Central Region Climate Outlook
October 16, 2014

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AMERICAN ASSOCIATION OF STATE CLIMATOLOGISTS

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Agenda

- Current Conditions
- Regional Climate Updates
- Outlooks

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General Information

- **Providing climate services to the Central Region**
  - Collaboration Activity Between:
  - Collaboration with Dennis Todey (South Dakota State Climatologist), Jim Angel (Illinois State Climatologist), Doug Kluck and John Eise (NOAA), State Climatologists and the Midwest Regional Climate Center, High Plains Regional Climate Center, NOAAs Climate Prediction Center, Iowa State University, Brian Fuchs (National Drought Mitigation Center)

- **Next Climate/Drought Outlook Webinar**
  - November 20, 2014 with Dennis Todey (South Dakota State Climatologist)

- **Access to Future Climate Webinars and Information**
- http://www.drought.gov/drought/content/regional-programs/regional-drought-webinars

- **Past recorded presentations and slides can be found here:**
- *http://mrcc.isws.illinois.edu/webinars.htm*
- *http://www.hprcc.unl.edu/webinars.php*

- **There will be time for questions at the end**

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Current Conditions

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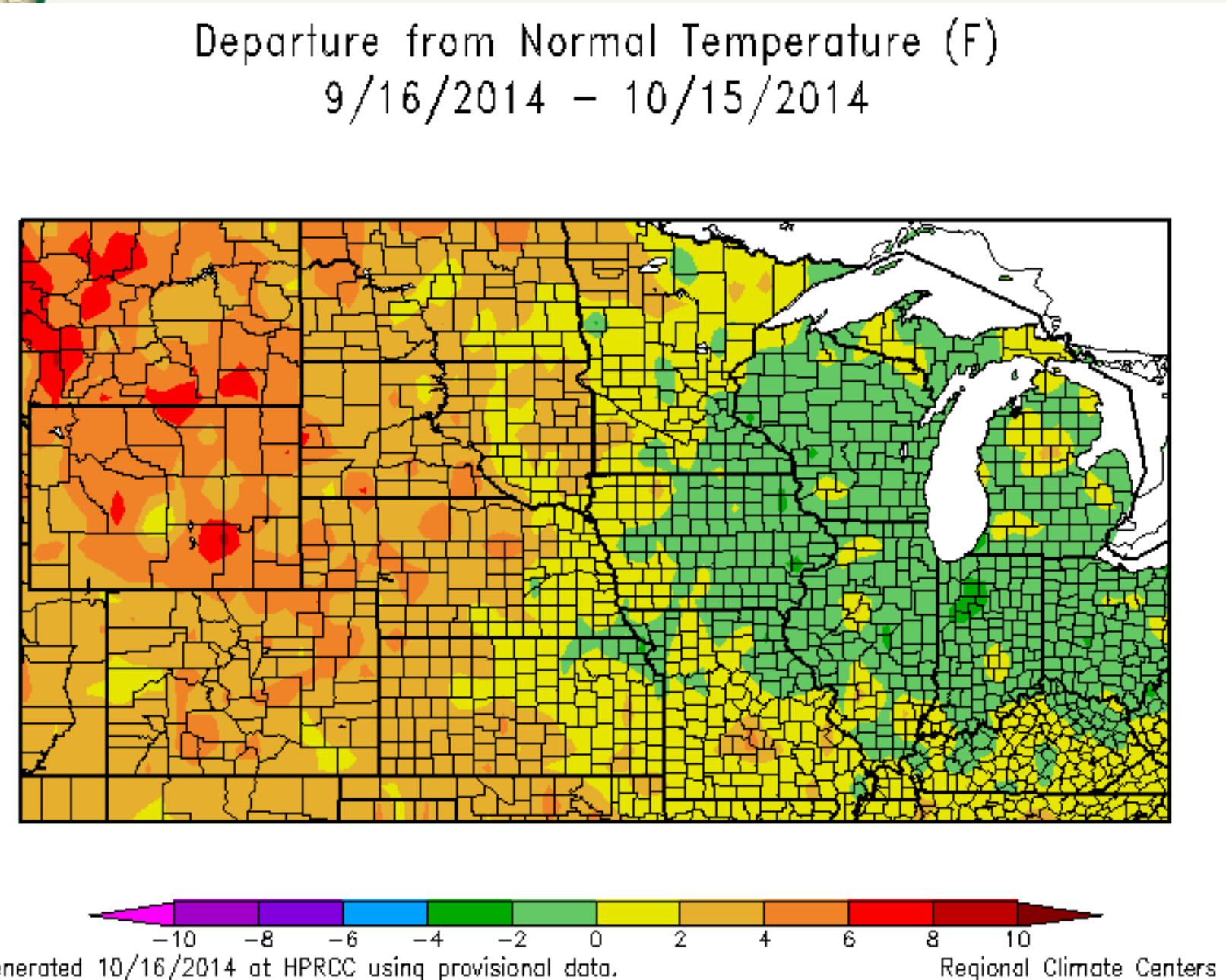
30-Day Temperature Departure



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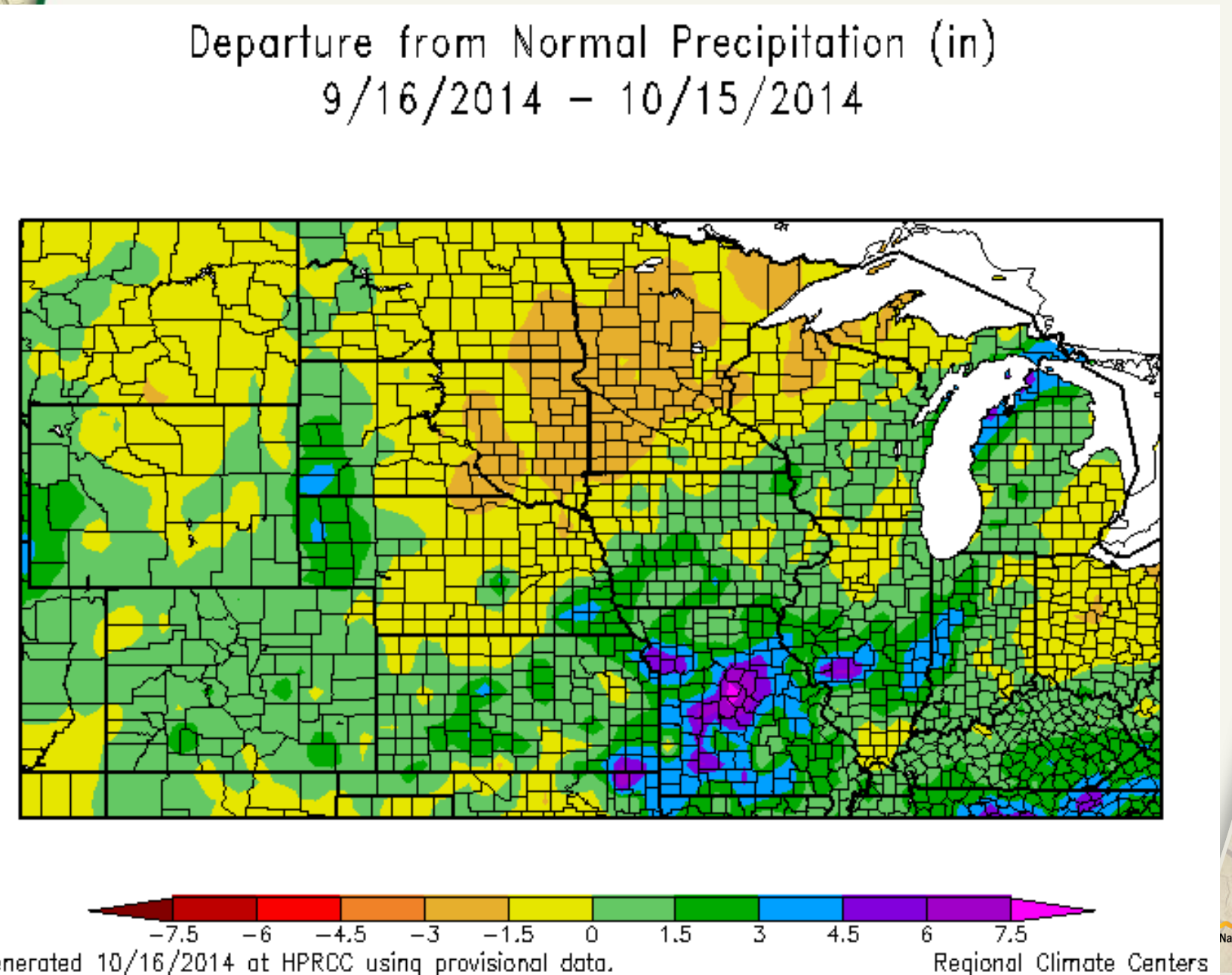
30-Day Precipitation Departure



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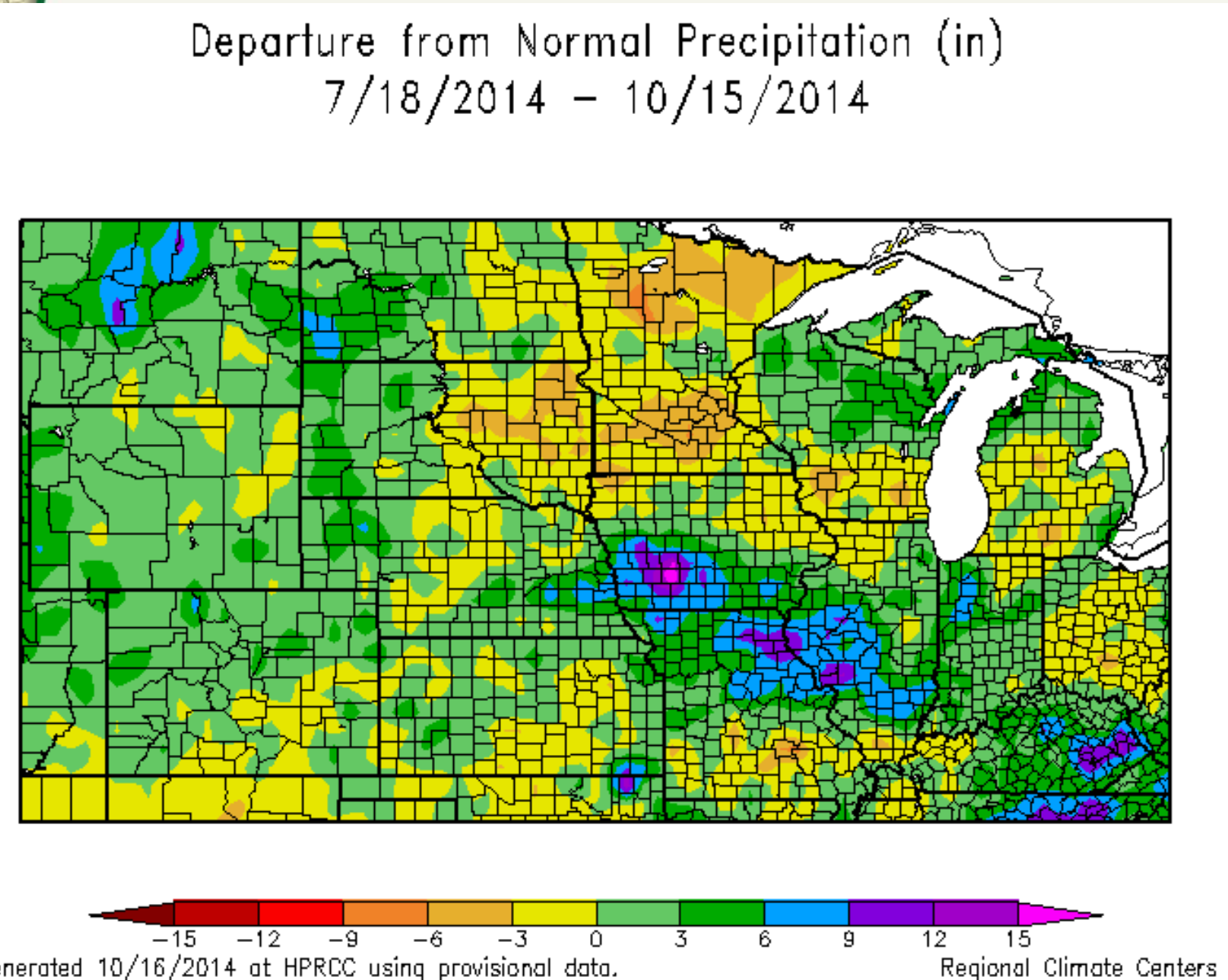
90-Day Precipitation Departure



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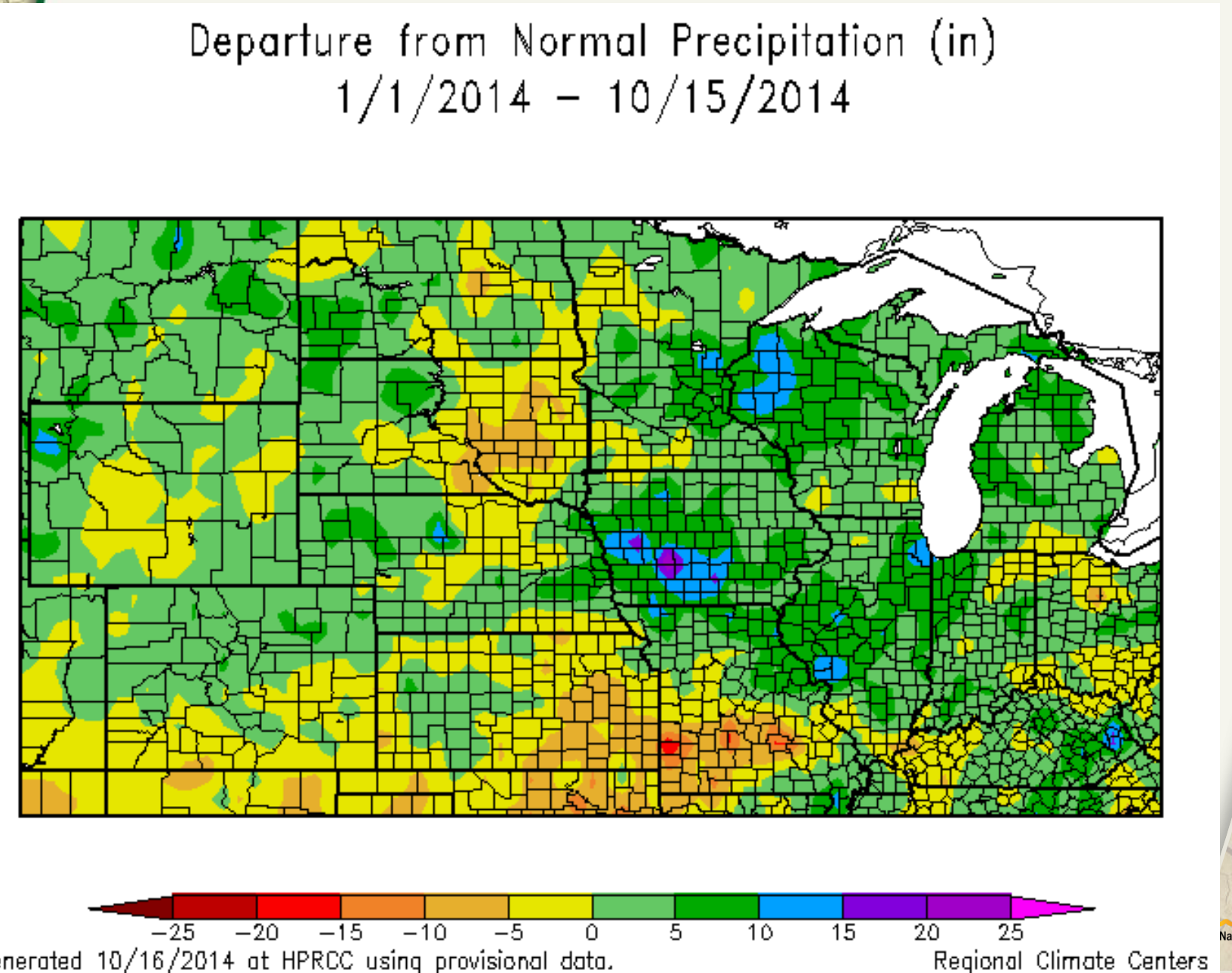
Year to Date Precipitation



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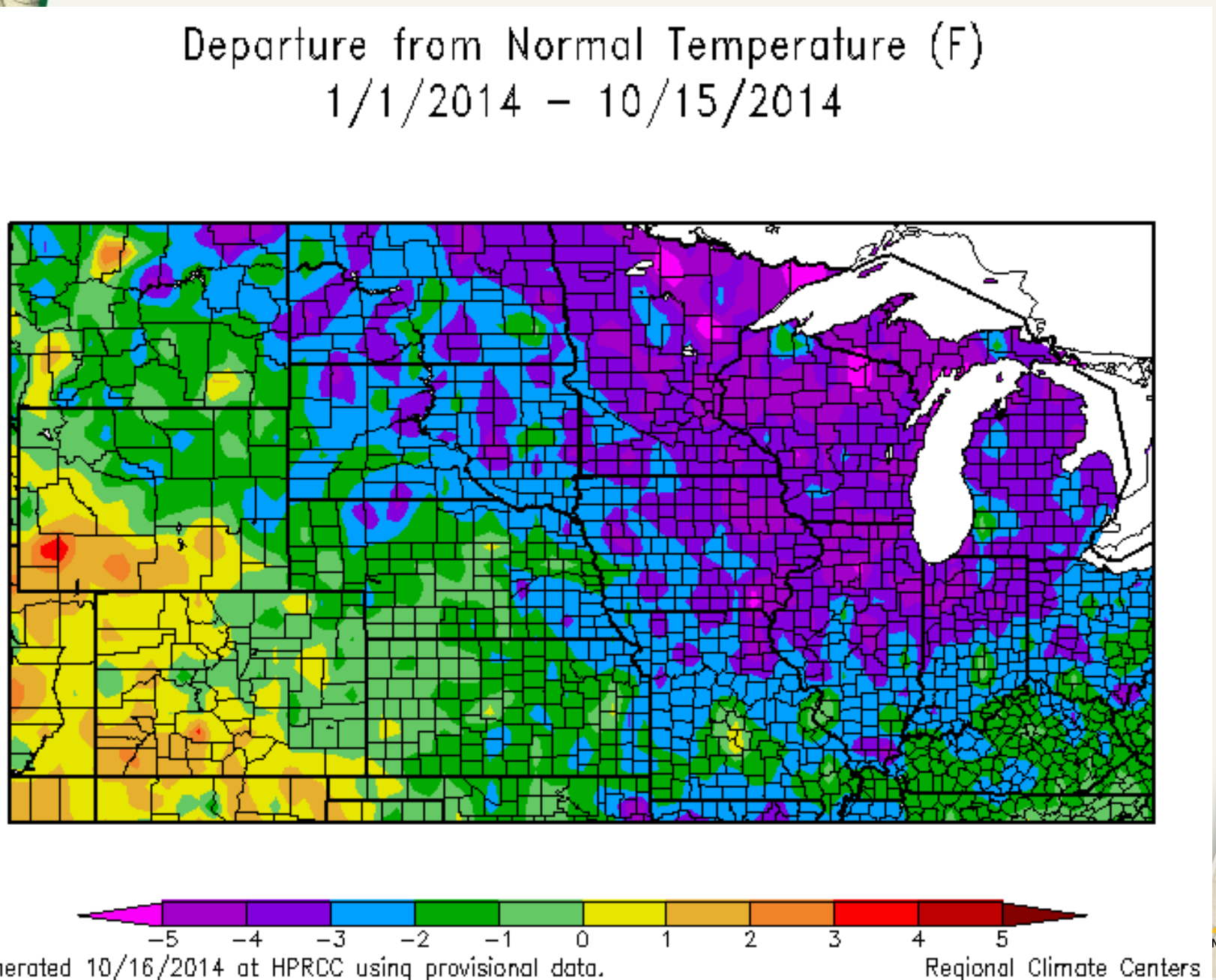
Year to Date Temperature



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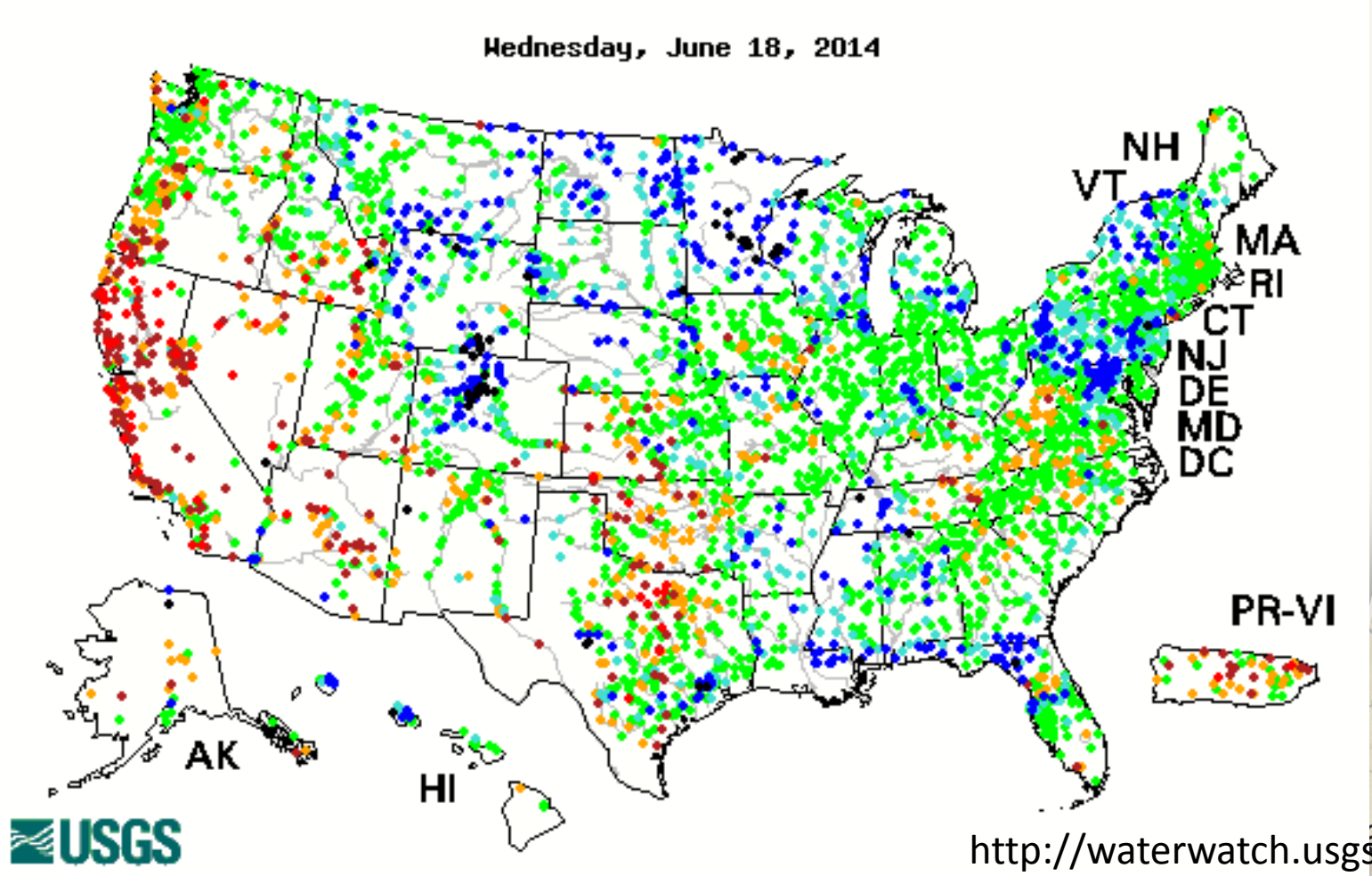
28-Day Average Streamflow



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

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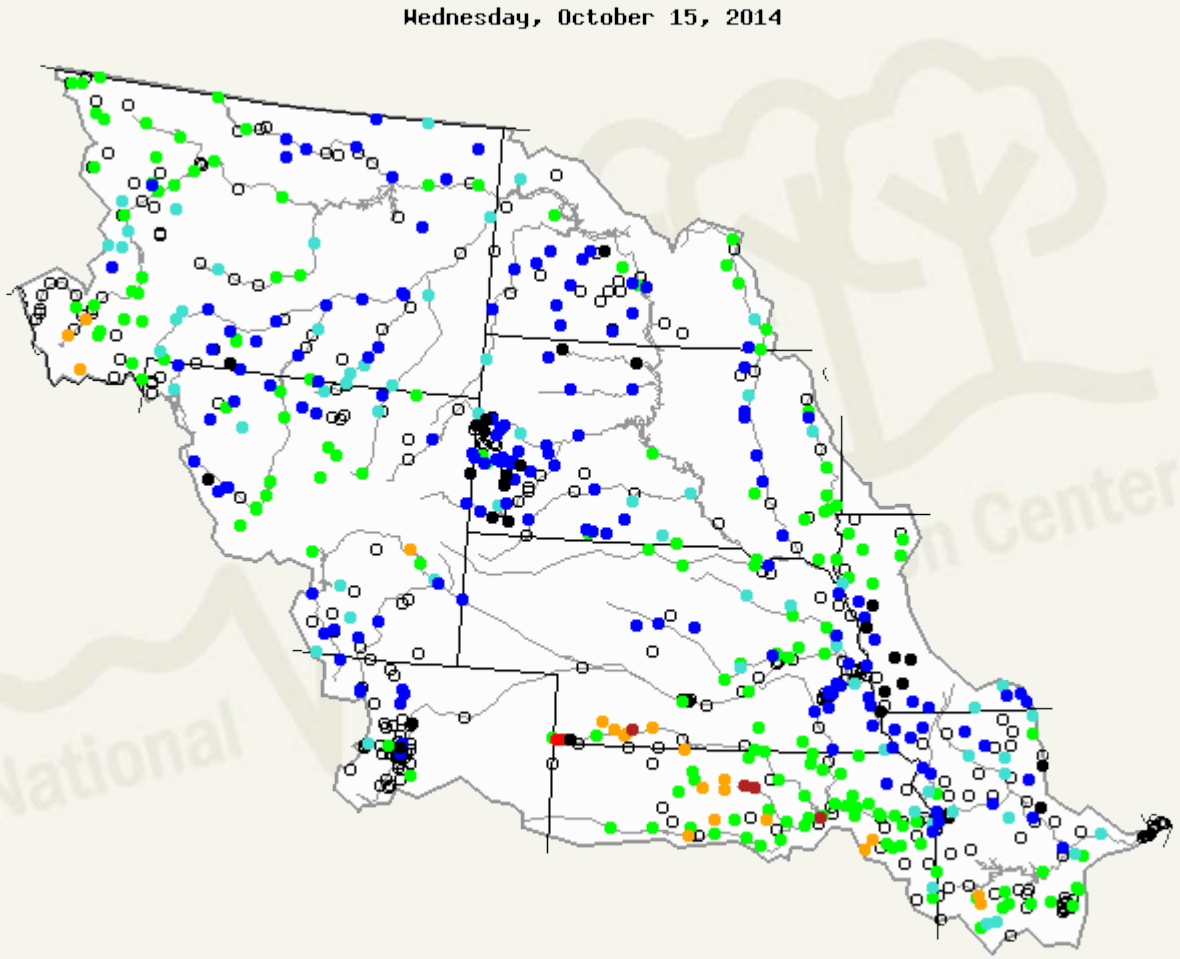
28-Day Average Streamflow



USGS

Explanation - Percentile classes						
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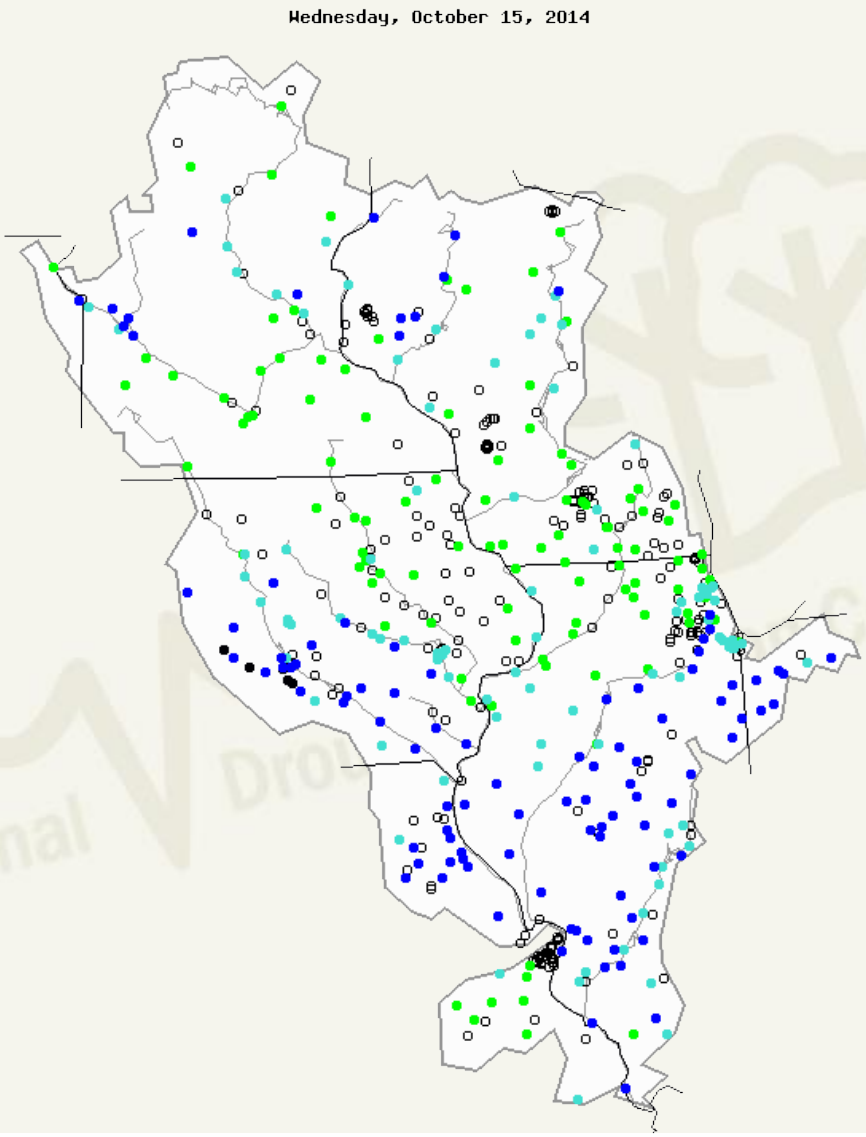
28-Day Average Streamflow



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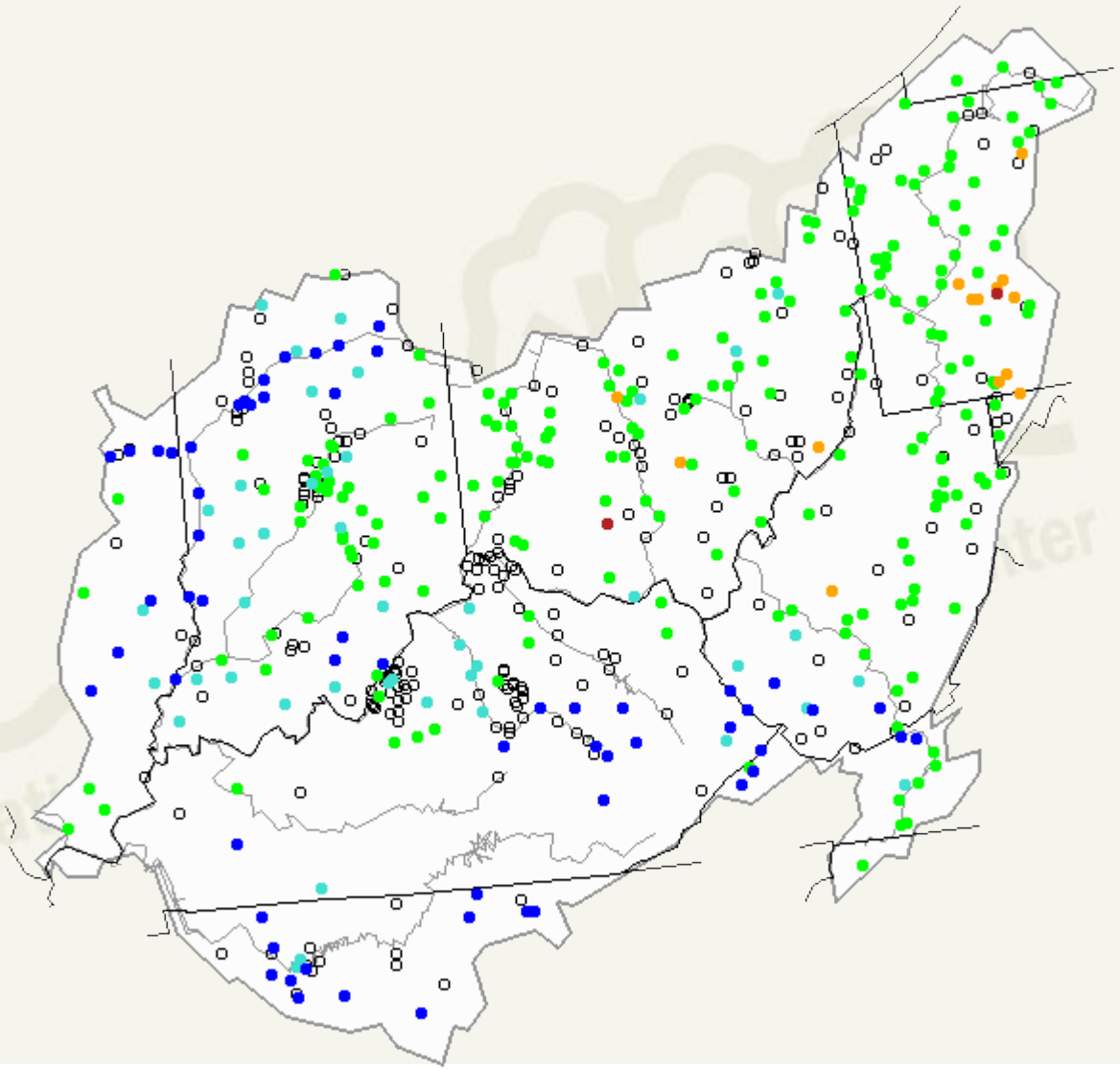
28-Day Average Streamflow

Wednesday, October 15, 2014



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Great Lakes

- Lake Michigan and Lake Huron water level may do something only achieved 4 times in the last 154 years: Achieving a high water mark in October.
  - Lake Michigan-Huron has *never had its high water mark in November.*

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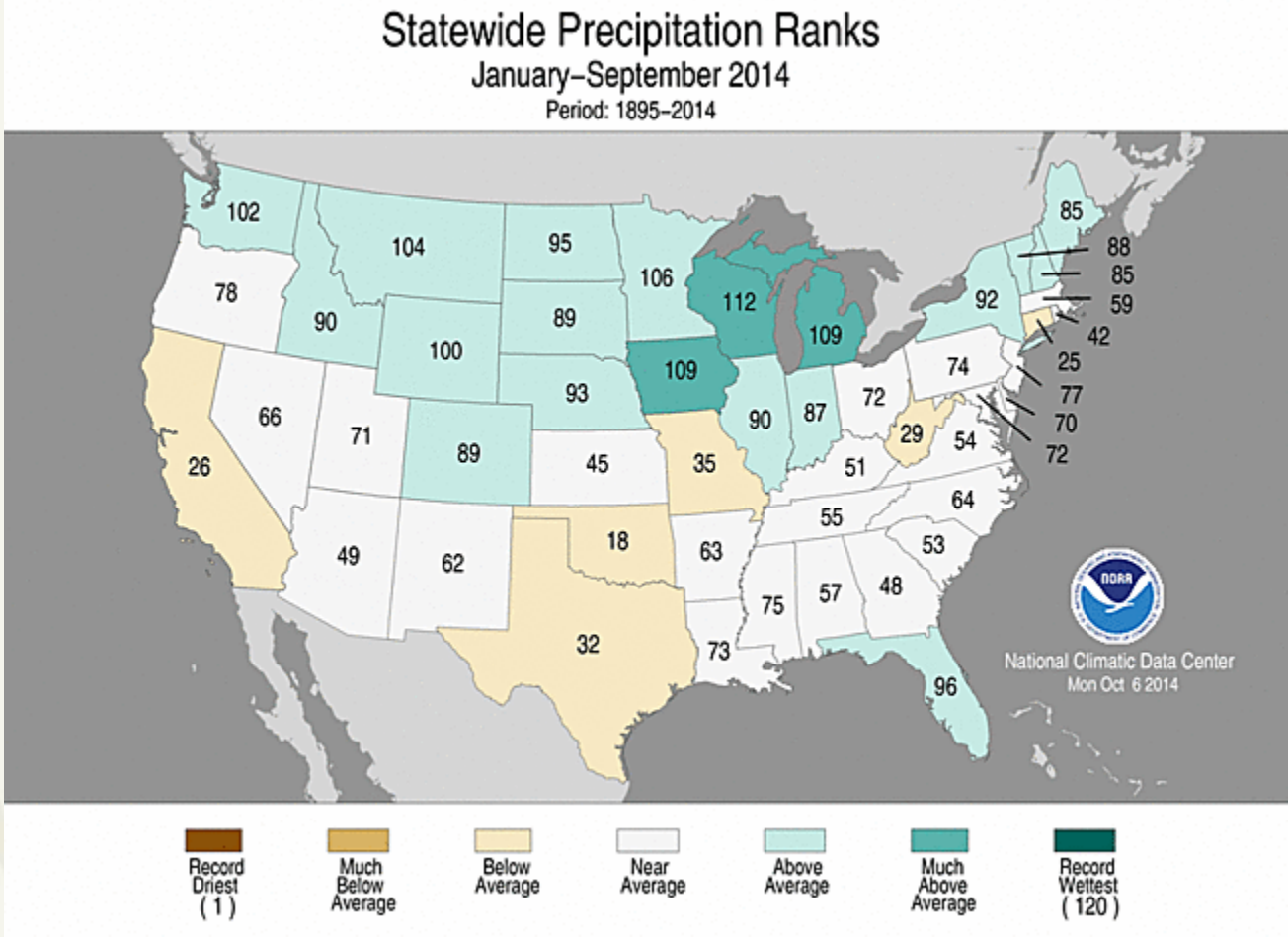
Near record precipitation in many of the states around the Great Lakes contributing to the high levels.



Whole Lake Surface Water Temperature - October 9

Lake	2014	2013	Normal
Lake Superior	47.6°	53.7°	51.1°
Lake Michigan	56.0°	62.1°	58.4°
Lake Huron	55.6°	60.6°	57.1°

Below normal temperatures for the Great Lakes:

http://www.glerl.noaa.gov/data/now/wlevels/levels.html

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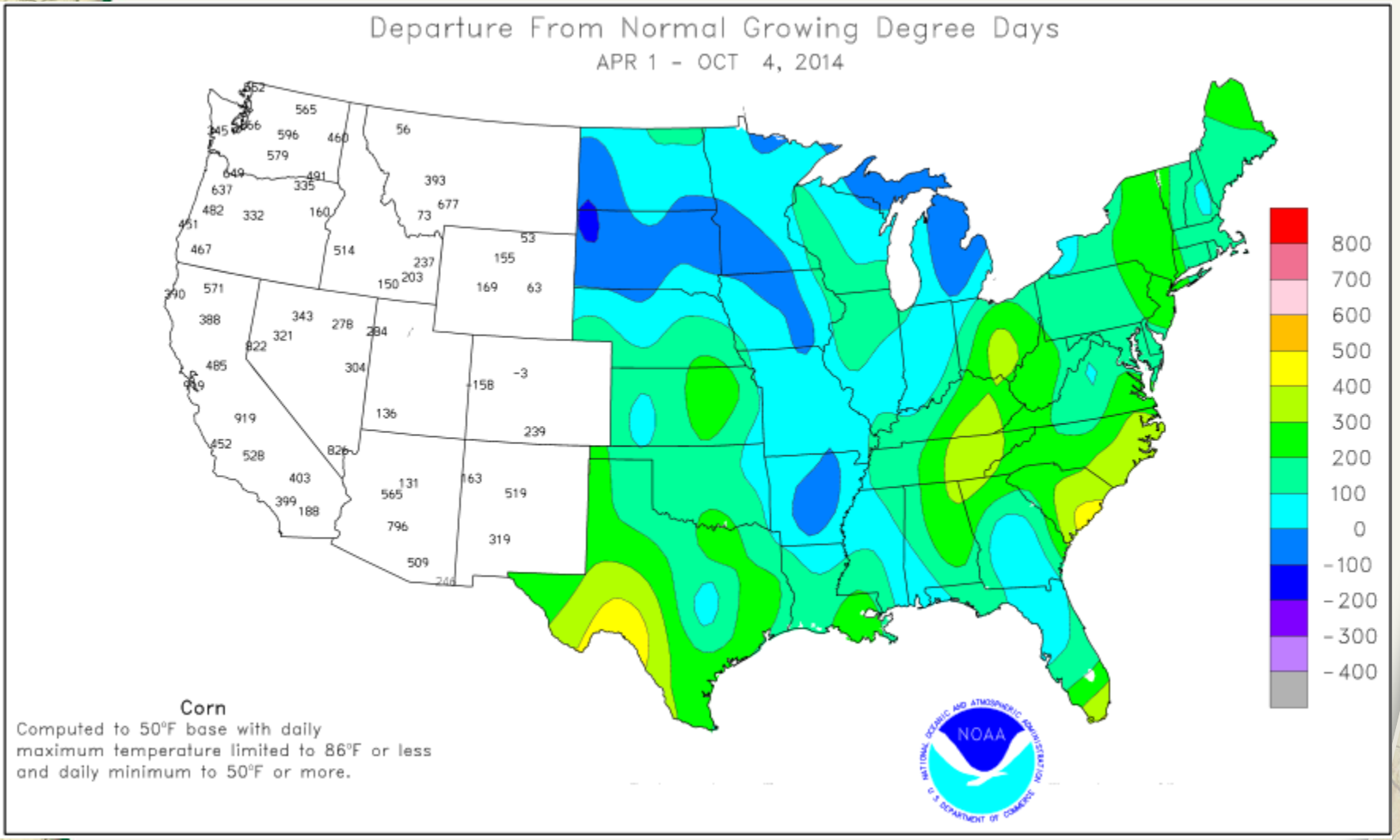
Agriculture



Below normal growing degree day (GDD) accumulation contributing to a delay in crops maturing and slowing down harvest

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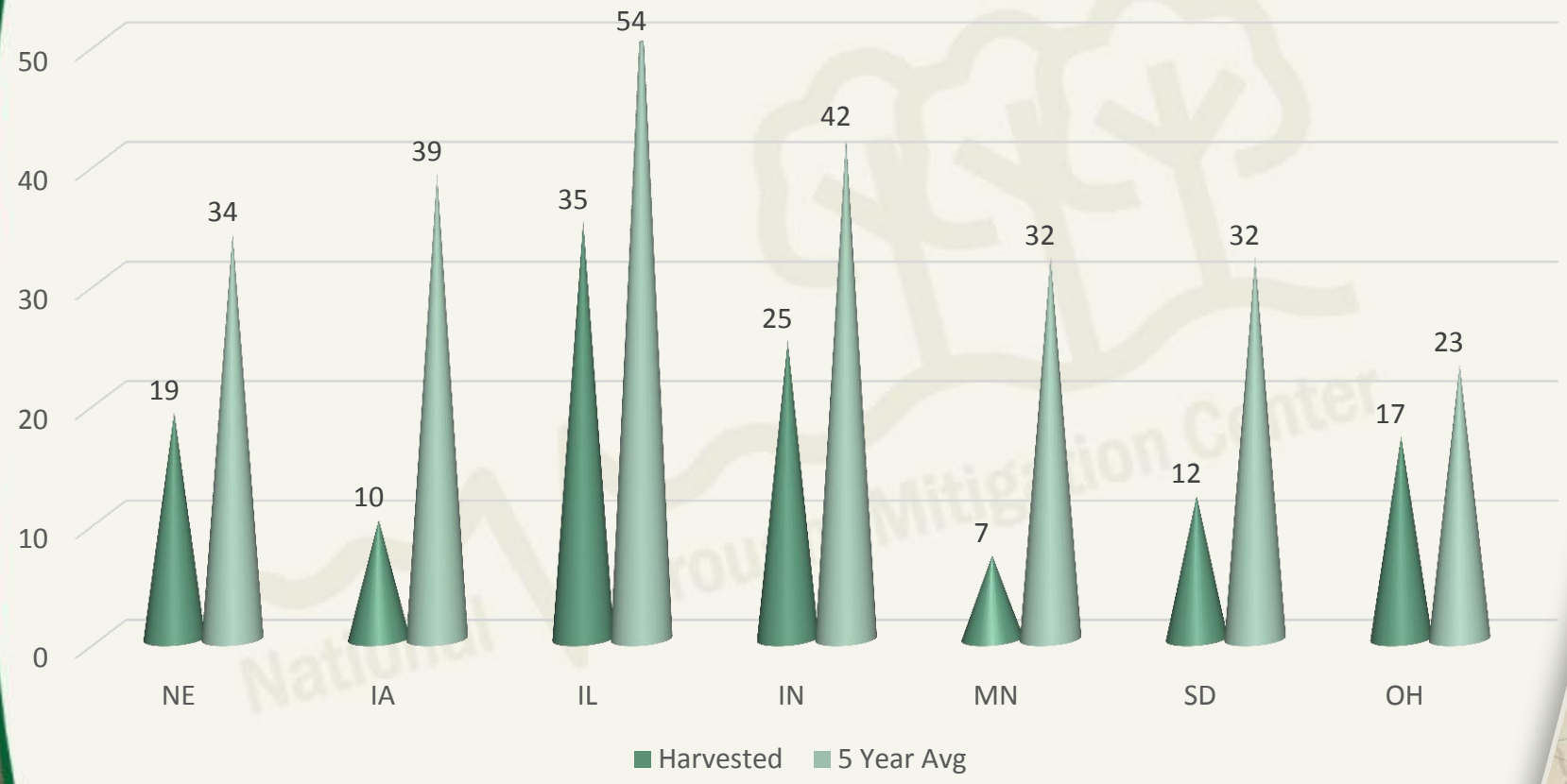
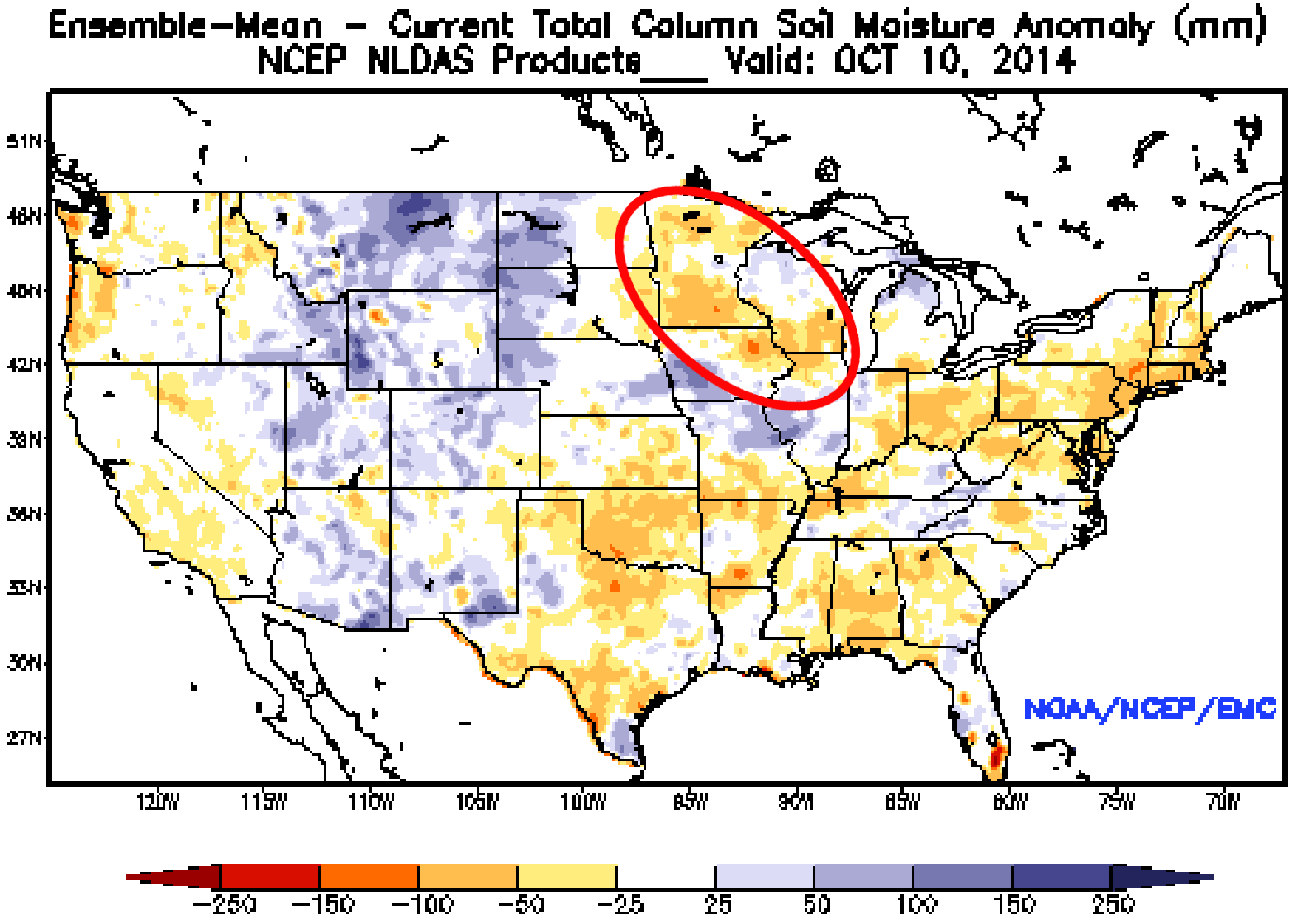
Corn Harvest



Soybean Harvest

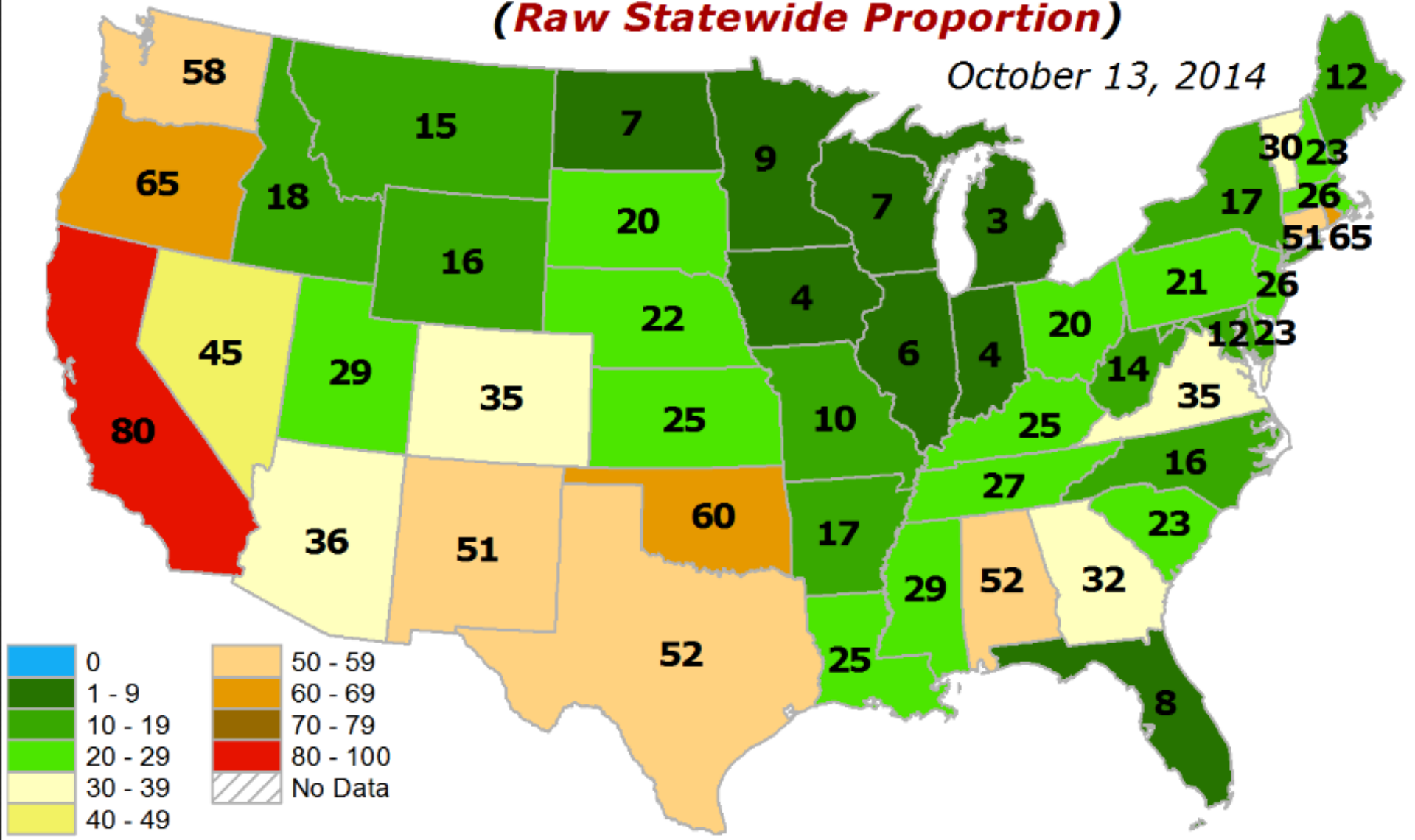
Soil Moisture Anomaly



Extent of Topsoil Short or Very Short of Moisture

(*Raw Statewide Proportion*)

October 13, 2014



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U.S. Drought Monitor

October 14, 2014

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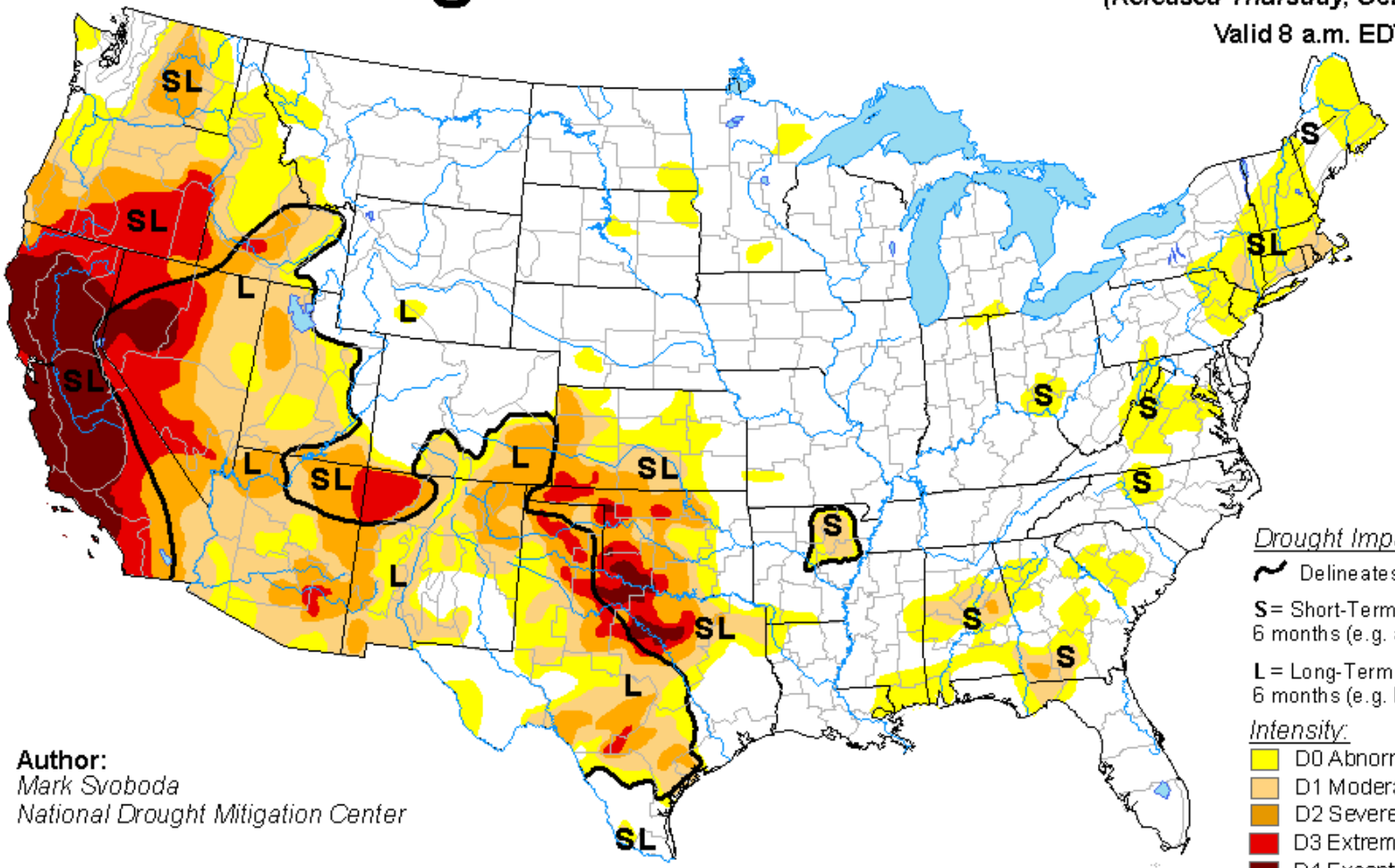

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Drought Impact Types:

Delineates dominant impacts

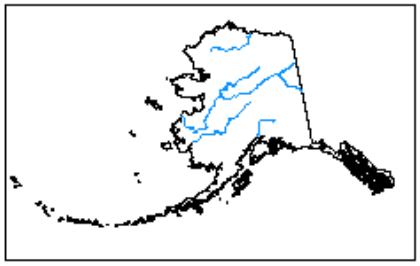
S = Short-Term, typically less than 6 months (e.g. agriculture, grasslands)

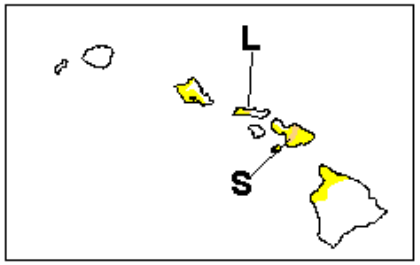
L = Long-Term, typically greater than 6 months (e.g. hydrology, ecology)

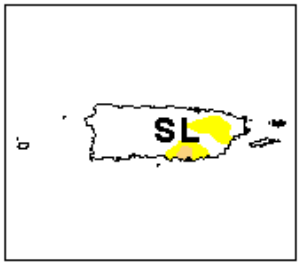
Intensity:

- 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.







USDA National Drought Mitigation Center

http://droughtmonitor.unl.edu/

Drought Condition (Percent Area): United States

Statistics type: (•) Traditional (D0-D4, D1-D4, etc.) ( ) Categorical (D0, D1, etc.)

Conditions for the U.S., including Alaska, Hawaii and Puerto Rico

Week	Date	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	2014-10-14	62.83	37.17	24.89	15.15	7.77	3.24
Last Week	2014-10-07	60.65	39.35	25.50	15.59	7.90	3.24
3 Months Ago	2014-07-15	61.98	38.02	28.55	20.15	9.92	2.39
Start of Calendar Year	2013-12-31	54.20	45.80	26.01	13.96	3.31	0.31
Start of Water Year	2014-09-30	59.89	40.11	25.54	15.59	7.86	3.22
One Year Ago	2013-10-15	48.95	51.05	33.45	15.18	2.31	0.24

Conditions for the Contiguous U.S.

Week	Date	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	2014-10-14	55.59	44.41	29.78	18.14	9.30	3.87
Last Week	2014-10-07	53.03	46.97	30.51	18.66	9.46	3.87
3 Months Ago	2014-07-15	54.61	45.39	34.16	24.12	11.87	2.86
Start of Calendar Year	2013-12-31	48.24	51.76	30.95	16.67	3.96	0.37
Start of Water Year	2014-09-30	52.22	47.78	30.57	18.66	9.41	3.85
One Year Ago	2013-10-15	45.24	54.76	36.71	18.13	2.75	0.29

Drought is impacting less than 30% of the contiguous United States for the first time since December 2011 but just over **74,000,000** people are still being impacted by drought

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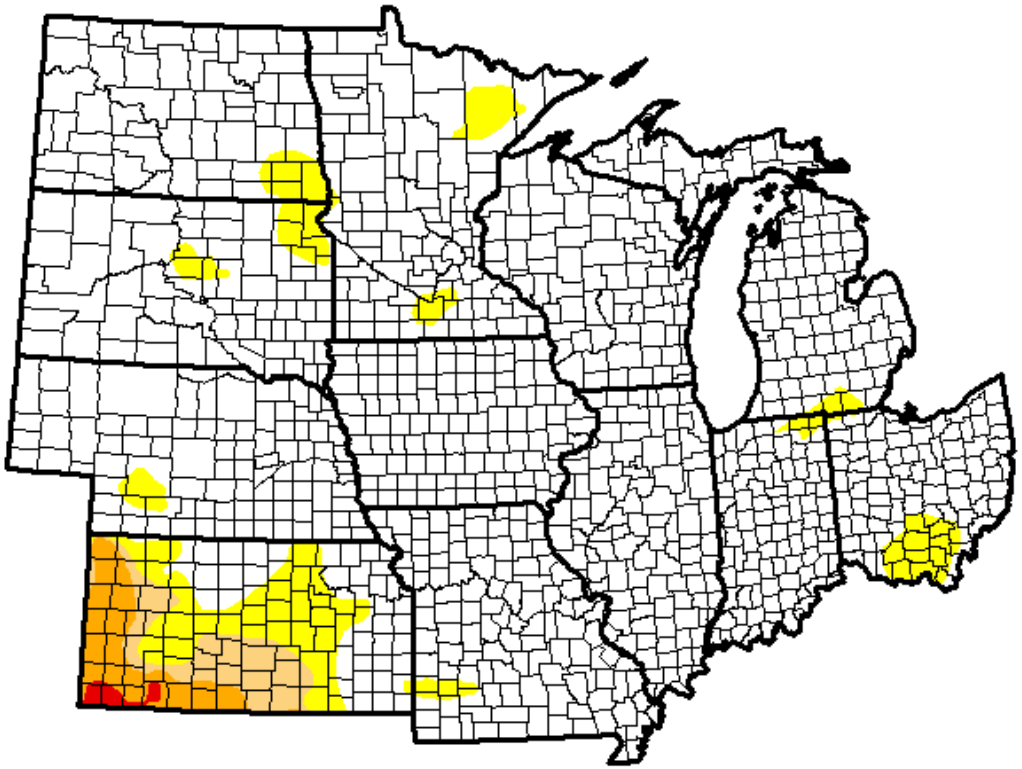
U.S. Drought Monitor
North Central



October 14, 2014
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Drought Conditions (Percent Area)

	None	D0	D1	D2	D3	D4
Current	89.03	6.95	1.93	1.85	0.24	0.00
Last Week *10/7/2014*	85.12	9.82	2.96	1.85	0.24	0.00
3 Months Ago *7/15/2014*	83.09	6.13	6.80	2.89	1.09	0.00
Start of Calendar Year *12/31/2013*	58.55	20.04	13.18	7.15	1.08	0.00
Start of Water Year *9/30/2014*	84.94	9.86	3.11	1.84	0.26	0.00
One Year Ago *10/15/2013*	48.93	24.96	14.28	10.80	1.03	0.00

Intensity:

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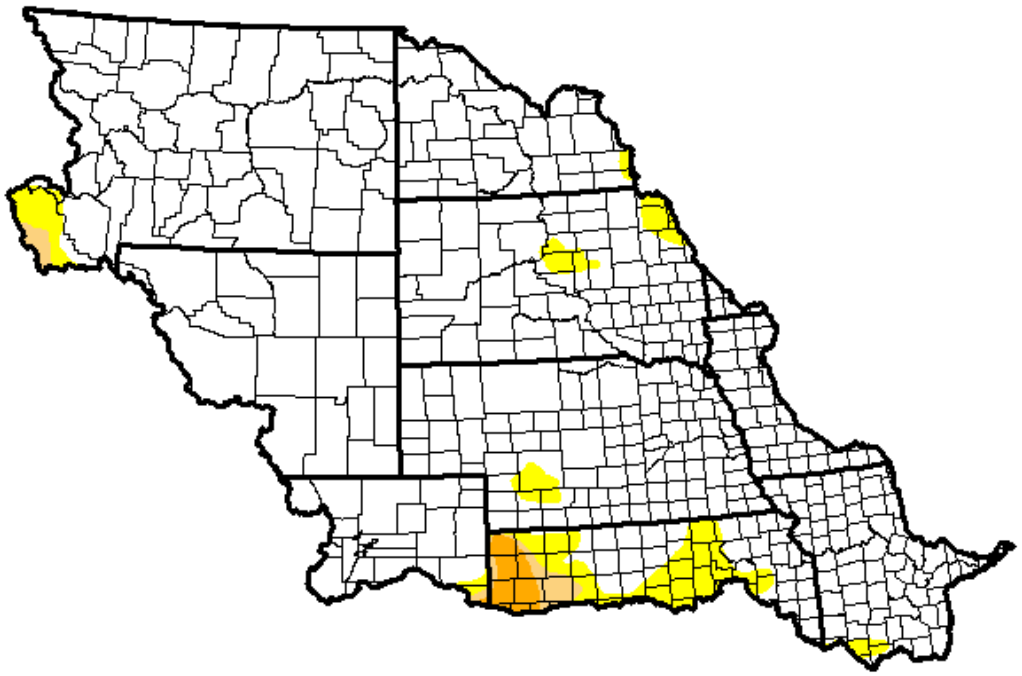
U.S. Drought Monitor

Missouri Watershed



October 14, 2014

(Released Thursday, Oct. 16, 2014)

Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0	D1	D2	D3	D4
Current	93.21	5.05	0.86	0.89	0.00	0.00
Last Week *10/7/2014*	91.89	6.06	1.16	0.89	0.00	0.00
3 Months Ago *7/15/2014*	83.72	8.40	6.84	0.47	0.57	0.00
Start of Calendar Year *12/31/2013*	63.00	20.27	9.75	5.57	1.41	0.00
Start of Water Year *9/30/2014*	90.62	7.11	1.38	0.89	0.00	0.00
One Year Ago *10/15/2013*	60.02	19.55	11.11	8.14	1.19	0.00

Intensity:

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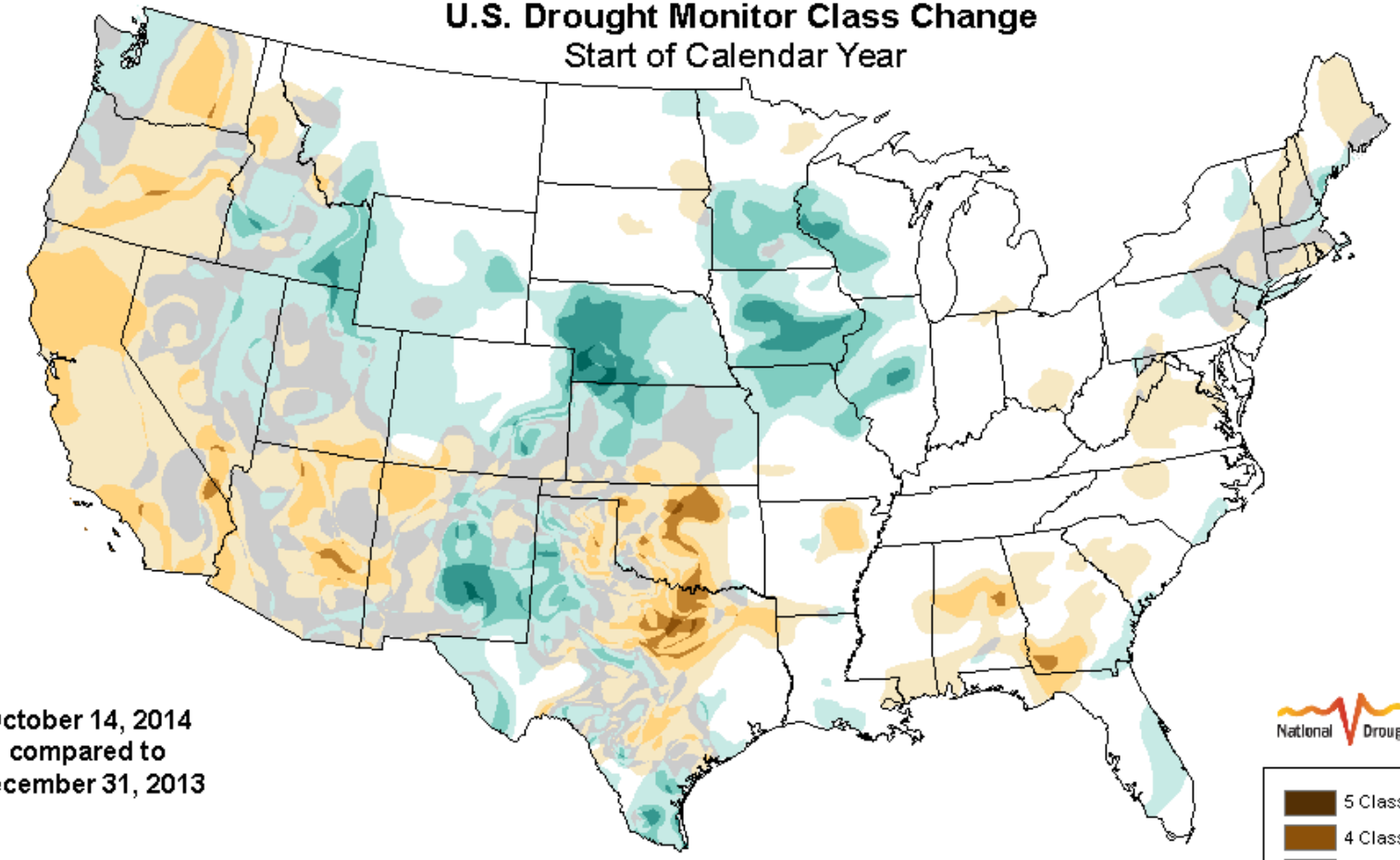
U.S. Drought Monitor Class Change

Start of Calendar Year



October 14, 2014
compared to
December 31, 2013

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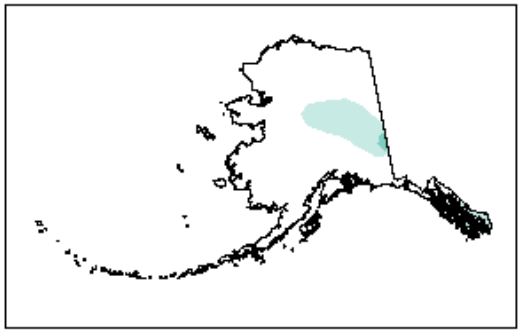
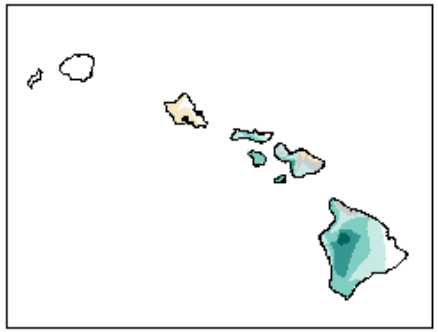
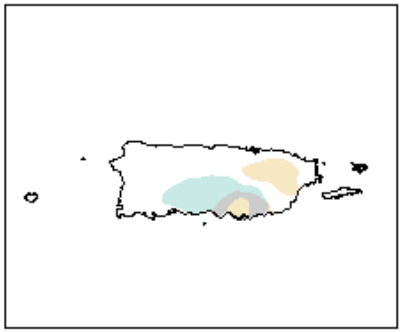




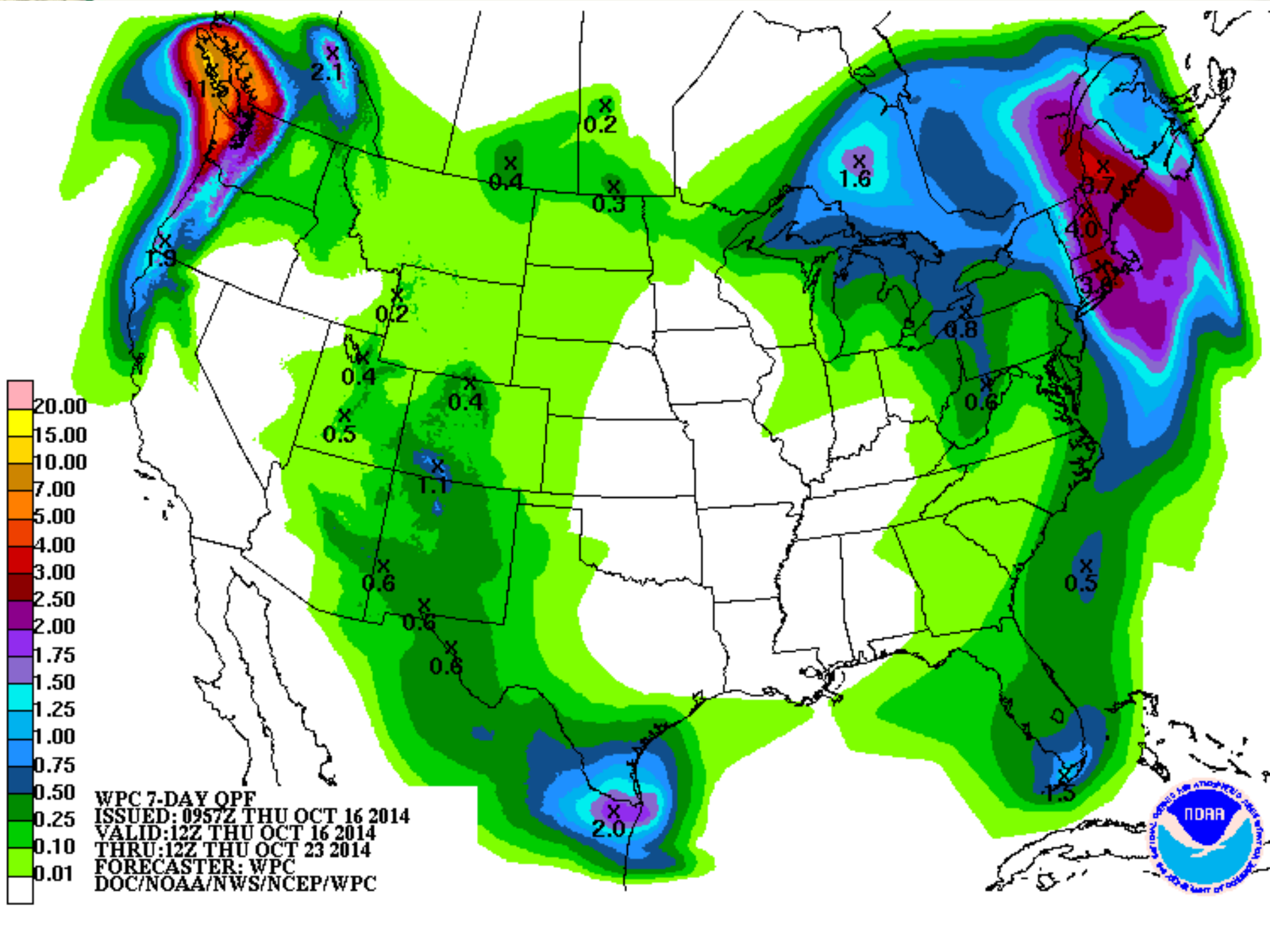


- 5 Class Degradation
- 4 Class Degradation
- 3 Class Degradation
- 2 Class Degradation
- 1 Class Degradation
- No Change
- 1 Class Improvement
- 2 Class Improvement
- 3 Class Improvement
- 4 Class Improvement
- 5 Class Improvement

http://droughtmonitor.unl.edu

Climate Outlooks

- **7-day precipitation forecast**
- **8-14 day outlook**
- **Monthly/Seasonal**
- **Winter Outlook (Dec-Feb)**
- **Seasonal Drought Outlooks**


20.00
15.00
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3.00
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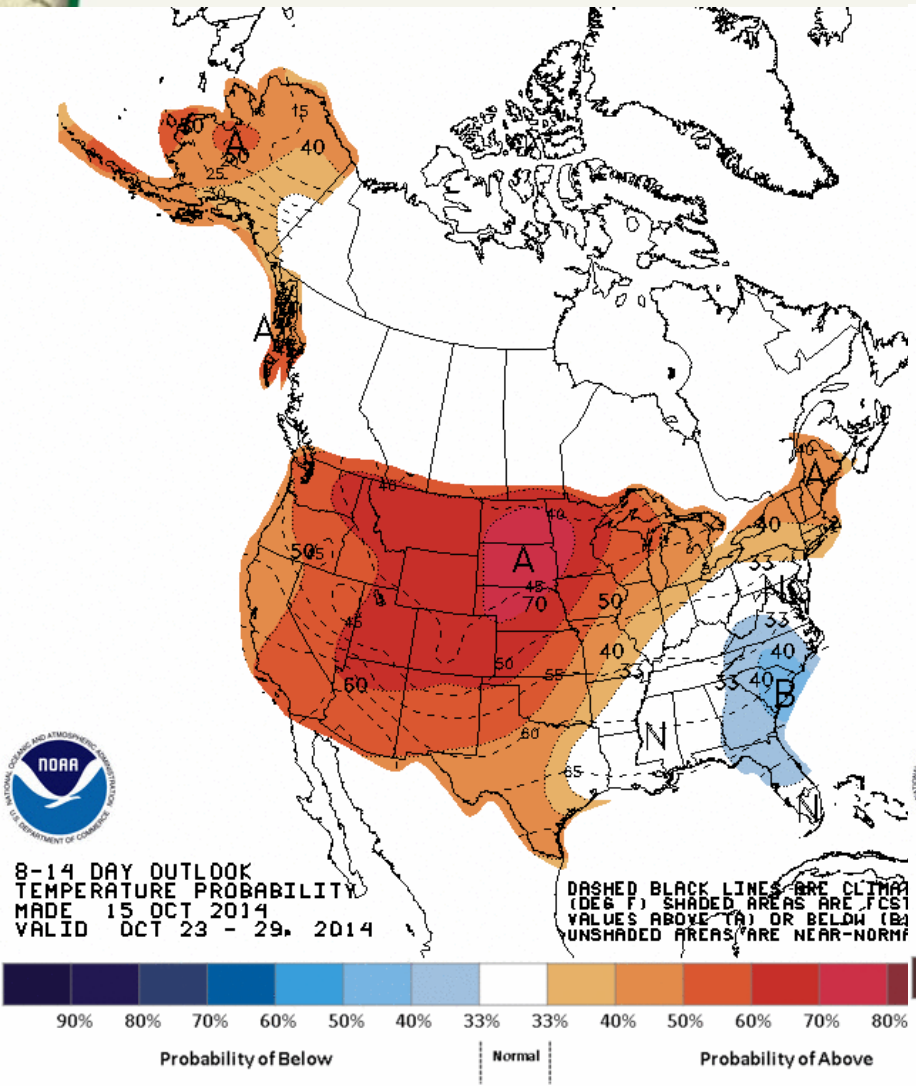
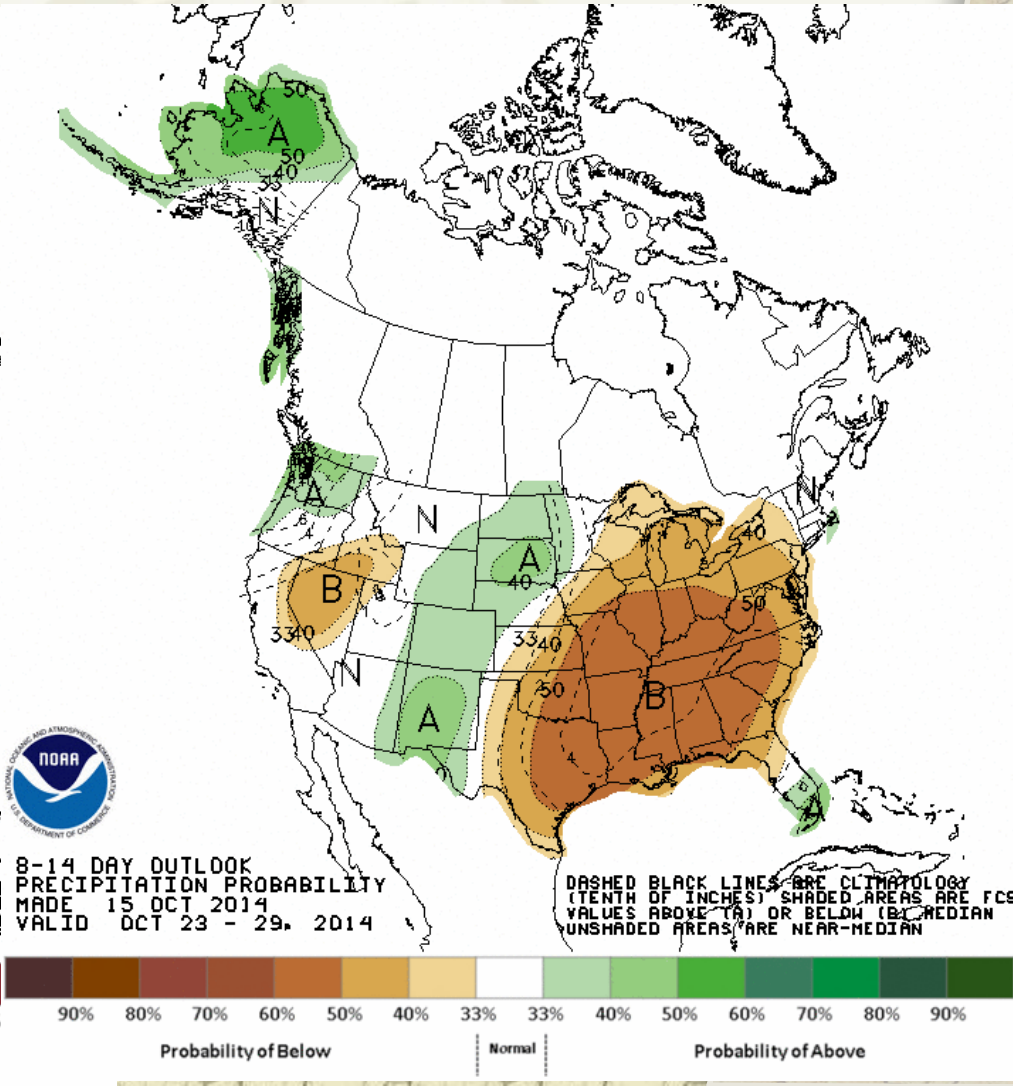
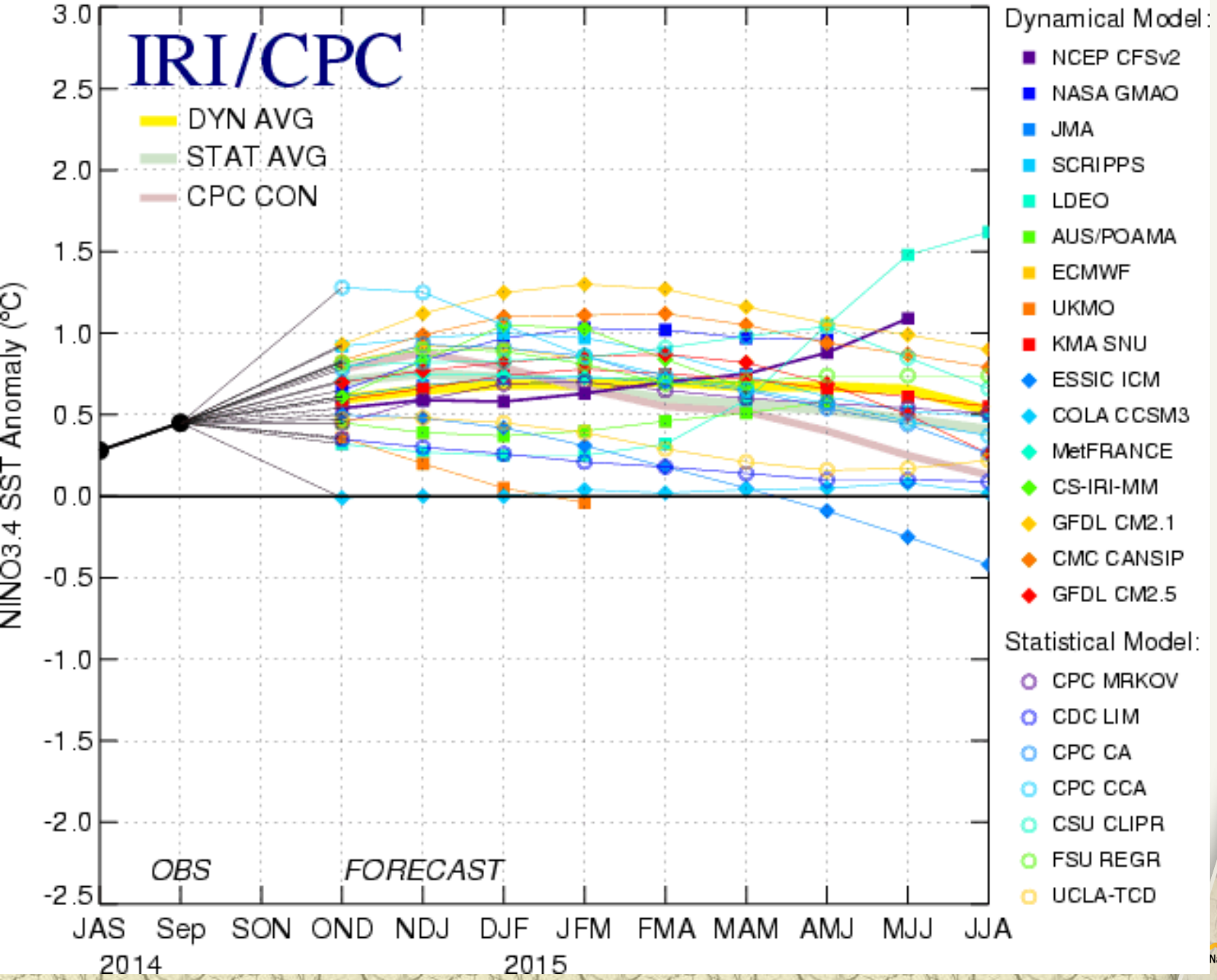
2.00
1.75
1.50
1.25
1.00
0.75
0.50
0.25
0.10
0.01
WPC 7-DAY QPF
ISSUED: 0957Z THU OCT 16 2014
VALID:12Z THU OCT 16 2014
THRU:12Z THU OCT 23 2014
FORECASTER: WPC
DOC/NOAA/NWS/NCEP/WPC
NOAA

8-14 day Outlook





Mid-Oct 2014 Plume of Model ENSO Predictions



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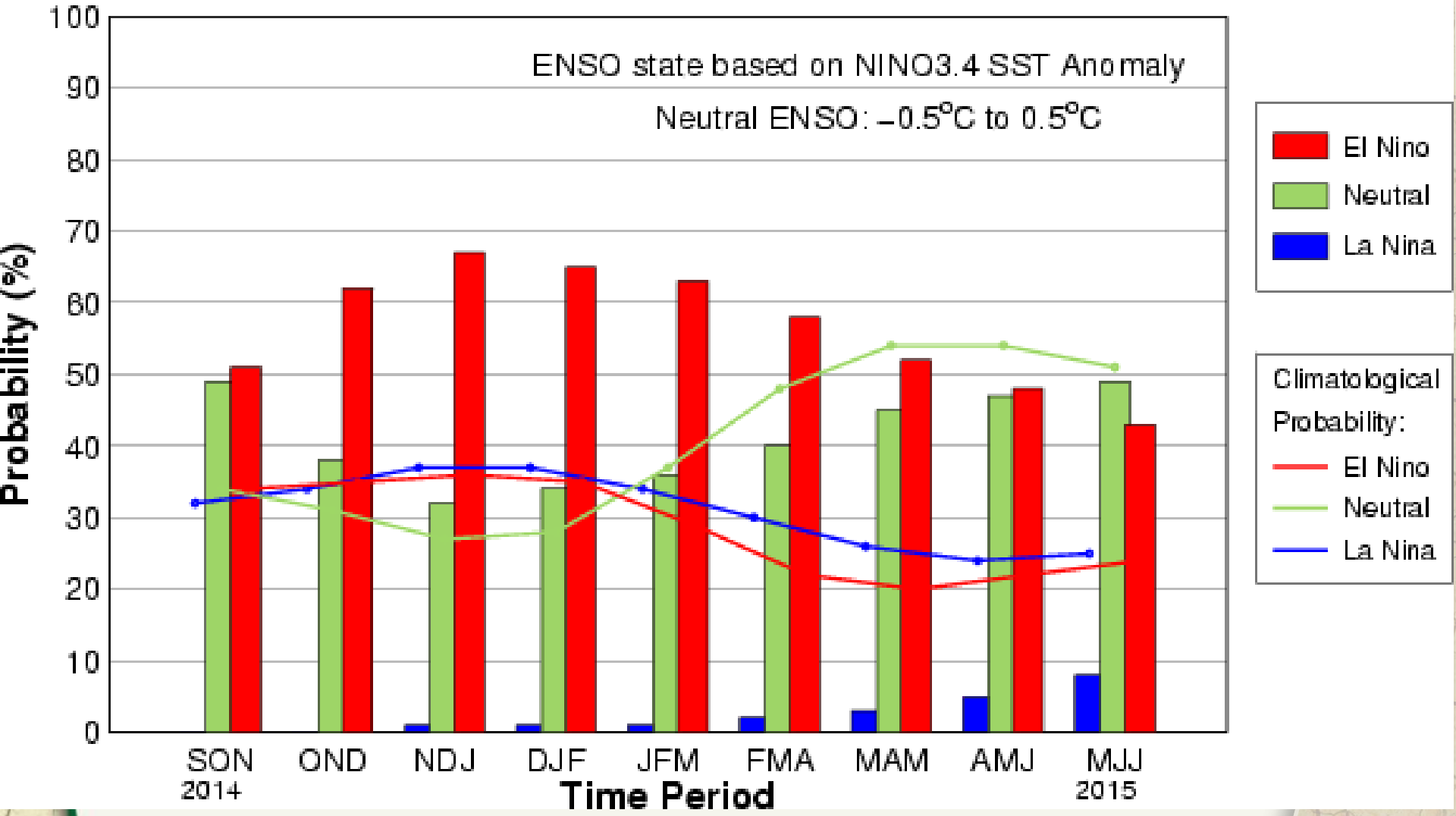
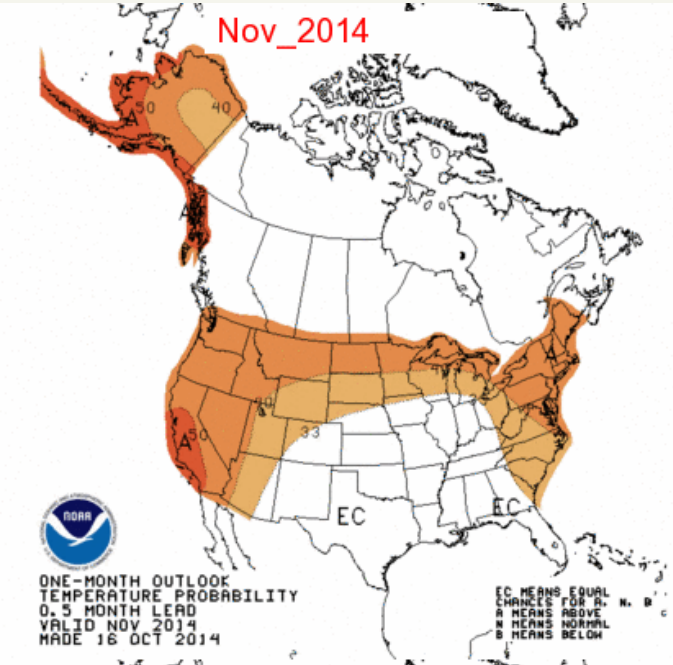
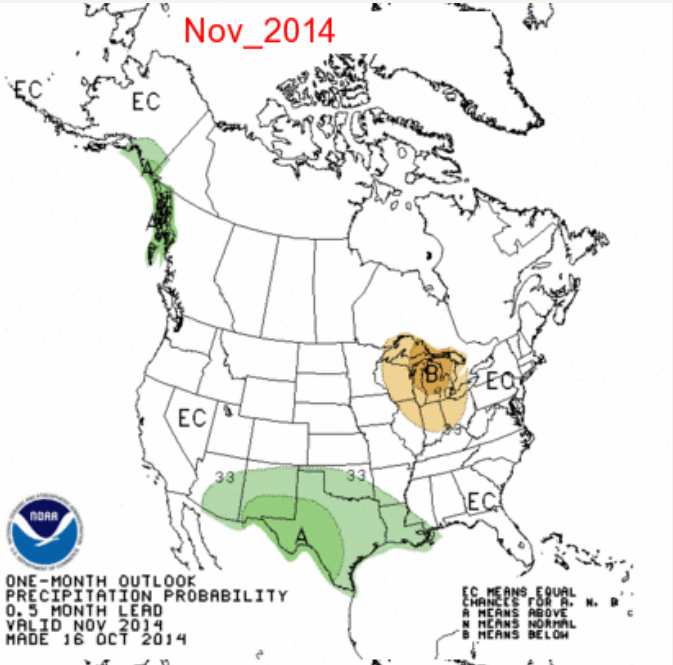
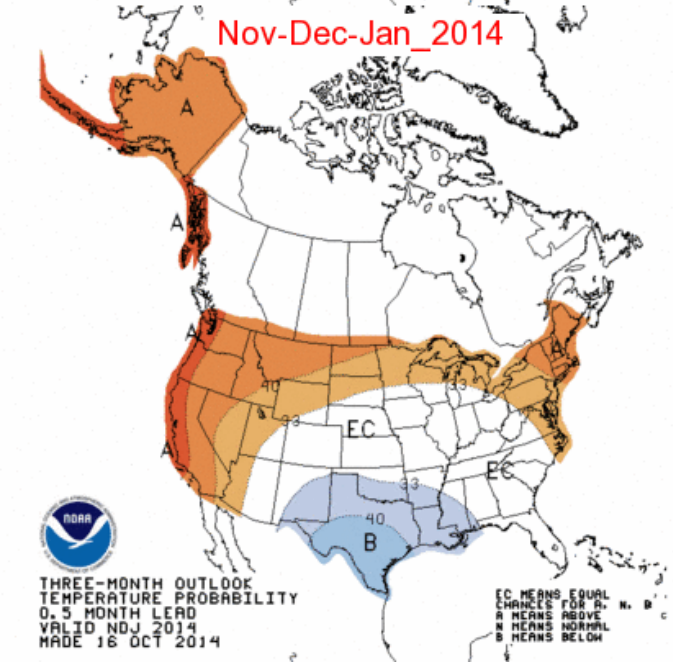
Early–Oct CPC/IRI Consensus Probabilistic ENSO Forecast

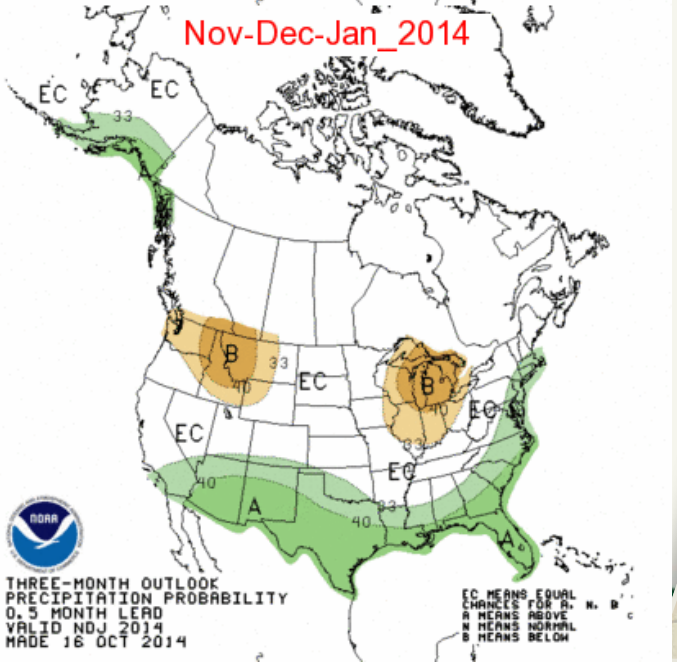


Monthly and Seasonal Outlook









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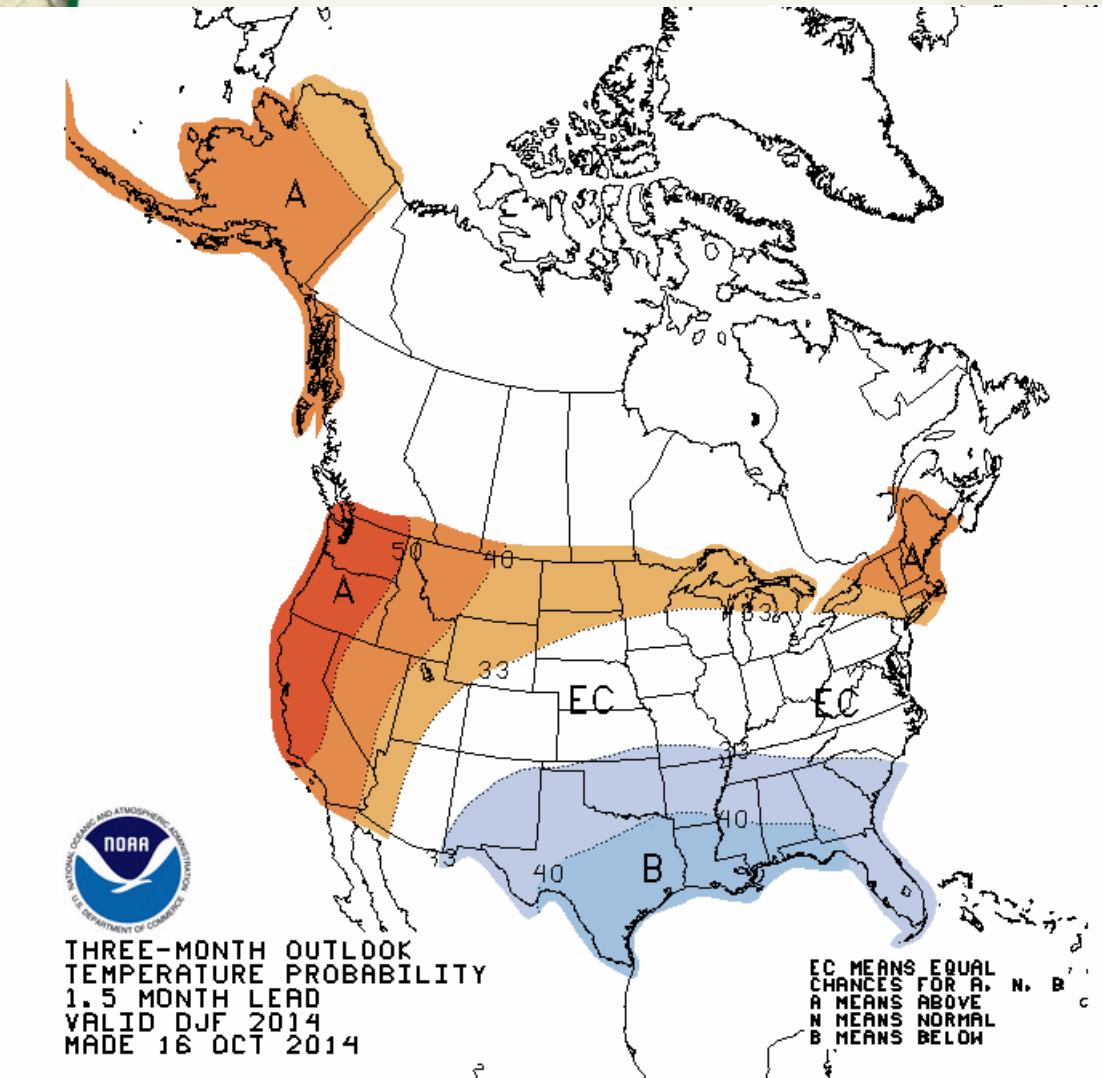
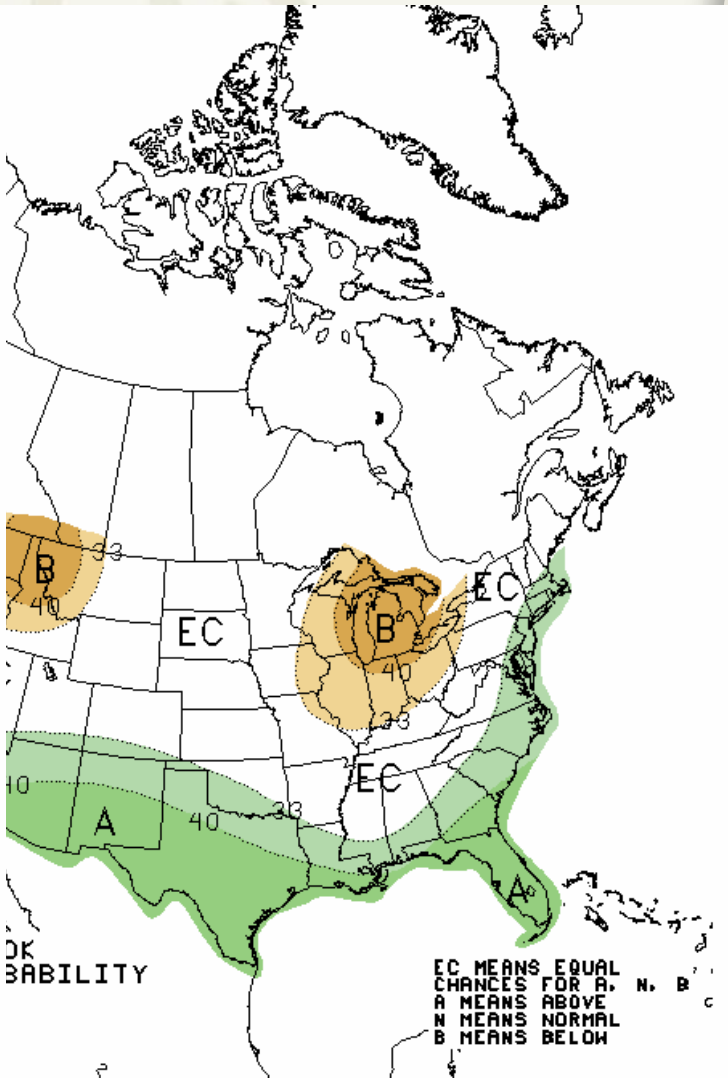
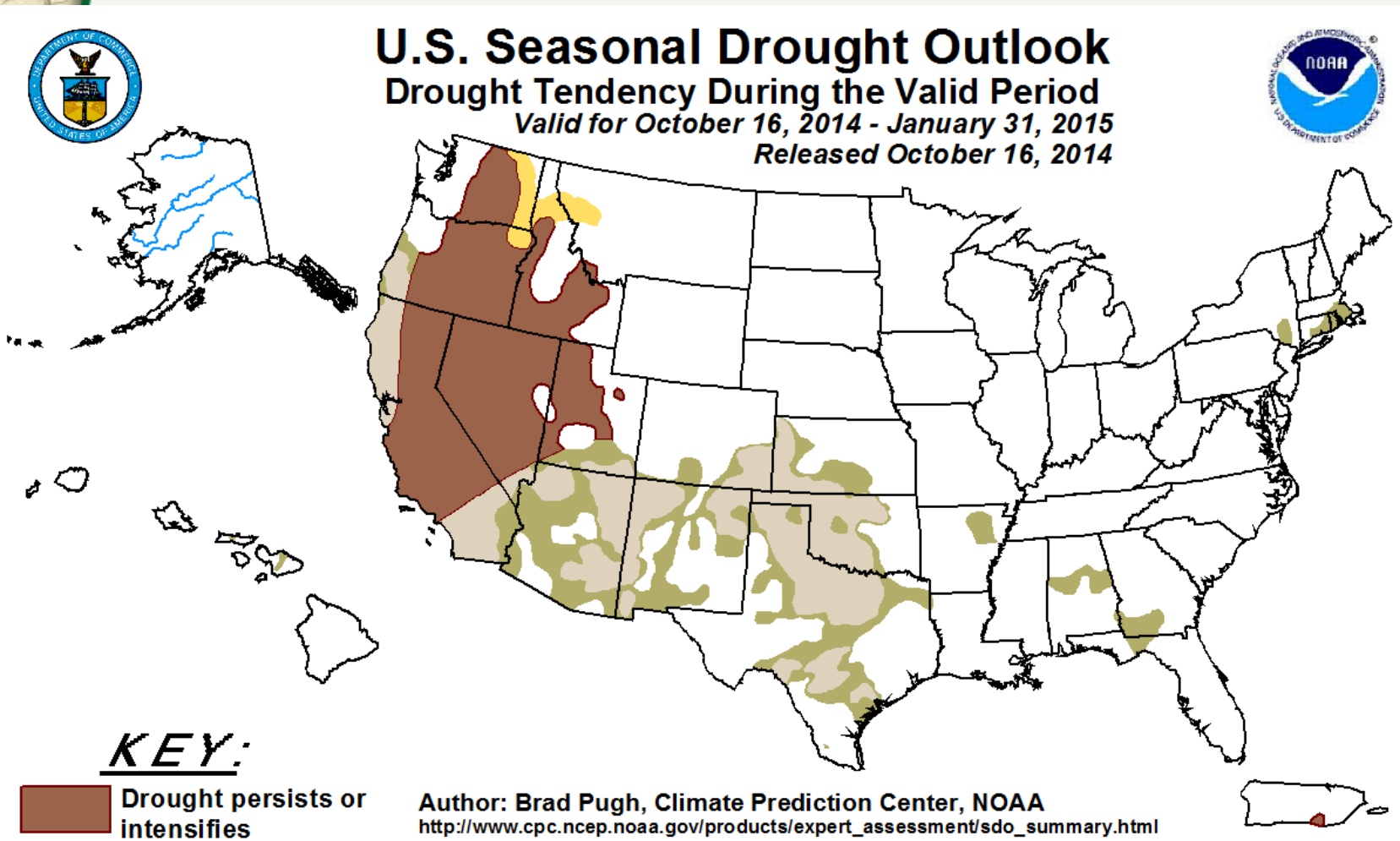
Winter Outlook





Seasonal Drought Outlook



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Any Questions ?

Contact Information:

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