



ARIZONA STATE
CLIMATE OFFICE

Arizona Climate Summary

Summary of conditions for November 2024

Published December 20, 2024

November 2024 Summary

This November ranked as the 44th coldest on record. Arizona received a statewide average of 0.32 inches of precipitation, which is 0.49 inches below the 1895-2024 mean of 0.81 inches. Cochise, Graham, Pima, and Santa Cruz counties each experienced their wettest November since 2019. For the water year to date (October-November), the state ranked as the 23rd driest with 0.75 inches of precipitation.

A trough and attendant cold front brought rain and mountain snow to portions of Arizona from November 2-4. On November 2, Scottsdale received 0.17 inches of precipitation, Tolleson received 0.15 inches of precipitation, Deer Valley received 0.09 inches of precipitation, and Page received a trace of precipitation. On November 3, Show Low received 0.91 inches of precipitation (2.0 inches of snow), San Manuel received 0.89 inches of precipitation, Payson received 0.76 inches of precipitation, Tucson received 0.43 inches of precipitation, Anvil Ranch received 0.40 inches of precipitation, and Carefree received 0.10 inches of precipitation. A storm spotter reported that Hart Prairie (located in Coconino County) received 4.5 inches of snow as of 10:56 am that day. Pea-sized hail (0.25 inches in diameter) was reported south of New River and also south-southwest of Peoria at an Arizona Cardinals football game. The National Weather Service in Flagstaff issued a Tornado Warning for Gila County due to a tornadic thunderstorm located around Haigler Creek and moving east at 20 miles per hour. The last time NWS Flagstaff issued a Tornado Warning in November was in 2016, and this was only the second time on record (since 1990) that that office issued a Tornado Warning that month. On November 4, Alpine received 0.48 inches of precipitation (3.0 inches of snow), Teec Nos Pos received 0.32 inches of precipitation, Safford Airport received 0.23 inches of precipitation, Duncan received 0.20 inches of precipitation, and Apache Junction received 0.04 inches of precipitation. That morning, 12.0 inches of snow was estimated in Vernon, 7.7 inches of snow was measured northwest of the Arizona Snowbowl, 6.7 inches of snow was recorded north of McNary, and 5.0 inches of snow was observed in Hannagan Meadow.

From November 6-7, an upper-level low pressure system and its associated cold front brought another round of rain and high elevation snow to a few northern and eastern locations, including Saint Johns (0.27 inches of precipitation; 2.5 inches of snow), Alpine (0.25 inches of precipitation; 1.0 inches of snow), Window Rock (0.20 inches of precipitation), and Flagstaff (0.07 inches of precipitation; 2.0 inches of snow). On November 6, 6.0 inches of snow fell east of Greer in six and a half hours, and on November 7, 3.6 inches of new snow was reported northwest of the Arizona Snowbowl (totaling 9 inches of snow on the ground). Record low temperatures were set on November 7 at Safford Airport (30°F, breaking the previous record of 32°F set in 2008) and Nogales Airport (29°F, breaking the previous record of 32°F set in 2000).

On November 8, lingering rain showers occurred in Teec Nos Pos (0.06 inches) and Window Rock (0.05 inches). Record low temperatures were set at Bisbee-Douglas Airport (22°F, breaking the previous record of 24°F set in 2011 and 2008) and Safford Airport (29°F, breaking the previous record of 31°F set in 2011).

A low pressure system brought precipitation to northern and northwestern locations from the evening of November 15-17, including Kingman (0.01 inches on the 15th), the Grand Canyon Airport (0.06 inches on the 16th), and Williams (0.10

Dr. Erinanne Saffell,
Arizona State Climatologist
Juliana Likourinou, Author
<http://azclimate.asu.edu>
© 2024 Arizona State Climate Office

ASU School of Geographical
Sciences and Urban Planning
Arizona State University



inches on the 17th). As the system moved south across Arizona and into northern Mexico by November 17, rain showers were triggered at Bisbee-Douglas Airport (0.05 inches) and Nogales Airport (0.01 inches).

From November 25-27, a storm system moving east through Utah produced rain and mountain snow showers in portions of northern Arizona. A trace of precipitation was recorded in a few locations on the 25th and 26th, including the Grand Canyon Airport, Page, and Betatakin. On the 27th, Teec Nos Pos received 0.64 inches of precipitation, Betatakin received 0.10 inches of precipitation (trace of snow), Window Rock received 0.07 inches of precipitation, and Canyon de Chelly received 0.02 inches of precipitation (0.7 inches of snow).

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.

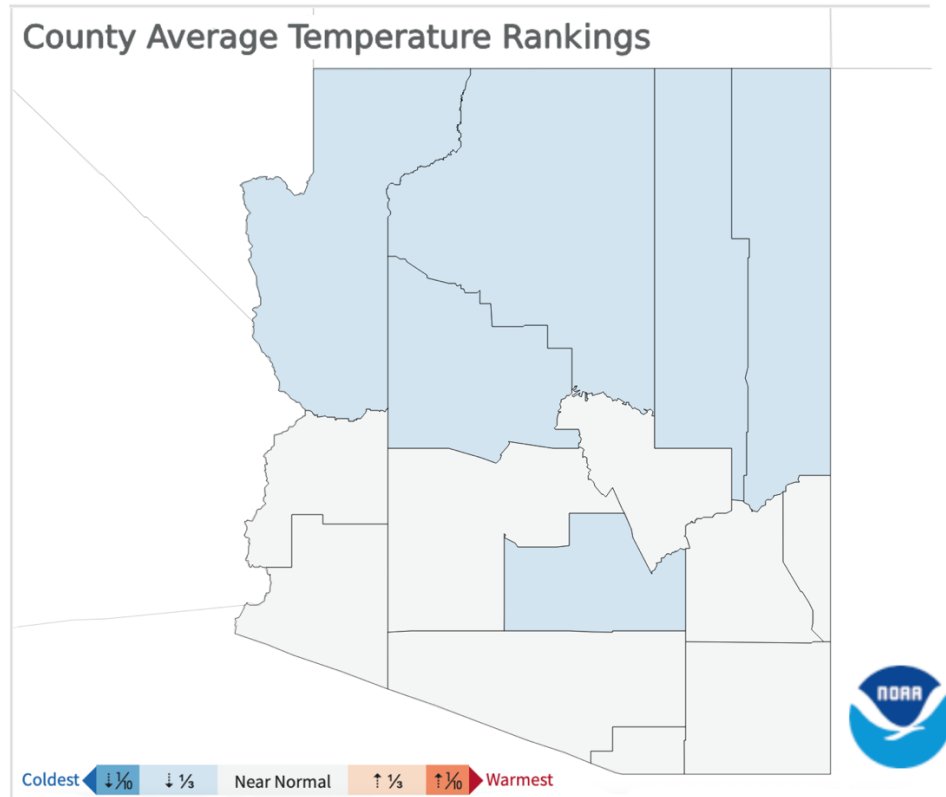
Dr. Erinanne Saffell,
Arizona State Climatologist
Juliana Likourinou, Author
<http://azclimate.asu.edu>
© 2024 Arizona State Climate Office

ASU School of Geographical
Sciences and Urban Planning
Arizona State University

AASC
AMERICAN ASSOCIATION OF
STATE CLIMATOLOGISTS

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

November 2024



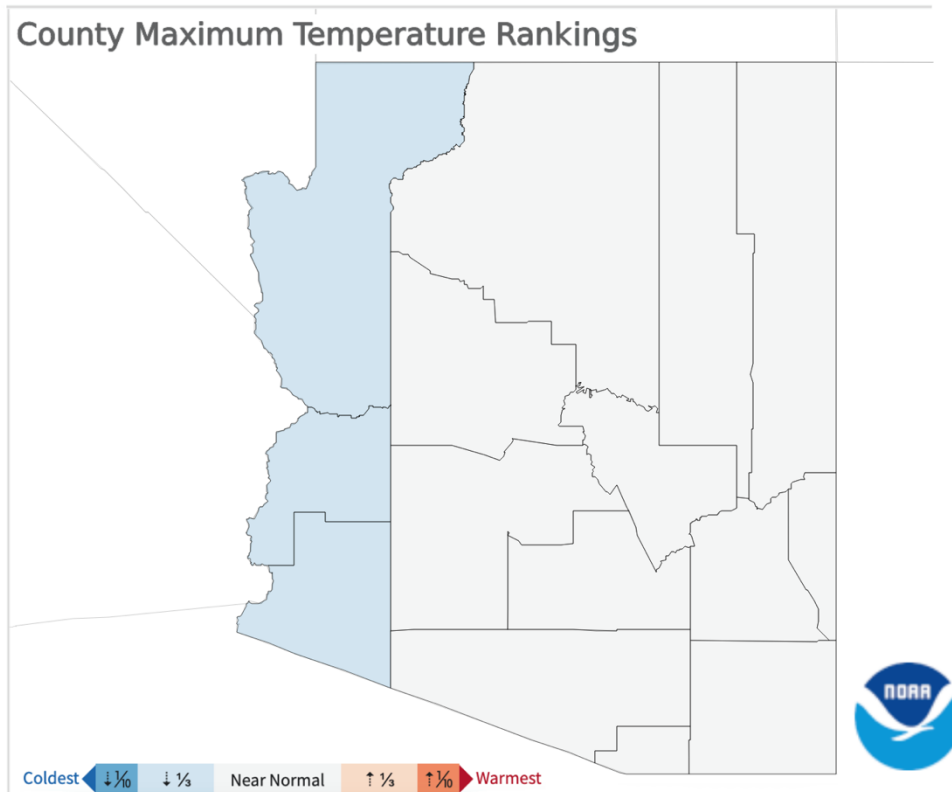
The average state temperature for November was 48.5°F, ranking as the 44th coldest November within the period of record. The 1895-2024 mean average state temperature for November was 49.6°F, resulting in an anomaly of -1.1°F.

County	Average Temperature	Rank (130 Years)	Anomaly From the 1895-2024 mean
Apache	38.0°F	34 th coldest	-1.6°F
Cochise	51.0°F	62 nd coldest	-0.2°F
Coconino	39.8°F	35 th coldest	-1.8°F
Gila	48.6°F	51 st coldest	-0.9°F
Graham	50.8°F	62 nd warmest	+0.1°F
Greenlee	46.4°F	64 th warmest	0.0°F
La Paz	59.1°F	50 th coldest	-0.9°F
Maricopa	58.9°F	54 th coldest	-0.6°F
Mohave	49.6°F	37 th coldest	-1.8°F
Navajo	39.1°F	37 th coldest	-1.4°F
Pima	57.0°F	53 rd coldest	-0.8°F
Pinal	57.0°F	43 rd coldest	-1.1°F
Santa Cruz	51.4°F	53 rd coldest	-0.7°F
Yavapai	48.0°F	41 st coldest	-1.5°F
Yuma	61.2°F	62 nd coldest	-0.1°F

Period of record: 1895-2024

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

November 2024



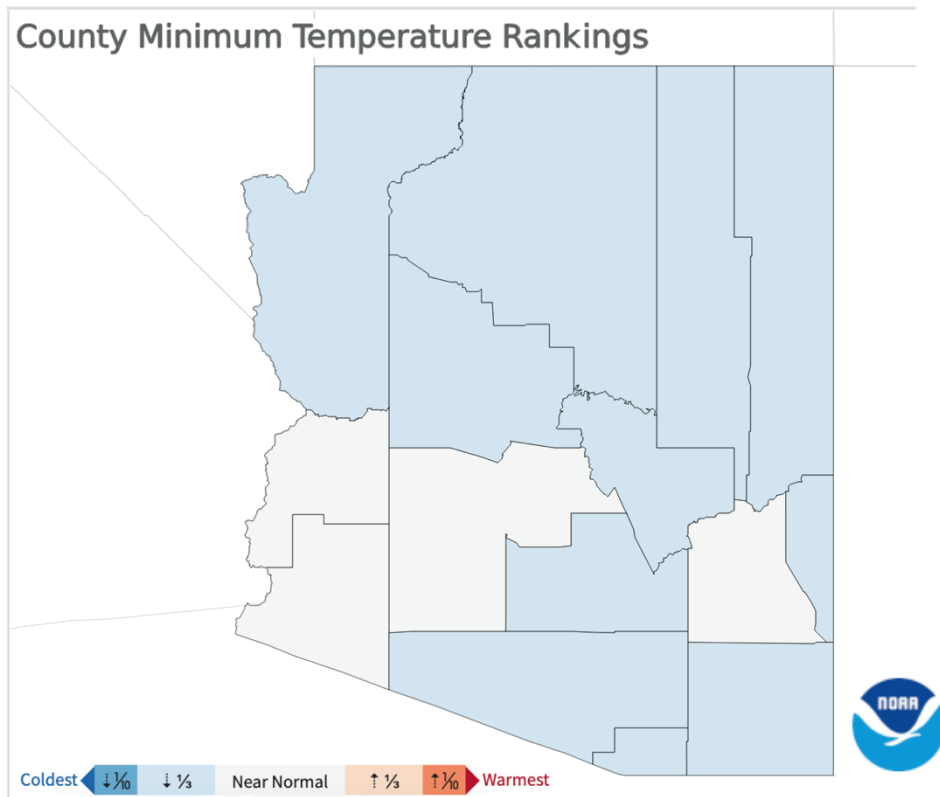
The average maximum state temperature for November was 62.8°F, ranking as the 58th coldest November within the period of record. The 1895-2024 mean maximum state temperature for November was 63.5°F, resulting in an anomaly of -0.7°F.

County	Maximum Temperature	Rank (130 Years)	Anomaly From the 1895-2024 mean
Apache	52.9°F	58 th coldest	-0.7°F
Cochise	67.7°F	53 rd warmest	+1.3°F
Coconino	53.9°F	51 st coldest	-1.2°F
Gila	63.0°F	61 st warmest	+0.3°F
Graham	64.3°F	60 th warmest	+0.6°F
Greenlee	60.8°F	51 st warmest	+1.1°F
La Paz	72.2°F	42 nd coldest	-1.8°F
Maricopa	73.0°F	59 th coldest	-0.7°F
Mohave	61.7°F	40 th coldest	-1.8°F
Navajo	53.7°F	57 th coldest	-0.7°F
Pima	72.3°F	60 th coldest	-0.3°F
Pinal	71.5°F	63 rd coldest	-0.4°F
Santa Cruz	68.0°F	58 th warmest	+0.6°F
Yavapai	63.1°F	56 th coldest	-0.7°F
Yuma	74.6°F	43 rd coldest	-1.4°F

Period of record: 1895-2024

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

November 2024



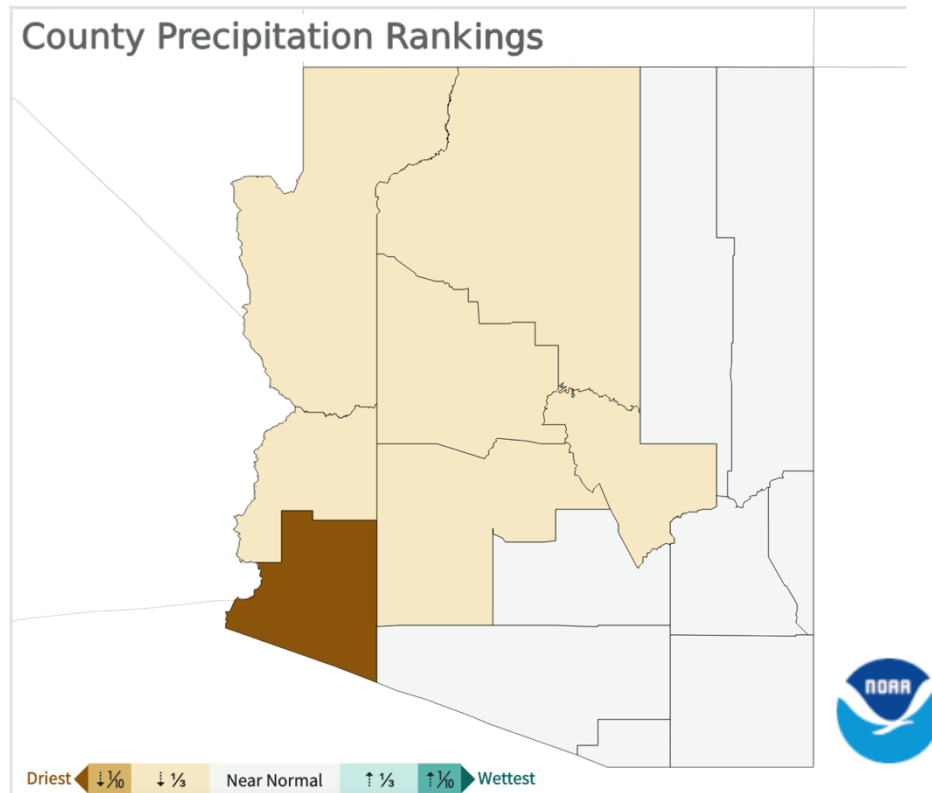
The average minimum state temperature for November was 34.2°F, ranking as the 30th coldest November within the period of record. The 1895-2024 mean minimum state temperature for November was 35.8°F, resulting in an anomaly of -1.6°F.

County	Minimum Temperature	Rank (130 Years)	Anomaly From the 1895-2024 mean
Apache	23.2°F	22 nd coldest	-2.3°F
Cochise	34.4°F	30 th coldest	-1.5°F
Coconino	25.8°F	25 th coldest	-2.3°F
Gila	34.2°F	24 th coldest	-2.0°F
Graham	37.2°F	52 nd coldest	-0.6°F
Greenlee	32.1°F	42 nd coldest	-1.0°F
La Paz	45.9°F	57 th coldest	-0.1°F
Maricopa	44.8°F	52 nd coldest	-0.6°F
Mohave	37.4°F	36 th coldest	-1.9°F
Navajo	24.4°F	23 rd coldest	-2.1°F
Pima	41.7°F	40 th coldest	-1.3°F
Pinal	42.5°F	32 nd coldest	-1.8°F
Santa Cruz	34.9°F	23 rd coldest	-1.8°F
Yavapai	32.8°F	26 th coldest	-2.3°F
Yuma	47.9°F	50 th warmest	+1.4°F

Period of record: 1895-2024

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

November 2024



The average state precipitation for November was 0.32 inches, ranking as the 39th driest November within the period of record. The 1895-2024 mean state precipitation for November was 0.81 inches, resulting in an anomaly of -0.49 inches.

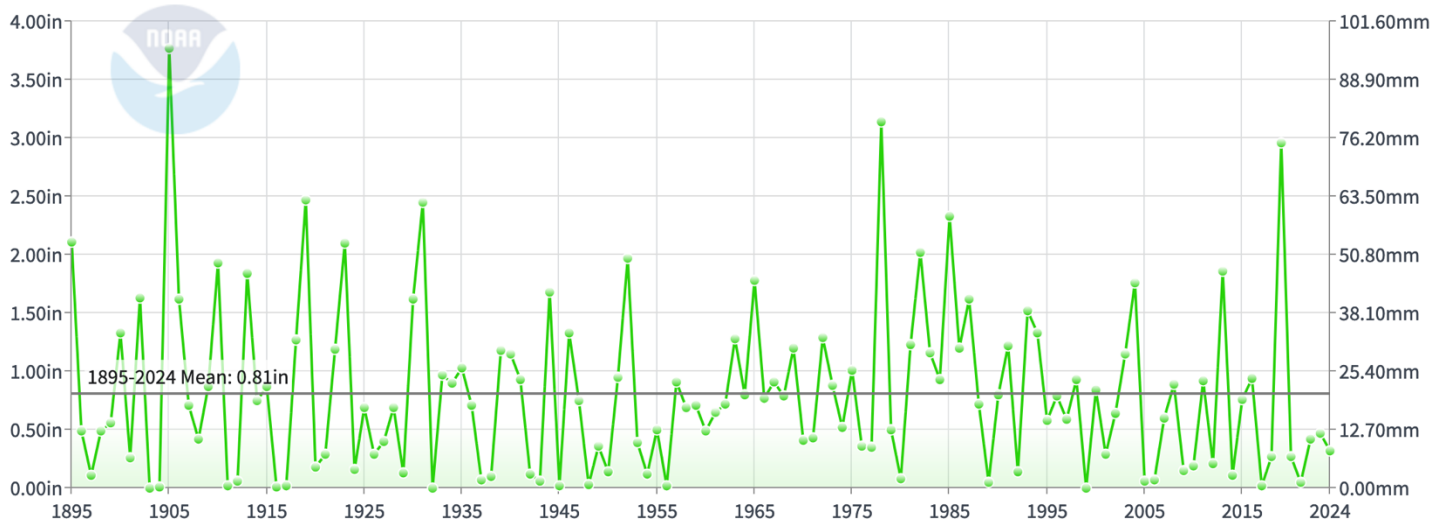
County	Precipitation	Rank (130 Years)	Anomaly From the 1895-2024 mean
Apache	0.52"	48 th driest	-0.35"
Cochise	0.47"	58 th driest	-0.26"
Coconino	0.23"	30 th driest	-0.65"
Gila	0.52"	40 th driest	-0.96"
Graham	0.80"	63 rd driest	-0.17"
Greenlee	0.55"	51 st driest	-0.49"
La Paz	0.01"	26 th driest	-0.37"
Maricopa	0.07"	29 th driest	-0.60"
Mohave	0.10"	27 th driest	-0.60"
Navajo	0.49"	53 rd driest	-0.33"
Pima	0.51"	60 th driest	-0.21"
Pinal	0.50"	57 th driest	-0.38"
Santa Cruz	0.51"	55 th driest	-0.35"
Yavapai	0.14"	27 th driest	-0.91"
Yuma	0.00"	Driest (tied with numerous years)	-0.31"

Period of record: 1895-2024

November Statewide Precipitation (1895 to date)

Arizona Precipitation

November



Period of record: 1895-2024

This chart shows average Arizona precipitation each November through the period of record (1895 to present). November 2024 ranked as the 39th driest with an average of 0.32 inches, which is 0.49 inches below the 1895-2024 average of 0.81 inches.

Flagstaff Climate Statistics

November 2024

This ranked as the 49th coldest November on record (9/10/1898 to present). With 0.22 inches of precipitation, it ranked as the 25th driest November on record.

Avg Max Temp: 51.4°F Normal: 52.1°F
Avg Min Temp: 20.9°F Normal: 23.0°F
Avg Mean Temp: 36.1°F Normal: 37.5°F

Highest Monthly Avg Temp: 44.9°F in 1949
Lowest Monthly Avg Temp: 29.6°F in 1972

Highest Temp this month: 66°F on 22nd
Lowest Temp this month: 12°F on 29th

Record High: 74°F on 11/3/1977, 11/8/1973
Record Low: -13°F on 11/18/1958

No temperature or precipitation records this month.

Flagstaff Number of Days of:

Minimum Temp 32°F or lower	30
Minimum Temp 0°F or lower	0
Maximum Temp 90°F or higher	0
Maximum Temp 32°F or lower	0

Heating Degree Days: 857 Normal: 824
Cooling Degree Days: 0 Normal: 0
Degree base 65°F

Total November Precipitation: 0.22''
Normal November Precipitation: 1.55''
Departure from Normal: -1.33''
Greatest 24-Hr Precip: 0.13'' on 3rd

Total Precipitation Year-to-Date: 19.16''
Departure from Normal: +0.54''
Total Precip Year-to-Date (Last Year): 24.12''

Total November Snowfall: 2.0''
Normal: 8.2''
Record November Snowfall: 42.6'' in 1902

Greatest November Precipitation: 7.10'' in 1905
Least November Precipitation: 0.00'' in 1999
and 7 other years

Average Wind Speed: 6.2 mph
Highest Peak Gust: 51 mph from 200° on 15th

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

NOVEMBER 2024 FLAGSTAFF

AVERAGE DAILY TEMPERATURE

ABOVE

AVERAGE

BELOW

+/- 0.5°F

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

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

@AZStateClimate

Flagstaff measured 12 days of above average temperatures, 1 day of average temperatures, and 17 days of below average temperatures this month.

Phoenix Climate Statistics

November 2024

This ranked as the 30th warmest November on record (8/6/1895 to present). With 0.00 inches of precipitation, it tied as the driest November on record.

Avg Max Temp: 76.3°F Normal: 76.5°F
Avg Min Temp: 51.9°F Normal: 53.7°F
Avg Mean Temp: 64.1°F Normal: 65.1°F

Highest Monthly Avg Temp: 71.2°F in 2017
Lowest Monthly Avg Temp: 55.0°F in 1922

Highest Temp this month: 85°F on 10th, 22nd
Lowest Temp this month: 46°F on 17th

Record High: 99°F on 11/5/2020
Record Low: 27°F on 11/23/1931

Temperature or precipitation records this month:

HiMin: 59°F on 11/27/2024,
tying the record set on 11/27/2002

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	0
Maximum Temp 32°F or lower	0

Heating Degree Days:	50	Normal:	85
Cooling Degree Days:	35	Normal:	88

Degree base 65°F

Total November Precipitation:	0.00''
Normal November Precipitation:	0.57''
Departure from Normal:	-0.57''

Total Precipitation Year-to-Date:	4.54''
Departure from Normal:	-1.94''
Total Precip Year-to-Date (Last Year):	3.32''

Greatest November Precipitation:	3.61'' in 1905
Least November Precipitation:	0.00'' in 2024 and 28 other years

Average Wind Speed: 4.7 mph
Highest Peak Gust: 39 mph from 270° on 3rd

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

NOVEMBER 2024 PHOENIX

AVERAGE DAILY TEMPERATURE

ABOVE

AVERAGE

BELOW

+/- 0.5°F

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

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

@AZStateClimate

Phoenix observed 14 days of above average temperatures and 16 days of below average temperatures this month.

Tucson Climate Statistics

November 2024

This ranked as the 48th warmest November on record (9/1/1894 to present). With 0.43 inches of precipitation, it ranked as the 60th driest November on record.

Avg Max Temp: 74.7°F Normal: 75.1°F
Avg Min Temp: 45.0°F Normal: 47.9°F
Avg Mean Temp: 59.9°F Normal: 61.5°F

Highest Monthly Avg Temp: 69.1°F in 2017
Lowest Monthly Avg Temp: 50.9°F in 1911*

Highest Temp this month: 87°F on 14th
Lowest Temp this month: 34°F on 8th

Record High: 94°F on 11/5/2023, 11/5/2020,
11/1/1924
Record Low: 19°F on 11/19/1921

No temperature or precipitation records this month.

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	0
Maximum Temp 32°F or lower	0

Heating Degree Days: 152 Normal: 151
Cooling Degree Days: 6 Normal: 46
Degree base 65°F

Total November Precipitation: 0.43"
Normal November Precipitation: 0.56"
Departure from Normal: -0.13"
Greatest 24-Hr Precip: 0.43" on 3rd

Total Precipitation Year-to-Date: 11.52"
Departure from Normal: +1.87"
Total Precip Year-to-Date (Last Year): 8.74"

Greatest November Precipitation: 4.61" in 1905
Least November Precipitation: 0.00" in 2014
and 24 other years

Average Wind Speed: 5.8 mph
Highest Peak Gust: 36 mph from 210° on 3rd

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

*Missing data on 11/11/1911

NOVEMBER 2024 TUCSON

AVERAGE DAILY TEMPERATURE

ABOVE

AVERAGE

BELOW

+/- 0.5°F

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

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

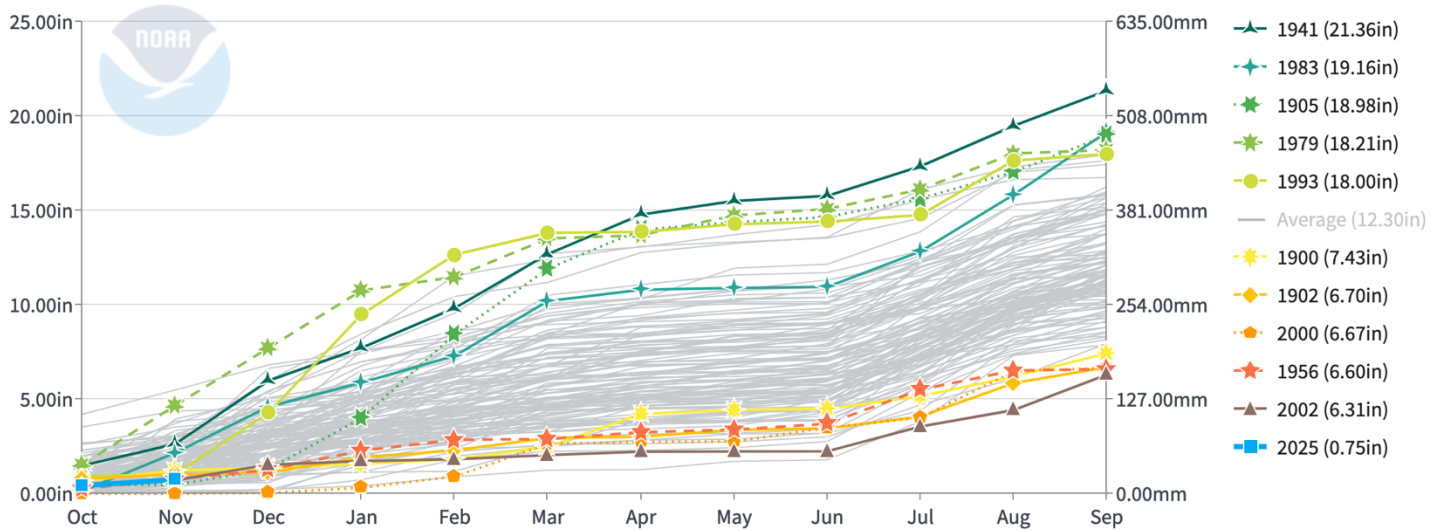
@AZStateClimate

Tucson recorded 13 days of above average temperatures, 1 day of average temperatures, and 16 days of below average temperatures this month.

Cumulative Statewide Precipitation per Water Year (Oct 2024-Sept 2025)

Arizona

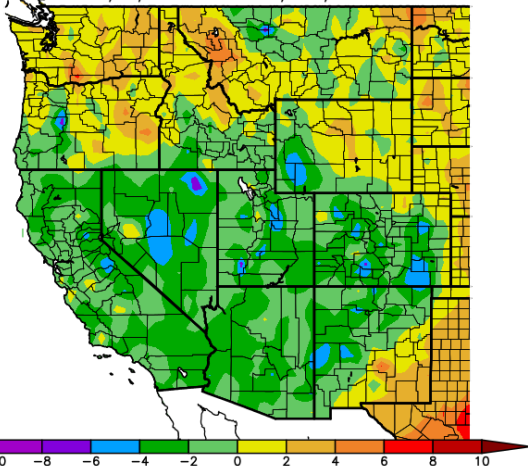
October-September Precipitation



The 5 wettest Water Years are shown with green lines, the 5 driest Water Years are shown with brown lines, and the current Water Year is the blue line. The average state cumulative Water Year precipitation was 0.75 inches at the end of November, which is 0.93 inches below the October-November average of 1.68 inches.

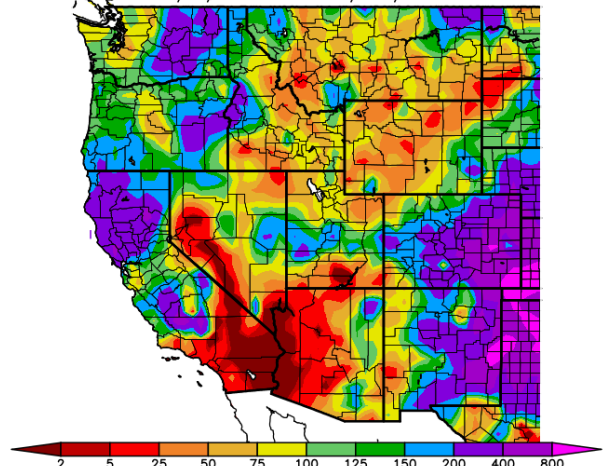
Data are from the National Centers for Environmental Information and are preliminary.

Ave. Temperature dep from Ave (deg F)
11/1st/2024 – 11/30/2024



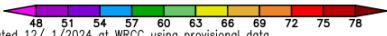
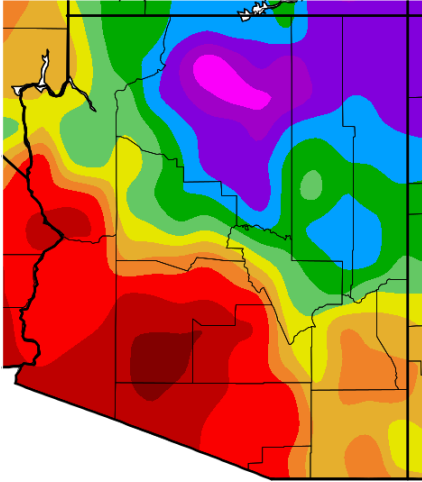
Generated 12/ 1/2024 at WRCC using provisional data.
NOAA Regional Climate Centers

Percent of Average Precipitation (%)
11/1st/2024 – 11/30/2024



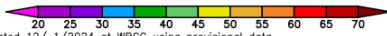
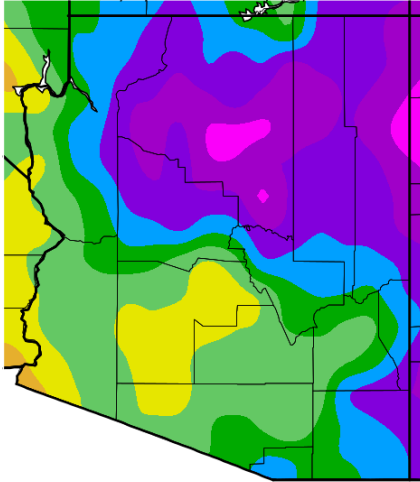
Generated 12/ 1/2024 at WRCC using provisional data.
NOAA Regional Climate Centers

Av. Max. Temperature (deg. F)
11/1/2024 - 11/30/2024



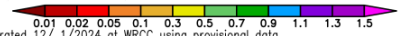
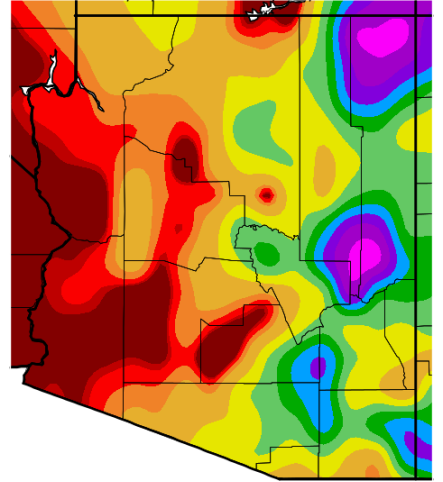
Generated 12/1/2024 at WRCC using provisional data.
NOAA Regional Climate Centers

Av. Min. Temperature (deg. F)
11/1/2024 - 11/30/2024



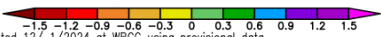
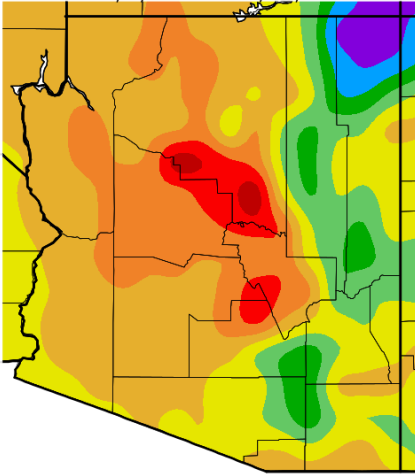
Generated 12/1/2024 at WRCC using provisional data.
NOAA Regional Climate Centers

Total Precipitation (in.)
11/1/2024 - 11/30/2024



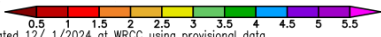
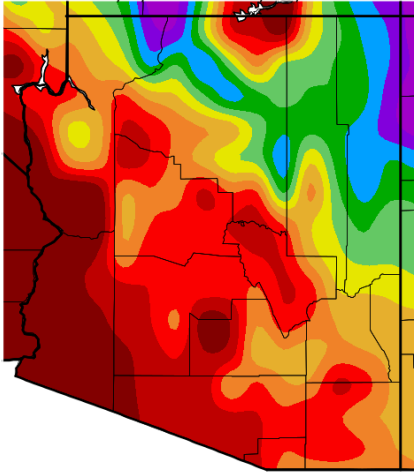
Generated 12/1/2024 at WRCC using provisional data.
NOAA Regional Climate Centers

Precipitation Departure from Average (in.)
11/1/2024 - 11/30/2024



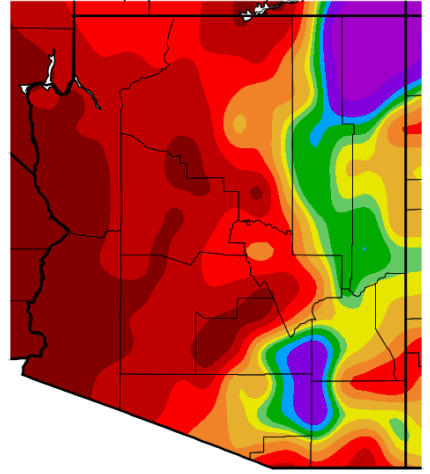
Generated 12/1/2024 at WRCC using provisional data.
NOAA Regional Climate Centers

Precipitation # Days > 0.01"
11/1/2024 - 11/30/2024



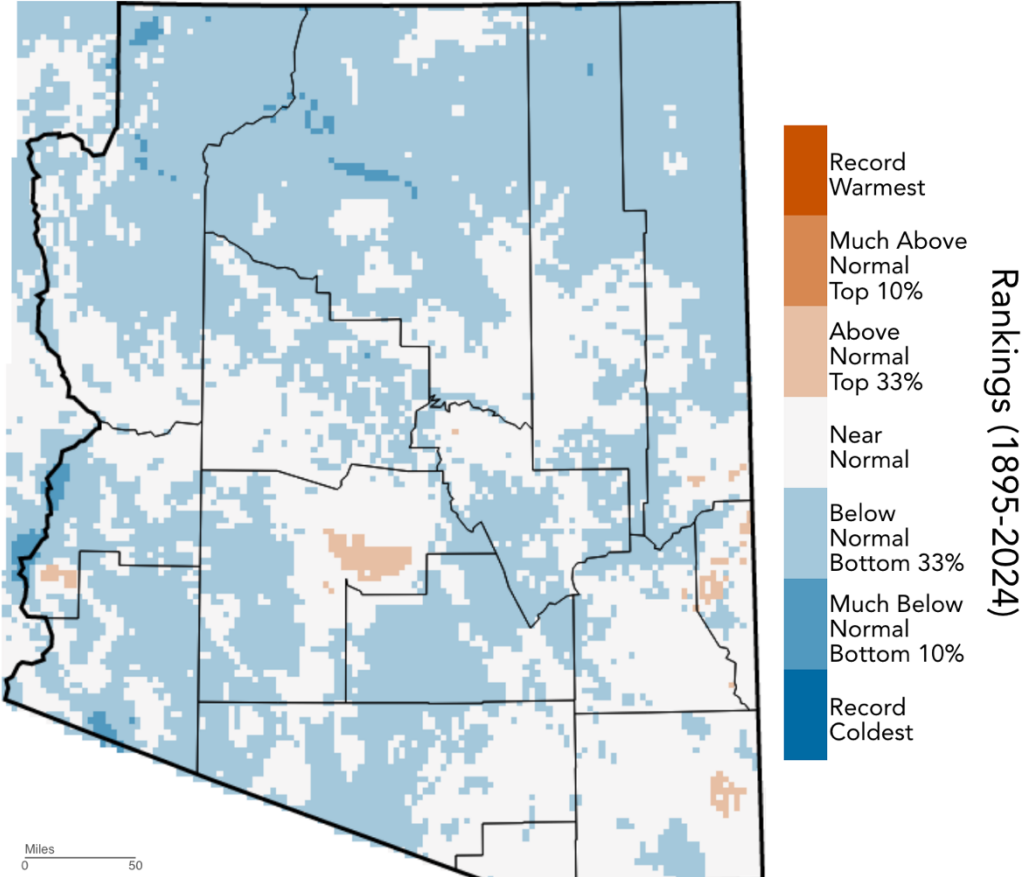
Generated 12/1/2024 at WRCC using provisional data.
NOAA Regional Climate Centers

Percent of Average Precipitation (%)
11/1/2024 - 11/30/2024



Generated 12/1/2024 at WRCC using provisional data.
NOAA Regional Climate Centers

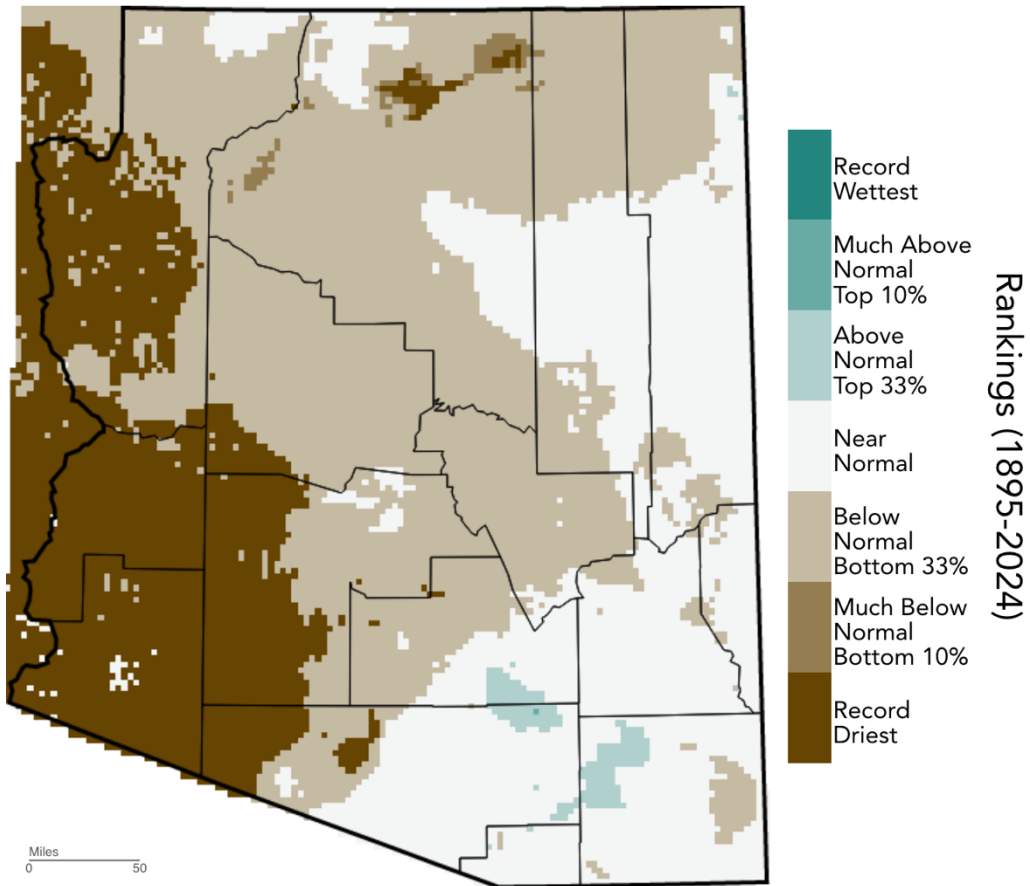
Arizona - Mean Temperature November 2024, Percentile



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

Temperatures were near normal to below normal across much of the state.

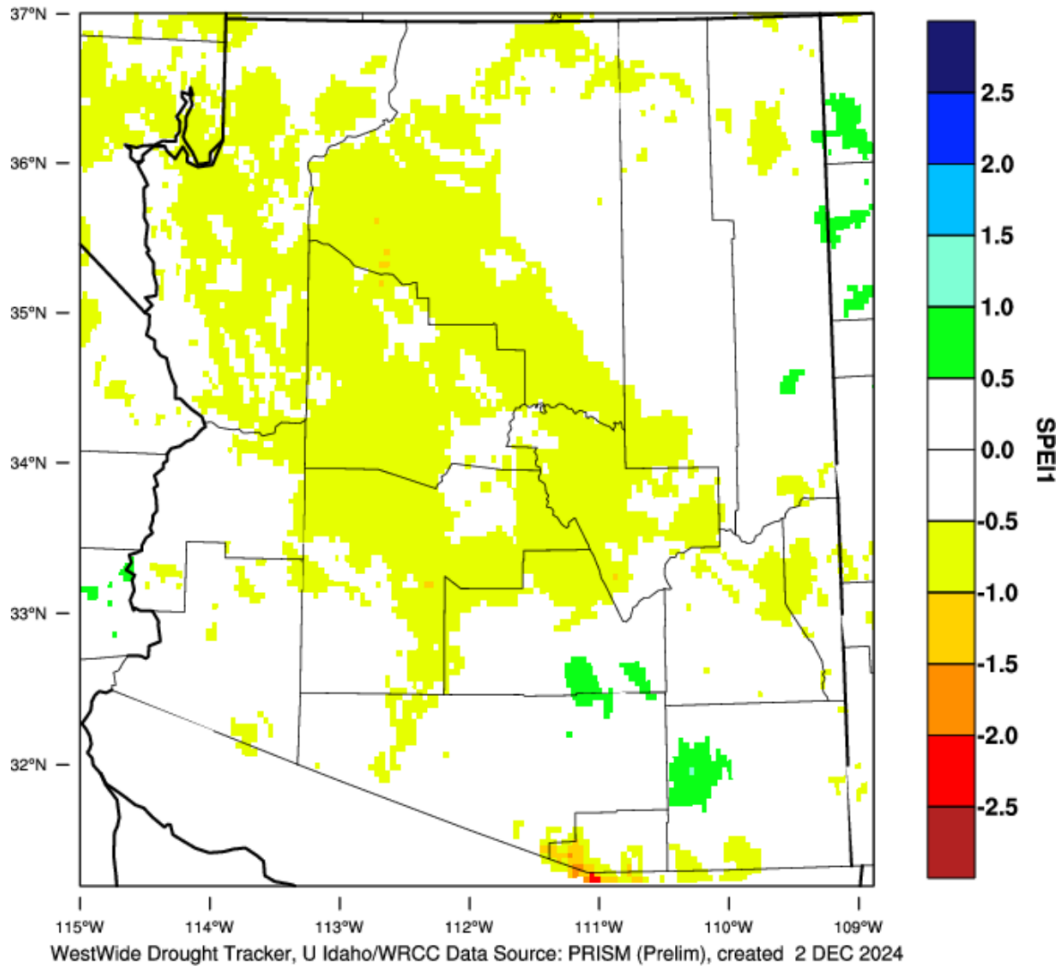
Arizona - Precipitation November 2024, Percentile



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

Near normal precipitation was measured in southeastern Arizona and southern Navajo and Apache counties, while dry conditions were prevalent in Mohave, La Paz, Yuma, and western portions of Maricopa and Pima counties.

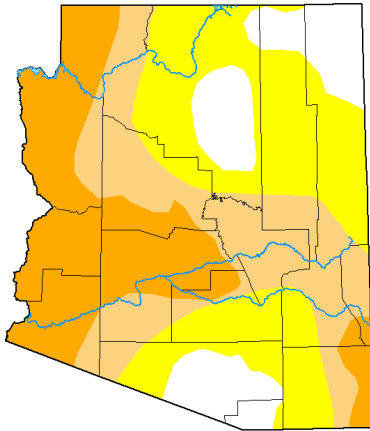
Arizona - 1 month SPEI November 2024



This map shows the Standardized Precipitation Evapotranspiration Index (SPEI) across Arizona. November precipitation and evapotranspiration totals are measured across the state and are compared to previous November 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



November 5, 2024 (Released Thursday, Nov. 7, 2024) Valid 7 a.m. EST

	Drought Conditions (Percent Area)					
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	14.45	85.55	52.56	26.89	0.00	0.00
Last Week 10-29-2024	14.47	85.53	52.55	26.89	0.00	0.00
3 Months Ago 08-06-2024	17.20	82.80	20.84	1.92	0.00	0.00
Start of Calendar Year 01-02-2024	5.62	94.38	53.37	33.54	5.75	0.00
Start of Water Year 10-01-2024	27.62	72.38	39.91	4.61	0.00	0.00
One Year Ago 11-07-2023	8.18	91.82	57.19	34.84	6.09	0.00

Intensity:

 None	 D2 Severe Drought
 D0 Abnormally Dry	 D3 Extreme Drought
 D1 Moderate Drought	 D4 Exceptional Drou

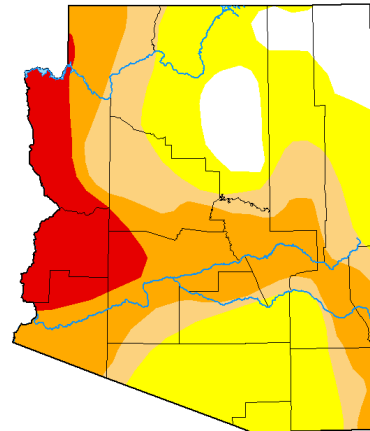
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to <https://droughtmonitor.unl.edu/About>.

Author:
Brian Fuchs
National Drought Mitigation Center



droughtmonitor.unl.edu

U.S. Drought Monitor Arizona



November 26, 2024 (Released Wednesday, Nov. 27, 2024) Valid 7 a.m. EST

	Drought Conditions (Percent Area)					
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	9.47	90.53	56.04	37.19	11.19	0.00
Last Week 11-19-2024	14.44	85.56	56.04	29.18	8.34	0.00
3 Months Ago 08-07-2024	17.38	82.62	20.84	1.92	0.00	0.00
Start of Calendar Year 01-02-2024	5.62	94.38	53.37	33.54	5.75	0.00
Start of Water Year 10-01-2024	27.62	72.38	39.91	4.61	0.00	0.00
One Year Ago 11-28-2023	8.18	91.82	57.19	34.97	6.09	0.00

Intensity:

 None	 D2 Severe Drought
 D0 Abnormally Dry	 D3 Extreme Drought
 D1 Moderate Drought	 D4 Exceptional Drou

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>.

Author:
David Simerali
Western Regional Climate Center



droughtmonitor.unl.edu

The last time Arizona experienced this amount of Extreme (D3) short-term drought was August 2022 (now 11% of state). Moderate and Severe (D1-D2) short-term drought persisted in western, central and southeastern counties (45% of state).

Percent of Statewide Area Change in Short-term Drought

Category	November 5, 2024	November 26, 2024	Change
No Drought	14	9	-5
D0 – Abnormally Dry	33	35	2
D1 – Moderate Drought	26	19	-7
D2 – Severe Drought	27	26	-1
D3 – Extreme Drought	0	11	11
D4 – Exceptional Drought	0	0	0

Data from U.S. Drought Monitor

Long-term Drought

Arizona Long-Term Drought

Published December 2024

