



ARIZONA STATE  
CLIMATE OFFICE

# Arizona Climate Summary

## Summary of conditions for August 2024

### August 2024 Summary

This August ranked as the 4th warmest for Arizona and was within the top 5 warmest for Apache, Coconino, Graham, Greenlee, La Paz, Maricopa, Navajo, Yavapai, and Yuma counties. Even though strong to severe thunderstorms continued in some areas through the month, August ranked as the 37th driest on record with a statewide average of 1.62 inches of precipitation.

On August 1, San Manuel received 0.79 inches of precipitation, Flagstaff received 0.74 inches of precipitation, Prescott received 0.63 inches of precipitation, Nogales received 0.07 inches of precipitation, and Yuma Proving Ground received 0.03 inches of precipitation. Dime-sized hail (0.70 inches in diameter) was estimated near Nogales, while thunderstorms near Saint Johns resulted in a 2.03 foot rise in a nearby USGS river gauge on the Little Colorado River. On August 2, Springerville received 1.05 inches of precipitation, Walnut Creek received 0.65 inches of precipitation, Kingman received 0.03 inches of precipitation, and McNeal received 0.02 inches of precipitation. A trained storm spotter near Marana observed 0.87 inches of rain that fell in 20 minutes. Tree damage was reported near Tucson (where mobile homes were also damaged) and Marana.

A ridge of high pressure over the Southwest brought above normal temperatures from August 3-6. Some locations experienced record-breaking temperatures, including Tacna (120°F on August 3, previous record 118°F set in 2021 and 2019), Carefree (113°F on August 4, previous record 112°F set in 1969), Yuma Proving Ground (a record high minimum temperature of 90°F on August 5, previous record 89°F set in 1986), and Kingman (107°F on August 6, previous record 104°F set in 2018).

Locations that received rainfall on August 3 include San Manuel (0.80 inches), Apache Junction and East Mesa (0.14 inches), and Springerville (0.10 inches). Penny-sized hail (0.75 inches in diameter) was estimated in Nogales, and two trees fell and damaged two roofs east of Sierra Vista. Cruff Wash, located south of Agua Caliente Road in Maricopa County, reached alarm stage at 7:52pm, then crested at bankfull 23 minutes later.

On August 4, Bright Angel received 0.90 inches of precipitation, and the Grand Canyon received 0.48 inches of precipitation. Heavy rainfall near Munds Park led to a 2 foot rise on a USGS stream gauge on Oak Creek in 15 minutes. On August 5, Bisbee-Douglas received 0.14 inches of precipitation, and Robson Ranch received 0.08 inches of precipitation.

Quarter-sized hail (1.00 inch in diameter) was measured southeast of Pine on August 6, while nickel-sized hail (0.88 inches in diameter) was measured southwest of Oro Valley. A wind gust of 75 mph was recorded at Nogales International Airport due to a nearby thunderstorm. Dust storms were observed southeast of Eloy (quarter mile visibility), east-northeast of Arizona City (less than quarter mile visibility), and southeast of Ak-Chin Village (300 foot visibility). A severe downburst occurred in Scottsdale with estimated peak wind gusts of 60-70+ mph, which uprooted several large trees near the intersection of East Via de Ventura and Hayden Road. These trees damaged vehicles and obstructed roads that were surrounding the Avia McCormick Ranch Apartment Complex.

Dr. Erinanne Saffell,  
Arizona State Climatologist  
Juliana Likourinou, Author  
<http://azclimate.asu.edu>  
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In addition, one of the trees fell onto the roof of the apartment side structure. Some residents were trapped in their apartments and were evacuated by the Scottsdale Fire Department. About 30 trees were also uprooted at the McCormick Ranch Golf Club.

On August 7, golf ball-sized hail (1.75 inches in diameter) was estimated near Crown King, and dime-sized hail (0.70 inches in diameter) was estimated north of the Prescott Courthouse. An 81 mph wind gust was measured at Embry-Riddle Aeronautical University in Prescott due to a wet microburst, which led to downed trees and power outages. Other areas that recorded precipitation include Anvil Ranch (0.83 inches), Saint Johns (0.52 inches), and Robson Ranch (0.12 inches). On August 8, a 70 mph wind gust was measured at Tucson International Airport along with 0.91 inches of precipitation. Downed trees and a downed power pole were also reported in areas nearby. On August 9, San Manuel received 1.28 inches of precipitation, Springerville received 0.65 inches of precipitation, and Carefree received 0.62 inches of precipitation.

Some areas that measured rainfall on August 10 include Walnut Creek (0.32 inches) and Anvil Ranch (0.15 inches). The National Weather Service in Flagstaff issued a Tornado Warning for Yavapai County due to a tornadic thunderstorm that was located 25 miles south of Camp Verde, moving northwest at 10 mph. The last time NWS Flagstaff issued a Tornado Warning in August was in 2015. Multiple homes were flooded in Cornville, with one having damage to roof shingles and a window screen. Wind damage occurred in the Quartzsite area, resulting in downed/snapped trees, flipped RVs, and damage to structures. The porch roof on the western side of the Arizona Sun RV Park community building was ripped off, and one or more power poles fell southwest of Wenden, leading to a power outage. Yucca also had reports of wind damage, where a trailer was significantly damaged, a roof and shed were destroyed, and an RV was flipped over.

On August 11, Bright Angel received 0.53 inches of precipitation, Window Rock received 0.32 inches of precipitation, and Kingman received 0.14 inches of precipitation. An underpass between Farm Road and Fleet Street under I-15 in Mohave County flooded with 8 to 10 feet of water and became obstructed. On August 12, Springerville received 1.97 inches of precipitation, Teec Nos Pos received 0.60 inches of precipitation, and Coronado National Memorial received 0.20 inches of precipitation. Dime-sized hail (0.70 inches in diameter) was measured north of Prescott Valley, a storm spotter near Washington Park observed 2 inches of rain that fell in about 45 minutes, and 2 people near the Horseshoe Bend Overlook were injured by lightning.

Coronado National Memorial received 0.50 inches of precipitation, Winslow and Pinnacle Peak received 0.32 inches of precipitation, and Show Low received 0.30 inches of precipitation on August 13. On August 14, Window Rock received 0.28 inches of precipitation and Coronado National Memorial received 0.16 inches of precipitation. Thunderstorms upstream of the USGS stream gauge on the Paria River at Lees Ferry resulted in a 2.2 foot rise in 30 minutes with a peak flow of 1095 cfs.

The National Weather Service in Tucson issued a Tornado Warning on August 16 for south central Pima County due to a tornadic thunderstorm that was located 12 miles northwest of Arivaca, moving northwest at 20 mph. Another tornadic thunderstorm occurred near Dragoon that day, which prompted the NWS Tucson office to issue a Tornado Warning for west central Cochise County. On August 17, Saint Johns received 0.54 inches of precipitation, Bisbee-Douglas received 0.33 inches of precipitation, and Page received 0.17 inches of precipitation.

On August 18, East Mesa received 0.59 inches of precipitation, Winslow received 0.17 inches of precipitation, Picacho received 0.12 inches of precipitation, and Phoenix received 0.10 inches of precipitation. Several downed trees were reported in the Fountain Park area, located in Fountain Hills, and 100-150 downed trees were observed throughout the TPC Scottsdale Golf Course. On August 19, quarter-sized hail (1.00 inch in diameter) was estimated near Tucson, and some areas that received precipitation include Alpine (0.55 inches), Coronado National Memorial (0.11 inches), and Tolleson (0.07 inches).

On August 20, Nogales received 0.17 inches of precipitation and Phantom Ranch received 0.06 inches of precipitation. On August 21, Flagstaff received 0.62 inches of precipitation, Picacho received 0.31 inches of precipitation, and Robson Ranch received 0.08 inches of precipitation. A USGS gauge at Truxton Canyon near Valentine measured a 7 foot rise in the wash. Quarter-sized hail (1.00 inch in diameter) was recorded west of Chino Valley, half dollar-sized hail (1.25 inches in diameter) accumulated west-northwest of Tucson, and ping pong ball-sized hail (1.50 inches in diameter) accumulated northwest of Willcox, causing damage to a car and its windshield. The National Weather Service in Tucson issued a Tornado Warning for southern Graham County and north central Cochise County due to a tornadic thunderstorm that was located 8 miles northwest of Willcox, moving northwest at 15 mph. This was the 3rd Tornado Warning that was issued by NWS Tucson this month, which is the greatest number of August tornado warnings issued by that office since 1993. North of Benson, a storm chaser live-streamed a video of a tornado on a mountain. Its rating, peak wind, and length/width are unknown. There were no injuries or fatalities.

A series of storms in Pinal County on August 22 produced an outflow boundary that traveled to Phoenix's East Valley and triggered a dust storm, which caused the visibility to drop to a quarter of a mile in areas east of Phoenix Mesa Gateway and west of East Mesa. Shortly after, a thunderstorm over Phoenix Sky Harbor produced a downburst, bringing peak wind gusts of 64 mph. Phoenix received 0.24 inches of precipitation, while Tempe received 0.70 inches of precipitation. Then, the thunderstorm traveled to north Tempe and Scottsdale and brought another downburst, leading to fallen power lines and many uprooted trees (one of which fell onto Indian School Road and another fell onto a house and damaged its roof). A rain gauge from the Flood Control District of Maricopa County recorded 1.89 inches of precipitation at Indian Bend Wash, resulting in flowing water in the wash. A storm spotter near Hayden and Chaparral roads observed 0.54 inches of rain that fell in 30 minutes. Ahwatukee Foothills also experienced a downburst from a different thunderstorm, which brought marble-sized hail (0.50 inches in diameter). Downed trees near Guadalupe caused vehicle damage, while an uprooted tree destroyed a concrete brick wall and fell onto Ray Road. A storm spotter near 48th Street and Elliot Road observed 0.50 inches of rain that fell in 10 minutes. In addition, monsoon rains caused catastrophic flash flooding in Supai and Havasupai Falls. Hundreds of hikers were stranded and rescued via helicopter by the Arizona National Guard. One person was swept away in the flash flood, and their body was recovered three days later. According to the Havasupai Tribal Council, the trails and falls were impassable, and there was extensive damage to the campground. Because of that, Havasupai was closed to tourists through September 30.

On August 23, Bright Angel received 0.78 inches of precipitation, Picacho received 0.60 inches of precipitation, and Apache Junction received 0.30 inches of precipitation. Heavy rainfall in Utah led to the USGS gauge on the Paria River at Lees Ferry to record a peak stage height of 12.09 feet and a peak discharge of 4,289 cfs. Southwest of Oracle, a storm spotter reported 0.50 inches of rain that fell in 18 minutes. Nickel-sized hail (0.88 inches in diameter) was measured west of Huachuca City, and quarter-sized hail (1.00 inch in diameter) was measured west of Tucson. There were also multiple reports of downed tree branches southwest of Oro Valley.

Showers continued through the end of the month. Locations that received rainfall include Bisbee-Douglas (0.44 inches on the 25th), Teec Nos Pos (0.25 inches on the 26th), Alpine (0.21 inches on the 27th), San Simon (0.92 inches on the 28th), Natural Bridge State Park (0.31 inches on the 29th), Saint Johns (0.13 inches on the 30th), and the Grand Canyon (0.22 inches on the 31st).

**Data are preliminary** and are from NOAA/NCEI, the Northeast Regional Climate Center, the Southeast Regional Climate Center, and the National Weather Service Forecast Offices in Flagstaff, Phoenix, Tucson, and Las Vegas.

Note: Weather stations across the state have different reporting times. Official daily temperature and precipitation values are recorded at the airports from midnight to midnight, while statewide observations are taken at varying times throughout the day.

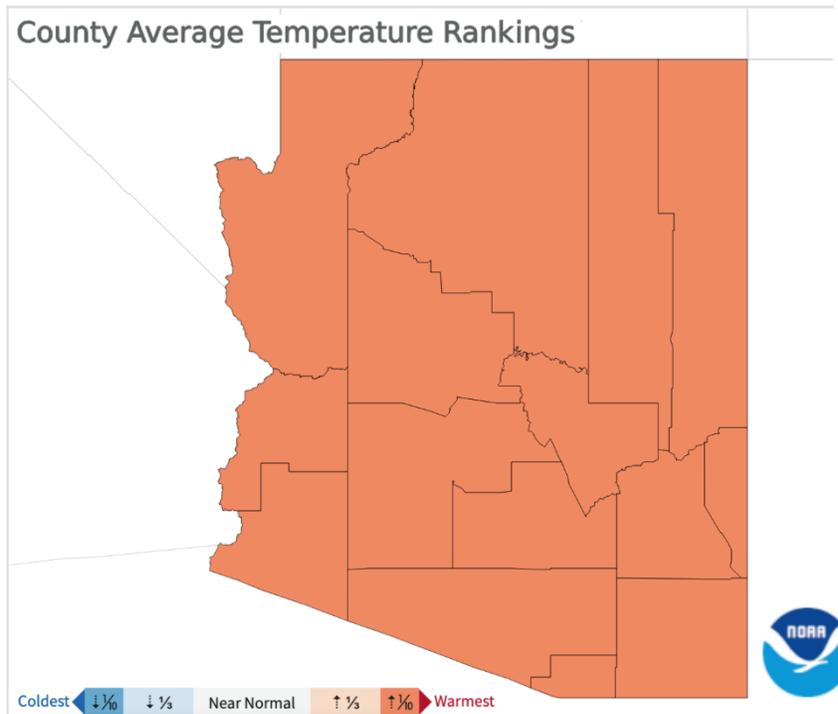
Dr. Erinanne Saffell,  
Arizona State Climatologist  
Juliana Likourinou, Author  
<http://azclimate.asu.edu>  
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Statewide Average, Maximum, Minimum Temperature and Total Precipitation, per County

August 2024



The average state temperature for August was 81.5°F, ranking as the 4<sup>th</sup> warmest August within the period of record. The 1895-2024 mean average state temperature for August was 78.1°F, resulting in an anomaly of +3.4°F.

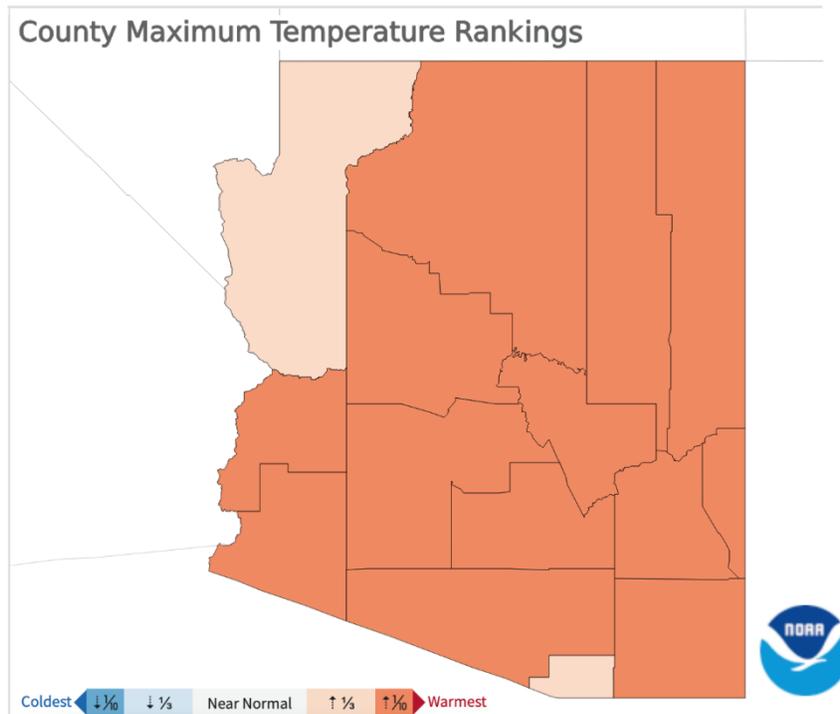
County	Average Temperature	Rank (130 Years)	Anomaly From the 1895-2024 mean
Apache	72.2°F	3 <sup>rd</sup> warmest	+2.9°F
Cochise	79.0°F	7 <sup>th</sup> warmest	+2.9°F
Coconino	74.7°F	4 <sup>th</sup> warmest	+3.2°F
Gila	79.8°F	6 <sup>th</sup> warmest	+3.5°F
Graham	80.4°F	5 <sup>th</sup> warmest	+3.1°F
Greenlee	76.0°F	4 <sup>th</sup> warmest	+3.4°F
La Paz	94.4°F	4 <sup>th</sup> warmest	+4.1°F
Maricopa	92.9°F	3 <sup>rd</sup> warmest	+4.8°F
Mohave	84.3°F	7 <sup>th</sup> warmest	+2.9°F
Navajo	74.5°F	4 <sup>th</sup> warmest	+3.2°F
Pima	86.2°F	10 <sup>th</sup> warmest	+2.8°F
Pinal	89.2°F	7 <sup>th</sup> warmest	+3.5°F
Santa Cruz	77.3°F	11 <sup>th</sup> warmest	+2.8°F
Yavapai	80.2°F	4 <sup>th</sup> warmest	+3.7°F
Yuma	95.0°F	3 <sup>rd</sup> warmest	+4.8°F

Period of record: 1895-2024

Data are from the National Centers for Environmental Information and are preliminary.

Statewide Average, Maximum, Minimum Temperature and Total Precipitation, per County

August 2024



The average maximum state temperature for August was 95.2°F, ranking as the 5<sup>th</sup> warmest August within the period of record. The 1895-2024 mean maximum state temperature for August was 91.6°F, resulting in an anomaly of +3.6°F.

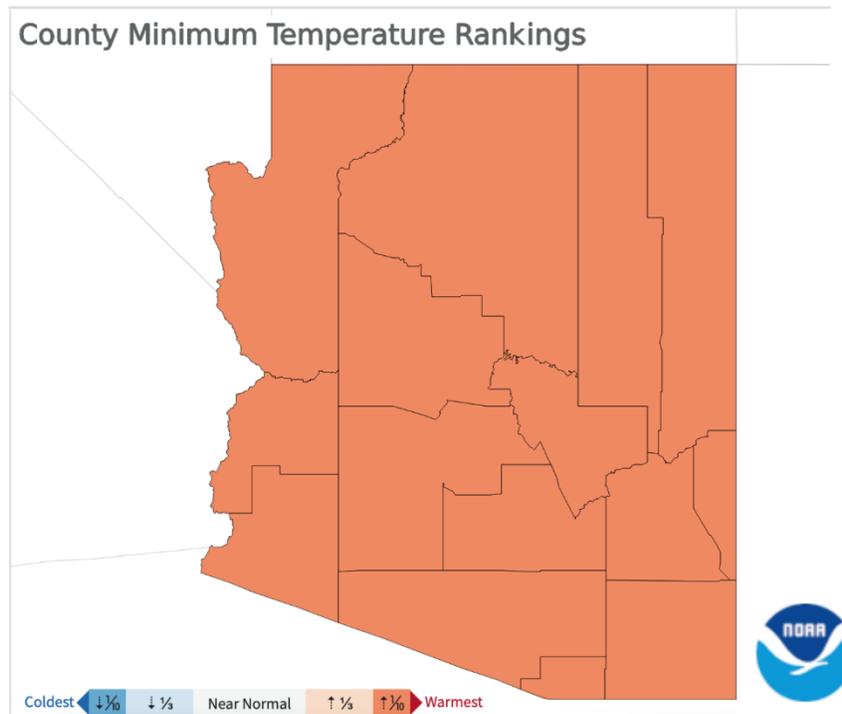
County	Maximum Temperature	Rank (130 Years)	Anomaly From the 1895-2024 mean
Apache	86.5°F	5 <sup>th</sup> warmest	+3.4°F
Cochise	92.4°F	9 <sup>th</sup> warmest	+3.5°F
Coconino	89.2°F	8 <sup>th</sup> warmest	+3.4°F
Gila	93.6°F	8 <sup>th</sup> warmest	+4.0°F
Graham	93.4°F	6 <sup>th</sup> warmest	+3.7°F
Greenlee	89.2°F	5 <sup>th</sup> warmest	+4.2°F
La Paz	106.8°F	7 <sup>th</sup> warmest	+3.5°F
Maricopa	105.9°F	4 <sup>th</sup> warmest	+4.7°F
Mohave	96.8°F	17 <sup>th</sup> warmest	+2.3°F
Navajo	89.3°F	5 <sup>th</sup> warmest	+3.9°F
Pima	99.9°F	10 <sup>th</sup> warmest	+3.4°F
Pinal	102.2°F	10 <sup>th</sup> warmest	+3.8°F
Santa Cruz	89.9°F	15 <sup>th</sup> warmest	+3.0°F
Yavapai	94.0°F	9 <sup>th</sup> warmest	+3.6°F
Yuma	109.2°F	2 <sup>nd</sup> warmest	+5.6°F

Period of record: 1895-2024

Data are from the National Centers for Environmental Information and are preliminary.

Statewide Average, Maximum, Minimum Temperature and Total Precipitation, per County

August 2024



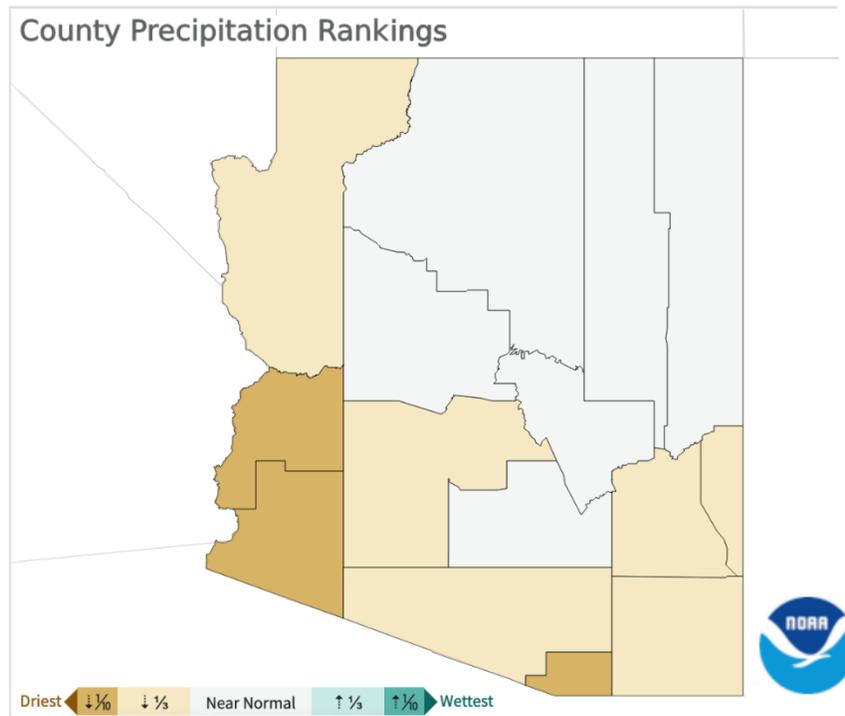
The average minimum state temperature for August was 67.8°F, ranking as the 4<sup>th</sup> warmest August within the period of record. The 1895-2024 mean minimum state temperature for August was 64.7°F, resulting in an anomaly of +3.1°F.

County	Minimum Temperature	Rank (130 Years)	Anomaly From the 1895-2024 mean
Apache	58.0°F	6 <sup>th</sup> warmest	+2.5°F
Cochise	65.6°F	6 <sup>th</sup> warmest	+2.4°F
Coconino	60.2°F	4 <sup>th</sup> warmest	+3.0°F
Gila	65.9°F	9 <sup>th</sup> warmest	+2.8°F
Graham	67.3°F	10 <sup>th</sup> warmest	+2.4°F
Greenlee	62.6°F	10 <sup>th</sup> warmest	+2.5°F
La Paz	81.9°F	2 <sup>nd</sup> warmest	+4.7°F
Maricopa	79.8°F	3 <sup>rd</sup> warmest	+4.8°F
Mohave	71.7°F	4 <sup>th</sup> warmest	+3.4°F
Navajo	59.8°F	6 <sup>th</sup> warmest	+2.5°F
Pima	72.5°F	11 <sup>th</sup> warmest	+2.2°F
Pinal	76.1°F	7 <sup>th</sup> warmest	+3.2°F
Santa Cruz	64.7°F	5 <sup>th</sup> warmest	+2.5°F
Yavapai	66.3°F	2 <sup>nd</sup> warmest	+3.8°F
Yuma	80.8°F	7 <sup>th</sup> warmest	+4.0°F

Period of record: 1895-2024

Statewide Average, Maximum, Minimum Temperature and Total Precipitation, per County

August 2024



The average state precipitation for August was 1.62 inches, ranking as the 37<sup>th</sup> driest August within the period of record. The 1895-2024 mean state precipitation for August was 2.04 inches, resulting in an anomaly of -0.42 inches.

County	Precipitation	Rank (130 Years)	Anomaly From the 1895-2024 mean
Apache	1.91''	63 <sup>rd</sup> driest	-0.17''
Cochise	2.62''	40 <sup>th</sup> driest	-0.52''
Coconino	2.12''	59 <sup>th</sup> wettest	+0.11''
Gila	3.00''	58 <sup>th</sup> wettest	0.00''
Graham	2.08''	40 <sup>th</sup> driest	-0.59''
Greenlee	2.44''	43 <sup>rd</sup> driest	-0.50''
La Paz	0.16''	12 <sup>th</sup> driest	-0.85''
Maricopa	0.61''	18 <sup>th</sup> driest	-0.80''
Mohave	0.81''	31 <sup>st</sup> driest	-0.67''
Navajo	1.79''	59 <sup>th</sup> driest	-0.16''
Pima	1.72''	24 <sup>th</sup> driest	-0.77''
Pinal	1.61''	53 <sup>rd</sup> driest	-0.38''
Santa Cruz	2.08''	10 <sup>th</sup> driest	-1.90''
Yavapai	1.95''	45 <sup>th</sup> driest	-0.54''
Yuma	0.10''	12 <sup>th</sup> driest	-0.69''

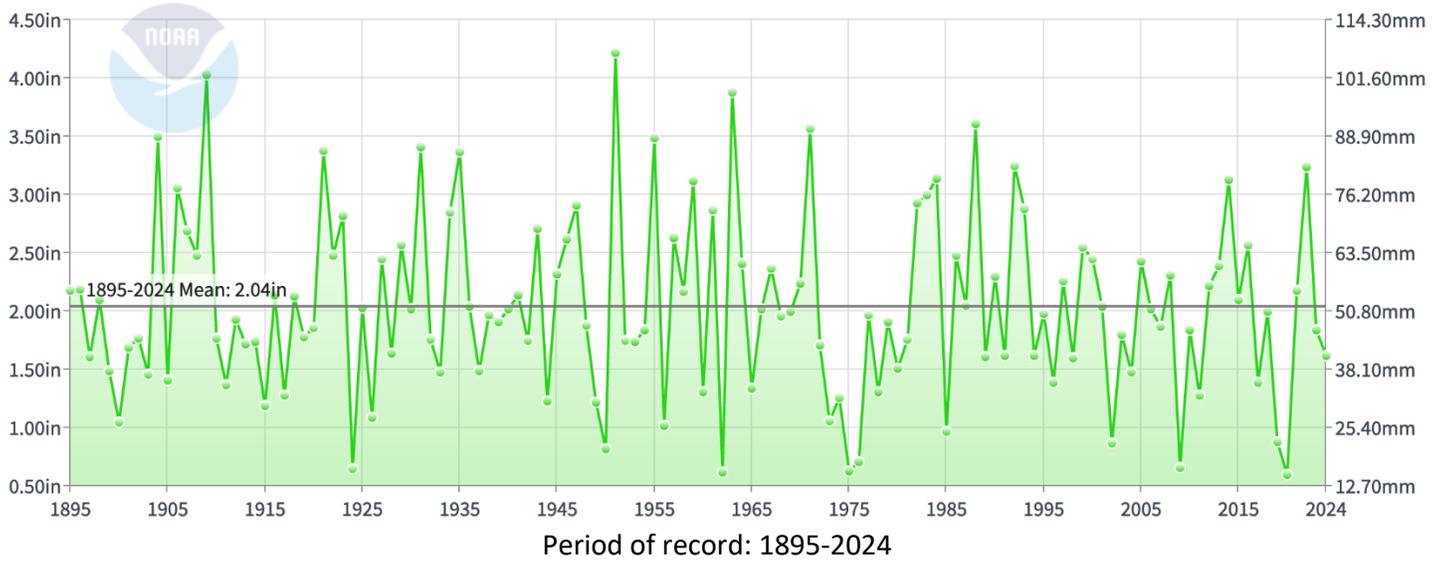
Period of record: 1895-2024

Data are from the National Centers for Environmental Information and are preliminary.

## August Statewide Precipitation (1895 to date)

### Arizona Precipitation

August



This chart shows average Arizona precipitation each August through the period of record (1895 to present). August 2024 ranked as the 37<sup>th</sup> driest with an average of 1.62 inches, which is 0.42 inches below the 1895-2024 average of 2.04 inches.

## Flagstaff Climate Statistics

August 2024

This ranked as the 2<sup>nd</sup> warmest August on record (9/10/1898 to present). With 2.69 inches of precipitation, it ranked as the 59<sup>th</sup> driest August on record.

Avg Max Temp: 81.7°F Normal: 79.3°F  
Avg Min Temp: 54.4°F Normal: 50.6°F  
Avg Mean Temp: 68.1°F Normal: 64.9°F

Highest Monthly Avg Temp: 68.8°F in 2020  
Lowest Monthly Avg Temp: 59.5°F in 1968

Highest Temp this month: 91°F on 1<sup>st</sup>  
Lowest Temp this month: 44°F on 26<sup>th</sup>

Record High: 93°F on 8/2/1902  
Record Low: 24°F on 8/23/1968

Temperature or precipitation records this month:  
HiMin: 59°F on 8/11/2024,  
previous record 57°F on 8/11/2020 and 2 other years

HiMin: 58°F on 8/17/2024,  
previous record 57°F on 8/17/2022, 8/17/1945

HiMin: 57°F on 8/18/2024,  
tying the record set on 8/18/2012 and 2 other years

HiMin: 57°F on 8/19/2024,  
tying the record set on 8/19/2023 and 2 other years

HiMin: 57°F on 8/28/2024,  
previous record 56°F on 8/28/1967, 8/28/1909

Flagstaff Number of Days of:  
Minimum Temp 32°F or lower 0  
Minimum Temp 0°F or lower 0  
Maximum Temp 90°F or higher 1  
Maximum Temp 32°F or lower 0

Heating Degree Days: 5 Normal: 44  
Cooling Degree Days: 107 Normal: 43  
Degree base 65°F

Total August Precipitation: 2.69"  
Normal August Precipitation: 3.04"  
Departure from Normal: -0.35"  
Greatest 24-Hr Precip: 0.74" on 1<sup>st</sup>

Total Precipitation Year-to-Date: 15.44"  
Departure from Normal: +1.73"  
Total Precip Year-to-Date (Last Year): 21.83"

Greatest August Precipitation: 8.77" in 1904  
Least August Precipitation: 0.26" in 1962

Number of Days:  
Clear 19  
Partly Cloudy 12  
Cloudy 0

Average Wind Speed: 4.9 mph  
Highest Peak Gust: 40 mph from 80° on 1<sup>st</sup>  
40 mph from 220° on 23<sup>rd</sup>

Data are from NOAA, the Northeast Regional Climate Center, and the Southeast Regional Climate Center and are **preliminary**.

Normals on this page are from 1991-2020

# AUGUST 2024 FLAGSTAFF

AVERAGE DAILY TEMPERATURE

**ABOVE**

**AVERAGE**

**BELOW**

+/- 0.5°F

S	M	T	W	Th	F	S
				<b>1</b>	<b>2</b>	<b>3</b>
<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>
<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>	<b>16</b>	<b>17</b>
<b>18</b>	<b>19</b>	<b>20</b>	<b>21</b>	<b>22</b>	<b>23</b>	<b>24</b>
<b>25</b>	<b>26</b>	<b>27</b>	<b>28</b>	<b>29</b>	<b>30</b>	<b>31</b>

\*Data are from the National Weather Service office in Flagstaff and are preliminary.

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Flagstaff recorded 24 days of above average temperatures, 6 days of average temperatures, and 1 day of below average temperatures this month.

## Phoenix Climate Statistics

August 2024

This ranked as the 3<sup>rd</sup> warmest August on record (8/6/1895 to present). With 0.35 inches of precipitation, it ranked as the 35<sup>th</sup> driest August on record.

Avg Max Temp: 109.4°F Normal: 105.1°F  
Avg Min Temp: 88.1°F Normal: 83.6°F  
Avg Mean Temp: 98.7°F Normal: 94.4°F

Highest Monthly Avg Temp: 99.1°F in 2020  
Lowest Monthly Avg Temp: 84.6°F in 1918

Highest Temp this month: 116°F on 3<sup>rd</sup>, 4<sup>th</sup>  
Lowest Temp this month: 79°F on 18<sup>th</sup>

Record High: 117°F on 8/14/2020, 8/14/2015,  
8/26/2011  
Record Low: 58°F on 8/20/1917

Temperature or precipitation records this month:  
HiMax: 116°F on 8/3/2024,  
previous record 114°F on 8/3/2020 and 2 other years

HiMax: 116°F on 8/4/2024,  
tying the record set on 8/4/1975

HiMin: 93°F on 8/2/2024,  
tying the record set on 8/2/2023, 8/2/2020

HiMin: 92°F on 8/3/2024,  
tying the record set on 8/3/2023

HiMin: 93°F on 8/4/2024,  
previous record 91°F on 8/4/2018

HiMin: 93°F on 8/10/2024,  
previous record 92°F on 8/10/1995

HiMin: 93°F on 8/17/2024,  
tying the record set on 8/17/2023

HiMin: 92°F on 8/20/2024,  
previous record 90°F on 8/20/2018

### Phoenix Number of Days of:

Minimum Temp 32°F or lower	0
Minimum Temp 0°F or lower	0
Maximum Temp 90°F or higher	31
Maximum Temp 32°F or lower	0

Heating Degree Days:	0	Normal:	0
Cooling Degree Days:	1053	Normal:	910

Degree base 65°F

Total August Precipitation:	0.35''
Normal August Precipitation:	0.93''
Departure from Normal:	-0.58''
Greatest 24-Hr Precip:	0.24'' on 22 <sup>nd</sup>

Total Precipitation Year-to-Date:	4.54''
Departure from Normal:	-0.24''
Total Precip Year-to-Date (Last Year):	3.00''

Greatest August Precipitation:	5.33'' in 1951
Least August Precipitation:	0.00'' in 2002 and 2 other years

### Number of Days:

Clear	7
Partly Cloudy	24
Cloudy	0

Average Wind Speed:	7.4 mph
Highest Peak Gust:	65 mph from 360° on 22 <sup>nd</sup>

Data are from NOAA, the Northeast Regional Climate Center, and the Southeast Regional Climate Center and are **preliminary**.

Normals on this page are from 1991-2020

# AUGUST 2024 PHOENIX

AVERAGE DAILY TEMPERATURE

**ABOVE**

**AVERAGE**

**BELOW**

+/- 0.5°F

S	M	T	W	Th	F	S
				<b>1</b>	<b>2</b>	<b>3</b>
<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>
<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>	<b>16</b>	<b>17</b>
<b>18</b>	<b>19</b>	<b>20</b>	<b>21</b>	<b>22</b>	<b>23</b>	<b>24</b>
<b>25</b>	<b>26</b>	<b>27</b>	<b>28</b>	<b>29</b>	<b>30</b>	<b>31</b>

\*Data are from the National Weather Service office in Phoenix and are preliminary.

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This month, Phoenix measured 29 days of above average temperatures and 2 days of below average temperatures.

## Tucson Climate Statistics

August 2024

This ranked as the 6<sup>th</sup> warmest August on record (9/1/1894 to present). With 1.20 inches of precipitation, it ranked as the 33<sup>rd</sup> driest August on record.

Avg Max Temp: 101.2°F Normal: 98.6°F  
Avg Min Temp: 76.9°F Normal: 75.2°F  
Avg Mean Temp: 89.0°F Normal: 86.9°F

Highest Monthly Avg Temp: 92°F in 2020  
Lowest Monthly Avg Temp: 80.8°F in 1923

Highest Temp this month: 108°F on 3<sup>rd</sup>  
Lowest Temp this month: 70°F on 21<sup>st</sup>

Record High: 112°F on 8/1/1993  
Record Low: 55°F on 8/20/1917

Temperature or precipitation records this month:  
HiMin: 83°F on 8/10/2024,  
tying the record set on 8/10/1915

HiMin: 80°F on 8/17/2024,  
tying the record set on 8/17/2020 and 2 other years

Tucson Number of Days of:  
Minimum Temp 32°F or lower 0  
Minimum Temp 0°F or lower 0  
Maximum Temp 90°F or higher 31  
Maximum Temp 32°F or lower 0

Heating Degree Days: 0 Normal: 0  
Cooling Degree Days: 752 Normal: 679  
Degree base 65°F

Total August Precipitation: 1.20''  
Normal August Precipitation: 1.98''  
Departure from Normal: -0.78''  
Greatest 24-Hr Precip: 0.91'' on 8<sup>th</sup>

Total Precipitation Year-to-Date: 10.97''  
Departure from Normal: +3.87''  
Total Precip Year-to-Date (Last Year): 7.93''

Greatest August Precipitation: 7.93'' in 1955  
Least August Precipitation: 0.08'' in 1924

Number of Days:  
Clear 26  
Partly Cloudy 0  
Cloudy 5

Average Wind Speed: 6.8 mph  
Highest Peak Gust: 70 mph from 180° on 8<sup>th</sup>

Data are from NOAA, the Northeast Regional Climate Center, and the Southeast Regional Climate Center and are **preliminary**.

Normals on this page are from 1991-2020

# AUGUST 2024 TUCSON

AVERAGE DAILY TEMPERATURE

**ABOVE**

**AVERAGE**

**BELOW**

+/- 0.5°F

S	M	T	W	Th	F	S
				<b>1</b>	<b>2</b>	<b>3</b>
<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>	<b>10</b>
<b>11</b>	<b>12</b>	<b>13</b>	<b>14</b>	<b>15</b>	<b>16</b>	<b>17</b>
<b>18</b>	<b>19</b>	<b>20</b>	<b>21</b>	<b>22</b>	<b>23</b>	<b>24</b>
<b>25</b>	<b>26</b>	<b>27</b>	<b>28</b>	<b>29</b>	<b>30</b>	<b>31</b>

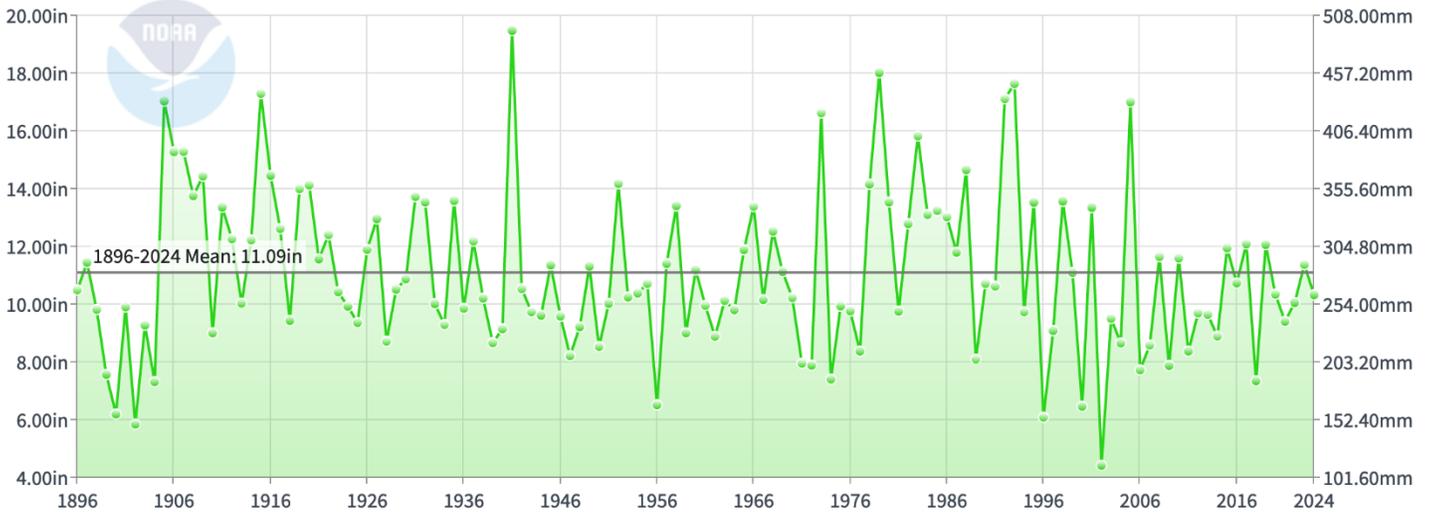
\*Data are from the National Weather Service office in Tucson and are preliminary.

@AZStateClimate

Tucson experienced 24 days of above average temperatures, 3 days of average temperatures, and 4 days of below average temperatures this month.

## Cumulative Statewide Precipitation per Water Year (Oct 2023-Sept 2024)

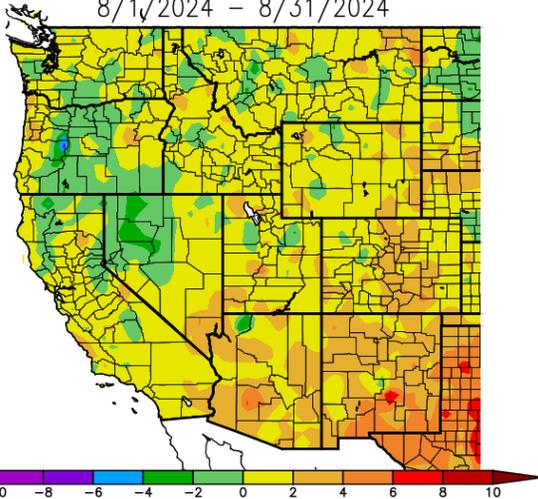
### Arizona Precipitation October-August



The average state cumulative Water Year precipitation was 10.34 inches at the end of August, which is 0.75 inches below the October-August average of 11.09 inches.

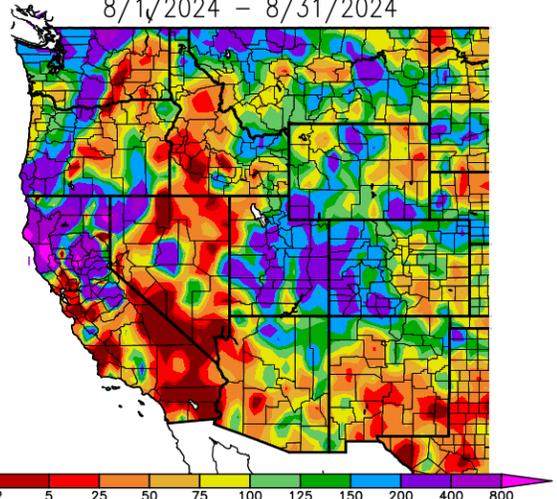
Data are from the National Centers for Environmental Information and are preliminary.

Ave. Temperature dep from Ave (deg F)  
8/1/2024 – 8/31/2024



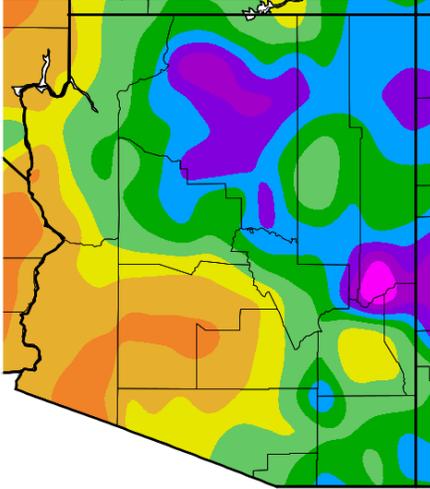
Generated 9/ 1/2024 at WRCC using provisional data.  
NOAA Regional Climate Centers

Percent of Average Precipitation (%)  
8/1/2024 – 8/31/2024



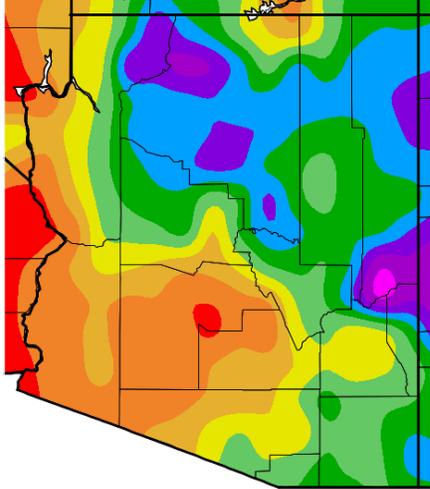
Generated 9/ 1/2024 at WRCC using provisional data.  
NOAA Regional Climate Centers

Av. Max. Temperature (deg. F)  
8/1/2024 - 8/31/2024



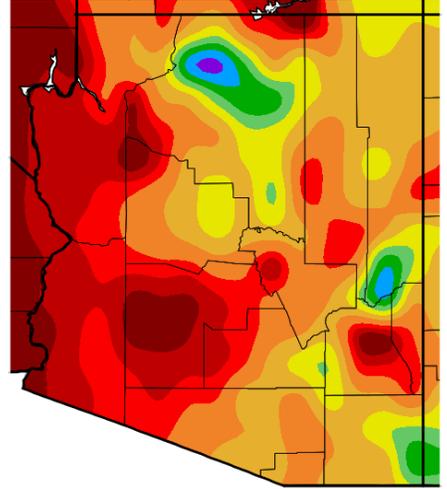
75 80 85 90 95 100 105 110 115 120 125  
Generated 9/1/2024 at WRCC using provisional data.  
NOAA Regional Climate Centers

Av. Min. Temperature (deg. F)  
8/1/2024 - 8/31/2024



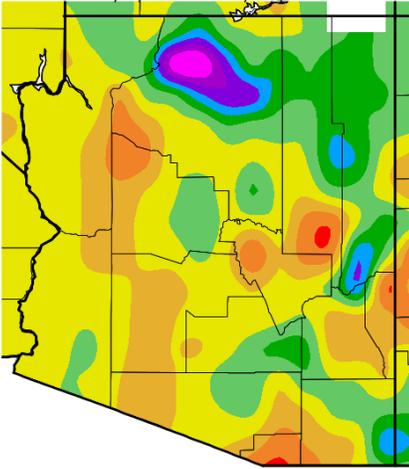
45 50 55 60 65 70 75 80 85 90 95  
Generated 9/1/2024 at WRCC using provisional data.  
NOAA Regional Climate Centers

Total Precipitation (in.)  
8/1/2024 - 8/31/2024



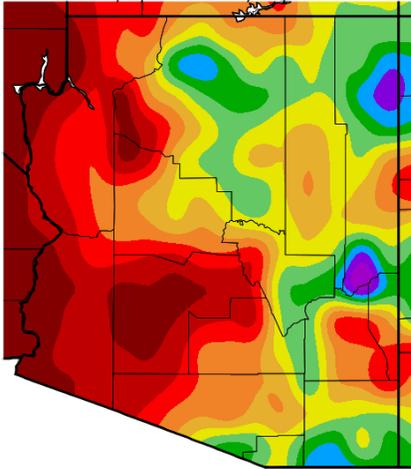
0.1 0.5 1 2 3 4 5 6 7 8 9  
Generated 9/1/2024 at WRCC using provisional data.  
NOAA Regional Climate Centers

Precipitation Departure from Average (in.)  
8/1/2024 - 8/31/2024



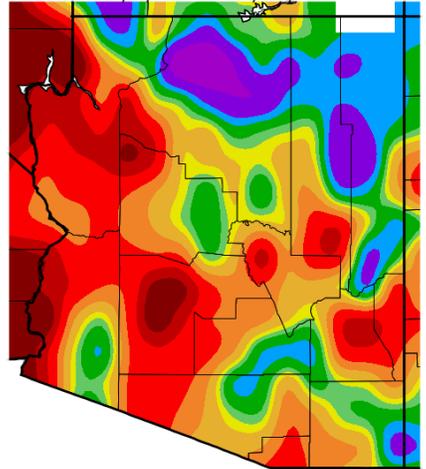
-3.75 -3 -2.25 -1.5 -0.75 0 0.75 1.5 2.25 3 3.75  
Generated 9/1/2024 at WRCC using provisional data.  
NOAA Regional Climate Centers

Precipitation # Days > 0.01"  
8/1/2024 - 8/31/2024



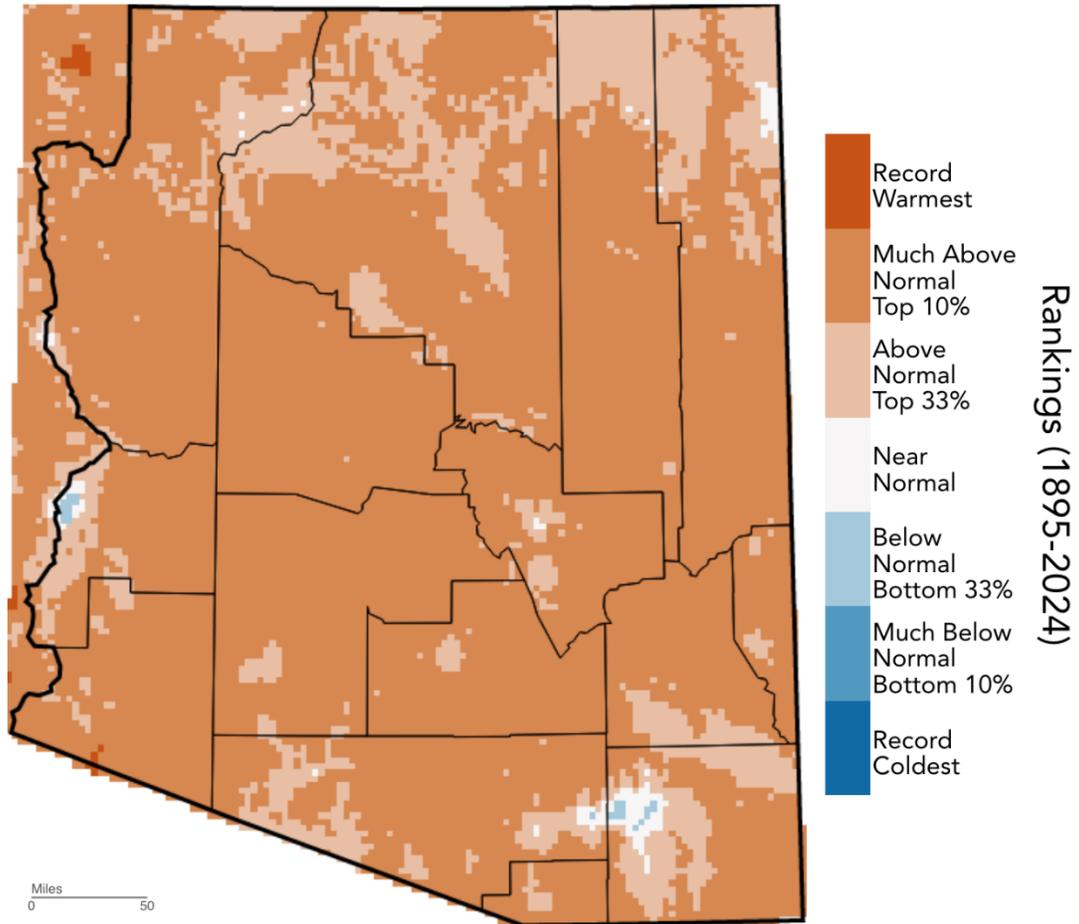
2 4 6 8 10 12 14 16 18 20 22  
Generated 9/1/2024 at WRCC using provisional data.  
NOAA Regional Climate Centers

Percent of Average Precipitation (%)  
8/1/2024 - 8/31/2024



5 25 50 70 90 100 110 130 150 200 300  
Generated 9/1/2024 at WRCC using provisional data.  
NOAA Regional Climate Centers

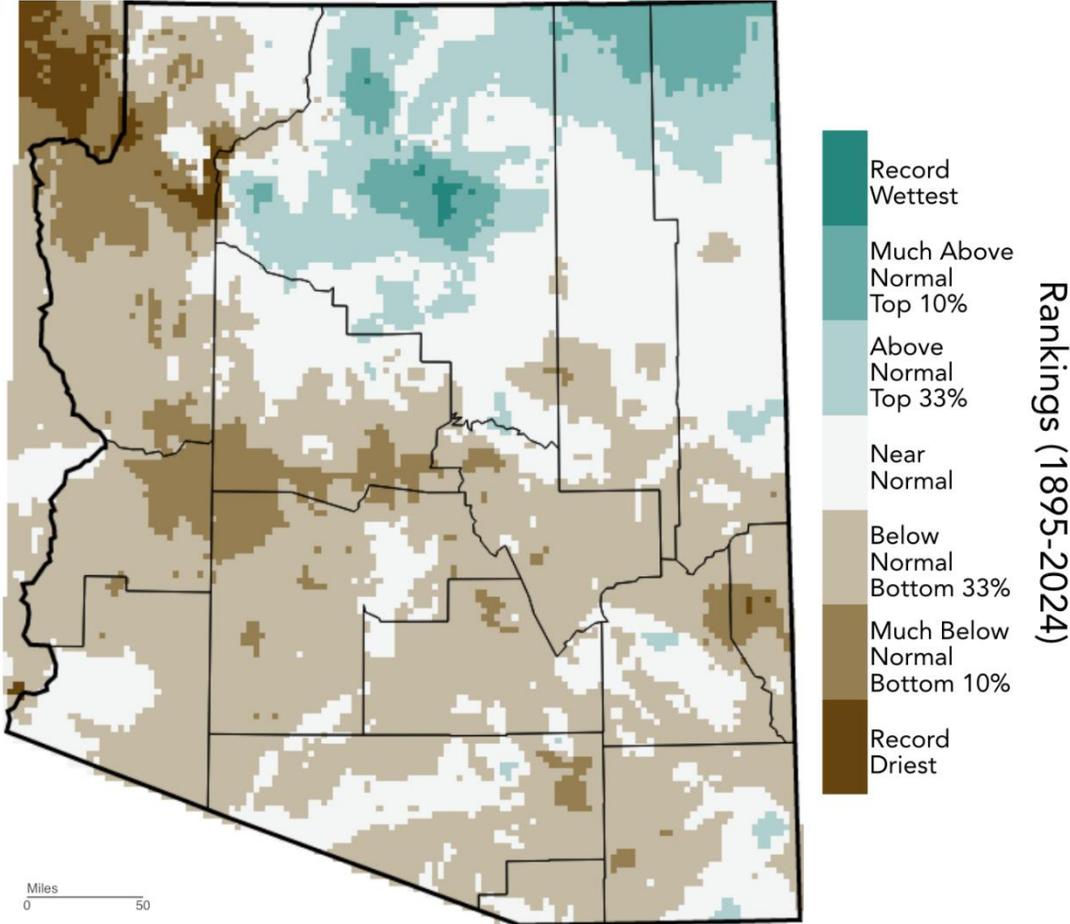
# Arizona - Mean Temperature August 2024, Percentile



WestWide Drought Tracker, WRCC, Climate Engine, Data Source: PRISM Prelim, created 05 Sep 2024

Much above normal temperatures occurred across the majority of the state this month.

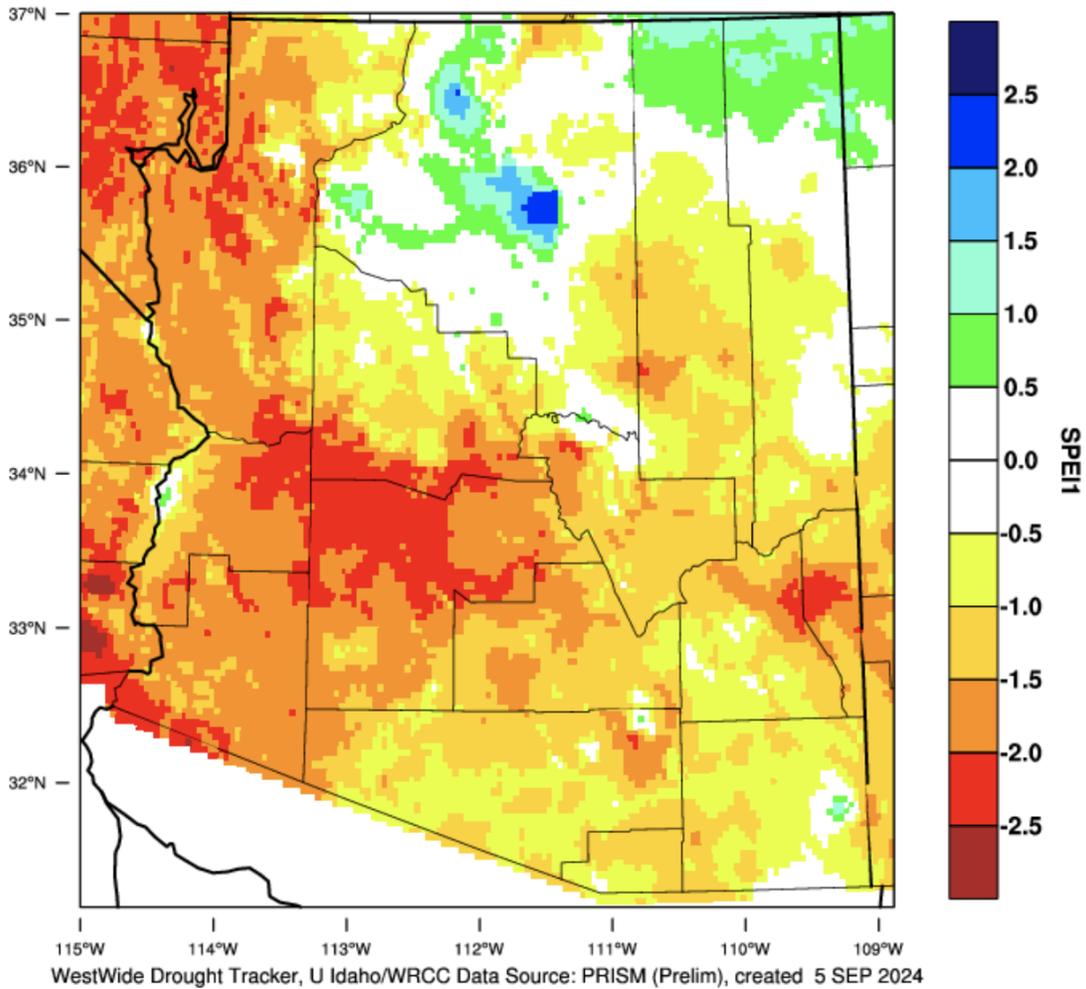
# Arizona - Precipitation August 2024, Percentile



WestWide Drought Tracker, WRCC, Climate Engine, Data Source: PRISM Prelim, created 05 Sep 2024

Below normal to much below normal precipitation was measured across most of the state, while portions of Coconino County and northern Navajo and Apache counties received above normal to much above normal precipitation.

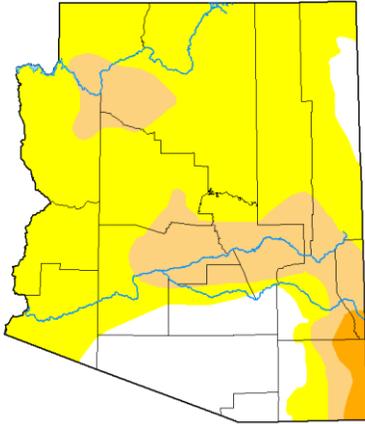
### Arizona - 1 month SPEI August 2024



This map shows the Standardized Precipitation Evapotranspiration Index (SPEI) across Arizona. August precipitation and evapotranspiration totals are measured across the state and are compared to previous August precipitation and evapotranspiration totals through the period of record (1895-present). Positive values represent wet conditions, while negative values represent dry conditions.

## Short-term Drought

### U.S. Drought Monitor Arizona



**August 6, 2024**  
(Released Thursday, Aug. 8, 2024)  
Valid 8 a.m. EDT

	Drought Conditions (Percent Area)					
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
<b>Current</b>	17.20	82.80	20.84	1.92	0.00	0.00
<b>Last Week</b> 07-30-2024	33.69	66.31	18.36	1.92	0.00	0.00
<b>3 Months Ago</b> 05-07-2024	25.82	74.18	25.31	3.15	0.00	0.00
<b>Start of Calendar Year</b> 01-01-2024	5.62	94.38	53.37	33.54	5.75	0.00
<b>Start of Water Year</b> 09-26-2023	8.12	91.88	47.06	22.74	5.34	0.00
<b>One Year Ago</b> 08-08-2023	14.66	85.34	28.81	0.00	0.00	0.00

**Intensity:**  
 None  
 D0 Abnormally Dry  
 D1 Moderate Drought  
 D2 Severe Drought  
 D3 Extreme Drought  
 D4 Exceptional Drought

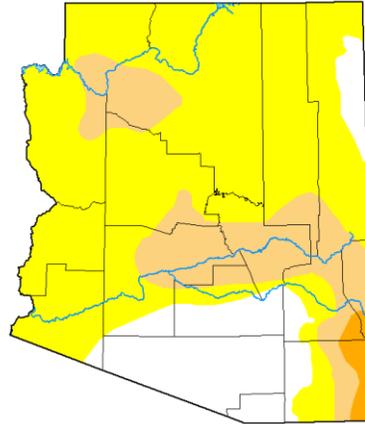
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.asp>

**Author:**  
David Simeral  
Western Regional Climate Center



[droughtmonitor.unl.edu](https://droughtmonitor.unl.edu)

### U.S. Drought Monitor Arizona



**August 27, 2024**  
(Released Thursday, Aug. 29, 2024)  
Valid 8 a.m. EDT

	Drought Conditions (Percent Area)					
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
<b>Current</b>	17.38	82.62	20.84	1.92	0.00	0.00
<b>Last Week</b> 08-20-2024	17.30	82.70	20.84	1.92	0.00	0.00
<b>3 Months Ago</b> 05-28-2024	28.63	71.37	20.02	3.15	0.00	0.00
<b>Start of Calendar Year</b> 01-01-2024	5.62	94.38	53.37	33.54	5.75	0.00
<b>Start of Water Year</b> 09-26-2023	8.12	91.88	47.06	22.74	5.34	0.00
<b>One Year Ago</b> 08-29-2023	11.11	88.89	38.25	1.52	0.00	0.00

**Intensity:**  
 None  
 D0 Abnormally Dry  
 D1 Moderate Drought  
 D2 Severe Drought  
 D3 Extreme Drought  
 D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About.asp>

**Author:**  
Richard Heim  
NCEI/NOAA



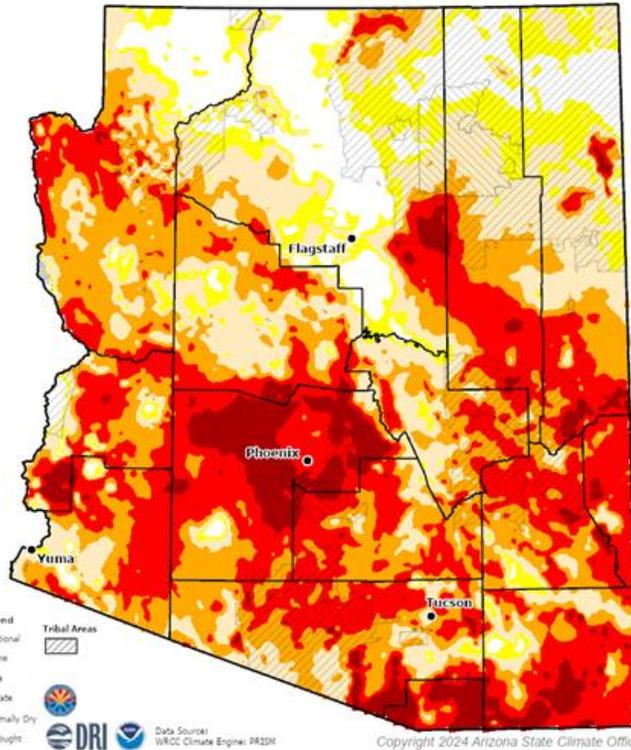
[droughtmonitor.unl.edu](https://droughtmonitor.unl.edu)

While August saw good amounts of precipitation in northeast and southern counties, hotter temperatures likely mitigated short-term improvements. There was no change to the August short-term drought conditions.

## Long-term Drought

### Arizona Long-Term Drought

Published September 2024



**Drought Legend**  
 Exceptional  
 Extreme  
 Severe  
 Moderate  
 Abnormally Dry  
 No Drought

**Tribal Areas**



Data Source:  
WRCC Climate Engine: PRISM

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