

Central Indiana February 2022 Climate Summary

70th Coldest on record at Indianapolis

Tied 17th Wettest on record at Indianapolis

29th Snowiest on record at Indianapolis

Temperatures

February started out warm with temperatures approaching 60° on the 1st followed by 50s for most on the 2nd. Conditions changed quickly, however, as a complex and significant winter storm shifted temperatures to much colder levels for the 3rd and through the following 3-4 days as much of central Indiana was blanketed by a deep snowpack. The coldest night of the month for much of the area came on the morning of the 5th under clear skies and light winds combined with the snow on the ground. Several locations over northern portions of central Indiana fell below zero with the rest of the region dropping into the single digits.

Recovery began on the 8th with a steady decline in the snowpack persisting over the next several days as highs oscillated between the 30s and 40s with mainly dry conditions and plenty of sunshine during the day. A brief cool down arrived from the 12th through the 14th with highs largely holding in the 20s. Beginning on the 15th though, conditions turned much warmer as southerly flow developed across the Ohio Valley. Many locations reached 60° on the 16th and 17th before falling back into the 30s as colder air returned in the wake of a strong storm system.

For the rest of the month, temperatures fluctuated between periods of colder then warmer aided by storm systems frequently tracking through the Ohio Valley. The warmest days for February came on the 21st and 22nd with highs rising into the low and mid 60s before returning yet again to the 30s for several days before rising right at the end of the month.

Despite the up and down nature of the temperatures throughout February, the month ended up cooler than normal with most locations up to 2° degrees below normal for the monthly average. In Indianapolis, 25 of the 28 days during the month experienced lows below freezing with 13 days seeing lows below 20°. Ten of the days saw highs at or below freezing while nearly half of the days in February experiencing highs above 40°.

February 2022's below normal temperatures continued the trend from both January 2022 and February 2021.

Site	February 2022 Average Temp	February 2022 Dep from Nml	Highest Temperature	Lowest Temperature
Indianapolis Int'l Airport	30.8	-1.7	63 on 21 st	2 on 5 th
Lafayette	27.9	-1.8	60 on 21 st	-3 on 5th
Muncie	31.5	-0.4	62 on 22 nd	5 on 8 th
Terre Haute	31.0	-1.9	63 on 21 st	3 on 5 th
Bloomington	32.3	-1.5	65 on 21st	5 on 5 th
Shelbyville	33.1	-0.5	64 on 22 nd	4 on 5 th
Indianapolis Eagle Creek	31.3	-1.2	63 on 21 st	3 on 5 th

At Indianapolis, February 2022's daily average temperatures were above normal on 11 days, below normal on 16 days, and at normal on 1 day. It was the **70th coldest** February for the Indianapolis Area since complete weather records began in 1872.

Precipitation

February 2022's liquid precipitation was above normal, and exceedingly so for far southern counties, as the Shoals (Martin Co.) COOP site's **7.00"** made for its 2nd-wettest February on record (since 1909). The month featured an active upper-level pattern, with several troughs plunging through the central United States. This encouraged slowly-passing frontal boundaries and surface weather systems over the Mid-West and/or Ohio Valley, which focused moisture from the Gulf of Mexico into central Indiana. The most notable events were the **2nd-3rd, 17th, and 22nd**.

The month began with a multi-day rain to snow event, centered on the **2nd-3rd**, which came in two phases, and featuring a prolonged period of mixed precipitation south of the Interstate 70 corridor. Thankfully the lull in organized precipitation between the system's earlier and later phases helped to limit ice accumulation across much of the region. Storm total precipitation ranged from around 1.50" over northern counties to around 2.50" for southern zones. This included appreciable snow and/or ice accumulation: snowfall totals were as high as **15.5"** in both Camden (Carroll Co.) and West Lafayette, with 12"+ also reported in Clinton, Fountain, Howard, Montgomery, Warren and Tipton counties. Indianapolis officially recorded **7.6"**, with 7.3" falling on the **3rd** – a daily record. Indy's storm total was a fair representation of other reports along the I-70 corridor, and a rough median of the strong snowfall gradient from north to south across the region. Southern counties saw noticeably less frozen precipitation as the changeover to all snow was delayed until later on the **3rd**. Greatest ice accumulation (as much as ~0.10-0.25"), was found along and south of the US-50 corridor, which contributed to the tight gradient in total snow/sleet here, as Elnora (northern Daviess Co.) reported **5.7"**, while Shoals 8 S (southern Martin Co.) observed only **2.5"**.

The **17th**'s system dropped 1.25-2.00" liquid precipitation on most locations, with greatest storm totals found in west-central counties: **2.52"** in Ladoga (Montgomery Co.), and **2.40"** near Terre Haute. The **22nd** found additional heavy rains, focused on southern counties where several locations approached 1.50", with as much as **1.52"** recorded near Mitchell (Lawrence Co.). Soon after, the **24th**'s system brought yet another 1.00-1.40" to several southern-tier sites, with **1.85"** reported east of Columbus (Bartholomew Co.). Despite receiving less-impressive (yet ample) liquid precipitation, northwestern counties saw additional light snows through the month's second half: on the **17th** generally 1-3" fell in the Lafayette Area, with a widespread light coating across the rest of the region; the **24th** had several reports of 1.0-2.5" from Hamilton County and points north and west. Indianapolis, following 0.3" snow on the **12th-13th**, and another 0.3" between the **17th** and **24th**, finished the month with 8.3" of snowfall. While only 2.3" above normal, it was still the 2nd snowiest February of the last seven years (behind last February's 11.8" snow total).

Widespread **minor river flooding** occurred through latter parts of February from the combination of frozen ground, melting snow, and the additional precipitation events. Most flooding began with the **17th**'s rain, with several sites remaining in minor flood through the end of the month. **Moderate flood** stage was also reached at a few sites across the region. The Wabash River entered flood on the **17th** from Lafayette down to Riverton, with Vincennes and Mount Carmel also entering flood on the **19th**. Lafayette fell out of flood hours before month's end, while flooding continued into March at all points downstream. A dual crest occurred from Lafayette down to Montezuma -- the **18th** and then the **23rd** -- with the **18th**'s at a higher stage. Points downriver saw only a single crest, flowing from Terre Haute on the **24th** to Mount Carmel on the **28th**. Lafayette had crested in **moderate flood** for over 2 days from late on the **17th** to pre-dawn on the **20th**, while Mount Carmel was in **moderate flood** from the morning of the **25th** through the end of the month, due in part to the additional discharge from both the White River and East Fork of the White. Most White River sites flooded for ~1-3 days between the **17th** and the evening of the **20th**; and Spencer flooded twice: on the **18th-22nd** and again on the **23rd-26th**; while prolonged flooding occurred from Elliston to points downriver, with ~10 days of minor flooding

ending at Elliston and Newberry late on the **27th**, and flooding continuing into March along Knox County. The crest flowed from Muncie on the **18th** to Hazleton on the **26th**; with a secondary crest observed at both Spencer (night of the **23rd**) and Newberry (on the **25th**). **Moderate flooding** was also reached at Petersburg for almost 2 days from the **25th** through early on the **27th**. Most of the East Fork of the White River flooded, with a lull in the minor flooding observed prior to the 22nd's event for portions from Shelby to Bartholomew County. These upriver sites flooded for ~1-3 days between pre-dawn on the **18th** and late on the **21st** ... before another ~1-5 days of minor flooding occurred within late on the **22nd** and the evening of the **27th**. Flooding was meanwhile continuous downriver from Rivervale to Williams, with both sites still in flood at month's end. Shoals was mainly in flood from midday on the **23rd** into March. No **moderate flooding** was observed on the East Fork, although Seymour crested inches shy of this stage on both the **18th** and **25th**. Eleven of the region's 19 site specific sites also reached flood stage between the evening of the **16th** and midday on the **19th**, with the Mississinewa River at Ridgeville cresting in **moderate flood** for 24 hours over the **17th-18th**. A second, less significant period of minor flooding occurred on the **22nd-23rd** at both Ridgeville and Youngs Creek at Amity.

February 2022's above normal precipitation was in contrast to both January 2022's and February 2021's below normal totals.

Site	February 2022 Precipitation	February 2022 Diff. from Normal	Wettest Day	Longest Dry Stretch
Indianapolis Intl AP	4.58	+2.15	1.64 on 17 th	3: 6-8, 14-16, 19-21, 26-28
Lafayette	3.46	+1.68	1.22 on 17 th	6 days: 5-10
Muncie	1.83INC*	M	M	5 days: 6-10
Terre Haute	4.75	+2.73	2.20 on 17 th	4 days: 5-8
Bloomington	5.22	+2.55	1.62 on 17 th	3 days: 6-8, 14-16 & 26-28
Shelbyville	4.44	+2.10	1.39 on 17 th	3 days: 6-8, 19-21 & 26-28
Indy - Eagle Creek	3.37INC**	+1.30	1.71 on 17 th	3 days: 19-21

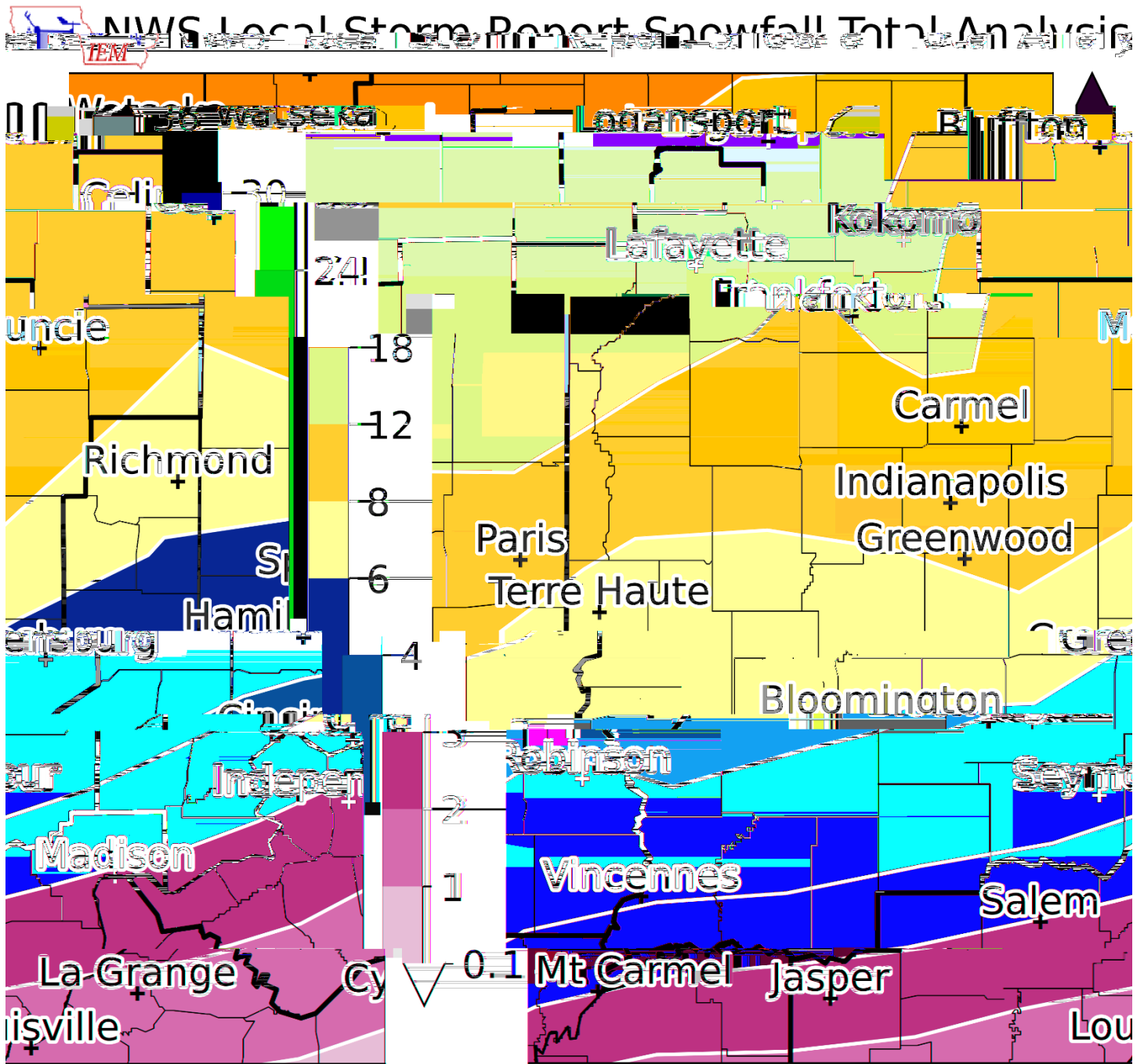
*Precipitation data at **Muncie** is incomplete on 2/3 and missing on 2/11, 2/22-2/23

Precipitation data at **Indianapolis – Eagle Creek is incomplete on 2/3 and missing on 2/11, 2/22-2/23

February 2022 tied for the **17th wettest** for the Indianapolis Area since complete weather records began in 1872, placing it in the 89th percentile.

February 2-4, 2022 Storm Total Snowfall

As Reported from COOP, CoCoRaHS, Emergency Management, Media, & Public Sources



The winter's most significant event: frozen precipitation totals ranged from **over 12"** of snowfall across far northwestern and north-central counties to **as little as 3-4"** of snowfall and sleet south of US-50.

Severe Weather

No severe weather occurred across central Indiana in February. Scattered thunderstorms early on the morning of the **22nd** did produce small hail in spots.

For info on severe weather in other areas during February, visit the Storm Prediction Center "Severe Weather Event Summaries" website at spc.noaa.gov/climo/online

Miscellaneous

The maximum wind gust at the Indianapolis International Airport was 46 mph from the south on the **16th** and **17th** and from the west-northwest on the **19th**. Fog or haze was reported at Indianapolis on 12 days during the month. Freezing rain or drizzle was reported on 4 days during the month with ice pellets occurring on the **2nd** and **17th**. Thunder was reported on the early morning of the **22nd**. Blowing snow occurred in the wake of the early February snowstorm on the **3rd** and **4th**.

March 2022 Outlook

The official outlook for March 2022 from the Climate Prediction Center indicates much greater chances for both above normal temperatures and precipitation across central Indiana. At Indianapolis, the normal March temperature is **42.4** degrees. Indianapolis' normal March precipitation is **3.69"**, including normal snowfall of **3.2"**.

*Data prepared by the Indianapolis Weather Forecast Office's State Climate Team
Questions should be referred to nws.indianapolis@noaa.gov*