

January 2024 Summary

This month, Arizona's average temperature was 42.1°F, which ranked as the 51st warmest January on record. Southern counties and portions of northern and eastern counties received slightly above average precipitation. Statewide, Arizona received 1.34 inches of precipitation, which is 0.18 inches above the 1895-2024 mean of 1.16 inches. Snowpack was slightly below average in the Upper Gila basin (96% median SWE) and below average in the Salt basin (68% median SWE), Little Colorado basin (67% median SWE), and Verde basin (56% median SWE).

On January 2, a weak low pressure system passed through southern Arizona, bringing rain to Coronado National Memorial (0.93 inches), Tombstone (0.19 inches), Willcox (0.11 inches), and Ajo (0.08 inches).

From January 3-4, a low pressure system and attendant cold front brought mountain snow and rain showers. Bright Angel received 0.63 inches of precipitation (4.0 inches of snow), Show Low received 0.42 inches of precipitation (4.5 inches of snow), Bellemont received 0.24 inches of precipitation (3.3 inches of snow), Casa Grande received 0.50 inches of precipitation, Coronado National Memorial received 0.22 inches of precipitation, Kingman received 0.12 inches of precipitation, and Yuma Proving Ground received 0.09 inches of precipitation. Winter Weather Advisories were issued by the National Weather Service in Flagstaff (for areas above 5000 feet across portions of northern Arizona), the National Weather Service in Tucson (for the White Mountains of Graham and Greenlee counties), and the National Weather Service in Las Vegas (for areas above 5000 feet in the Northwest Plateau). Strong gusty winds at Sky Harbor prompted the National Weather Service in Phoenix to issue an Airport Weather Warning on January 3, and dense fog led the National Weather Service in Las Vegas to issue a Dense Fog Advisory for Lake Mead National Recreation Area, Lake Havasu, and Fort Mohave on January 4.

On January 5, the National Weather Service in Tucson issued the first Freeze Warning of the season for south central and southeastern Pinal County, the Tucson Metro Area, and the Tohono O'odham Nation, and on January 6, the National Weather Service in Phoenix issued the first Freeze Warning of the season for northwestern Pinal County, Superior, Tonopah Desert, Tonto Basin, and Southeast Valley/Queen Creek.

A winter weather system arrived in Arizona on the evening of January 6 and impacted the state from January 7-8. Snow was observed in Bellemont (9.6 inches), Show Low (9.0 inches), Bright Angel (11.0 inches), Flagstaff (10.8 inches), Globe (0.7 inches), and Sierra Vista (0.5 inches). Rain was measured in lower elevations, including Picacho (0.23 inches), Carefree (0.20 inches), East Mesa (0.19 inches), Tucson (0.14 inches), Green Valley (0.13 inches), and Tempe (0.04 inches). The National Weather Service in Flagstaff issued a Winter Storm Warning for the Kaibab Plateau, White Mountains, Chuska Mountains, and Defiance Plateau and areas above 3500 feet along the Mogollon Rim, northern Gila County, and the Black Mesa Area. Winter Weather Advisories were issued by the National Weather Service in Flagstaff (for areas above 3500 feet across portions of northern Arizona), the National Weather Service in Phoenix (for areas above 4000 feet for the Mazatzal Mountains, Pinal/Superstition Mountains, southeastern Gila County, Dripping Springs, and Globe/Miami), the National Weather Service in Tucson (for the White Mountains of Graham and Greenlee counties and the Galiuro, Pinaleño, Catalina, and Rincon Mountains), and the National Weather Service in Las Vegas (for areas above 3500 feet in the Northwest Plateau and areas above 4000 feet in the Northwest Deserts). The National Weather Service in Phoenix, Deer Valley, Scottsdale/Paradise Valley, and Gila Bend. The National Weather Service in Tucson issued the first Freeze Warning of the season for western Pima County, including Ajo and Organ Pipe Cactus National Monument. The first Hard Freeze Warning of the season was issued by the

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National Weather Service in Phoenix for central La Paz and northwestern/western Pinal counties, portions of Gila County, and portions of Maricopa County, including Fountain Hills/East Mesa and Cave Creek/New River. The National Weather Service in Tucson also issued the first Hard Freeze Warning of the season for southeastern/south central Pinal County, areas below 5000 feet in eastern Cochise County, and portions of Graham, Greenlee, Santa Cruz, and Pima counties, including the Tucson Metro Area and the Tohono O'odham Nation. The National Weather Service in Las Vegas issued the first Hard Freeze Warning of the season for the Northwest Deserts. Special Weather Statements were also issued by the National Weather Service in Flagstaff for strong snow showers in Yavapai County and the National Weather Service in Phoenix for strong thunderstorms in portions of Maricopa, Pinal, and Gila counties.

Another storm system affected Arizona on January 11. Bellemont received 4.4 inches of snow, and Betatakin and Williams received 4.0 inches of snow. Rain was observed at Globe (0.31 inches), Willcox (0.22 inches), Apache Junction (0.16 inches), and Bullhead City (0.08 inches). Winter Weather Advisories were issued by the National Weather Service in Flagstaff (for areas above 3500 feet across portions of northern Arizona), Phoenix (for areas above 4500 feet in the Mazatzal Mountains, Pinal/Superstition Mountains, and southeastern Gila County), and Tucson (for the White Mountains of Graham and Greenlee counties, Galiuro, Pinaleño, Catalina, and Rincon Mountains, and areas above 4500 feet in southeastern Pinal County and the Upper Gila River Valley). A dangerous snow squall led the National Weather Service in Flagstaff to issue a Snow Squall Warning for Coconino and Yavapai counties. Strong winds prompted the National Weather Service in Phoenix and Las Vegas to issue Wind Advisories for portions of Southeastern Arizona. Blowing dust resulted in the issuance of Dust Advisories by the National Weather Service in Phoenix and Tucson issued a High Wind Warning for portions of southeastern Arizona. Blowing dust resulted in the issuance of Dust Advisories by the National Weather Service in Phoenix and Tucson issued a High Wind Warning for portions of southeastern Arizona. Blowing dust resulted in the issuance of Dust Advisories by the National Weather Service in Phoenix and Tucson for southwestern La Paz County and northeastern Cochise County.

A trace of snow was observed in Window Rock during the early morning hours of January 14 due to a passing low pressure system. Temperatures warmed up from January 15-20 due to a ridge over the West Coast, and on January 17, a passing shortwave brought a trace of rain to Betatakin and Window Rock.

A trough over the western United States with embedded shortwaves affected Arizona from the evening of January 20-23. Ajo received 2.82 inches of precipitation, Tucson received 1.61 inches of precipitation, Bright Angel received 1.48 inches of precipitation (14.0 inches of snow), Yuma Marine Corps Air Station received 1.29 inches of precipitation, Natural Bridge State Park received 1.01 inches of precipitation, Phoenix received 0.70 inches of precipitation, Lake Havasu received 0.55 inches of precipitation, and Kingman received 0.47 inches of precipitation. The National Weather Service in Phoenix issued Dense Fog Advisories for western/northwestern Pinal County, South Mountain/Ahwatukee, Southeast Valley/Queen Creek, and Yuma. A Dense Fog Advisory was also issued by the National Weather Service in Tucson for south central Pinal County and the Tohono O'odham Nation.

Isolated showers lingered on January 24. Wupatki received 0.75 inches of precipitation, Springerville received 0.35 inches of precipitation, Jerome received 0.21 inches of precipitation, Sierra Vista received 0.18 inches of precipitation, and Tempe received 0.04 inches of precipitation. The National Weather Service in Phoenix issued a Dense Fog Advisory for central La Paz County and portions of Yuma and Maricopa counties.

A trough of low pressure brought rain and high elevation snow from January 25 into January 26. The Grand Canyon received 0.38 inches of precipitation, Betatakin received 0.32 inches of precipitation (4.5 inches of snow), Alpine received 0.20 inches of precipitation, and Safford Municipal Airport received 0.11 inches of precipitation. The National Weather Service in Flagstaff issued Special Weather Statements due to strong thunderstorms in Coconino, Yavapai, and Gila counties.

The month ended with warm temperatures and dry conditions due to a ridge of high pressure over Arizona.

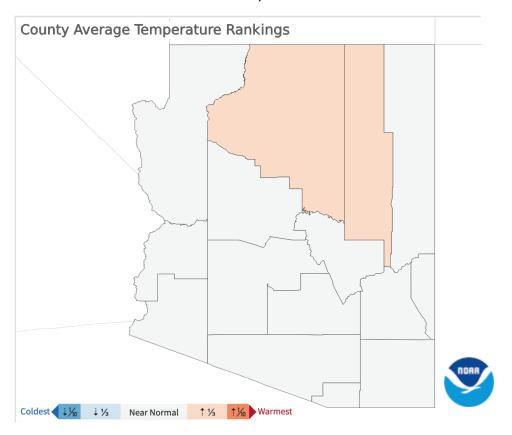
Data are preliminary and are from NOAA/NCEI, the Northeast Regional Climate Center, the Southeast Regional Climate Center, and the National Weather Service Forecast Offices in Flagstaff, Phoenix, Tucson, and Las Vegas.

<u>Note</u>: 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.

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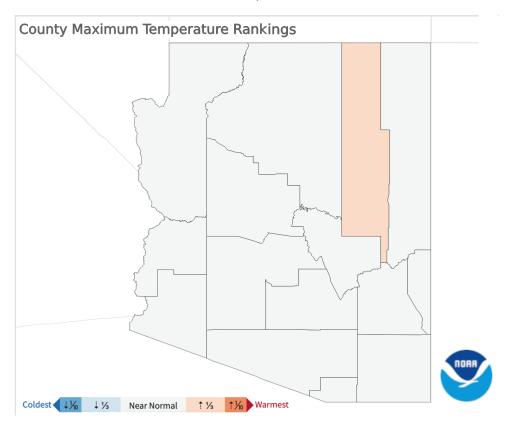






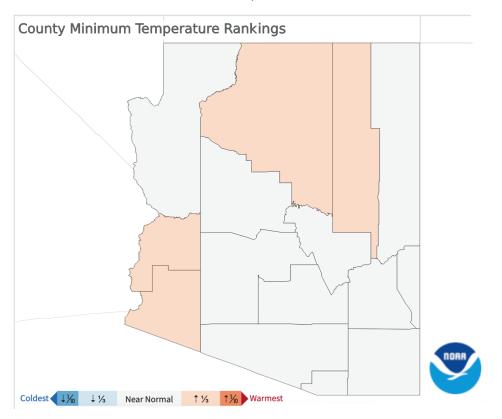
The average state temperature for January was 42.1°F, ranking as the 51st warmest January within the period of record. The 1895-2024 mean average state temperature for January was 41.1°F, resulting in an anomaly of +1.0°F.

County	Average Temperature	Rank (130 Years)	Anomaly °F		
			From the 1895-2024 mean		
Apache	30.9°F	60 th warmest	+0.8°F		
Cochise	44.1°F	65 th coldest	+0.3°F		
Coconino	34.7°F	33 rd warmest	+2.3°F		
Gila	41.5°F	64 th coldest	+0.1°F		
Graham	42.9°F	62 nd coldest	0.0°F		
Greenlee	39.2°F	59 th warmest	+0.5°F		
La Paz	52.7°F	48 th warmest	+1.0°F		
Maricopa	51.6°F	64 th warmest	+0.2°F		
Mohave	43.9°F	48 th warmest	+1.1°F		
Navajo	33.6°F	32 nd warmest	+2.8°F		
Pima	50.0°F	62 nd warmest	0.0°F		
Pinal	50.2°F	56 th warmest	+0.3°F		
Santa Cruz	44.6°F	58 th coldest	-0.1°F		
Yavapai	41.8°F	57 th warmest	+0.4°F		
Yuma	54.4°F	47 th warmest	+1.0°F		



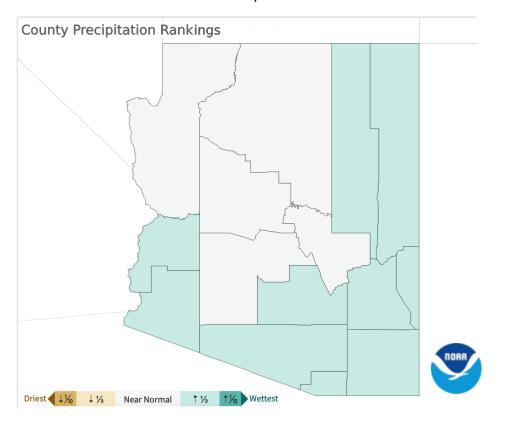
The average maximum state temperature for January was 53.9°F, ranking as the 60th warmest January within the period of record. The 1895-2024 mean maximum state temperature for January was 53.5°F, resulting in an anomaly of +0.4°F.

County	Maximum Temperature	Rank (130 Years)	Anomaly °F		
			From the 1895-2024 mean		
Apache	42.6°F	62 nd coldest	+0.1°F		
Cochise	58.0°F	65 th coldest	+0.2°F		
Coconino	45.9°F	50 th warmest	+1.7°F		
Gila	53.2°F	64 th warmest	-0.2°F		
Graham	54.8°F	58 th warmest	+0.2°F		
Greenlee	50.6°F	61 st coldest	-0.1°F		
La Paz	64.2°F	65 th warmest	-0.2°F		
Maricopa	63.5°F	57 th coldest	-0.7°F		
Mohave	54.2°F	50 th warmest	+0.9°F		
Navajo	45.6°F	35 th warmest	+2.7°F		
Pima	63.3°F	62 nd coldest	-0.4°F		
Pinal	62.2°F	61 st coldest	-0.2°F		
Santa Cruz	58.5°F	56 th coldest	-0.4°F		
Yavapai	54.3°F	60 th warmest	+0.3°F		
Yuma	66.1°F	54 th coldest	-0.7°F		



The average minimum state temperature for January was 30.3°F, ranking as the 45th warmest January within the period of record. The 1895-2024 mean minimum state temperature for January was 28.8°F, resulting in an anomaly of +1.5°F.

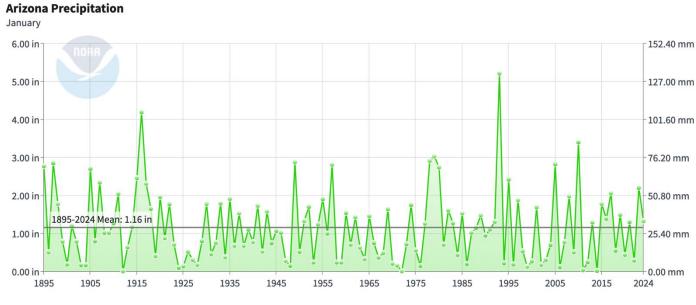
County	Minimum Temperature	Rank (130 Years)	Anomaly °F From the 1895-2024 mean
Apache	19.3°F	49 th warmest	+1.6°F
Cochise	30.2°F	63 rd warmest	+0.4°F
Coconino	23.5°F	32 nd warmest	+3.0°F
Gila	29.8°F	58 th warmest	+0.4°F
Graham	31.1°F	61 st coldest	0.0°F
Greenlee	27.7°F	50 th warmest	+0.9°F
La Paz	41.2°F	38 th warmest	+2.1°F
Maricopa	39.7°F	47 th warmest	+1.1°F
Mohave	33.7°F	48 th warmest	+1.4°F
Navajo	21.6°F	34 th warmest	+2.9°F
Pima	36.8°F	61 st warmest	+0.5°F
Pinal	38.3°F	50 th warmest	+1.0°F
Santa Cruz	30.7°F	64 th coldest	+0.2°F
Yavapai	29.3°F	58 th warmest	+0.5°F
Yuma	42.7°F	26 th warmest	+2.7°F



The average state precipitation for January was 1.34 inches, ranking as the 46th wettest January within the period of record. The 1895-2024 mean state precipitation for January was 1.16 inches, resulting in an anomaly of +0.18 inches.

County	Precipitation	Rank (130 Years)	Anomaly From the 1895-2024 mean
Apache	1.33"	36 th wettest	+0.31"
Cochise	1.74"	23 rd wettest	+0.72''
Coconino	1.15"	61 st wettest	-0.09''
Gila	1.90''	61 st wettest	-0.32''
Graham	1.75"	43 rd wettest	+0.45''
Greenlee	1.81"	38 th wettest	+0.43''
La Paz	1.22"	27 th wettest	+0.52''
Maricopa	1.12"	48 th wettest	+0.09''
Mohave	1.00''	62 nd wettest	-0.14''
Navajo	1.16"	42 nd wettest	+0.19''
Pima	1.64"	23 rd wettest	+0.66''
Pinal	1.71"	37 th wettest	+0.50''
Santa Cruz	2.29"	22 nd wettest	+1.01"
Yavapai	1.03"	61 st driest	-0.64''
Yuma	1.47"	15 th wettest	+0.87''

January Statewide Precipitation (1895 to date)



Period of record: 1895-2024

This chart shows average Arizona precipitation each January through the period of record (1895 to present). January 2024 ranked as the 46th wettest with an average of 1.34 inches, which is 0.18 inches above the 1895-2024 average of 1.16 inches. This was the wettest January since 2023.

Flagstaff Climate Statistics

January 2024

This ranked as the 38th warmest January on record Heating Degree Days: 1055 Normal: 1070 (1898-2024). With 1.53 inches of precipitation, it Cooling Degree Days: 0 Normal: 0 ranked as the 59th driest January on record. Degree base 65°F Avg Max Temp: 42.8°F Total January Precipitation: 1.53" Normal: 43.4°F Normal January Precipitation: Avg Min Temp: 18.6°F Normal: 17.6°F 2.05" Avg Mean Temp: 30.7°F Normal: 30.5°F Departure from Normal: -0.52" 0.41" on 7th Greatest 24-Hr Precip: Highest Monthly Avg Temp: 37.1°F in 2003 Total Precipitation Year-to-Date: Lowest Monthly Avg Temp: 12.7°F in 1937 1.53" Departure from Normal: -0.52" Total Precip Year-to-Date (Last Year): 5.77" Highest Temp this month: 58°F on 30th Lowest Temp this month: -2°F on 9th Total January Snowfall: 22.2" Normal: 20.9" Record January Snowfall: 104.8" in 1949 Record High: 66°F on 1/30/1971 Record Low: -30°F on 1/22/1937 Greatest January Precipitation: 9.55" in 1993 Least January Precipitation: 0.00" in 1972 No temperature or precipitation records this month. Number of Days: Flagstaff Number of Days of: Clear 20 Minimum Temp 32°F or lower 29 Partly Cloudy 6 Minimum Temp 0°F or lower 1 Cloudy 5 Maximum Temp 90°F or higher 0 Maximum Temp 32°F or lower 4

> Average Wind Speed: 6.2 mph Highest Peak Gust: 46 mph from 210° on 11th

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

JANUARY 2024 FLAGSTAFF AVERA GE DAILY TEMPERATURE									
	ABOVE AVERAGE BELOW +/- 0.5°F								
	S	М	т	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	31					

Flagstaff experienced 10 days of below average temperatures, 4 days of average temperatures, and 17 days of above average temperatures this month.

Phoenix Climate Statistics

January 2024

This ranked as the 28th warmest January on record Heating Degree Days: 282 Normal: 256 (1895-2024). With 0.73 inches of precipitation, it Cooling Degree Days: 11 Normal: 2 ranked as the 56th wettest January on record. Degree base 65°F Avg Max Temp: 66.1°F Total January Precipitation: 0.73" Normal: 67.6°F Normal January Precipitation: 0.87" Avg Min Temp: 45.8°F Normal: 46.0°F Avg Mean Temp: 56.0°F Normal: 56.8°F Departure from Normal: -0.14" 0.66" from 22nd – 23rd Greatest 24-Hr Precip: Highest Monthly Avg Temp: 62°F in 2003 Lowest Monthly Avg Temp: 43.1°F in 1937 Total Precipitation Year-to-Date: 0.73" Departure from Normal: -0.14" Total Precip Year-to-Date (Last Year): 1.03" Highest Temp this month: 81°F on 29th, 30th, 31st Lowest Temp this month: 35°F on 9th Greatest January Precipitation: 5.22" in 1993 0.00" in 2014 Least January Precipitation: Record High: 88°F on 1/19/1971 and 10 other years Record Low: 16°F on 1/7/1913 Number of Days: Clear 11 Temperature or precipitation records this month: Partly Cloudy 16 Precip: 0.41" on 1/23/2024, Cloudy 4 previous record 0.25" on 1/23/1967 Average Wind Speed: 4.8 mph Phoenix Number of Days of: 45 mph from 310° on 3rd Highest Peak Gust: Minimum Temp 32°F or lower 0 Minimum Temp 0°F or lower 0 Maximum Temp 90°F or higher 0 Data are from NOAA, the Northeast Regional Climate Maximum Temp 32°F or lower 0 Center, and the Southeast Regional Climate Center

Normals on this page are from 1991-2020

and are preliminary.

		Р	HOE	20 NIX TEMPERA				
AB	ABOVE AVERAGE BELOW +/- 0.5°F							
S	М	т	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	31					
a are from the Natio	onal Weather Se	ervice office in F	² hoenix and are	preliminary.				

This month, there were 13 days of below average temperatures, 8 days of average temperatures, and 10 days of above average temperatures in Phoenix.

Tucson Climate Statistics

January 2024

This ranked as the 40th warmest January on record Heating Degree Days: 370 Normal: 352 (1894-2024). With 1.77 inches of precipitation, it Cooling Degree Days: 0 Normal: 1 ranked as the 16th wettest January on record. Degree base 65°F **Total January Precipitation:** 1.77" Avg Max Temp: 65.2°F Normal: 66.5°F Normal January Precipitation: 0.84" Avg Min Temp: 40.5°F Normal: 40.8°F Avg Mean Temp: 52.8°F Normal: 53.6°F Departure from Normal: +0.93" Greatest 24-Hr Precip: 0.81" on 21st Highest Monthly Avg Temp: 59.1°F in 2018 Lowest Monthly Avg Temp: 41.2°F in 1937 Total Precipitation Year-to-Date: 1.77" Departure from Normal: +0.93" Total Precip Year-to-Date (Last Year): 1.76" Highest Temp this month: 80°F on 29th Lowest Temp this month: 28°F on 9th Greatest January Precipitation: 4.81" in 1993 0.00" in 2014 Least January Precipitation: Record High (F): 88°F on 1/4/1927 and 10 other years Record Low (F): 6°F on 1/7/1913 Number of Days: Temperature or precipitation records this month: Clear 21 Precip: 0.81" on 1/21/2024, Partly Cloudy 4 previous record 0.40" on 1/21/1982, 1/21/1933 Cloudy 6 Precip: 0.60" on 1/23/2024, previous record 0.56" on 1/23/1985 Average Wind Speed: 5.8 mph 49 mph from 170° on 20th Highest Peak Gust: Tucson Number of Days of: Minimum Temp 32°F or lower 4 Data are from NOAA, the Northeast Regional Climate Minimum Temp 0°F or lower 0 Center, and the Southeast Regional Climate Center Maximum Temp 90°F or higher 0 and are preliminary. Maximum Temp 32°F or lower 0

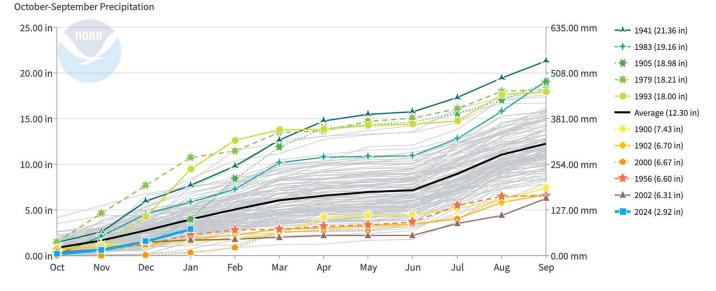
Normals on this page are from 1991-2020

JANUARY 2024 TUCSON AVERA GE DAILY TEMPERATURE ABOVE AVERAGE BELOW								
	+/- 0.5°F							
	S	м 1	т 2	W 3	Th 4	F 5	S 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	31				
ata are	from the Natio	nal Weather Se	ervice office in T	Tucson and are	preliminary.			(

16 days of below average temperatures, 3 days of average temperatures, and 12 days of above average temperatures occurred in Tucson this month.

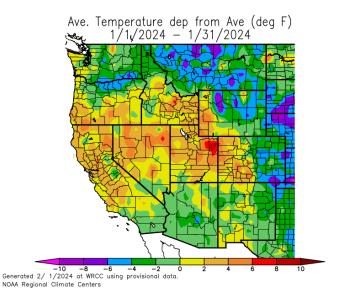
Cumulative Statewide Precipitation per Water Year (Oct 2023-Sept 2024)

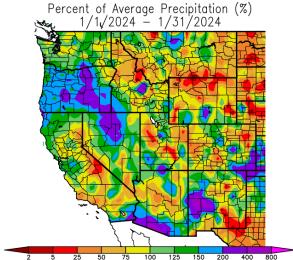




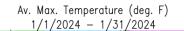
The 5 wettest Water Years are shown with green lines and the 5 driest Water Years are shown with brown lines. The current Water Year is the blue line, and the average annual precipitation per Water Year (period of record) is the black line. The average state cumulative Water Year precipitation was 2.92 inches at the end of January, which is 1.08 inches below the October-January average of 4.00 inches.

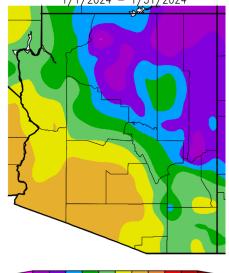
Data are from the National Centers for Environmental Information and are preliminary.





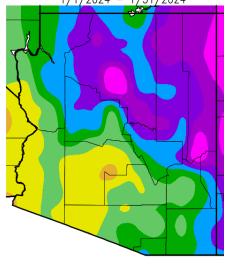
2 5 25 50 75 100 125 150 200 400 800 Generated 2/ 1/2024 at WRCC using provisional data. NOAA Regional Climate Centers



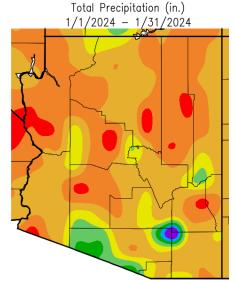




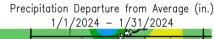
Av. Min. Temperature (deg. F) 1/1/2024 - 1/31/2024

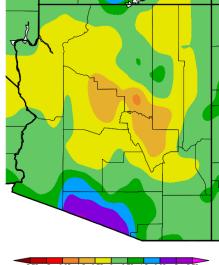


15 20 25 30 35 40 45 50 55 60 65 Generated 2/ 1/2024 at WRCC using provisional data. NOAA Regional Climate Centers

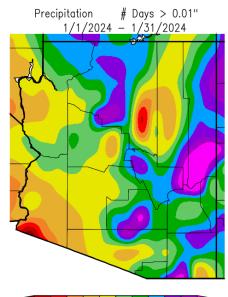


0.1 0.25 0.5 1 1.75 2.5 3.25 4 4.75 5.5 6.25 Generated 2/ 1/2024 at WRCC using provisional data. NOAA Regional Climate Centers





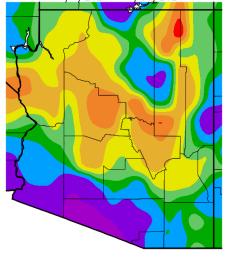
-3,75 -3 -2.25 -1.5 -0.75 0 0.75 1.5 2.25 3 3.75 Generated 2/ 1/2024 at WRCC using provisional data. NOAA Regional Climate Centers



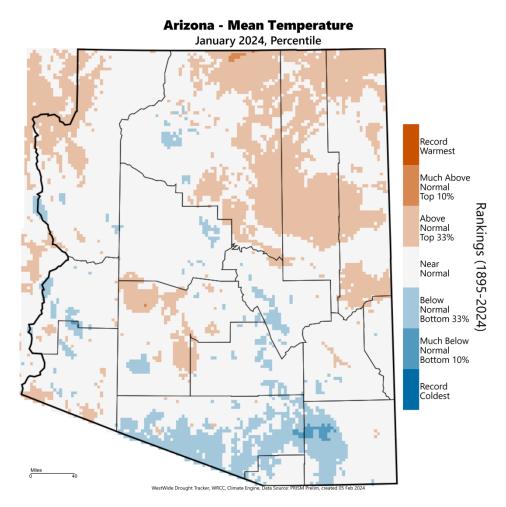
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 Generated 2/ 1/2024 at WRCC using provisional data.
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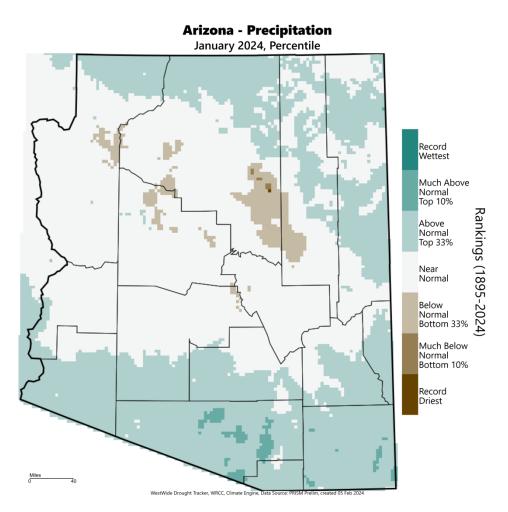
Percent of Average Precipitation (%) 1/1/2024 - 1/31/2024



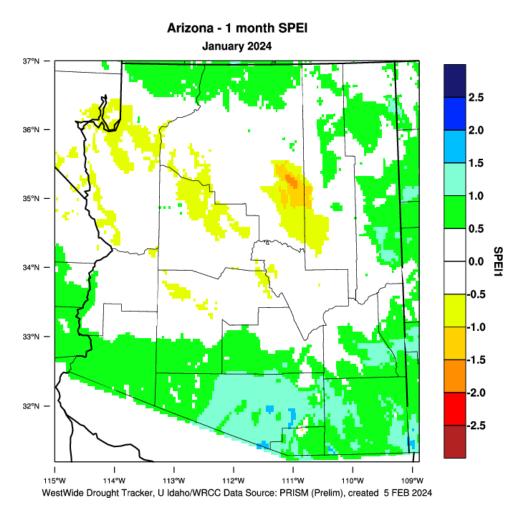
2 5 25 50 75 100 125 150 200 400 800 Generated 2/ 1/2024 at WRCC using provisional data. NOAA Regional Climate Centers



Temperatures were near normal across much of the state. Portions of Mohave, Maricopa, Coconino, Navajo, and Apache counties experienced above normal temperatures, while below normal temperatures were observed in portions of central and southern counties.

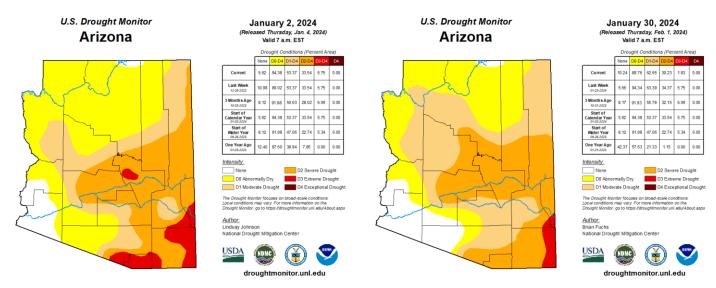


Southern counties and portions of northern and eastern counties received above normal precipitation. Near normal to below normal precipitation was recorded in central counties and portions of Coconino, Navajo, Yavapai, and Mohave counties.



This map shows the standardized precipitation evapotranspiration index (SPEI) across Arizona. January precipitation and evapotranspiration totals are measured across the state and are compared to previous January 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



Moderate (D1) and Severe (D2) short-term drought expanded to 61% of the state, including expansion in Mohave, Yavapai, and Coconino counties. Extreme (D3) short-term drought improved to only 2% of the state, largely in eastern Cochise County and small areas in southern Graham and Greenlee counties. Abnormally Dry (D0) or areas without drought decreased to 37% of the state.