

**Ken Scheeringa
And
Andy Eggert**

(765) 494-8105

Indiana State Climate Office

Monthly Weather Report

May 8, 2017



<http://www.iclimat.org>

April 2017 Climate Summary

Month Summary

April was a very warm and wet month in Indiana, nearly setting a new monthly temperature record. Like the month before April weather was active with 8 severe weather days including several hail and wind damage events, torrential rainfall, extensive flooding, a confirmed tornado, but just one reported injury. Crop planting was ahead of schedule near month's end until heavy rainfall arrived. The snow season ended in early April.

The April state average temperature was 57.3°F. This is 6.0°F above normal and ties 2010 as the 2nd warmest April on record. The warmest recorded April was just 0.5°F warmer at 57.8°F in 1896. The day split in April 2017 was 6 days of below normal temperature, 23 days above normal, and 1 day at normal. On 9 days the daily state mean temperature was at least 10°F above normal. The highest temperature of the month was 86°F at many locations on several April dates. The coolest was 11°F on April 8th at Wanatah 2 wnw.

April state precipitation averaged 4.81" which is 0.87" above normal and ties 1984 as the 30th wettest April since 1895. Some recent wetter Aprils include 2002 as the 20th wettest when the state average was 5.59" and 2014 with its average 5.73", coming in as 14th wettest April. The year 2009 was 13th wettest with 5.74" while 2013 had 6.38", the 6th wettest April on record. The wettest April since 1895 was in 2011 with the state average 9.61" of precipitation. The heaviest single day precipitation among cooperative network stations in April 2017 was 7.28" recorded on April 29th in Stendal. The highest in the CoCoRaHS network was 8.32" that same day in the same town at Stendal 0.1 sw. The largest month total precipitation in the cooperative network was 11.29" again at Stendal. In the CoCoRaHS network the heaviest was 12.65" at Holland 6.3 nw. Widespread precipitation fell on about 19 days this month.

The greatest daily snowfall reported in the cooperative network was 2.0" on April 6th at Plymouth. In the CoCoRaHS network 1.0" was measured the same day at nearby Plymouth 2.5 wsw and Walkerton 5.7 ene. This was the only snow day in April so the monthly totals are the same. It only snowed in a few counties during the month so the statewide snow day count was set to 0 days.

Regionally April 2017 precipitation totaled to near 120% of normal across northern and southern Indiana and 130% of normal in central counties. Normal April precipitation ranges from 3.5" in northeast Indiana to 4.5" in the southwest corner of the state.

April 1st – 8th

After a warmer than usual first few April days the state temperature returned to near normal. Precipitation was heaviest in northern Indiana, trending lighter southward across the state. One day of snowfall was recorded in north central Indiana on April 6th. Windy conditions that day caused local power outages in west central Indiana and churned waves up to 20 feet high on Lake Michigan. An EF-1 tornado was confirmed in Daviess county on April 5th.

An Iowa ridge skirted toward Indiana on April 1st to fill the vacancy left by a storm that raced from Indiana to the New England coast. The month began with the Indiana state temperature 1°F below normal. The next day the ridge advanced to Ohio. Winds over Indiana shifted to come from the south which began a warmup with sunshine across the state. The Indiana temperature rose to 4°F above normal.

The ridge moved on to the Atlantic coast on April 3rd and this allowed an occluded low pressure center in Kansas to stream warm moist air ahead of it into Indiana, driving the state temperature to 7°F above normal. Rain began falling as warm air was lifted and cooled in the atmosphere north of the front, releasing some of its moisture. The occluded weather system passed through Indiana into Michigan the next day. It was windy in Indiana behind this front. This was the warmest day of the interval as the state temperature peaked at 8°F above normal.

The occluded storm moved well off into the Atlantic on April 5th. Its long tail cold front linked into another storm system over Missouri, slowing the entire front to a crawl in Tennessee. Indiana was sandwiched between this southern front and a northern cold front over the Great Lakes, creating an unstable atmosphere. An EF-1 tornado formed in Daviess county, producing some damage but no injuries. The state temperature dipped a tad to 7°F above normal.

On April 6th the northern cold front cruised through Indiana and tapped into colder Canadian air. The state temperature tumbled to 2°F below normal. The northern and southern systems merged later in the day into a powerful storm, creating windy and wet conditions over Indiana. The intensified storm rumbled to New York the next day. A ridge behind the storm built its way into Indiana, bringing calm dry weather and sunny skies. The state temperature held steady at near 2°F below normal.

High pressure to the west of Indiana settled south of the state on April 8th. A southerly backflow of warmer air filtered into the state, helping to raise the state temperature to 2°F above normal to end the 8 day interval.

Over the 8 days the state temperature averaged to 3°F above normal. Typically at the start of April the daily maximum temperature should range between 55°F and 64°F north to south across the state. The daily minimum normally varies from 35°F in far northern counties to 41°F in the southwest corner of the state. The warmest temperature among cooperative network stations over the 8 days was 78°F at Leavenworth 2nw on April 6th. The coldest among this same network of stations was 11°F at Wanatah 2wnw on April 8th.

Rain fell frequently. There were just two dry days when no rain fell anywhere in the state. According to CoCoRaHS network morning reports rain was recorded statewide on April 4th, 6th, and 7th. On the 8 day precipitation map more than 1.5” was generally summed north of a Perrysville to

Peru to Portland line. In contrast less than a half inch was received in a band stretching from Washington to Boonville. Totals between 0.5" and 1.5" were the most common across the state.

Regionally about 1.7" was tallied across northern Indiana, 1.2" in central areas, and 0.8" in the south. These amounts equate to about 180% of normal in the north, 120% across central, and 70% of normal in southern Indiana. The heaviest single day precipitation came on April 6th. On that day volunteers in the vicinity of North Judson measured 1.96", near San Pierre 1.95", outside Spencer 1.89", at Rensselaer 1.78", and in Laporte 1.76". For the 8 day interval the highest sums included CoCoRaHS observers near Demotte with 2.21" and 2.16", at Fort Wayne with 2.19", and in Laporte and Otterbein with 2.18".

It can still snow in Indiana in April. In north central Indiana on April 6th 1.0" of snow was measured by Plymouth and Walkerton CoCoRaHS volunteers, 0.6" at Granger, 0.5" in South Bend, and 0.4" at Huntington. Snow totals for the 8 day interval were the same since snow fell on just that one day. The weekly snowfall map indicated up to 1" was seen primarily in St Joseph, Marshall, Starke, Whitley, and Huntington counties.

Extreme weather caused problems for Indiana residents on April 5th and 6th.

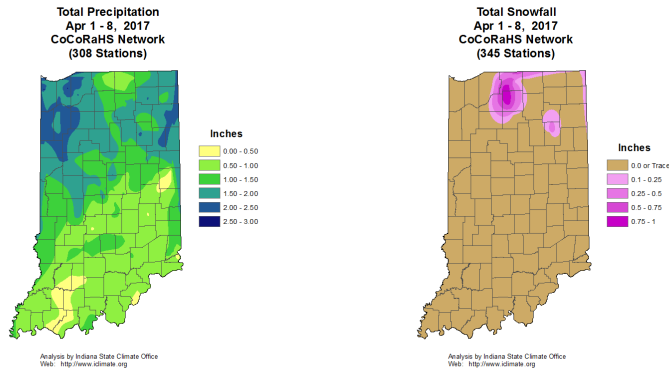
On April 5th an EF-1 tornado with 100 mph winds touched down in Daviess county over a 1.3 mile path. There were no injuries with this tornado. The tornado destroyed 2 barns, 2 outbuildings, and a silo. A home suffered roof damage and 2 power poles were snapped.

Wind gusts in straight line winds were problems for Union and Monroe counties. A porch was blown off a house and a roof peeled off in Union county. In Monroe county a snapped tree ripped down power lines. Nearby 1.0" diameter hail was reported in Monroe, Brown, Jennings, and Decatur counties. Hail sizes varied in Harrison and Floyd counties between 1.00" and 1.75". In east central Indiana Randolph county observed 1.00" hail.

The next day a tree snagged power lines as it fell in Lafayette, knocking out power for at least a half day. Strong winds to 50 mph generated 20 foot high waves on Lake Michigan.

Heavy rainfall on April 5th and April 6th caused lingering high water problems in west central and northwest Indiana. Bridge construction workers above the Wabash River had to suspend work for a few days due to high water safety concerns. Some Tippecanoe county roads were forced to close due to high water.

According to the US Drought Monitor soil moisture conditions are unchanged around the state this week. Indiana continues to be rated with 4% of soils as abnormally dry with the remaining 96% in normal soil moisture status for this time of year.



April 9th – 15th

The second week of April was very warm with above to much above normal daily temperatures. Rain continued to fall frequently but amounts were much lighter than the previous week. No snow was recorded due to the warm temperatures. Large hail was observed in 3 west central Indiana counties on April 10th. Abnormally dry soils expanded across south central Indiana, helping to dry fields as farmers begin planting crops.

A high pressure ridge controlled much of the eastern half of the country on April 9th. The ridge was centered over Virginia and directed warm southerly winds to Indiana. The state temperature began the week at 11°F above normal. The next day a cold front stretched from Lake Michigan to Iowa then Oklahoma, squeezing the Virginia ridge well off the Atlantic shore. This pressure play placed Indiana and states to the south and east into a developing warm sector. The Indiana state temperature soared to 18°F above normal, the warmest day of the week.

On April 11th the cold front moved through Indiana. High pressure from Manitoba plunged to Nebraska and transported much cooler air into the Midwest. The Indiana state temperature crashed to 8°F above normal with rain falling statewide. The Nebraska high moved directly overhead Indiana the next day, forcing the cold front to the Atlantic coast. The Indiana temperature dropped to 2°F above normal, the coldest day of the week.

A low pressure system moved east into Iowa on April 13th, shifting wind flow and reversing the Indiana cool down into a warming trend. The Indiana temperature rose to 6°F above normal. The next day two high pressure centers on the north and south sides of Indiana drew a stationary front across central counties. The net effect was more warm weather as the state temperature climbed to 11°F above normal.

The north and south high centers merged on April 15th off the New Jersey coast. Southerly winds behind the strengthened ridge morphed the stationary front into a warm front which pushed north into Michigan. This front linked into a South Dakota low center, its paired cold front in Nebraska. The new warm sector covered about a third of the country, including Indiana. The state temperature bumped to 15°F above normal, nearly as warm as at the start of the week.

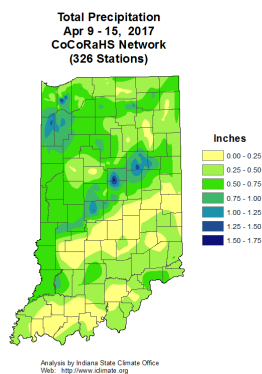
Overall for the week the state temperature averaged to 10°F above normal. Typically in this second week the daily maximum temperature should range between 58°F in far northern Indiana to 67°F in the southwest corner of the state. Daily minimums should range between 37°F and 43°F north to south across the state. The warmest temperature of the week among cooperative network stations was 85°F at several locations on April 14th. The coolest temperature among stations in this same network was 26°F at Columbia City and New Castle 3sw on April 9th.

On the weekly rainfall map more than an inch fell in northwest Indiana mostly in Newton, Jasper, and Porter counties. Elsewhere an inch or more was located in a band generally northeast of a line from Greencastle to Hartford City. Less than a quarter inch of rain fell just south of this region and in southwest Indiana. In summary a Brazil to Winchester line largely divided a wet northern region from a drier southern region. Regionally about 0.6” of rain fell across northern Indiana, 0.4” in central, and 0.3” in the south. These amounts equate to about 60% of normal in the north, 40% in central, and 30% of normal in the southern third of the state.

In the morning CoCoRaHS reports of April 11th rainfall was observed statewide. Rainfall was reported generally in the east half of the state on April 12th and in the northern half of Indiana on April 14th and 15th. The largest single day precipitation was measured on April 11th and included Atlanta with 1.65”, Danville at 1.20”, and Valparaiso and Indianapolis volunteers with 1.11”. For the week one of the highest sums was 1.67” near Atlanta, 1.64” and 1.59” reports in Valparaiso, 1.40” at Fairmount, and 1.31” in Danville.

Large hail fell on April 10th along a line from Warren to Carroll counties. In those counties hail size was near 1.00” but in Tippecanoe county diameters ranged between 1.00” and 1.75”. In far northern Indiana 1.00” hail was also reported in Laporte county.

Soil dryness spread from southwest into south central Indiana this week. According to the April 11th edition of the US Drought Monitor, the 4% coverage by abnormally dry D0 soils the prior week increased to 11% D0 coverage. Indiana soils rated in normal soil moisture status for this time of year decreased from 96% to 89%. An older region of D0 was removed from Vigo and Sullivan counties. The southwest edge of the D0 category ran from Princeton to Salem to Corydon generally.



April 16th – 22nd

The week began very warm until much cooler weather arrived and brought the 13 day warm spell to an end. The last two days of the week were slightly cooler than normal. Rainfall was frequent but light again this week. Severe weather on April 16th was limited to just two northeast Indiana counties reporting hail and wind damage. Four days later another round of wind gusts damaged local areas of Elkhart and Putnam counties. Planting of field crops finally got a jump start this week with mostly warm and dry soil conditions.

Indiana was barely inside a warm air mass sector that covered the southeast half of the country on April 16th. The state temperature opened the week at a balmy 15°F above normal. A cold front in Illinois was ready to pounce on Indiana. That cold front did pass through the state before dawn the next day, lowering the state temperature to 10°F above normal. Indiana was then positioned between two fronts, the first which just passed through, and a second slowing in central Michigan.

On April 18th the Michigan front drifted south to central Indiana, then stalled there as a stationary front. A low pressure center had traveled to South Dakota, its counter clockwise circulation working to slow the front in Indiana. The state temperature didn't change much, dipping slightly to 8°F above normal. The next day the stalled front reversed direction, evolved into a warm front, and moved from Indiana northeastward to Lake Ontario. Indiana was joined to a warm sector again as its state temperature bumped a few degrees to 10°F above normal. A weak cold front was approaching Indiana from the northwest.

A storm center raced from Colorado to Illinois on April 20th, halting the weak cold front into a stationary front in northern Indiana. With the storm center's cold front in Missouri, yet another warm sector dominated Indiana, supported by southerly wind flow behind a strong high pressure center over Georgia. The Indiana state temperature climbed once again to 14°F above normal. On April 21st the storm center pushed into Canada, swinging its strong cold front through Indiana. The door to much cooler Canadian air was opened. The Indiana state temperature plummeted to 2°F below normal after two weeks of above normal temperatures.

On April 22nd the cold front stalled over Tennessee. But the cold front had already passed through Indiana and there was nothing to stop the cool air infiltrating the state. The state temperature closed out the week at 3°F below normal, the coldest day of the week.

Overall for the week the state temperature averaged 7°F above normal. Typically in mid-April daily maximum temperatures should vary between 61°F and 69°F north to south. Daily minimums normally range between 40°F in far northern Indiana to 46°F in the southwest corner of the state. The warmest daily temperature of the week as measured by cooperative network stations was 88°F at Terre Haute on April 21st. The coolest daily temperature among stations in this same network was 35°F at South Bend Airport, Wabash, and Warsaw on April 22nd.

Precipitation was recorded on all 7 days somewhere in Indiana. Rain covered the state on April 21st, hit the north half on April 20th, the south half on the 17th and 22nd, and only along the Ohio River on April 18th and 19th. Regionally the northern and central thirds of Indiana received about 0.5" for the week while southern Indiana had much more at 1.4". These amounts equate to about 60% of normal in the north, 50% in central, and 130% of normal across southern Indiana.

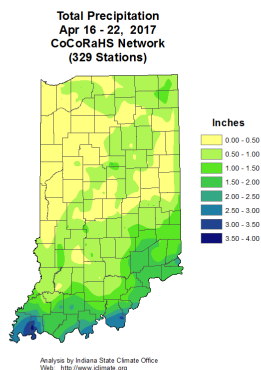
On the weekly rainfall map amounts were heavy along the Ohio River. From 2" to 4" fell in Posey, Vanderburgh, Perry, and Harrison counties. More than an inch fell generally south of a Princeton to Connersville line. In contrast less than a half inch was noted generally north of a Terre Haute to Winchester line. The highest single daily amounts were found mostly in southern Indiana as recorded the morning of April 17th by the CoCoRaHS network. Among reports that day were 2.26" at Elizabeth, 2.07" outside Evansville, 1.76" near Cannelton, and 1.53" in the vicinity of Holland. Some places with the heaviest totals for the week included 3.70" near Evansville, 3.19" at Elizabeth, 2.28" at Huntingburg, with 2.19" and 2.14" tallied by two volunteers in Jeffersonville.

On April 16th hail and wind damage were reported in just two northeast Indiana counties. In DeKalb county hail stones with diameters between 1.25" and 2.00" caused roof damage. To the south there was one report of 2.00" hail from Allen county. High winds in DeKalb county tore the roof off a barn and pulled down power lines.

On April 20th high wind gusts were problematic in Elkhart and Putnam counties. Branches and fences were ripped down in Elkhart county. In Putnam county 3 trees fell across a road while another tree fell on a mobile home, crushing the roof.

Heavy rains were limited to far southern counties of the state this week with light amounts elsewhere. The lack of substantial coverage did not change Indiana soil moisture status according to the April 18th edition of the US Drought Monitor. About 11% of total state area remained in abnormally dry soil moisture status while 89% of the state continued in near normal soil moisture status for this time of year.

The Indiana Weekly Weather and Crop bulletin of April 24th states that farmers finally made good planting progress as most of the week was warm and mostly dry. There were cooler temperatures and limited showers late in the week. Corn planting ranged from 7% complete in northern Indiana to 34% complete in the south. Soybean planting had just started and mint planting was nearly done. Winter wheat was in good to excellent condition while pastures and livestock were in good condition on average.



April 23rd – 30th

The early half of the final eight days of April displayed a strong warmup in Indiana with mostly calm weather conditions. That all changed in the second half. Indiana temperatures cooled to normal as a group of storm centers traveled from Colorado into the Midwest. The centers had strong dynamic support, from ground level through the upper atmosphere, as they consolidated, intensified, and slowed in the Oklahoma area. Sluggish fronts extended from there through Indiana and into New England, triggering severe weather in Indiana on April 26th, 28th, 29th, and 30th. Very heavy rain fell in southern Indiana causing widespread flooding. Before the rains came Indiana farmers enjoyed a week of planting which moved seasonal progress ahead of schedule.

The Indiana state temperature was right at normal on April 23rd as a ridge of high pressure stretched from Texas to Illinois to Pennsylvania. A cold front lie across Michigan, Wisconsin, and Minnesota with a high pressure center behind it in Manitoba. The next day the cold front slid south into northern Indiana and stalled as a stationary front, held there by storm centers over South Dakota. The Indiana state temperature rose to 4°F above normal as warm air was pumped into Indiana via a high center over Arkansas.

The Dakota storm approached Indiana on April 25th, forcing the stationary front back north of the state. Indiana was now inside a warm sector and the state temperature continued rising to 8°F above normal. The storm core moved to Wisconsin the next day with its cold front extended from the Great Lakes to Texas. High pressure in Georgia funneled warm air into Indiana. The state temperature peaked at 13°F above normal, the warmest day of the 8 day interval.

On April 27th the cold front was realigned north to south down the length of Lake Michigan to Mississippi as the cold air behind this front slammed into warm air to the east. As colder air entered Indiana the state temperature fell to 2°F above normal and rain spread nearly statewide. The next day the storm center moved on to Hudson Bay but energy left over in the upper atmosphere supported new follow up surface storms in Kansas and Texas. Two fronts formed, a stationary front between Kansas and Indiana, and a warm front between Texas and Alabama. The northern front spread severe weather across southern Indiana. The state temperature fell to 2°F below normal, the coldest day among the 8 days in the interval.

The northern front reformed as a cold front on April 29th and inched southward. Meanwhile the warm front over Alabama traveled north to the Ohio River where it slowed and halted near the Ohio River. With two very close fronts facing one another in Indiana the atmosphere became very unstable and excessive rain amounts were wrung out across far southern counties. On April 30th the two fronts merged into a warm front across central Indiana. The parent storm of this warm front remained far back in Kansas. Heavy rainfall continued in some southern Indiana counties with moisture transported in by the Kansas storm. With the warm front in Indiana the state temperature on the final day of the month rebounded to 6°F above normal.

Over the 8 day interval the state temperature averaged to 4°F above normal. Usually in the final week of April daily maximum temperatures should average between 64°F in far northern counties to 71°F in the southwest corner of the state. Daily minimums normally vary from 43°F to 48°F north to south across the state. The warmest daily temperature of the 8 days according to stations in the cooperative network was 86°F at NWS Indianapolis and Wabash on April 26th and at Tipton 5

sw on April 27th. The coolest among stations in that same network was 27°F at Wanatah 2 wnw on April 23rd.

Rainfall was light across Indiana through April 26th then was moderate before becoming heavy to torrential at the end of the month according to daily morning CoCoRaHS network reports. Rain fell statewide in the report of April 30th and nearly statewide as reported April 27th and 29th. No rainfall was recorded on April 24th and 25th. Regionally over the 8 days about 1.4" of rain was tallied generally across northern Indiana, 2.8" in central counties, and 2.9" in the southern third of the state. These amounts equate to about 170% of normal in the north, 300% in central, and 250% of normal in southern Indiana.

The 8 day precipitation map showed heavy rain totals in west central Indiana and along the Ohio River, including inside a wedge area bounded by Attica to Indianapolis to Vincennes. More than 3" fell generally south of a Princeton to Brookville line. Very heavy totals between 5" and 10" were noted in Posey, Vanderburgh, Pike, Dubois, Orange, Crawford, Harrison, Floyd, and Clark counties. In contrast less than an inch was summed in north central and northeast Indiana counties. Among the largest spot totals over the 8 days were the vicinities of Holland with 9.70", Huntingburg at 9.41", Celestine with 8.72", outside Milltown with 7.87", and New Salisbury at 7.23". Some of the highest single day amounts in the CoCoRaHS network were measured on April 29th and included Stendal with 8.32", Huntingburg at 8.11", outside Holland with 7.93", and in Celestine with 7.90".

On April 26th severe weather erupted along a southwest to northeast line from Vigo to Huntington counties. Hail 1.75" in diameter was reported in Boone and Grant counties with 1.25" hail noted in Boone, Tipton, and Howard counties. One inch diameter hail was observed in Clay, Putnam, Hendricks, Hamilton, Tipton, Madison, and Grant counties. Smaller hail also fell but hail near or larger than 1.00" in diameter is considered to have the potential to cause damage.

Damaging wind gusts were also within these thunderstorms. In Putnam county trees fell on power lines and blocked a US highway. Power outages and debris blown by 60 mph winds were reported from Vigo county. Winds between 60 mph and 75 mph in Howard county blew a barn on to a road and tore down many trees. Power lines and big tree limbs fell on to roads in Huntington county causing power outages. In Allen county wind speeds were measured at 65 mph.

Detailed damage reports came from Boone county. Large hail broke windows, splintered trees, and gouged home siding. At least 18 utility poles were blown over in high winds. Trapped passengers had to wait for power to be turned off before they could exit a car. Damaged and uprooted poles were replaced quickly by utility companies.

Homes showed hail damage over several miles. Entire roofs had no shingles left. Homeowners were sending in damage reports to the Emergency Management Office. Tree limbs were found blocking storm drains and some trees had no leaves remaining. A big box store had hail fall through the roof skylight and into the store.

The southern third of Indiana reported several instances of hail and wind damage on April 28th. Hail up to 1.75" in diameter fell in Decatur and Ripley counties with 1.25" hail in Clark county. Greenhouse glass was shattered in Ripley county with numerous car dents in Clark county. Reports of hail to 1.00" diameter were issued by Crawford and Harrison counties. Perry county hail sizes hit 1.25" and Floyd was 1.50" in diameter. In southwest Indiana 1.00" hail knocked out power in

Posey county. Vanderburgh county reported a wide range of hail sizes between 1.00” and 2.00” in diameter.

Wind gusts in Monroe, Brown, and Bartholomew counties reached 60 mph which ripped down trees. In Monroe and Ripley counties trees snagged power lines as they fell to the ground. In Brown county trees fell on roads. One tree fell on a house with a man inside. Trees fell on a garage in Scott county and did minor home damage. More trees came down in Dearborn and Clark counties. Power lines fell in Dubois county and on to roads in Floyd county. A baseball field was damaged in Gibson county and other buildings were damaged.

Severe weather events slowed on April 29th but road closings peaked as highways were overwhelmed by the flood aftermath. State roads were closed in Dubois, Gibson, Perry, Posey, Spencer, Tippecanoe, Vanderburgh, and Warrick counties. Part of I-64 had to be closed and traffic rerouted due to flooding in Dubois county. Phone lines in that county went down including at the state police post.

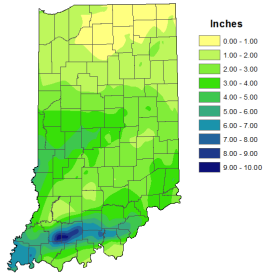
One inch hail was noted in Fountain county while 1.75” hail was reported in Jefferson county. Lightning struck a condo complex in Tippecanoe county, setting it on fire. One building was damaged and one resident was injured in the fire. Elsewhere in the county trees, power lines, and poles were knocked down and a road had to be closed until daylight.

Heavy rains impacted Crawford and Vanderburgh counties on April 30th. A high school prom was forced to move to another venue when the original was flooded. Southern Indiana farmers began to consider how long crops had been underwater which can determine chances for crop survival. Access to saturated fields may require a 10 day wait even if no more rain occurs. Crops already sprayed may lose their protection from fungi if the effectiveness of the spray is washed away.

The US Drought Monitor map was issued on April 25th before the impact of heavy rainfall near the end of the month was included. As of that date only minor changes had been made to the map relative to the prior week. Statewide coverage by abnormally dry soil was rated at 10%, a 1% soil moisture improvement since April 18th. This minor improvement was drawn along the northern edge of the D0 area in Pike and Dubois counties. Changes caused by the heavy end of month rainfall will show in the next edition of the map dated May 2nd.

The USDA Indiana weekly weather and crop report of May 1st mentioned the halt of fieldwork after the end of month heavy rainfall. Before that rain event farmers had made excellent progress in planting of corn and soybeans with about 55% of corn planting finished in central and southern Indiana and about 20% of soybeans planted in central and southern Indiana. These numbers put Indiana crop planting ahead of schedule before the heavy rains arrived. Replanting may now be necessary in some Indiana fields. The condition of winter wheat and livestock remained good even after the heavy rains the bulletin stated.

Total Precipitation
Apr 23 - 30, 2017
CoCoRaHS Network
(340 Stations)



Analysis by Indiana State Climate Office
Web: <http://www.idclimate.org>

April 2017

Region	Temperature	Temperature	
		Normal	Deviation
Northwest	54.3	49.5	4.8
North Central	54.2	48.9	5.2
Northeast	53.9	48.5	5.4
West Central	57.3	51.5	5.8
Central	57.3	50.9	6.4
East Central	57.1	49.9	7.2
Southwest	60.7	54.9	5.8
South Central	60.8	54.2	6.5
Southeast	60.0	53.1	6.9
State	57.3	51.4	6.0

Region	Precipitation	Precipitation		
		Normal	Deviation	Percent of Normal
Northwest	4.58	3.60	0.98	127
North Central	3.88	3.59	0.30	108
Northeast	3.93	3.47	0.45	113
West Central	5.48	3.88	1.60	141
Central	4.86	3.91	0.95	124
East Central	4.10	3.78	0.33	109
Southwest	5.77	4.45	1.32	130
South Central	4.89	4.42	0.47	111
Southeast	5.26	4.21	1.05	125
State	4.81	3.94	0.87	122

Spring so far (March - April)

Region	Temperature	Temperature	
		Normal	Deviation
Northwest	46.4	43.9	2.5
North Central	46.0	43.3	2.7
Northeast	45.7	42.8	2.9
West Central	49.8	46.0	3.8
Central	49.5	45.4	4.2
East Central	48.8	44.4	4.4
Southwest	53.5	49.7	3.7
South Central	53.4	49.1	4.3
Southeast	52.1	48.1	4.0
State	49.6	46.0	3.6

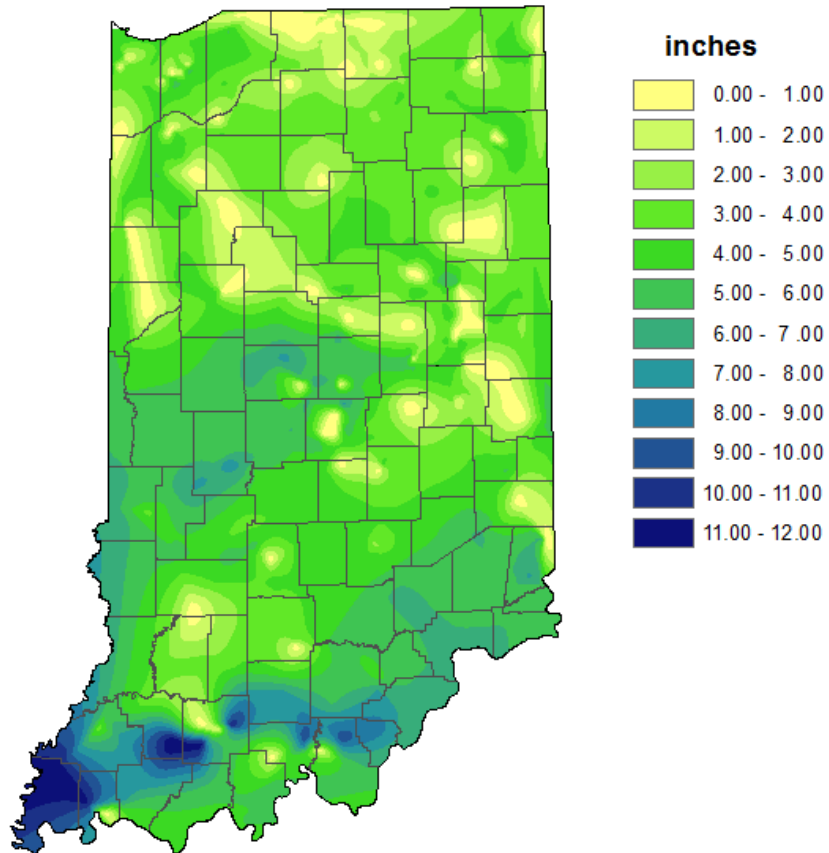
Region	Precipitation	Precipitation		
		Normal	Deviation	Percent of Normal
Northwest	8.68	6.52	2.16	133
North Central	7.79	6.37	1.42	122
Northeast	7.50	6.18	1.32	121
West Central	8.98	7.23	1.74	124
Central	9.26	7.19	2.06	129
East Central	8.73	6.85	1.88	127
Southwest	9.62	8.68	0.94	111
South Central	9.27	8.59	0.68	108
Southeast	10.14	8.16	1.98	124
State	8.91	7.34	1.57	121

2017 Annual so far (Jan - Apr)

Region	Temperature	Temperature	
		Normal	Deviation
Northwest	40.3	34.7	5.6
North Central	40.2	34.4	5.8
Northeast	40.0	34.0	6.0
West Central	43.4	36.9	6.5
Central	43.4	36.5	6.9
East Central	42.9	35.7	7.2
Southwest	47.2	41.1	6.1
South Central	47.2	40.7	6.5
Southeast	46.1	39.8	6.3
State	43.5	37.2	6.3

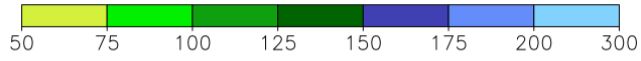
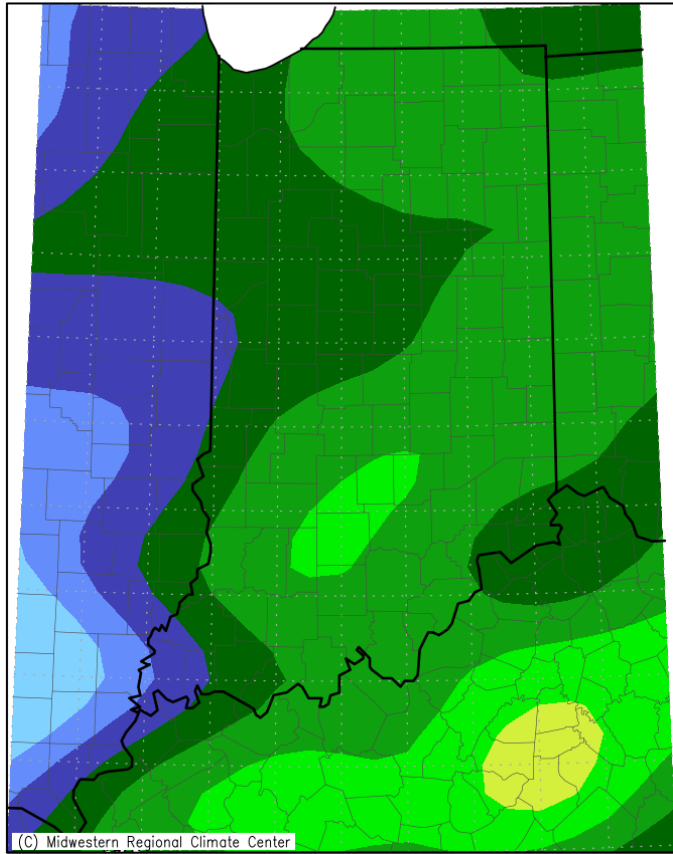
Region	Precipitation	Precipitation		
		Normal	Deviation	Percent of Normal
Northwest	13.71	10.08	3.63	136
North Central	13.32	10.21	3.11	130
Northeast	13.32	9.95	3.38	134
West Central	13.37	11.68	1.69	114
Central	14.39	11.80	2.58	122
East Central	14.17	11.29	2.88	126
Southwest	13.65	14.55	-0.90	94
South Central	14.09	14.61	-0.52	96
Southeast	15.71	13.96	1.74	112
State	13.92	12.05	1.87	116

**Total Precipitation
April 2017
CoCoRaHS network
(328 stations)**



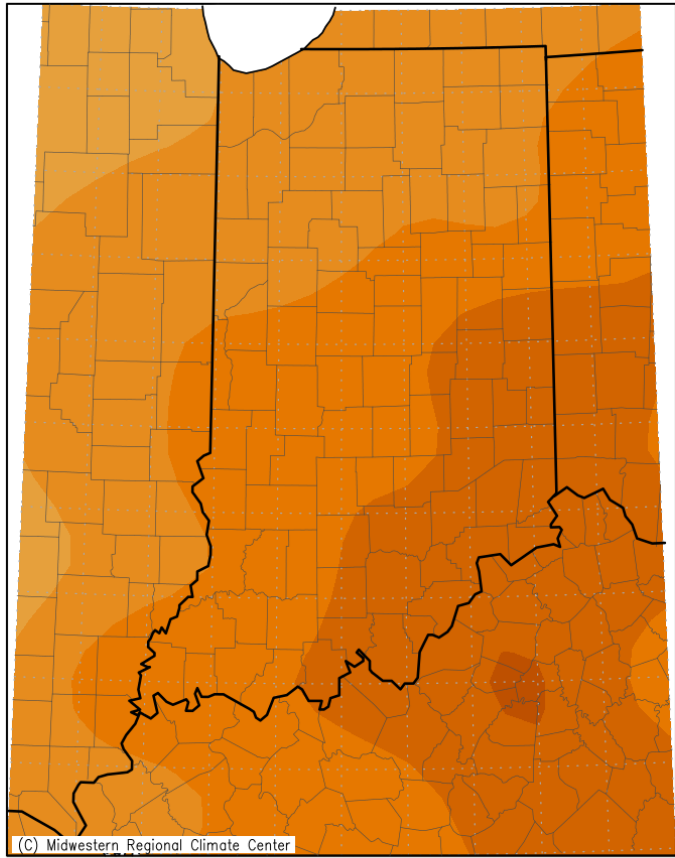
Analysis by Indiana State Climate Office
Web: <http://www.iclimate.org>

Accumulated Precipitation: Percent of Mean
April 1, 2017 to April 30, 2017



Midwestern Regional Climate Center
cli-MATE: MRCC Application Tools Environment
Generated at: 5/8/2017 2:49:01 PM CDT

Average Temperature (°F): Departure from Mean
April 1, 2017 to April 30, 2017



Mean period is 1981-2010.



Midwestern Regional Climate Center
cli-MATE: MRCC Application Tools Environment
Generated at: 5/8/2017 2:50:18 PM CDT

Drought Summary from the U.S. Drought Monitor

Below is a drought summary for the state of Indiana from the U.S. Drought Monitor. Areas in white are not experiencing any drought. Yellow areas are abnormally dry, but not considered a drought. Drought begins when the moisture levels become more severe, with beige, orange, red, and brown indicating increasing levels of drought (moderate, severe, extreme, and exceptional, respectively). The table below indicates what percentage of the state is drought free, and how much of the state is in drought by degree of severity (D1 - D4 category).

Statistics type: Categorical Percent Area
Indiana

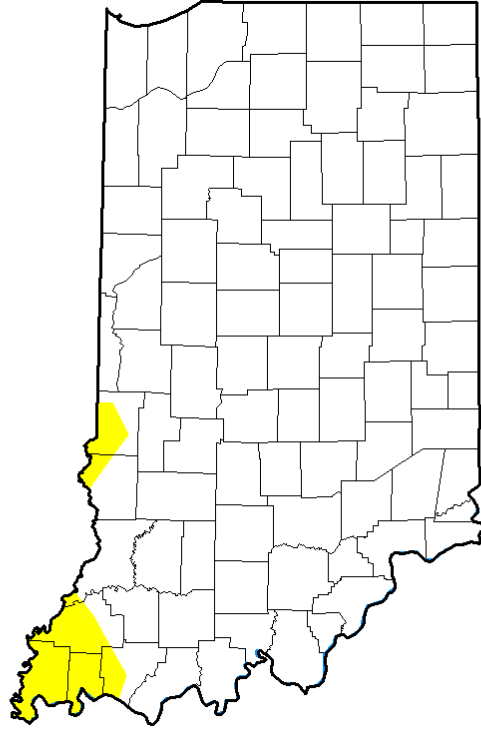
Percent Area in U.S. Drought Monitor Categories

Show 25 entries

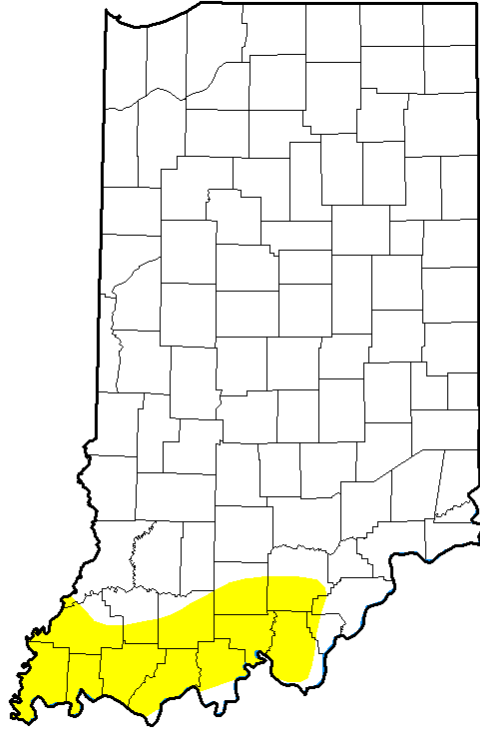
Search:

Week	None	D0	D1	D2	D3	D4
2017-05-02	100.00	0.00	0.00	0.00	0.00	0.00
2017-04-25	89.56	10.44	0.00	0.00	0.00	0.00
2017-04-18	89.39	10.61	0.00	0.00	0.00	0.00
2017-04-11	89.39	10.61	0.00	0.00	0.00	0.00
2017-04-04	96.03	3.97	0.00	0.00	0.00	0.00

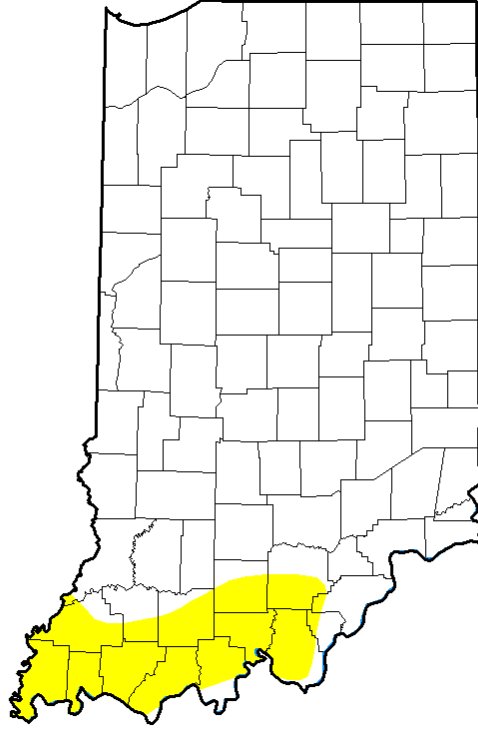
Apr 4th Drought Summary



Apr 11th Drought Summary



Apr 18th Drought Summary



Apr 25th Drought Summary

