Nebraska Climate Update
Climate Assessment Response Committee

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Growing Season Highlights

• March Warm Statewide. Precipitation above normal west, below normal east

• April warm Statewide. Precipitation above normal east, mixed bag west

• May Warm east, cool west. Precipitation above normal east, mixed bag west

• June warm statewide. Precipitation dry west, wet east

• July warm and wet statewide.

• August cool statewide. Precipitation wet west, dry east.

• September warm statewide. Precipitation wet west, dry east

• October warm and wet statewide.
Fall Temperature Trend

Departure from Normal Temperature (F)
10/1/2017 – 10/27/2017

Generated 10/28/2017 at HPRCC using provisional data.

NOAA Regional Climate Centers

NEBRASKA STATE CLIMATE OFFICE
Growing Season Crop Concerns

- Significant Planting delays, crop starts out behind in GDD accumulations
- Soil Moisture Recharge
- Muddled in crops (northeast), potential for compaction issues
- Return of heat, stress on young corn plants
- Dicamba
- Heat and dryness impact on pollination
- Grain fill for corn during August, maturity concerns
- Warm September, crops gain ground, wet west aids late season irrigation, White Mold.
- Harvest delays, extreme wind leads to dropped ears
- Some reports of below normal hay season west central.
- Delayed wheat planting, concerns if planted too late and how it will impact stand emergence
- Soil Moisture recharge is off to a fantastic start
- This fall storm pattern bringing in more frequent shots of cold air than last fall
Mean La Nina Winter Jet Stream Response

WINTER LA NIÑA PATTERN

variable Polar Jet Stream

colder

wetter

drier

warmer

drier

blocking high pressure
La Niña Temperature Response


Difference from average temperature (°F):

NOAA Climate.gov
Data: NCDC/ESRL
La Niña Winter Precipitation Response

Winter (December-February) precipitation during strong, moderate, and weak La Niñas since 1950

NOAA Climate.gov
Data: NCDC/ESRL

NEBRASKA STATE CLIMATE OFFICE
ENSO Spring Severe Weather Response
Concerns Going Forward

• Was our wet fall period a lucky break or signs of things to come

• How much of a moderating influence will current soil moisture levels have on air temperatures as we approach winter.

• How strong will La Nina get and what will be the mean jet stream pattern

• Will there be recovery in the northern Plains drought signature

• Will the southern Plains experience dry and warm conditions through the winter and develop a drought signal

• What will be the mean storm pattern this winter

• Will this La Nina end quickly or hang on later than current models suggest
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