

Central Indiana

December 2015

Climate Summary

3rd Warmest on record at Indianapolis

9th Wettest on record at Indianapolis

Tied for the 30th Least Snowiest on record at Indianapolis

Temperatures

December started out on a seasonable note with high temperatures generally in the 30s through the first five days of the month. Temperatures rose after that as an upper level ridge brought unseasonably warm weather through about the middle of the month. Highs were consistently in the 50s or warmer, peaking from the 11th through the 14th as most all of central Indiana climbed into the 60s. Indianapolis shattered a record high on the 12th when the temperature made it to 70 degrees, 7 degrees warmer than the previous record set in 1877 and 1927. It was also the latest 70 degree reading in Indianapolis in recorded history. Most of central Indiana made it into the lower 70s on the 12th, an amazing 30 degrees above normal. Overnight lows in the middle and in some areas, upper 50s, made it feel more like spring.

Temperatures dropped beginning on the 15th in the wake of a cold frontal passage, returning primarily into the 40s during the day which remained above average. The coldest overnight temperatures of the month came for most locations on the 19th as lows fell into the teens and lower 20s. Highs during this time period were only in the lower and middle 30s. This was only a temporary reprieve from the warmer temperatures, as milder air quickly returned to the Ohio Valley beginning on the 20th and continuing through Christmas. Highs rose into the 60s once again on the 23rd as southerly winds brought warm moist air into the region ahead of a strong cold front. Indianapolis tied a record high of 64 on the 23rd, matching the old daily record from 1933.

Highs remained in the 50s and lower 60s through the 27th as the weather stayed active. Indianapolis enjoyed the warmest Christmas Eve since 1982 and the warmest Christmas Day since 1987 with highs in the 50s. An unusual setup occurred along a slowly southward moving front on the early morning of the 27th as warmer air to the south of the boundary drew much warmer air into the southern half of Indiana. Many areas south of Interstate 70 rose into the 60s during the overnight hours with Bloomington making it to 70 degrees around 5 am. Temperatures fell quickly for the remainder of the day, with progressively cooler air settling in for the last few days of the year. Ironically, the coldest day of the month for most of central Indiana was the last day of 2015 with a chilly, gray day as temperatures only rose into the 30 to 35 degree range.

In Indianapolis, 17 days during the month experienced highs at or above 50 degrees. Only December 1877 and 1889 experienced more 50+ degree days with 18 and 22 respectively. The temperature made it to 65 or warmer on 3 days during the month, the most since December 2001. The 70 degree high on December 12 was the first 70 degree day since December 5, 2001.

Site	December 2015 Avg Temp	December 2015 Difference from Normal	Highest Temperature	Lowest Temperature
Indianapolis	42.6	+11.0	70 on 12	21 on 19
Lafayette	41.2	+10.8	67 on 12	18 on 19
Muncie	44.1	+13.4	71 on 12	21 on 19
Terre Haute	43.1	+11.5	70 on 12	22 on 19
Bloomington	43.7	+11.5	70 on 12 and 27	22 on 4
Shelbyville	44.4	+12.6	71 on 12	24 on 19
Indy – Eagle Crk.	42.4	+10.7	69 on 12	21 on 19

At Indianapolis, there were 25 days with above normal average temperatures, 5 days with below normal average temperatures and 1 day with normal average temperatures.

December 2015 was the 3rd warmest in the Indianapolis area since weather records began in 1871.

Precipitation

December 2015 was one of the wettest Decembers of record for Indiana. December monthly rainfall and melted precipitation measured from slightly over 3 inches in northeast Indiana to more than 8 inches in west central Indiana. Rainfall ranged from near normal in portions of southern Indiana to record amounts for December in west

central Indiana. Rainfall during the last 11 days of the month ended the dry period that persisted in much of the state since August.

Most of the rainfall for December fell in the 8-day period from the 21st-the 28th. Rains of 2 to more than 8 inches fell during this time compared to only a quarter to slightly over an inch for the remainder of the month. For the Indianapolis area, this was the wettest December since the record wet December of 1990. The Indianapolis monthly total of 5.59 inches was a few hundredths of an inch greater than the Decembers of 2006, 2007 and 2008.

Significant flooding quickly returned to central and southern Indiana, for the first time since July, immediately following Christmas. Rains of 1 to 3 inches on the 21st and 23rd saturated the soil and caused elevated stream levels. Much of the heavy rains of 3 to more than 8 inches from the 26th-28th ran into the streams and rivers and caused extensive flooding.

River flooding along the Wabash River in eastern Illinois and western Indiana was the highest since April 2013. Flooding along the White, East Fork White Rivers and many other streams in central and southern Indiana were the highest since June or July. Significant river flooding in western and southern Indiana continued into the New Year.

Site	December 2015 Precipitation	December 2015 Difference from Normal	Wettest Day	Longest Dry Stretch
Indianapolis	5.59	+2.42	1.86 on 27	6 days 8-13
Lafayette	6.76	+4.25	2.20 on 28	4 days 7-10 and 17-20
Muncie	5.08	+2.20	1.45 on 27	4 days 3-6
Terre Haute	6.49	+3.44	1.68 on 28	3 days 3-5 and 8-10
Bloomington	5.26	+1.72	1.43 on 23	6 days 8-13
Shelbyville	6.16	+2.89	1.74 on 27	4 days 17-20
Indy – Eagle Crk.	5.23	+2.15	1.76 on 27	3 days 3-5, 8-10 and 18-20

December 2015 was the 9th wettest in the Indianapolis area since weather records began in 1871.

Snowfall

With such a warm month across the Hoosier state, little snowfall occurred during December. Snowfall was once again confined to northern and central portions of Indiana. Monthly snowfall totals ranged from less than an inch in central Indiana to 2 inches in northern Indiana.

With only 0.6 inches of snow in the Indianapolis area, December 2015 tied for the 30th least snowiest December on record.

Severe Weather

Strong low pressure moving into the upper Midwest produced a rare winter severe weather event across the Mississippi, Ohio and Tennessee valleys on the afternoon of December 23. Multiple lines of thunderstorms producing wind damage moved across central Indiana. Three small tornadoes occurred as well, all producing EF1 damage. The first occurred near Greenwood, the second was just to the southwest of Noblesville, and the third tornado occurred along the Decatur-Rush County line near Williamstown. For more information on the severe weather from the 23rd, go to <http://www.weather.gov/ind/dec232015severe>.

For information on severe weather in other areas during December, visit the Storm Prediction Center "Severe Weather Event Summaries" website at <http://www.spc.noaa.gov/climo/online/>.

Miscellaneous

The maximum wind gust at Indianapolis International Airport was 46 mph out of the southwest as a line of showers and storms impacted the Indianapolis metro area on the afternoon of the 23rd. Fog or haze was reported at Indianapolis on 19 days during the month, with dense fog reported on four days. Thunder was reported on 4 days during December.

January 2016 Outlook

The official outlook for January 2016 from the Climate Prediction Center indicates an equal chance of near, above or below normal temperatures across central Indiana. At Indianapolis, the average temperature for the month is 28.1 degrees. There is also a slightly greater chance of near to below normal precipitation for central Indiana. The

average precipitation for January at Indianapolis is 2.66 inches, with 8.6 inches of snowfall.

Data prepared by the Indianapolis Forecast Office.