

CLIMATE UPDATE

Season-ending freeze later than normal

Strong winds affect harvest across Nebraska

October brought warm and wet conditions to the eastern two-thirds of Nebraska and cool, dry conditions to the west. Temperatures averaged close to 60°F in the far southeast, which was a few degrees above average. In the Panhandle, temperatures averaged in the mid 40s, up to 3 degrees below average. The statewide average temperature for October was 51°F, which is 0.2°F above the most recent 30-year average.

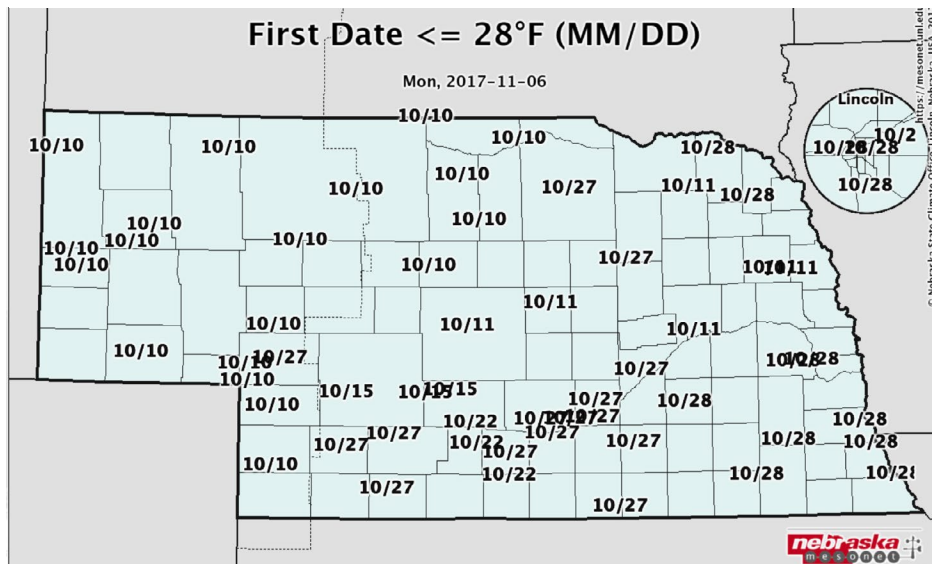
A few locations around Nebraska reached the freezing mark during September, but the widespread and growing season-ending hard frost occurred during October. The first event occurred on Oct. 10 and 11 reaching primarily western Nebraska. The second hard frost occurred at mid-month, and the third event, which was statewide, occurred on Oct. 27 and 28. These first freeze dates were generally later than the average date for the respective locations, but not record-breaking.

The high temperature for the month was 87°F, reported at a handful of locations throughout Nebraska early in the month. As more seasonable air filtered into the state later in the month, lows near zero were reported in the west. By month's end, soil temperatures under bare ground were mostly in the 40s across the state.

Precipitation

For most of the state, the first half of October was much wetter than the second half. In fact, 90 percent of the moisture received in Lincoln occurred during the first 10 days of the month. Monthly totals of 4 to more than 7 inches were received in the east, which is about 2 to 3 inches more

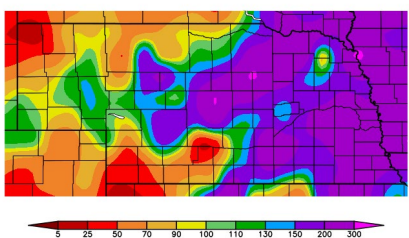
FIRST FREEZE DATE FOR NEBRASKA STATIONS



NSCO

All maps generated using October provisional data.

PERCENT OF NORMAL PRECIPITATION

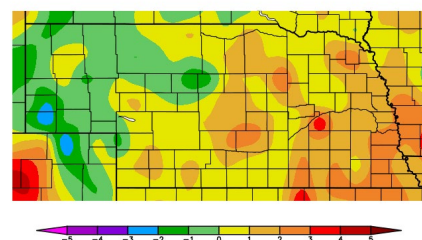


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than normal. Conditions in the western half of the state were near normal to about an inch below normal. A half inch to an inch of rain fell in the west. For the statewide average precipitation, Nebraska had 2.88 inches, which is 1.46 inches above normal. It ranked as the 11th wettest on record.

A handful of hail and wind events were reported in the state during October — a function of both localized convective severe weather and frontal boundary passage.

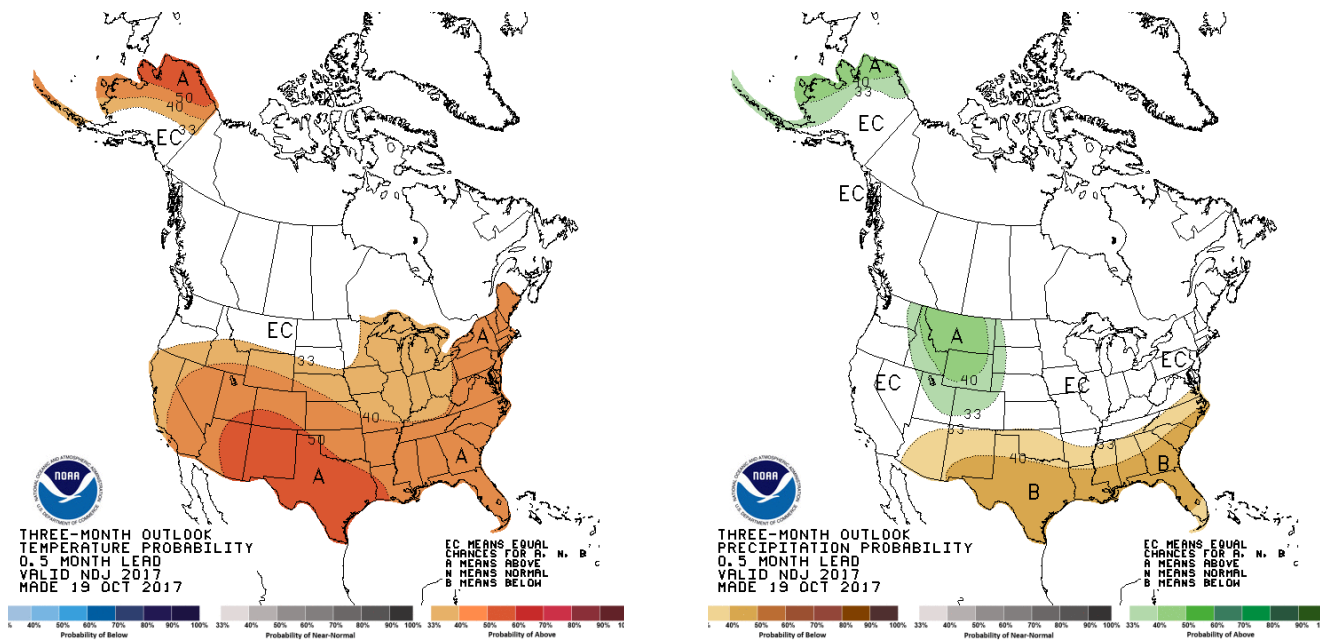
DEPARTURE FROM NORMAL TEMPERATURES (F)



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One tornado briefly touched down 4 miles northwest of St. Edwards on Oct. 2 and was an EF0. The Nebraska Mesonet station near Ord reported a wind gust of 54 mph, also on Oct. 2. High winds associated with weather fronts occurred on Oct. 23, 24, 26 and 27. Peak wind gusts in excess of 50 mph were reported. For a detailed analysis of this wind event, [a UNL CropWatch story can be found here.](#)

90-DAY OUTLOOK TEMPERATURE (LEFT) & PRECIPITATION



Crops

As with the end of September, the wetness during the first part of October was an issue resulting in harvest delays. For the remainder of the month, mostly dry conditions led to significant field activity that put corn and soybean harvest percentages back closer to normal. The high wind event in late October resulted in substantial ear losses for fields yet to be harvested. This is causing concern about feeding stalks with an abundance of corn on the ground.

Drought

Slight improvements to the drought conditions in Nebraska were made during October, according to the U.S. Drought Monitor.

Three pockets of D0 (abnormally dry) and D1 (moderate drought) remained at the start of the month – far southeast Nebraska, the southern Panhandle mostly south of the North Platte River, and a pocket in northcentral Nebraska. The dry area in the far southeast was erased due to an excess of rainfall during the month. The

October extremes

Nebraska’s statewide weather network operated by the University of Nebraska-Lincoln, the Nebraska Mesonet, cataloged the following extremes in October:

- Highest air temperature:** 87°F on Oct. 2 at Julian 4E
- Lowest air temperature:** 5°F on Oct. 31 at Angora 13N
- Largest 24-hour temperature change:** 80°F ending on Oct. 26 at Harrison 4NW
- Highest 4-inch bare soil temperature:** 76°F on Oct. 1 at Long Pine 20S
- Lowest 4-inch bare soil temperature:** 31°F on Oct. 31 at Ainsworth 2NE
- Highest 1-day precipitation:** 2.83 inches on Oct. 7 at Wausa 2SW
- Highest 5-second wind gust:** 54 mph Oct. 2 Ord 2N

pocket in the north was scaled back with D1 almost all removed, and the Panhandle remained the same. At month’s end, D1 covered 2.5 percent of the state and D0 covered 8 percent.

Outlook

The NOAA monthly outlook for November issued at the end of October puts Nebraska right at a dividing line between cooler and wetter conditions to our north and warmer, drier conditions to our south. This pattern is reflective of a La Nina type of climate trend. For the November to January timeframe, all of Nebraska is in the increased chance for above-normal temperatures, as is much of the U.S. The seasonal precipitation outlook is calling for an increased chance of wetness for a pocket of the north-central U.S., including the Nebraska Panhandle. The remainder of the state is in the equal chances category of above, near and below normal.

For more information on what La Nina means for the central U.S., read these stories:

- [What a La Nina forecast means for the Midwest](#)
- [Understanding how El Nino/La Nina affect crops](#)

— MARTHA SHULSKI,
NEBRASKA STATE CLIMATE OFFICE



NEBRASKA STATE CLIMATE OFFICE
153 Hardin Hall | 3310 Holdrege St. | Lincoln, NE 68503-0931
School of Natural Resources at University of Nebraska - Lincoln

CONTACT US
e) nsco@unl.edu | p) 402.472.5206

ON THE WEB
 nsco.unl.edu

FOLLOW US
 @mshulski3