NOAA Climate Science & Services Monthly Climate Update

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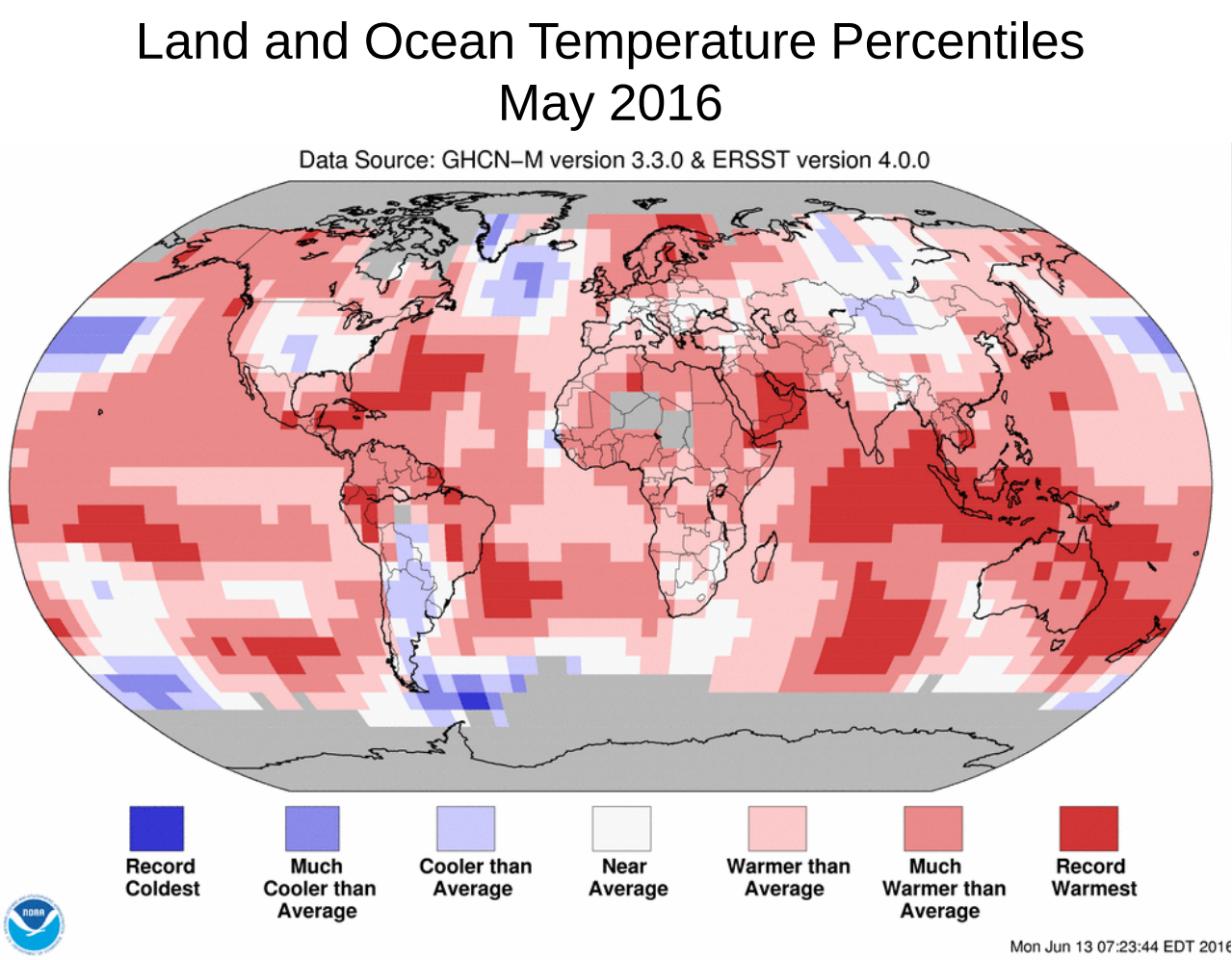
Global Temperature: May 2016

- May: +0.87°C above 20th century average
  - Warmest May on record
  - 13th consecutive record warm month
  - First month since Nov 2015 less than 1°C warmer than 20th century average
- Land: +1.17°C
  - 3rd Warmest May on record
- Ocean: +0.76°C
  - Warmest May on record
  - Smallest monthly departure since July 2015

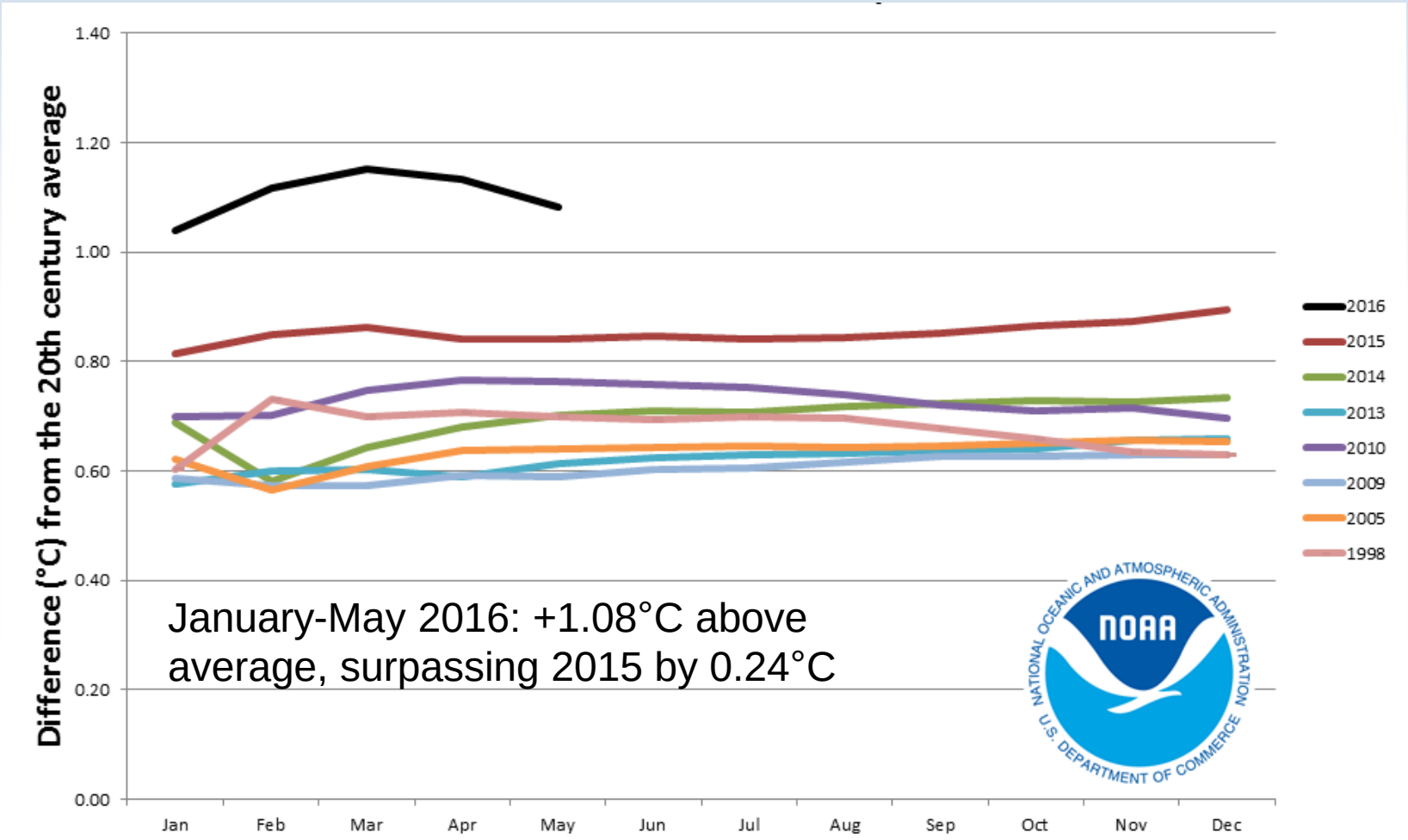


The global temperature record dates to 1880 (137 years)

Global Temperature: Jan-May 2016

Year-to-Date Global Temperature

for 2016 and the other seven warmest years on record



Ten Warmest Months on Record:

as of Nov 2013 (left) vs. current (right)

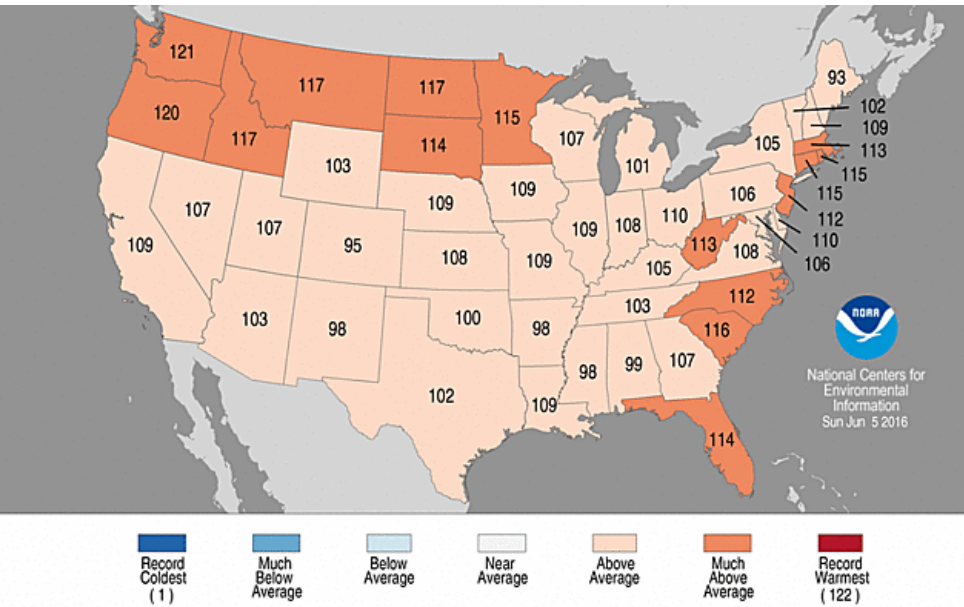
Rank	Month	Anomaly °C	Anomaly °F	Rank	Month	Anomaly °C	Anomaly °F
1	Jan 2007	+0.88	+1.58	1	Mar 2016	+1.22	+2.20
2	Feb 1998	+0.86	+1.55	2	Feb 2016	+1.20	+2.16
3	Mar 2010	+0.84	+1.51	3	Dec 2015	+1.12	+2.02
4 (tie)	Apr 2010	+0.82	+1.48	4	Apr 2016	+1.07	+1.93
4 (tie)	Nov 2013	+0.82	+1.48	5	Jan 2016	+1.04	+1.87
6	Mar 2002	+0.79	+1.42	6	Oct 2015	+0.99	+1.78
7	Feb 2002	+0.78	+1.40	7	Nov 2015	+0.96	+1.73
8	Nov 2011	+0.77	+1.39	8	Sep 2015	+0.92	+1.66
9 (tie)	Dec 2006	+0.76	+1.37	9	Mar 2015	+0.89	+1.60
9 (tie)	Mar 2008	+0.76	+1.37	**10 (tie)**	**Jan 2007**	**+0.88**	**+1.58**
9 (tie)	May 2010	+0.76	+1.37	10 (tie)	Feb 2015	+0.88	+1.58

Contiguous U.S. Spring 2016

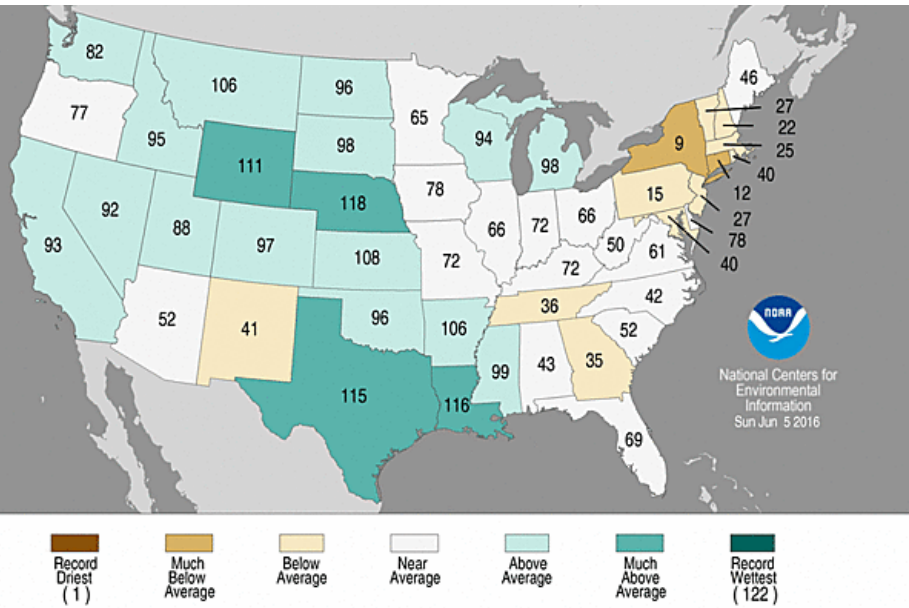
Temperature: 53.7°F, +2.8°F, 6th warmest spring on record

Precipitation: 9.03”, +1.09”, t-18th wettest spring on record

Statewide Temperature Ranks Spring 2016
Period: 1895-2016 (122 years)



Statewide Precipitation Ranks, Spring 2016
Period: 1895-2016 (122 years)



- Every state categorized as, at least, “above average”
- Warmth was most focused, relatively speaking, in the Pacific NW; WA 2nd warmest spring
- Generally, morning lows were more unusually warm than afternoon highs

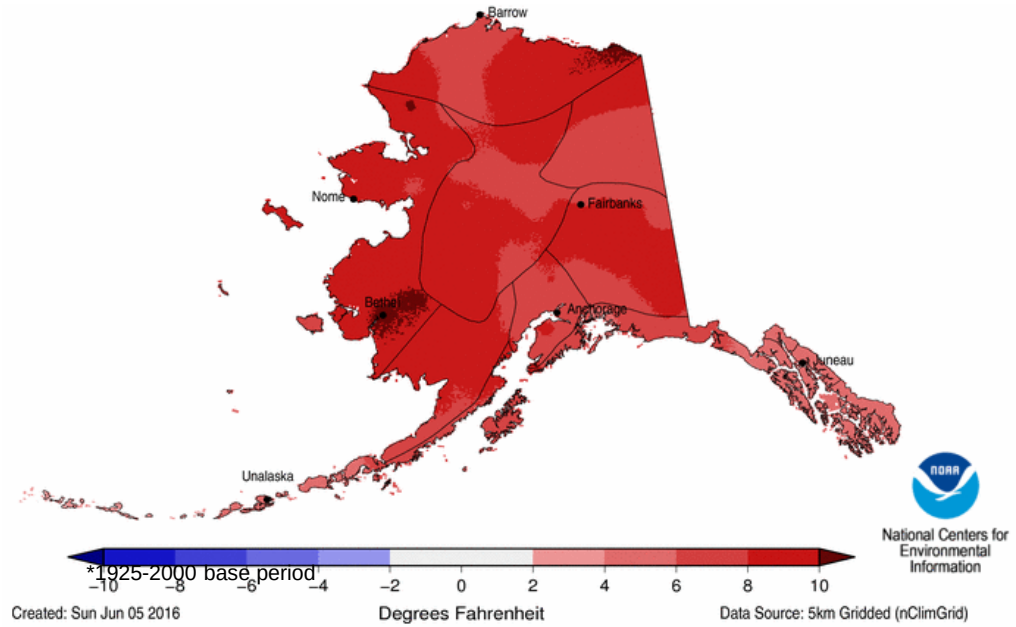
- Individually, May was near normal for CONUS
- Generally wetter than normal west of the Mississippi
  - Flooding in Texas several times during the season
- Drier than average in Northeast and Southeast
- Individually, May was near normal for CONUS

Record Warm Alaska Spring

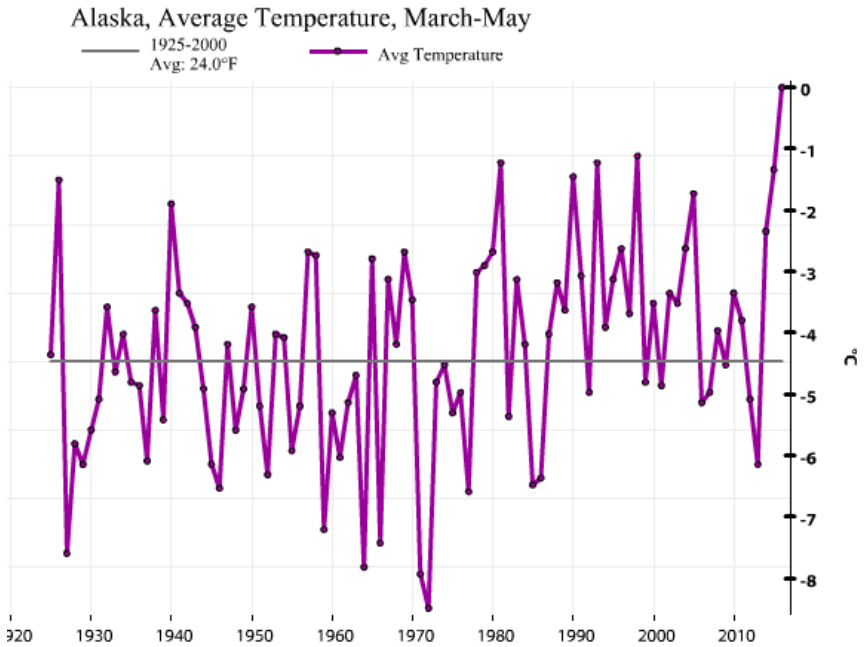
May: 44.0°F, +6.2°F, 2nd warmest May on record

Spring: 32.0°F, +8.0°F, warmest spring on record

Alaska Temperature Departures from Average Spring 2016



Alaska Statewide Temperature Departures Spring: 1925-2016 (92 years)

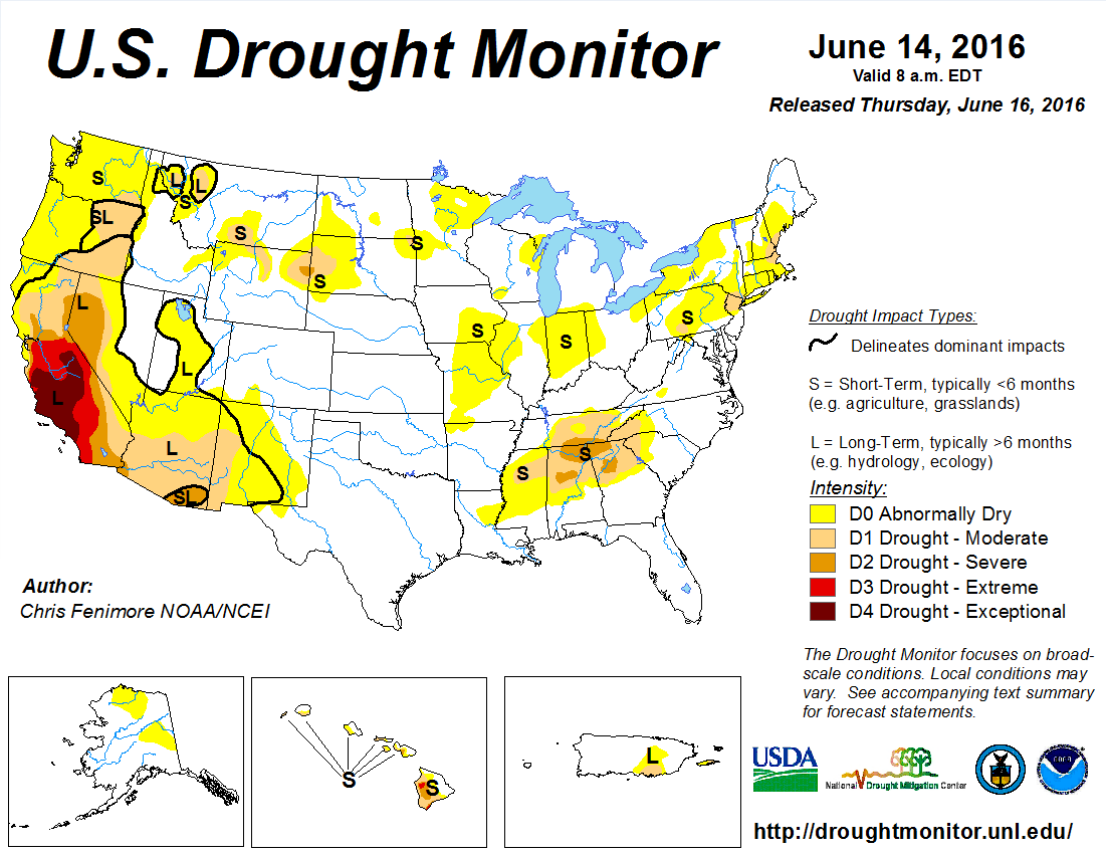


Current U.S. Drought

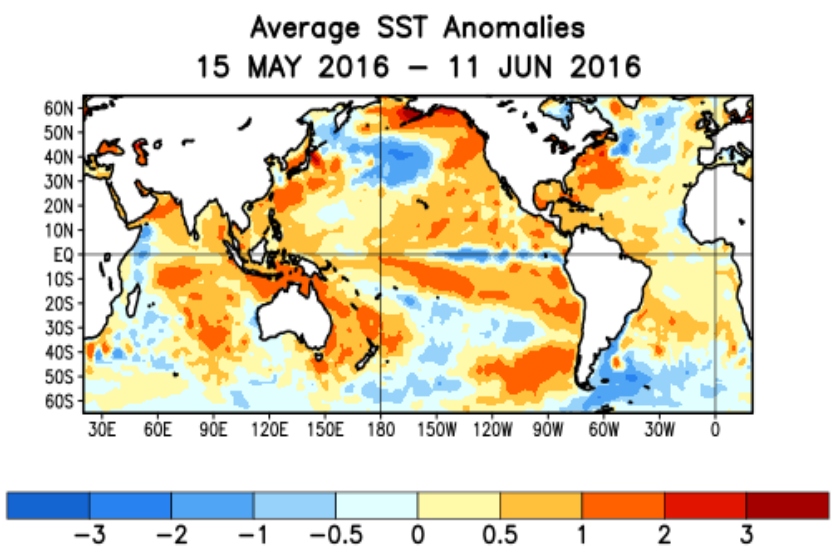
13.8% of Contiguous U.S. in Drought

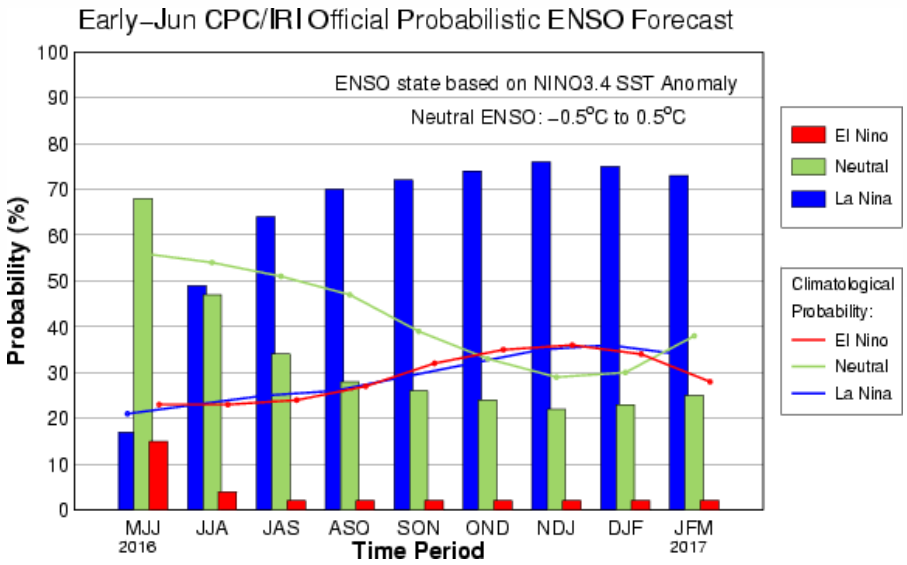
(↓1.6 percentage points since late April)

- Improvement: Great Basin, Northern California
- Degradation: Southeast
- Outside CONUS: Modest improvement in Hawaii



Sea Surface Temperatures and ENSO

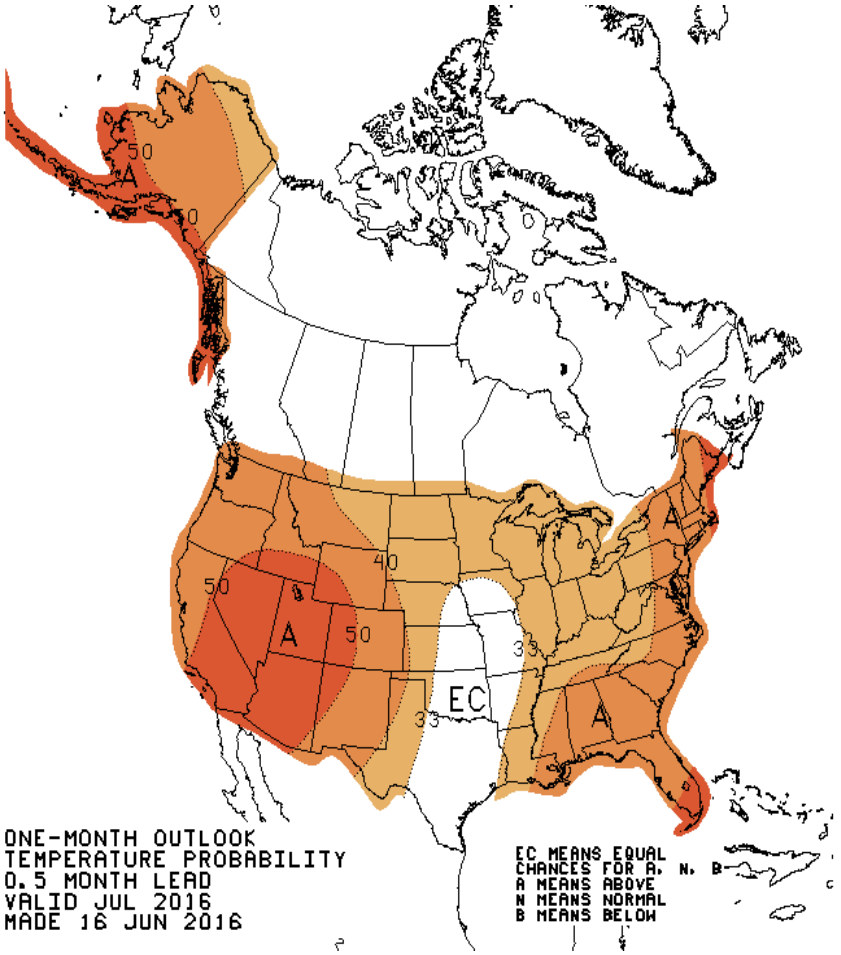




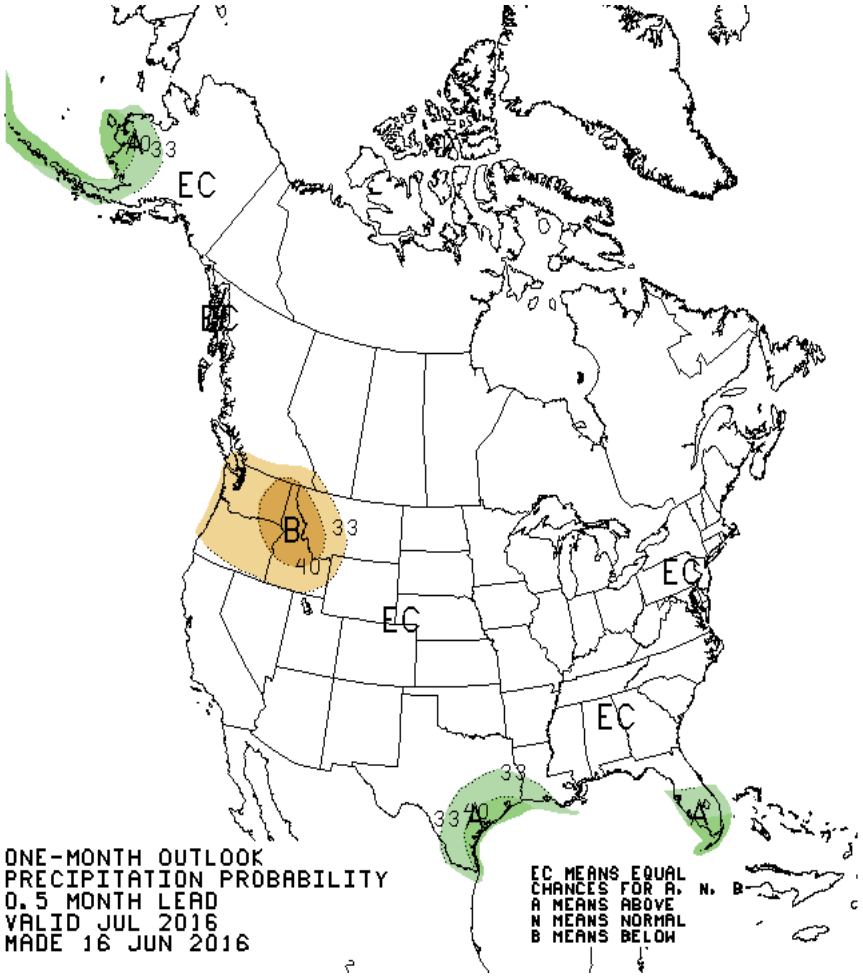
- Sea surface temperatures
  - Below normal SSTs beginning to develop across the equatorial Pacific
  - Above normal SSTs along the west coast of North America
  - ENSO neutral conditions present with a La Niña watch issued
- ENSO forecast
  - A transition to La Niña anticipated during the summer 2016
  - Enhanced odds of La Niña persisting through the winter 2016-17

Monthly Forecast (July)

July Average Temperature Probability

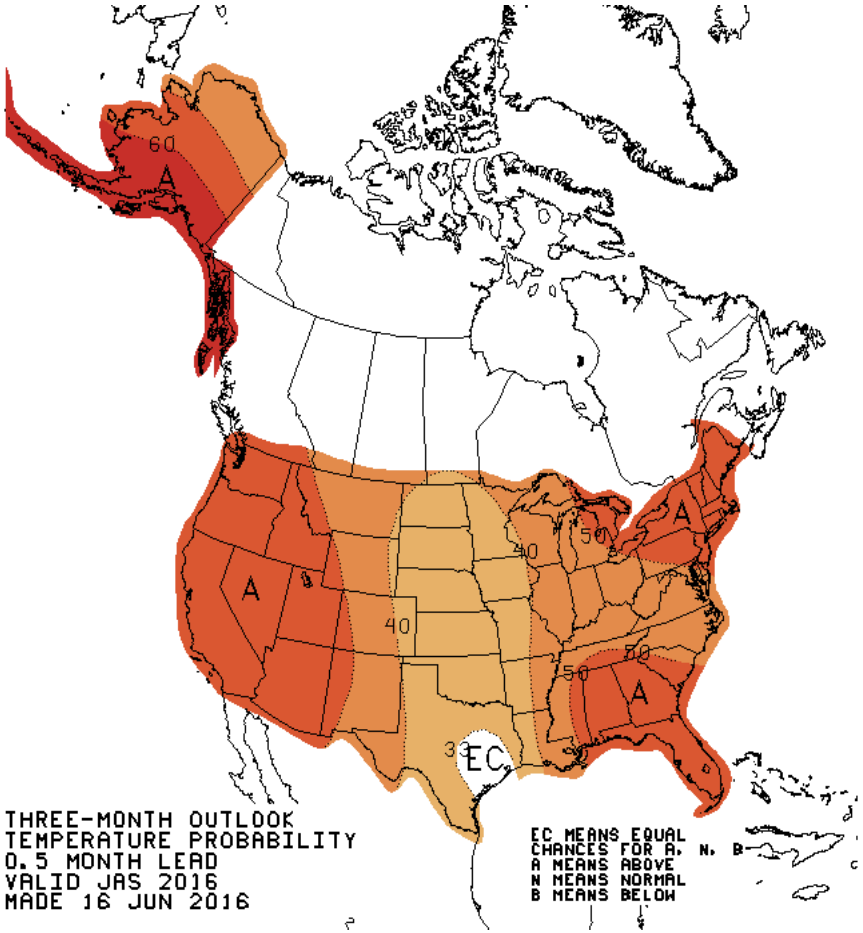


July Total Precipitation Probability

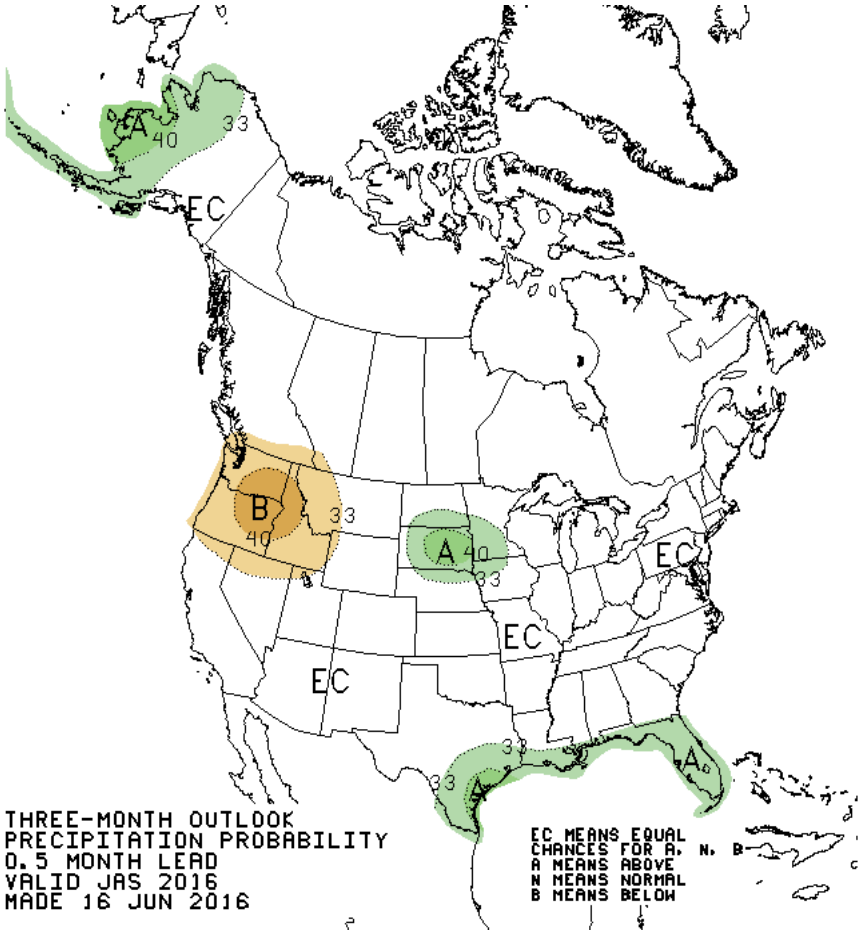


Seasonal Forecast (Jul-Aug-Sep)

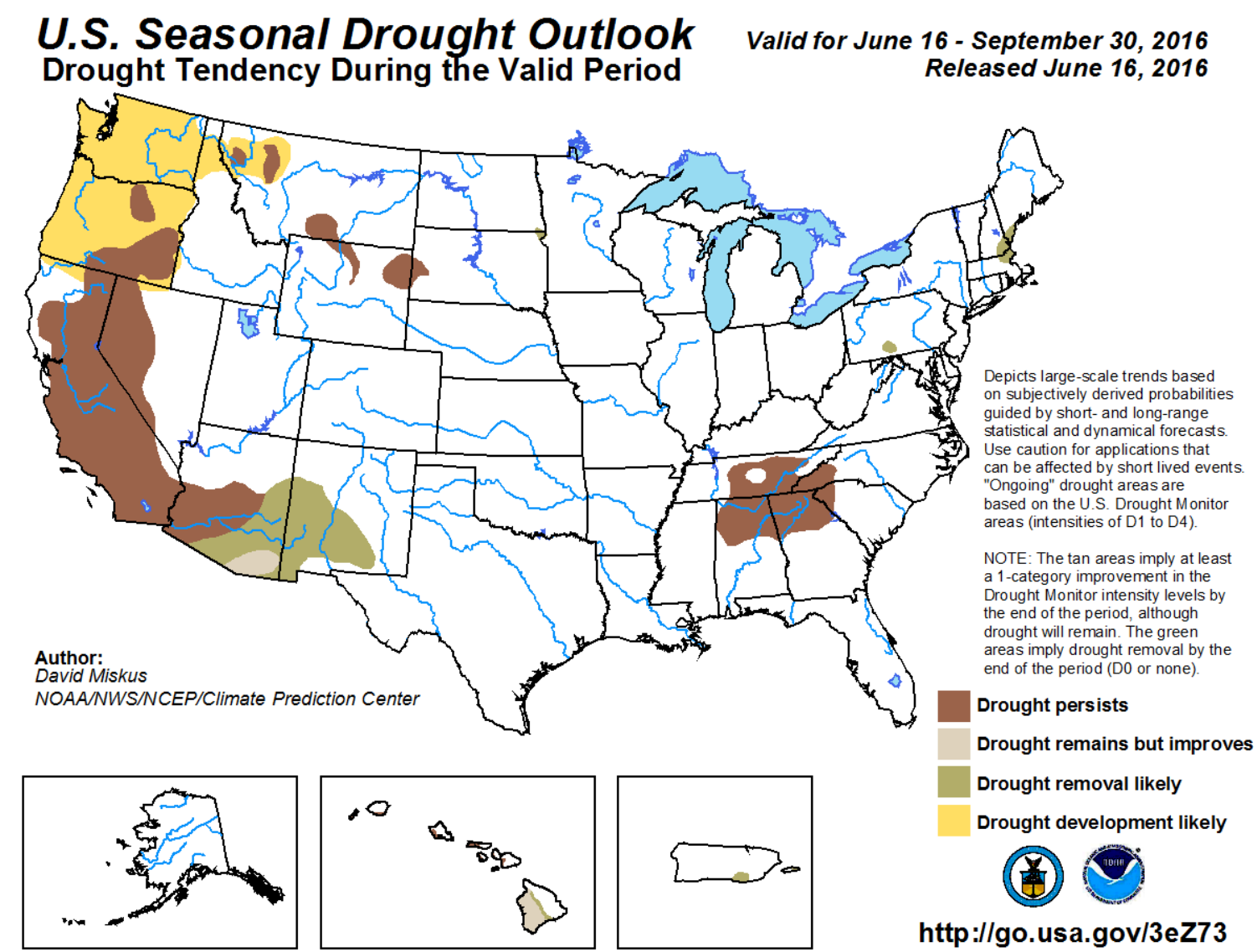
Jul-Aug-Sep Average Temperature Probability



Jul-Aug-Sep Total Precipitation Probability



U.S. Drought Outlook



For More Information

TODAY'S PRESENTATION:

- http://www.ncdc.noaa.gov/sotc/briefings

NOAA's National Centers for Environmental Information: www.ncdc.noaa.gov

- Monthly climate reports (U.S. & Global): www.ncdc.noaa.gov/sotc/
- Dates for upcoming reports: http://www.ncdc.noaa.gov/monitoring-references/dyk/monthly-releases

NOAA's Climate Prediction Center: www.cpc.ncep.noaa.gov

National Weather Service – Southern Region: http://www.srh.noaa.gov/

U.S. Drought Monitor: http://drought.gov

Climate Portal: www.climate.gov

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