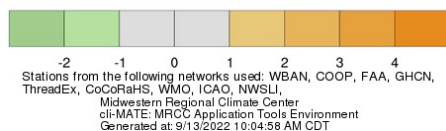
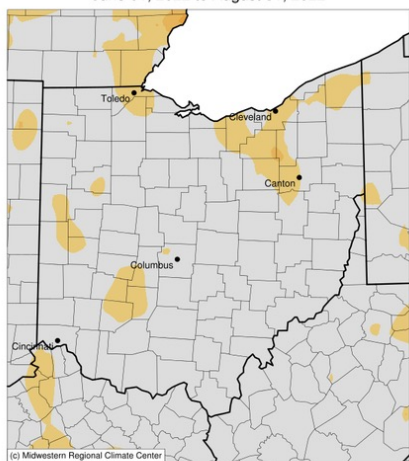




Temperature and Precipitation

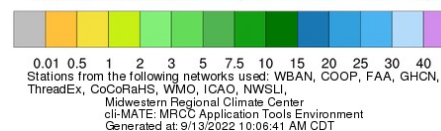
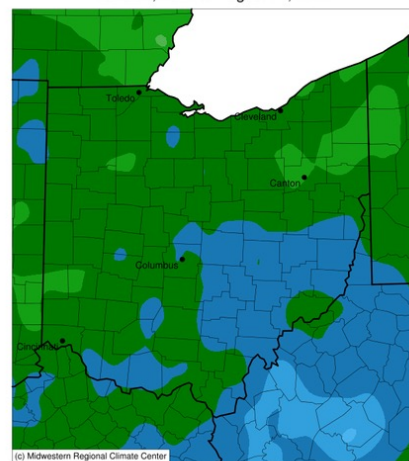
The summer months of 2022 are a tale of two variables for the state of Ohio. Temperatures were balanced for the season compared to the decade's norms, with most areas ranking just a touch above average with isolated pockets of 1-2°F above normal in northern and western Ohio. (Fig. 1a) Precipitation was much more varying across the state, with the southeast ending up quite saturated due repeated rounds of thunderstorms. (Fig. 1b) In fact, the 15-20 inches of season-wide precipitation was as much as 2-6 inches above normal for areas of the southeast. Parts of the northwest were also much above normal. (Fig. 1c) This contrasts sharply with northeast and parts of west central Ohio, where percentages of normal precipitation were in a deficit (less than 100%) compared to much of their surrounding regions. (Fig. 1d)

Average Temperature (°F): Departure from 1991-2020 Normals
June 01, 2022 to August 31, 2022



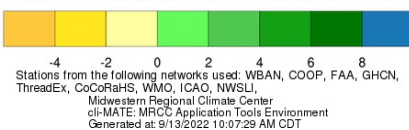
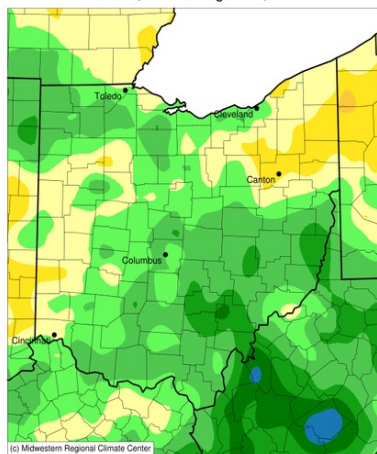
a)

Accumulated Precipitation (in)
June 01, 2022 to August 31, 2022



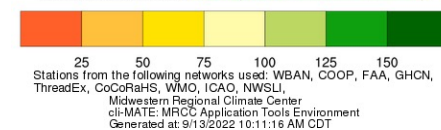
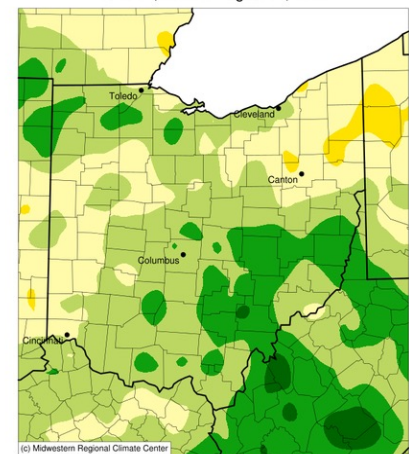
b)

Accumulated Precipitation (in): Departure from 1991-2020 Normals
June 01, 2022 to August 31, 2022



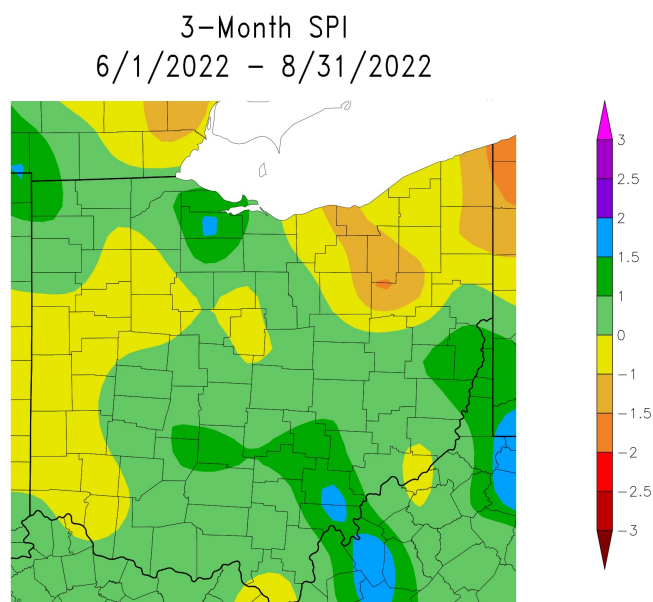
c)

Accumulated Precipitation (in): Percent of 1991-2020 Normals
June 01, 2022 to August 31, 2022



d)

Figure 1: Statewide departures from normal temperature (a) and accumulated precipitation (b) over the summer months at top, followed by statewide departures from normal of precipitation (c) and percent of normal (d) at bottom. All data courtesy of the Midwestern Regional Climate Center (<http://mrcc.purdue.edu>).



Generated 9/10/2022 at HPRCC using provisional data.

NOAA Regional Climate Centers

Figure 2: Three-month Standardized Precipitation Index (SPI) across the state of Ohio from June through August, used as a proxy for soil moisture conditions. Data courtesy of the High Plains Regional Climate Center (<https://hprcc.unl.edu/>)

Soil and Energy

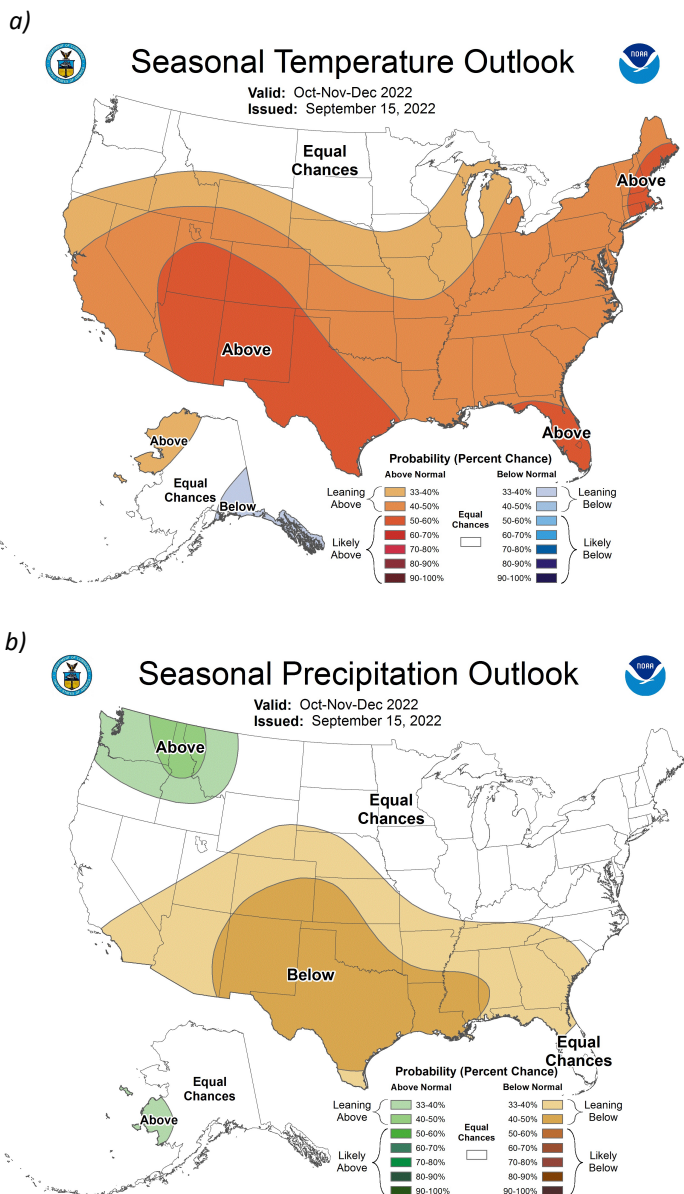
The variations in precipitation for the summer months are even more pronounced in the newest three-month Standardized Precipitation Index (SPI). Large portions of the southeast and far north/northwest Ohio are in the positive with plenty of rainfall leading to adequate soil moisture, while regions of west central and especially northeast Ohio are experiencing some drier conditions as a result of missing out on some of the heavier precipitation. (Fig. 2)

Heating (HDDs) and Cooling (CDDs) Degree Days reflect the season's temperature trends and its impact on energy nicely. A slightly warmer than normal summertime led to a noticeable lack of HDDs, while CDDs were above normal in all but one regional climate division. (Fig. 3)

Climate Division	Heating Degree Days	Normal	Departure	Cooling Degree Days	Normal	Departure
1	7	35	-28	687	648	38
2	7	36	-29	708	647	60
3	31	63	-32	536	503	33
4	2	26	-24	724	697	27
5	4	23	-18	694	707	-13
6	16	41	-25	633	587	45
7	16	36	-20	644	602	42
8	0	16	-16	816	777	39
9	5	15	-10	787	771	16
10	9	25	-16	697	669	28
Statewide	9	30	-21	697	668	30



Figure 3: (Left) Total June-August 2022 heating & cooling degree days. (Right) Corresponding Ohio Climate Divisions. Data courtesy of the Midwestern Regional Climate Center (<http://purdue.mrcc.edu>).



Looking Ahead

The newest 3-month outlook from the Climate Prediction Center continues to signal increased probabilities for above average temperatures heading into the fall months. (Fig. 4a) However, no strong suggestions exist for precipitation, leading to equal probabilities for above, below, or average conditions for the season. (Fig. 4b) While the region’s seasonal decline in average temperature means it will be harder to experience full summer-like heat, days with highs in the 80°F range are still very much a possibility with this type of pattern especially heading into October. This may help keep CDDs running above average and, combined with an equal chance precipitation outlook, may be helpful for farmers heading into harvest season.

Note: these outlooks do not provide the quantity of above or below normal conditions, just the likelihood of occurrence (i.e., the probability).

Figure 4: a) Nationwide Seasonal Temperature and b) Precipitation Outlook for October–December 2022. Courtesy of the Climate Prediction Center (<https://www.cpc.ncep.noaa.gov/>).

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