06 February 1967  
3.2" Snow.....12 January 1985  
3.2" Snow.....22 February 1966  
2.8" Snow.....02 January 1985  
2.1" Snow.....08 February 1973  
2.1" Snow.....21 February 1964  
2.0" Snow.....08 November 2006  
1.8" Snow.....09 January 1973  
1.8" Snow.....23 February 1966  
1.5" Snow.....10 January 1973  
1.4" Snow.....26 November 1980  
1.2" Snow.....12 February 1958  
1.2" Snow.....16 January 1953  
1.2" Snow.....31 January 1972  
1.0" Snow.....11 February 1963  
1.0" Snow.....14 November 1959  
1.0" Snow.....13 January 1982  
0.8" Snow.....29 January 1979  
0.7" Snow.....14 February 2004  
0.6" Snow.....04 February 2011  
0.6" Snow.....2-3 March 1965  
0.6" Snow.....31 December 1946  
0.5" Snow.....01 February 1985  
0.4" Snow.....13 January 1944  
0.4" Snow.....12 January 1975  
0.3" Snow.....28 November 1976  
0.3" Snow.....23 February 2010  
0.1" Snow.....07 February 1988  
0.1" Snow.....14 January 1944  
0.1" Snow.....16-17 January 2007

(Updated through December 2011)



# GREATER AUSTIN METROPOLITAN AREA

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## PART 7: TEMPERATURE RECORDS

Austin, in south central Texas, is located along the Balcones Escarpment which separates the Texas coastal plains to the east and southeast from the Texas hill country to the west. The Austin area, including Williamson, Travis and Hays Counties, is located within a subtropical climate regime. The average annual temperature is about 68.5° F. Based on average annual data, the average minimum temperature is about 57.5° F while the average maximum temperature is about 79.0° F.

### TOP 3 WARMEST AND COLDEST AVERAGE MONTHLY TEMPERATURES

#### January

##### **KATT/Camp Mabry**

Warmest	Coldest
59.6 F - 1923	36.6 F - 1856
59.5 F - 1880	39.4 F - 1930
59.4 F - 1907	40.1 F - 1881

##### **KAUS/Austin Bergstrom**

Warmest	Coldest
61.3 F - 1952	42.4 F - 1978
58.5 F - 1950	42.8 F - 1979
58.4 F - 1990	44.5 F - 1963/1977

#### February

##### **KATT/Camp Mabry**

Warmest	Coldest
62.3 F - 1999	42.3 F - 1905
62.1 F - 2000	42.8 F - 1895
61.3 F - 1976	45.0 F - 1978

##### **KAUS/Austin Bergstrom**

Warmest	Coldest
63.3 F - 1996	45.9 F - 1978/2010
62.9 F - 1957	47.9 F - 2002
62.2 F - 1962	48.9 F - 1968

#### March

##### **KATT/Camp Mabry**

Warmest	Coldest
68.4 F - 1907	51.4 F - 1867
67.3 F - 1967	51.8 F - 1915
67.2 F - 1916	53.4 F - 1965

##### **KAUS/Austin Bergstrom**

Warmest	Coldest
68.2 F - 1972	52.9 F - 2001
68.0 F - 1974	54.8 F - 1969
67.9 F - 1945	55.0 F - 1965

#### April

##### **KATT/Camp Mabry**

Warmest	Coldest
76.1 F - 2011	59.2 F - 1857
75.9 F - 1967	61.7 F - 1926
75.8 F - 1893	62.0 F - 1907

##### **KAUS/Austin Bergstrom**

Warmest	Coldest
76.1 F - 1967	62.6 F - 2007
74.4 F - 1972	64.1 F - 1973
74.3 F - 1954	64.5 F - 1998

#### May

##### **KATT/Camp Mabry**

Warmest	Coldest
80.6 F - 1996	66.9 F - 1907
80.3 F - 1902	70.4 F - 1917
80.1 F - 2003	70.6 F - 1924

##### **KAUS/Austin Bergstrom**

Warmest	Coldest
80.2 F - 1956	71.6 F - 1976
79.6 F - 1955	72.2 F - 1979
78.8 F - 1949/2003	72.8 F - 1970

**June****KATT/Camp Mabry**

Warmest	Coldest
87.4 F - 2008	71.4 F - 1856
87.1 F - 2011	76.4 F - 1907
86.6 F - 2009	76.9 F - 1913

**KAUS/Austin Bergstrom**

Warmest	Coldest
86.8 F - 1953	78.1 F - 1973
86.5 F - 1998	79.4 F - 1968
85.4 F - 1956/2008	79.6 F - 1966/1983/2007

**July****KATT/Camp Mabry**

Warmest	Coldest
89.7 F - 2011	78.6 F - 1907
89.5 F - 2009	79.8 F - 1869
89.1 F - 1860	80.1 F - 1855

**KAUS/Austin Bergstrom**

Warmest	Coldest
88.5 F - 1954	79.5 F - 2007
88.2 F - 1994	80.7 F - 1976
88.0 F - 1956/1957	81.2 F - 1968

**August****KATT/Camp Mabry**

Warmest	Coldest
91.6 F - 2011	77.9 F - 1900
89.1 F - 2009	80.0 F - 1866/1880
88.7 F - 2010	80.4 F - 1870

**KAUS/Austin Bergstrom**

Warmest	Coldest
89.0 F - 1951/1985	79.7 F - 1971
88.3 F - 2011	80.6 F - 1973
88.1 F - 1954	81.6 F - 1961

**September****KATT/Camp Mabry**

Warmest	Coldest
84.4 F - 2005/2011	70.3 F - 1887
84.2 F - 1911	72.3 F - 1974
83.8 F - 1977	72.7 F - 1913

**KAUS/Austin Bergstrom**

Warmest	Coldest
84.1 F - 2005	75.0 F - 1974
83.8 F - 1954	75.4 F - 2001
83.3 F - 1977	75.7 F - 1967

**October****KATT/Camp Mabry**

Warmest	Coldest
77.0 F - 1931	60.3 F - 1863
76.2 F - 1947	61.3 F - 1976
75.9 F - 2004	61.4 F - 1869

**KAUS/Austin Bergstrom**

Warmest	Coldest
75.3 F - 1947	61.4 F - 1976
75.0 F - 1958/2004	65.5 F - 2001
74.8 F - 1954	66.7 F - 1964

**November****KATT/Camp Mabry**

Warmest	Coldest
68.2 F - 1927	46.0 F - 1880
65.9 F - 1909	51.6 F - 1976
65.6 F - 1913	51.9 F - 1858

**KAUS/Austin Bergstrom**

Warmest	Coldest
67.7 F - 1973	51.1 F - 1976
66.1 F - 1988	54.5 F - 1972/1997
65.3 F - 1965	54.7 F - 2002

**December****KATT/Camp Mabry**

Warmest	Coldest
65.5 F - 1889	40.9 F - 1859
60.6 F - 1867	41.9 F - 1983
59.6 F - 1933	42.9 F - 1898

**KAUS/Austin Bergstrom**

Warmest	Coldest
61.3 F - 1984	43.9 F - 2000
60.0 F - 1970	45.3 F - 1983
59.3 F - 1954	45.5 F - 1963

## ALL TIME ANNUAL AVERAGE WARMEST AND COLDEST TEMPERATURES

### **KATT/Camp Mabry**

Warmest	Coldest
72.0 F - 2011	64.2 F - 1856
71.6 F - 2006	65.2 F - 1869
71.2 F - 1999	65.6 F - 1872
70.9 F - 2008	65.8 F - 1855/1857
70.8 F - 1933/1998	66.0 F - 1913/1924
70.7 F - 1990	66.2 F - 1864/1968/1976/ 1979/1983
70.5 F - 2009	
70.4 F - 1954	66.3 F - 1870/1912
70.3 F - 2000	66.4 F - 1868/1940
70.2 F - 1955/1956	66.5 F - 1865/1875/1907
70.1 F - 1927	66.6 F - 1877/1880
70.0 F - 1921/1934	
69.9 F - 2005	
69.8 F - 1994	
69.7 F - 1890	

### **KAUS/Austin Bergstrom International Airport**

Warmest	Coldest
72.6 F - 1954	66.6 F - 2007
71.8 F - 1956	66.7 F - 2001
71.0 F - 1953/1955	66.8 F - 1976
70.8 F - 1951	66.9 F - 1968
70.6 F - 1950/1990	67.0 F - 1979
70.5 F - 1984/1994	67.1 F - 2002/2003
70.2 F - 1957	67.6 F - 1966
70.0 F - 1971/1995	67.7 F - 1978
69.8 F - 1945/1949/1952	67.8 F - 2004
69.6 F - 1948/2011	67.9 F - 1973/1983
69.5 F - 1986/1991	68.0 F - 1970

(Updated through December 2011)

## **SUMMER TEMPERATURE RECORDS**

### **HIGHEST AVERAGE MONTHLY MAXIMUM TEMPERATURES**

#### **KATT/Camp Mabry**

102.9 F - Aug 1923  
102.1 F - July 2011  
102.0 F - July 2009  
101.7 F - Jul 1923/Aug 2009  
101.2 F - Jul 1925  
100.7 F - Aug 2006  
100.6 F - Aug 1924/Aug 2010  
100.5 F - Aug 1999  
100.1 F - Aug 1951/Jul 1980/Aug 2000  
99.8 F - Aug 1952  
99.6 F - Aug 1963

#### **KAUS/Austin Bergstrom International Airport**

101.3 F - Aug 1951  
101.1 F - July 2009  
100.5 F - Jul 1998  
100.2 F - Aug 2009  
100.3 F - Jul 1980/Aug 1985  
100.0 F - Aug 2000/July 2011  
99.9 F - Jul 1954/Aug 1962/Aug 2006  
99.8 F - Aug 1952  
99.7 F - Jul 1956  
99.6 F - Aug 2010  
99.5 F - Aug 1954/Aug 1999

### **HIGHEST JULY AVERAGE MAXIMUM TEMPERATURES**

#### **KATT/Camp Mabry**

102.1 F - 2011  
102.0 F - 2009  
101.7 F - 1923  
101.2 F - 1925  
100.1 F - 1980  
99.4 F - 1956/2000  
99.2 F - 1998/2001  
99.1 F - 1994/2008  
98.7 F - 1914/1954  
98.3 F - 1918/1963/1996

#### **KAUS/Austin Bergstrom International Airport**

101.1 F - 2009  
100.5 F - 1998  
100.3 F - 1980  
100.0 F - 2011  
99.9 F - 1954  
99.7 F - 1956  
99.4 F - 2000  
99.2 F - 1957  
99.0 F - 1994  
98.8 F - 1951

### **HIGHEST AUGUST AVERAGE MAXIMUM TEMPERATURES**

#### **KATT/Camp Mabry**

104.8 F - 2011  
102.9 F - 1923  
101.7 F - 2009  
100.7 F - 2006  
100.6 F - 1924/2010  
100.5 F - 1999  
100.1 F - 1951  
100.0 F - 2000  
99.8 F - 1952  
99.6 F - 1963

#### **KAUS/Austin Bergstrom International Airport**

103.3 F - 2011  
101.3 F - 1951  
100.3 F - 1985  
100.2 F - 2009  
100.0 F - 2000  
99.9 F - 1962/2006  
99.8 F - 1952  
99.6 F - 2010  
99.5 F - 1954/1999  
99.1 F - 1956

### **GREATEST NUMBER OF DAYS WITH 100+ DEGREE TEMPERATURES**

#### **KATT/Camp Mabry**

90 days.....	2011
69 days.....	1925
68 days.....	2008
66 days.....	1923
50 days.....	2008
40 days.....	1963
38 days.....	1998
34 days.....	1924/1956/2006
33 days.....	1951
32 days.....	1980
31 days.....	1954
23 days.....	1917/1999

#### **KAUS/Austin Bergstrom International Airport**

74 days.....	2011
55 days.....	2009
50 days.....	1998
43 days.....	1951/2000
42 days.....	2000
40 days.....	2001
39 days.....	1954
38 days.....	1956
34 days.....	2006
30 days.....	1980
27 days.....	1985
22 days.....	1957/1962



**GREATEST NUMBER OF CONSECUTIVE DAYS WITH 100+ DEGREE TEMPERATURES****KATT/Camp Mabry**

27 days.....17 July - 12 August 2011  
21 days.....12 July - 01 August 2001  
19 days.....12-30 July 1925  
18 days.....06-23 August 1925  
16 days.....3-10 August 2009  
14 days.....2-15 July 2011  
13 days.....10-22 August 1923

**KAUS/Austin Bergstrom International Airport**

23 days.....27 July - 18 August 1951  
23 days.....09 - 31 July 1998  
14 days.....30 July - 12 August 2011  
13 days.....03-15 August 1962  
12 days.....08-19 August 1955  
12 days.....12-23 July 2000  
11 days.....24 August - 03 September 1951

**HIGHEST TEMPERATURES EVER RECORDED (105 F DEGREES OR ABOVE)****KATT / Camp Mabry**

.... 1930s ....  
21 June 1936..... 106 F  
08 July 1939..... 105 F  
24 July 1939..... 105 F

.... 1940s ....  
None recorded

.... 1950s ....  
19 July 1951..... 105 F  
04 August 1951..... 105 F  
05 August 1951..... 105 F  
17 August 1951..... 105 F  
08 August 1953..... 105 F  
09 August 1953..... 106 F  
10 August 1953..... 105 F  
12 July 1954..... 107 F  
26 July 1954..... 109 F  
27 July 1954..... 105 F  
31 August 1954..... 105 F

.... 1960s ....  
09 August 1962..... 105 F  
12 August 1962..... 105 F  
11 August 1969..... 105 F

.... 1970s ....  
16 July 1978..... 105 F

.... 1980s ....  
27 June 1980..... 105 F  
17 July 1984..... 105 F  
19 August 1984..... 106 F  
08 August 1988..... 105 F  
11 August 1988..... 105 F

.... 1990s ....  
27 August 1990..... 106 F  
31 August 1990..... 105 F  
14 June 1998..... 108 F  
03 August 1998..... 105 F  
20 August 1999..... 106 F

**KAUS / Austin Bergstrom International Airport**

.... 1940s ....  
None recorded

.... 1950s ....  
19 July 1951..... 106 F  
01 September 1951..... 107 F  
09 August 1953..... 106 F  
10 August 1953..... 107 F  
12 July 1954..... 106 F  
13 July 1954..... 105 F  
26 July 1954..... 106 F  
27 July 1954..... 105 F  
30 July 1957..... 105 F

.... 1960s ....  
09 August 1962..... 106 F

.... 1970s ....  
16 July 1978..... 106 F

.... 1980s ....  
17 July 1984..... 105 F  
19 August 1984..... 106 F  
01 September 1985..... 106 F

.... 1990s ....  
29 July 1995..... 105 F  
14 June 1998..... 109 F  
15 June 1998..... 105 F

.... 2000s ....	
05 September 2000.....	112 F (Highest Ever)
18 August 2001.....	105 F
08 August 2003.....	110 F
25 September 2005.....	107 F
26 September 2005.....	107 F
28 September 2005.....	106 F
14 July 2008.....	105 F
3 August 2008.....	105 F
24 June 2009.....	105 F
25 June 2009.....	106 F
26 June 2009.....	105 F
27 June 2009.....	105 F
29 June 2009.....	106 F
05 July 2009.....	105 F
08 July 2009.....	106 F
09 July 2009.....	105 F
13 July 2009.....	105 F
16 July 2009.....	105 F
26 July 2009.....	105 F
27 July 2009.....	105 F
06 August 2009.....	105 F
11 August 2009.....	105 F
23 August 2009.....	105 F

.... 2010s ....	
16 August 2010.....	105 F
23 August 2010.....	106 F
24 August 2010.....	107 F
17 June 2011.....	106 F
18 June 2011.....	106 F
19 June 2011.....	105 F
24 July 2011.....	105 F
25 July 2011.....	105 F
01 August 2011.....	107 F
02 August 2011.....	107 F
03 August 2011.....	106 F
04 August 2011.....	107 F
05 August 2011.....	106 F
08 August 2011.....	106 F
09 August 2011.....	106 F
14 August 2011.....	105 F
15 August 2011.....	105 F
18 August 2011.....	106 F
19 August 2011.....	107 F
20 August 2011.....	106 F
22 August 2011.....	105 F
24 August 2011.....	106 F
27 August 2011.....	110 F
28 August 2011.....	112 F (Highest Ever)
29 August 2011.....	109 F
30 August 2011.....	105 F
12 September 2011.....	105 F
13 September 2011.....	105 F
25 September 2011.....	105 F

.... 2000s ....	
14 July 2000.....	105 F
15 July 2000.....	105 F
05 September 2000.....	112 F
31 August 2001.....	106 F
08 August 2003.....	108 F
16 July 2005.....	105 F
25 September 2005.....	108 F
26 September 2005.....	107 F
28 September 2005.....	105 F
25 June 2009.....	107 F
26 June 2009.....	105 F
05 July 2009.....	105 F
08 July 2009.....	105 F

.... 2010s ....	
23 August 2010.....	105 F
24 August 2010.....	107 F
17 June 2011.....	105 F
01 August 2011.....	105 F
02 August 2011.....	106 F
03 August 2011.....	105 F
04 August 2011.....	105 F
19 August 2011.....	105 F
20 August 2011.....	105 F
27 August 2011.....	108 F
28 August 2011.....	110 F
29 August 2011.....	108 F

**Since 1926,  
Austin / Camp Mabry Temperatures:**

-- Have hit 105 F +, 80 times  
-- Have hit 106 F +, 35 times  
-- Have exceeded 106, 15 times

In June...  
Have hit 105 F +, 8 times  
Have hit 106 F +, 6 times  
Have exceeded 106 F +, 1 time

In July...  
Have hit 105 F +, 18 times  
Have hit 106 F +, 3 times  
Have exceeded 106 F +, 2 times

In August...  
Have hit 105 F +, 44 times  
Have hit 106 F +, 21 times  
Have exceeded 106 F +, 9 times

In September...  
Have hit 105 F +, 7 times  
Have hit 106 F +, 7 times  
Have exceeded 106 F +, 3 times

**Since 1942,  
Austin Bergstrom International Temperatures:**

-- Have hit 105 F +, 42 times  
-- Have hit 106 F +, 22 times  
-- Have exceeded 106, 12 times

In June...  
Have hit 105 F +, 5 times  
Have hit 106 F +, 5 times  
Have exceeded 106 F +, 2 times

In July...  
Have hit 105 F +, 14 times  
Have hit 106 F +, 4 times  
Have exceeded 106 F +, 0 time

In August...  
Have hit 105 F +, 17 times  
Have hit 106 F +, 11 times  
Have exceeded 106 F +, 6 times

In September...  
Have hit 105 F +, 6 times  
Have hit 106 F +, 5 times  
Have exceeded 106 F +, 4 times

(Updated through December 2011)

**HEAT RELATED DEATHS IN THE AUSTIN METROPOLITAN AREA**  
**(TRAVIS, WILLIAMSON AND HAYS COUNTIES)**  
**1990 - 2011**

Year	Date	Location (County)	Remarks
------	------	-------------------	---------

1999	29 Jul	Austin (Travis)	
------	--------	-----------------	--

A 40 year old male was found wandering in Austin and suffering from heat stress. He was taken to a hospital where he later died.

1999	14 Aug	Austin (Travis)	
------	--------	-----------------	--

A 76 year old female, apparently not wanting to increase her utility bill, did not use the air conditioner in her apartment. She was found on 16 August, but it is believed that she actually died of heat related causes on 14 August.

1999	16 Aug	Austin (Travis)	
------	--------	-----------------	--

A 77 year old male was found dead due in his home. He died as a result of heat exhaustion; his health had been further weakened by a heart condition.

2000	03 Jul	Westlake (Travis)	
------	--------	-------------------	--

A 26 year old male died of heat stroke after working outdoors at a construction site in Westlake Hills. The Westlake Fire Department transported him to the hospital about 6 p.m. with 108.4 degree F body temperature. He died shortly after being admitted to the emergency room. The man had been working outside in a surveying crew at River Garden, a subdivision under construction.

2000	04 Jul	Austin (Travis)	
------	--------	-----------------	--

A 33 year old male was found dead around 6 p.m. He died as a result of hyperthermia and dehydration.

2000	18 Jul	Austin (Travis)	
------	--------	-----------------	--

A 88 year old female was found dead in her home. She died as a result of heat stroke.

2000	23 Jul	Austin (Travis)	
------	--------	-----------------	--

A 2 year old male child died of heat stroke as a result of being left on the floor of a sunroom after his mother fell asleep. The child had a history of cerebral palsy and epilepsy and was mentally retarded. The child had a body temperature of 108.0 degrees F when he arrived in the emergency room. He died shortly thereafter.

2000	23 Jul	Austin (Travis)	
------	--------	-----------------	--

A 72 year old female died as a result of heat stroke. Although air conditioning was available in her home, she had not turned it on.

2000	25 Jul	----- (Williamson)	
------	--------	--------------------	--

A 85 year old male was found dead in his home. His body was found in front of an open refrigerator. His home had no air conditioning although a window fan was present.

2003	20 Jun	Austin (Travis)	
------	--------	-----------------	--

A 2 year old female child was found dead in an unoccupied vehicle after being left there for an extended period of time. The air temperature outside of the vehicle was 90 degrees F which induced hyperthermia resulting in the child's death. The child's mother was the day care director at La Petite Academy in south Austin where the vehicle was found.

2003	25 Jun	Austin (Travis)	
------	--------	-----------------	--

A 4 year old male child climbed into an unoccupied family station wagon in the driveway of their home while the mother was napping. The child died of heat stroke.

**2009 15 Jul** Austin (Travis)

A man was reported as working for multiple days without any rest. He was found unresponsive in his vehicle parked in south Austin in the late afternoon with temperatures reaching 100 degrees. Officials noted that there were other underlying causes to the mans death with heat being one of them.

**2011 25 May** Austin (Travis)

On a day when afternoon temperatures in Austin rose to over 100 degrees, a one-year old girl was accidentally left by her father during the morning hours in a parked car at his work place in northwest Austin. She was found in the car by a passerby between 1 and 2pm and was transferred to the hospital where she was pronounced dead.

(Updated through December 2011)

## **WINTER TEMPERATURE RECORDS**

### **LOWEST AVERAGE MONTHLY TEMPERATURES**

#### **KATT/Camp Mabry**

36.6 F - Jan 1856  
39.4 F - Jan 1930  
40.1 F - Jan 1881  
40.4 F - Jan 1979  
40.6 F - Jan 1940  
40.7 F - Jan 1978  
40.9 F - Dec 1859  
41.4 F - Jan 1859  
41.6 F - Jan 1977  
41.9 F - Dec 1983

#### **KAUS/Austin Bergstrom International Airport**

42.4 F - Jan 1978  
42.8 F - Feb 1979  
43.9 F - Dec 2000  
44.5 F - Jan 1963/Jan 1977  
45.3 F - Dec 1983  
45.5 F - Dec 1963/Jan 1985  
45.8 F - Jan 1948/Jan 2007  
45.9 F - Jan 1962/Feb 1978  
46.1 F - Dec 1989  
47.5 F - Dec 1997

### **LOWEST DECEMBER AVERAGE TEMPERATURES**

#### **KATT/Camp Mabry**

40.9 F - 1859  
41.9 F - 1983  
42.9 F - 1898  
43.4 F - 1876  
44.3 F - 1989

#### **KAUS/Austin Bergstrom International Airport**

43.9 F - 2000  
45.3 F - 1983  
45.5 F - 1963  
46.1 F - 1989/2009  
47.5 F - 1997

### **LOWEST JANUARY AVERAGE TEMPERATURES**

#### **KATT/Camp Mabry**

36.6 F - 1856  
39.4 F - 1930  
40.1 F - 1881  
40.4 F - 1979  
40.6 F - 1940

#### **KAUS/Austin Bergstrom International Airport**

42.4 F - 1978  
42.8 F - 1979  
44.5 F - 1963/1977  
45.5 F - 1985  
45.8 F - 1948/2007

### **LOWEST FEBRUARY AVERAGE TEMPERATURES**

#### **KATT/Camp Mabry**

42.3 F - 1905  
42.8 F - 1895  
45.0 F - 1978  
46.2 F - 1929  
46.5 F - 1897

#### **KAUS/Austin Bergstrom International Airport**

45.9 F - 1978/2010  
47.9 F - 2002  
48.9 F - 1968  
49.2 F - 1947  
49.3 F - 2004

### **GREATEST NUMBER OF DAYS WITH MINIMUMS AT 32 F OR BELOW**

#### **KATT/Camp Mabry**

October..... 2 days (1924)  
November..... 10 days (1959)  
December..... 17 days (1989)  
January..... 25 days (1925)  
February..... 14 days (1905)  
March..... 8 days (1932)  
April..... 2 days (1924)

#### **KAUS/Austin Bergstrom International Airport**

October..... 1 day (2005/2010)  
November..... 9 days (1959/2011)  
December..... 16 days (2000)  
January..... 17 days (1962/2009/2010)  
February..... 16 days (2002)  
March..... 7 days (1965)  
April..... 2 days (1980/1999)

**MOST CONSECUTIVE DAYS WITH BELOW FREEZING MINIMUM TEMPERATURES****KATT/Camp Mabry**

October..... 2 days (1924)  
 November..... 6 days (1937)  
 December..... 15 days (1989)  
 January..... 14 days (1940)  
 February..... 8 days (1948/1989)  
 March..... 7 days (1932)  
 April..... 2 days (1924)

**KAUS/Austin Bergstrom International Airport**

October..... 0 days  
 November..... 3 days (2003/1999)  
 December..... 10 days (1983)  
 January..... 12 days (2010)  
 February..... 13 days (2011)  
 March..... 4 days (2002/1989)  
 April..... 1 day (1999/1980)

**MOST CONSECUTIVE DAYS WITH TEENS OR BELOW MINIMUM TEMPERATURES****KATT/Camp Mabry**

December..... 5 days (1983)  
 January..... 7 days (1930)  
 February..... 4 days (1905/1933)

**KAUS/Austin Bergstrom International Airport**

December..... 5 days (1983)  
 January..... 4 days (1962/2010)  
 February..... 6 days (1951)

**MAXIMUM CONSECUTIVE NUMBER OF HOURS WITH AT/BELOW FREEZING TEMPERATURES****KATT/Camp Mabry (1930 to 2011)**

140 Hours.....21 December - 27 December 1983  
 116 Hours.....8-12 January 1973  
 112 Hours.....28 January - 2 February 1951  
 97 Hours.....31 January - 4 February 1985  
 91 Hours.....3-7 February 1989  
 85 Hours.....29 December 1946 - 02 January 1947  
 83 Hours.....11-15 January 1997

**KAUS/Austin Bergstrom Intl Airport (1998 to 2011)**

68 Hours.....1-4 February 2011  
 60 Hours.....15-18 January 2007  
 42 Hours.....24-28 February 2003  
 37 Hours.....22-23 December 1998  
 30 Hours.....11-13 December 2000  
 23 Hours.....7-8 December 2005  
 17 Hours.....23-24 December 2004

**EARLIEST (FALL) FREEZES IN AUSTIN****(Average date of first freeze at KATT/Camp Mabry.... November 28)****KATT/Camp Mabry**

26 October 1924..... 31 F  
 27 October 1924..... 31 F  
 28 October 1957..... 32 F  
 30 October 1917..... 30 F  
 31 October 1993..... 30 F

**KAUS/Austin Bergstrom International Airport**

03 November 1951..... 26 F  
 04 November 1991..... 27 F  
 05 November 1991..... 27 F  
 06 November 1959..... 32 F  
 07 November 1959..... 30 F

**LATEST (SPRING) FREEZES IN AUSTIN****(Average date of last freeze at KATT/Camp Mabry.... March 3)****KATT/Camp Mabry**

09 April 1914..... 32 F  
 02 April 1924..... 32 F  
 01 April 1926..... 30 F  
 31 March 1987..... 30 F  
 28 March 1955..... 27 F

**KAUS/Austin Bergstrom International Airport**

17 April 1999..... 31 F  
 13 April 1980..... 31 F  
 30 March 1944..... 32 F  
 28 March 1955..... 28 F  
 27 March 1955..... 32 F

(Updated through December 2011)

# **COLDEST TEMPERATURES (15 F OR LESS) EVER RECORDED**

**KATT / Camp Mabry**

**KAUS / Austin Bergstrom International Airport**

.... 1890s ....

09 December 1898..... 15 F

12 February 1899..... -1 F

.... 1900s ....

18 February 1900..... 14 F

13 February 1905..... 10 F

14 February 1905..... 12 F

.... 1910s ....

03 January 1911..... 12 F

04 January 1911..... 13 F

07 January 1912..... 13 F

13 January 1912..... 14 F

12 January 1918..... 8 F

.... 1920s ....

06 January 1924..... 15 F

27 December 1924..... 15 F

.... 1930s ....

17 January 1930..... 10 F

18 January 1930..... 4 F

22 January 1930..... 14 F

23 January 1930..... 14 F

07 February 1933..... 15 F

08 February 1933..... 11 F

09 February 1933..... 13 F

.... 1940s ....

19 January 1943..... 13 F

15 January 1944..... 15 F

30 January 1949..... 4 F

31 January 1949..... -2 F (Lowest Ever)

.... 1940s ....

19 January 1943..... 14 F

04 January 1947..... 15 F

30 January 1949..... 0 F

31 January 1949..... -5 F (Lowest Ever)

.... 1950s ....

01 February 1951..... 12 F

02 February 1951..... 7 F

.... 1950s ....

01 February 1951..... 13 F

02 February 1951..... 8 F

.... 1960s ....

10 January 1962..... 13 F

24 January 1963..... 12 F

.... 1960s ....

10 January 1962..... 15 F

12 January 1962..... 12 F

24 January 1963..... 14 F

14 January 1964..... 11 F

.... 1970s ....

02 January 1979..... 13 F

.... 1970s ....

12 January 1973..... 15 F



.... 1980s ....  
 11 January 1982..... 11 F  
 24 December 1983..... 12 F  
 25 December 1983..... 10 F  
 26 December 1983..... 14 F  
 22 December 1989..... 12 F  
 23 December 1989..... 4 F

.... 1990s ....  
 None Recorded

.... 2000s ....  
 None Recorded

.... 1980s ....  
 11 January 1982..... 14 F  
 25 December 1983..... 11 F  
 02 February 1985..... 15 F  
 13 December 1989..... 12 F  
 22 December 1989..... 14 F  
 23 December 1989..... 6 F  
 24 December 1989..... 14 F

.... 1990s ....  
 23 December 1990..... 15 F  
 24 December 1990..... 15 F

.... 2000s ....  
 05 January 2000..... 14 F  
 27 February 2002..... 13 F  
 08 January 2010..... 13 F  
 09 January 2010..... 10 F  
 10 January 2010..... 13 F

**Since 1926,  
 Austin / Camp Mabry Temperatures:**

-- Have been 15 F or below: 34 times  
 -- Have been below 10 F: 7 times  
 -- Have been below 5 F: 4 times  
 -- Have been below 0 F: 2 times

In December..  
 -- Have been 15 F or below: 7 times  
 -- Have been below 10 F: 1 time  
 -- Have been below 5 F: 1 time  
 -- Have been below 0 F: 0 time

In January..  
 -- Have been 15 F or below: 18 times  
 -- Have been below 10 F: 3 times  
 -- Have been below 5 F: 2 times  
 -- Have been below 0 F: 1 time

In February..  
 -- Have been 15 F or below: 8 times  
 -- Have been below 10 F: 1 time  
 -- Have been below 5 F: 0 times  
 -- Have been below 0 F: 0 times

**Since 1942,  
 Austin Bergstrom International Temperatures:**

-- Have been 15 F or below: 25 times  
 -- Have been below 10 F: 4 times  
     -- Have been below 5 F: 2 times  
 -- Have been below 0 F: 1 time

In December..  
 -- Have been 15 F or below: 7 times  
 -- Have been below 10 F: 1 time  
 -- Have been below 5 F: 0 times  
 -- Have been below 0 F: 0 times

In January..  
 -- Have been 15 F or below: 14 times  
 -- Have been below 10 F: 2 times  
     -- Have been below 5 F: 2 times  
 -- Have been below 0 F: 1 time

In February..  
 -- Have been 15 F or below: 4 times  
 -- Have been below 10 F: 1 time  
 -- Have been below 5 F: 0 times  
 -- Have been below 0 F: 0 times

(Updated through December 2011)



# GREATER AUSTIN METROPOLITAN AREA

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## PART 8: PRECIPITATION RECORDS

Austin, in south central Texas, is located along the Balcones Escarpment which separates the Texas coastal plains to the east and southeast from the Texas hill country to the west. The Austin area, including Williamson, Travis and Hays Counties, is located within a subtropical climate regime. The average annual precipitation for the greater Austin metropolitan area (including Williamson, Travis and Hays Counties) is between 30 and 34 inches annually. Areas along the eastern borders of Williamson, Travis and Hays counties, sees more than this amount while western parts of the counties see less.

### THE WETTEST AND DRIEST MONTHS EVER RECORDED IN AUSTIN

#### JANUARY

##### **KATT/Camp Mabry**

<b>Wettest</b>	<b>Driest</b>
9.21" - 1991	0.00" - 1875 / 1904
9.13" - 1934	0.01" - 1867
8.03" - 1889	0.04" - 1971
7.94" - 1968	0.06" - 1996
6.92" - 2007	0.07" - 1942
6.30" - 1863	0.15" - 1911

##### **KAUS/Austin Bergstrom International Airport**

<b>Wettest</b>	<b>Driest</b>
10.53" - 1991	0.02" - 1971
7.66" - 2007	0.15" - 1948
7.62" - 1968	0.22" - 1967
5.87" - 1965	0.24" - 1959/1996
4.83" - 1992	0.40" - 1950/2009
4.42" - 1944	0.43" - 1943

#### FEBRUARY

##### **KATT/Camp Mabry**

<b>Wettest</b>	<b>Driest</b>
9.41" - 1903	0.00" - 1918
7.55" - 1896	Trace - 1885/1893
7.22" - 1888	0.03" - 1999
6.94" - 1877	0.12" - 1937
6.92" - 1863	0.14" - 2007
6.75" - 1923	0.15" - 1926

##### **KAUS/Austin Bergstrom International Airport**

<b>Wettest</b>	<b>Driest</b>
7.34" - 1958	0.02" - 1999
6.82" - 1992	0.09" - 1974
5.38" - 2004	0.12" - 2007
5.16" - 1965	0.15" - 1954
4.92" - 2003	0.22" - 1976
4.20" - 1970	0.28" - 1943/1947

#### MARCH

##### **KATT/Camp Mabry**

<b>Wettest</b>	<b>Driest</b>
7.54" - 2006	0.00" - 1899
7.23" - 1926	Trace - 1972
7.20" - 1900	0.04" - 1925
7.02" - 1858	0.09" - 2011
6.77" - 1865	0.13" - 1904
6.68" - 1905	0.15" - 1916

##### **KAUS/Austin Bergstrom International Airport**

<b>Wettest</b>	<b>Driest</b>
6.52" - 1983	0.05" - 1972
6.00" - 2007	0.11" - 1959
5.91" - 1976	0.15" - 2011
5.46" - 1951	0.25" - 1954
4.97" - 1992	0.26" - 1986
4.96" - 1999	0.46" - 1955

#### APRIL

##### **KATT/Camp Mabry**

<b>Wettest</b>	<b>Driest</b>
19.82" - 1915	Trace - 1887
10.43" - 1921	0.06" - 1984
9.93" - 1957	0.10" - 1892/1961/2003
9.63" - 1900	0.16" - 1983
8.67" - 1922	0.20" - 1893
8.15" - 1914	0.27" - 2011

##### **KAUS/Austin Bergstrom International Airport**

<b>Wettest</b>	<b>Driest</b>
12.18" - 1957	0.03" - 1984
7.97" - 1976	0.06" - 2003
7.88" - 1969	0.19" - 2011
6.87" - 1991	0.21" - 1944
6.28" - 1950	0.23" - 1983
5.31" - 1949	0.24" - 1961

## MAY

### **KATT/Camp Mabry**

#### **Wettest**

14.10" - 1895  
12.75" - 1929  
12.59" - 1914  
11.37" - 1904  
11.05" - 1900  
9.98" - 1965

#### **Driest**

Trace - 1886  
0.13" - 1860  
0.17" - 1865  
0.53" - 1883  
0.58" - 1931  
0.70" - 1891

### **KAUS/Austin Bergstrom International Airport**

#### **Wettest**

13.69" - 1965  
10.48" - 1974  
8.29" - 1987  
8.19" - 1975  
8.17" - 1986  
7.91" - 1995

#### **Driest**

0.28" - 1949  
0.32" - 1963  
0.51" - 2003  
0.61" - 1998  
0.83" - 1973  
0.90" - 1947/2002

## JUNE

### **KATT/Camp Mabry**

#### **Wettest**

14.96" - 1981  
12.60" - 1941  
11.43" - 1961  
11.41" - 2004  
10.85" - 1987  
9.71" - 1935

#### **Driest**

0.00" - 1881/1882/1911  
Trace - 1967  
0.02" - 1862  
0.11" - 1947  
0.20" - 1934  
0.21" - 1974

### **KAUS/Austin Bergstrom International Airport**

#### **Wettest**

15.59" - 1981  
14.18" - 2004  
9.60" - 1961  
8.29" - 1985  
8.13" - 1987  
7.49" - 2007

#### **Driest**

Trace - 1947/1967  
0.15" - 1970  
0.16" - 1956  
0.30" - 1974  
0.38" - 1954  
0.55" - 2005

## JULY

### **KATT/Camp Mabry**

#### **Wettest**

12.80" - 1919  
12.65" - 1903  
10.54" - 1979  
9.84" - 2007  
9.25" - 1936  
9.20" - 1869

#### **Driest**

0.00" - 1871/1884/1895/1962  
Trace - 1887/1894/1993  
0.01" - 1913  
0.05" - 1924/2011  
0.07" - 1861  
0.09" - 1989

### **KAUS/Austin Bergstrom International Airport**

#### **Wettest**

9.77" - 1979  
7.62" - 2007  
5.82" - 1961  
5.37" - 2010  
5.34" - 1999  
5.32" - 2002

#### **Driest**

0.00" - 1947  
Trace - 1993  
0.02" - 1951/1986/1994  
0.05" - 2011  
0.06" - 1980  
0.07" - 1977

## AUGUST

### **KATT/Camp Mabry**

#### **Wettest**

10.88" - 1860  
9.48" - 2001  
8.90" - 1974  
8.81" - 1996  
8.50" - 1994  
7.75" - 1914

#### **Driest**

0.00" - 1865/1902/1952  
Trace - 1877/1896/1921/1957  
2010/2011  
0.01" - 1929  
0.04" - 1884  
0.06" - 1973/1977  
0.07" - 1910/1941

### **KAUS/Austin Bergstrom International Airport**

#### **Wettest**

8.91" - 1966  
7.94" - 1969  
7.79" - 1974  
7.32" - 1971  
6.17" - 1991  
5.56" - 1959

#### **Driest**

Trace - 1957/1993/2011  
0.03" - 2006  
0.05" - 1983  
0.10" - 1977  
0.16" - 1952  
0.25" - 1970/1987

## SEPTEMBER

### **KATT/Camp Mabry**

#### **Wettest**

20.78" - 1921  
13.20" - 2010  
12.78" - 1874  
12.33" - 1886  
10.54" - 1873  
9.70" - 1859

#### **Driest**

0.00" - 1872  
Trace - 1903  
0.02" - 1931/2008  
0.07" - 1947  
0.09" - 1956  
0.13" - 1912

### **KAUS/Austin Bergstrom International Airport**

#### **Wettest**

9.36" - 1986  
8.82" - 1957  
8.80" - 1958  
6.98" - 2009  
6.50" - 1967  
6.41" - 1964

#### **Driest**

0.01" - 2011  
0.02" - 1989  
0.11" - 1956  
0.34" - 2008  
0.47" - 1999  
0.49" - 1993

**OCTOBER****KATT/Camp Mabry**

<b>Wettest</b>	<b>Driest</b>
12.63" - 1925	0.00" - 1893
12.54" - 1870	Trace - 1952
12.39" - 1998	0.02" - 1947
12.30" - 1960	0.03" - 1934
11.11" - 1973	0.08" - 2010
10.92" - 1919	0.09" - 1955

**KAUS/Austin Bergstrom International Airport**

<b>Wettest</b>	<b>Driest</b>
13.08" - 1960	0.00" - 1952
12.73" - 1998	0.01" - 1947
10.40" - 1973	0.06" - 2010
9.30" - 1984	0.21" - 1987
9.11" - 1986/2002	0.33" - 1955
9.00" - 1957	0.37" - 1968

**NOVEMBER****KATT/Camp Mabry**

<b>Wettest</b>	<b>Driest</b>
14.10" - 2004	0.00" - 1861/1894/1897
10.00" - 2001	Trace - 1896/1903/1970
7.99" - 1907	0.01" - 1949
7.95" - 2000	0.02" - 1927
7.91" - 1946	0.03" - 1950
7.52" - 1874	0.05" - 1924

**KAUS/Austin Bergstrom International Airport**

<b>Wettest</b>	<b>Driest</b>
12.49" - 1974	Trace - 1970
10.50" - 2001	0.02" - 1949
9.91" - 2004	0.08" - 1950/1999
7.01" - 2000	0.11" - 1966/2008
6.94" - 1978	0.20" - 1954
6.61" - 1952	0.42" - 1988

**DECEMBER****KATT/Camp Mabry**

<b>Wettest</b>	<b>Driest</b>
16.14" - 1913	0.00" - 1894
14.16" - 1991	Trace - 1950
9.00" - 1891	0.02" - 1893/1917
8.49" - 1892	0.06" - 1901
7.72" - 1874	0.09" - 2005
7.04" - 1923	0.11" - 1970

**KAUS/Austin Bergstrom International Airport**

<b>Wettest</b>	<b>Driest</b>
12.88" - 1991	0.01" - 1950
8.11" - 1994	0.14" - 1989
5.96" - 1986	0.20" - 2004/2005
5.83" - 1953	0.26" - 1942
5.14" - 1965	0.31" - 1981
4.93" - 2002	0.32" - 1948

**TOP 10 WETTEST AND DRIEST YEARS IN AUSTIN WEATHER HISTORY****KATT/Camp Mabry****(Avg Ann Rainfall 34.24" - 1981-2010 Data)**

<b>DRIEST</b>	<b>WETTEST</b>
11.42" - 1954	64.68" - 1919
15.41" - 1956	53.99" - 1900
15.58" - 1917	52.27" - 2004
16.07" - 2008	52.21" - 1991
17.30" - 1963	51.79" - 1888
18.34" - 1879	51.73" - 1921
19.04" - 1893	51.30" - 1957
19.21" - 1988	51.24" - 1923
19.50" - 1901	49.00" - 1913
19.63" - 1856	47.28" - 1946

**KAUS/Austin Berg Intl Arprt****(Avg Ann Rainfall 32.15" - 1981-2010 Data)**

<b>DRIEST</b>	<b>WETTEST</b>
9.98" - 1954	55.74" - 1957
13.92" - 1948	55.24" - 1991
15.65" - 1956	51.89" - 2004
15.89" - 2008	50.12" - 1965
15.99" - 1963	47.11" - 1992
16.90" - 2011	46.47" - 1974
18.64" - 1943	45.91" - 2007
18.91" - 1955	44.94" - 1969
21.00" - 1989	43.50" - 1994
21.42" - 1977	43.12" - 2001

**GREATEST NUMBER OF MEASURABLE RAIN DAYS (.01" OR GREATER) PER MONTH****KATT/Camp Mabry (1891-2011)**

January.....22 days (1937)  
 February.....14 days (1923/1944/1948/1959)  
 March.....15 days (1926)  
 April.....15 days (1941/1949)  
 May.....16 days (1986/1992)  
 June.....17 days (1919)  
 July.....17 days (2007)  
 August.....12 days (1974/1996)  
 September.....14 days (1986)  
 October.....19 days (1984)  
 November.....15 days (1957/1985)  
 December.....17 days (1991)

**KAUS/Austin Bergstrom Intl Airport (1942-2011)**

January.....18 days (1949)  
 February.....14 days (1948/2003/2005)  
 March.....14 days (1979)  
 April.....15 days (1957)  
 May.....16 days (1965/1986)  
 June.....17 days (1981)  
 July.....17 days (2007)  
 August.....13 days (1998)  
 September.....14 days (1986)  
 October.....18 days (1984)  
 November.....17 days (1985)  
 December.....18 days (1991)

(Note:

KAUS missing precipitation data for:

Jan-Sep 1942, Mar-Sep 1946 and

Apr 1996-Sep 1997)

**NUMBER OF RAIN DAYS ( .01" OR GREATER) PER YEAR SINCE 1990****KATT/Camp Mabry**

1990.... 91 days  
 1991.... 111 days  
 1992.... 108 days  
 1993.... 89 days  
 1994.... 91 days  
 1995.... 85 days  
 1996.... 76 days  
 1997.... 104 days  
 1998.... 89 days  
 1999.... 64 days  
 2000.... 88 days  
 2001.... 95 days  
 2002.... 89 days  
 2003.... 78 days  
 2004.... 103 days  
 2005.... 74 days  
 2006.... 76 days  
 2007.... 112 days  
 2008.... 67 days  
 2009.... 79 days  
 2010.... 73 days  
 2011.... 50 days

**KAUS/Austin Bergstrom International Airport**

1990.... 92 days  
 1991.... 112 days  
 1992.... 103 days  
 1993.... 78 days  
 1994.... 94 days  
 1995.... 80 days  
 1996.... n/a  
 1997.... n/a  
 1998.... 84 days  
 999.... 60 days  
 2000.... 87 days  
 2001.... 91 days  
 2002.... 87 days  
 2003.... 81 days  
 2004.... 101 days  
 2005.... 75 days  
 2006.... 69 days  
 2007.... 107 days  
 2008.... 66 days  
 2009.... 77 days  
 2010.... 74 days  
 2011.... 49 days

(Updated through December 2011)

# GREATER AUSTIN METROPOLITAN AREA

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## PART 9: WILD FIRE DATA

This table summarizes the wild fires across our general area of south central Texas since 2009.

**2009                      28 Feb - 1 Mar / 12:30pm Sat - Sun                      Bastrop County**  
Dubbed the "Wilderness Ridge Fire," ongoing drought, extremely dry and windy weather (following a strong dry cold frontal passage) and a small spark from some downed power lines, as a result of the strong post frontal strong wind, destroyed 26 homes, 20 businesses and 1,491 acres of endangered species habitat near Smithville.

**2011                      17-19 April / 2:00 pm                      Travis County**  
On this Sunday afternoon, a brushfire originate near the "Y" in Oak Hill and eventually grew into a massive brush fire. It quickly spread north into the Scenic Brook Neighborhood. Gusty winds (near 30 mph) along with a very low humidity and dry conditions all contributed to fuel the fire. Nearly 40 homes were damaged with 8 homes completely destroyed. 100 acres burned before the fire was contained. Officials later brought a homeless man into custody after he turned himself in. The man was trying to cook eggs over an open fire when the fire quickly got out of control.

**2011                      15 Aug / 3:00pm-9:00pm                      Williamson County**  
A wildfire broke out in central Leander and forced evacuations from 189 homes. The fire went directly through a mobile home neighborhood near Horseshoe Drive destroying 15 homes and 19 vehicles. 30 acres burned and a total of \$500,000 in damage was reported.

**2011                      04-09 Sep / Sun 2:00pm- Fri- 5:00 pm                      Travis County**  
Sparks from overhead power lines ignited a fire the originated near Mansfield Dam. The wildfire quickly spread into the surrounding parts of the heavily populated Steiner Ranch. The entire subdivision went under a "mandatory" evacuation. Firefighters battled unfavorable conditions fueling the fire for nearly 5 days. The final total statistical loss was 23 homes destroyed, 3 homes with significant structural damage and 28 properties with exterior damage. This wildfire was one of many that started on September 4th. Of the multiple fires that erupted through the Austin area, the costliest fire in Texas history occurred just 40 miles east in Bastrop. The fire destroyed 1554 homes and took two civilian lives.

**2011                      04-07 Sep                      Travis County**  
A wildfire broke out in the Pedernales area off Paleface Ranch Road off of Texas 71 in western Travis County. The fire eventually jumped the road and spread towards Lake Travis. The fire eventually prompted a mandatory evacuation for all residents within 3 miles of the active fire. Total damage arose to 63 structures being destroyed, 34 of which were homes.

**2011                      06 Sep                      Williamson County**  
A wildfire broke out in the Mason Creek North Subdivision on Moonglow Drive in Leander. The fire eventually destroyed 11 homes and damaged 9 more. Investigators later ruled the fire arson. This fire was the second in the Leander area in a matter of 3 weeks and led Leander officials to declare the city a disaster area.

(Updated through December 2011)





# GREATER AUSTIN METROPOLITAN AREA

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## PART 10: WIND DATA

Austin, in south central Texas, is located along the Balcones Escarpment which separates the Texas coastal plains to the east and southeast from the Texas hill country to the west. The Austin area, including Williamson, Travis and Hays Counties, is located within a subtropical climate regime. Average annual wind direction in Austin is south (from 170° degrees) at an annual average 7 to 8 mph.

This table summarizes the highest peak wind gusts per month ever reported at the city's official weather observation stations.

### KATT / Camp Mabry

Month	Wind Dir	Wind Peak Gust (mph)	Year(s)
January	N	52	1982 / 85 / 92
February	NW	55	1984
March	NW	56	1984
April	NW	58	1983
May	N	71	1997
June	N	54	1988 / 90
July	W	69	1980
August	NE	47	1988
September	N	81	1987
October	NW	46	1988
November	NW	49	1988
December	NW	63	1987

### KAUS / Austin Bergstrom International Airport

Month	Wind Dir	Wind Peak Gust (mph)	Year(s)
January	WNW	72	1953
February	SW	59	1956
March	SSW	72	1953
April	WSW	60	1991
May	NW	78	1965
June	WNW	79	1949
July	ESE	62	1984
August	N	66	1949
September	NNE	63	1958
October	N	51	1985
November	NW	62	1983
December	NNW	76	1947

### HIGHEST PEAK WIND GUSTS EVER OBSERVED IN AUSTIN

#### **KATT/Camp Mabry**

- (1) N 81 mph (thunderstorm) - 10 Sep 1987
- (2) N 71 mph (thunderstorm) - 27 May 1997
- (3) W 69 mph (thunderstorm) - 28 Jul 1980
- (4) NW 63 mph (non thunderstorm) - 14 Dec 1987
- (5) NW 63 mph (thunderstorm) - 27 May 1992
- (6) NW 58 mph (non thunderstorm) - 01 Apr 1983
- NW 58 mph (non thunderstorm) - 22 Nov 1983
- (7) NW 56 mph (non thunderstorm) - 28 Mar 1984

#### **KAUS/Austin Bergstrom International Airport**

- (1) WNW 79 mph (thunderstorm) - 14 Jun 1949
- (2) NW 78 mph (thunderstorm) - 16 May 1965
- (3) S 76 mph (thunderstorm vcnty) - 31 Dec 1947
- (4) NNW 74 mph (thunderstorm) - 04 May 2006
- (5) SSW 73 mph (thunderstorm) - 31 Mar 1953
- (6) WNW 73 mph (thunderstorm) - 31 Jan 1953
- (7) S 71 mph (thunderstorm) - 29 May 1962

(Updated through December 2011)



# GREATER AUSTIN METROPOLITAN AREA

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## PART 11: PRESSURE DATA

Austin, in south central Texas, is located along the Balcones Escarpment which separates the Texas coastal plains to the east and southeast from the Texas hill country to the west. The Austin area, including Williamson, Travis and Hays Counties, is located within a subtropical climate regime.

According to the NOAA Local Climatological Data for KAUS/Austin Bergstrom International Airport as well as KATT/Austin City (Camp Mabry), the mean seal level pressure reading for the metropolitan area is 30.01 inches of Mercury.

This table summarizes the highest and lowest sea level pressure readings at the Austin City (Camp Mabry) weather station since 1926 (through May 2006).

### HIGHEST / LOWEST BAROMETRIC PRESSURE READINGS BY MONTH

Month	Highest / Year	Lowest / Year
January	30.98" / 1962	29.33" / 1996
February	30.89" / 1996	29.14" / 1960
March	30.73" / 1996	29.19" / 1984
April	30.67" / 1940	29.31" / 1953
May	30.36" / 1967, 1997	29.33" / 1973
June	30.27" / 1946	29.47" / 1974
July	30.25" / 1972	29.59" / 1932
August	30.28" / 2003	29.48" / 1942
September	30.38" / 1983	28.76" / 1961
October	30.65" / 1957	29.46" / 1979
November	30.78" / 1959	29.35" / 2005
December	31.01" / 1989	29.31" / 1940

### RECORD HIGHEST / LOWEST BAROMETRIC PRESSURE READINGS EVER IN AUSTIN

Highest..... 31.01" on 23 December 1989  
(Associated with arctic cold outbreak and a temperature low of 4 F)

Lowest..... 28.76" on 12 September 1961  
(Associated with Hurricane Carla and northeasterly wind of 45 mph)

(Updated through December 2011)



# GREATER AUSTIN METROPOLITAN AREA

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## PART 12: THUNDERSTORM DAYS

Austin, in south central Texas, is located along the Balcones Escarpment which separates the Texas coastal plains to the east and southeast from the Texas hill country to the west. The Austin area, including Williamson, Travis and Hays Counties, is located within a subtropical climate regime. With the abundance of maritime tropical air from the Gulf of Mexico, the greater Austin metropolitan area sees, on average, between 40 and 45 days a year when thunderstorms are observed. The number of thunderstorm days are greater to the east and southeast of the area while the number of thunderstorm days to the west is less.

This table summarizes the average number of thunderstorm days in Austin as well as the actual number of thunderstorm days recorded at both city weather observing stations since 1996.

("KAUS" is the station identifier for the former Robert Mueller Municipal Airport through 22 May 1999; 23 May 1999 and afterwards, it became the identifier for Austin Bergstrom International Airport)

("KATT" is the station identifier for Austin City / Camp Mabry 23 May 1999 and afterwards; please note that this location did not have the ability to record thunderstorms 23 May 1999 through 13 July 2000 after which an automated thunderstorm sensor was installed at the unaugmented KATT ASOS)

### AVERAGE NUMBER OF THUNDERSTORM DAYS

	J	F	M	A	M	J	J	A	S	O	N	D	Total
KAUS	1	2	3	5	7	5	4	5	5	3	2	1	43
KATT	1.0	2.2	3.3	4.7	7.1	4.9	3.9	4.8	4.0	2.8	1.7	1.1	41.4

### ACTUAL NUMBER OF THUNDERSTORM DAYS PER MONTH WITH THUNDERSTORMS RECORDED

	J	F	M	A	M	J	J	A	S	O	N	D	Total
1996 KAUS	0	0	2	4	3	6	2	8	7	2	2	1	37
1997 KAUS	0	3	0	5	8	7	2	2	3	1	1	4	36
1998 KAUS	3	6	4	2	3	1	5	11	2	4	2	2	45
1999 KAUS	1	0	4	1	5	-	-	-	-	-	-	-	11
(through 22 May)													
KATT	-	-	-	-	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
(23 May and afterwards)													
ABA	1	0	3	1	5	9	12	1	2	1	0	1	37
(KAUS 23 May and afterwards)													

<b>2000</b>	<b>J</b>	<b>F</b>	<b>M</b>	<b>A</b>	<b>M</b>	<b>J</b>	<b>J</b>	<b>A</b>	<b>S</b>	<b>O</b>	<b>N</b>	<b>D</b>	<b>Total</b>
<b>KAUS</b>	1	4	8	5	5	6	3	1	5	7	6	2	53
<b>KATT</b>	n/a	n/a	n/a	n/a	n/a	n/a	n/a	3	6	7	6	2	
<b>2001</b>	<b>J</b>	<b>F</b>	<b>M</b>	<b>A</b>	<b>M</b>	<b>J</b>	<b>J</b>	<b>A</b>	<b>S</b>	<b>O</b>	<b>N</b>	<b>D</b>	<b>Total</b>
<b>KAUS</b>	3	1	5	4	6	4	2	4	6	3	4	3	45
<b>KATT</b>	5	2	8	4	12	6	3	7	6	4	5	3	65
<b>2002</b>	<b>J</b>	<b>F</b>	<b>M</b>	<b>A</b>	<b>M</b>	<b>J</b>	<b>J</b>	<b>A</b>	<b>S</b>	<b>O</b>	<b>N</b>	<b>D</b>	<b>Total</b>
<b>KAUS</b>	2	0	3	2	4	4	11	4	2	7	1	6	46
<b>KATT</b>	1	0	3	3	5	9	12	6	3	7	1	4	54
<b>2003</b>	<b>J</b>	<b>F</b>	<b>M</b>	<b>A</b>	<b>M</b>	<b>J</b>	<b>J</b>	<b>A</b>	<b>S</b>	<b>O</b>	<b>N</b>	<b>D</b>	<b>Total</b>
<b>KAUS</b>	1	4	2	3	3	7	6	4	4	4	1	1	40
<b>KATT</b>	0	2	3	4	5	9	12	8	5	4	1	2	55
<b>2004</b>	<b>J</b>	<b>F</b>	<b>M</b>	<b>A</b>	<b>M</b>	<b>J</b>	<b>J</b>	<b>A</b>	<b>S</b>	<b>O</b>	<b>N</b>	<b>D</b>	<b>Total</b>
<b>KAUS</b>	0	5	5	7	4	13	3	5	1	6	6	0	55
<b>KATT</b>	0	5	7	7	4	17	6	7	1	9	9	0	72
<b>2005</b>	<b>J</b>	<b>F</b>	<b>M</b>	<b>A</b>	<b>M</b>	<b>J</b>	<b>J</b>	<b>A</b>	<b>S</b>	<b>O</b>	<b>N</b>	<b>D</b>	<b>Total</b>
<b>KAUS</b>	1	3	4	8	5	1	9	7	2	4	0	0	42
<b>KATT</b>	1	4	8	6	4	3	17	11	5	4	0	1	64
<b>2006</b>	<b>J</b>	<b>F</b>	<b>M</b>	<b>A</b>	<b>M</b>	<b>J</b>	<b>J</b>	<b>A</b>	<b>S</b>	<b>O</b>	<b>N</b>	<b>D</b>	<b>Total</b>
<b>KAUS</b>	0	1	5	7	7	5	4	2	3	2	3	3	42
<b>KATT</b>	1	1	5	7	10	6	5	4	7	2	2	2	53
<b>2007</b>	<b>J</b>	<b>F</b>	<b>M</b>	<b>A</b>	<b>M</b>	<b>J</b>	<b>J</b>	<b>A</b>	<b>S</b>	<b>O</b>	<b>N</b>	<b>D</b>	<b>Total</b>
<b>KAUS</b>	2	0	7	7	10	10	9	7	2	1	5	2	62
<b>KATT</b>	3	0	7	8	14	13	15	7	7	1	4	2	81
<b>2008</b>	<b>J</b>	<b>F</b>	<b>M</b>	<b>A</b>	<b>M</b>	<b>J</b>	<b>J</b>	<b>A</b>	<b>S</b>	<b>O</b>	<b>N</b>	<b>D</b>	<b>Total</b>
<b>KAUS</b>	0	2	2	5	7	4	4	6	0	1	0	1	32
<b>KATT</b>	0	3	5	7	8	4	7	15	1	2	2	2	56
<b>2009</b>	<b>J</b>	<b>F</b>	<b>M</b>	<b>A</b>	<b>M</b>	<b>J</b>	<b>J</b>	<b>A</b>	<b>S</b>	<b>O</b>	<b>N</b>	<b>D</b>	<b>Total</b>
<b>KAUS</b>	0	1	5	6	5	5	2	6	9	4	2	0	45
<b>KATT</b>	0	1	5	6	5	6	6	7	10	3	1	0	50
<b>2010</b>	<b>J</b>	<b>F</b>	<b>M</b>	<b>A</b>	<b>M</b>	<b>J</b>	<b>J</b>	<b>A</b>	<b>S</b>	<b>O</b>	<b>N</b>	<b>D</b>	<b>Total</b>
<b>KAUS</b>	1	1	4	3	3	3	8	3	6	3	2	1	38
<b>KATT</b>	2	1	5	3	5	7	9	4	5	3	2	1	47
<b>2011</b>	<b>J</b>	<b>F</b>	<b>M</b>	<b>A</b>	<b>M</b>	<b>J</b>	<b>J</b>	<b>A</b>	<b>S</b>	<b>O</b>	<b>N</b>	<b>D</b>	<b>Total</b>
<b>KAUS</b>	1	0	1	2	4	2	3	0	2	2	2	4	19
<b>KATT</b>	0	0	3	2	6	3	2	0	5	2	2	3	28

(Updated through December 2011)

# GREATER AUSTIN METROPOLITAN AREA

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## PART 13: FOG DAYS

Austin, in south central Texas, is located along the Balcones Escarpment which separates the Texas coastal plains to the east and southeast from the Texas hill country to the west. The Austin area, including Williamson, Travis and Hays Counties, is located within a subtropical climate regime. With the abundance of maritime tropical moisture from the Gulf of Mexico, days with fog (in varying degrees) in Austin are fairly common. Fog events are a little more common at Austin Bergstrom International Airport due to its low lying more rural location to the southeast of the city.

This table summarizes the average number of days with fog at the city's official weather stations.

### AVERAGE NUMBER OF DAYS WITH LIMITED VISIBILITY IN FOG IN AUSTIN

#### **Average number of days with 1/4 mile or less visibility in fog (updated through 2011 annual data)**

##### **KATT / Camp Mabry**

(Period of record 48 years)

January..... 3.5 days  
February..... 1.9 days  
March..... 2.1 days  
April..... 0.9 day  
May..... 0.9 day  
June..... 0.5 day  
July..... 0.5 day  
August..... 0.4 day  
September..... 0.7 day  
October..... 1.6 days  
November..... 2.7 days  
December..... 3.6 days  
**Average Annual..... 19.3 days**

##### **KAUS / Austin Bergstrom International Airport**

(Period of record 19 years)

January..... 1.6 days  
February..... 1.2 days  
March..... 1.2 days  
April..... 0.6 day  
May..... 0.3 day  
June..... 0.2 day  
July..... 0.6 day  
August..... 0.2 day  
September..... 0.6 day  
October..... 1.0 days  
November..... 2.3 days  
December..... 1.7 days  
**Average Annual..... 11.5 days**

#### **Average number of days with 7 miles or less visibility in fog**

##### **KAUS / Austin Bergstrom International Airport**

(Period of record 54 years; USAF records from Bergstrom AFB)

January..... 14 days  
February..... 12 days  
March..... 12 days  
April..... 13 days  
May..... 13 days  
June..... 8 days  
July..... 6 days  
August..... 6 days  
September..... 10 days  
October..... 11 days  
November..... 11 days  
December..... 13 days  
**Average Annual..... 129 days**

(Updated through December 2011)





# GREATER AUSTIN METROPOLITAN AREA

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## PART 14: SUNSHINE DATA

Sunshine data was observed, by the National Weather Service, in the Austin area beginning in 1949 and was discontinued after December 31, 2009. Sunshine data was observed at the U. S. Weather Bureau/National Weather Service office at Robert Mueller Municipal Airport from 1949 into the 1990s. Since the closure of the local National Weather Service office at 10am on March 23, 1995, the data had been a cooperative effort between National Weather Service, FAA Contract Weather Observers, the Lower Colorado River Authority and local weather volunteer observers. The age of the equipment, the inability to obtain replacement parts for the older equipment, the lack of modern equipment to record the data as well as the difficulty finding a suitable recording location makes this a data set that, after a period of record of 59 years, had unfortunately more questionable data in more recent years and is the reason that the data set is no longer officially observed by the National Weather Service.

Please note that data displayed below for dates after December 31, 2009 is the author's own unofficial estimate of daily sunshine for the Austin metropolitan area.

### Average Annual Amount (%) of Sunshine Received (Based on the Entire Period of Record).....

#### Since 1949, The Year With....

The Greatest Amount of Sunshine Received.... 1952..... 72%  
1954, 1956, and 1999..... 67%

The Least Amount of Sunshine Received..... 1997.... 46% - Data "flagged" as being questionable  
1991.... 52%

#### Since 1949, The Month With....

The Greatest Amount of Sunshine Received..... August 1952 and October 1952 - 96%  
August 1951 and September 1999 - 90%

The Least Amount of Sunshine Received..... January 1950 - 13%  
November 1985 - 24%

### By Year, Amount (%) of Sunshine Observed (Highest % Month / Lowest % Month)

1949..... 59% (80% August/31% February)  
1950..... 55% (78% October/13% January)  
1951..... 65% (90% August/48% November)  
1952..... 72% (96% August and October/47% November)  
1953..... 66% (87% June/45% March)  
1954..... 67% (86% September/42% April)  
1955..... 64% (83% October/42% February)  
1956..... 67% (83% September/44% April)  
1957..... 57% (85% July and August/29% January)  
1958..... 57% (84% July/27% October)  
1959..... 54% (68% July/30% February)  
1960..... 60% (81% September/43% November)  
1961..... 59% (79% August/37% November)  
1962..... 61% (87% July/46% January)  
1963..... 58% (84% August/42% December)  
1964..... 63% (82% October/38% April and May)

1965..... 54% (87% July/27% May)  
 1966..... 57% (74% July/40% April and May)  
 1967..... 62% (80% June/42% December)  
 1968..... 56% (76% August/31% January)  
 1969..... 61% (77% July/43% January)  
 1970..... 61% (79% August/42% April and December)  
 1971..... 55% (76% July/33% December)  
 1972..... 64% (75% June/48% December)  
 1973..... 57% (77% December/54% February)  
 1974..... 60% (77% June/39% January)  
 1975..... 62% (74% July/46% May and December)  
 1976..... 55% (79% August/31% March)  
 1977..... 65% (87% July/36% May)  
 1978..... 59% (83% July/36% November)  
 1979..... 55% (72% July and November/33% January)  
 1980..... 65% (89% July/38% January)  
 1981..... 61% (78% July/41% October)  
 1982..... 57% (82% September/29% November)  
 1983..... 57% (69% August/47% December)  
 1984..... 63% (80% July and August/34% December)  
 1985..... 61% (84% July/24% November)  
 1986..... 53% (82% July/34% November)  
 1987..... 64% (83% August/44% May)  
 1988..... 60% (78% June/39% December)  
 1989..... 60% (84% September/29% February)  
 1990..... 57% (82% June/34% March)  
 1991..... 52% (70% July/28% December)  
 1992..... 58% (73% June/29% December)  
 1993..... 56% (84% August/33% January)  
 1994..... 54% (77% July/40% November)  
 1995..... 59% (79% July/40% December)  
 1996..... 56% (75% July/33% November)  
 1997..... 46% (70% December/30% February) - Note: Data for this year is "flagged" as being questionable  
 1998..... 55% (79% July/37% November)  
 1999..... 67% (90% September/43% March)  
 2000..... 63% (86% July/27% October)  
 2001..... 56% (84% July/35% February)  
 2002..... 59% (82% August/39% October)  
 2003..... 61% (82% August/30% February)  
 2004..... 59% (85% July/32% January)  
 2005..... 64% (81% June/26% February)  
 2006..... 66% (88% August/46% March)  
 2007..... 53% (79% October/38% July)  
 2008..... 60% (84% September/50% January)  
 2009..... 58% (71% August/43% October)

.... Data below is unofficial and is the author's estimate of sunshine based upon daily estimates of sunshine observed in the Austin metropolitan area ....

2010..... 62% (89% October/44% April)  
 2011..... 69% (89% August/35% December)

(Updated through December 2011)

# APPENDIX

# NORMALS, MEANS, AND EXTREMES AUSTIN/CITY (KATT)

LATITUDE: 30° 19'N		LONGITUDE: -97° 45'W		ELEVATION (FT): GRND: 670 BARO: 696				TIME ZONE: CENTRAL (UTC -6)				WBAN: 13958			
	ELEMENT	POR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR
TEMPERATURE °F	NORMAL DAILY MAXIMUM	30	60.3	65.1	72.5	78.9	84.8	90.9	95.0	95.6	90.1	81.4	70.1	62.3	78.9
	MEAN DAILY MAXIMUM	81	60.1	63.1	71.9	78.7	85.4	90.9	94.3	95.8	88.9	81.5	69.9	62.6	78.6
	HIGHEST DAILY MAXIMUM	70	90	99	98	99	102	108	109	112	112	98	91	90	112
	YEAR OF OCCURRENCE		1971	1996	1971	2006	1998	1998	1954	2011	2000	1991	2006	1955	AUG 2011
	MEAN OF EXTREME MAXS.	81	79.5	82.5	87.0	90.9	94.3	97.8	100.9	101.9	98.5	92.5	85.0	79.7	90.9
	NORMAL DAILY MINIMUM	30	40.0	44.0	50.9	57.6	65.4	71.1	73.4	73.3	68.8	59.8	49.3	41.9	58.0
	MEAN DAILY MINIMUM	81	39.7	42.3	49.6	57.5	65.3	70.9	73.2	73.6	68.1	59.3	48.4	41.4	57.4
	LOWEST DAILY MINIMUM	70	-2	7	18	34	43	53	64	61	41	30	20	4	-2
	YEAR OF OCCURRENCE		1949	1951	1948	2007	1954	1970	1970	1967	1942	1993	1976	1989	JAN 1949
	MEAN OF EXTREME MINS.	81	23.4	26.8	32.7	42.3	53.3	63.1	69.4	68.5	57.0	44.3	33.0	25.9	45.0
	NORMAL DRY BULB	30	50.2	54.6	61.7	68.3	75.1	81.0	84.2	84.5	79.5	70.6	59.7	52.1	68.5
	MEAN DRY BULB	81	49.9	52.7	60.8	68.2	75.3	81.0	83.8	84.7	78.5	70.4	59.2	52.0	68.0
	MEAN WET BULB	28	43.6	47.0	53.0	59.6	67.2	71.9	73.1	72.8	68.5	61.5	52.6	45.3	59.7
	MEAN DEW POINT	28	40.4	43.1	49.5	56.5	65.4	70.2	70.7	70.4	66.0	58.7	49.6	41.9	56.9
	NORMAL NO. DAYS WITH: MAXIMUM >= 90	30	*	0.3	0.6	1.6	7.2	20.8	28.0	28.2	18.2	4.4	0.0	0.0	109.3
	MAXIMUM <= 32	30	0.4	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	1.0
	MINIMUM <= 32	30	6.6	3.5	0.8	0.0	0.0	0.0	0.0	0.0	0.0	*	0.8	4.9	16.6
	MINIMUM <= 0	30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
H/C	NORMAL HEATING DEG. DAYS	30	475	319	163	44	2	0	0	0	2	32	205	406	1648
	NORMAL COOLING DEG. DAYS	30	7	18	59	147	323	495	605	610	439	207	51	13	2974
RH	NORMAL (PERCENT)	30	68	67	66	67	73	71	66	65	68	69	70	68	68
	HOURLY 00 LST	30	73	72	72	74	82	81	76	75	77	76	78	74	76
	HOURLY 06 LST	30	79	80	80	83	89	90	89	88	86	85	83	80	84
	HOURLY 12 LST	30	61	59	57	56	62	58	52	51	55	57	60	60	57
	HOURLY 18 LST	30	57	53	51	52	58	56	48	47	53	55	60	59	54
S	PERCENT POSSIBLE SUNSHINE	60	49	51	55	54	56	69	74	74	66	64	55	49	60
W/O	MEAN NO. DAYS WITH: HEAVY FOG (VISIBY <= 1/4 MI)	48	3.5	1.9	2.1	0.9	0.9	0.5	0.5	0.4	0.7	1.6	2.7	3.6	19.3
	THUNDERSTORMS	64	1.0	2.1	3.4	4.5	6.8	5.3	4.6	5.1	4.1	3.1	1.8	1.3	43.1
CLOUDINESS	MEAN: SUNRISE-SUNSET (OKTAS)				4.8					2.4				4.8	
	MIDNIGHT-MIDNIGHT (OKTAS)				4.8										
	MEAN NO. DAYS WITH: CLEAR														
	PARTLY CLOUDY CLOUDY														
PR	MEAN STATION PRESSURE (IN)	28	29.46	29.41	29.33	29.27	29.25	29.25	29.31	29.30	29.30	29.35	29.41	29.45	29.34
	MEAN SEA-LEVEL PRES. (IN)	28	30.14	30.09	30.00	29.93	29.90	29.90	29.96	29.95	29.96	30.02	30.08	30.14	30.01
WINDS	MEAN SPEED (MPH)	28	7.3	7.8	8.3	8.2	7.6	7.1	6.6	6.0	5.9	6.3	6.8	6.9	7.1
	PREVAIL. DIR. (TENS OF DEGS)	40	36	36	17	17	17	17	19	19	17	19	19	36	17
	MAXIMUM 2-MINUTE: SPEED (MPH)	16	32	34	33	46	52	34	30	33	47	33	29	33	52
	DIR. (TENS OF DEGS)		03	36	03	27	02	29	10	09	03	36	01	36	02
	YEAR OF OCCURRENCE		1998	1998	1996	1997	1997	1997	2004	1999	1997	1998	1996	1996	MAY 1997
	MAXIMUM 3-SECOND SPEED (MPH)	16	45	45	52	55	71	47	40	54	57	43	44	46	71
	DIR. (TENS OF DEGS)		03	00	03	27	02	28	11	09	05	01	30	30	02
	YEAR OF OCCURRENCE		1996	1996	1996	1997	1997	1997	2004	1999	1997	1998	2006	2003	MAY 1997
PRECIPITATION	NORMAL (IN)	30	1.89	1.99	2.14	2.51	5.03	3.81	1.97	2.31	2.91	3.97	2.68	2.44	33.65
	MAXIMUM MONTHLY (IN)	70	9.21	6.56	7.54	9.93	9.98	14.96	10.54	9.48	13.20	12.39	14.10	14.16	14.96
	YEAR OF OCCURRENCE		1991	1992	2006	1957	1965	1981	1979	2001	2010	1998	2004	1991	JUN 1981
	MINIMUM MONTHLY (IN)	70	0.04	0.03	T	0.06	0.73	T	0.00	0.00	0.02	T	T	T	0.00
	YEAR OF OCCURRENCE		1971	1999	1972	1984	1998	1967	1962	1952	2008	1952	1970	1950	JUL 1962
	MAXIMUM IN 24 HOURS (IN)	70	4.41	3.73	3.46	3.86	5.66	6.50	5.46	6.01	7.39	7.51	7.55	6.19	7.55
	YEAR OF OCCURRENCE		1991	1958	2006	1942	1979	1964	1961	1994	2010	1998	2001	1991	NOV 2001
	NORMAL NO. DAYS WITH: PRECIPITATION >= 0.01	30	7.7	7.0	7.9	7.2	9.5	7.5	5.1	5.2	7.2	7.4	8.2	7.9	87.8
	PRECIPITATION >= 1.00	30	0.3	0.3	0.5	0.7	1.6	1.3	0.5	0.7	0.8	1.2	0.7	0.7	9.3
SNOWFALL	NORMAL (IN)	30	0.4	0.1	0.*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.*	0.6
	MAXIMUM MONTHLY (IN)	64	7.5	6.0	2.0	T	T	T	0.0	0.0	0.0	0.0	2.0	0.1	7.5
	YEAR OF OCCURRENCE		1985	1966	1965	2011	2011	2009		2011			1980	2008	JAN 1985
	MAXIMUM IN 24 HOURS (IN)	64	7.0	6.0	2.0	T	T	T	0.0	0.0	0.0	0.0	2.0	T	7.0
	YEAR OF OCCURRENCE		1944	1966	1965	2011	2011	2009					1980	2009	JAN 1944
	MAXIMUM SNOW DEPTH (IN)	59	6	6	1	0	0	0	0	0	0	0	0	T	6
	YEAR OF OCCURRENCE		1949	1966	1965									2008	FEB 1966
	NORMAL NO. DAYS WITH: SNOWFALL >= 1.0	30	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.2

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30 year Normals (1971-2000)

## STATION LOCATION

AUSTIN, TEXAS

LOCATION	OCCUPIED FROM	OCCUPIED TO	AIRLINE DISTANCES AND DIRECTIONS FROM PREVIOUS LOCATION	LATITUDE NORTH	LONGITUDE WEST	ELEVATION ABOVE										AUTOMATIC OBSERVING EQUIPMENT *	* Type M = AMOS T = AUTOB S = ASOS W = AWOS	REMARKS		
						SEA LEVEL	GROUND													
							GROUND TEMPERATURE	WIND INSTRUMENTS	EXTREME THERMOMETERS	PSYCHROMETER	SUNSHINE SWITCH	TIPPING BUCKET	RAIN GAGE	WEIGHING RAIN GAGE	8 INCH RAIN GAGE				HYGRO THERMOMETER	
Engineering Building University of Texas	1906	4/1/23	NA	30° 18'	97° 44'	590		40							80		Cooperative station.			
Engineering Building University of Texas	4/1/23	4/1/24	0.5 mi. W	30° 17'	97° 44'	560		6							3		Cooperative station.			
Engineering Building University of Texas	4/1/24	10/15/26	0.5 mi. NW	30° 17'	97° 44'	570		6							3		Cooperative station.			
Room 901, Littlefield Bldg., Sixth & Congress	10/15/26	10/8/36	1.5 mi. S	30° 17'	97° 44'	495	148	135	135		128		128				Weather Bureau Office.			
Room 408, Federal Court Building, 200 W. 8th St	10/8/36	2/12/42	0.25 mi. NW	30° 17'	97° 44'	540	79	66	66		60		60				Weather Bureau Office.			
Rooms 801-807 Littlefield Building Sixth & Congress	2/12/42	8/16/42	0.25 mi. SE	30° 17'	97° 44'	495	148	135	135		128		128				Weather Bureau Office.			

## STATION LOCATION

AUSTIN/CITY, TEXAS

LOCATION	Occupied From	Occupied To	Airline Distances and Directions from previous Location	LATITUDE NORTH	LONGITUDE WEST	ELEVATION ABOVE										AUTOMATIC OBSERVING EQUIPMENT *	* TYPE  M - AMOS T - AUTOB S - ASOS W - AWOS	REMARKS
						SEA LEVEL	GROUND											
							GROUND TEMPERATURE	WIND INSTRUMENT	EXTREME THERMOMETERS	PSYCHROMETER	SUNSHINE SWITCH	TIPPING BUCKET	RAIN GAGE	WEIGHING RAIN GAGE	8 INCH RAIN GAGE			
*NOTE:																		
<u>AIRPORT</u>																		
Administration Building Municipal Airport	8/16/42	6/30/61	3 mi. NNE	30°18'	97°42'	615	41 a32	6	5	Unk	3		3			a.	Effective 9/13/57.	
Administration Building 3600 Manor Road Municipal Airport	7/1/61	10/24/79	0.7 mi. SE	30°18'	97°42'	597	20 b	5 b	5 b	35	3	NA	3 c6	6	NA	b.	Removed 7/1/63. c. Minor adjustment 2/20/67	
Weather Svc Bldg. 3724 Manor Rd. Municipal Airport	10/24/79	07/01/95	0.25 mi SE	30°17'	97°42'	597	d20 g33	NA	NA	20	5 15	e5 15	d3 f3	d6 h5	NA	d.	Not moved 10/24/79. e. Installed 10/25/79. f. Relocated 10/30/79. g. Relocated 7/1/82. h. Moved 20' NE & type change 11/15/84. i. Minor move 02/23/89.	
Weather Svc Bldg. 3724 Manor Rd. Municipal Airport	07/01/95	07/21/99	0.25 mi SE	30°17'	97°42'	597	d20 g33	NA	NA	20	5 15	e5 15	d3 f3	d6 h5	NA			
Camp Mabry Army Nat'l Guard Base	07/21/99	Present	4 mi. WNW	30°19'	97°46'	648									S	ASOS Commissioned 7/1/95 j. Ground elevation.		

# NORMALS, MEANS, AND EXTREMES AUSTIN/BERGSTROM (KAUS)

LATITUDE: 30° 10'N		LONGITUDE: 97° 40'W		ELEVATION (FT): GRND: 480 BARO: 661				TIME ZONE: CENTRAL (UTC -6)					WBAN: 13904		
	ELEMENT	POR	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	YEAR
TEMPERATURE °F	NORMAL DAILY MAXIMUM	30	58.9	64.1	71.4	77.8	84.3	89.9	94.0	94.0	89.7	80.8	69.7	61.3	78.0
	MEAN DAILY MAXIMUM	34	61.0	64.6	71.7	79.8	86.2	92.2	95.4	96.6	90.3	81.5	71.1	63.3	79.5
	HIGHEST DAILY MAXIMUM	70	89	101	98	100	102	109	106	110	112	98	90	91	112
	YEAR OF OCCURRENCE		1971	1996	1991	2006	1998	1998	1978	2011	2000	2005	2008	1955	SEP 2000
	MEAN OF EXTREME MAXS.	62	79.7	81.5	86.2	90.1	94.7	98.1	100.7	102.6	98.9	92.1	85.6	79.5	90.8
	NORMAL DAILY MINIMUM	30	37.3	41.0	48.4	56.3	65.1	70.2	71.5	70.3	65.3	56.3	45.9	38.2	55.5
	MEAN DAILY MINIMUM	34	38.9	42.1	48.8	58.4	65.7	71.5	73.7	73.4	68.1	57.9	47.7	40.2	57.2
	LOWEST DAILY MINIMUM	70	-5	8	17	28	38	56	62	59	45	32	20	6	-5
	YEAR OF OCCURRENCE		1949	1951	2002	2009	2011	2009	1970	2004	2000	2010	1976	1989	JAN 1949
	MEAN OF EXTREME MINS.	62	20.2	25.0	30.8	40.8	51.9	62.4	68.3	66.8	55.9	41.3	30.2	23.9	43.1
	NORMAL DRY BULB	30	50.1	54.1	62.1	69.6	75.5	81.1	84.3	84.4	79.3	70.4	61.0	52.9	68.7
	MEAN DRY BULB	61	50.4	54.2	61.4	69.0	75.8	81.8	84.6	84.8	79.4	70.3	60.0	52.4	68.7
	MEAN WET BULB	12	40.9	44.2	51.8	59.7	66.7	71.0	72.5	71.8	66.9	59.4	50.9	42.4	58.2
	MEAN DEW POINT	12	42.1	45.5	52.6	60.1	66.9	71.8	72.6	71.9	67.0	60.1	51.2	42.0	58.7
	NORMAL NO. DAYS WITH:														
	MAXIMUM >= 90	30	*	0.3	0.6	1.6	7.2	20.8	28.0	28.2	18.2	4.4	0.0	0.0	109.3
	MAXIMUM <= 32	30	0.4	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	1.0
	MINIMUM <= 32	30	6.6	3.5	0.8	0.0	0.0	0.0	0.0	0.0	0.0	*	0.8	4.9	16.6
	MINIMUM <= 0	30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
H/C	NORMAL HEATING DEG. DAYS	30	532	360	180	45	5	0	0	0	1	38	248	480	1889
	NORMAL COOLING DEG. DAYS	30	8	11	23	107	307	453	551	532	377	148	32	8	2557
RH	NORMAL (PERCENT)	30	67	66	64	66	71	70	65	64	68	67	69	68	67
	HOURLY 00 LST	30	72	72	71	75	81	80	75	73	78	75	76	73	75
	HOURLY 06 LST	30	78	80	80	82	88	89	88	87	86	84	82	80	84
	HOURLY 12 LST	30	60	59	56	57	60	56	51	50	55	55	58	59	56
	HOURLY 18 LST	30	57	53	49	52	57	53	47	46	54	54	59	58	53
S	PERCENT POSSIBLE SUNSHINE	64	49	51	55	54	56	69	75	74	66	63	56	49	60
W/O	MEAN NO. DAYS WITH:														
	HEAVY FOG (VISIBY <= 1/4 MI)	19	1.6	1.2	1.2	0.6	0.3	0.2	0.6	0.2	0.6	1.0	2.3	1.7	11.5
	THUNDERSTORMS	34	1.0	1.8	3.0	4.6	5.1	4.6	4.1	4.1	4.2	3.1	1.7	1.4	38.7
CLOUDINESS	MEAN:														
	SUNRISE-SUNSET (OKTAS)														
	MIDNIGHT-MIDNIGHT (OKTAS)														
	MEAN NO. DAYS WITH:														
	CLEAR														
	PARTLY CLOUDY														
	CLOUDY														
PR	MEAN STATION PRESSURE (IN)	12	29.61	29.55	29.47	29.41	29.38	29.39	29.44	29.42	29.43	29.49	29.56	29.52	29.47
	MEAN SEA-LEVEL PRES. (IN)	12	30.16	30.12	30.00	29.94	29.89	29.90	29.95	29.92	29.94	30.01	30.09	30.14	30.01
WINDS	MEAN SPEED (MPH)	12	8.3	9.1	9.1	9.5	9.1	8.3	7.1	6.7	6.3	6.8	7.6	7.9	8.0
	PREVAIL. DIR. (TENS OF DEGS)	6	35	17	16	16	15	17	18	17	01	19	18	01	17
	MAXIMUM 2-MINUTE:														
	SPEED (MPH)	12	36	41	39	37	53	46	41	37	40	33	46	38	53
	DIR. (TENS OF DEGS)		01	01	01	34	34	01	01	23	03	02	25	18	34
	YEAR OF OCCURRENCE		2005	2006	2000	2006	2006	2007	2005	2009	2000	2008	2001	2002	MAY 2006
	MAXIMUM 3-SECOND														
	SPEED (MPH)	70	73	59	73	60	78	80	62	66	63	55	62	76	80
PRECIPITATION	DIR. (TENS OF DEGS)		29	23	20	25	32	29	11	36	02	24	24	34	29
	YEAR OF OCCURRENCE		1953	1956	1953	1991	1965	1949	1984	1949	1958	2001	2001	1947	JUN 1949
	NORMAL (IN)	30	2.21	2.02	2.36	2.63	5.12	3.42	2.03	2.51	2.88	3.99	3.02	2.53	34.72
	MAXIMUM MONTHLY (IN)	70	10.53	7.34	6.52	12.18	13.69	15.59	9.77	8.91	9.36	13.08	12.49	12.88	15.59
	YEAR OF OCCURRENCE		1991	1958	1983	1967	1965	1981	1979	1966	1986	1960	1974	1991	JUN 1981
	MINIMUM MONTHLY (IN)	70	0.02	0.02	0.05	0.03	0.28	T	0.00	T	0.01	0.00	T	0.01	0.00
	YEAR OF OCCURRENCE		1971	1999	1972	1984	1949	1967	1947	2011	2011	1952	1970	1950	OCT 1952
	MAXIMUM IN 24 HOURS (IN)	70	5.01	3.90	2.66	4.50	8.53	5.73	3.96	5.93	5.97	6.85	8.70	4.81	8.70
SNOWFALL	YEAR OF OCCURRENCE		1991	1958	2007	1969	1974	1981	1961	1966	1986	1998	1974	1953	NOV 1974
	NORMAL NO. DAYS WITH:														
	PRECIPITATION >= 0.01	30	7.7	7.0	7.9	7.2	9.5	7.5	5.1	5.2	7.2	7.4	8.2	7.9	87.8
	PRECIPITATION >= 1.00	30	0.3	0.3	0.5	0.7	1.6	1.3	0.5	0.7	0.8	1.2	0.7	0.7	9.3
	NORMAL (IN)	30	0.4	0.3	T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	T	0.8
	MAXIMUM MONTHLY (IN)	70	6.8	5.0	0.6	T	T	T	0.0	T	0.0	T	2.0	0.6	6.8
	YEAR OF OCCURRENCE		1985	1966	1965	2007	2008	2008		2011		2002	1955	1946	JAN 1985
	MAXIMUM IN 24 HOURS (IN)	70	5.5	4.0	0.6	T	T	T	0.0	0.0	0.0	T	2.0	0.6	5.5
SNOWFALL	YEAR OF OCCURRENCE		1949	1967	1965	2005	2001	2001				2002	1955	1946	JAN 1949
	MAXIMUM SNOW DEPTH (IN)	70	6	5	T	0	0	0	0	0	0	0	T	T	6
	YEAR OF OCCURRENCE		1949	1963	1948								1980	1990	JAN 1949
	NORMAL NO. DAYS WITH:														
	SNOWFALL >= 1.0	30	0.1	0.2	0.*	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.4

published by: NCDC Asheville, NC

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30 year Normals (1971-2000)

# STATION LOCATION

AUSTIN/BERGSTROM, TEXAS

LOCATION	Occupied From	Occupied To	Airline Distances and Directions from previous Location	LAT ITUDE NORTH	LONG ITUDE WEST	ELEVATION ABOVE										AUTOMATED EQUIPMENT * REMARKS	
						SEA LEVEL	GROUND										* TYPE M - AMOS T - AUTOB S - ASOS W - AMOS
							GROUND TEMPERATURE	WIND INSTRUMENT	EXTREME THERMOMETERS	PSYCHROMETER	SUNSHINE SWITCH	TIPPING GAUGE BUCKET	WEIGHING RAIN GAUGE	RAIN GAUGE	HYGROMETER		
Bergstrom AFB Austin-Bergstrom Int'l Airport	1942 10/02/97	1995 Present	NA	30°11'	97°41'	a650									S	ASOS Commissioned 10/02/97 a. Ground elevation.	





**NOAA - NATIONAL CLIMATIC DATA CENTER**  
**KAUS / Austin Bergstrom International Airport**  
**KATT / Austin City - Camp Mabry Army National Guard**

**LOCAL CLIMATOLOGICAL DATA - WEATHER BRIEF AND STATION HISTORY**

Austin, capital of Texas, is located on the Colorado River where the stream crosses the Balcones escarpment separating the Texas Hill Country from the Blackland Prairies to the east. Elevations within the city vary from 400 feet to nearly 1,000 feet above sea level. Native trees include cedar, oak, walnut, mesquite, and pecan.

The climate of Austin is humid subtropical with hot summers. Winters are mild, with below freezing temperatures occurring on an average of about 25 days each year. Rather strong northerly winds, accompanied by sharp drops in temperature, frequently occur during the winter months in connection with cold fronts, but cold spells are usually of short duration, seldom lasting more than two days. Daytime temperatures in summer are hot, but summer nights are usually pleasant.

Precipitation is fairly evenly distributed throughout the year, with heaviest amounts occurring in late spring. A secondary rainfall peak occurs in September, primarily because of tropical cyclones that migrate out of the Gulf of Mexico. Precipitation from April through September usually results from thunderstorms, with fairly large amounts of rain falling within short periods of time. While thunderstorms and heavy rains may occur in all months of the year, most of the winter precipitation consists of light rain. Snow is insignificant as a source of moisture, and usually melts as rapidly as it falls. The city may experience several seasons in succession with no measurable snowfall.

Prevailing winds are southerly, however in winter, northerly winds are about as frequent as those from the south. Destructive winds and damaging hailstorms are infrequent. On rare occasions dissipating tropical storms produce strong winds and heavy rains in the area. Blowing dust occurs occasionally in spring, but visibility rarely drops substantially, and then only for a few hours.

The average length of the warm season (freeze-free period) is 273 days. The average occurrence of the last temperature of 32 degrees in spring is early March and the average occurrence of the first temperature of 32 degrees is late November.

**EDITORIAL NOTE:**

With the opening of Austin Bergstrom International Airport in May 1999, there are now two sets of Local Climatological Data (LCD) maintained for Austin, Texas. As a user of National Climate Data Center products, you should be aware of the history of the data sets; in addition, you should know where and how these climatological data records are kept for the two Austin area weather observation sites.

Austin Bergstrom International Airport (Identifier AUS) The Local Climatological Data for this site is based upon U. S. Air Force weather records taken at Bergstrom Air Force Base (formerly occupying this site) for the time period 1942 through 1995. With base conversion to civilian use, Austin Bergstrom International Airport was opened to cargo operations on September 1, 1997, with resumption of manual surface weather observations. On October 2, 1997, an ASOS was commissioned at this airport. Austin Bergstrom International Airport was opened to full civilian operations (with full human augmentation as FAA Service Level "A" weather observations) on May 23, 1999. This weather observation site is located about 6 miles southeast of downtown Austin (immediately southeast of the intersection of U.S. Highway 183 and State Highway 71) in the Onion Creek watershed. Because the location is in a more outlying and lowlying area, nighttime temperatures (especially during calm wind conditions during the winter time of the year) tend to be considerably cooler than the Austin - City/Camp Mabry (Texas National Guard) weather observation site.

Austin City/Camp Mabry (Texas National Guard) (Identifier ATT) The Local Climatological Data for this site is based on weather records started back in the 1800s in the downtown Austin area. This National Weather Service first order data set was moved 3 miles northeast of the downtown area with the opening of Austin Robert Mueller Municipal Airport in the 1940s and continued until the closure of the Robert Mueller Airport on May 23, 1999. The National Weather Service ASOS was left without human augmentation effective with the closure of the airport. With the planned demolition of the former airport site, the National Weather Service held discussions with local users about finding a comparable location (geography and elevation) to maintain this "in city" climate data set. With cooperation of Texas National Guard officials, the National Weather Service moved the ASOS (no human augmentation) to Camp Mabry on July 21, 1999. This location, which is very similar to the former airport site, is along Loop 1/MoPac Expressway about 4 miles west northwest of the former Robert Mueller airport site and about 3 miles northwest of downtown Austin.

As a NCDC Local Climatological data user, you should be aware of these 1999 changes and how it affects the choice of which Local Climatological Data set you use for Austin, Texas.