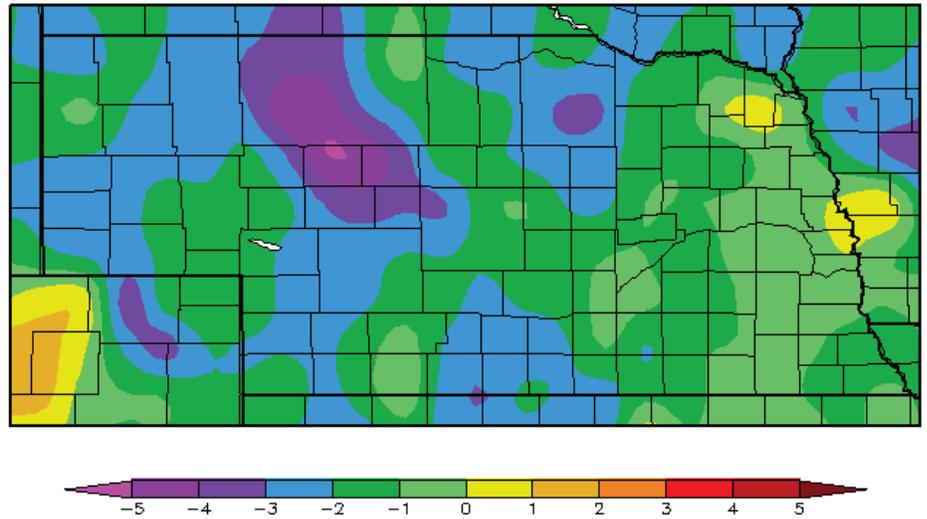


CLIMATE UPDATE

May delivers both snow and tornadoes

In an overall cool and wet May, Nebraska experienced a taste of winter and spring weather with both snow and tornadic activity. A late-April snowstorm left a narrow band of snow cover in central Nebraska to start off the month. This wasn't on the ground long as temperatures warmed quickly. A second snow event on May 20 to 21 resulted in the Panhandle getting a few inches of snow – the highest reported total was 6 inches. In addition to the snow, storm reports indicate three tornadic events. Two F0 tornadoes occurred on May 16 (near Exeter and Brandon) and an F1 was confirmed near Wisner that impacted a local farmstead. A wind gust of 93 mph was reported on May 14 near Harrison, Nebraska, and was associated with a convective storm moving through the Panhandle. Reports confirm damage around the area.

DEPARTURE FROM NORMAL TEMPERATURE (F)



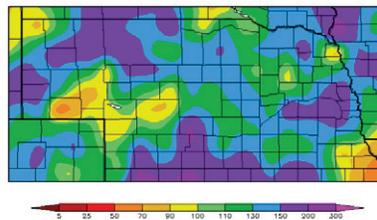
HIGH PLAINS REGIONAL CLIMATE CENTER

All maps generated using May provisional data.

Temperatures

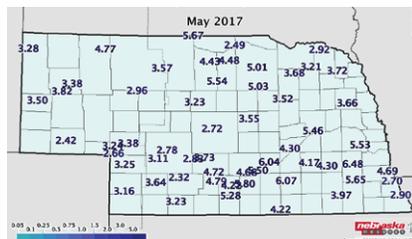
Monthly average temperatures were cooler than normal overall. The coldest pockets were in north-central Nebraska and the southern Panhandle with departures of 3°F or more. The statewide average temperature of 57.1°F was 1.6 degrees cooler than normal. Over the long term (since 1895), May temperatures have increased slightly, by approximately 1°F. Daily temperatures did vary quite a bit during the month, as can be typical for a transition season. The highest air temperature reading from the Nebraska Mesonet network was 94°F on May 8 near Oakland (northeast), while the lowest Mesonet reading was observed only a few days earlier on May 4, 28°F near Whitman (north-central).

PERCENT OF NORMAL PRECIPITATION



HIGH PLAINS REGIONAL CLIMATE CENTER

LIQUID PRECIPITATION TOTALS (IN)



NEBRASKA STATE CLIMATE OFFICE

Precipitation

Monthly precipitation totals were in the 3- to 6-inch range across Nebraska, which is mostly above average. Portions of the northwest, south-central and east-central

May extremes

The Nebraska Mesonet, Nebraska's statewide weather network operated by the University of Nebraska-Lincoln, cataloged the following extremes this May:

- Highest air temperature:** 94°F on May 8 at Oakland 4W
- Lowest air temperature:** 28°F on May 4 at Whitman 5NE
- Greatest 24-hour temperature change:** 39°F, 32°F on May 20 to 67° on May 21 at Memphis 5N (Mead area)
- Highest 1-day precipitation total:** 2.30 inches on May 17 at Harvard 4SW (Clay Center)
- Highest 4-inch bare soil temperature:** 87°F on May 14 at Central City 3W
- Lowest 4-inch bare soil temperature:** 35°F on May 2 at Fordyce 4N
- Highest 5-second wind gust:** 93 mph on May 14 at Harrison 4NW

U.S. DROUGHT MONITOR | MAY 30

| | Drought Conditions (Percent Area) | | | | | |
|---|-----------------------------------|-------|-------|-------|-------|------|
| | None | D0-D4 | D1-D4 | D2-D4 | D3-D4 | D4 |
| Current | 100.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| Last Week 05-23-2017 | 100.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 3 Months Ago 02-28-2017 | 66.27 | 33.73 | 8.33 | 0.00 | 0.00 | 0.00 |
| Start of Calendar Year 01-03-2017 | 48.25 | 51.75 | 13.43 | 0.16 | 0.00 | 0.00 |
| Start of Water Year 09-27-2016 | 77.29 | 22.71 | 1.59 | 0.16 | 0.00 | 0.00 |
| One Year Ago 05-31-2016 | 100.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

Intensity

- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

DROUGHTMONITOR.UNL.EDU

received the highest amounts relative to normal (150 percent). A few locations scattered around the state received slightly below-normal precipitation. The statewide average total of 4.71 inches is about an inch above average. How has May precipitation trended over time in Nebraska? Wetter overall, by about half an inch since 1895.

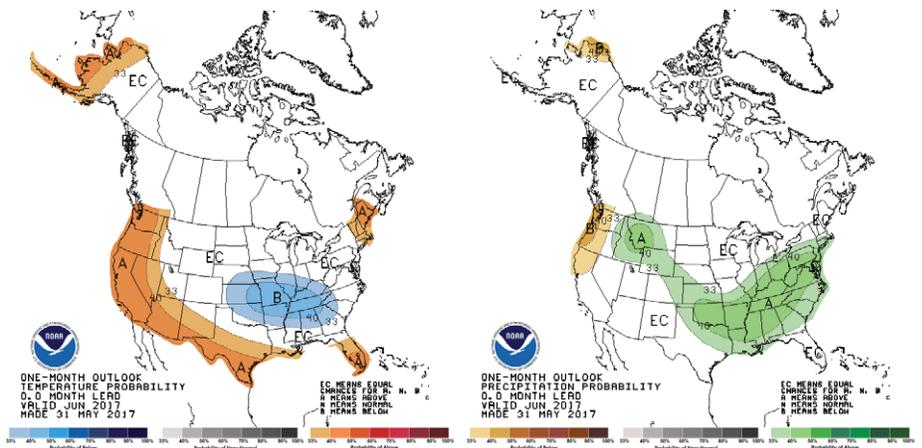
Drought

Nebraska started off with two pockets of D0 (abnormally dry) conditions covering almost 5 percent of the state – an area around the Platte River centered on Hamilton County and south of the North Platte River in southwest Nebraska. However, rainfall received during the month in these areas was enough to recover deficits and remove the dryness category by month’s end.

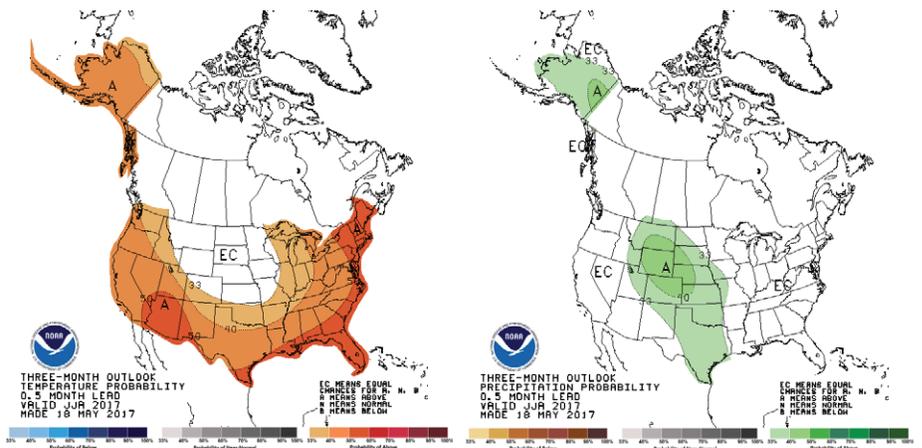
Crops

Corn and soybean planting progress was impacted by a period of near consistent rainfall and subsequent saturated field conditions during the latter half of the month. By the third week of May, the

30-DAY OUTLOOK TEMPERATURE (LEFT) & PRECIPITATION



90-DAY OUTLOOK TEMPERATURE (LEFT) & PRECIPITATION



percent planted statewide lagged a bit behind normal. Some relief in the wet pattern occurred at the end of the month however. Bare soil temperatures at the 4-inch depth were in the 60s and 70s by the start of June.

Outlook

The monthly outlook from the Climate Prediction Center is favoring above-normal precipitation for southwest Nebraska and equal chances of below, near and above normal for the rest of the state during

June. For temperature, the odds are tilted toward the below-normal category for the southeastern half of Nebraska. Looking out further, climate predictions for the summer months (June, July and August) are calling for increased chance of wetter-than-normal precipitation amounts across the state. This enhanced area extends through the Plains states and portions of the intermountain West. The temperature outlook does not offer as much guidance as Nebraska lies in an area covering the north-central U.S. of equal chances of below, near, and above normal.



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