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Indiana State Climate Office

Monthly Weather Report

Dec 5, 2007



<http://www.iclimat.org>

November 2007 Climate Summary

Summary

November 2007 was much colder than what we are used to experiencing. Except for east central counties, monthly average temperatures were at least ½ degree cooler than normal. The statewide average temperature comes in at 41.7°F, or -0.7°F below normal. The state, overall, received only 80% of the normal precipitation but, like previous months, this doesn't tell the whole story. Counties in the north, east central, and west central were all above or just under the normal. The south continued its dry phase. Southwestern and south central counties received only 2.01 and 2.02 inches of rain respectively. This isn't even 50% of the normal.

Looking at the big picture, autumn in Indiana was actually warm. The statewide average temperature from September through November is 57.1° which more than 3°F above normal. Precipitation came in at 94% of normal. All divisions received at least 89% of their normal.

For year-to-date figures, Indiana temperatures are 1.6°F above normal at 55.5°F. Statewide average precipitation is above 36 inches and all of the state is above 80% of the eleven month normal. The biggest precipitation deficit remains in the south. These counties remain more than 5 inches below normal precipitation.

The entire state was cooler than usual in November. But once again precipitation amounts varied. The north was close to, or above, normal but the south remained dry.

November 1st – 8th

The eleventh month of 2007 started of quite cool as the final disturbance from October progressed further east. Temperatures across the state were well below normal – a continuous theme for the month – as high temperatures ranged between 50°-60°F. Temperatures warmed slightly on the 2nd and remained constant until the 5th. On the 5th temperatures rose as a warm front approached and preceded a looming cold front. Some scattered showers affected northern and southeastern regions and the following day much of the state received small amounts of rain from the passing cold front. The front made temperatures plummet. Highs dropped into the mid-40s. These cold temperatures on the 6th and 7th were at least 5°F below the normal across all of Indiana. Some areas were as

much as 11°F cooler than usual. Temperatures rose slightly on the 8th. As the cold front exited, the west warmed back to normal as the east remained cool.

November 9th – 17th

Temperatures didn't stay at the normal. Another approaching disturbance – the second of the month – loomed. Highs fell back below normal by a few degrees on the 9th and continued to do so through the 10th, when temperatures hovered in the low-50s. The second disturbance of the month entered on the 12th and was gone late on the 13th. However another disturbance, the third of November, followed directly behind the second. This caused wet weather from the 12th through the 16th. The heaviest rain occurred during the frontal passages on the 12th for disturbance two and early on the 14th for disturbance three. Scattered showers filled in the gaps on the 13th and 15th. Lingering showers were present along the eastern border on the 16th as well. The five day precipitation total reached nearly 1.5 inches in Jay and Randolph counties, where the heaviest rain fell. Central Indiana received over 1 inch and most of the northern and southern sections of the state received around ½ inch. Low pressure associated with the first front ushered in much warmer temperatures on the 11th. By the 12th all of Indiana was 10°F above normal as temperatures entered the mid-60s. The unusual warmth remained on the 13th and 14th but much cooler temperatures returned with approach of the second front (third of the month). High temperatures receded to the low-40s as much of the state sat close to 10°F below normal, a 20°F change from 12th. Temperatures rebounded on the 17th. Northern Indiana temperatures were slightly below normal and southern Indiana was slightly above normal. This was caused by another system closing in on the state.

November 18th – 25th

The fourth disturbance of November 2007 persisted for a few days. The stationary front that brought warmer temperatures to the southern half of the state on the 17th pushed to the south allowing cooler air in behind it. This movement brought temperatures into the high-40s to low-50s, except for counties in the southwest where temperatures remained above normal due to the presence of the stationary front. Scattered showers from Lake Michigan brought some rain to the northeast on the 18th and to many northern counties on the 19th. The stationary front evolved on the 19th and brought warmer weather with it as temperatures rose above normal and into the mid-60s. High temperatures slowly climbed on the 20th as well. Unfortunately the transformed stationary front created a cold front behind the warm front and the system number five brought plenty of wet – and cool – weather back to the state on the 21st and 22nd. All of Indiana registered some precipitation on the 21st and 22nd. The heaviest fell, as usual, in the northern half. Benton and Warren counties approached 2 inches of rain for the two day period. All of the northern counties received at least 1 inch. The warm temperatures from the 20th dropped steadily and reached the mid-30s on the 23rd. They bounced back on the 24th – somewhat – as temperatures escalated into the low-40s, still below normal. They remained there on the 25th, as the next system approached to bring even cooler weather.

November 26th – 30th

Two separate systems converged on Indiana on the 26th. An occluded low from the south pushed its way northeast, set to clip the state, and a cold front proceeded southward from Canada. The occluded system won the battle and brought rain to the state on the 26th and 27th. With the system moving northeastward the majority of the rain fell in southern and eastern counties, though the entire state did experience some precipitation. Switzerland, Ohio, Dearborn, and Franklin counties received the most at approximately 0.6 inches over the two day period. Temperatures steadily rose over these days as the disturbance exited. Highs reached the mid-50s on the 28th, slightly warmer than normal. The final days of November would see a repeat pattern from the middle of the month. Two more systems approached Indiana and brought cooler conditions on the 29th and 30th. High temperatures reached into the low-40s for most of the state during these days. The systems lacked enough moisture to produce recordable precipitation.

November Summary

Temperature

Region	Temperature	Normal	Deviation
Northwest	39.7	40.5	-0.9
North Central	39.5	40.4	-0.9
Northeast	39.6	40.1	-0.5
West Central	41.5	42.1	-0.6
Central	41.4	41.9	-0.5
East Central	41.1	41.3	-0.2
Southwest	44.7	45.4	-0.7
South Central	43.8	45.0	-1.2
Southeast	43.3	44.3	-0.9
State	41.7	42.4	-0.7

Precipitation

Region	Precipitation	Normal	Deviation	Percent of Normal
Northwest	3.09	3.16	-0.07	98
North Central	3.49	3.16	0.34	111
Northeast	3.78	3.02	0.75	125
West Central	3.36	3.60	-0.25	93
Central	2.79	3.63	-0.84	77
East Central	3.14	3.36	-0.22	93
Southwest	2.01	4.27	-2.26	47
South Central	2.02	4.09	-2.07	49
Southeast	2.29	3.70	-1.42	62
State	2.86	3.59	-0.73	80

Autumn-To-Date
(September, October, and November)

Temperature

Region	Temperature	Normal	Deviation
Northwest	55.5	52.7	2.8
North Central	55.1	52.2	2.9
Northeast	54.8	51.8	3.0
West Central	57.0	54.0	2.9
Central	56.9	53.6	3.3
East Central	56.3	52.8	3.5
Southwest	59.8	56.8	3.0
South Central	59.1	56.2	2.9
Southeast	58.7	55.4	3.3
State	57.1	54.0	3.1

Precipitation

Region	Precipitation	Normal	Deviation	Percent of Normal
Northwest	8.31	9.29	-0.98	89
North Central	9.15	9.41	-0.25	97
Northeast	8.40	8.92	-0.52	94
West Central	9.76	9.53	0.23	102
Central	8.45	9.44	-0.99	89
East Central	8.65	8.88	-0.23	97
Southwest	9.49	10.45	-0.96	91
South Central	9.16	10.21	-1.06	90
Southeast	10.05	9.66	0.40	104
State	9.01	9.58	-0.57	94

Annual-to-Date
(January through November)

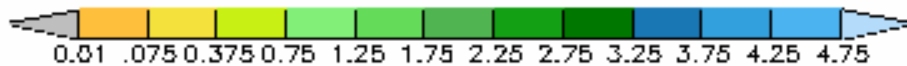
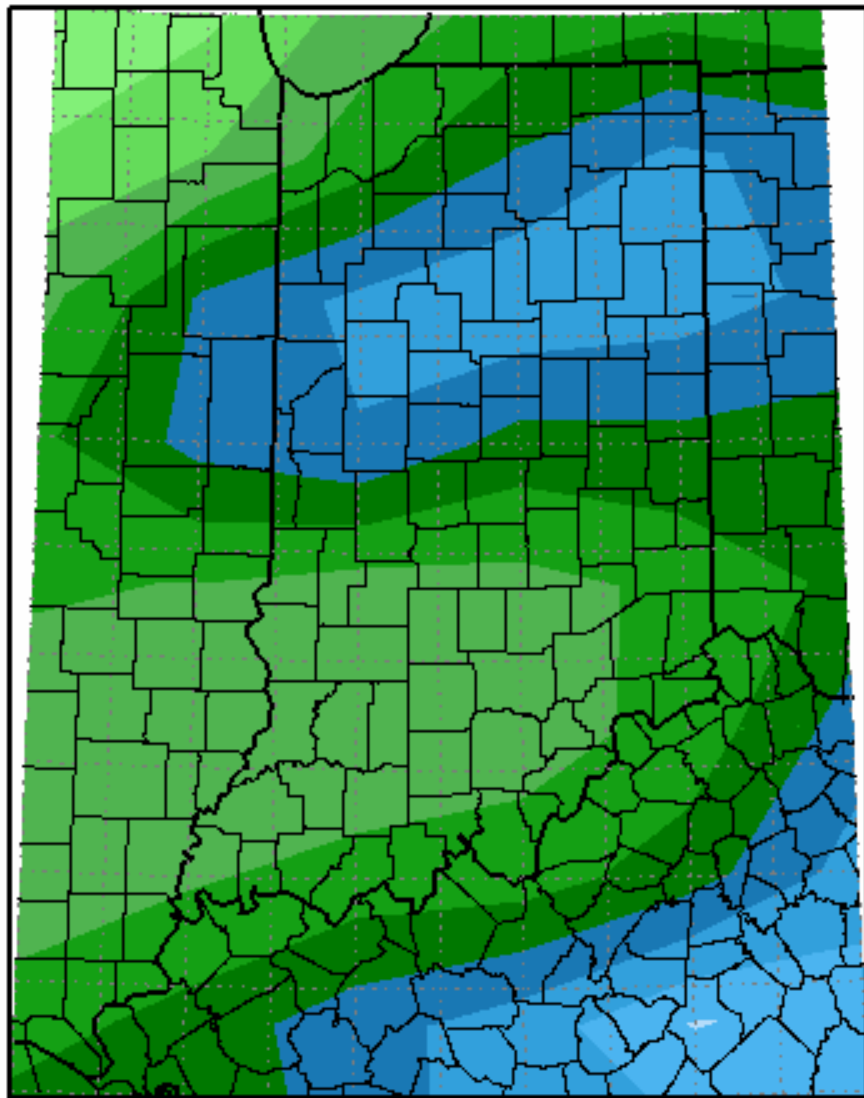
Temperature

Region	Temperature	Normal	Deviation
Northwest	53.4	52.2	1.2
North Central	53.0	51.8	1.2
Northeast	52.9	51.4	1.5
West Central	55.3	53.8	1.5
Central	55.1	53.4	1.8
East Central	54.4	52.6	1.8
Southwest	59.0	57.0	2.0
South Central	58.1	56.4	1.7
Southeast	57.2	55.5	1.6
State	55.5	53.9	1.6

Precipitation

Region	Precipitation	Normal	Deviation	Percent of Normal
Northwest	38.77	35.36	3.41	110
North Central	38.46	35.40	3.06	109
Northeast	37.02	34.06	2.96	109
West Central	35.97	38.27	-2.30	94
Central	36.32	37.75	-1.44	96
East Central	37.12	36.36	0.76	102
Southwest	34.92	42.02	-7.10	83
South Central	34.52	42.14	-7.63	82
Southeast	35.37	40.71	-5.34	87
State	36.45	38.12	-1.66	96

Total Precipitation in Inches
November 1, 2007 to November 30, 2007

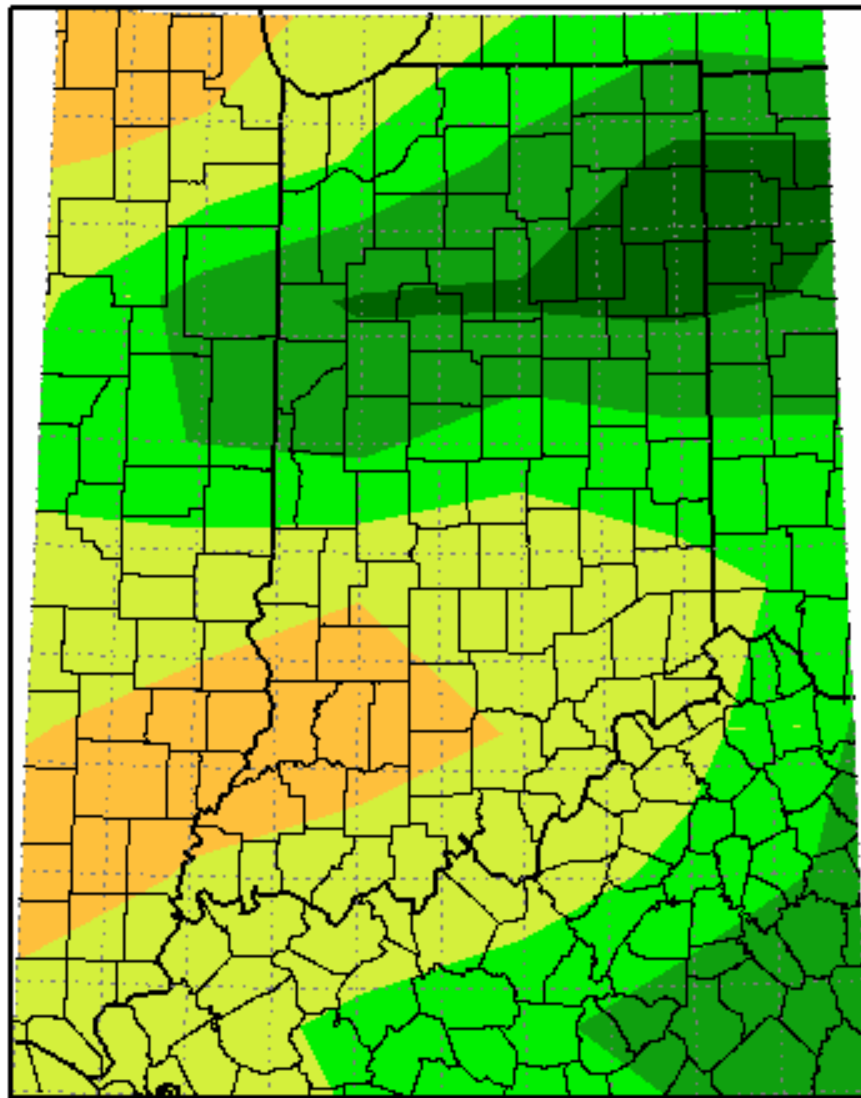


Midwestern Regional Climate Center

Illinois State Water Survey

Champaign, Illinois

**Total Precipitation Percent of Mean
November 1, 2007 to November 30, 2007**

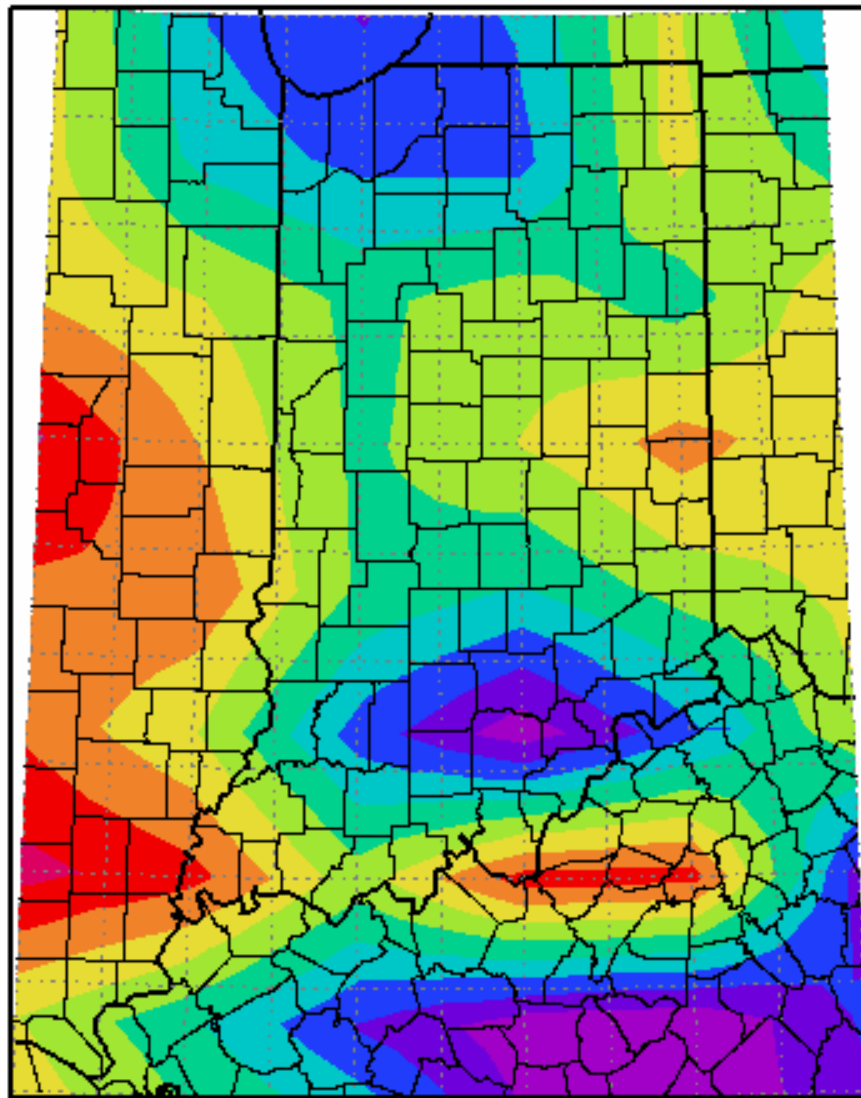


Midwestern Regional Climate Center

Illinois State Water Survey

Champaign, Illinois

Average Temperature Departure from Mean in Degrees F
November 1, 2007 to November 30, 2007



Midwestern Regional Climate Center

Illinois State Water Survey

Champaign, Illinois

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 entirely 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 how much of the state is not under drought conditions, and also how much of the state is under drought conditions from its respective column upwards.

For example, November 13th has 75.70% of Indiana under no drought, and 24.30% of Indiana under at *least* D0 through D4 drought status. This is followed by 0.00% as D1 through D4 status. To obtain the amount that is D0 status, simply subtract the D1-D4 column from the D0-D4 column, thus giving you the percentage of area with abnormally dry conditions. Please note, however, that these areas are not exact, and much of this drought map has been created from reports throughout the state and estimation, so use this information as a general view rather than for specifics.

D0 Abnormally Dry	D1 Drought - Moderate	D2 Drought - Severe	D3 Drought - Extreme	D4 Drought - Exceptional		
Week	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
11/27/07	67.89	32.11	0.00	0.00	0.00	0.00
11/20/07	67.43	32.58	0.00	0.00	0.00	0.00
11/13/07	75.70	24.30	0.00	0.00	0.00	0.00
11/06/07	75.70	24.30	0.00	0.00	0.00	0.00

November 6th Drought Summary



November 13th Drought Summary



November 20th Drought Summary



November 27th Drought Summary

