

# 2024 Annual Weather Summary

Southern Indiana and Central Kentucky

Photo: The Ohio River between Louisville and Clarksville June 27, 2024



# **Top Events**



**January 19**: Two to four inches of snow blanketed southern Indiana and north central Kentucky. The snow was followed by sub-zero temperatures for many on the 20th and 21st.

**January 25**: The temperature at Lexington rose to 64° just four days after having fallen to -7°.

**February 10**: Two brief pre-dawn EF-1 tornadoes struck Clark County, Indiana and Henry County, Kentucky.

**March 14-15**: An EF2 tornado struck Hanover, Indiana and Milton, Kentucky on the 14th. The twister crossed the Ohio River three times. That night a squall line brought 50-60 mph winds.

**March 28**: After a couple of days in the 70s, a sharp cold front produced powerful storms and brought a stripe of wind damage and hail from Hancock and Ohio counties through the Lexington metro during the early morning hours. Temperatures behind the front crashed 30 to 40 degrees in a matter of several hours.

April 2: Ten tornadoes struck the region, including an EF2 from west of Utica to east of Prospect, and another EF2 near Buckner.

May 7: An isolated shower that wasn't even producing any lightning managed to spin up a small tornado in Clark County, Indiana.

May 8: The Kentucky counties of Logan, Barren, Butler, Hart, Green, and Grayson all received golf ball sized hail from severe storms.

May 26: Two waves of storms brought widespread damaging winds and several tornadoes, including an EF1 that was on the ground for 41 miles.

**June 4**: Storms moving from south to north caused spotty flash flooding. Cars were submerged near the intersection of Seventh St and Berry Blvd in Louisville.

July 4: Brief tornadoes touched down on the west side of Louisville and in Harrison County, Indiana.

**August 17**: A line of storms pushed through the Bluegrass and produced a wind gust of 82 mph near Winchester.

August 21-23: Unusually cool summer weather led to some locations seeing temperatures in the upper 40s. Meade County fell to 44° on the 22nd.

August 29-30: Two of the hottest days of the year. Louisville made it to 102° on the 29th and 100° on the 30th.

September 24: A brief EF0 tornado struck Clark County, Indiana. Also, drought conditions peaked across the region.

**September 27-29**: The remnants of Hurricane Helene brought 2-6" of soaking rains to the Ohio Valley, ending the summer drought. On the 27th winds up to 65 mph were recorded.

October 31: One of only two days in October on which rain fell in Bowling Green and Louisville.

November 30: November ended on a cold note with morning temperatures in the teens. Shelby County dropped to 14°.







	Bowling Green	Frankfort	Lexington	Louisville Ali	Louisville Bowman
Highest Temperature	101° August 29	98° August 30	98° August 30	102° August 29	98° August 29
Lowest Temperature	1° January 21	-6° January 21	-7° January 21	3° January 20	2° January 20 and January 21
Daily Average Temperature Most Above Normal	+23° February 27	+25° January 25	+27° January 25	+23° January 25, February 27, and March 4	+23° January 25 and March 4
Daily Average Temperature Most Below Normal	-25° January 16 and January 20	-26° January 20	-25° January 20	-24° January 15	-25° January 15 and January 20
Wettest Day	2.97" September 27	1.95" September 27	2.29" September 27	2.26" September 27	2.15" September 24
Snowiest Day	2.0" January 14 and January 15		2.0" January 19	2.7" January 19	
Deepest Snow Cover	3" January 15-17		4" January 20	2" January 19-20	
Fastest Wind Gust	52 mph January 12	56 mph July 31	65 mph September 27	62 mph April 18 and May 26	63 mph May 26





# Averages, Departures, & Records

### **Station Values**

	Average Temperature*	Departure from Normal	Precipitation	Departure from Normal	Snow	Departure from Normal
Bowling Green	61.8°	+2.7°	51.68"	+1.58"	5.1"	-3.4"
Frankfort	58.8°	+2.3°	45.65"	-1.69"		
Lexington	59.8°	+3.5°	49.98"	+0.14"	10.2"	-4.3"
Louisville Ali	61.9°	+3.0°	48.23"	-0.11"	5.3"	-8.1"
Louisville Bowman	59.1°	+1.3°	50.44"	+2.32"		

### Records

- Warmest year on record at Lexington and Louisville
- 2nd warmest year on record at Bowling Green and Frankfort

\*Calculated as an average of monthly averages



Source: **NWS Louisville Climate** 



# **Louisville City Summary**

**January 12, 2025** 8:37 PM

	Average Temperature	Departure from Normal	Precipitation	Departure from Normal	Snowfall	Departure from Normal
January	34.7	-1.0	6.53"	+3.14"	4.1"	-0.4"
February	47.3	+7.8	1.63"	-1.78"	0.4"	-3.7"
Winter	42.4	+4.1	10.02"	-0.91"	4.6"	-6.2"
March	53.2	+4.8	2.31"	-2.29"	Trace	-2.1"
April	62.2	+3.2	4.93"	+0.13"	0	-0.1"
Мау	71.9	+3.6	6.07"	+0.89"	0	0
Spring	62.4	+3.8	13.31"	-1.27"	Trace	-2.2"
June	78.5	+2.1	1.78"	-2.49"	0	0
July	80.3	+0.4	5.91"	+1.86"	0	0
August	80.0	+1.1	0.99"	-2.72"	0	0
Summer	79.6	+1.2	8.68"	-3.35"	0	0
September	75.1	+3.1	6.71"	+3.05"	0	0
October	63.6	+3.3	0.36"	-3.36"	T (hail)	0
November	53.6	+5.1	7.20"	+3.78"	0.6"	+0.3"
Autumn	64.1	+3.8	14.27"	+3.47"	0.6"	+0.2"
December	42.7	+3.1	3.81"	-0.32"	0.2"	-2.0"
ANNUAL	61.9	+3.0	48.23"	-0.11"	5.3"	-8.1"



**ANNUAL** 

59.8

+3.5

# **Lexington City Summary**

10.2"

-4.3"

+0.03"

$\frac{\sqrt[4]{*} \star \star \star^{3}}{2}$						
	Average Temperature	Departure from Normal	Precipitation	Departure from Normal	Snowfall	Departure from Normal
January	33.9	0	6.05"	+2.63"	5.4"	+0.7"
February	45.4	+7.9	4.60"	+0.91"	1.5"	-3.0"
Winter	41.1	+4.7	13.04"	+1.78"	6.9"	-4.2"
March	51.0	+5.1	3.67"	-0.87"	Trace	-2.8"
April	59.8	+3.6	4.40"	-0.02"	0	-0.2"
Мау	69.3	+3.9	5.68"	+0.24"	0	0
Spring	60.0	+4.2	13.75"	-0.59"	Trace	-3.0"
June	76.1	+2.8	3.03"	-1.93"	0	0
July	78.9	+2.2	3.99"	-1.13"	0	0
August	76.9	+1.2	3.46"	-0.25"	0	0
Summer	77.3	+2.1	10.48"	-3.31"	0	0
September	72.1	+3.0	6.33"	+2.91"	0	0
October	60.6	+2.8	0.43"	-3.23"	0	0
November	52.3	+6.2	4.14"	+0.77"	1.7"	+1.3"
Autumn	61.7	+4.0	10.90"	0.45"	1.7"	+1.3"
December	41.3	+3.5	4.20"	0	1.6"	-0.3"

49.98"



# **Bowling Green City Summary**

January 12, 2025 8:37 PM

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	Average Temperature	Departure from Normal	Precipitation	Departure from Normal	Snowfall	Departure from Normal					
January	34.9	-2.3	5.80"	+2.16"	4.6"	+1.4"					
February	48.0	+6.9	3.25"	-0.82"	0.2"	-2.7"					
Winter	42.4	+2.8	11.20"	-0.86"	4.8"	-2.1"					
March	53.9	+4.7	1.98"	-2.56"	0	-1.4"					
April	62.5	+3.5	5.07"	+0.26"	0	-0.1"					
May	70.7	+2.7	7.26"	+2.23"	0	0					
Spring	62.4	+3.7	14.31"	-0.07"	0	-1.5"					
June	77.7	+1.6	2.86"	-1.65"	0	0					
July	80.1	+0.4	7.86"	+3.60"	0	0					
August	78.9	+0.4	1.43"	-2.46"	0	0					
Summer	78.9	+0.8	12.15"	-0.51"	0	0					
September	73.7	+2.3	5.82"	+2.18"	0	0					
October	63.3	+3.3	0.40"	-3.23"	0	0					
November	54.3	+5.9	4.03"	+0.30"	Trace	-0.1"					
Autumn	63.8	+3.9	10.25"	-0.75"	Trace	-0.1"					
December	43.6	+3.1	5.92"	+1.57"	0.3"	-0.5					
ANNUAL	61.8	+2.7	51.68"	+1.58"	5.1"	-3.4"					



# **Frankfort City Summary**

	Average Temperature	Departure from Normal	Precipitation	Departure from Normal
January	32.8	-1.3	5.96"	+2.69"
February	44.5	+6.7	2.46"	-0.94"
Winter	39.8	+3.1	10.49"	+0.05
March	49.7	+3.5	3.01"	-1.71"
April	59.2	+2.5	5.43"	+0.88"
Мау	68.5	+3.0	5.48"	+0.38"
Spring	59.1	+3.0	13.92"	-0.45"
June	74.9	+1.2	1.80"	-2.54"
July	77.8	+0.6	3.04"	-1.65"
August	76.1	0	3.79"	+0.64"
Summer	76.3	+0.6	8.63"	-3.55"
September	71.4	+2.2	5.86"	+2.51"
October	59.4	+1.8	0.28"	-3.36"
November	51.2	+5.1	3.81"	+0.45"
Autumn	60.7	+3.1	9.95"	-0.40"
December	40.2	+2.1	4.73"	+0.96"
ANNUAL	58.8	+2.3	45.65"	-1.69"









Darkness in Paoli, Indiana during the total solar eclipse on April 8. Photo by Evan Webb

Sunrise in Oldham County on December 12. Photo by Ryan Sharp



Sunset over Louisville June 27. Photo by Tom Reaugh

# **Photos**







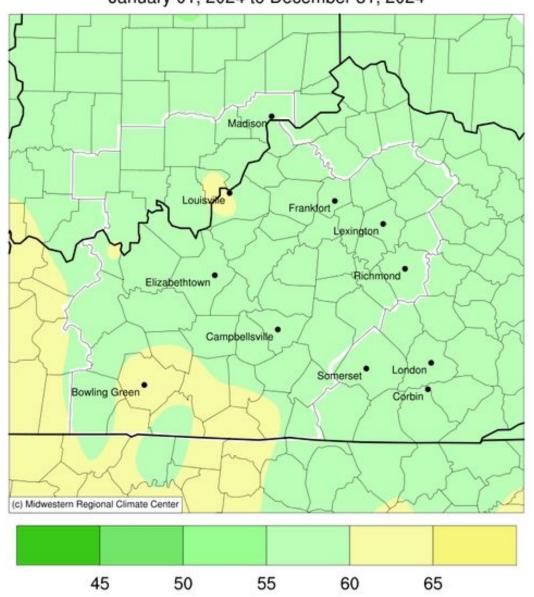
Flying over central Kentucky toward Louisville Muhammad Ali International Airport on May 28 (left), and an evening at Slugger Field between rain delays on July 9 (above). *Photos by CJ Padgett* 

# **Temperature Maps**



### Average Temperature (°F) \*

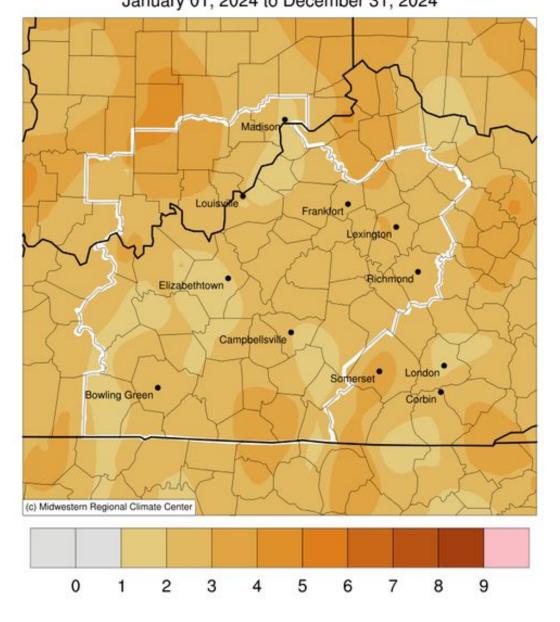
January 01, 2024 to December 31, 2024



\*Calculated as an average of daily averages

Source: MRCC

# Average Temperature (°F): Departure from 1991-2020 Normals January 01, 2024 to December 31, 2024



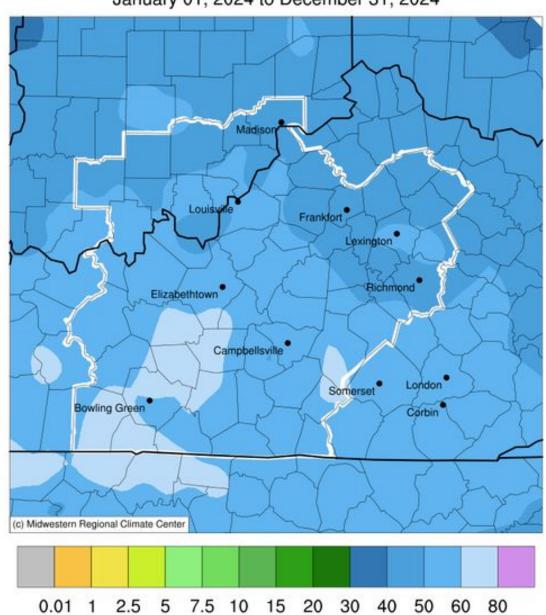


# **Precipitation Maps**



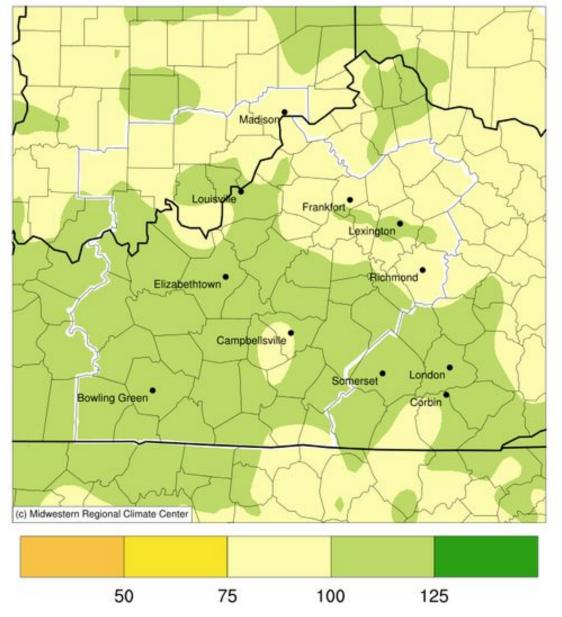
### Accumulated Precipitation (in)

January 01, 2024 to December 31, 2024



### Accumulated Precipitation (in): Percent of 1991-2020 Normals

January 01, 2024 to December 31, 2024





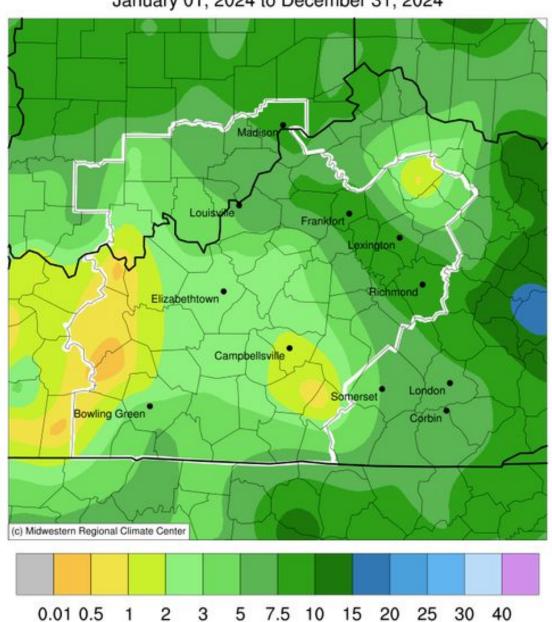


# **Snowfall Maps**



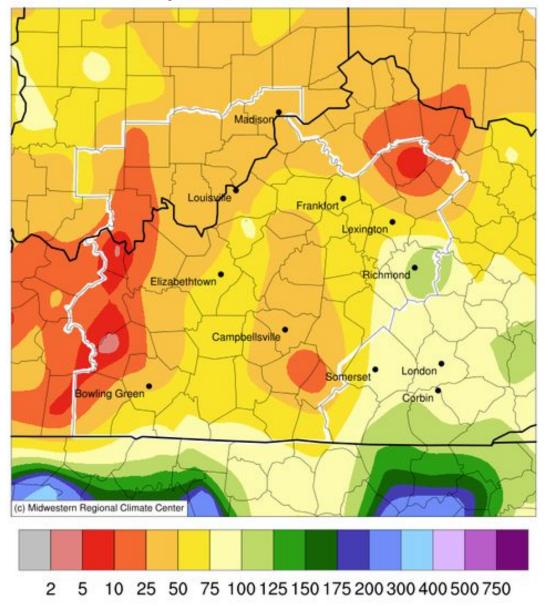
### Accumulated Snowfall (in)

January 01, 2024 to December 31, 2024



### Accumulated Snowfall (in): Percent of 1991-2020 Normals

January 01, 2024 to December 31, 2024



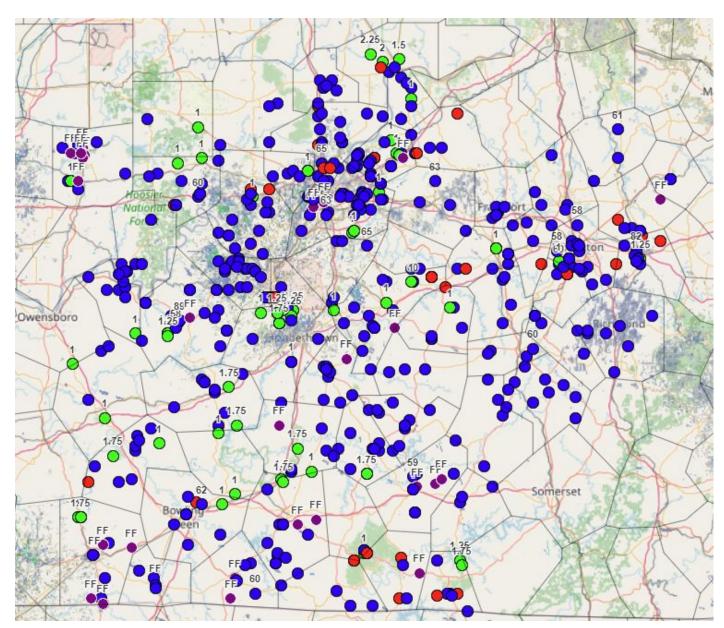
Source: MRCC







### January 1 - December 31



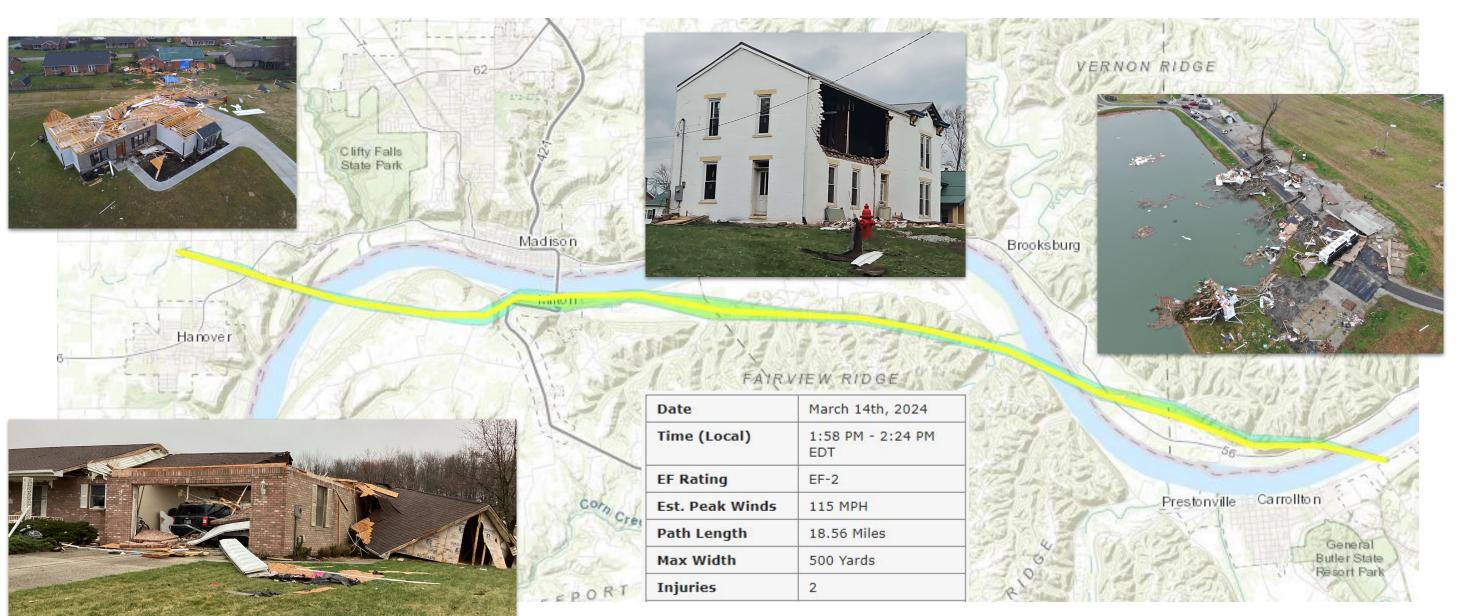




# **Hanover-Milton Tornado**



March 14 EF2







# **Utica-Prospect and Buckner Tornadoes**

### **April 2 EF2s**







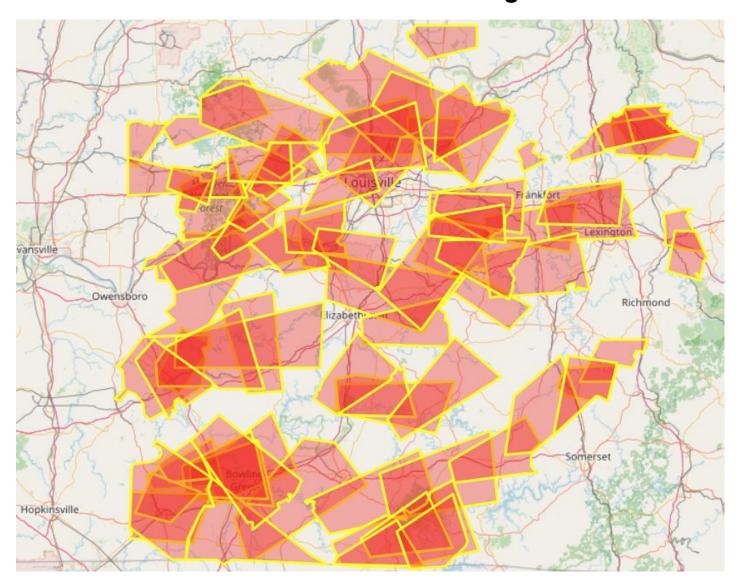


### **Issued by NWS Louisville**

### **Tornado Warnings**

# Frankfort Hopkinsville

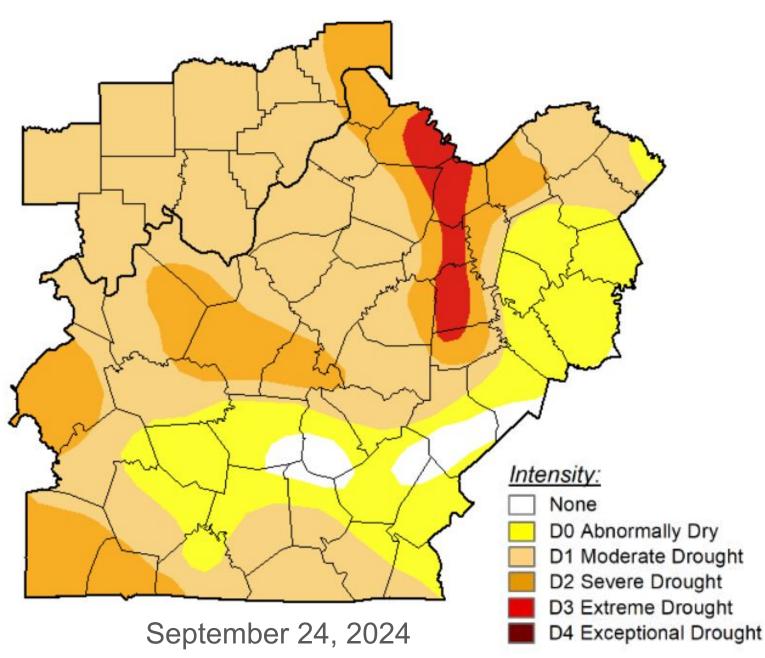
### **Severe Thunderstorm Warnings**





# **U.S. Drought Monitor**





2024 started off with most of southern Indiana and central Kentucky in moderate to severe drought. It soon came to an end, though, as increased precipitation in mid and late January erased drought from the region.

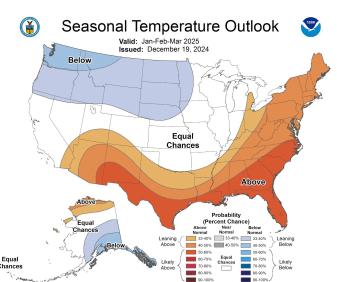
However, warm and dry conditions led to the redevelopment of drought during the summer months. The drought peaked during the third week of September. Moderate to severe drought was widespread, and areas from New Castle through Frankfort to Harrodsburg experienced extreme drought conditions. The remnants of Hurricane Helene then brought two to five inches of soaking rain to the area September 27-29, eliminating the drought. It was a good thing, too, since October was one of the driest months on record for some spots, including Frankfort and Lexington.

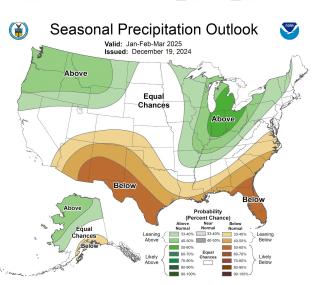
Source: **USDM** 



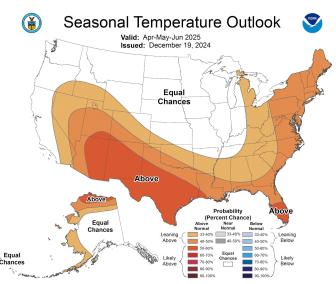
# **CPC Seasonal Outlooks for 2025**

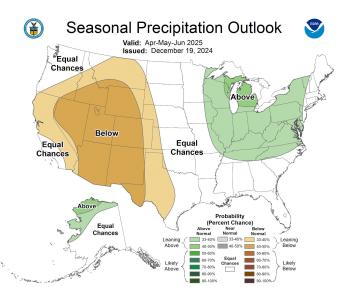
### JAN - MAR



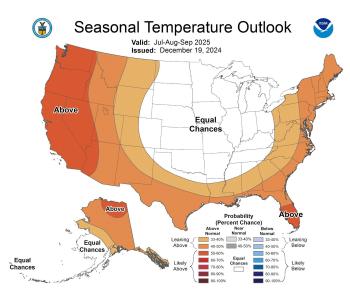


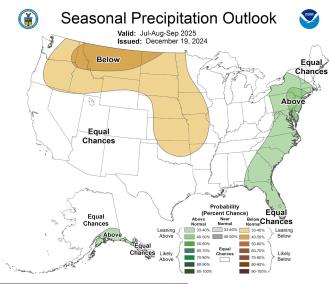
### **APR-JUN**





### JUL-SEP





Source: Climate Prediction Center, NOAA

### OCT - DEC

