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Indiana State Climate Office

Monthly Weather Report

Aug 7, 2008



<http://www.iclimat.org>

July 2008 Climate Summary

Summary

Cool, cool, cool. June was a warmer than usual month here in Indiana but the middle of summer proved to be the exact opposite. Much of the state was below normal for over half the month. The statewide average temperature is 74.6° for July but in 2008 it was 73.6°F. Six of the nine climate divisions in Indiana were over 1°F below normal. This is a result of the high number of cold fronts that set their sights on the state this July.

Though not as extreme as June, many regions of the state received above normal precipitation this month. Again, six of the nine climate divisions were at or above the normal and another received 98% of the normal. This continues the trend of an extremely wet year. All climate divisions are well above 100% of the normal precipitation through 7 months. The central counties have seen a surplus of precipitation in excess of 13 inches already. However this may be coming to an end. July was closer to normal precipitation and with the end of La Niña and the possibility of entering an El Niño sooner rather than later, precipitation may drop below normal in the coming months.

July 1st – 7th

Some light showers carried over from June during the early morning hours of the first day of the month but accumulations were minimal. Temperatures were a bit cool for this time of year, as highs settled in the low-80s. Temperatures remained in this range on the 2nd but things would change on the 3rd. A cold front – the first significant system of the month – would enter late on the 2nd and bring some rain to all parts of the state on the 3rd. Northern and west central regions dried out for a lovely Independence Day but, unfortunately for the southern and west central counties, the system evolved into a stationary front and rain persisted – albeit intermittently – throughout the 4th and 5th. As the frontal system passed through the state temperatures plummeted further below normal. Highs sat in the mid-70s on the 3rd and the 4th of July. Once the majority of the disturbance had passed, temperatures rebounded. Highs in the low-80s returned on the 5th and they rose to the mid-80s on the 6th, about normal. Another synoptic low threatened the region late on the 7th. However this system would be a bit more intense.

July 8th – 15th

Week two of July 2008 started with a bang. Temperatures receded slightly in accordance with the system. Strong thunderstorms rocked part of the state, specifically the region that had been

hit hard at the beginning of June – the west central and southwestern counties. Because of the nature of the short-lived thunderstorms, rainfall totals weren't large. However, because of the time period in which the rain fell flash flooding became an issue in some areas. The thunderstorms on the 8th reportedly spawned a tornado in Whitley County and high winds in excess of 60 mph were reported in multiple counties across the state. Scattered showers and thunderstorms persisted throughout the night and through most of the next day. Things finally dried up on the 10th. It wouldn't last. On the 11th the state entered the warm pool of another approaching synoptic system. This mid-week system would prove just as strong as its predecessor. Highs approached 90°F on the 11th and severe thunderstorms popped up late that night and early the next morning. High winds were reported in many central counties. A tornado briefly touched down near Cloverdale in Putnam County as well. Rain continued through the 12th and didn't end until late afternoon on the 13th. Temperatures cooled off considerably during the passage of the front but warmed up on the 15th, with highs reaching the mid-80s, as high pressure settled in just south of Indiana.

July 16th – 23rd

Conditions were rather pleasant (if you like warm, clear days) on the 16th, 17th, and 18th. There was minimal cloud cover and temperatures were hot. Highs peaked in the near 90 and were continually above 85°F across the state. After about 5 days of dry weather another front made its approach. Cooler temperatures arrived and more severe weather was just around the corner. Late on the 19th some thunderstorms rolled through, a product of the cold front to the north. The front stalled, however, and heavy rain and severe storms effected only the northern half of the state (central regions could relax for once). The storms produced strong winds that reached almost 80 mph and hail over 1 ¾ inches in diameter. Flash flooding became a concern as heavy rain fell over a short period of time. The system finally started to move south on the 21st, bringing more severe storms to the rest of the state. Rain from this disturbance would last through the morning of the 23rd.

July 24th – 31st

Temperatures warmed a bit on the 24th but the big change was dry weather for the first time in days. Of course something was already brewing to the southwest. A sudden jump in temperatures on the 25th could only mean one thing: advancing synoptic system. Sure enough, late on the 25th more rain came, focused solely on the southern counties. The heaviest rain fell in southern Illinois and northern Kentucky but ½ inch did fall in Posey and Vanderburgh counties on the 25th and 26th. Once this small system passed, temperatures shot back up into the mid-80s where they would stay for the rest of the month. A small string of thunderstorms passed through areas of the state on the 28th, but they weren't severe and produced minimal accumulations. The final event of July 2008 took place over the final 2 days. A cold front pushed its way south from Canada on the 30th and stalled into a stationary front to end the month. The largest rainfall totals occurred over the Illinois-Indiana-Kentucky junction, where over 2 inches fell. Again the southwestern counties received the brunt of the system.

July Summary

Temperature

Region	Temperature	Normal	Deviation
Northwest	72.6	73.6	-1.1
North Central	72.2	73.1	-0.9
Northeast	72.3	72.8	-0.6
West Central	73.7	74.8	-1.2
Central	73.0	74.3	-1.2
East Central	72.4	73.5	-1.1
Southwest	76.2	77.1	-0.9
South Central	75.0	76.3	-1.2
Southeast	74.4	75.5	-1.1
State	73.6	74.6	-1.0

Precipitation

Region	Precipitation	Normal	Deviation	Percent of Normal
Northwest	3.86	3.86	0.00	100
North Central	3.04	3.80	-0.76	80
Northeast	3.29	3.66	-0.37	90
West Central	5.99	4.39	1.60	136
Central	5.30	4.26	1.04	124
East Central	4.59	4.10	0.48	112
Southwest	4.97	4.26	0.71	117
South Central	4.66	4.32	0.34	108
Southeast	4.05	4.12	-0.07	98
State	4.51	4.10	0.40	110

Summer-to-Date

(June & July)

Temperature

Region	Temperature	Normal	Deviation
Northwest	71.8	71.9	0.0
North Central	71.4	71.3	0.1
Northeast	71.5	71.0	0.5

West Central	73.2	73.1	0.1
Central	72.5	72.5	0.0
East Central	71.9	71.7	0.2
Southwest	75.8	75.2	0.6
South Central	74.8	74.4	0.4
Southeast	73.8	73.5	0.3
State	73.1	72.8	0.2

Precipitation

Region	Precipitation	Normal	Deviation	Percent of Normal
Northwest	8.94	8.20	0.74	109
North Central	7.98	8.10	-0.12	98
Northeast	8.42	7.74	0.68	109
West Central	15.03	8.72	6.31	172
Central	14.54	8.36	6.19	174
East Central	12.77	8.33	4.43	153
Southwest	10.88	8.37	2.51	130
South Central	10.74	8.41	2.33	128
Southeast	10.62	8.34	2.29	127
State	11.30	8.30	3.00	136

Annual-to-Date

Temperature

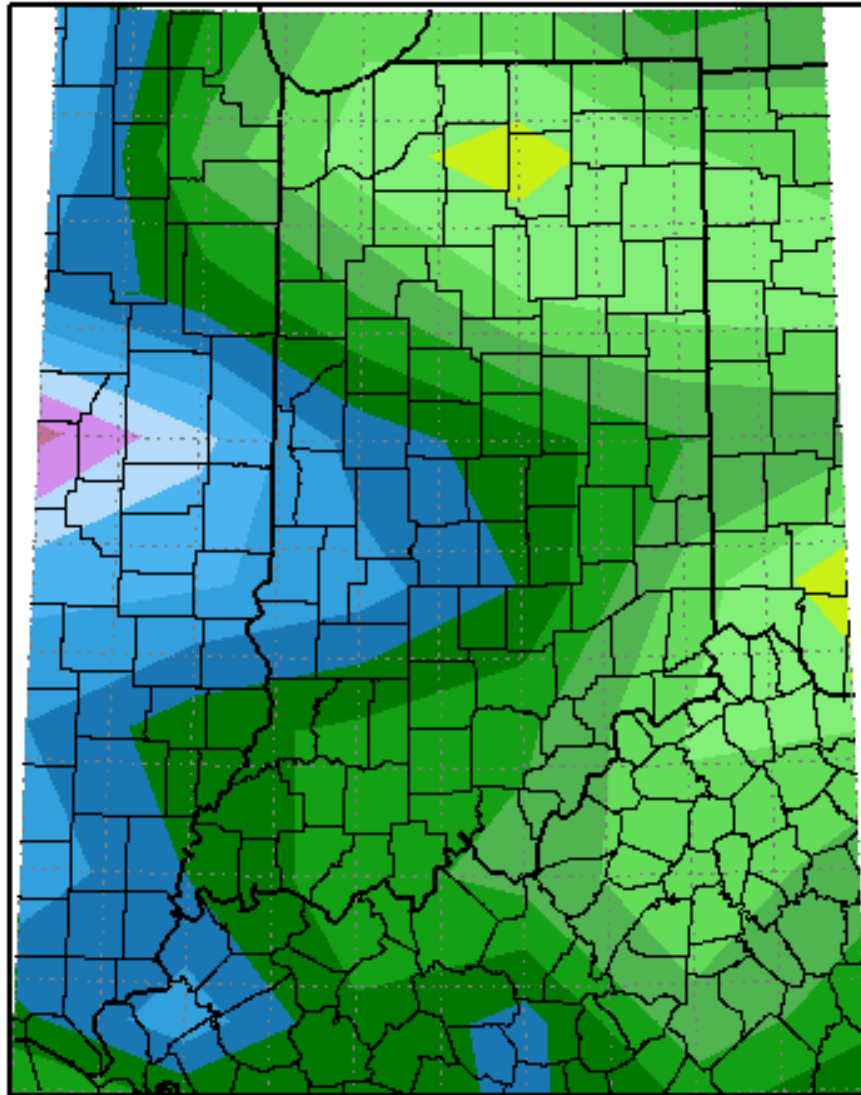
Region	Temperature	Normal	Deviation
Northwest	47.9	49.2	-1.3
North Central	47.7	48.7	-1.0
Northeast	47.8	48.3	-0.5
West Central	49.7	50.9	-1.2
Central	49.7	50.5	-0.8
East Central	49.1	49.6	-0.6
Southwest	53.5	54.3	-0.8
South Central	52.8	53.7	-0.9
Southeast	51.9	52.8	-0.9
State	50.1	51.0	-0.9

Precipitation

Region	Precipitation	Normal	Deviation	Percent of Normal
Northwest	27.17	22.28	4.89	122
North Central	27.78	22.20	5.58	125
Northeast	26.74	21.47	5.27	125
West Central	36.18	24.78	11.40	146
Central	37.98	24.57	13.42	155
East Central	33.86	23.94	9.92	141
Southwest	42.08	27.91	14.17	151

South Central	42.73	28.02	14.71	152
Southeast	38.76	27.16	11.60	143
State	35.18	24.76	10.42	142

Total Precipitation in Inches July 1, 2008 to July 31, 2008

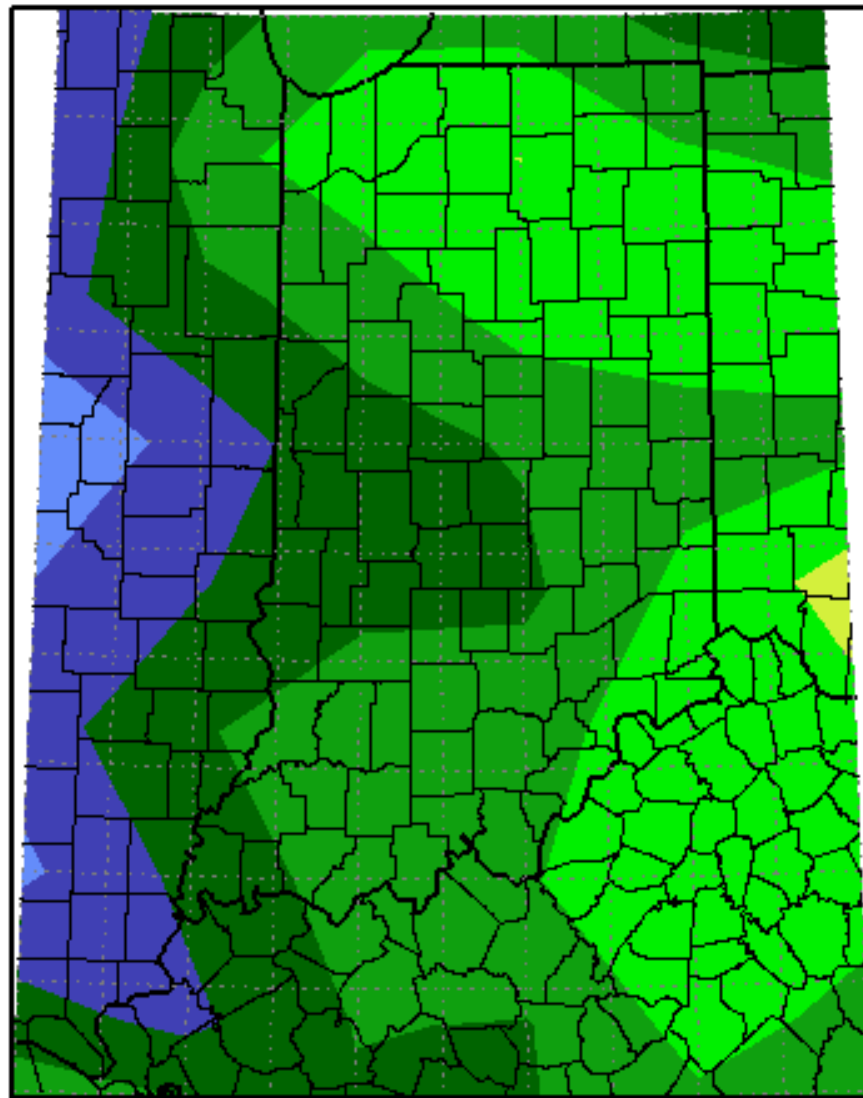


NOAA Midwestern Regional Climate Center

Illinois State Water Survey

Champaign, Illinois

Total Precipitation Percent of Mean
July 1, 2008 to July 31, 2008

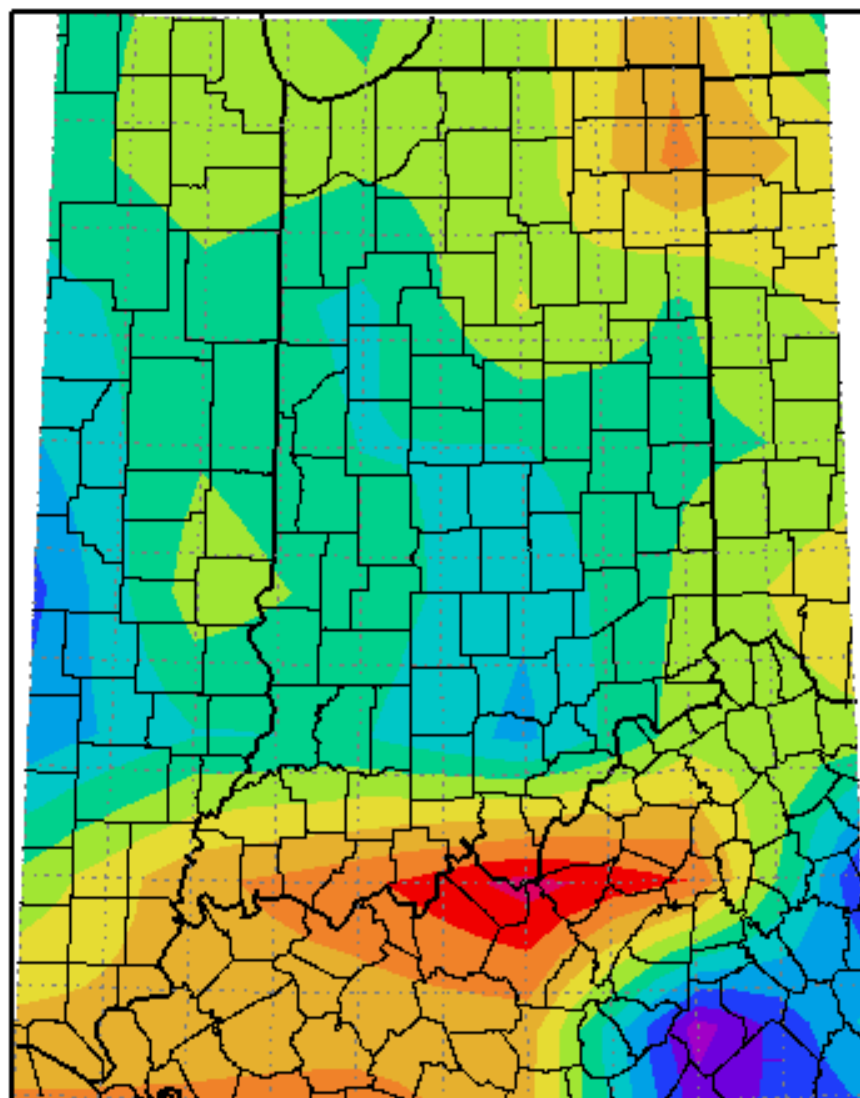


NOAA **Midwestern Regional Climate Center**

Illinois State Water Survey

Champaign, Illinois

Average Temperature Departure from Mean in Degrees F
July 1, 2008 to July 31, 2008



NOAA 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, July 1st has 0.00% of Indiana under no drought, and 0.00% 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
07/01/08	100.00	0.00	0.00	0.00	0.00	0.00
07/08/08	100.00	0.00	0.00	0.00	0.00	0.00
07/15/08	100.00	0.00	0.00	0.00	0.00	0.00
07/22/08	100.00	0.00	0.00	0.00	0.00	0.00
07/29/08	100.00	0.00	0.00	0.00	0.00	0.00

July 1st Drought Summary



July 8th Drought Summary



July 15th Drought Summary



July 22nd Drought Summary



July 29th Drought Summary

