Midwest and Great Plains Climate & Drought Outlook 18 October 2018

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Photo courtesy: Mitchell Equipment, north central NE
@MitchellEquip

National Drought Mitigation Center

United States Department of Agriculture
Midwest Climate Hub

General Information

- **Providing climate services to the Central Region**
  - Collaboration Activity Between:
    - State Climatologists/American Association of State Climatologists
    - NOAA NCEI/NWS/OAR/NIDIS
    - USDA Climate Hubs
    - Midwest and High Plains Regional Climate Centers
    - National Drought Mitigation Center
- **Next Regular Climate/Drought Outlook Webinar**
  - November 15, 2018 (1 PM CDT): Presenter BJ Baule, Michigan State Climate Office
- **Access to Future Climate Webinars and Information**
- http://www.drought.gov/drought/content/regional-programs/regional-drought-webinars
- *http://mrcc.isws.illinois.edu/webinars.htm*
- *http://www.hprcc.unl.edu/webinars.php*
- **Open for questions at the end**

Agenda

- **Recent Conditions**
- **Impacts**
- **Outlooks**
  - **El Niño Watch**
  - **Winter season**

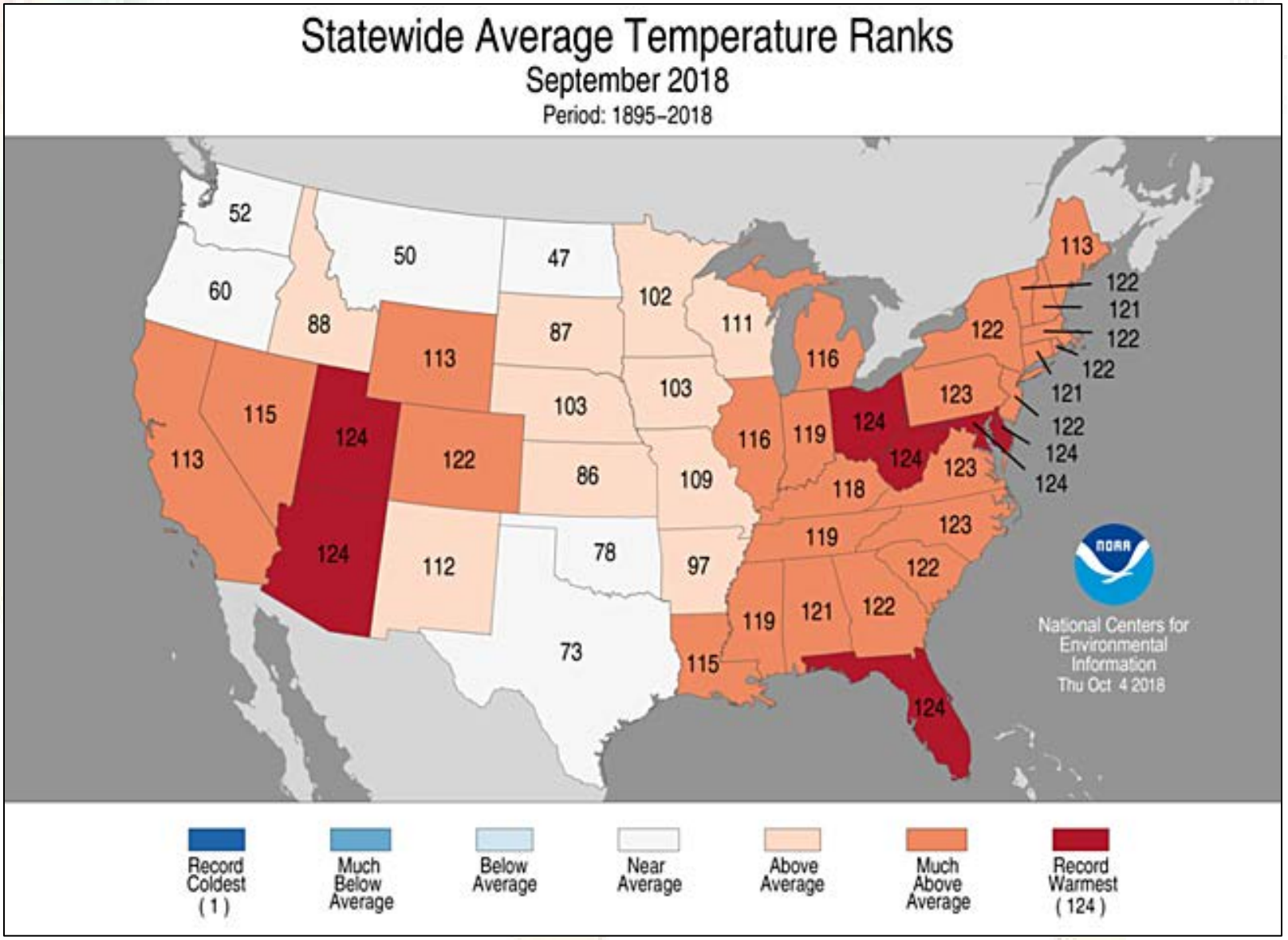
Corn mold, October 2018.
Photo courtesy: Tamra Jackson-Ziems, UNL Extension

Recent Conditions

A LOOK BACK

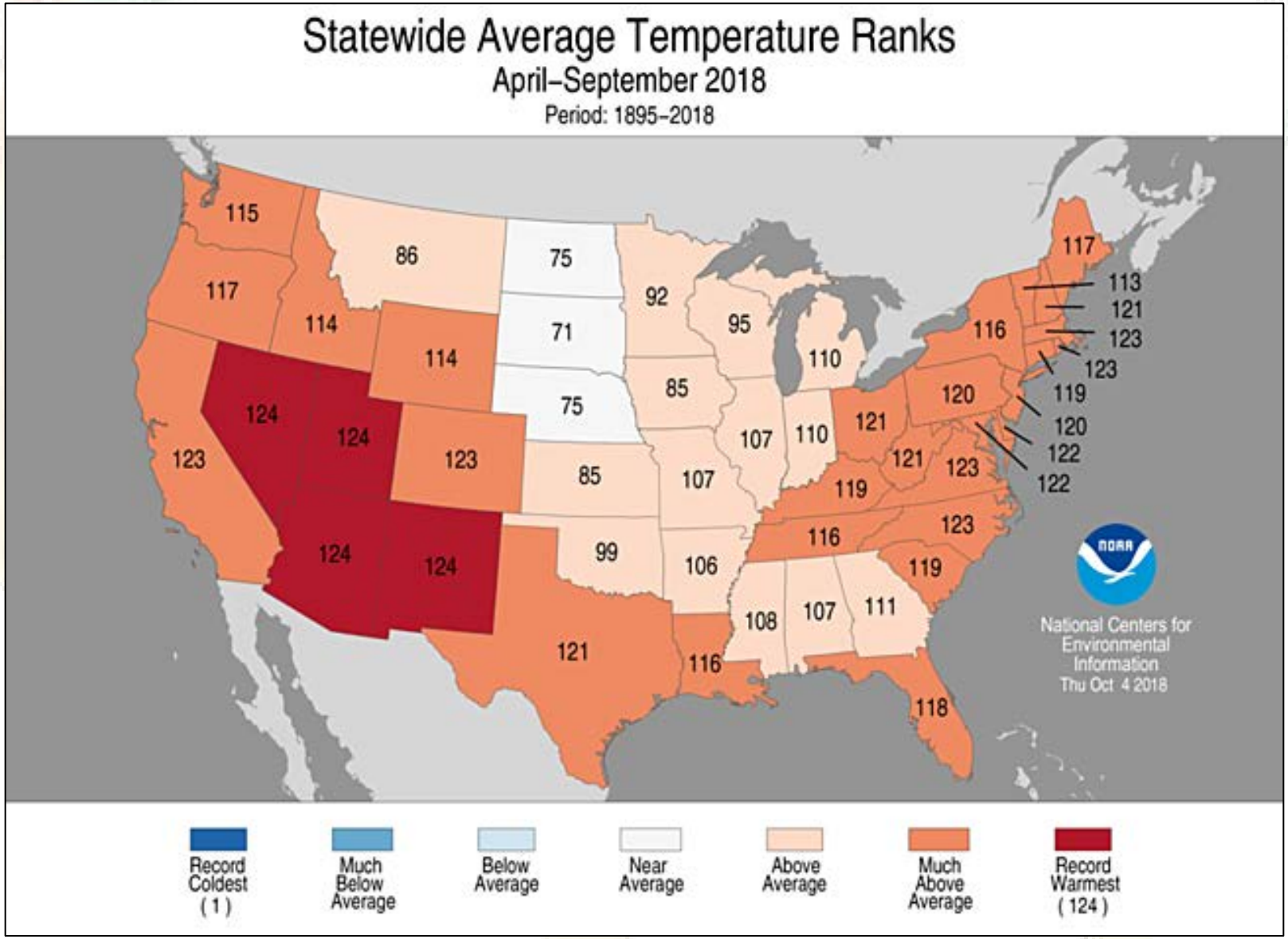
Photo courtesy Devon Miller, Charles City, IA
@DevonMurray49

September Temperature Ranks



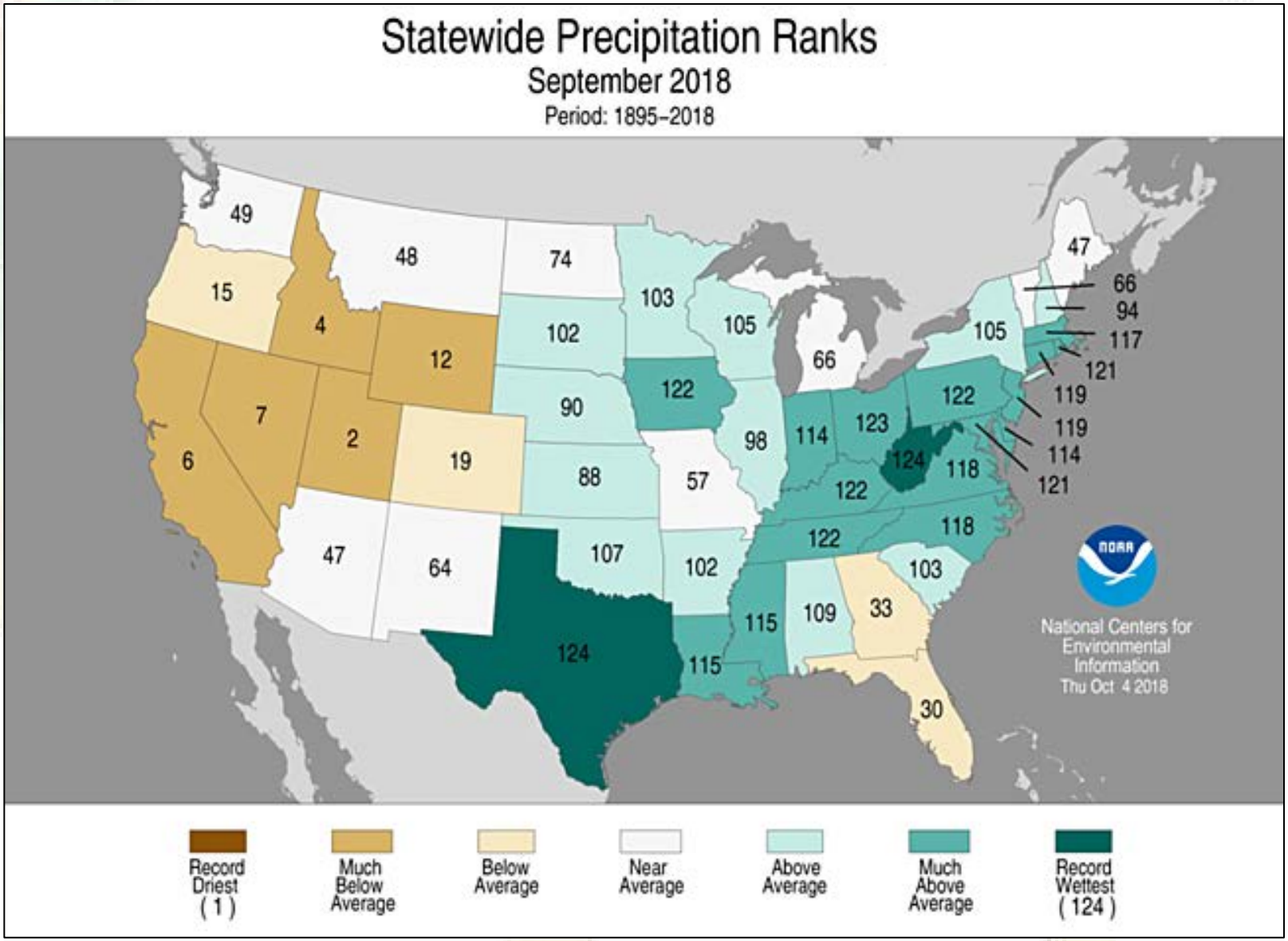
http://www.ncdc.noaa.gov/temp-and-precip/us-maps/

Growing Season Temperature Ranks



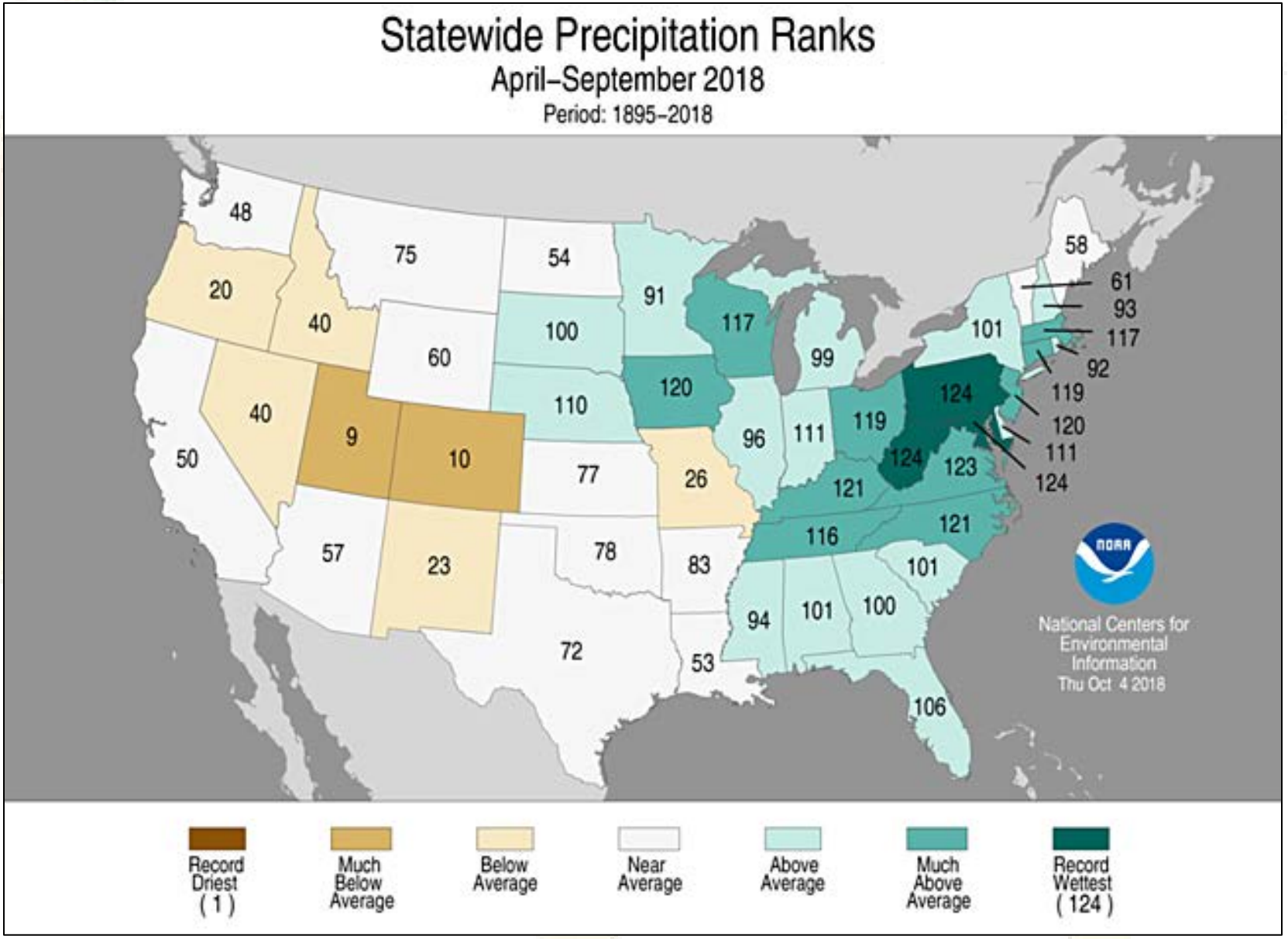
http://www.ncdc.noaa.gov/temp-and-precip/us-maps/

September Precipitation Ranks



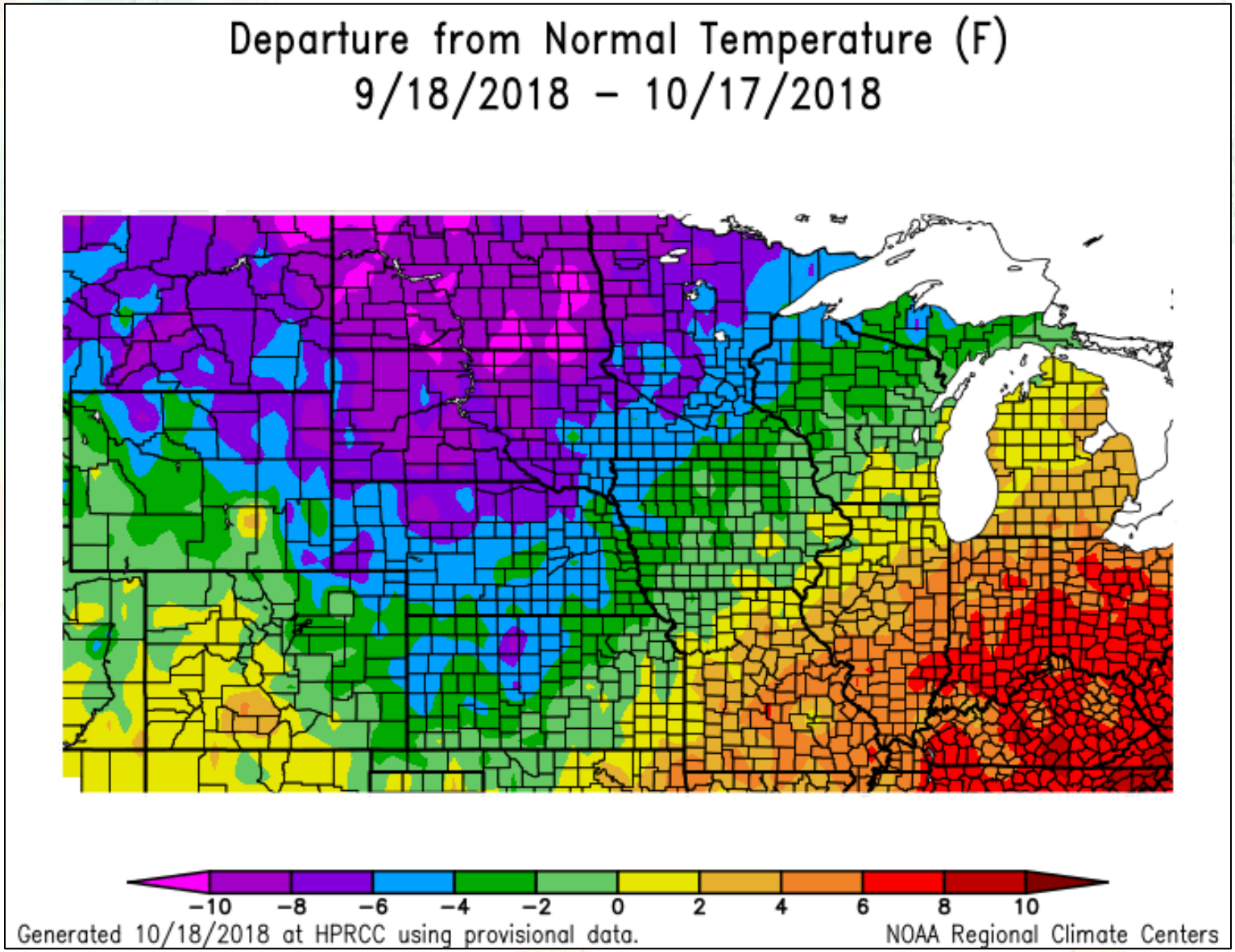
http://www.ncdc.noaa.gov/temp-and-precip/us-maps/

Growing Season Precipitation Ranks



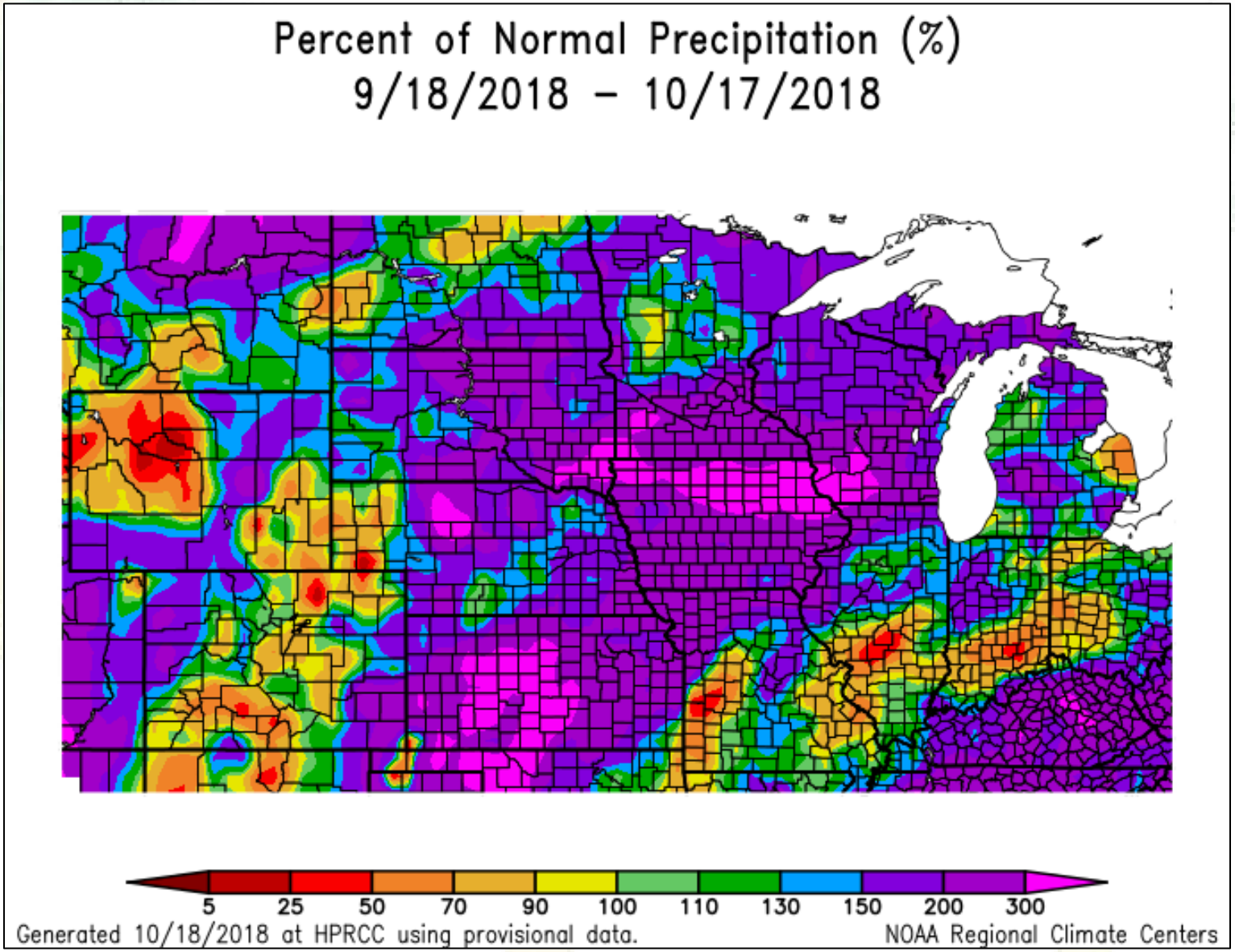
http://www.ncdc.noaa.gov/temp-and-precip/us-maps/

Last 30 Days



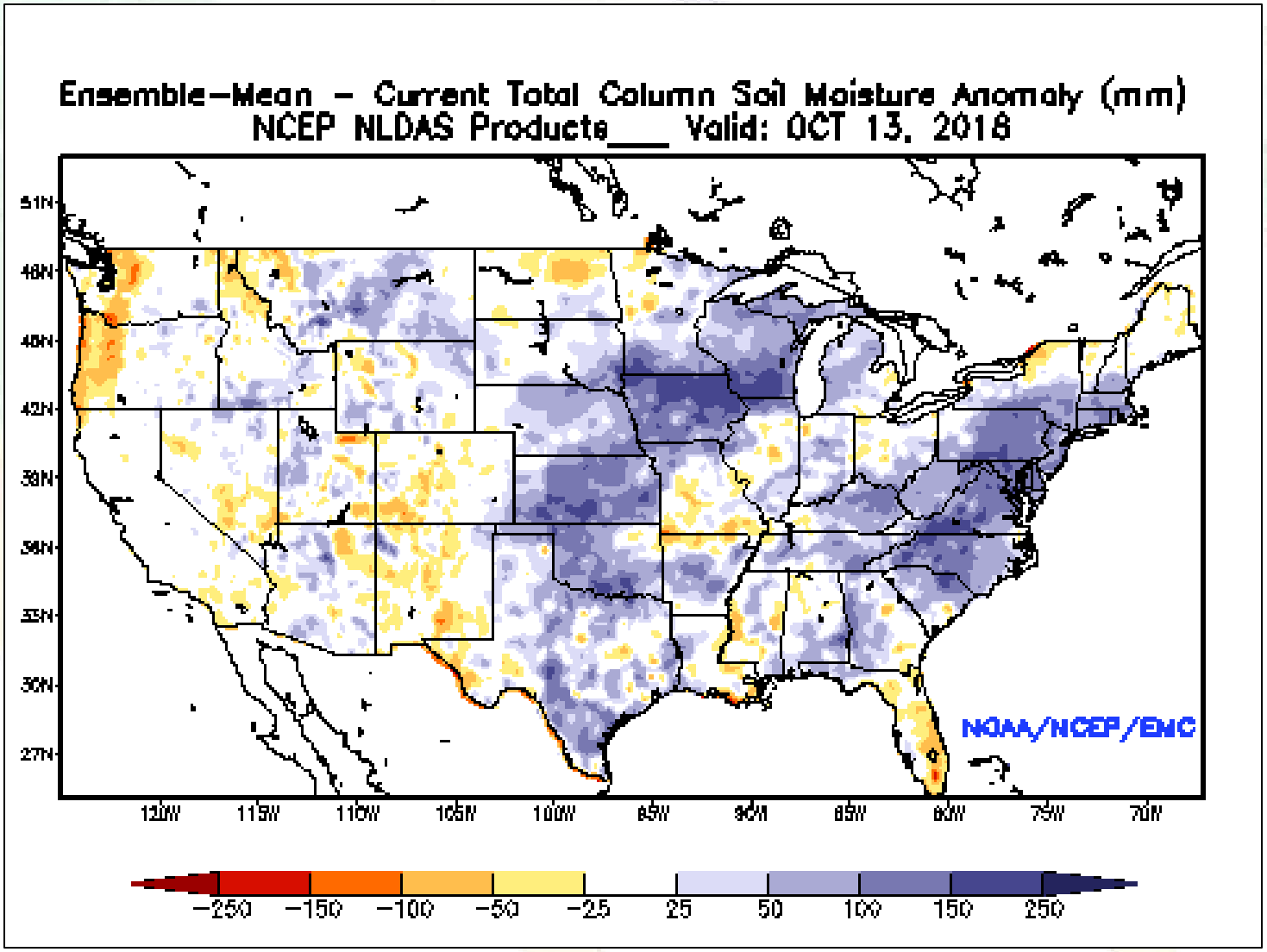
https://hprcc.unl.edu/maps.php?map=ACISClimateMaps

Last 30 Days



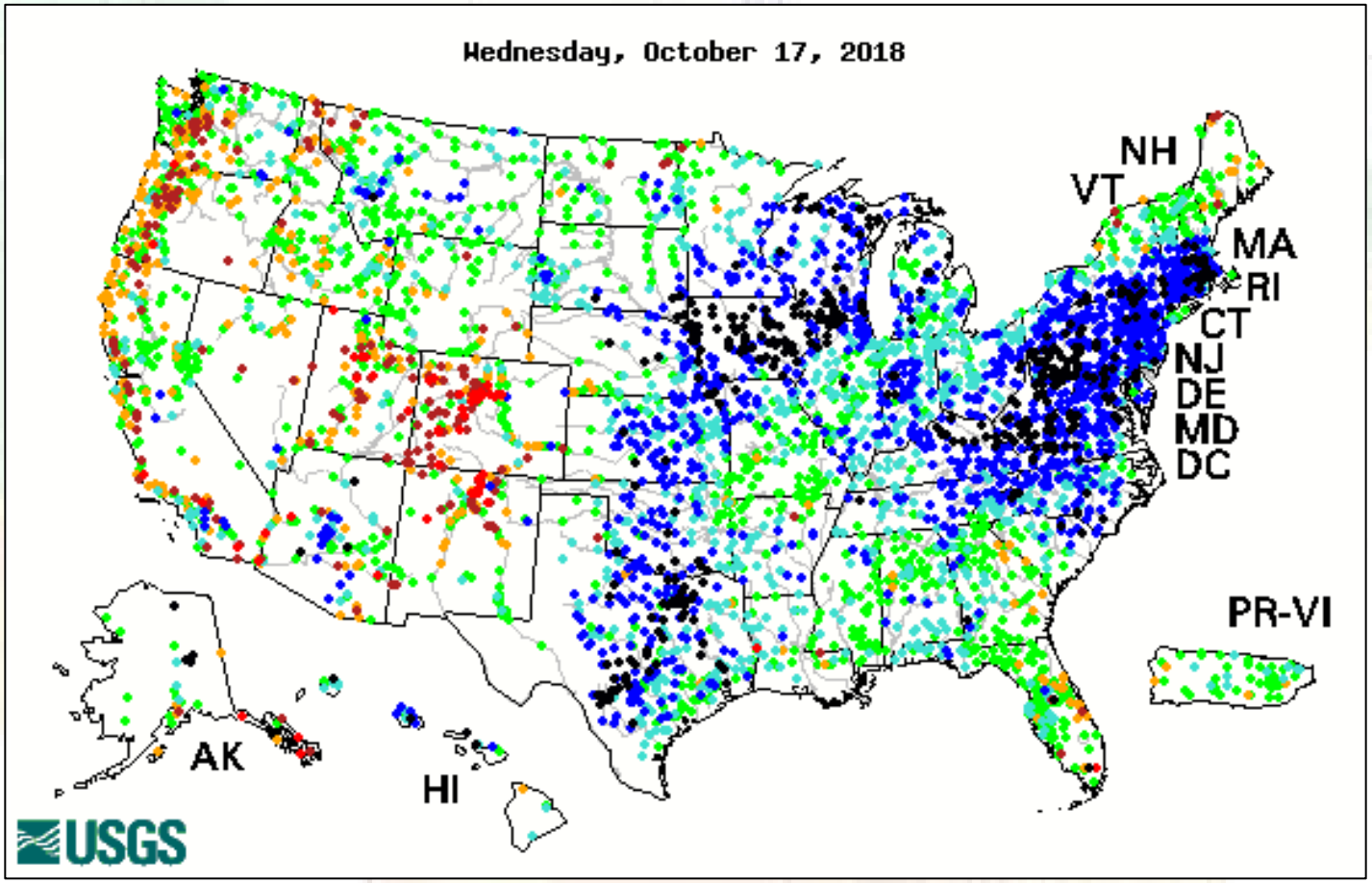
https://hprcc.unl.edu/maps.php?map=ACISClimateMaps

Modeled Soil Moisture



http://www.emc.ncep.noaa.gov/mmb/nldas/drought/

28-Day Average Streamflow

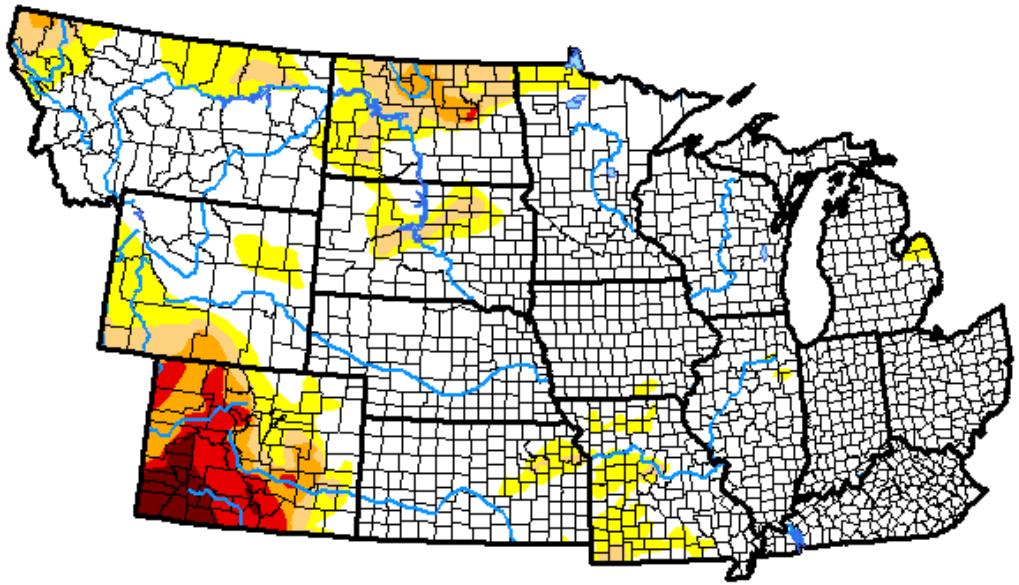


Explanation - Percentile classes						
Low	<10	10-24	25-75	76-90	>90	High
	Much below normal	Below normal	Normal	Above normal	Much above normal	

http://waterwatch.usgs.gov/index.php?id=pa07d

U.S. Drought Monitor

NWS Central Region



October 16, 2018

(Released Thursday, Oct. 18, 2018)

Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	76.90	23.10	11.40	6.36	3.55	1.23
Last Week *10-09-2018*	73.50	26.50	13.32	6.83	3.79	1.23
3 Months Ago *07-17-2018*	71.92	28.08	16.48	8.98	4.70	1.23
Start of Calendar Year *01-02-2018*	44.74	55.26	22.30	7.69	2.03	0.00
Start of Water Year *09-25-2018*	64.00	36.00	17.93	9.15	5.03	1.49
One Year Ago *10-17-2017*	60.34	39.66	18.82	7.67	2.14	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.

Author:

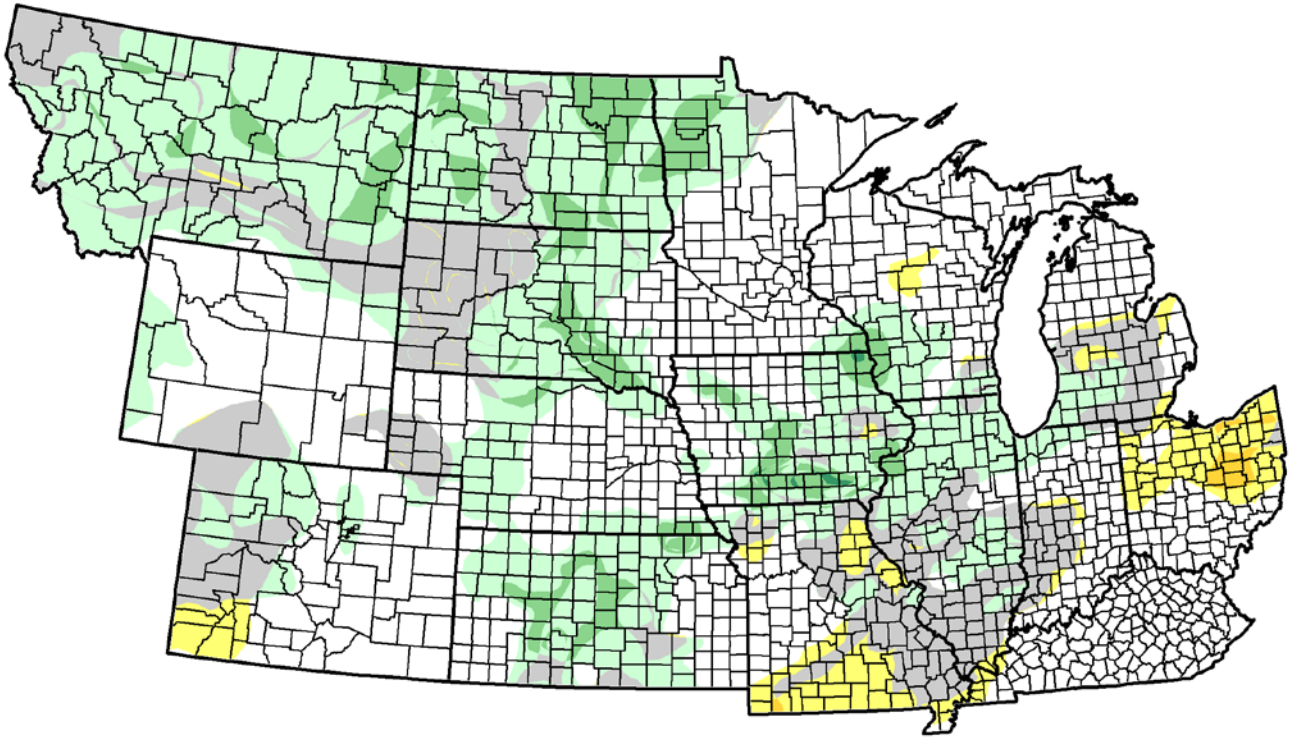
Eric Luebehusen

U.S. Department of Agriculture

http://droughtmonitor.unl.edu/

U.S. Drought Monitor Class Change - NWS Central Region

1 Month



National Drought Mitigation Center · NDMC · University of Nebraska

- 5 Class Degradation
- 4 Class Degradation
- 3 Class Degradation
- 2 Class Degradation
- 1 Class Degradation
- No Change
- 1 Class Improvement
- 2 Class Improvement
- 3 Class Improvement
- 4 Class Improvement
- 5 Class Improvement

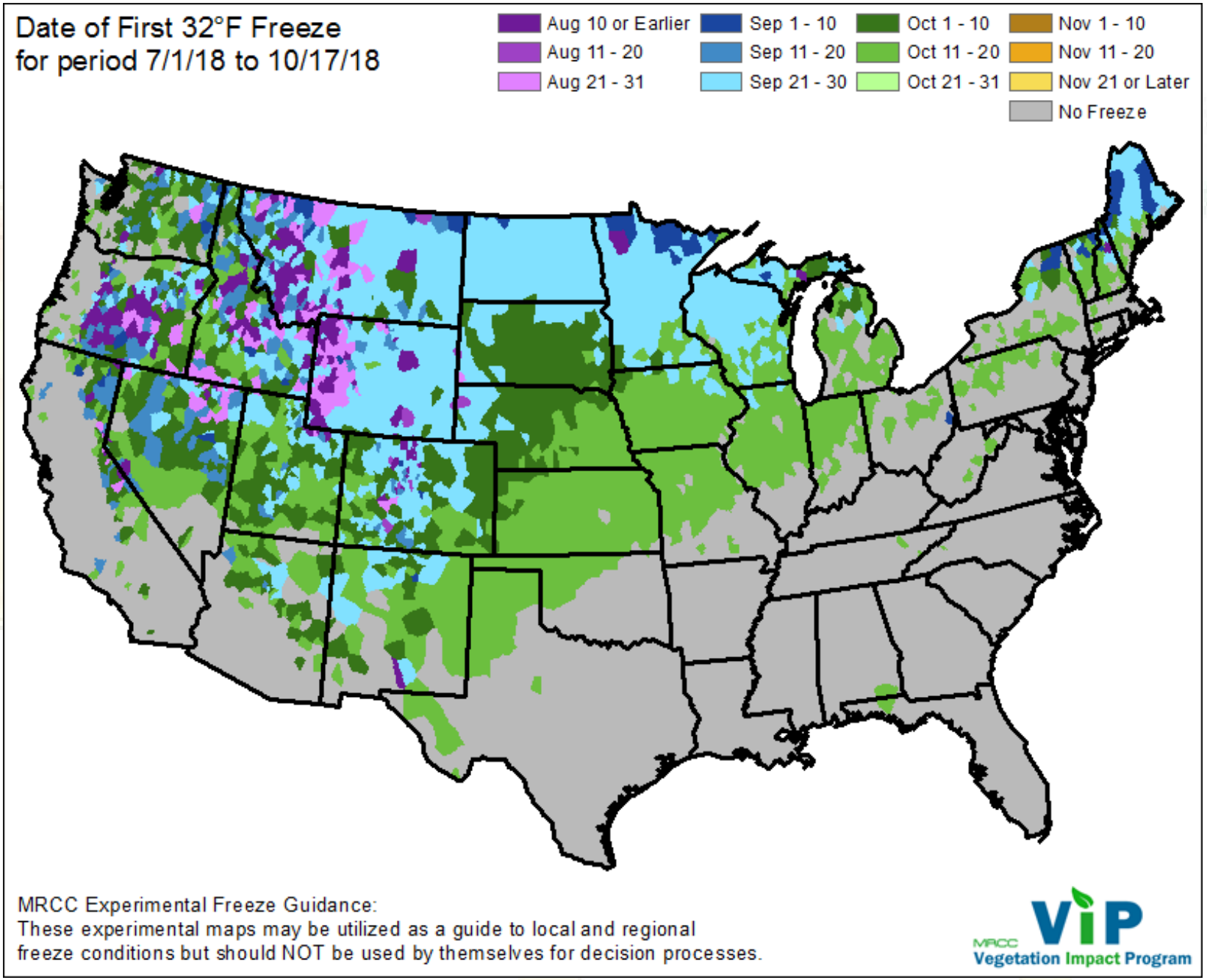
October 17, 2017
compared to
September 19, 2017

http://droughtmonitor.unl.edu

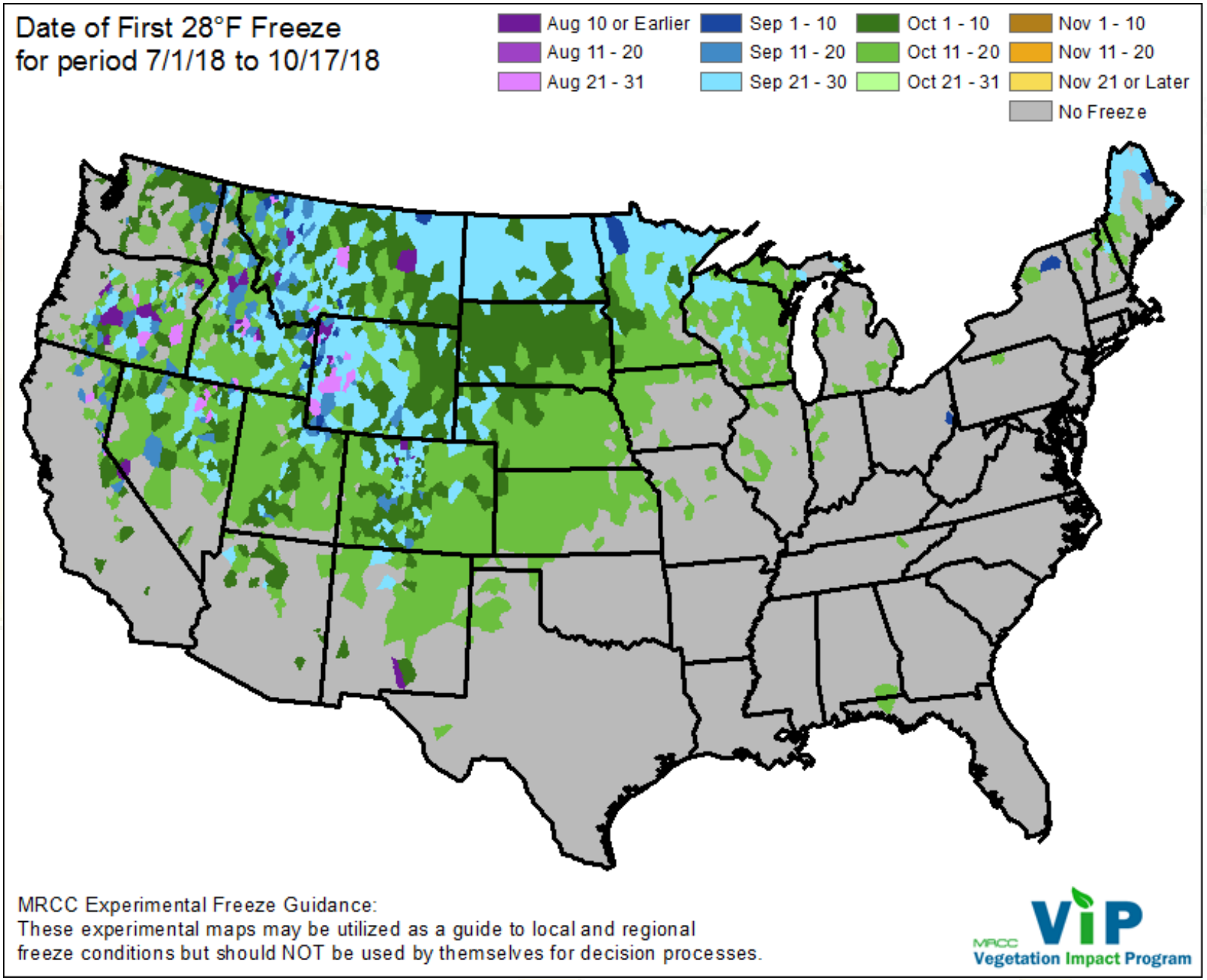
October 2018 snow in southeast Nebraska.
Photo courtesy: Gary Lesoing, UNL

Impacts

COLD, SNOW AND WATER

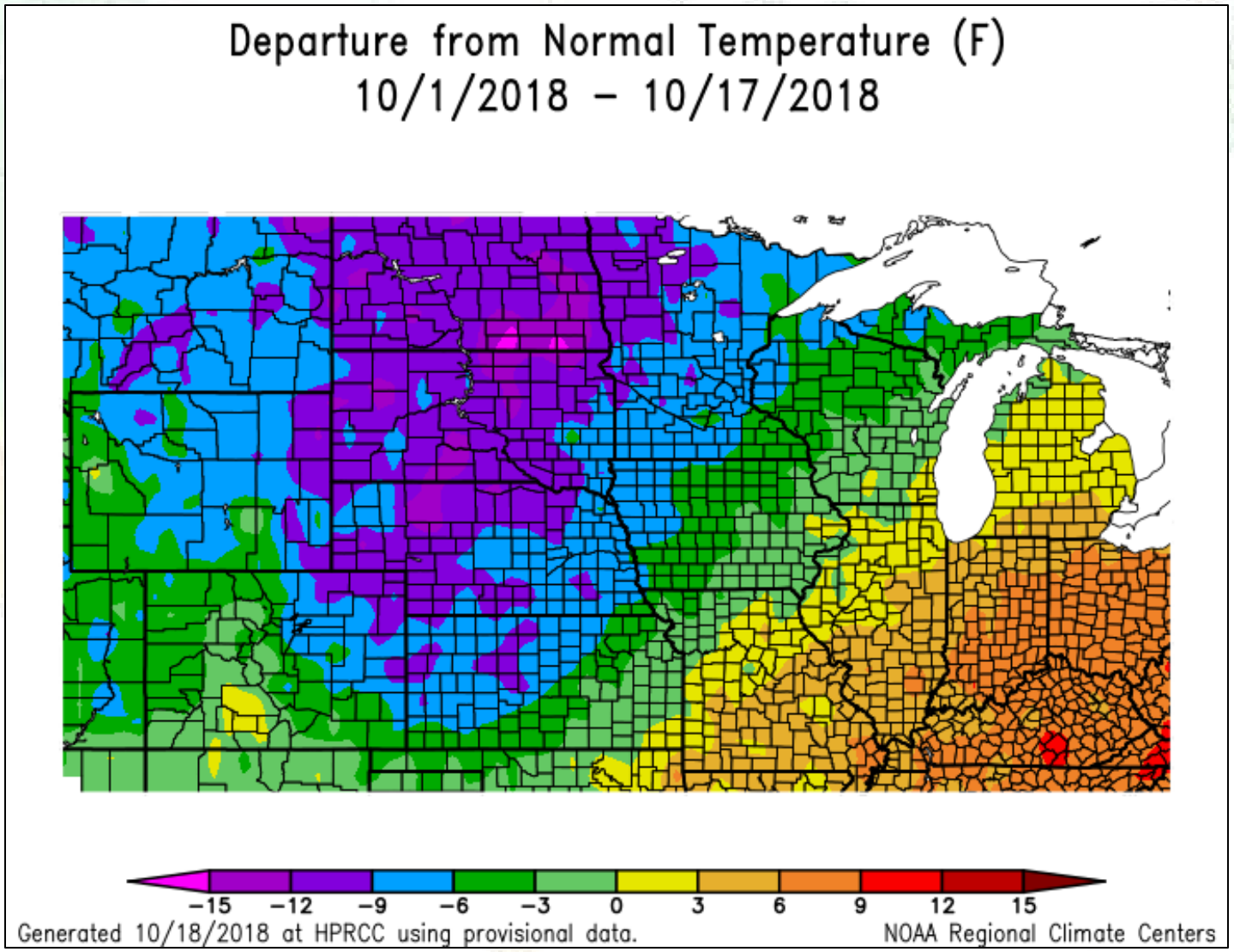


https://mrcc.illinois.edu/VIP/frz_maps/freeze_maps.html



https://mrcc.illinois.edu/VIP/frz_maps/freeze_maps.html

Record Cold in Northern Plains
Oct 1-14



Record Cold

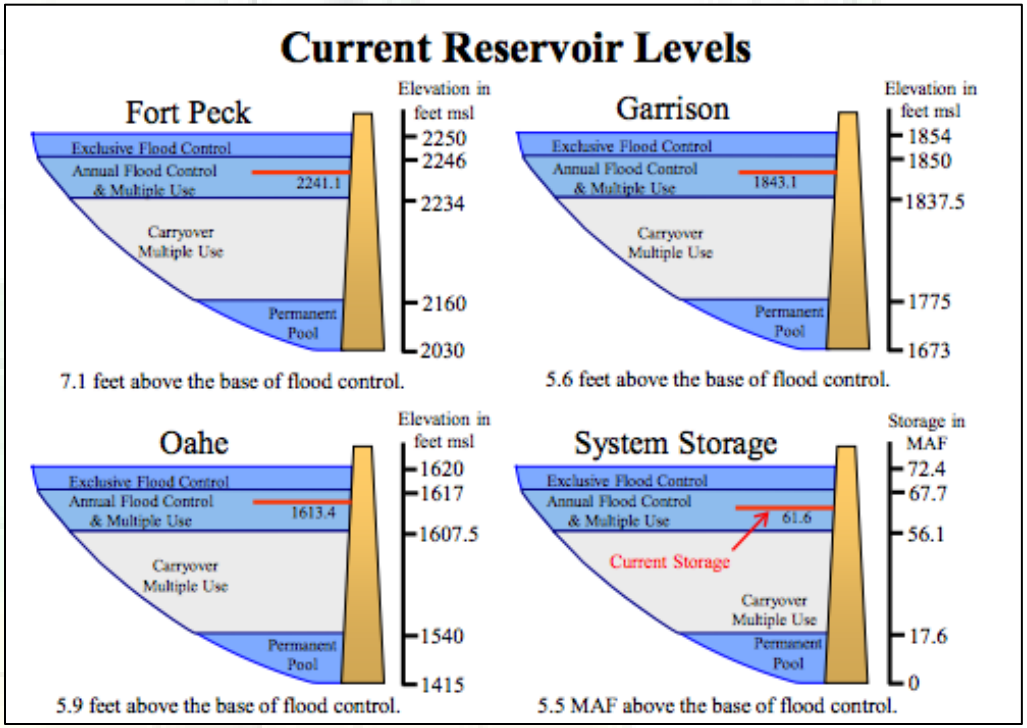
- Fargo, ND & Aberdeen, SD:
  - Coldest Oct 1-14 on record (120+ years)
- October 2009 v. 2018
  - Oct 1-14, 2009 was coldest on record for SD
  - Many areas are 2nd, 3rd coldest this year
- Lows in single digits in CO, KS
- Snow from Colorado to Iowa

- Average frost date for many, but due to wet conditions, crops are still in the fields. Some early frost damage in Kansas sorghum.

Missouri River

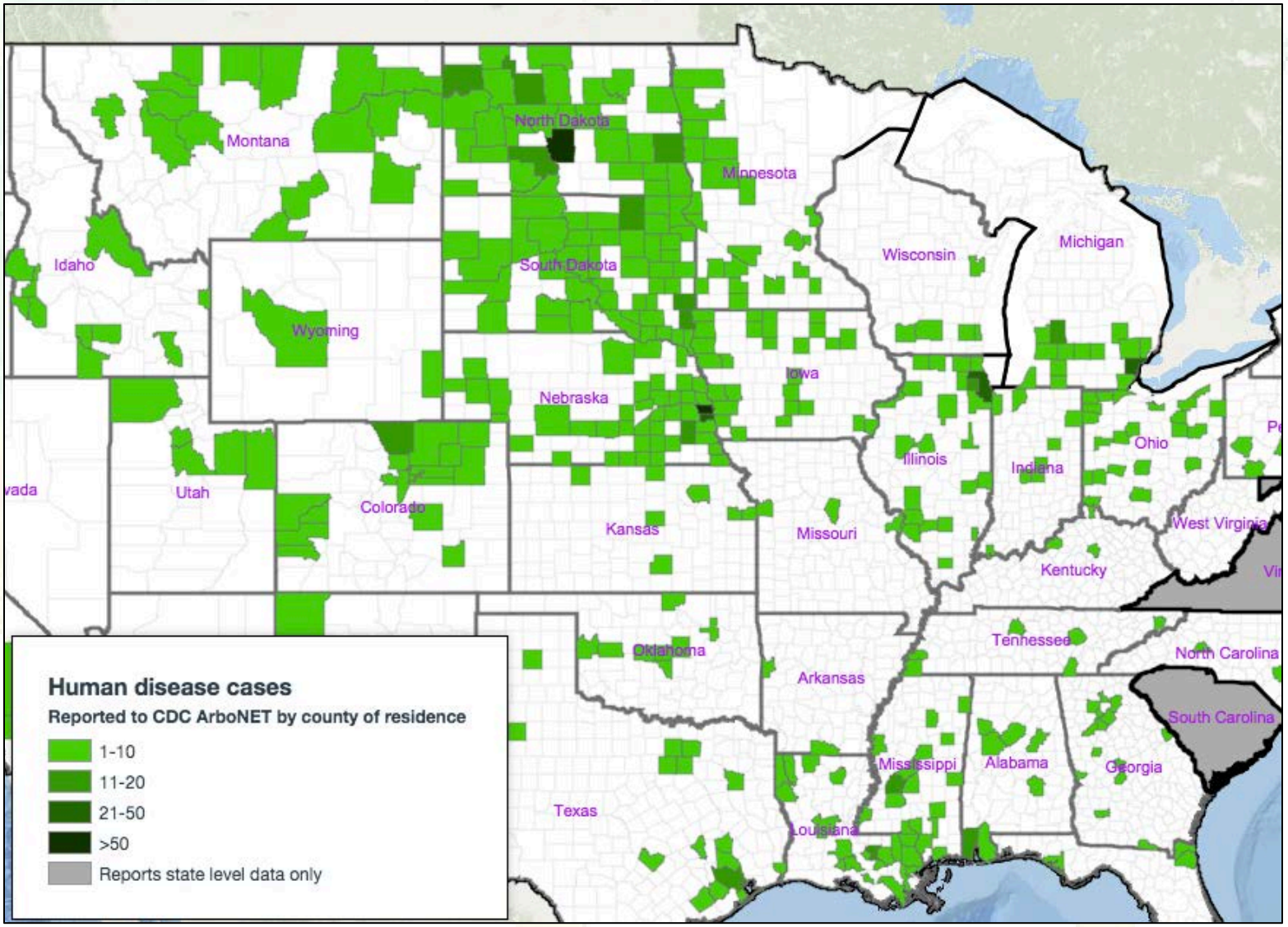
Missouri Mainstem Reservoir Status (as of 10/9/18):

- Runoff from eastern SD rivers was record high in September (120 yr). These are unregulated: James, Vermilion and Big Sioux. Currently about 10x average runoff for this time of year from Gavins Pt Dam to Sioux City.
- 2018 will be 3rd highest runoff year for the Upper Missouri River basin, behind 1997 and 2011.
- Higher than average releases expected until late Nov to reduce reservoir levels before freeze.



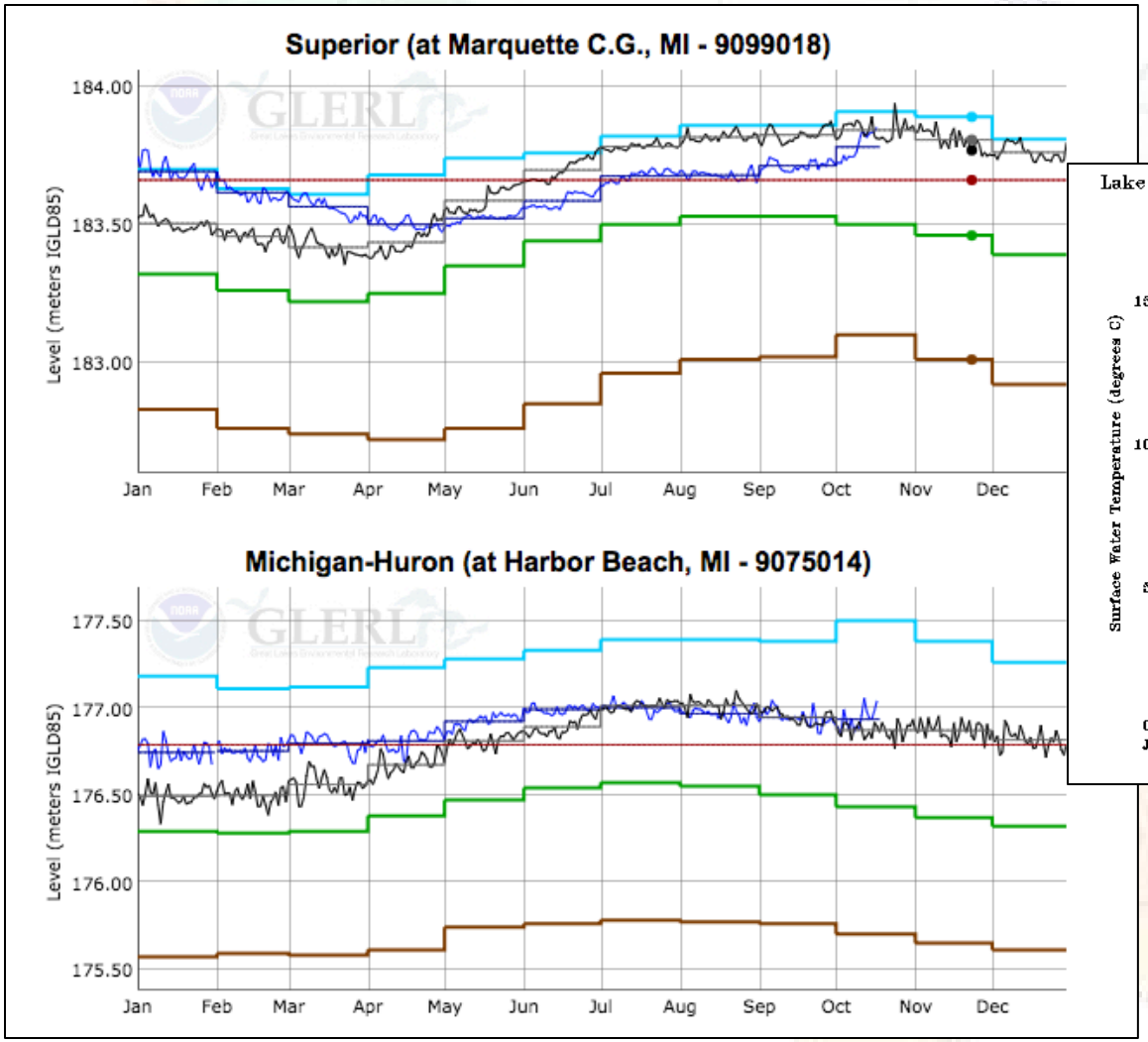
http://www.nwd-mr.usace.army.mil/rcc/reports/pdfs/weeklyupdate_previous.pdf

West Nile Virus

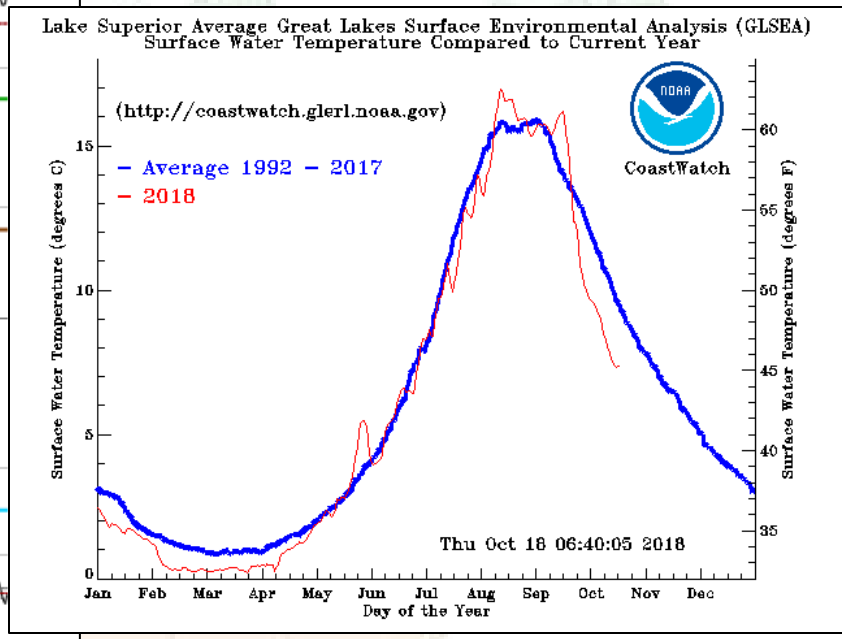


https://wwwn.cdc.gov/arbonet/Maps/ADB_Diseases_Map/index.html

Great Lakes Water Level



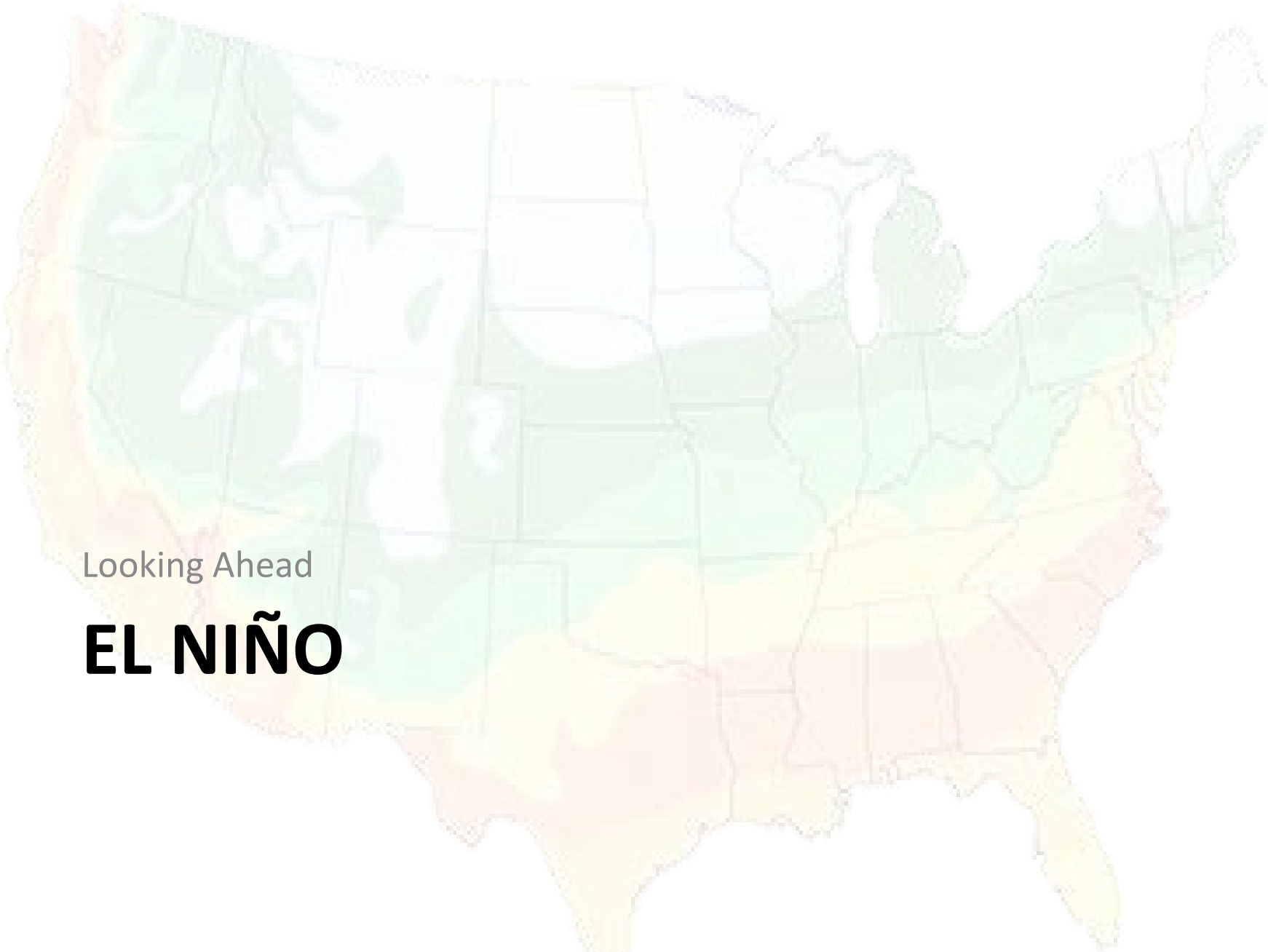
https://www.glerl.noaa.gov/data/wlevels/levels.html#observations



https://coastwatch.glerl.noaa.gov/statistic/gif/avgtemps-s_1992-2017.gif

Summary - Conditions

- Cold in north, warm in east
- Drought improvement in last month
- Missouri River flows continue higher than average for this time of year
- Hard freeze has ended growing season and related concerns (i.e. mosquitoes)



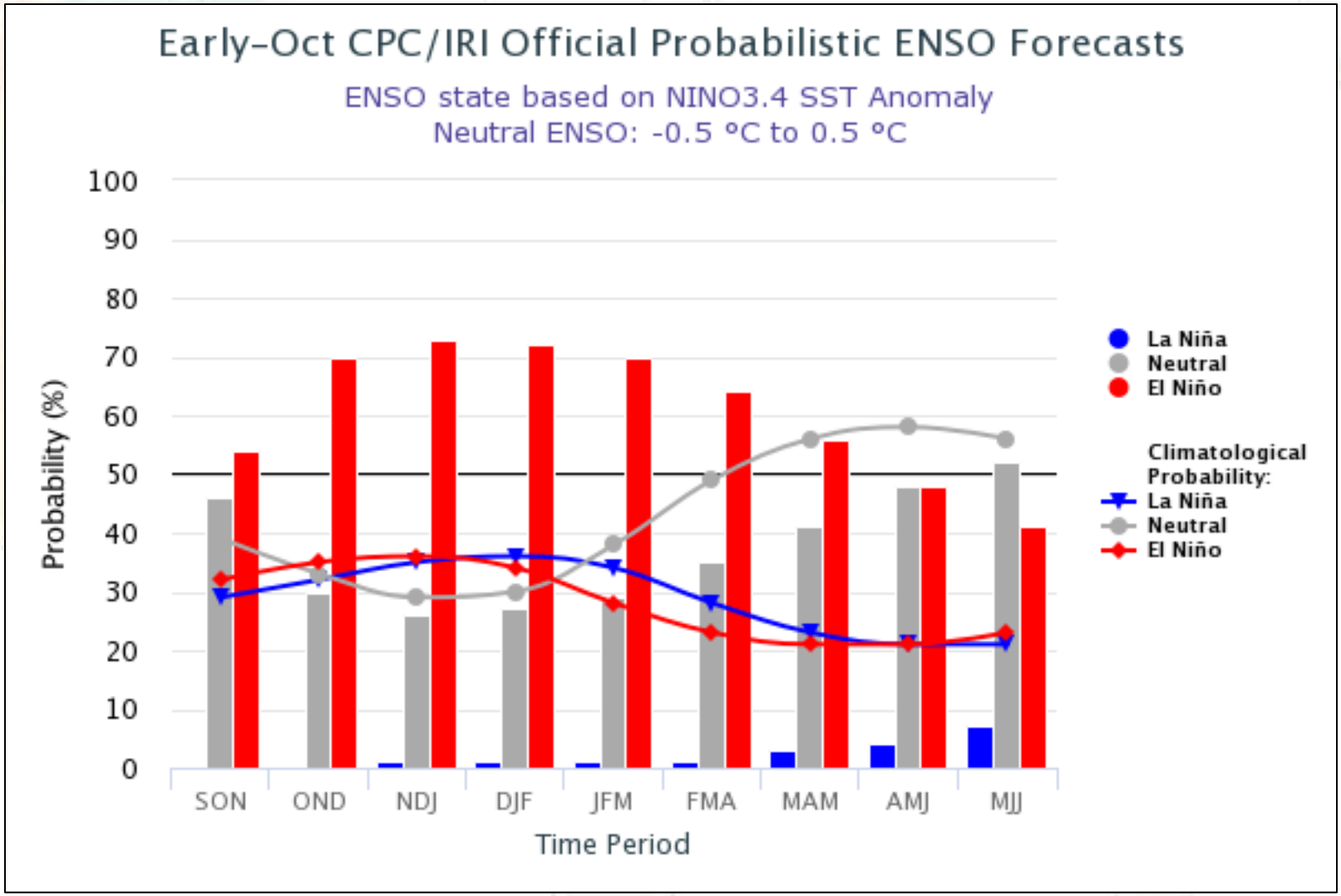
Looking Ahead

EL NIÑO

El Niño Winter?

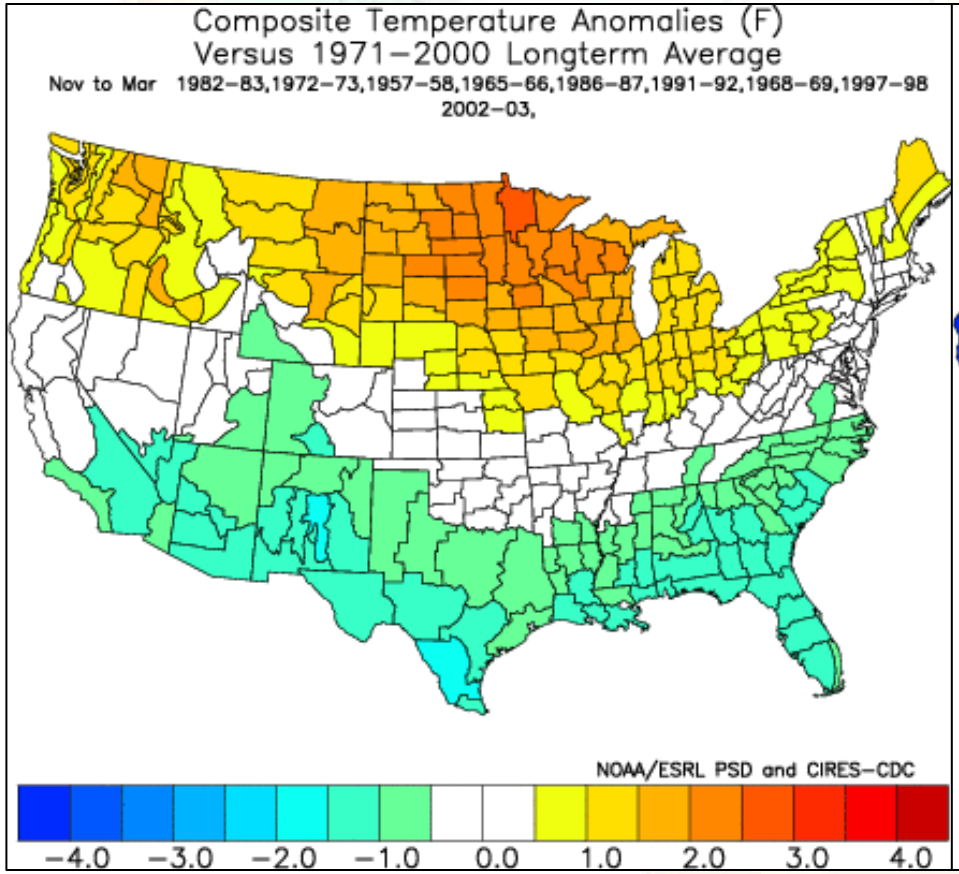
- 70-75% likely development during fall and continue through winter
- Historically, has meant warmer than average temperatures in north central states
- Not well correlated to precipitation for most of our region

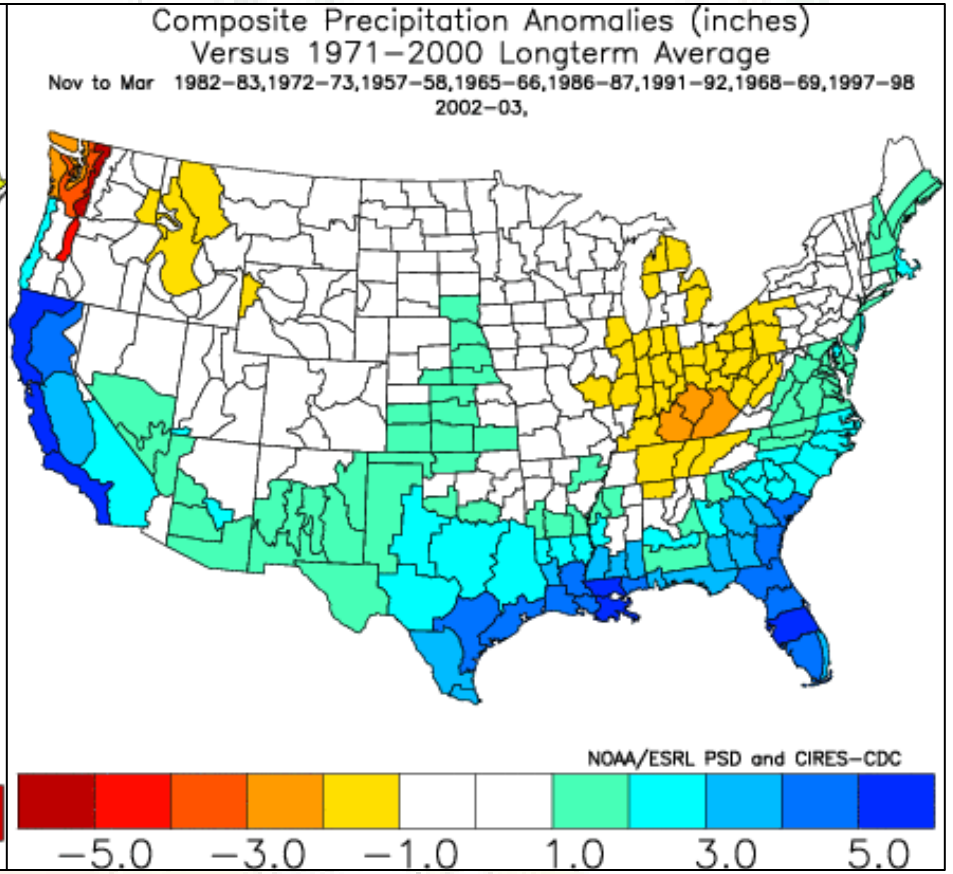
El Niño Probabilities

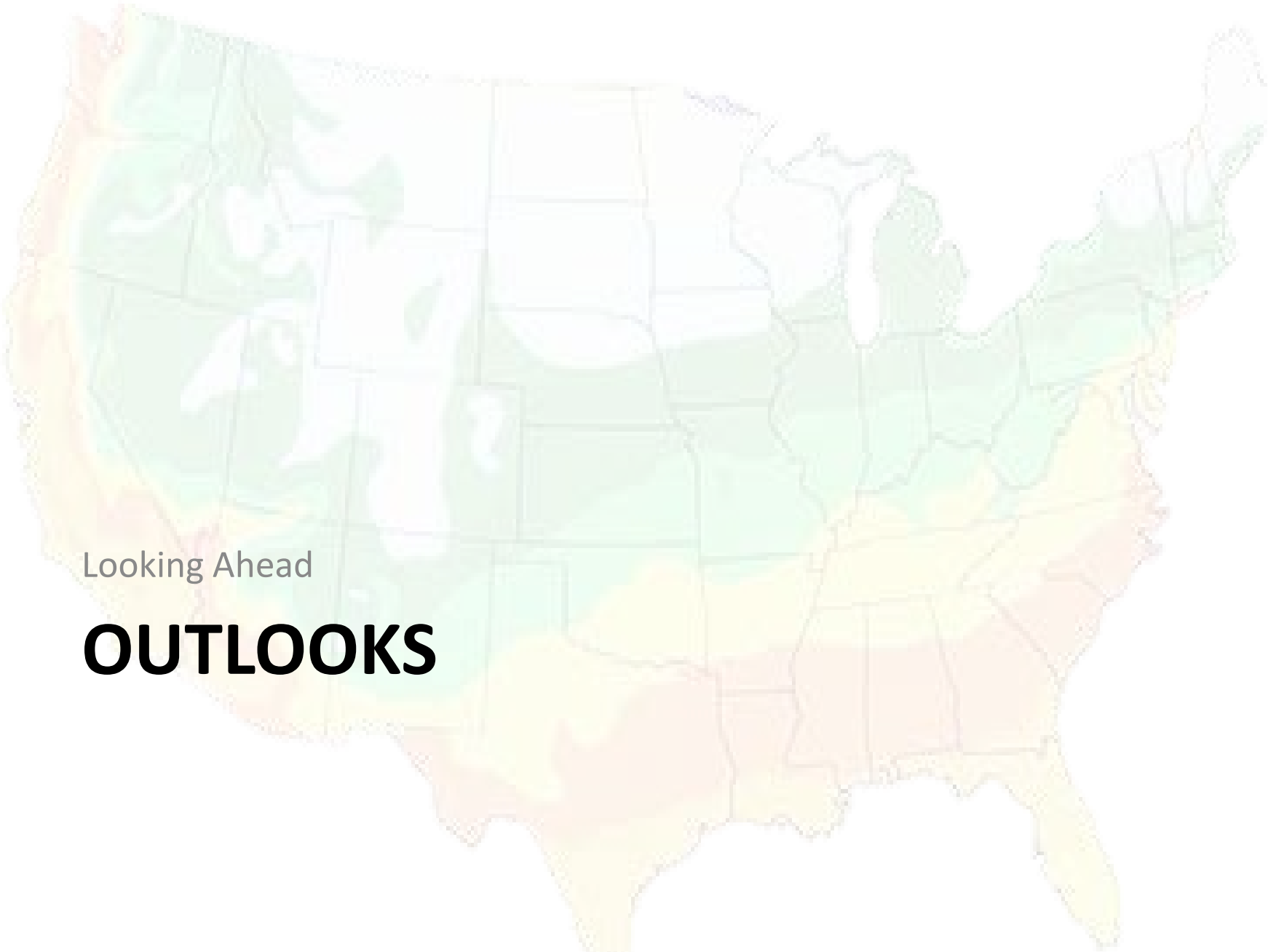


https://iri.columbia.edu/our-expertise/climate/forecasts/enso/current/?enso_tab=enso-quicklook

El Niño:
Historical temperature & precipitation







Looking Ahead

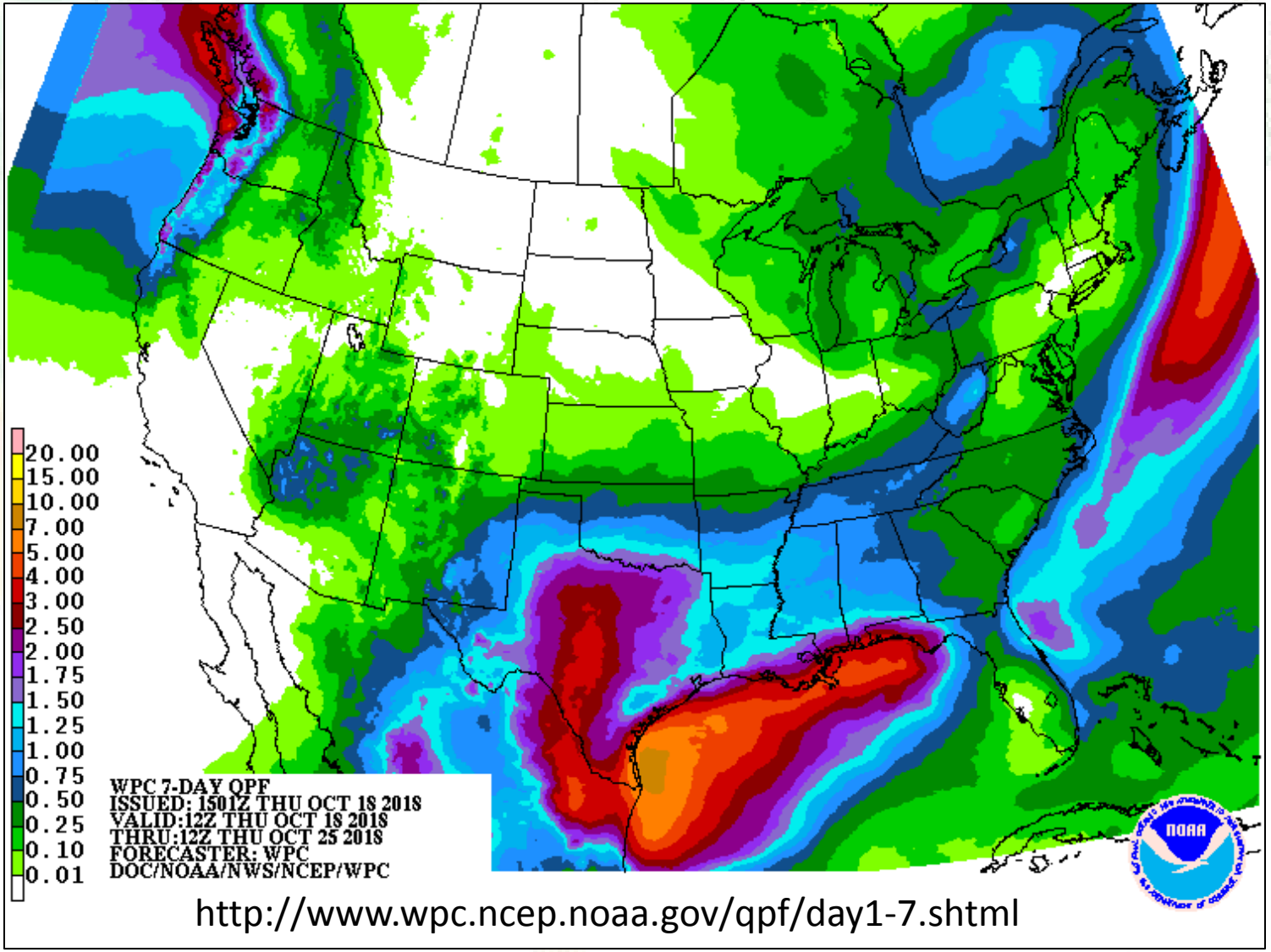
OUTLOOKS

Climate Outlooks

- **7-day precipitation forecast**
- **8-14 day outlook**
- **November temperature and precipitation**
- **Winter season temperature and precipitation**

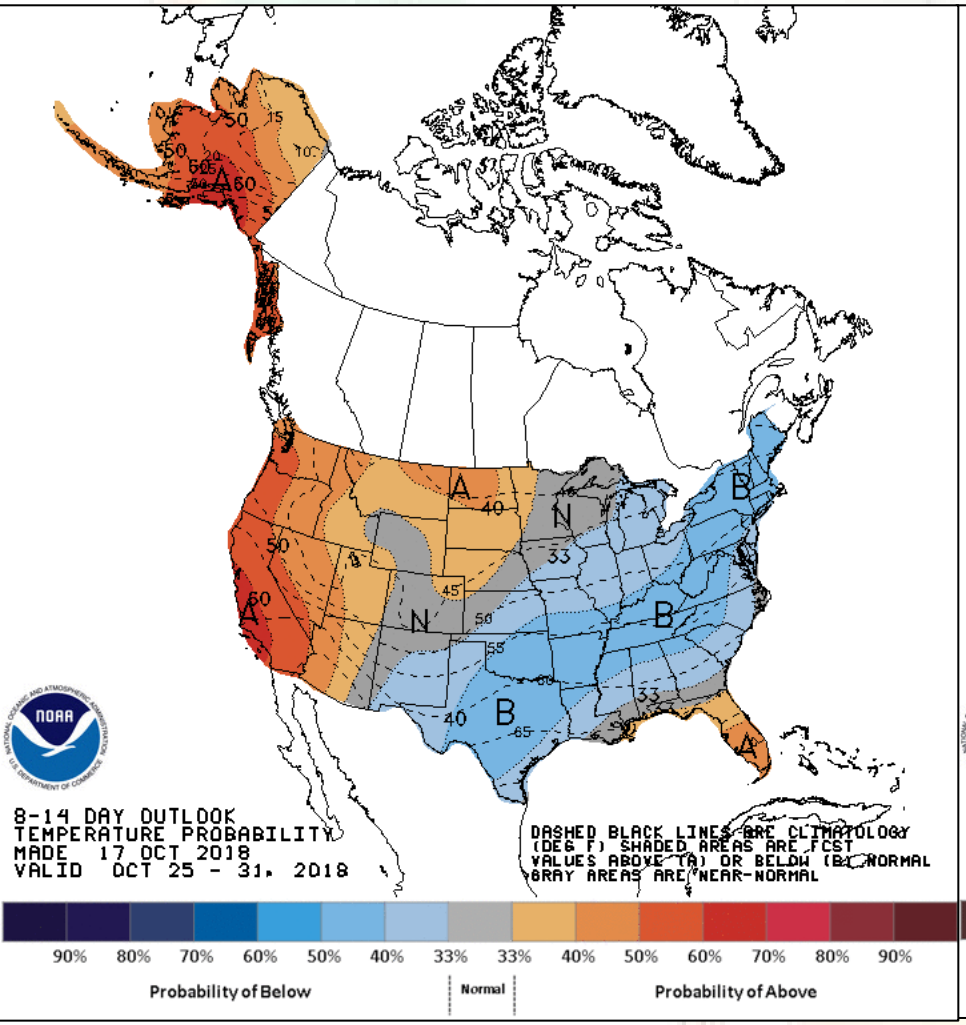
7-day Quantitative Precipitation Forecast

Valid: 18 Oct – 25 Oct

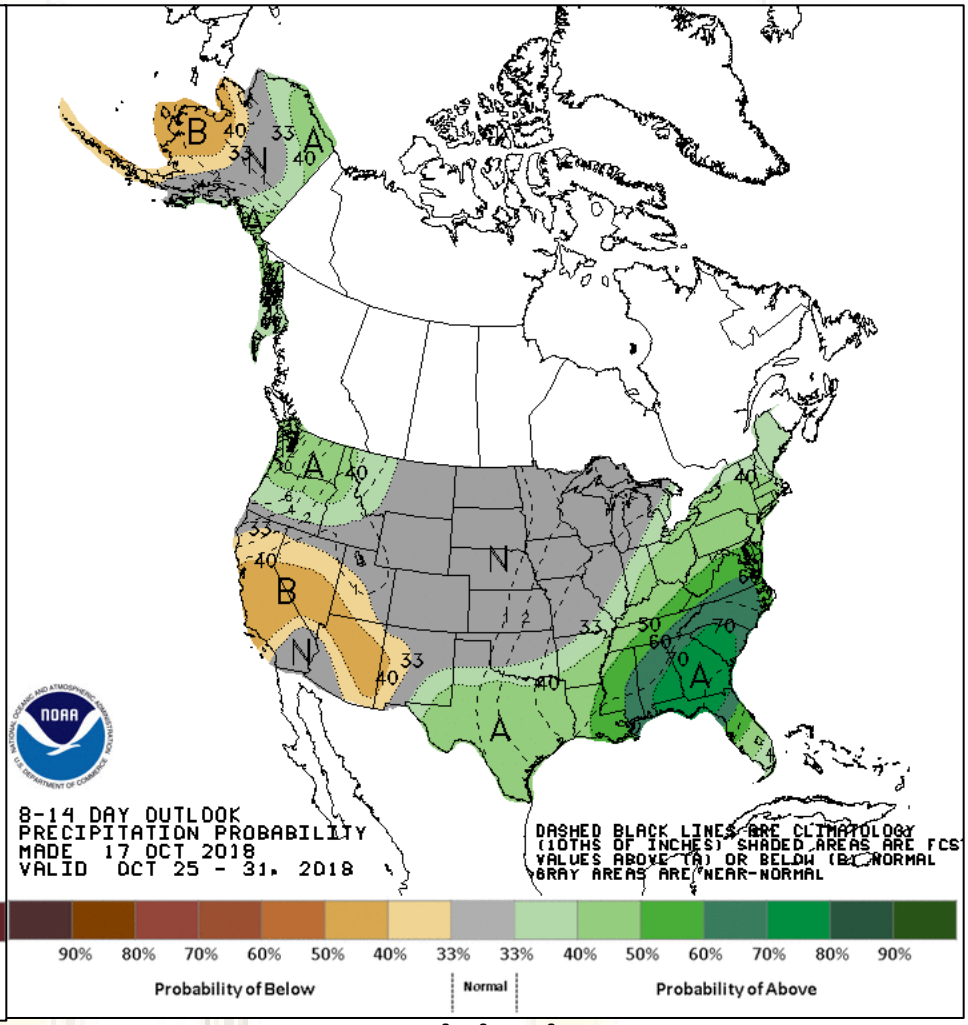


http://www.wpc.ncep.noaa.gov/qpf/day1-7.shtml

8-14 Day Outlook



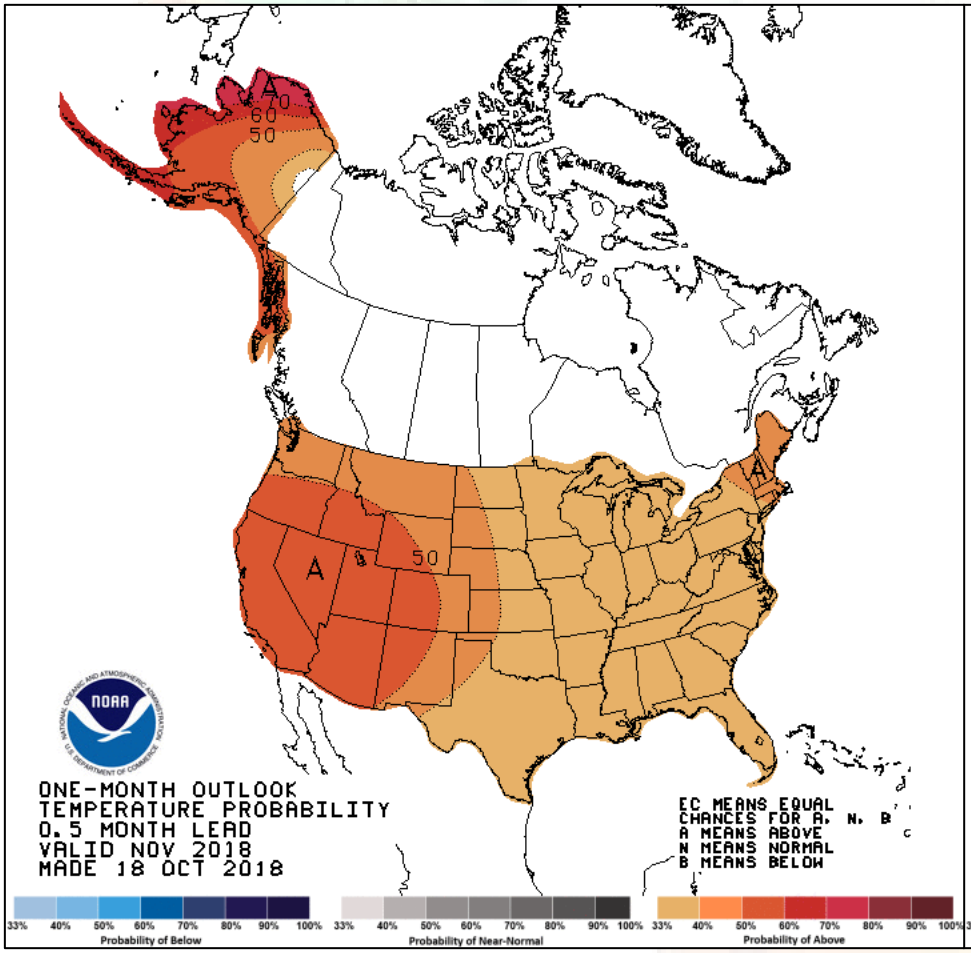
Temperature



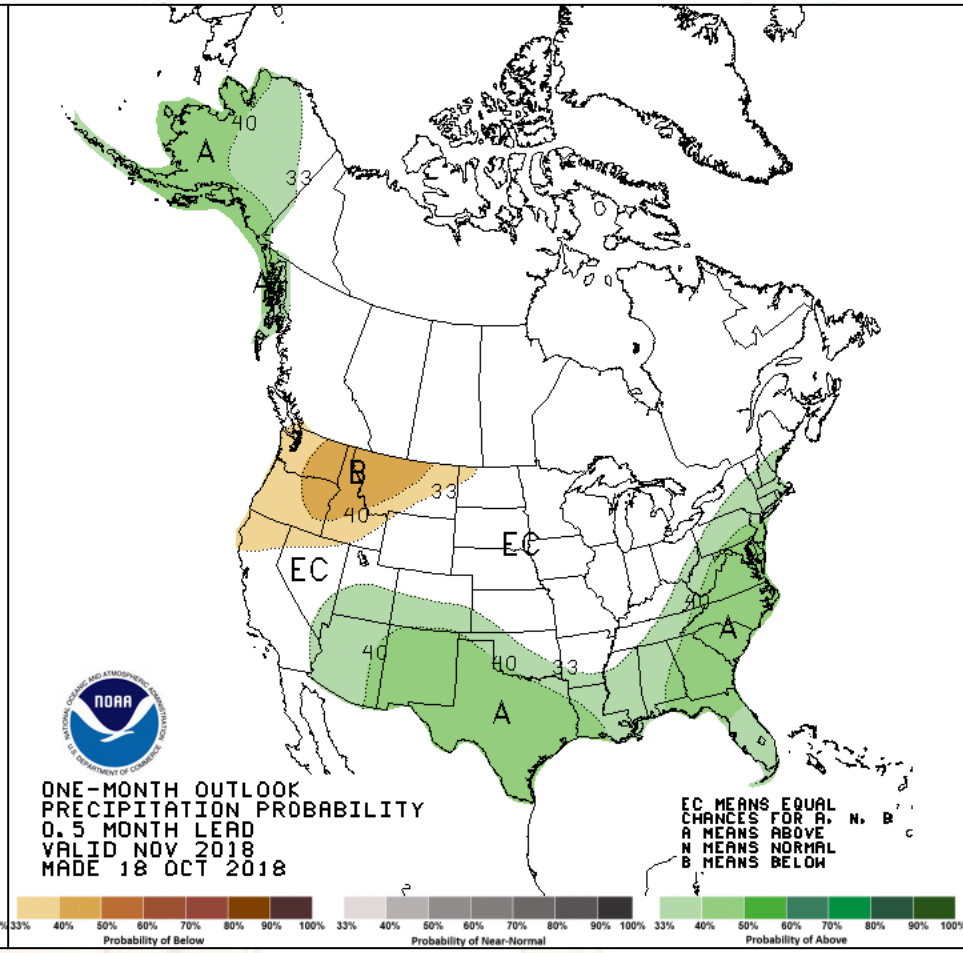
Precipitation

http://www.cpc.ncep.noaa.gov/products/predictions/814day/index.php

November Temperature and Precipitation Outlooks



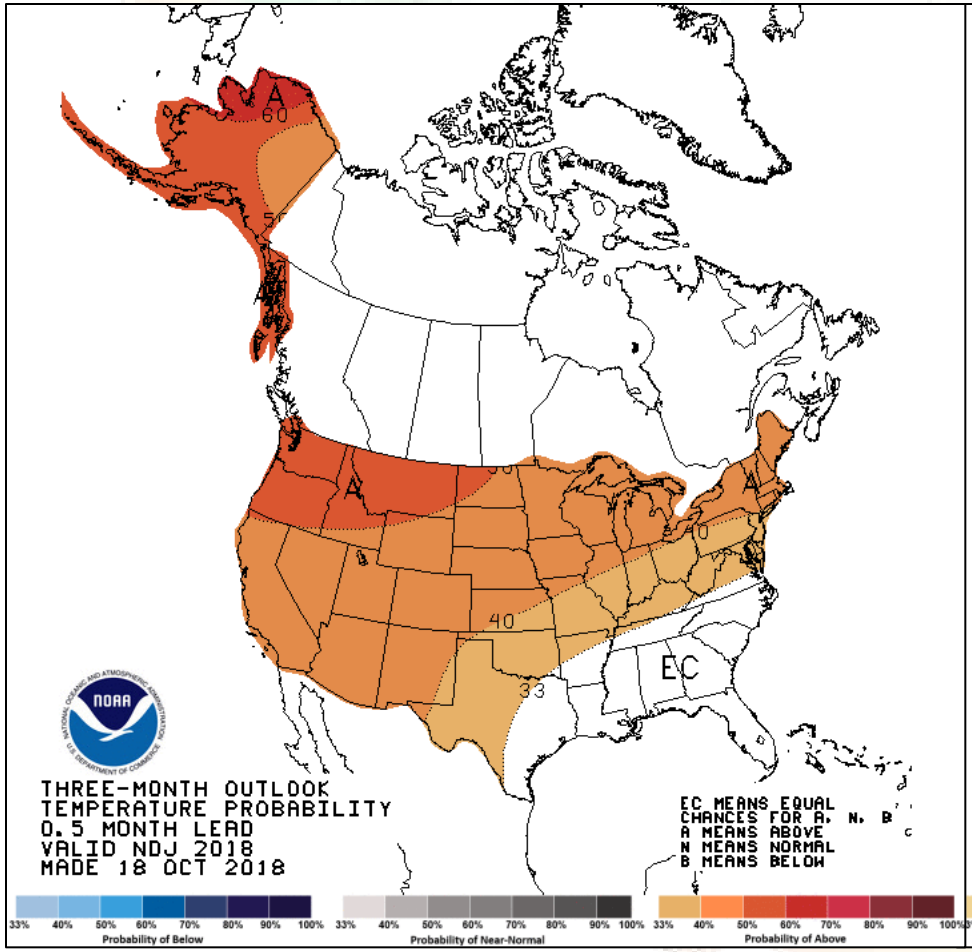
Temperature



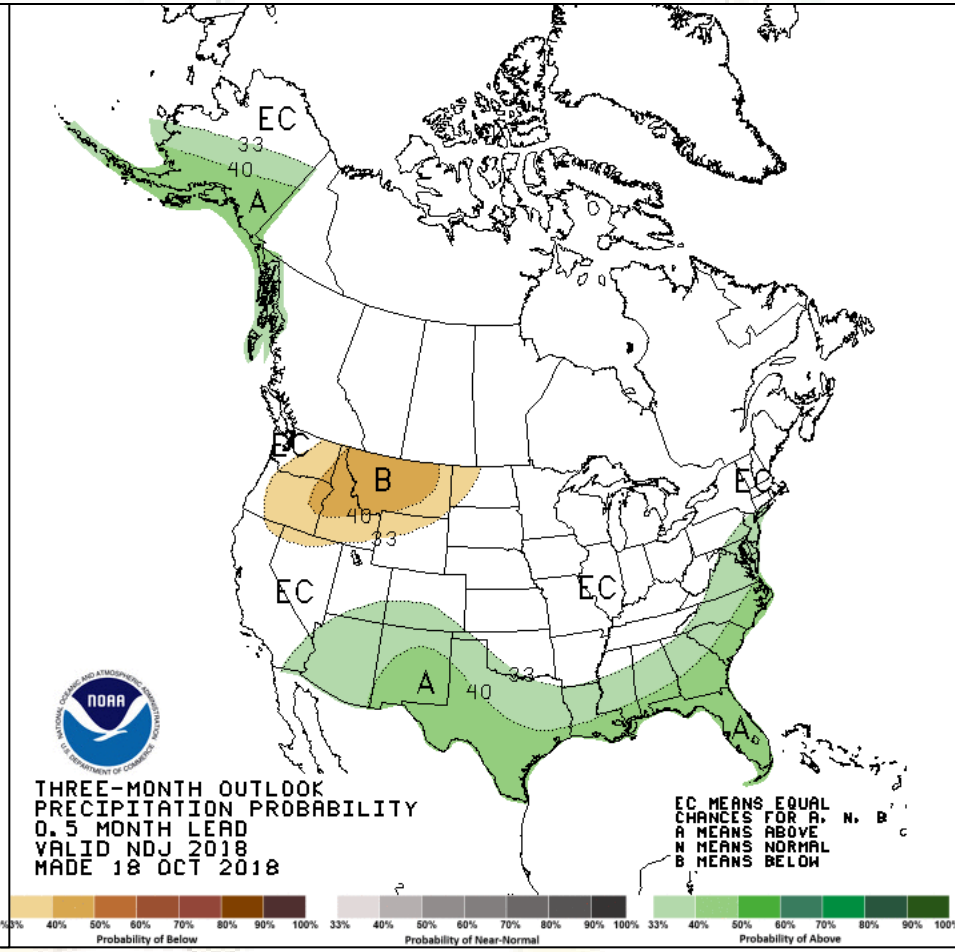
Precipitation

http://www.cpc.ncep.noaa.gov/products/predictions/30day/

3 Month Temperature and Precipitation Outlooks, Nov-Jan



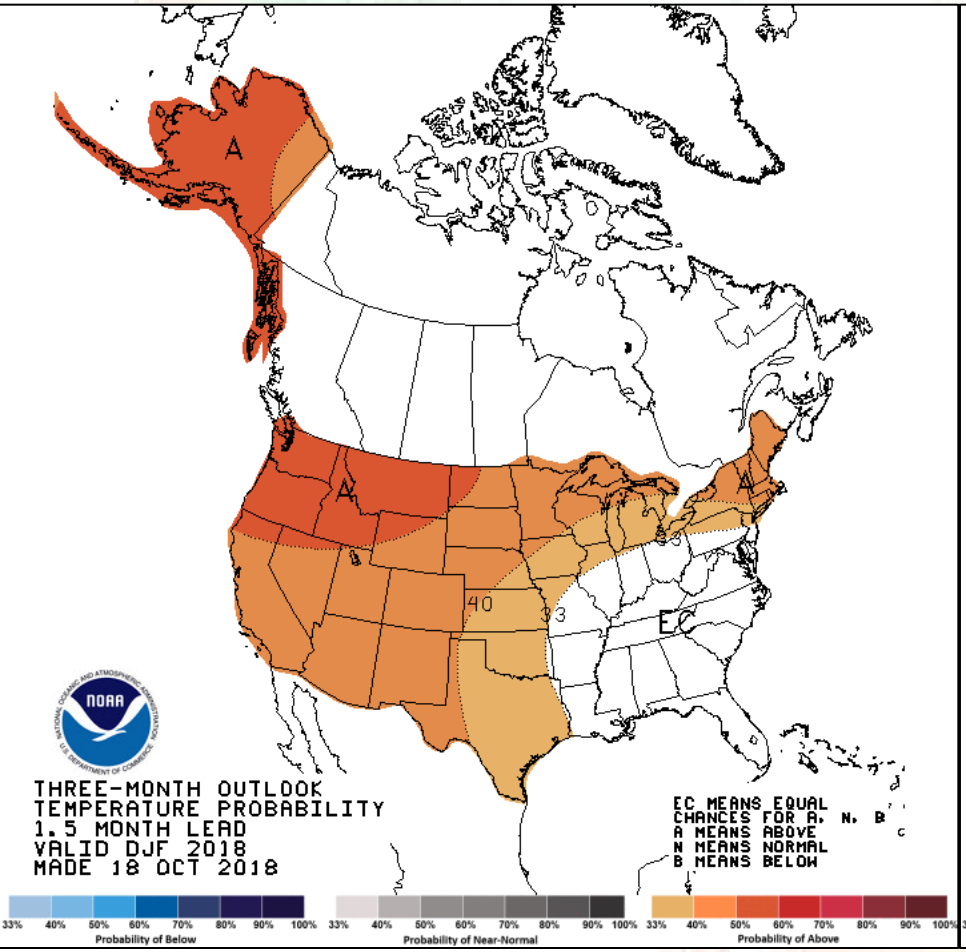
Temperature



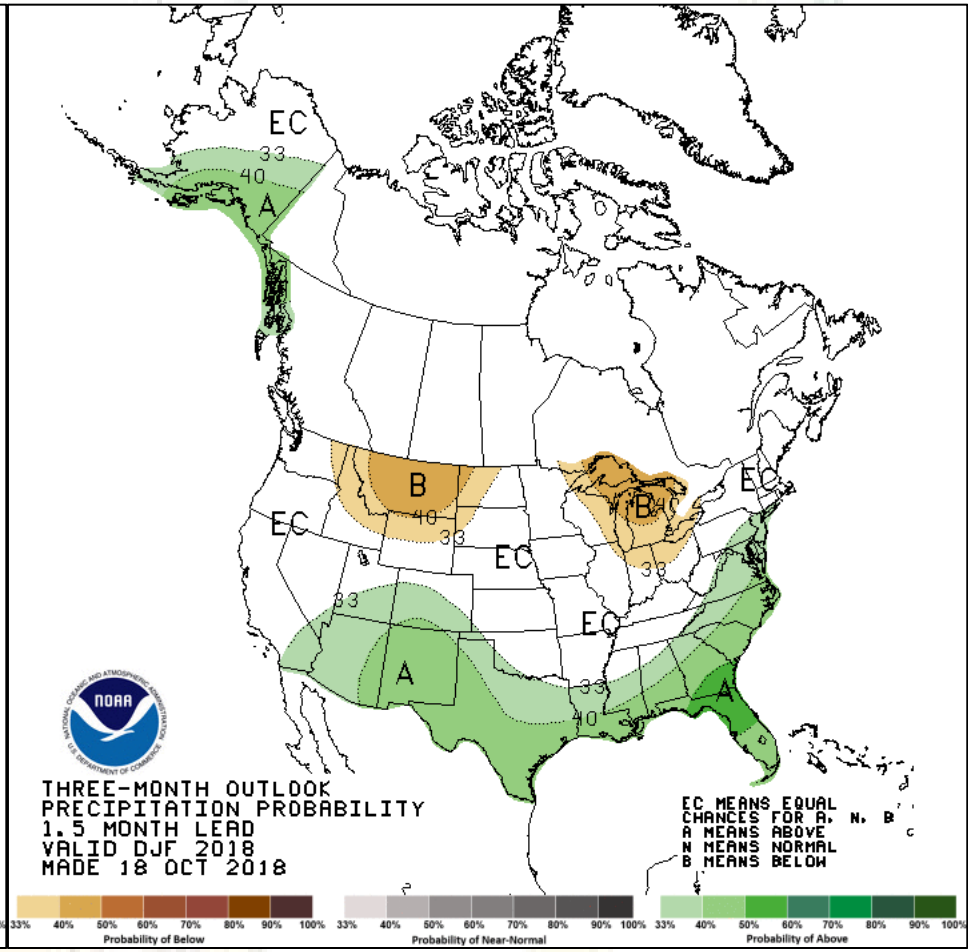
Precipitation

http://www.cpc.ncep.noaa.gov/products/predictions/long_range/seasonal.php?lead=2

3 Month Temperature and Precipitation Outlooks, Dec-Feb



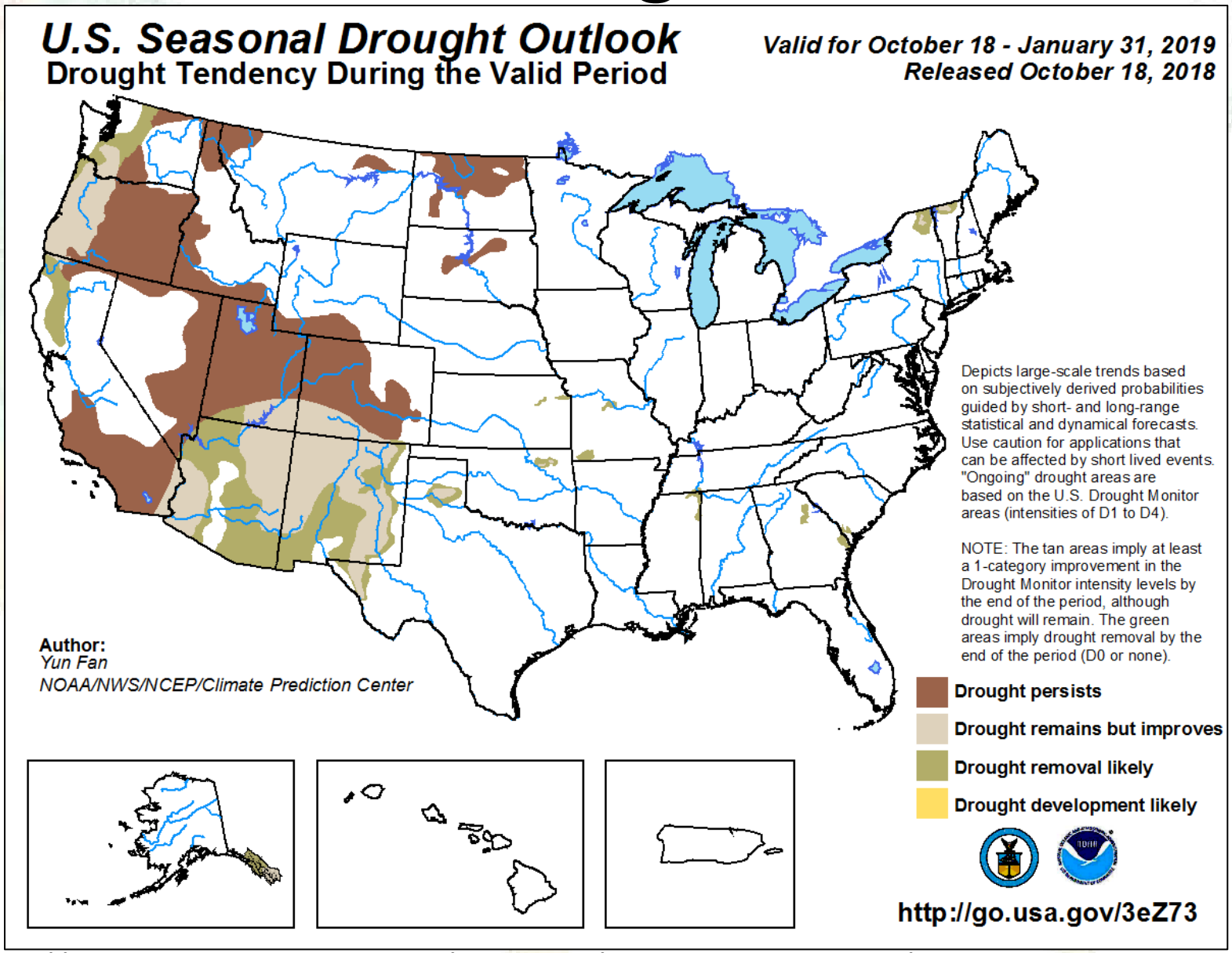
Temperature



Precipitation

http://www.cpc.ncep.noaa.gov/products/predictions/long_range/seasonal.php?lead=2

Seasonal Drought Outlook



http://www.cpc.ncep.noaa.gov/products/expert_assessment/season_drought.png

Summary - Outlooks

- El Niño Watch:
  - Historically favors warmer temperatures in north central states
- November:
  - Warmer than average temperatures favored across the region
  - Northwest/MT favored for drier conditions. Elsewhere, equal chances of drier/wetter/near average moisture.
- Winter:
  - Early winter leaning warmer. Later winter favors drier in Great Lakes.

Further Information - Partners

- **Today's and Past Recorded Presentations:**
- http://mrcc.isws.illinois.edu/webinars.htm
  http://www.hprcc.unl.edu
- NOAA's National Climatic Data Center: www.ncdc.noaa.gov
  - Monthly climate reports (U.S. & Global): www.ncdc.noaa.gov/sotc/
- NOAA's Climate Prediction Center: www.cpc.ncep.noaa.gov
- Climate Portal: www.climate.gov
- U.S. Drought Portal: www.drought.gov
- National Drought Mitigation Center: http://drought.unl.edu/
- State climatologists
  - http://www.stateclimate.org
- Regional climate centers
  - http://mrcc.isws.illinois.edu
  - http://www.hprcc.unl.edu

Thank You and Questions?

- Questions:
  - **Climate:**
  - Laura Edwards: laura.edwards@sdstate.edu, 605-626-2870
  - Dennis Todey: dennis.todey@ars.usda.gov , 515-294-2013
  - Doug Kluck: doug.kluck@noaa.gov, 816-994-3008
  - Mike Timlin: mtimlin@illinois.edu; 217-333-8506
  - Natalie Umphlett: numphlett2@unl.edu ; 402 472-6764
  - Brian Fuchs: bfuchs2@unl.edu 402 472-6775

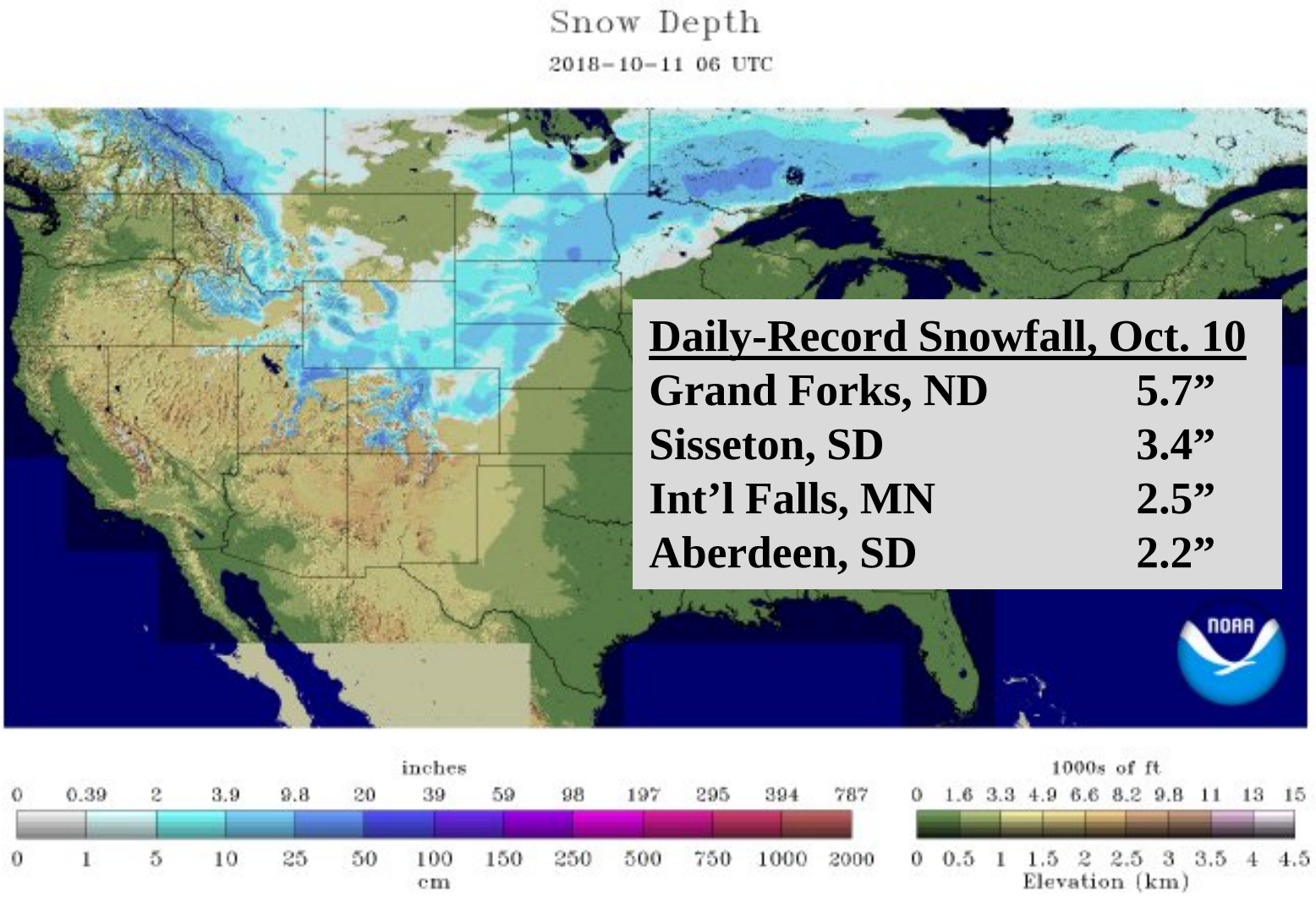
  - **Weather:**
  - crhroc@noaa.gov

North-Central U.S. Agricultural Update, Oct. 18, 2018

Sweet Cherries in Berrien Co., MI, June 20, 2018. Photo by B. Rippey, USDA.


Berrien County, MI, June 20, 2018
Photo by Brad Rippey, USDA

Snow Depth, October 11, 2018




Early Snow, Colorado Plains
October 10, 2018
(photo by Bryce Anderson, DTN)

Snow Depth, October 15, 2018

Daily-Record Snowfall, Oct. 14	
Lincoln, NE	3.5”
Sioux Falls, SD	2.8”
Rochester, MN *	1.6”
Eau Claire, WI	1.4”
Wichita, KS [X]	0.3”
Kansas City, MO [Y]	0.2”

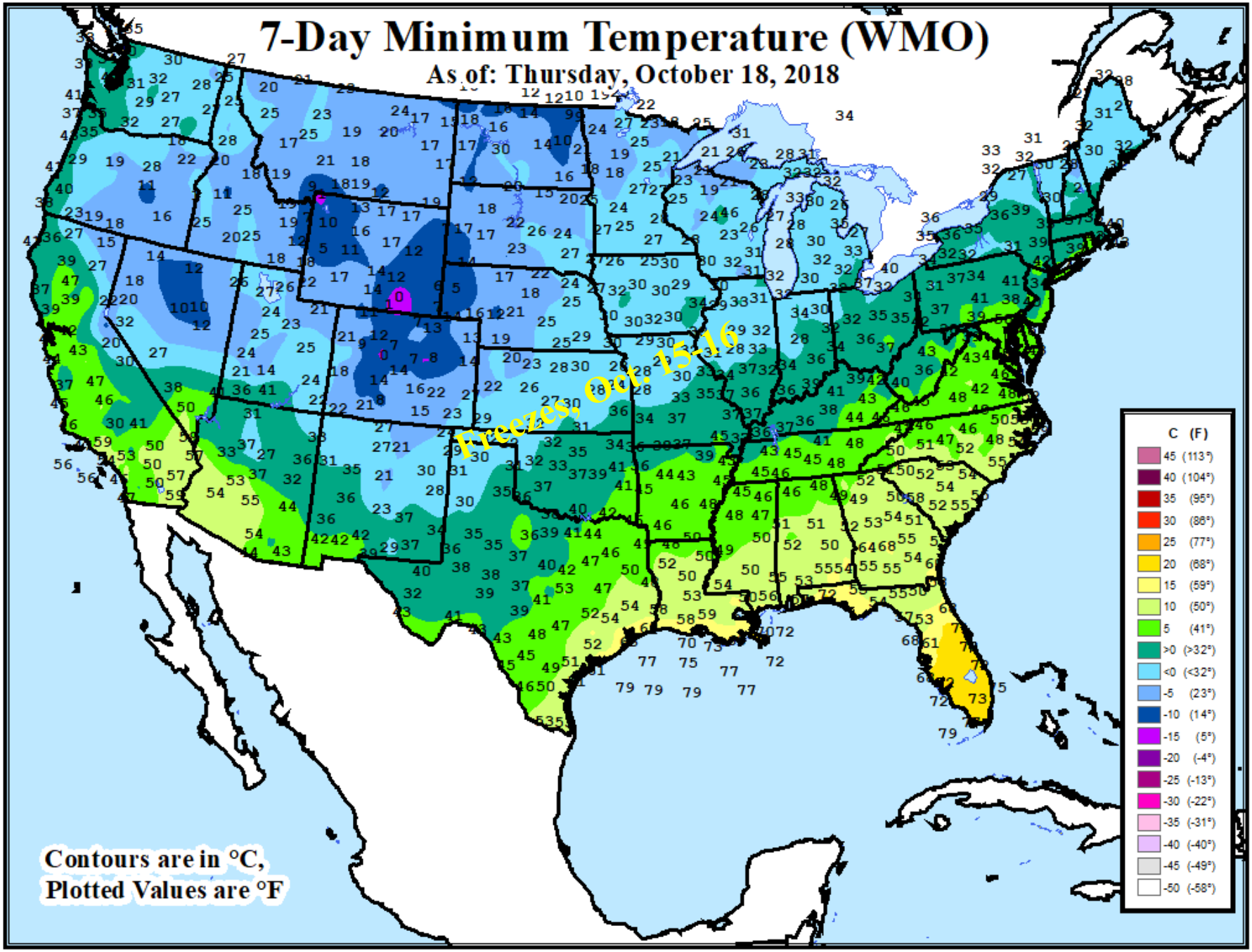
* Earliest snow > 1” (10/15/1969)

[X] Earliest meas. snow (10/22/1996)

[Y] Earliest meas. snow (10/17/1898)

National Snow 2017-Analysis 2018

OWP | OFFICE OF WATER PREDICTION

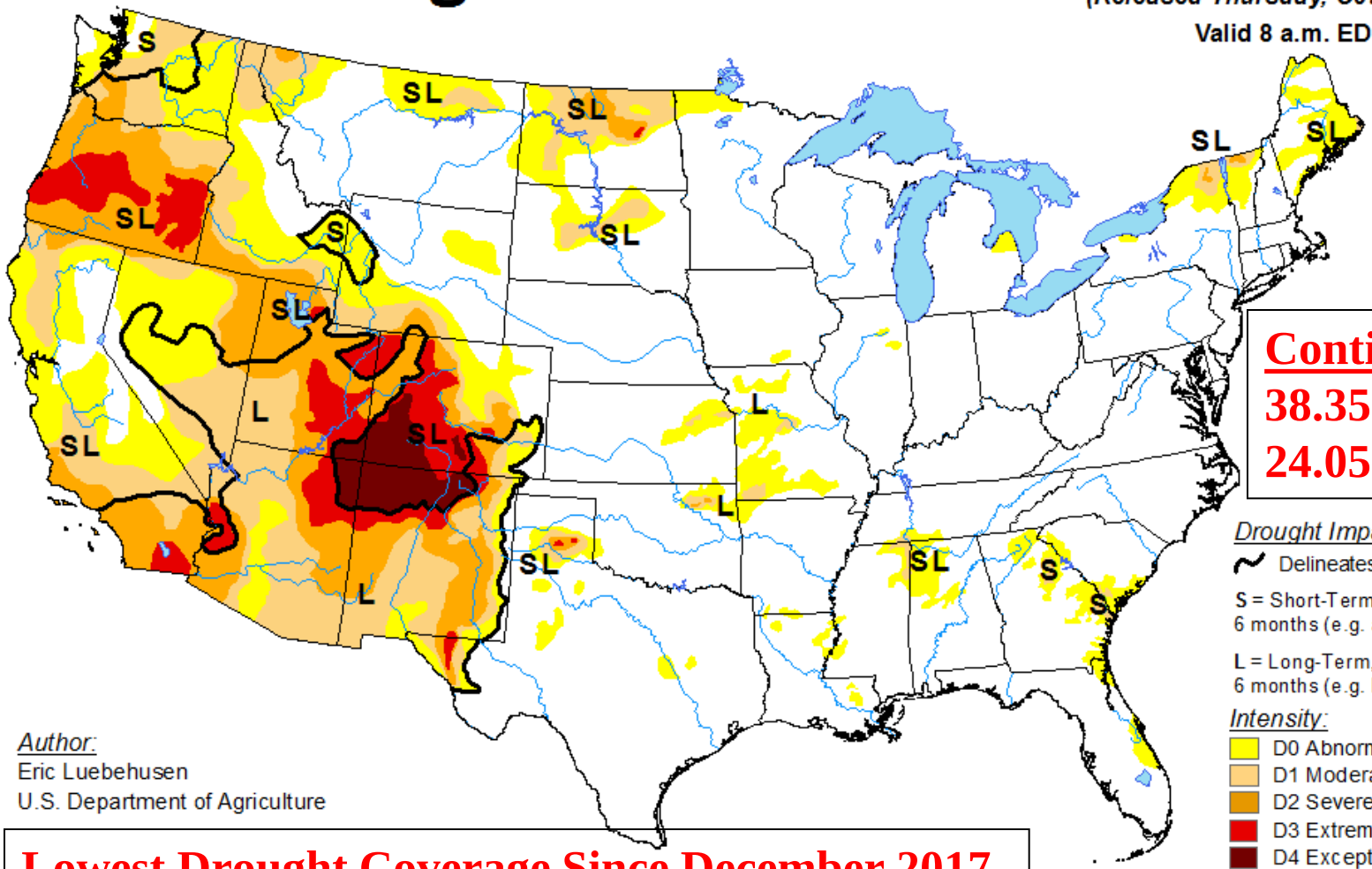

7-Day Minimum Temperature (WMO)
As of: Thursday, October 18, 2018
Freezes, Oct 15-16
C (F)
45 (113°)
40 (104°)
35 (95°)
30 (86°)
25 (77°)
20 (68°)
15 (59°)
10 (50°)
5 (41°)
>0 (>32°)
<0 (<32°)
-5 (23°)
-10 (14°)
-15 (5°)
-20 (-4°)
-25 (-13°)
-30 (-22°)
-35 (-31°)
-40 (-40°)
-45 (-49°)
-50 (-58°)
Contours are in °C,
Plotted Values are °F

U.S. Drought Monitor

October 16, 2018

(Released Thursday, Oct. 18, 2018)

Valid 8 a.m. EDT



Contiguous U.S.

38.35% D0 – D4

24.05% D1 – D4

Drought Impact Types:

Delineates dominant impacts

S = Short-Term, typically less than 6 months (e.g. agriculture, grasslands)

L = Long-Term, typically greater than 6 months (e.g. hydrology, ecology)

Intensity:

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

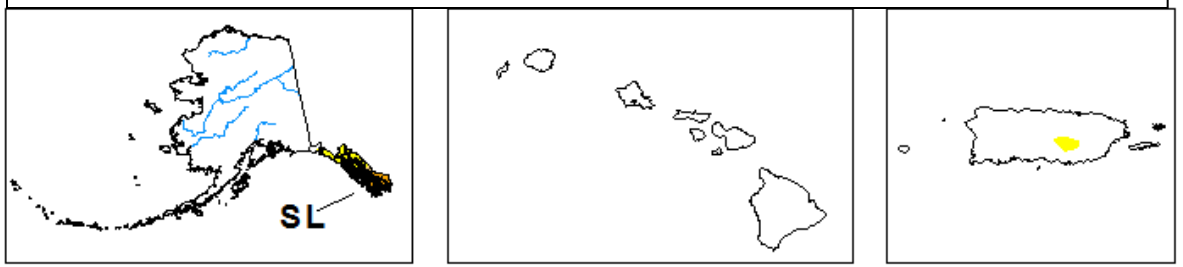
The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

Author:

Eric Luebehusen

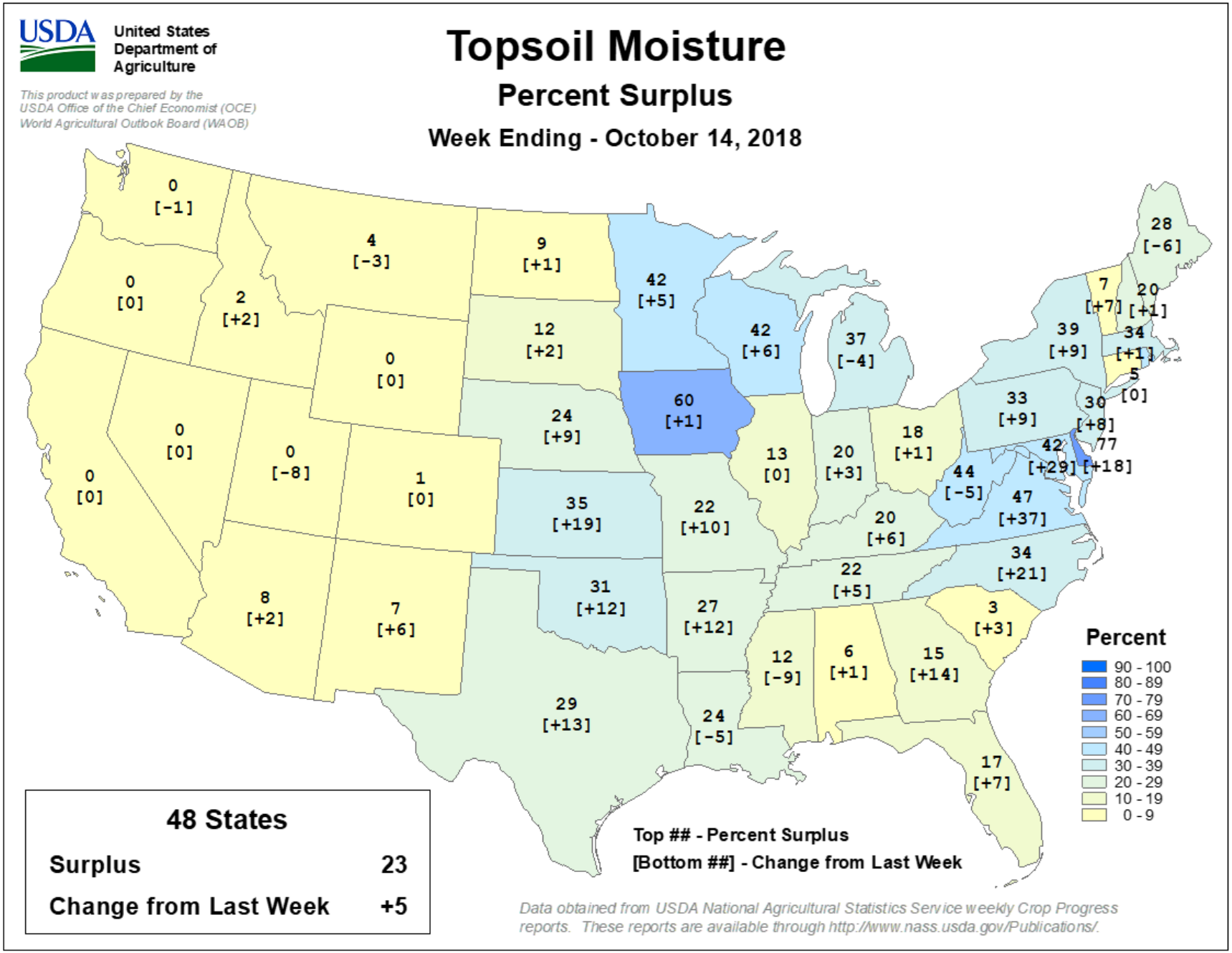
U.S. Department of Agriculture

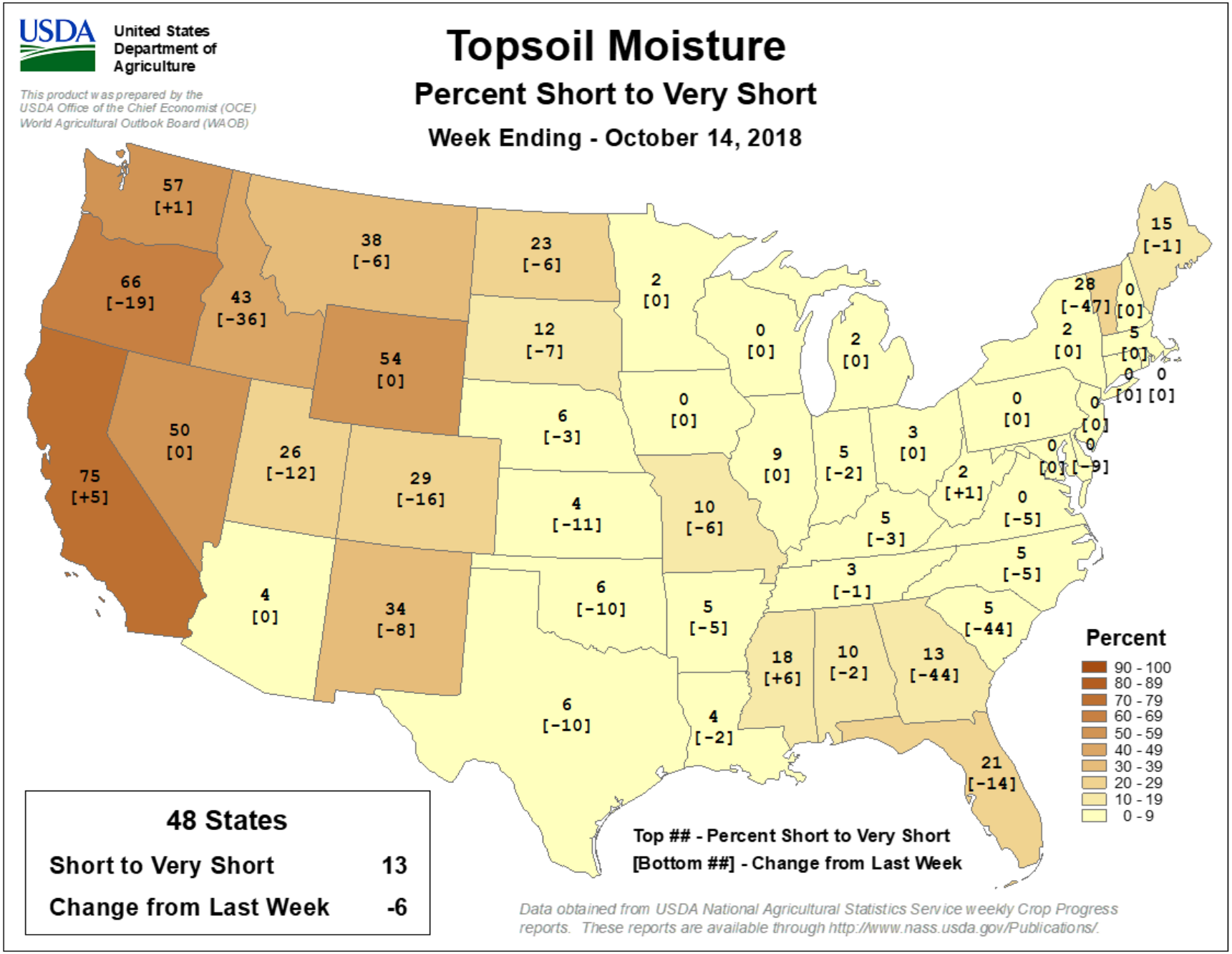
Lowest Drought Coverage Since December 2017



USDA NDMC NOAA

http://droughtmonitor.unl.edu/

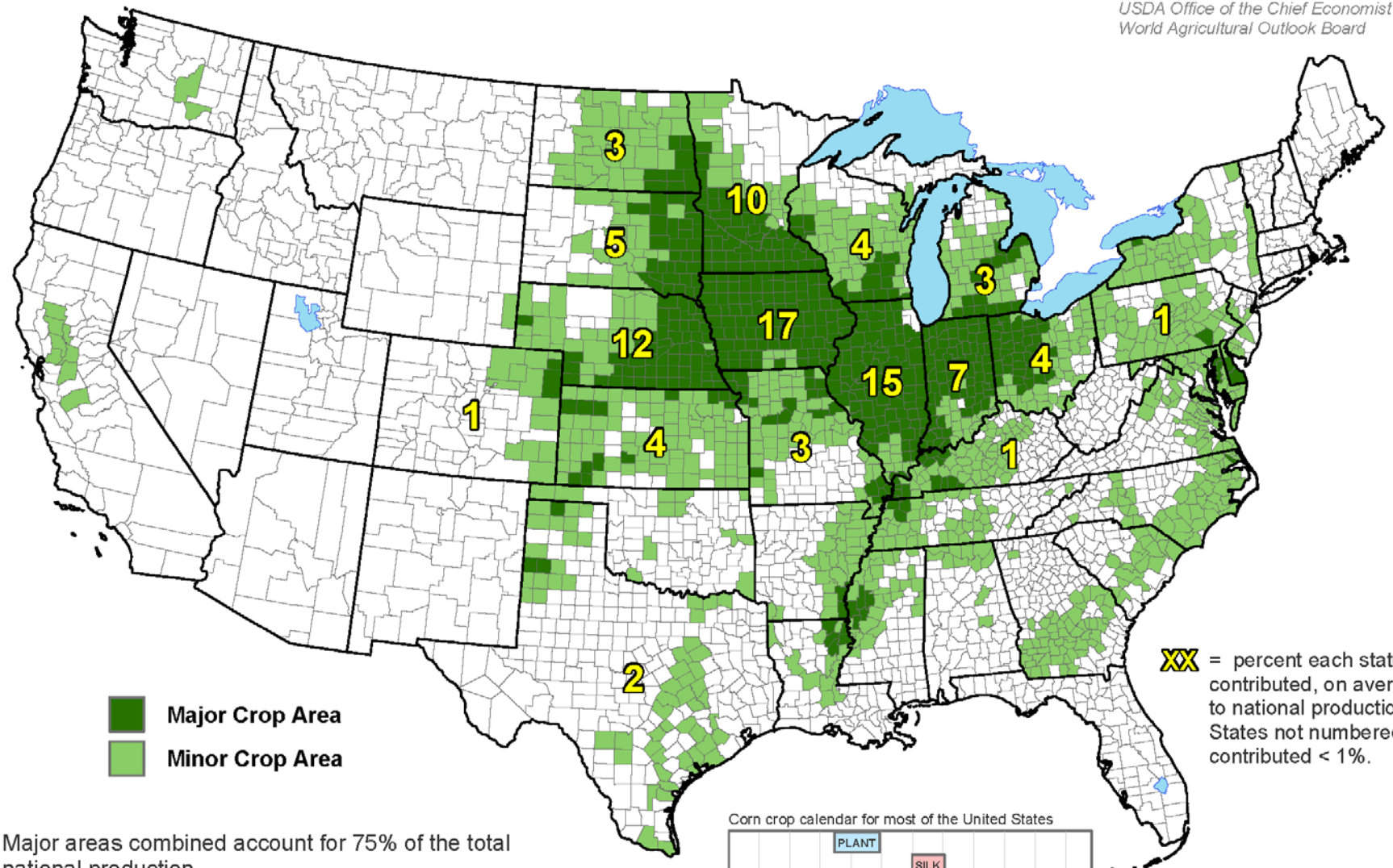

USDA
United States Department of Agriculture
This product was prepared by the USDA Office of the Chief Economist (OCE) World Agricultural Outlook Board (WAOB)
Topsoil Moisture
Percent Surplus
Week Ending - October 14, 2018
0 [-1]
0 [0]
2 [+2]
4 [-3]
9 [+1]
42 [+5]
42 [+6]
37 [-4]
28 [-6]
7 [+7]
20 [+1]
39 [+9]
34 [+1]
5 [0]
12 [+2]
0 [0]
60 [+1]
24 [+9]
33 [+9]
30 [+8]
42 [+29]
77 [+18]
0 [0]
0 [0]
0 [-8]
1 [0]
13 [0]
20 [+3]
18 [+1]
44 [-5]
47 [+37]
35 [+19]
22 [+10]
20 [+6]
34 [+21]
22 [+5]
31 [+12]
27 [+12]
3 [+3]
8 [+2]
7 [+6]
12 [-9]
6 [+1]
15 [+14]
29 [+13]
24 [-5]
17 [+7]
Percent
90 - 100
80 - 89
70 - 79
60 - 69
50 - 59
40 - 49
30 - 39
20 - 29
10 - 19
0 - 9
48 States
Surplus 23
Change from Last Week +5
Top ## - Percent Surplus
[Bottom ##] - Change from Last Week
Data obtained from USDA National Agricultural Statistics Service weekly Crop Progress reports. These reports are available through http://www.nass.usda.gov/Publications/.


USDA
United States Department of Agriculture
This product was prepared by the USDA Office of the Chief Economist (OCE) World Agricultural Outlook Board (WAOB)
Topsoil Moisture
Percent Short to Very Short
Week Ending - October 14, 2018
57 [+1]
66 [-19]
43 [-36]
38 [-6]
54 [0]
23 [-6]
12 [-7]
2 [0]
0 [0]
2 [0]
6 [-3]
0 [0]
9 [0]
5 [-2]
3 [0]
50 [0]
26 [-12]
29 [-16]
4 [-11]
10 [-6]
75 [+5]
4 [0]
34 [-8]
6 [-10]
5 [-5]
6 [-10]
4 [-2]
18 [+6]
10 [-2]
13 [-44]
21 [-14]
28 [-47]
2 [0]
0 [0]
15 [-1]
0 [0]
5 [0]
0 [0]
0 [0]
0 [0]
0 [0]
0 [0]
0 [-9]
2 [+1]
0 [-5]
5 [-3]
3 [-1]
5 [-5]
5 [-44]
Percent
90 - 100
80 - 89
70 - 79
60 - 69
50 - 59
40 - 49
30 - 39
20 - 29
10 - 19
0 - 9
48 States
Short to Very Short 13
Change from Last Week -6
Top ## - Percent Short to Very Short
[Bottom ##] - Change from Last Week
Data obtained from USDA National Agricultural Statistics Service weekly Crop Progress reports. These reports are available through http://www.nass.usda.gov/Publications/.

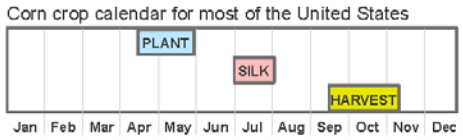
United States: Corn

United States Department of Agriculture

This product was prepared by the USDA Office of the Chief Economist World Agricultural Outlook Board



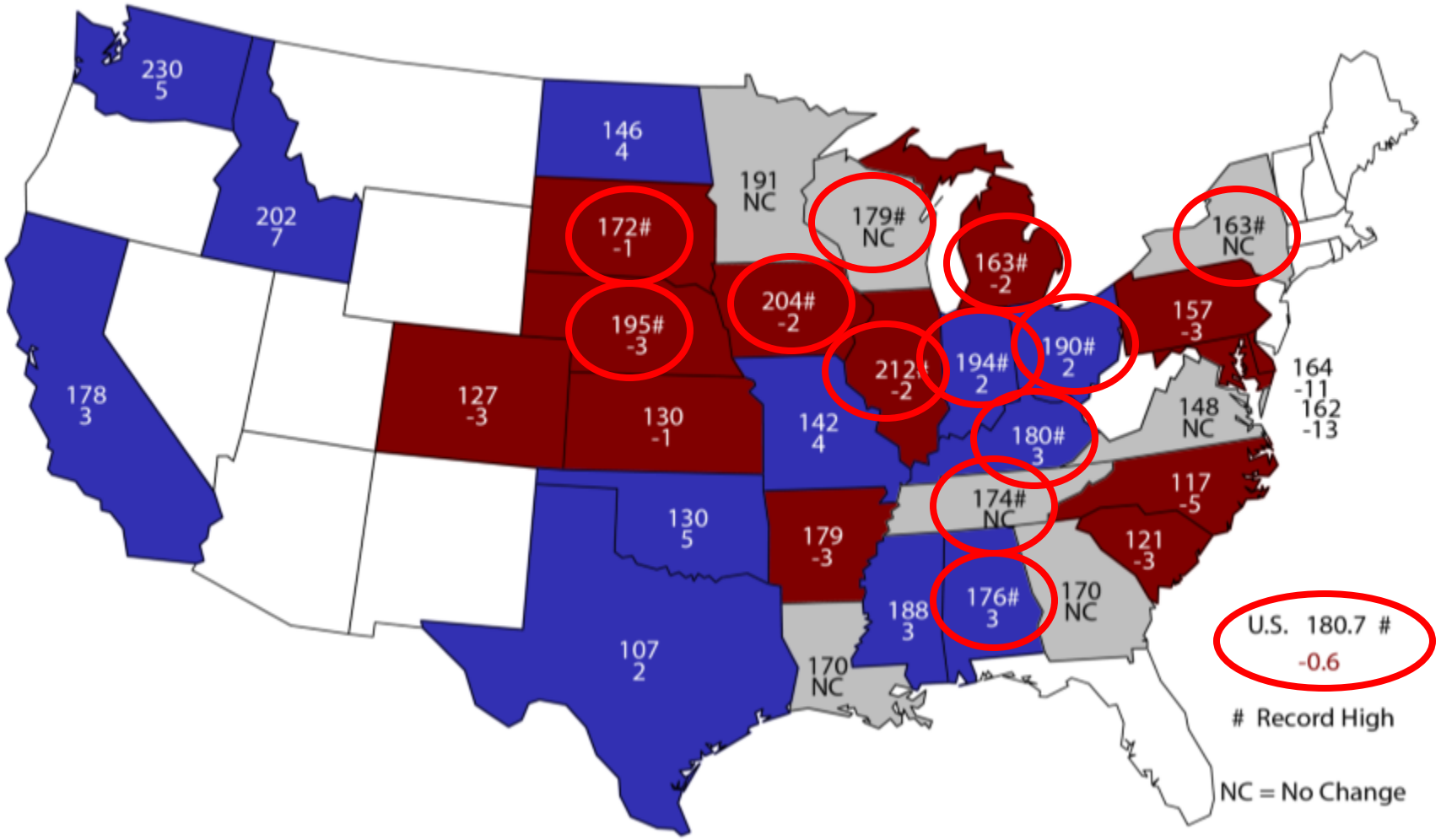
- Major areas combined account for 75% of the total national production.
- Major and minor areas combined account for 99% of the total national production.
- Major and minor areas and state production percentages are derived from NASS survey data from 2010 to 2014.



The crop calendar was developed using NASS crop progress data from 2010-2014. This calendar illustrates, on average, the dates when national progress advanced from 10 to 90 percent.

October 1, 2018 Corn Yield

Bushels and Change From Previous Forecast

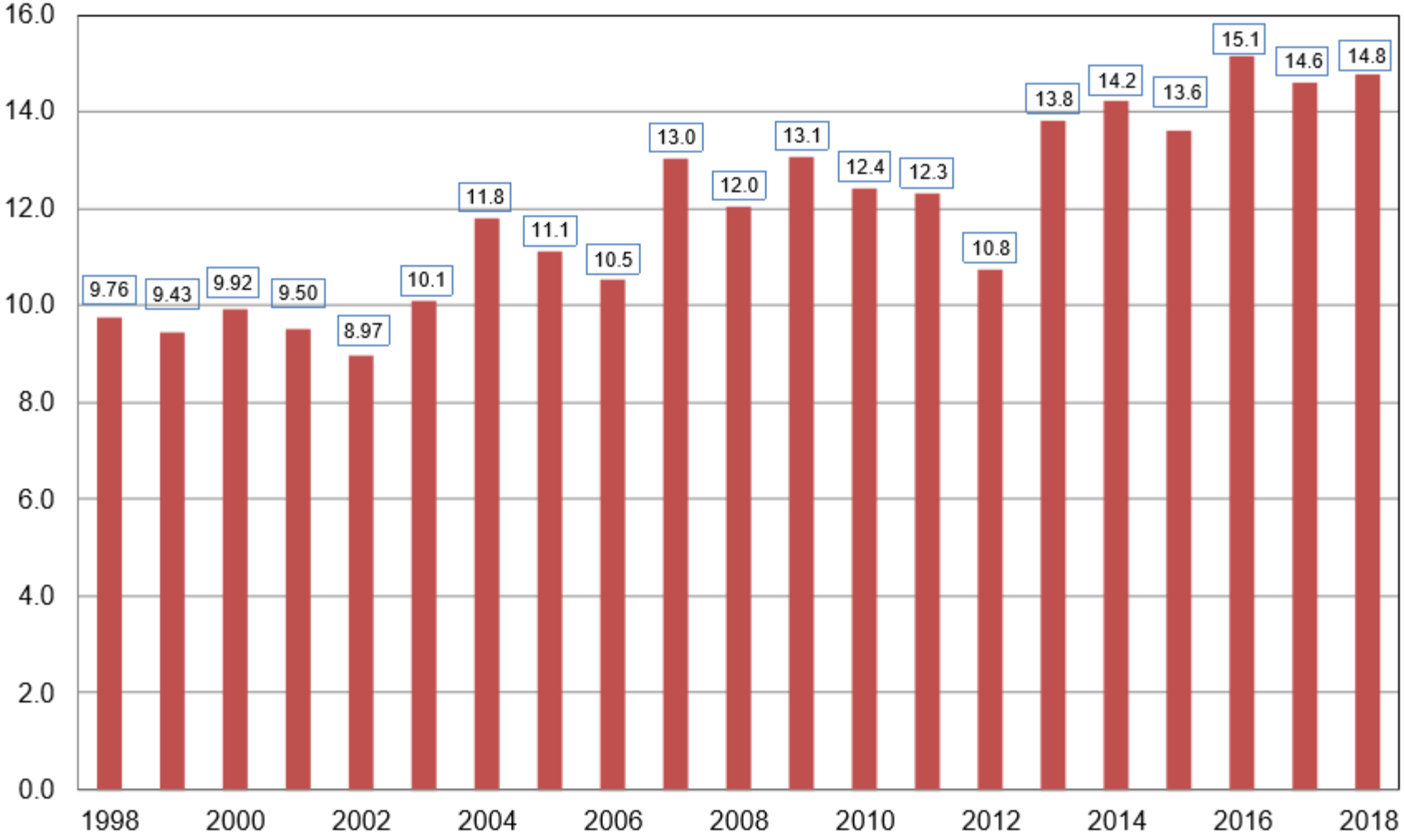


USDA-NASS
10-11-18

Corn for Grain Production

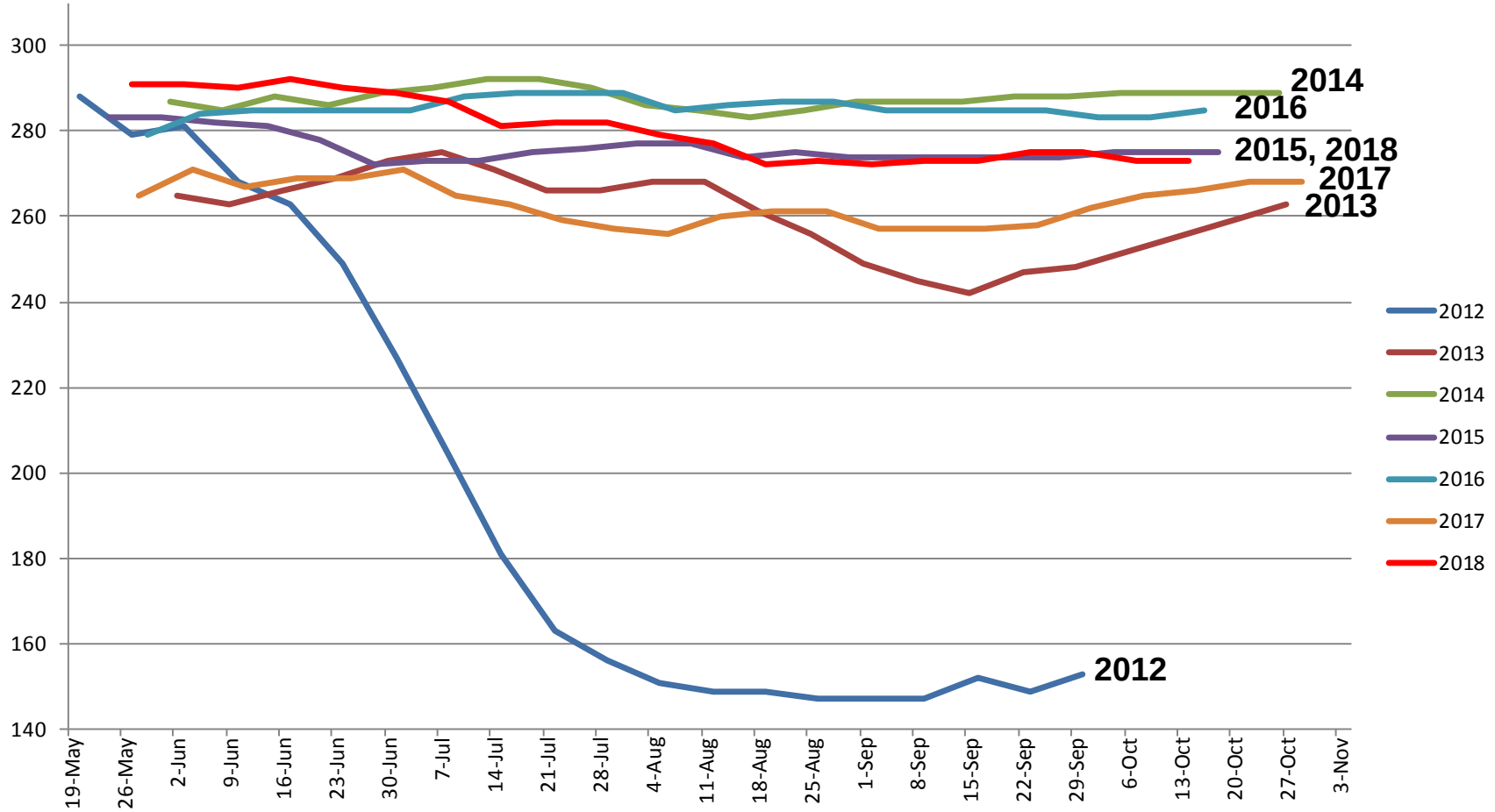
United States

Billion Bushels



USDA-NASS
10-11-18

U.S. CORN Condition Index

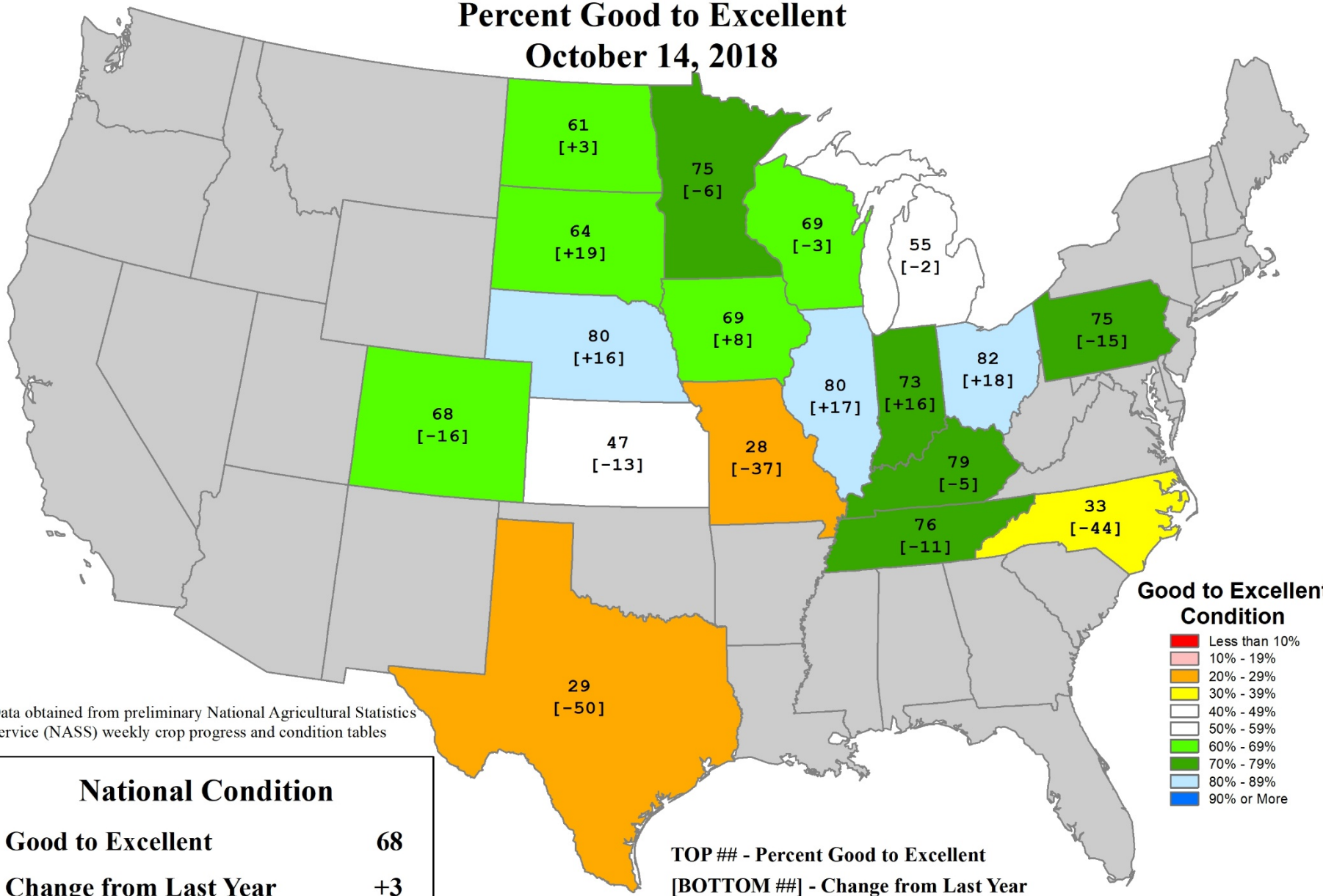


Based on NASS crop progress data.

Index Weighting: Excellent = 4; Good = 3; Fair = 2; Poor = 1; Very Poor = 0

U.S. Corn Conditions

Percent Good to Excellent
October 14, 2018



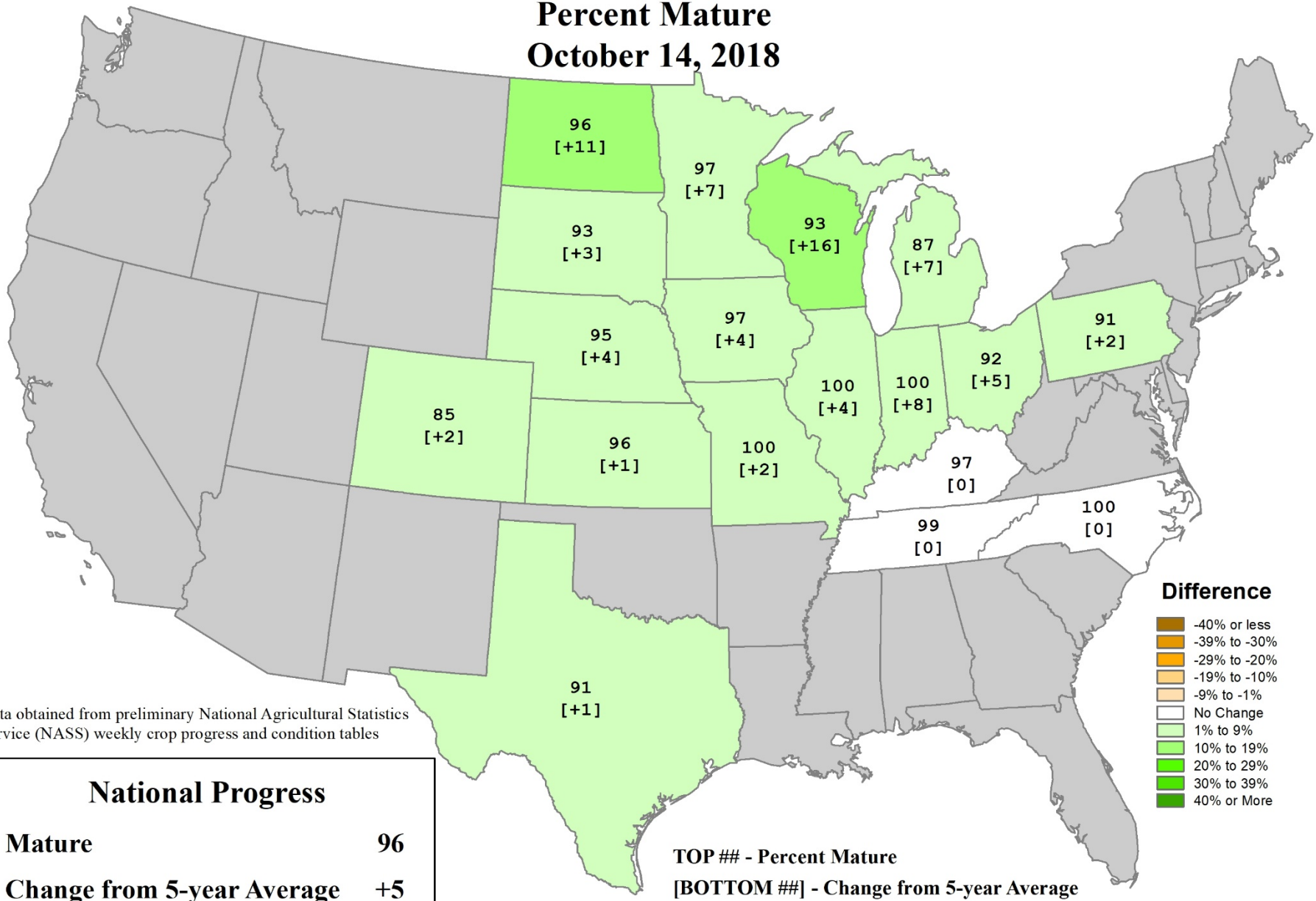
Data obtained from preliminary National Agricultural Statistics Service (NASS) weekly crop progress and condition tables

National Condition	
Good to Excellent	68
Change from Last Year	+3

USDA Agricultural Weather Assessments
World Agricultural Outlook Board

U.S. Corn Progress

Percent Mature
October 14, 2018



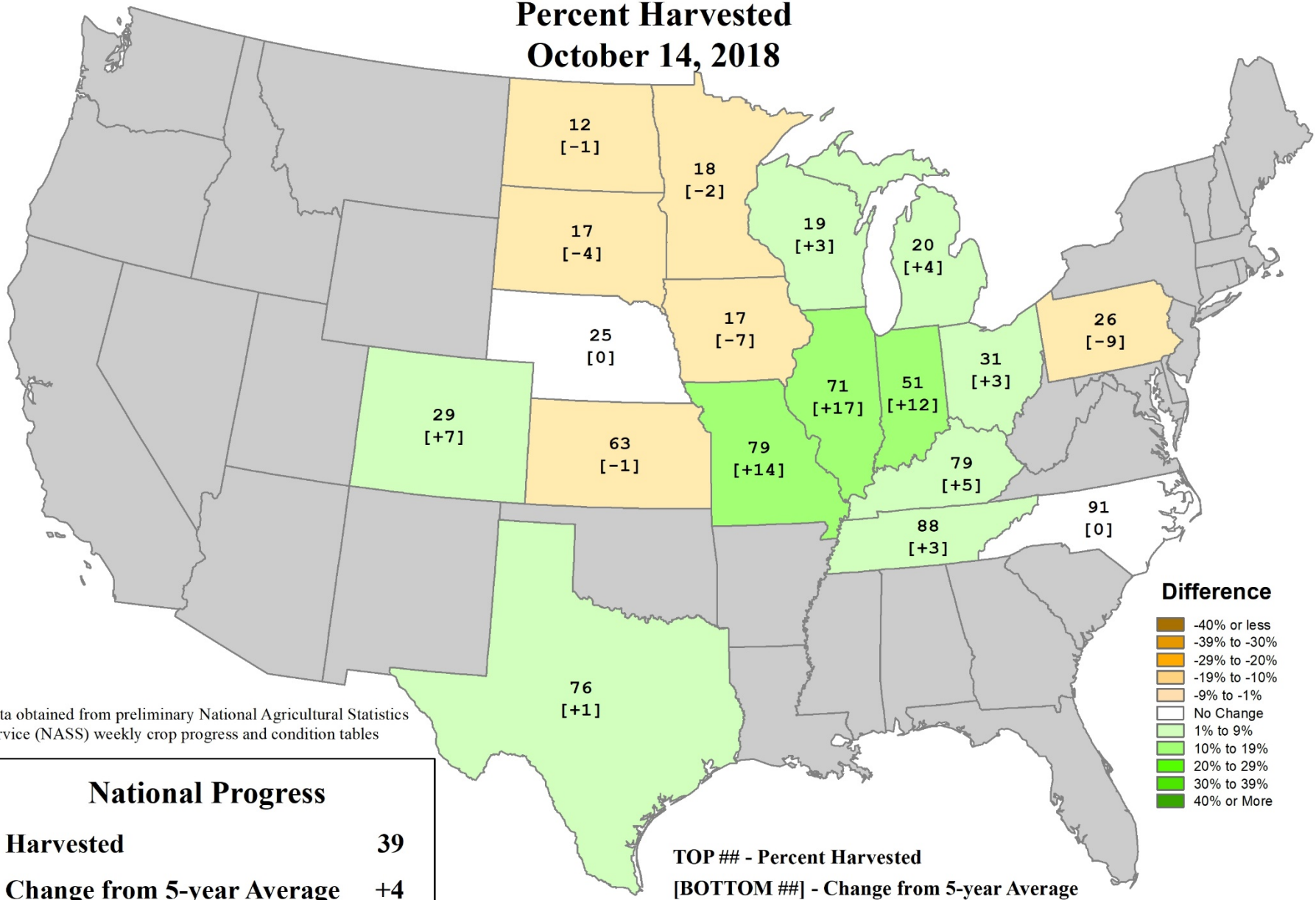
Data obtained from preliminary National Agricultural Statistics Service (NASS) weekly crop progress and condition tables

National Progress	
Mature	96
Change from 5-year Average	+5

USDA Agricultural Weather Assessments
World Agricultural Outlook Board

U.S. Corn Progress

Percent Harvested
October 14, 2018



Data obtained from preliminary National Agricultural Statistics Service (NASS) weekly crop progress and condition tables

National Progress	
Harvested	39
Change from 5-year Average	+4

TOP ## - Percent Harvested
[BOTTOM ##] - Change from 5-year Average

USDA Agricultural Weather Assessments
World Agricultural Outlook Board

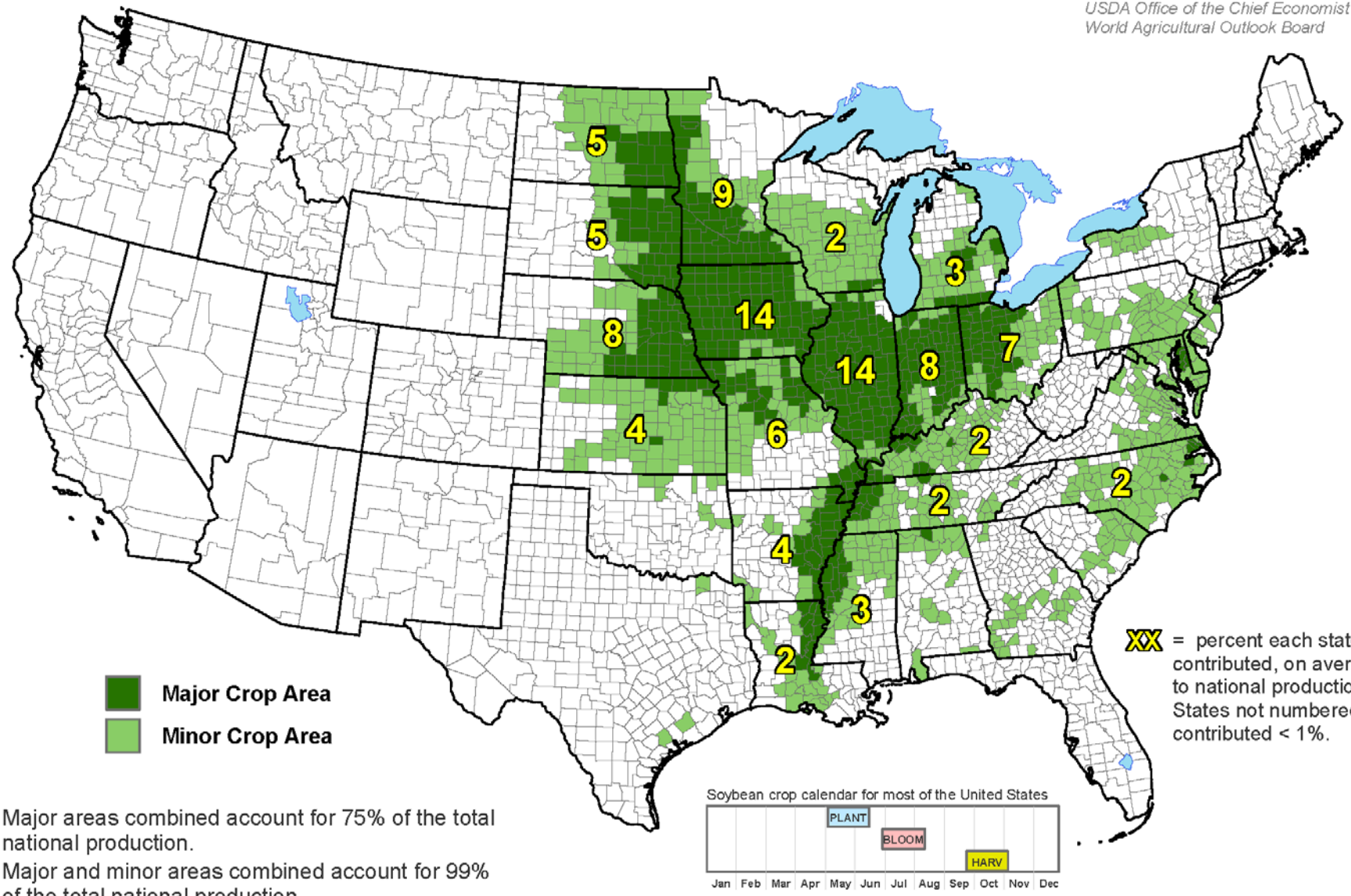
St. Joseph Co., IN, June 27, 2016
Photo by Brad Rippey, USDA

- Despite above-normal temperatures starting in early May, many major production areas avoided extreme heat and had ample moisture. However, heat and drought lowered yield prospects in the southwestern Corn Belt.
- Oct. 1 estimates, if realized, indicate record-high corn production in nine Central States (IL, IN, IA, KY, MI, NE, OH, SD, and WI).
- If Oct. 1 estimates are realized, 2018 will have a record U.S. corn yield (180.7 bushels/acre) and the second-highest production (14.8 billion bushels).
- Drought affected 5 to 13% of the U.S. corn production area during the 2018 growing season. Wetness is a current concern in the upper Midwest.
- Currently, 68% of the U.S. corn crop is rated good to excellent.

United States: Soybeans

USDA United States Department of Agriculture

This product was prepared by the USDA Office of the Chief Economist World Agricultural Outlook Board



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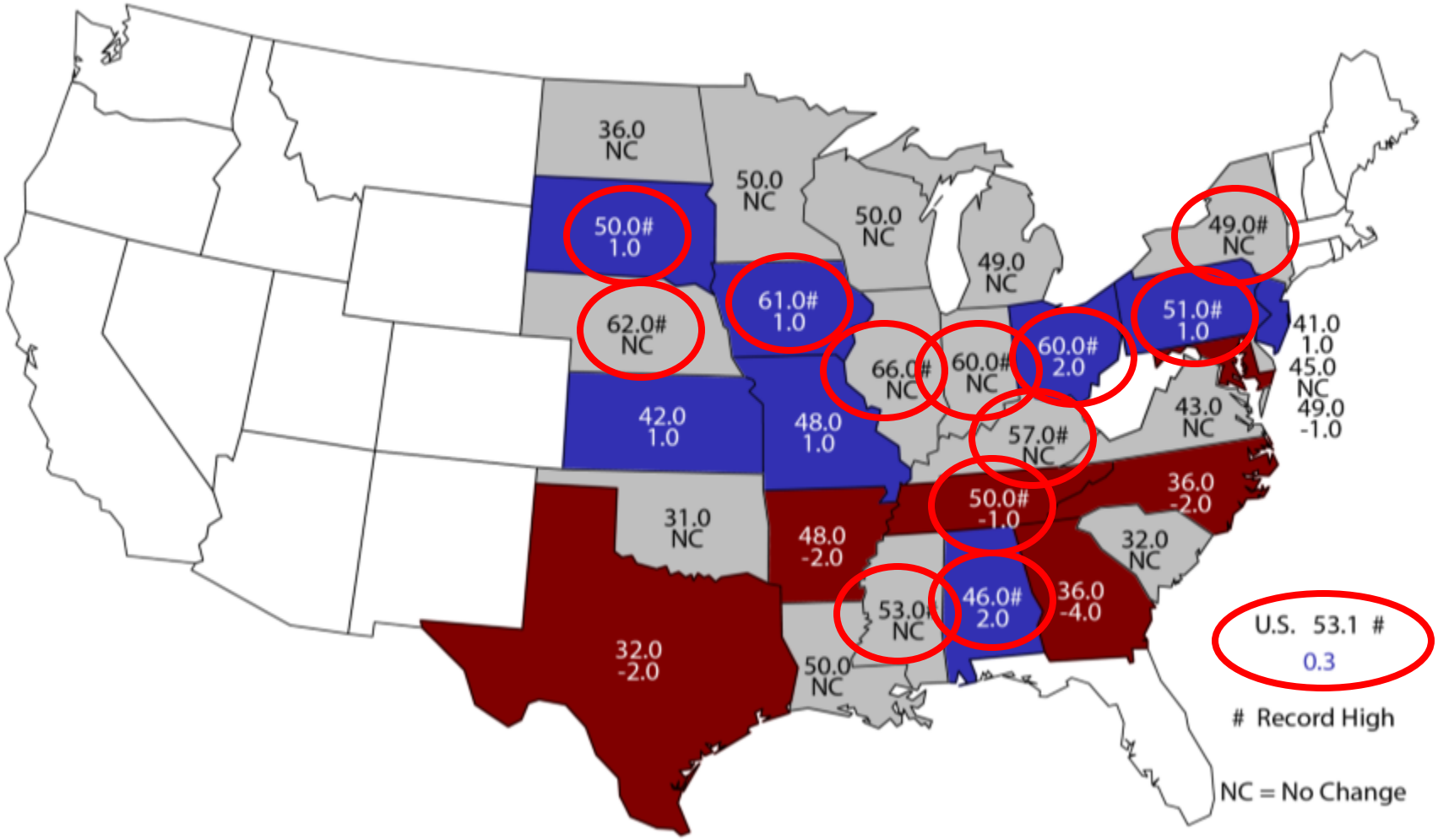
- Major and minor areas combined account for 99% of the total national production.
- Major and minor areas and state production percentages are derived from NASS survey data from 2010 to 2014.

Soybean crop calendar for most of the United States

The crop calendar was developed using NASS crop progress data from 2010-2014. This calendar illustrates, on average, the dates when national progress advanced from 10 to 90 percent.

October 1, 2018 Soybean Yield

Bushels and Change From Previous Forecast

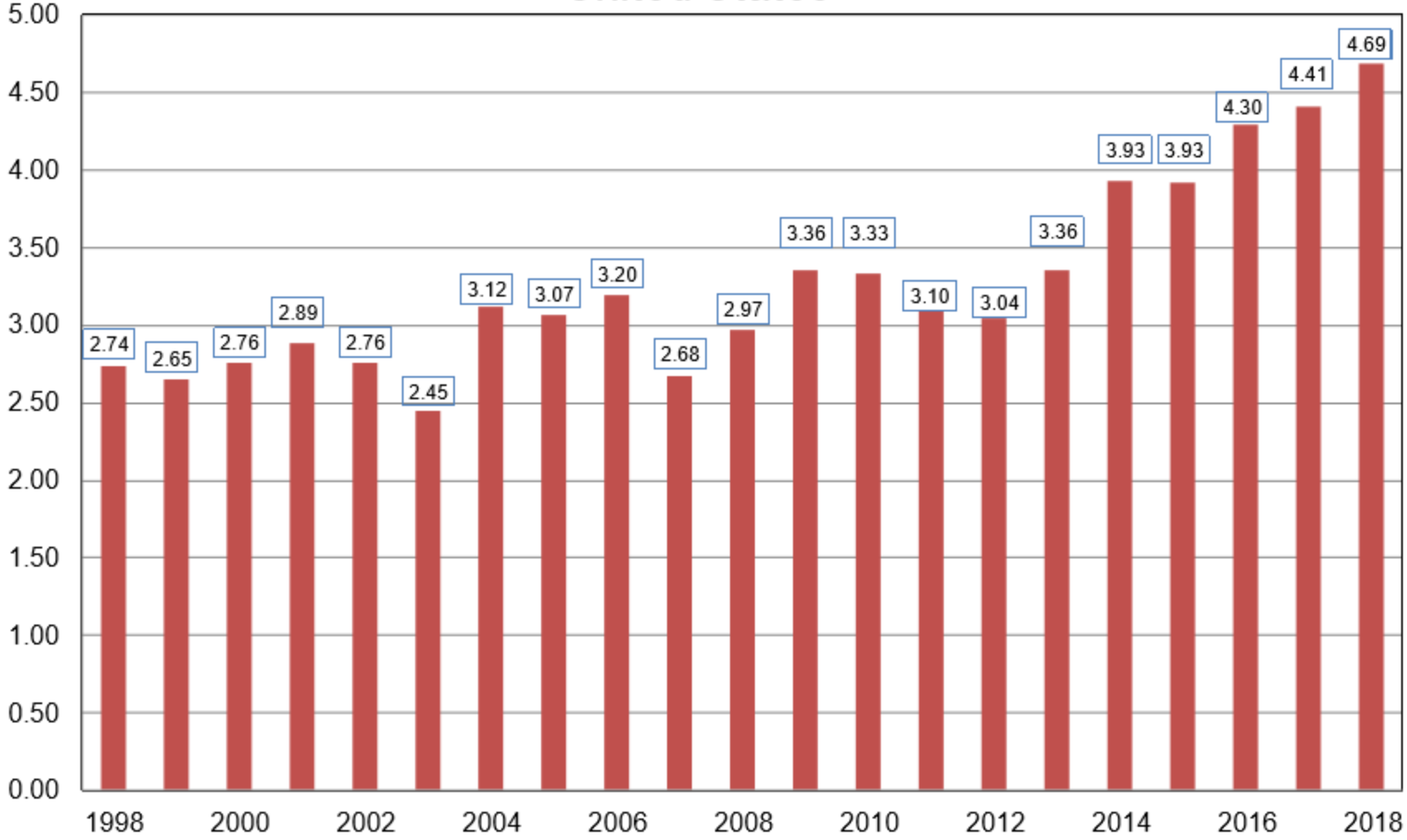


USDA-NASS
10-11-18

Soybean Production

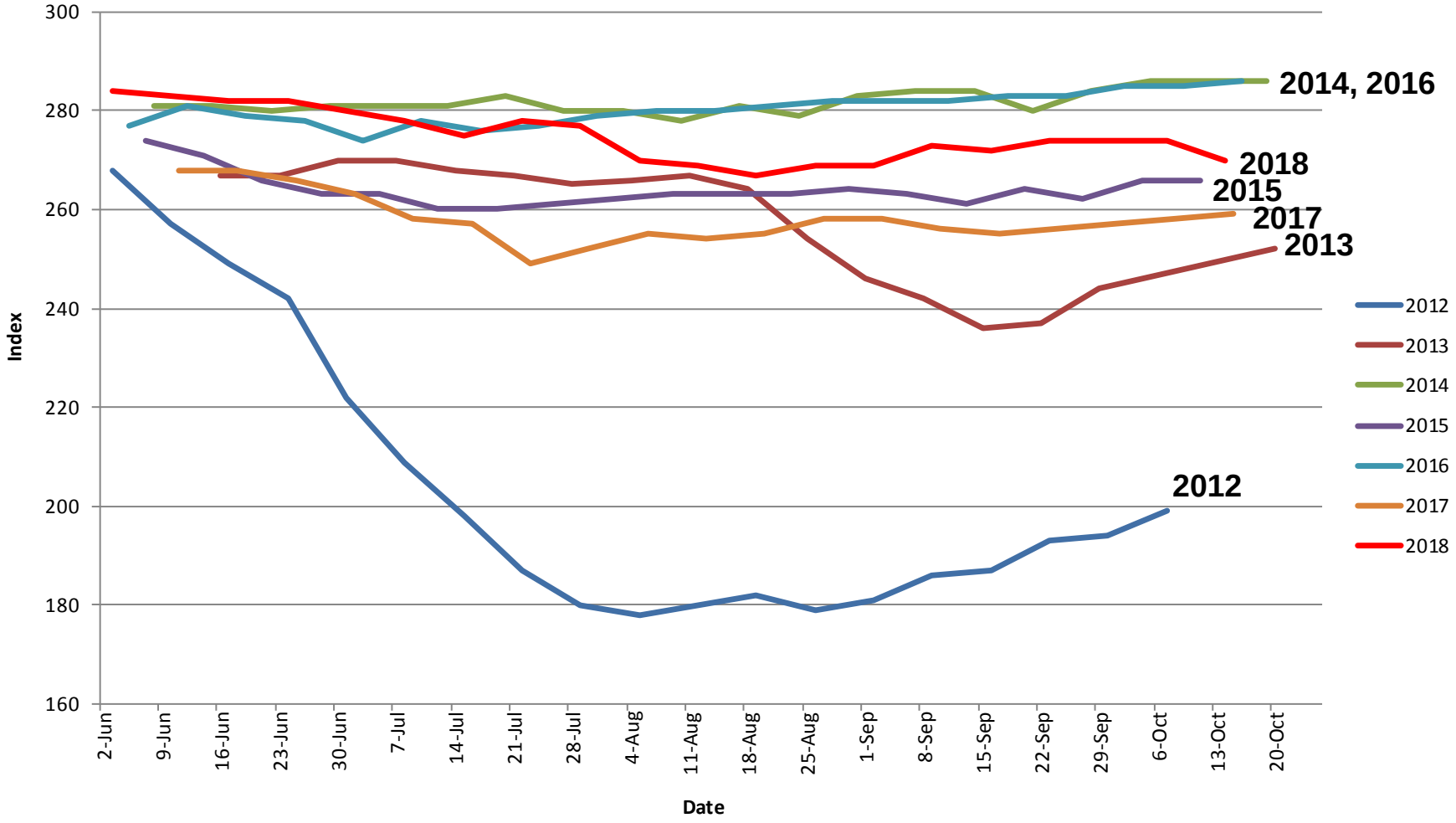
United States

Billion Bushels



USDA-NASS
10-11-18

U.S. SOYBEAN Condition Index

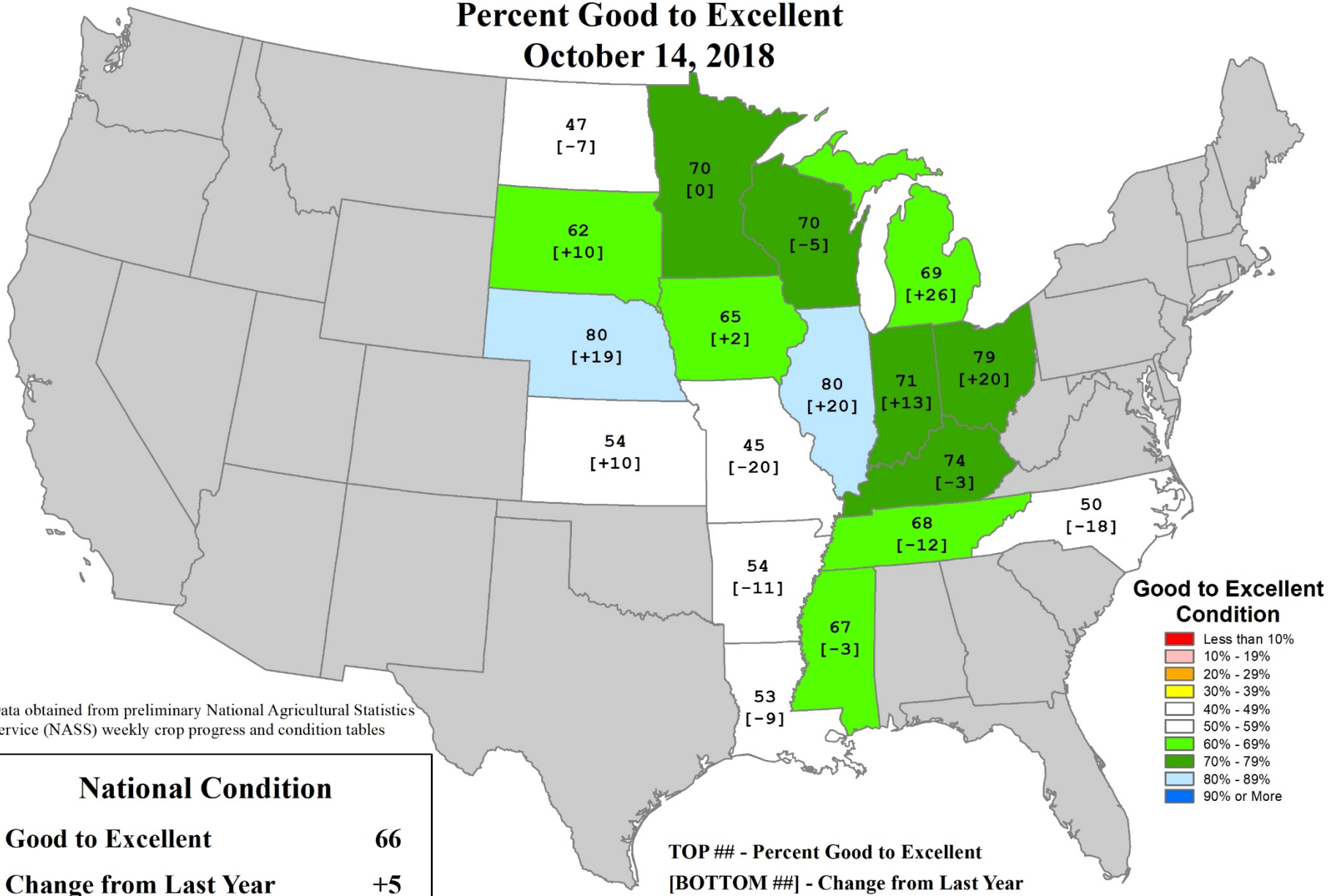


Based on NASS crop progress data.

Index Weighting: Excellent = 4; Good = 3; Fair = 2; Poor = 1; Very Poor = 0

U.S. Soybean Conditions

Percent Good to Excellent
October 14, 2018



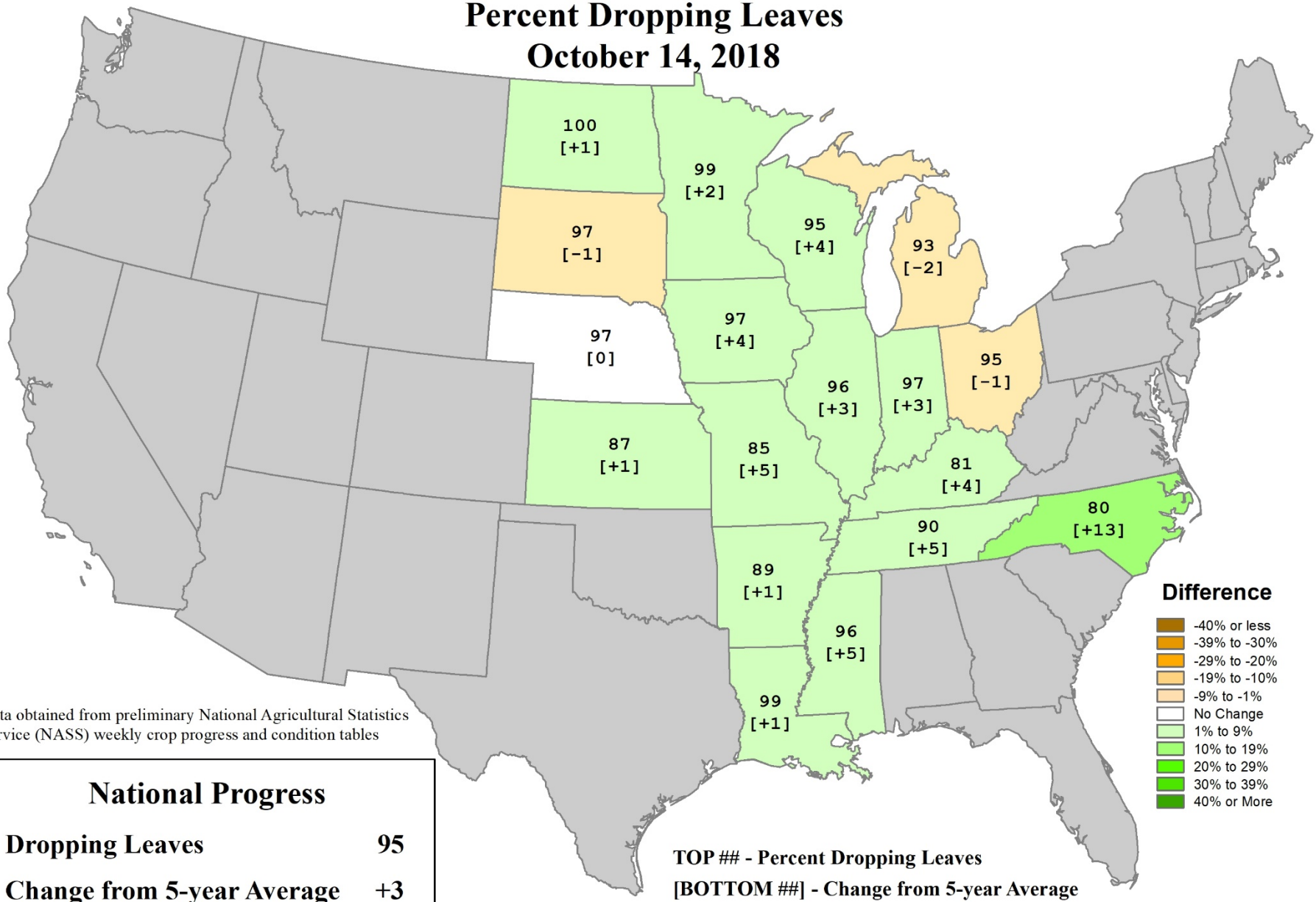
Data obtained from preliminary National Agricultural Statistics Service (NASS) weekly crop progress and condition tables

National Condition	
Good to Excellent	66
Change from Last Year	+5

USDA Agricultural Weather Assessments
World Agricultural Outlook Board

U.S. Soybeans Progress

Percent Dropping Leaves
October 14, 2018



Data obtained from preliminary National Agricultural Statistics Service (NASS) weekly crop progress and condition tables

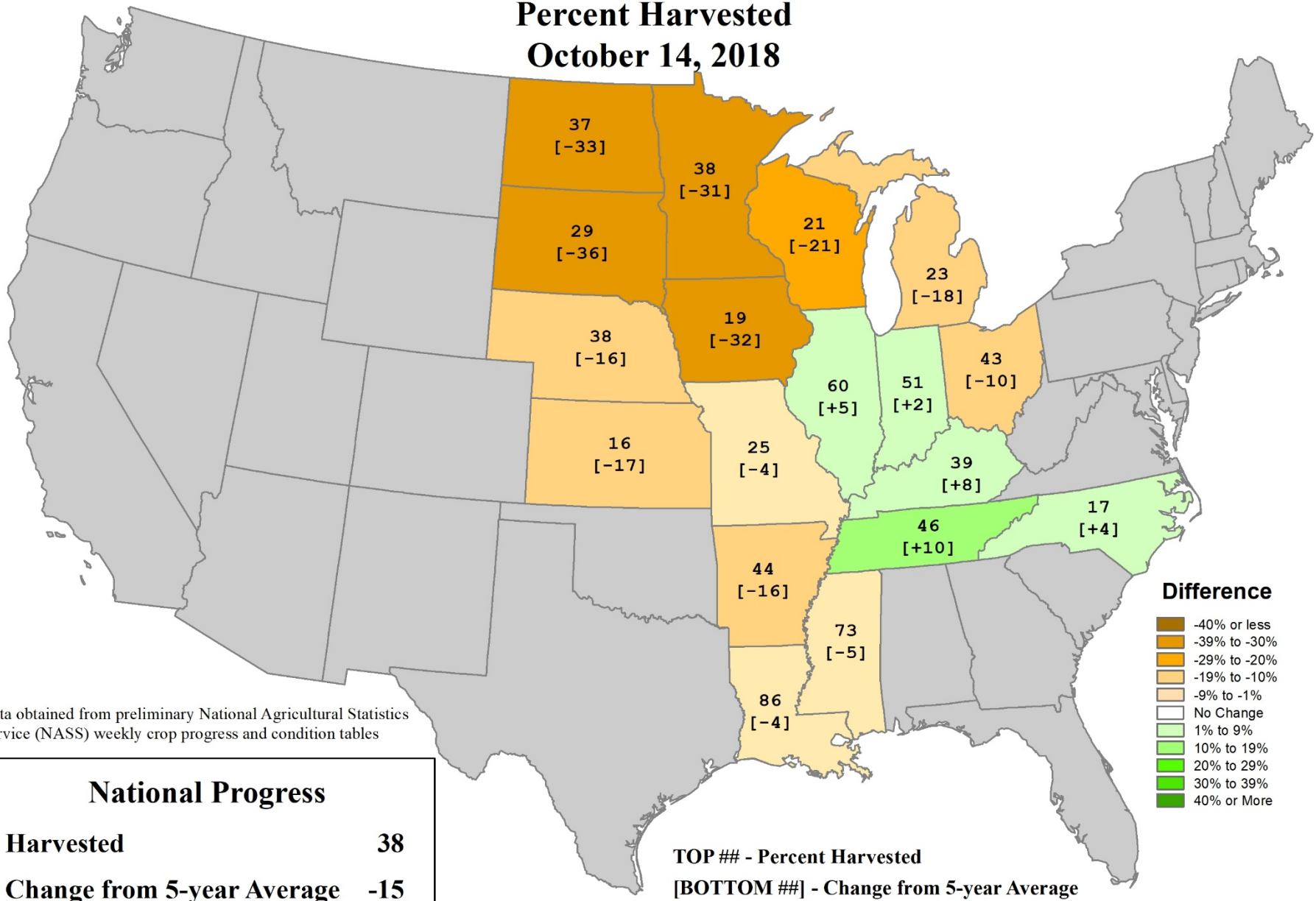
National Progress	
Dropping Leaves	95
Change from 5-year Average	+3

TOP ## - Percent Dropping Leaves
[BOTTOM ##] - Change from 5-year Average

USDA Agricultural Weather Assessments
World Agricultural Outlook Board

U.S. Soybeans Progress

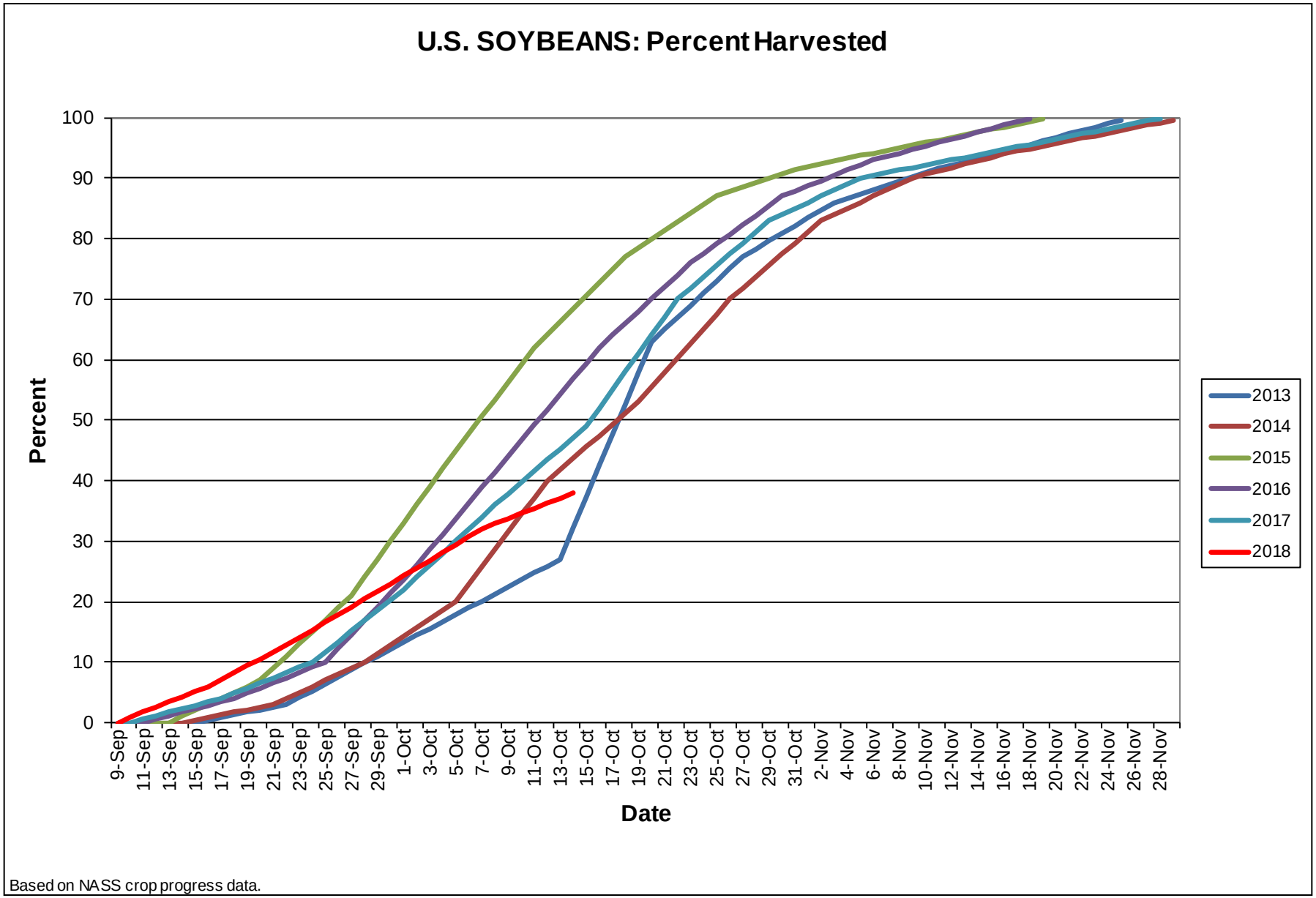
Percent Harvested
October 14, 2018



Data obtained from preliminary National Agricultural Statistics Service (NASS) weekly crop progress and condition tables

National Progress	
Harvested	38
Change from 5-year Average	-15

USDA Agricultural Weather Assessments
World Agricultural Outlook Board



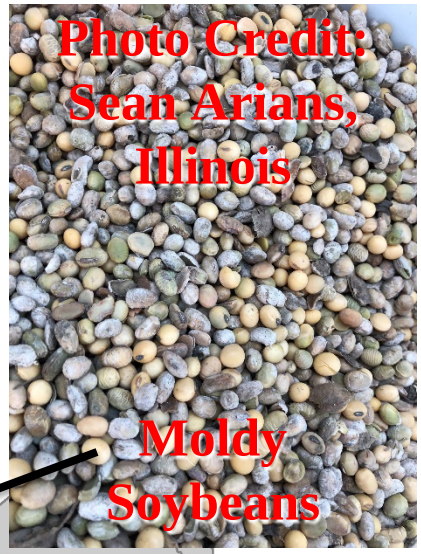
Based on NASS crop progress data.

South Dakota soybean harvest, Oct. 2018. Photo courtesy of Laura Edwards.

- As with other crops, warm weather after May 1 hastened soybean development.
- Oct. 1 estimates, if realized, indicate record-high soybean production in seven Central States (IL, IN, IA, KY, NE, OH, and SD).
- If Oct. 1 estimates are realized, 2018 will feature record-high U.S. soybean yield (53.1 bushels/acre) and production (4.69 million bushels).
- Drought affected 7 to 18% of the U.S. soybean production area during the 2018 growing season. Cold, wet weather is a current quality concern as harvest begins to languish.
- Currently, 66% of the U.S. soybean crop is rated G to EX.

U.S. Soybean Conditions

Percent Good to Excellent
October 14, 2018



47 [-7]
70 [-2]
70 [-1]
69 [0]
62 [-2]
65 [-5]
80 [-2]
80 [0]
71 [-1]
79 [-5]
54 [-5]
45 [-4]
74 [-2]
68 [-4]
50 [+4]
54 [-3]
67 [0]
53 [0]

Data obtained from preliminary National Agricultural Statistics Service (NASS) weekly crop progress and condition tables

National Condition	
Good to Excellent	66
Change from Last Week	-2

Good to Excellent Condition

- Less than 10%
- 10% - 19%
- 20% - 29%
- 30% - 39%
- 40% - 49%
- 50% - 59%
- 60% - 69%
- 70% - 79%
- 80% - 89%
- 90% or More

TOP ## - Percent Good to Excellent
[BOTTOM ##] - Change from Last Week

USDA Agricultural Weather Assessments
World Agricultural Outlook Board

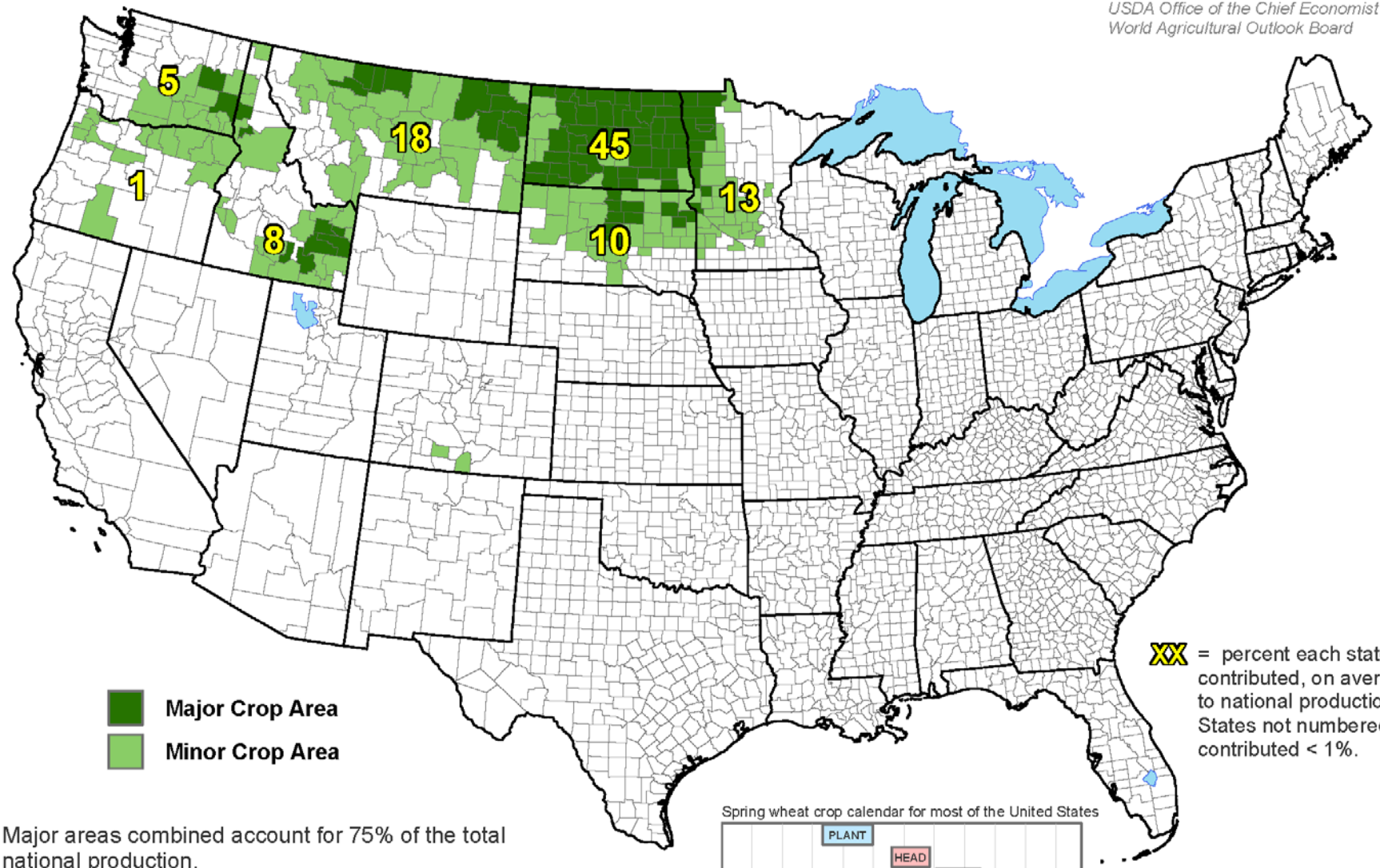
Other Current Agricultural Highlights

- **Spring wheat bounced back in 2018, following the worst drought since 1988. Production is forecast to be up 48% from last year, while harvest area increased 27%.**
- **Sunflower production is expected to be down 10% from last year, largely due to a 7% percent decrease in harvested area.**
- **Winter wheat is emerging in most major production areas. Late-season planting has been limited by wet weather, while emergence has been slowed by cool conditions.**
- **The sugarbeet harvest is underway, but conditions have not been ideal. The production estimate is virtually unchanged from last year, despite a 1% decrease in harvested area.**
- **Sorghum production is forecast to be up 5% from last year.**
- **Rangeland and pastures are in good shape in most areas. However, there have been lingering drought impacts on the northern High Plains, while drought affected the southwestern Corn Belt.**

United States: Spring Wheat

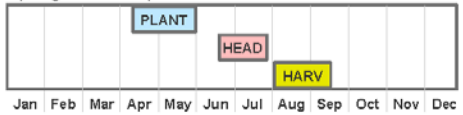
United States Department of Agriculture

This product was prepared by the USDA Office of the Chief Economist World Agricultural Outlook Board

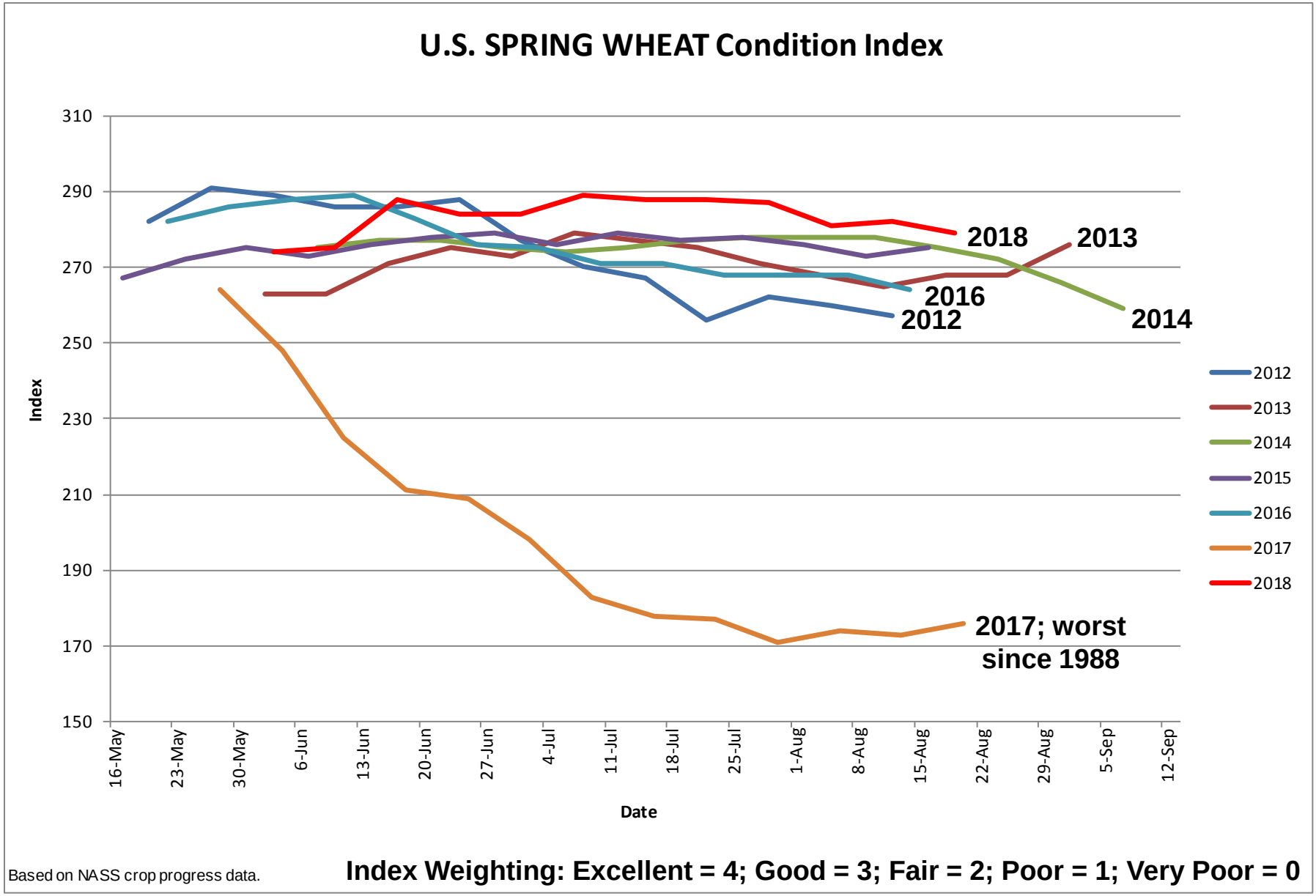


- Major areas combined account for 75% of the total national production.
- Major and minor areas combined account for 99% of the total national production.
- Major and minor areas and state production percentages are derived from NASS survey data from 2010 to 2014.

Spring wheat crop calendar for most of the United States

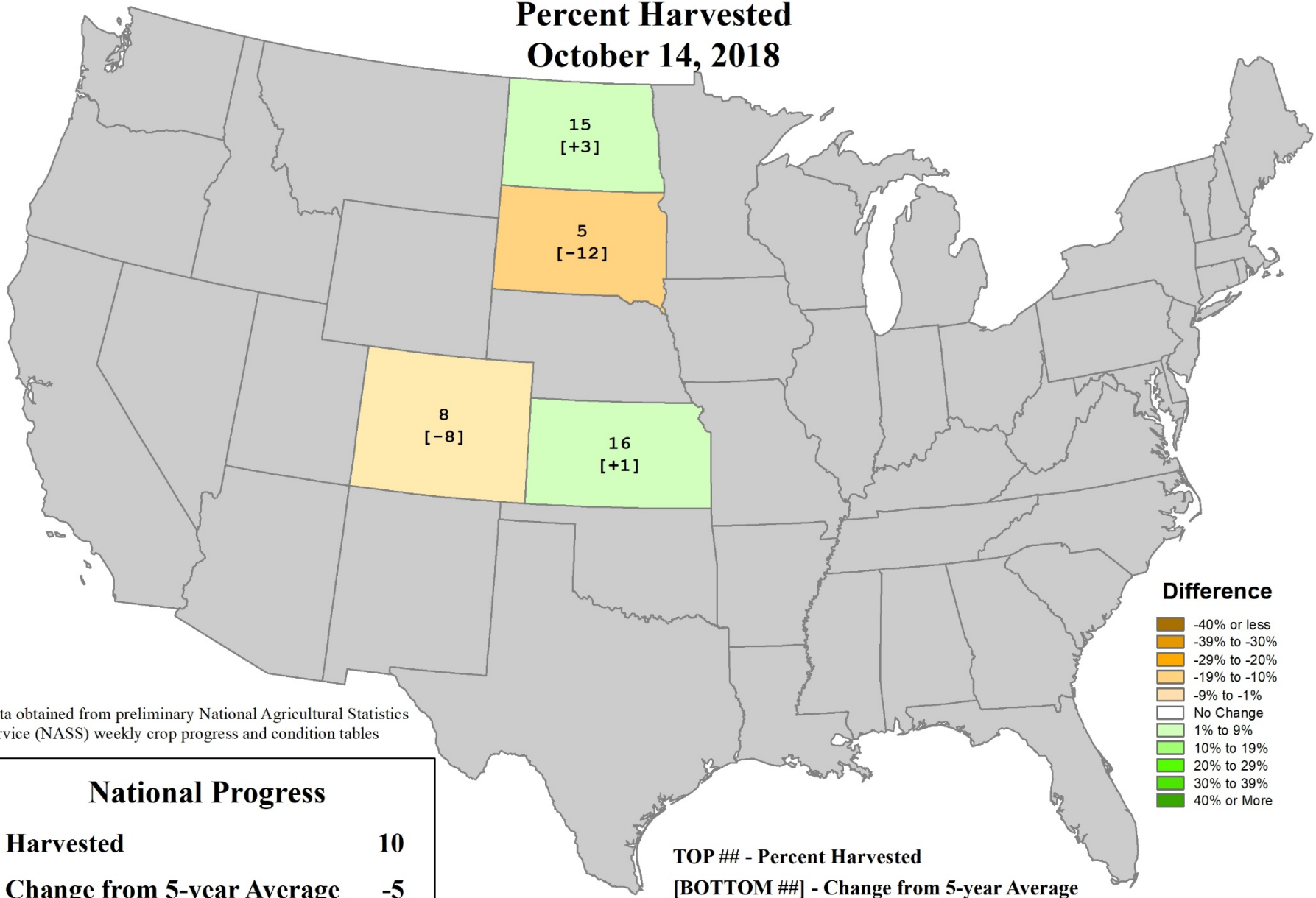


The crop calendar was developed using NASS crop progress data from 2010-2014. This calendar illustrates, on average, the dates when national progress advanced from 10 to 90 percent.


U.S. SPRING WHEAT Condition Index
Index
310
290
270
250
230
210
190
170
150
16-May
23-May
30-May
6-Jun
13-Jun
20-Jun
27-Jun
4-Jul
11-Jul
18-Jul
25-Jul
1-Aug
8-Aug
15-Aug
22-Aug
29-Aug
5-Sep
12-Sep
Date
2018
2013
2016
2012
2014
2017; worst since 1988
2012
2013
2014
2015
2016
2017
2018
Based on NASS crop progress data.
Index Weighting: Excellent = 4; Good = 3; Fair = 2; Poor = 1; Very Poor = 0

U.S. Sunflowers Progress

Percent Harvested
October 14, 2018



Data obtained from preliminary National Agricultural Statistics Service (NASS) weekly crop progress and condition tables

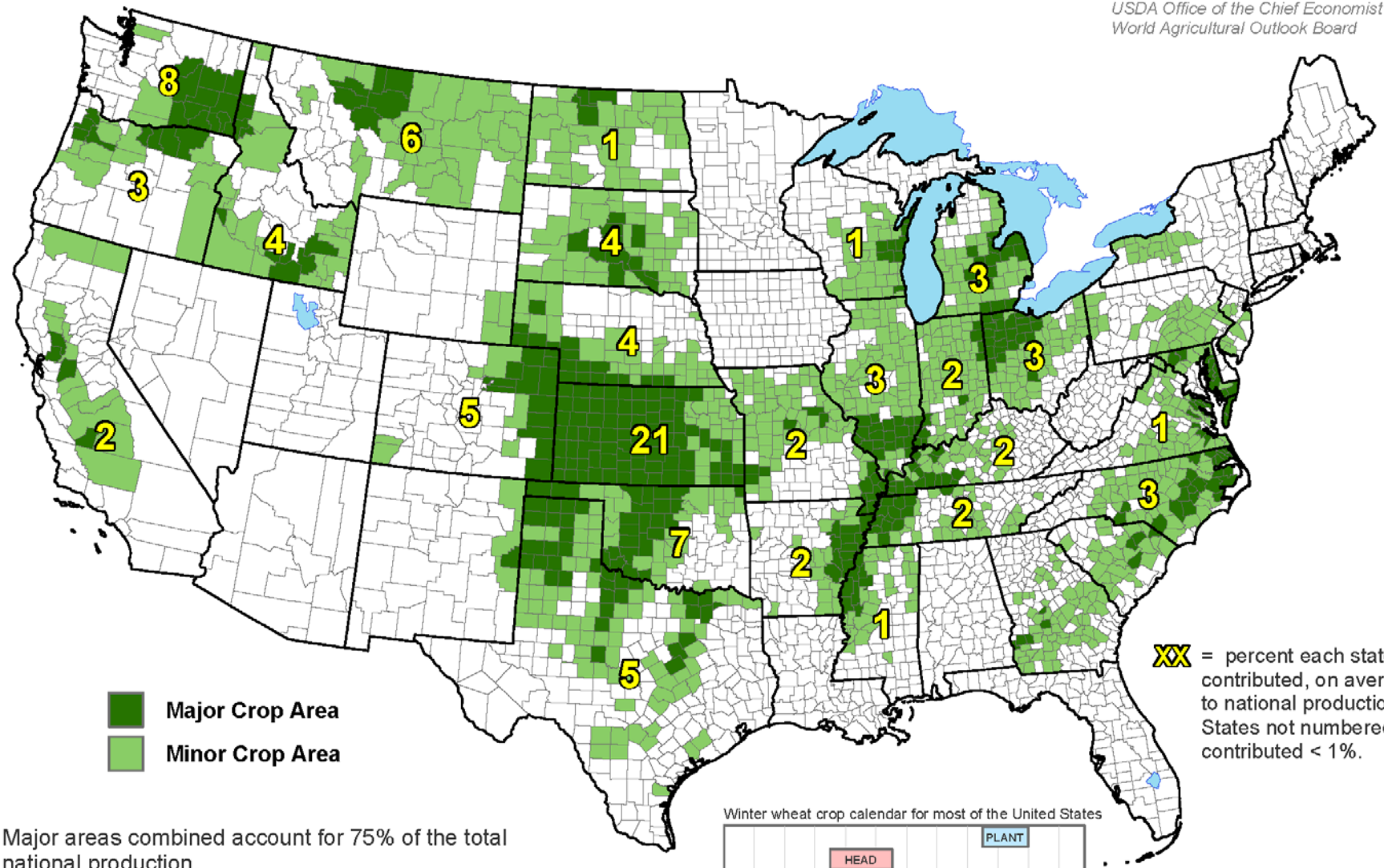
National Progress	
Harvested	10
Change from 5-year Average	-5

USDA Agricultural Weather Assessments
World Agricultural Outlook Board

United States: Winter Wheat

United States Department of Agriculture

This product was prepared by the USDA Office of the Chief Economist World Agricultural Outlook Board



XX = percent each state contributed, on average, to national production. States not numbered contributed < 1%.

- Major areas combined account for 75% of the total national production.
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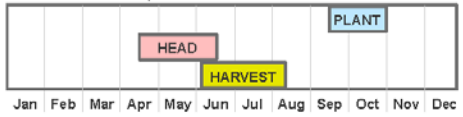
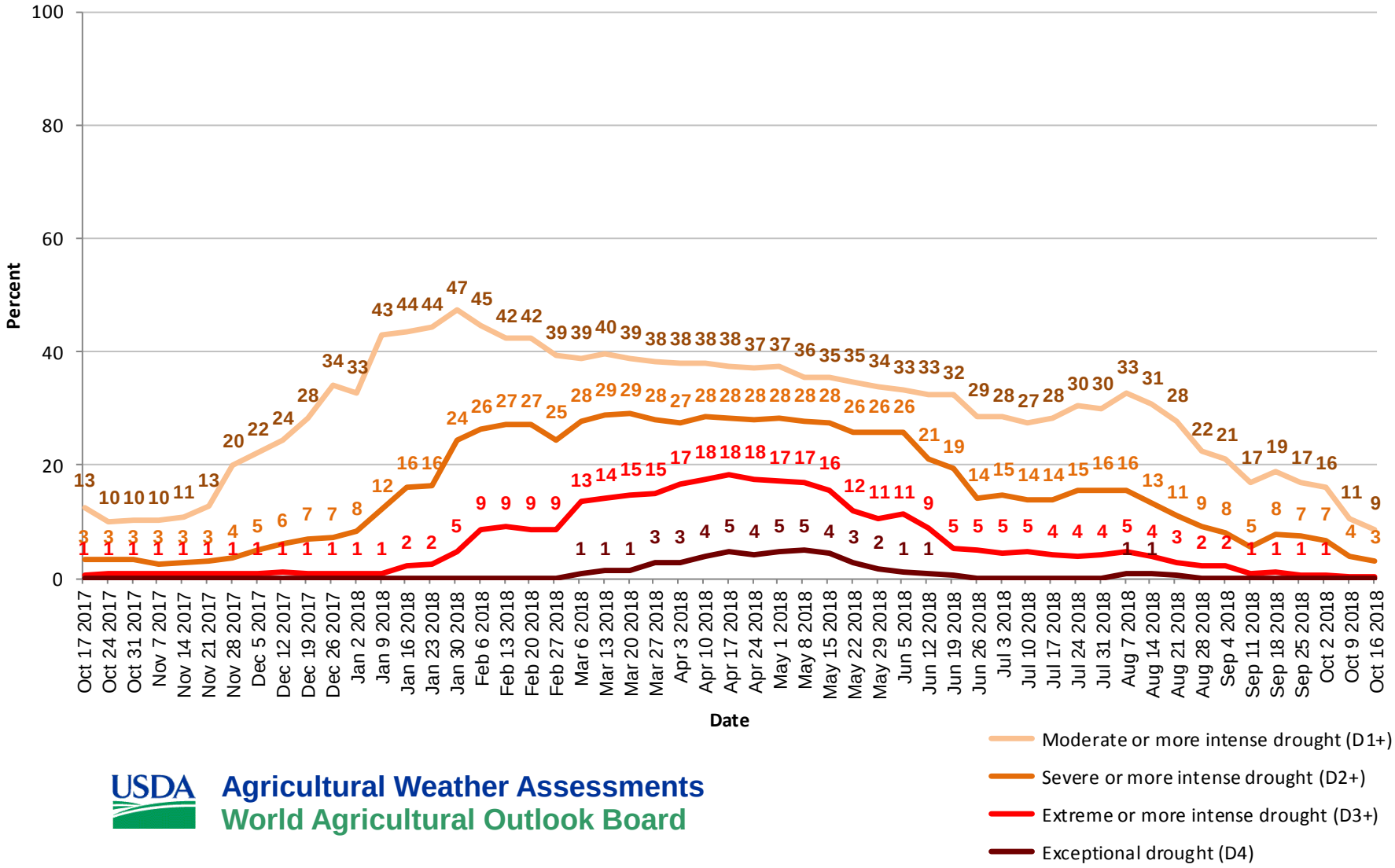
- Major and minor areas and state production percentages are derived from NASS survey data from 2010 to 2014.

Winter wheat crop calendar for most of the United States



The crop calendar was developed using NASS crop progress data from 2010-2014. This calendar illustrates, on average, the dates when national progress advanced from 10 to 90 percent.

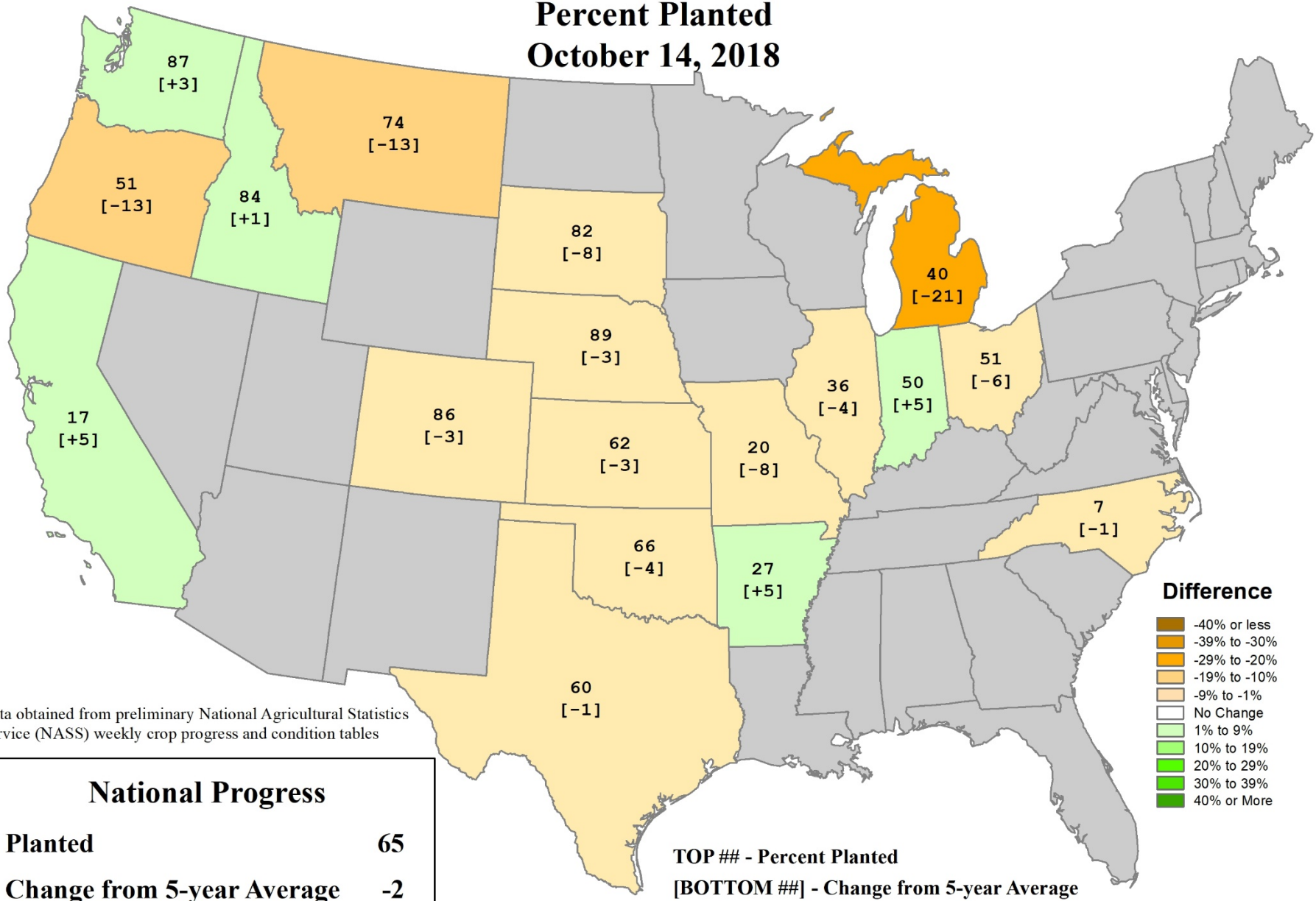
United States Winter Wheat Areas Located in Drought



USDA Agricultural Weather Assessments
World Agricultural Outlook Board

U.S. Winter Wheat Progress

Percent Planted
October 14, 2018



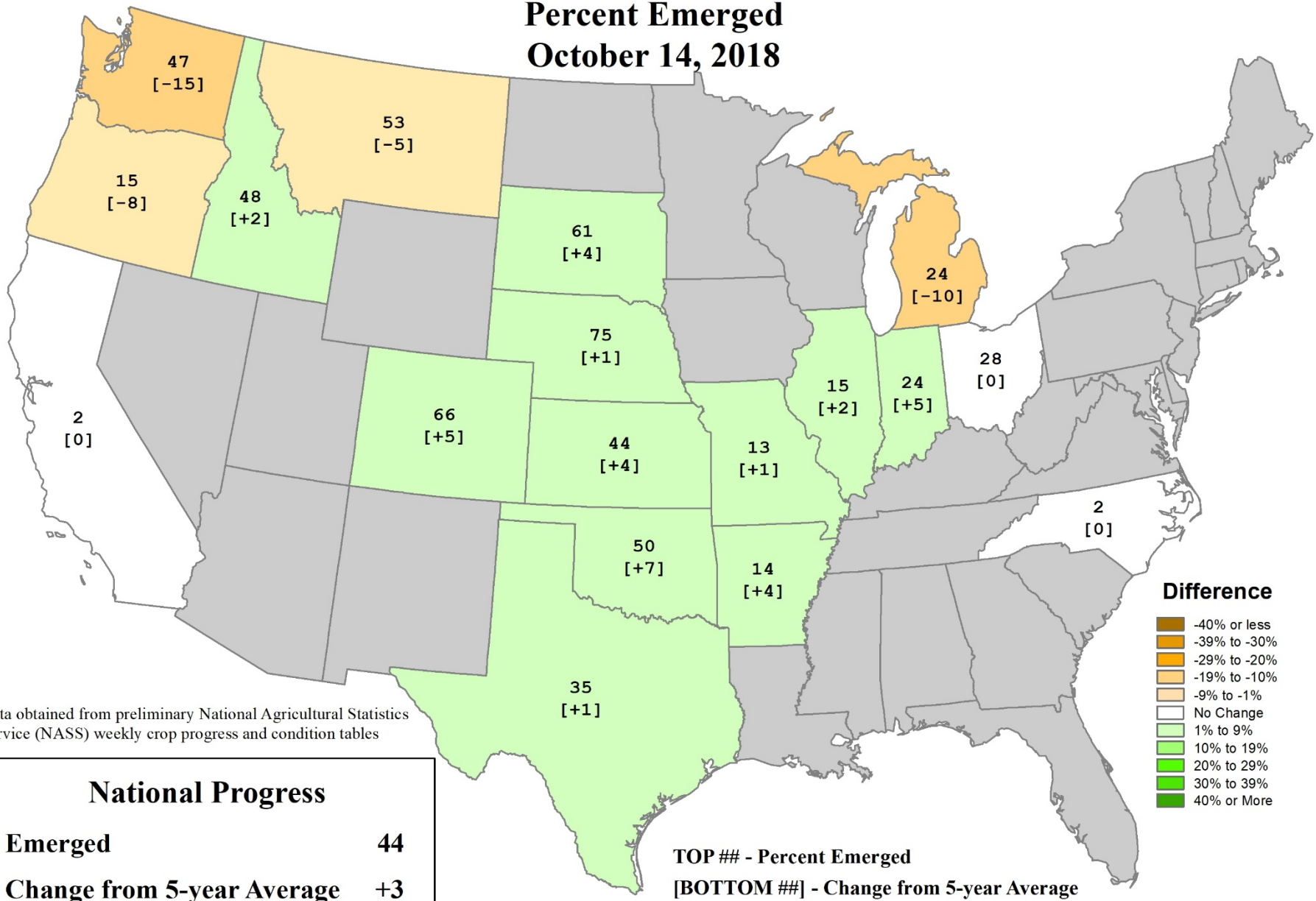
Data obtained from preliminary National Agricultural Statistics Service (NASS) weekly crop progress and condition tables

National Progress	
Planted	65
Change from 5-year Average	-2

USDA Agricultural Weather Assessments
World Agricultural Outlook Board

U.S. Winter Wheat Progress

Percent Emerged
October 14, 2018



Data obtained from preliminary National Agricultural Statistics Service (NASS) weekly crop progress and condition tables

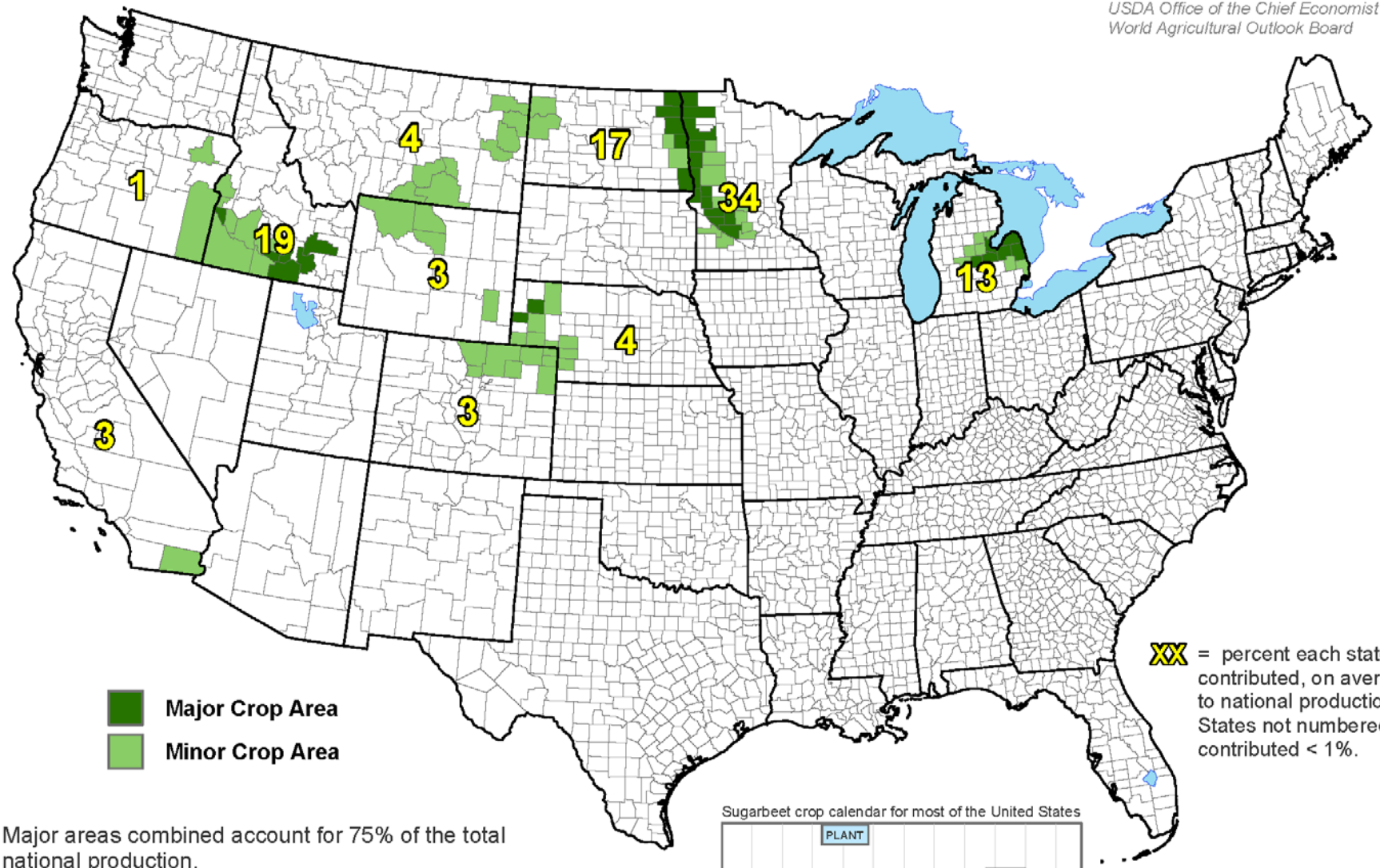
National Progress	
Emerged	44
Change from 5-year Average	+3

USDA Agricultural Weather Assessments
World Agricultural Outlook Board

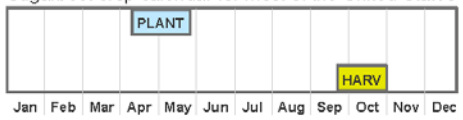
United States: Sugarbeets

United States Department of Agriculture

This product was prepared by the USDA Office of the Chief Economist World Agricultural Outlook Board



Sugarbeet crop calendar for most of the United States



The crop calendar was developed using NASS crop progress data from 2010-2014. This calendar illustrates, on average, the dates when national progress advanced from 10 to 90 percent.

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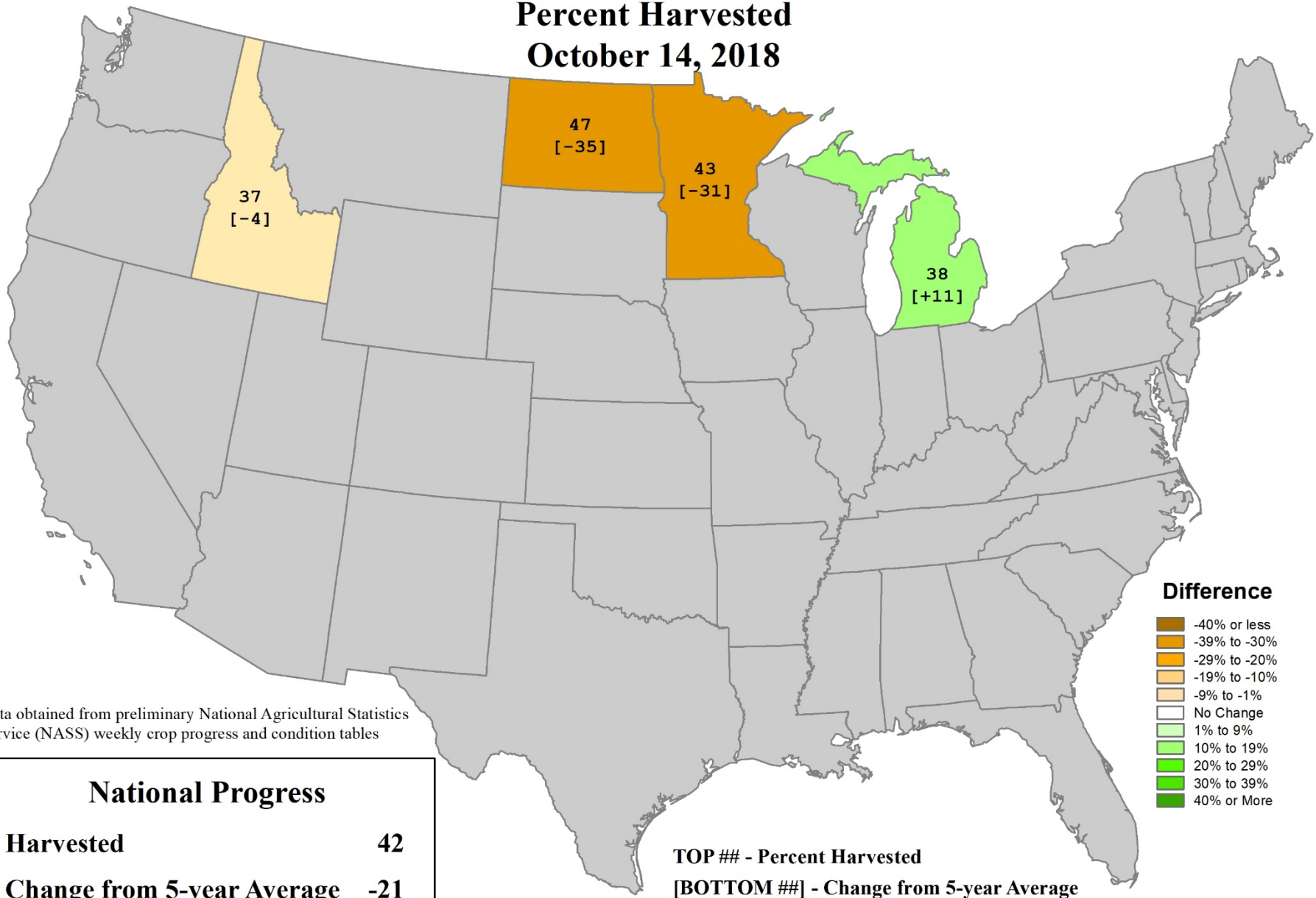
U.S. Sugarbeets Progress

Percent Harvested
October 14, 2018



Data obtained from preliminary National Agricultural Statistics Service (NASS) weekly crop progress and condition tables

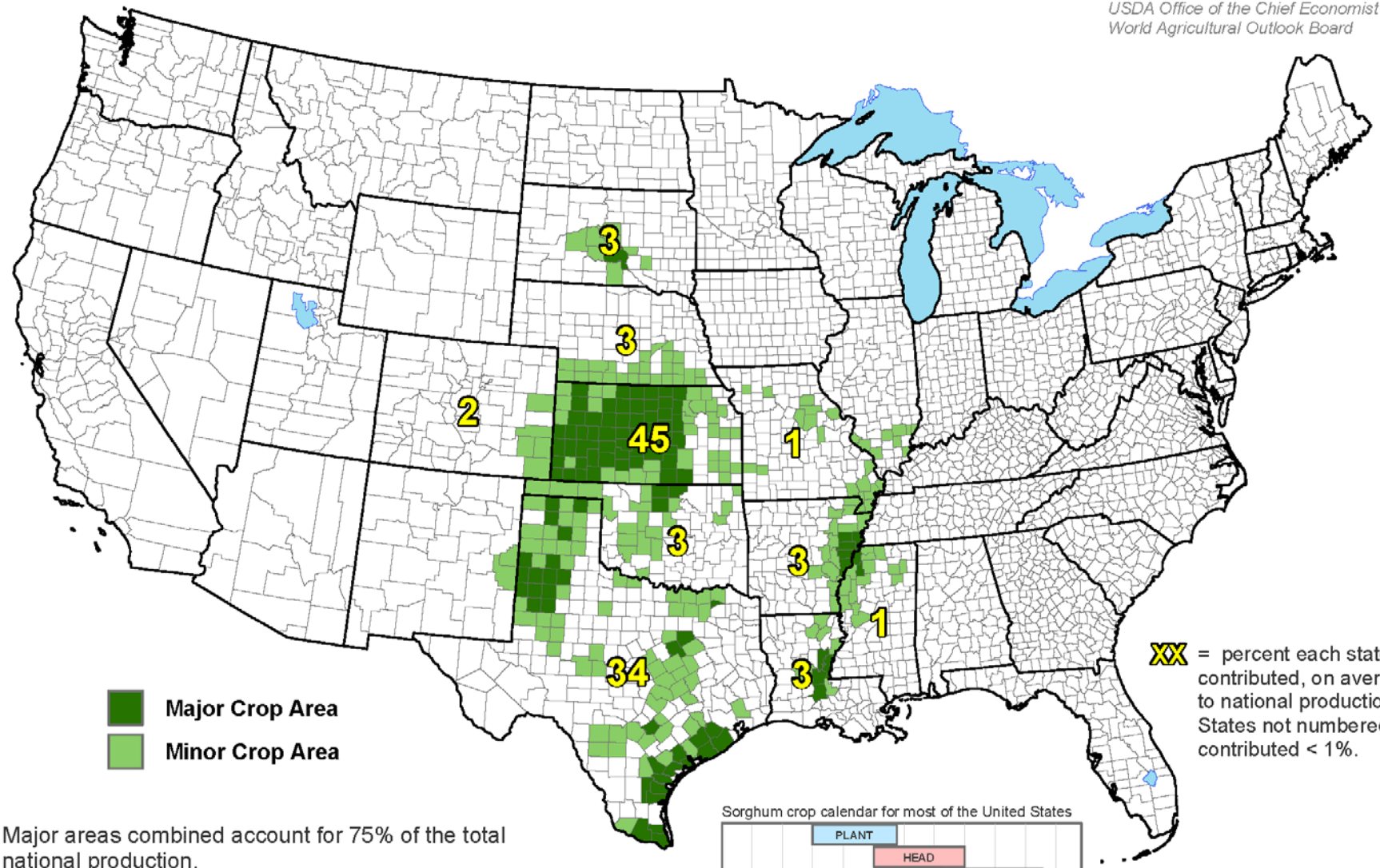
National Progress	
Harvested	42
Change from 5-year Average	-21

USDA Agricultural Weather Assessments
World Agricultural Outlook Board

United States: Sorghum

USDA United States Department of Agriculture

This product was prepared by the USDA Office of the Chief Economist World Agricultural Outlook Board



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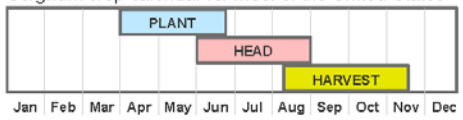
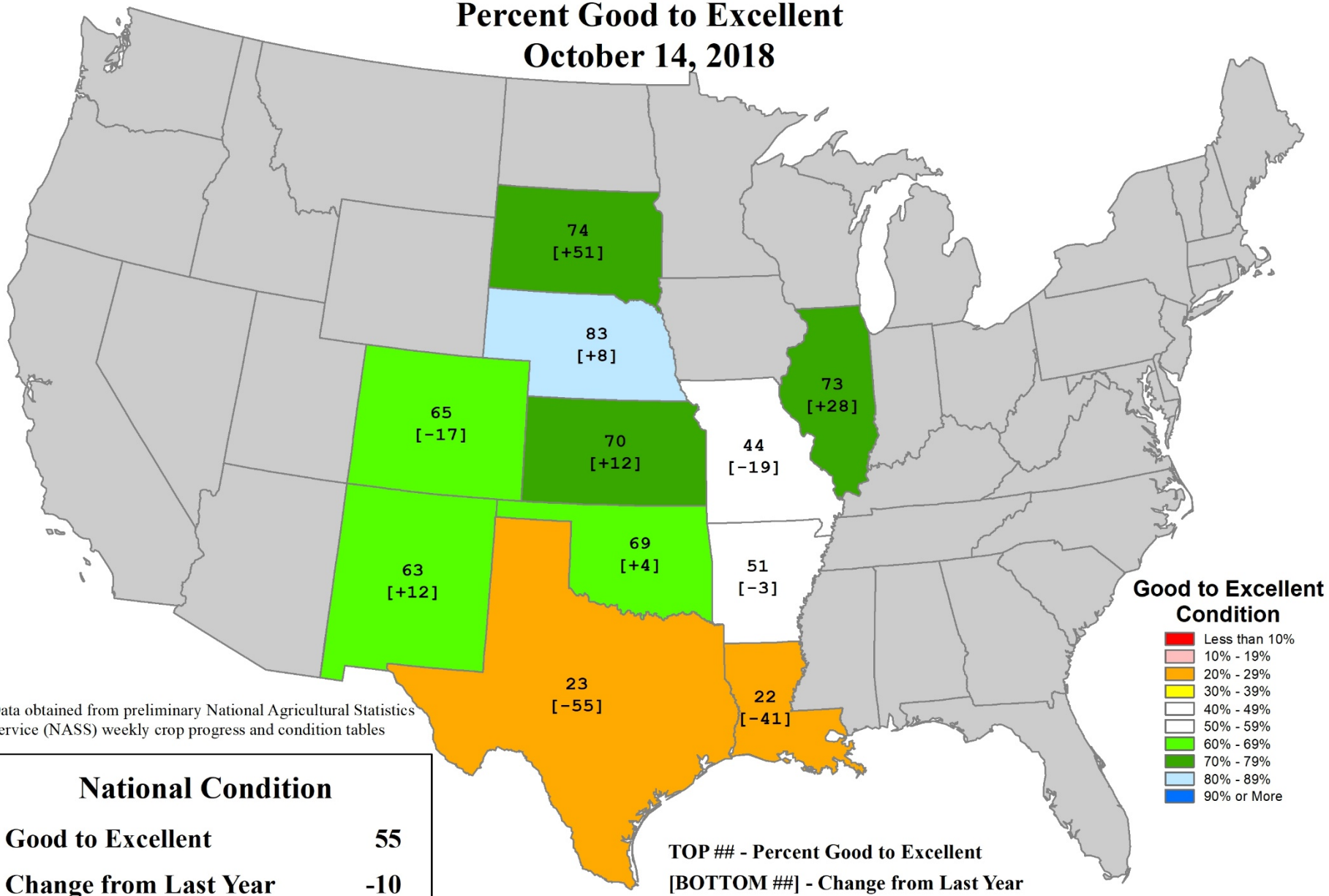
Sorghum crop calendar for most of the United States



The crop calendar was developed using NASS crop progress data from 2010-2014. This calendar illustrates, on average, the dates when national progress advanced from 10 to 90 percent.

U.S. Sorghum Conditions

Percent Good to Excellent
October 14, 2018



Data obtained from preliminary National Agricultural Statistics Service (NASS) weekly crop progress and condition tables

National Condition	
Good to Excellent	55
Change from Last Year	-10

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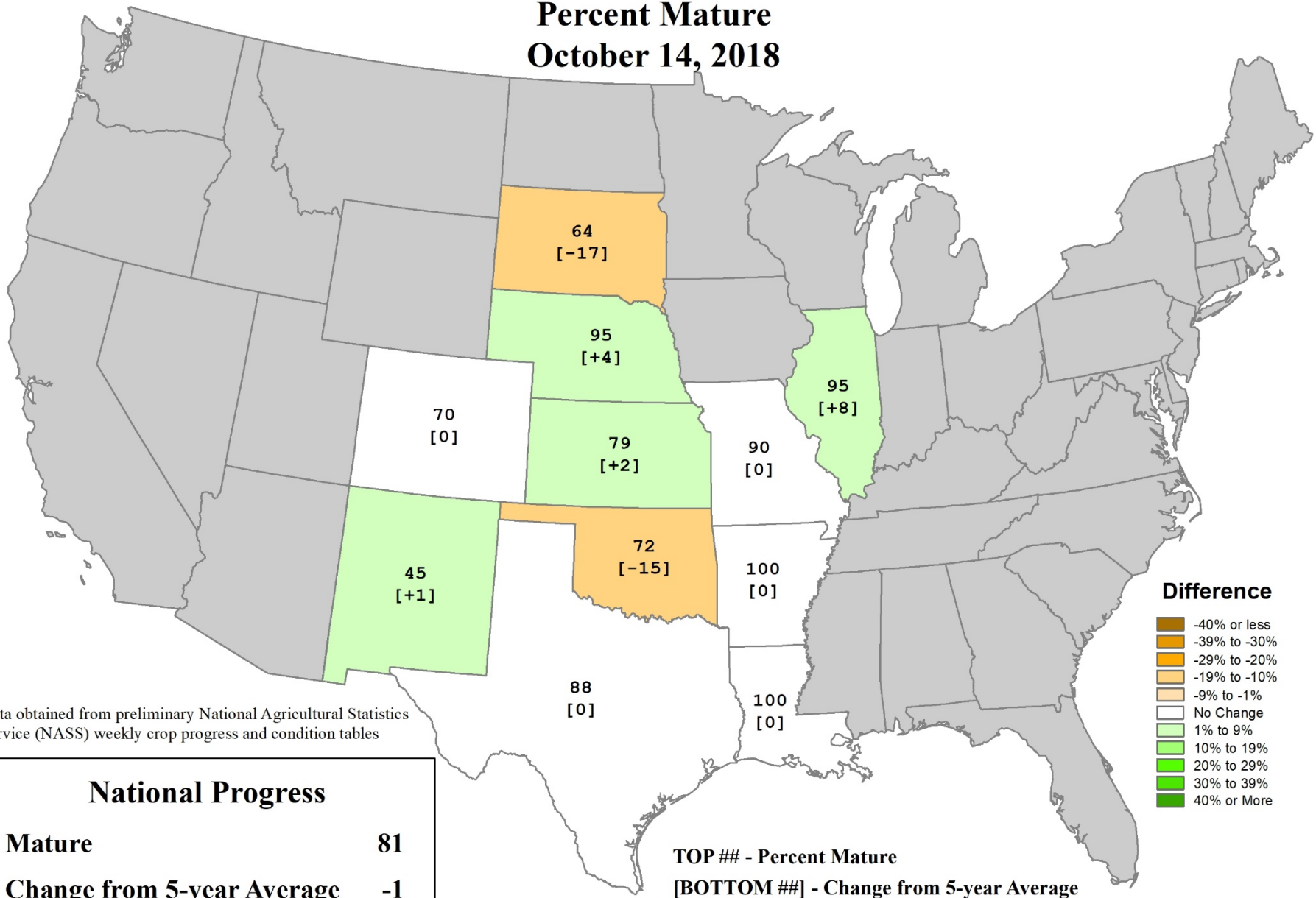
U.S. Sorghum Progress

Percent Mature
October 14, 2018



Data obtained from preliminary National Agricultural Statistics Service (NASS) weekly crop progress and condition tables

National Progress	
Mature	81
Change from 5-year Average	-1

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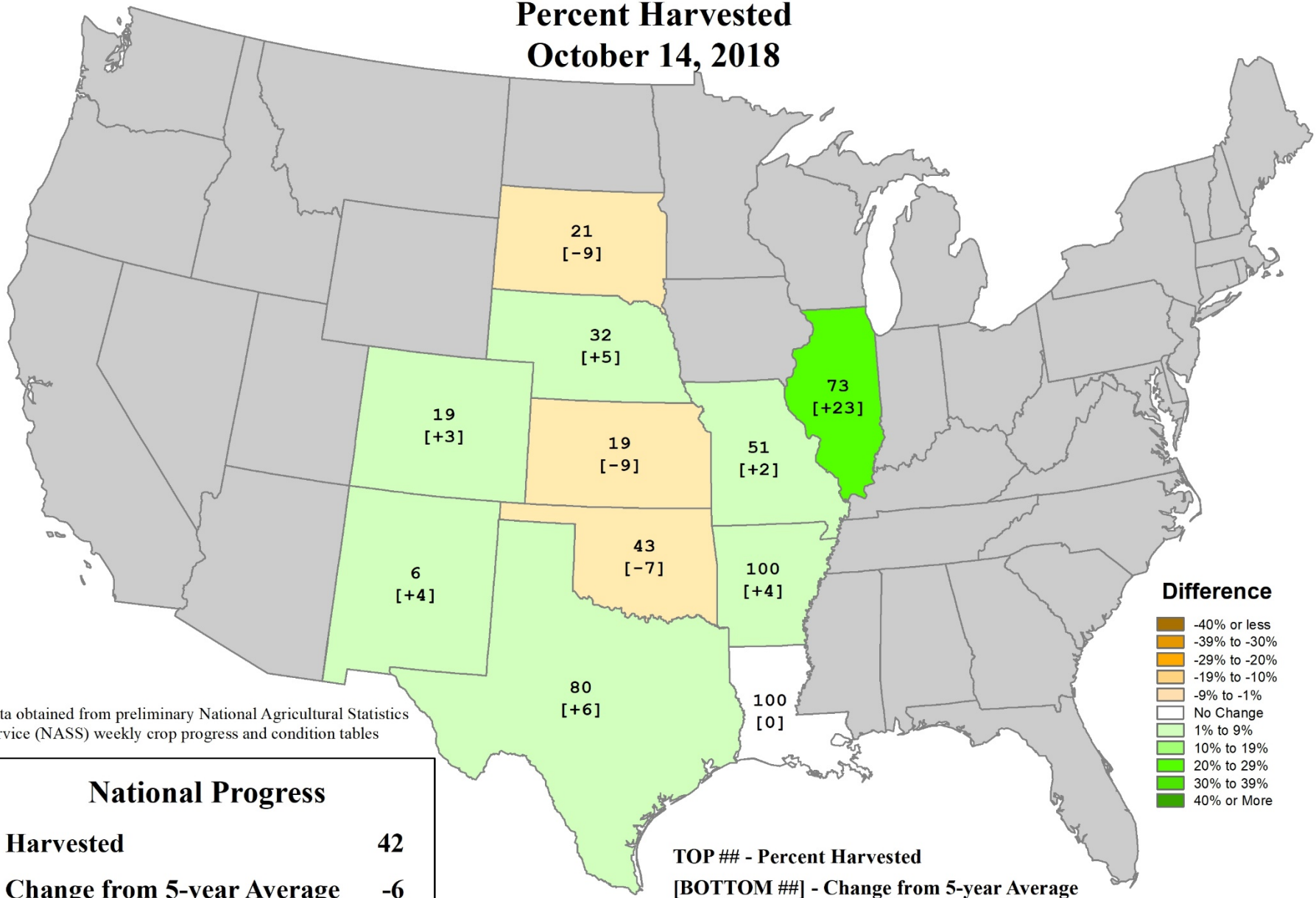
U.S. Sorghum Progress

Percent Harvested
October 14, 2018



Data obtained from preliminary National Agricultural Statistics Service (NASS) weekly crop progress and condition tables

National Progress	
Harvested	42
Change from 5-year Average	-6

TOP ## - Percent Harvested
[BOTTOM ##] - Change from 5-year Average

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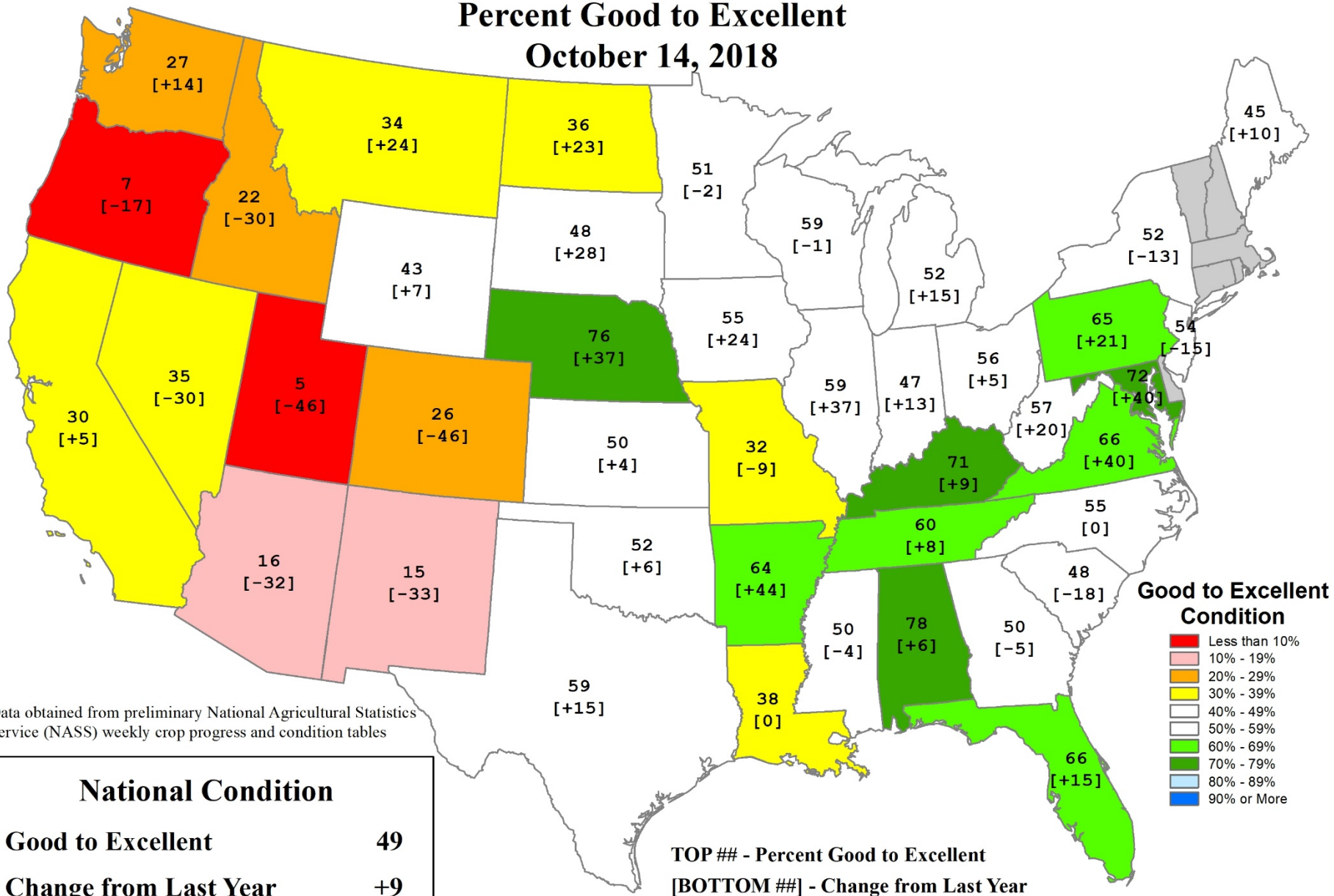
U.S. Pasture and Range Conditions

Percent Good to Excellent
October 14, 2018



Data obtained from preliminary National Agricultural Statistics Service (NASS) weekly crop progress and condition tables

National Condition	
Good to Excellent	49
Change from Last Year	+9

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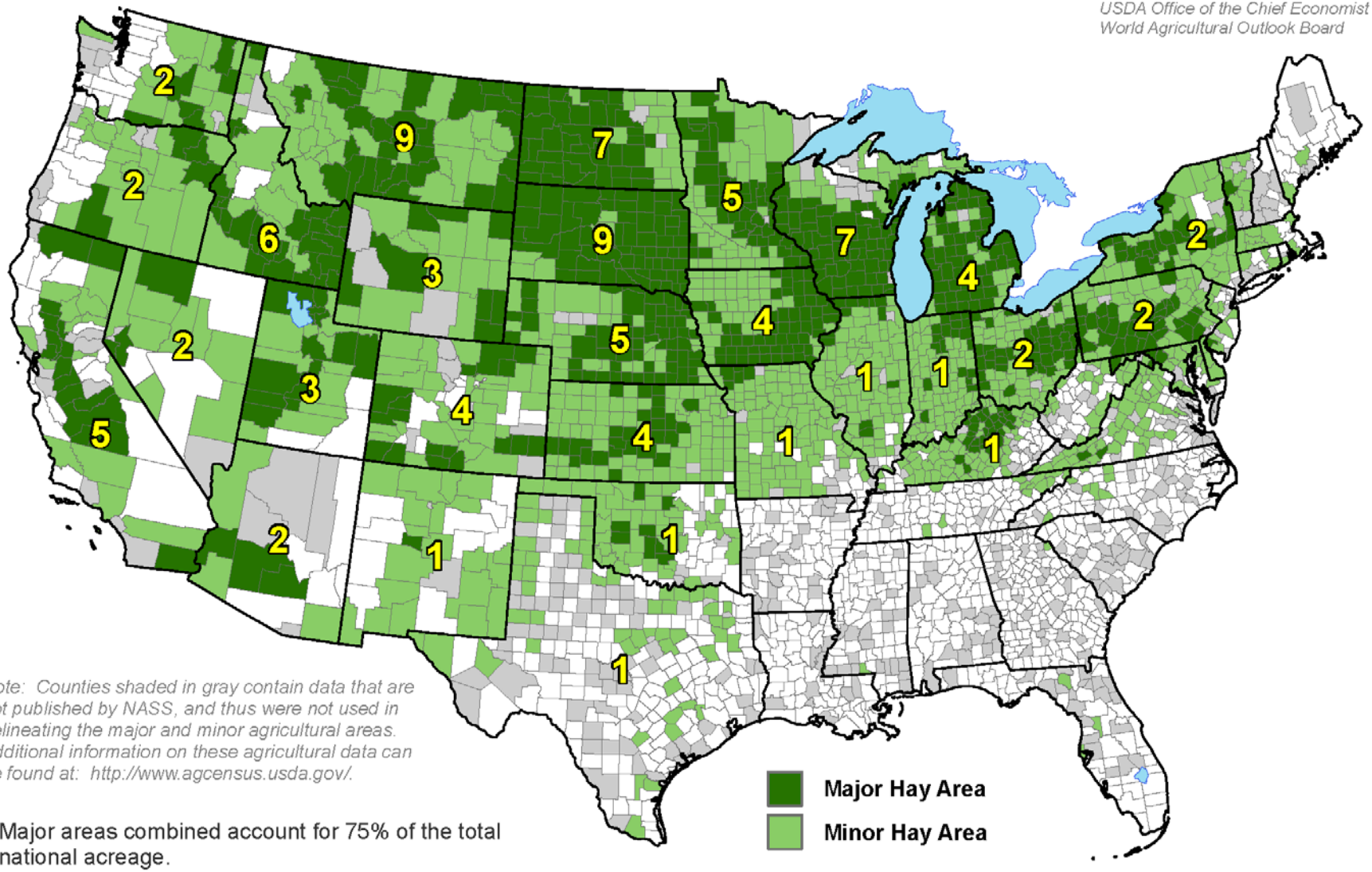
United States: Alfalfa Hay

USDA United States Department of Agriculture

This product was prepared by the USDA Office of the Chief Economist World Agricultural Outlook Board



Note: Counties shaded in gray contain data that are not published by NASS, and thus were not used in delineating the major and minor agricultural areas. Additional information on these agricultural data can be found at: http://www.agcensus.usda.gov/.

- Major areas combined account for 75% of the total national acreage.
- Major and minor areas combined account for 99% of the total national acreage.
- Major and minor areas and state acreage percentages are derived from NASS 2012 Census of Agriculture data.

Yellow numbers indicate the percent each state contributed to the total national acreage. States not numbered contributed less than 1% to the national total.

October 2018 Crop Production

Crop	Unit	October 2018	% Change From Previous Forecast	% Change From Previous Season
Alfalfa Hay				
Harvested	Mil Ac	17.4	NC	+4.8
Yield	Tons/Ac	3.43	+3.0	+3.3
Production	Mil Tons	59.5	+3.0	+8.1

USDA-NASS

Sunset from
Mackinac Island, MI
June 21, 2018
(photo by B. Rippey)

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