### Tropical Systems and Arkansas

Records for tropical cyclones in the North Atlantic Basin began in 1851. No cyclone apparently affected Arkansas from 1851-1859. However, based on 15 full decades of data from 1860-2009, analysis shows that Arkansas is affected by a landfalling North Atlantic tropical cyclone an average of four to five times in a given decade. The frequency of the exact center of the storms to cross the state line in Arkansas is slightly less, with an average of three times in a given decade.

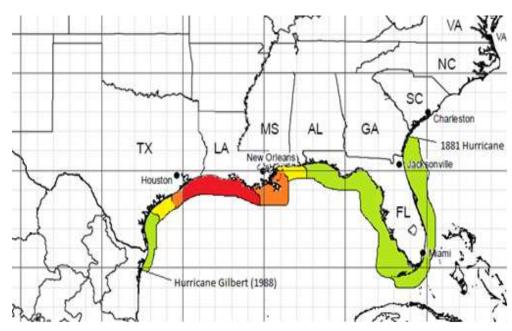
By the time the storms reach Arkansas or begin to have an effect on weather within the state, they are usually in the decaying stages, or have already become a remnant low pressure system. On a few occasions, the storms have maintained at least tropical storm strength while moving through the state (for example, Betsy in 1965 and lke in 2008).

Decaying tropical systems have a history of producing a number of potential hazards in Arkansas, including tornadoes, wind damage, heavy rains and associated flash flooding, as well as devastating river flooding.

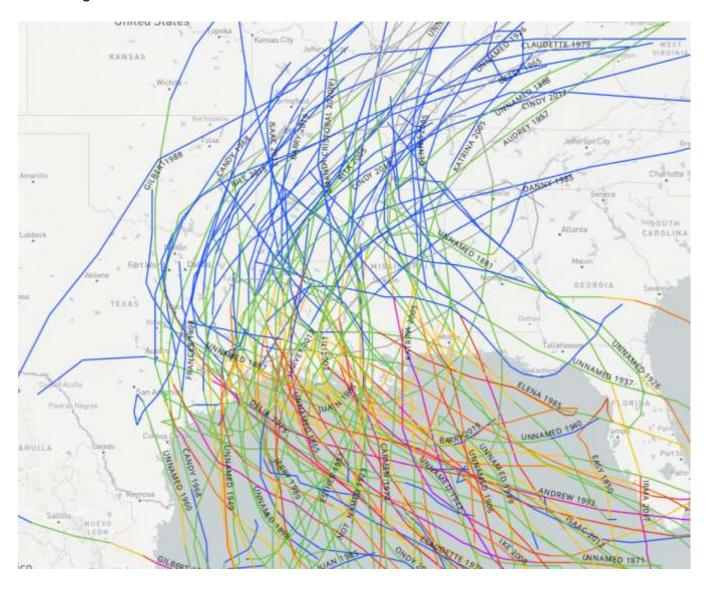
Peak time for these systems to affect Arkansas is usually during the month of September, though storms have affected the state as early as June 5th (Tropical Storm 1 in 1871) and as late as October 30th (Hurricane Juan in 1985).

Tropical cyclones that have affected Arkansas have made landfall anywhere from the northern coast of Mexico to the Atlantic coast of Georgia. However, based on a qualitative analysis, the most favored area for a landfalling tropical system to affect Arkansas is generally from along the upper Texas coast to the western and central Louisiana Gulf Coast; more specifically, from near Freeport, Texas to Morgan City, Louisiana.

To the right is a map indicating the general locations of landfalling tropical systems that have affected the state. Areas are qualitatively ranked from highest frequency (in red) to lowest frequency (in green). The extreme landfall points are marked by a line and the name and year of the landfalling storm.



The next map is a plot of all known tropical cyclones that have affected Arkansas since records began in 1851.



Until the late 1880s and early 1890s, weather records in Arkansas were spotty at best. The storms below are listed with the year, the earliest ascertainable date when Arkansas was affected, and any effects that are known. Storms in **purple and bold** denote that the center of circulation or remnant low crossed into Arkansas.

Year	Storm/Storm Name	Dates	Description
1865	Hurricane 4	14 Sep	The remnants of this storm dissipated over west central Arkansas.

Year	Storm/Storm Name	Dates	Description
1871	Tropical Storm 1	05 Jun	The remnants of this storm dissipated over northwest Arkansas. Clarksville received over 1.5 inches of rain from the storm's remnants.
	Tropical Storm 2	10 Jun	The remnants of the storm dissipated to the west of Texarkana.
1879	Hurricane 3	23-24 Aug	The remnants of this storm passed over Arkansas, dumping two to four inches of rain in at least western and central Arkansas.
1881	Hurricane 5	29 Aug	The remnants of the storm dissipated near the Memphis area, but only produce about an inch of rain at Little Rock.
1886	Hurricane 9	13-14 Oct	The remnants entered southwest Arkansas and dissipated.
1888	Hurricane 3	20 Aug	The storm's remnants passed through far southeast Arkansas. The effects of the storm included heavy rainfall mainly over far eastern Arkansas, near Memphis.
1891	Hurricane 1	06-07 Jul	The storm's remnants passed through southwest and eastern Arkansas. The storm produced a general one inch rainfall over central and eastern Arkansas, with nearly two inches at Camden.
1895	Tropical Storm 4	07 Oct	Moved into south central Arkansas before dissipating. Effects in Arkansas were mostly limited to about half an inch of rain over the central and south.
1897	Hurricane 2	13 Sep	Dissipated over north Texas. Some light rain was noted in Arkansas, but little else.
1898	Tropical Storm 4	21-22 Sep	Produced one to three inches of rain over much of western and central Arkansas.
1938	Tropical Storm 6	28 Sep	Dissipated near northwest Louisiana, with some rain noted over Arkansas on the 29th and 30th.
1900	Hurricane 2 (The Galveston Hurricane)	10 Sep	The remnants passed through Oklahoma and produced nearly an inch of rain at Mena.
1901	Hurricane 4	17 Aug	Remnants moved through northeast Arkansas, producing two to four inches of rainfall in the east.

Year	Storm/Storm Name	Dates	Description
1902	Hurricane 2	28 Jun	Remnants dissipated over southwest Missouri and produced four to six inches of rain over west and central Arkansas.
1905	Tropical Storm 3	30 Sep	Remnants entered southeast Arkansas and dissipated over west central Arkansas. Mainly light rain was noted.
1906	Hurricane 5	28 Sep	Remnants moved across northeast Arkansas, producing two to four inches of rain across central and eastern Arkansas.
1909	Hurricane 7	21 Sep	Remnants entered south central Arkansas and exited north central Arkansas later that day. Two inches of rain fell at Little Rock.
1911	Hurricane 1	13-14 Aug	Remnants traversed northeast and north central Arkansas. The system produced two to four inches of rain over central and eastern Arkansas.
1915	Hurricane 2 (Galveston Hurricane of 1915)	17-20 Aug	August 17th through 20th - Remnants of the Galveston Hurricane dumped 8 to 14 inches of rain on Northern Arkansas and caused record high river stages on the Buffalo, White, and Black Rivers. Gilbert recorded a stage of 54 feet. All crops along the White River at or above DeValls Bluff were destroyed.
1916	Hurricane 1	06-07 Jul	While the storm's remnants did not move into Arkansas, they did produce light rain over the east.
1918	Hurricane 1	06 Aug	Dissipated over northeast Texas but did bring light rain to a large portion of Arkansas, bringing some temporary relief from a heat wave.
1920	Hurricane 2	22-23 Sep	Remnants moved across the west with three inches of rain in parts of the west and one to three inches of rain in other areas.
1921	Hurricane 1	23 Jun	Remnants moved through eastern Oklahoma causing heavy rainfall in the west.
1923	Hurricane 3	16-17 Oct	Remnants of this storm moved across the east, producing one to three inches of rain.
1926	Hurricane 1 (the "Nassau Hurricane")	30-31 Jul	Originally made landfall along the Florida Atlantic coast, with the remnants traversing eastern Arkansas. One to two inches of rain fell.

Year	Storm/Storm Name	Dates	Description
1931	Tropical Storm 2	16-17 Jul	A dissipating storm reached the southwest but rainfall was less than two inches.
1932	Hurricane 3	02-03 Sep	Remnants moved across far northeast Arkansas, and produced up to 1.5 inches of rain at Helena.
1933	Tropical Storm 4	24-27 Jul	Remnants of the storm moved across northern Louisiana to the Mississippi River. 11 inches of rain fell in the south and east.
1937	Tropical Storm 3	01-02 Sep	Remnants of the system moved across the northeast with moderate to heavy rain in north central sections.
1939	Tropical Storm 1	16 Jun	Dissipated southwest of Helena. There was little appreciable effect in Arkansas.
1940	Hurricane 2	09-10 Aug	Remnants passed through northwest Arkansas. The system produced two to three inch rains across northern Arkansas.
1941	Hurricane 2	24 Sep	Entered southwest Arkansas as a tropical storm, weakened to a depression, and exited northeast Arkansas in under 12 hours. The storm produced high wind and three to four inches of rain, mostly in the north.
1942	Hurricane 1	22 Aug	Remnants of the storm produced one to three inches of rainfall.
1945	Tropical Storm 7	06 Sep	Dissipated over northwest Louisiana, producing generally less than an inch of rain over the state.
	Hurricane 3 (Dog/Easy)	28 Aug	Remnants moved over Oklahoma, but dumped 9-10 inches of rain in the west.
1947	Hurricane 4	20 Sep	Remnants of a major hurricane moved from New Orleans to northeast Texas to northwest Arkansas and caused up to four inches of rain in the state that broke a drought.
1948	Hurricane 5	04-05 Sep	A dissipating tropical storm moved across Mississippi and dropped up to an inch of rain on eastern Arkansas.
1949	Hurricane 10	05 Oct	Dissipating hurricane reached central Arkansas with many places getting four inches of rain or more. The storm originated in the pacific.
1950	Hurricane Baker	31 Aug-01 Sep	Dissipated over the Missouri Bootheel and produced some rainfall in eastern Arkansas.

Year	Storm/Storm Name	Dates	Description
	Hurricane Easy	09 Sep	Dissipated over northeast Arkansas. Produced rainfall generally less than an inch across the northeast.
1955	Tropical Storm 5	29 Aug	Moved through northeast Oklahoma, causing up to two inches of rain in western Arkansas.
1956	Tropical Storm 2	14 Jun	The system moved across the state from southeast to northwest as a depression, and produced up to two inches of rain in the south.
	Hurricane Audrey	27 Jun	Produced strong winds and heavy rain, mainly in the south.
1957	Tropical Storm Bertha	11-13 Aug	Remnants dumped eight to 12 inches of rain in central and western sections and cause some flash flooding.
	Tropical Storm Esther	19 Sep	Dissipated over southeast Arkansas.
1960	Tropical Storm 1	26-27 Jun	As a depression, the system dumped six to eight inches of rain on parts of central and east central Arkansas, and produced a tornado west of Hot Springs.
1961	Hurricane Carla	13 Sep	Remnants moved across northwest Arkansas, producing three to five inches of rain in the north and west.
1965	Hurricane Betsy	10-11 Sep	Remnants of Hurricane Betsy moved across the state with 50 to 70 mile an hour winds, up to six inches of rain in the northeast and general two inch rains in all but the northwest.
1968	Tropical Storm Candy	24-25 Jun	Remnants of tropical storm Candy moved through eastern Oklahoma and dropped one to four inches of rain on the northern half of Arkansas.
1969	Hurricane Camille	18-19 Aug	The storms remnants passed just to the east of Arkansas, with one to three inches of rain in the far northeast and east.
1970	Tropical Storm Felice	17-18 Sep	The remnants of the storm dissipated over eastern Oklahoma, and produced one to three inches of rain across parts of western and central Arkansas.
1973	Tropical Storm Delia	06 Sep	The remnants of the storm produced heavy rains in much of the state.

Year	Storm/Storm Name	Dates	Description
1974	Hurricane Carmen	10 Sep	The remnants produced one to three inches of rain mostly in the west and southwest. The storm dissipated over north Texas.
1978	Tropical Storm Debra	29 Aug	The remnants dissipated over central Arkansas, and produced four to six inches of rain in most areas except the northwest.
1979	Tropical Storm Claudette	27 Jul	The remnants moved across far northwest Arkansas, producing two to four inches of rain mainly in central and western portions.
1982	Tropical Storm Chris	11-13 Sep	Produced a general half inch to inch rainfall as the system dissipated. Over three inches of rain fell at Eudora.
	Hurricane Danny	16 Aug	Remnants moved through far southeast Arkansas, producing one to two-inch rains in parts of the state.
1985	Hurricane Elena	03-04 Sep	Remnants of Elena moved through the state with 8.95 inches of rain at Mountain Home and two to four inches common in central and north central sections. The storm produced flash flooding in portions of Baxter, Van Buren, Cleburne, and Garland Counties. Two feet of water flooded downtown Hot Springs.
	Hurricane Juan	28-30 Oct	The storm stalled off the Louisiana coast and resulted in two to four inches of rain in parts of Arkansas on the 28th. The storm was still stalled along the Louisiana coast on the 30th, and produced another one to two inches of rain over the south.
1986	Hurricane Bonnie	27 Jun	Remnants moved into southern Arkansas and drop 5 to 8 inches of rain in the south and 11 inches at El Dorado.
1987	Tropical Storm 1	10-11 Aug	Remnants passed just south of Arkansas, with generally less than an inch of rain in parts of the south.
1988	Hurricane Florence	10-11 Sep	The system passed southwest of Texarkana, and produced about an inch of rain over parts of southern Arkansas.
	Hurricane Gilbert	18-19 Sep	The remnants passed just northwest of the state, but did produce rainfall in western and parts of central Arkansas.
1989	Hurricane Jerry	16 Oct	The system dissipated over southwest Arkansas. It produced about a quarter inch of rain over parts of the southwest.

Year	Storm/Storm Name	Dates	Description
			Monticello received nearly an inch.
1992	Hurricane Andrew	27 Aug	Remnants of the system passed to the southeast of Arkansas, but managed to produce some heavy rains.
1995	Hurricane Erin	04-05 Aug	The system produced half an inch to an inch of rain, mainly over far eastern and northeast Arkansas. Much of the remainder of the state continued in a severe drought.
1998	Tropical Storm Frances	11-13 Sep	The system stalled out and eventually dissipated over north Texas, but not before producing as much as five to six inches of rain across southern Arkansas, and a general rain over much of the state.
2001	Tropical Storm Barry	07 Aug	The system produced mostly light rain in the state, however, some areas of the northeast saw as much as one to two inches.
2002	Hurricane Lili	03-04 Oct	The storm's remnants traversed eastern Arkansas near the Mississippi River, and produced a general half inch to inch and a half rainfall over the state.
2003	Tropical Storm Grace	01-02 Sep	The storm dissipated over southeast Oklahoma, but its remnants produce four to six inches of rain over northeast Arkansas, with flash flooding in Izard, Sharp, and Stone Counties.
2004	Tropical Storm Matthew	10 Oct	The storm's remnants produced three to five inches of rainfall, with some areas receiving close to eight inches.
2005	Hurricane Dennis	16 Jul	The remnants moved through western Tennessee, producing one to three inches of rain primarily in southwest, central and eastern Arkansas. Over five inches fell west of Benton. Flash flooding occurred in portions of the Little Rock metro area, mainly in Sherwood and Jacksonville.
	Hurricane Katrina	29-30 Aug	One to two inches of rain fell, mainly in eastern Arkansas in areas close to the Mississippi River.
	Hurricane Rita	24 Sep	The storm made landfall along the Texas/Louisiana border, and moved across the south and east, dumping three to five inches of rain, producing 35 to 45 MPH wind gusts, and tornadoes.

Year	Storm/Storm Name	Dates	Description
2008	Hurricane Gustav	02-05 Sep	Remnants of Hurricane Gustav slowly moved through western Arkansas, producing a general four to eight-inch rain over the state, along with flash flooding and river flooding. The system spawned four tornadoes across the state. Bismarck recorded 11.50 inches of rain in 4 days.
	Hurricane Ike	13-14 Sep	Moved into Arkansas as a a high-end tropical storm, then quickly exited the state on the morning of the 14th. The storm produced widespread wind damage, as well as nine tornadoes, and some flash flooding across the west.
2011	Tropical Storm Lee	03-04 Sep	The remnants passed to the southeast of Arkansas, but produced a general one to two-inch rain in the southeast portion of the state.
2012	Hurricane Isaac	30 Aug-01 Sep	Moved slowly through western Arkansas, producing gusty winds, as well as four to ten inches of rain over parts of eastern and southeast Arkansas. The heavy rain caused serious flooding in Pine Bluff, Fordyce, and England. Two tornadoes were spawned in Clay County, with one seriously damaging the Corning airport.
2015	Tropical Storm Bill	16-19 Jun	The remnants produced steady rainfall in portions of northwest and western Arkansas. Four-day totals averaged two to nearly five inches.
	Tropical Storm Cindy	23-24 Jun	Two to four inches of rain fell over southeast Arkansas. Flash flooding was reported near Monticello and near De Witt.
2017	Hurricane Harvey	31 Aug-01 Sep	Six to eight inches of rain fell in portions of eastern Arkansas. Flash Flooding occurred at McCrory, near Des Arc, and De Witt, at Beedeville, Blytheville, and Harrisburg.
	Hurricane I rma	12 Sep	The remnants moved through Tennessee and into the Missouri Bootheel before dissipating. Only light rain fell in Arkansas. Highs in much of the state were only in the 60s due to cooler air being pulled in on the west side of the system.
2018	Tropical Storm Gordon	05-07 Sep	The remnants of Tropical Storm Gordon produced heavy rainfall over portions of the eastern half of Arkansas. Two to four-inch amounts were common, particularly in the Little Rock and Pine Bluff area.

Year	Storm/Storm Name	Dates	Description
2019	Hurricane Barry	13-17 Jul	The remnants of Hurricane Barry slowly moved through Arkansas, with very heavy rain falling from southwest into northeast Arkansas. The heaviest rains were between Arkadelphia and De Queen. Amounts of six to 12 inches were common over portions of Howard, Pike, Clark, Nevada, and Hempstead County. Dierks saw the most rain, however, with 16.17 inches of rain in the 24-hour period ending at 1 PM July 16th.
	Tropical Storm I melda	19-20 Sep	Rainfall amounts of half an inch to two inches were common.
2020	Tropical Storm Cristobal	08-09 Jun	The system made landfall in Louisiana on the 7 <sup>th</sup> and continued northward into Arkansas on the 8 <sup>th</sup> . It brought widespread downpours and northeast winds gusting from 30 to 40 mph in places, and set record June low pressures at Pine Bluff and North Little Rock.
	Hurricane Laura	27-28 Aug	Laura made landfall in southwest Louisiana on August 27 <sup>th</sup> . It move into southwest Arkansas that evening, then turned and shifted northeast of the state on Friday. Tropical Storm force winds were noted in a large part of the state, with the highest gusts above 50 MPH at Pine Bluff and El Dorado. Two to four inch rains were common over central and eastern portions of the state. Also, eight tornadoes were spawned.
	Tropical Storm Beta	Sep. 22-24	Beta came ashore in coastal Texas and shifted through northern Louisiana and into Mississippi. The biggest effect on Arkansas was heavy rainfall of mainly two to four inches over the southern half of the state.
	Hurricane Delta	Oct. 9-10	Delta made landfall in southwest Louisiana and shifted across northern Louisiana into western Mississippi. However, winds gusted over 45 MPH in southeast Arkansas, and two to four-inch rains were common over the southeast portions of the state.