NOAA Climate Science & Services
Monthly Climate Update

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Contiguous U.S. August 2016

Temperature: 73.6°F, +1.5°F, 17th warmest August on record
Precipitation: 3.47”, +0.85”, 2nd wettest August on record

- West Coast, Midwest, Southeast, and Northeast were warmer than average.
  - CT, DE, MD, MA, NJ, NY, PA, and RI record warm.
- Near- to below-average temperatures were observed in the Rockies, Great Plains, and Southwest.

- Southwest, Southern Plains, Midwest, and Lower Mississippi Valley were wet.
  - Record wet with record flooding in Louisiana
- Drier than average in West and along parts of the East Coast
- Warm and dry conditions in the West created ideal wildfire conditions.
• Southwest, Central Rockies, and much of the East were much warmer than average.
  - CA, CT, and RI were each record warm.
• Daytime temperatures were 1.8°F warmer than average – 10th warmest. Nighttime temperatures were 2.4°F above average – record warm.

• Above-average dew points (measure of moisture) were observed for locations east of the Great Plains.
  - Increased heat index, nighttime temperatures, and precipitation
• Below-average dew points in the West were associated with ideal wildfire conditions during the season.
### Alaska Average Temperature Sep-Aug 1925-2016

#### Alaska Divisional Average Temperature Ranks

September 2015–August 2016
Period: 1925-2016

<table>
<thead>
<tr>
<th>Period</th>
<th>Avg Temp</th>
<th>Departure</th>
<th>Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aug 2016</td>
<td>53.3°F</td>
<td>+3.8°F</td>
<td>3rd warmest</td>
</tr>
<tr>
<td>1-month period</td>
<td></td>
<td></td>
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<tr>
<td>Jun - Aug 2016</td>
<td>53.6°F</td>
<td>+3.1°F</td>
<td>2nd warmest</td>
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<td>3-month period</td>
<td></td>
<td></td>
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<tr>
<td>Mar - Aug 2016</td>
<td>42.8°F</td>
<td>+5.6°F</td>
<td>Record warm</td>
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<tr>
<td>6-month period</td>
<td></td>
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</tr>
<tr>
<td>Jan - Aug 2016</td>
<td>36.4°F</td>
<td>+7.6°F</td>
<td>Record warm</td>
</tr>
<tr>
<td>8-month period</td>
<td></td>
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<tr>
<td>Dec 2015 - Aug 2016</td>
<td>33.3°F</td>
<td>+7.3°F</td>
<td>Record warm</td>
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<td>9-month period</td>
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<tr>
<td>Sep 2015 - Aug 2016</td>
<td>32.3°F</td>
<td>+6.3°F</td>
<td>Record warm</td>
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<td>12-month period</td>
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<tr>
<td>Mar 2015 - Aug 2016</td>
<td>35.1°F</td>
<td>+5.4°F</td>
<td>Record warm</td>
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<td>18-month period</td>
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<tr>
<td>Sep 2014 - Aug 2016</td>
<td>31.4°F</td>
<td>+5.4°F</td>
<td>Record warm</td>
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<td>24-month period</td>
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<tr>
<td>Sep 2013 - Aug 2016</td>
<td>30.8°F</td>
<td>+4.8°F</td>
<td>Record warm</td>
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<td>36-month period</td>
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<td>Sep 2012 - Aug 2016</td>
<td>29.6°F</td>
<td>+3.7°F</td>
<td>Record warm</td>
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<td>48-month period</td>
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<tr>
<td>Sep 2011 - Aug 2016</td>
<td>28.8°F</td>
<td>+2.9°F</td>
<td>2nd warmest</td>
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<tr>
<td>60-month period</td>
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</table>
18.3% of Contiguous U.S. in Drought

(2.8 percentage points since early August)

- Improvement: Northern and Southern Great Plains, Midwest, and parts of the Southeast
- Degradation: Northern and Central Rockies, Northeast, and Mid-Atlantic
- Outside CONUS: Improving drought for parts of Alaska, Hawaii, and Puerto Rico
Hurricane Hermine

- 1st hurricane to make landfall along Apalachee Bay since 1966
- Weak cat. 1, winds 80 mph and 982 mb central pressure
- Storm surge of 4-6’ in Wakulla County and 8-9’ in Dixie
- 80% of Tallahassee customers lost power
- 13 tornado warnings, 3 confirmed in Taylor county
Summer 2016 Temperature and Precipitation Records and near-records at selected stations

Based on non-threaded station data. Temperatures are averaged across 92 days. Stations have varying periods of record.
Consecutive days at or above 90 degrees

- Warmest July on record statewide, 3rd warmest summer (June – Aug.)
- 253 Tmax records broken or tied, 646 Tmin
- 74 consecutive days with minimum temperatures at or above 72 at Tallahassee (June 24 – Sept. 5)
Northeast Florida Dryness

August Average Rainfall

90 - day Deficits

August 2016
Sea Surface Temperatures and ENSO

- **Sea surface temperatures**
  - Below normal SSTs in equatorial Pacific
  - Above normal SSTs in the mid-latitudes of the Pacific
  - Above normal SSTs for much of the Atlantic for August.

- **ENSO forecast**
  - ENSO-Neutral conditions observed
  - **ENSO Alert System: Not Active**
  - ENSO-Neutral conditions favored (55-60%) during the Northern Hemisphere fall and winter 2016-17.
Monthly Forecast (October)

October Average
Temperature Probability

October Total
Precipitation Probability
Seasonal Forecast (Oct–Nov–Dec)

Oct-Nov-Dec Average Temperature Probability

Oct-Nov-Dec Total Precipitation Probability

THREE-MONTH OUTLOOK TEMPERATURE PROBABILITY
0.5 MONTH LEAD
VALID ON 2ND 2016
MADE 15 SEP 2016

EC MEANS EQUAL
A MEANS ABOVE
N MEANS NORMAL
B MEANS BELOW

THREE-MONTH OUTLOOK PRECIPITATION PROBABILITY
0.5 MONTH LEAD
VALID ON 2ND 2016
MADE 15 SEP 2016

EC MEANS EQUAL
A MEANS ABOVE
N MEANS NORMAL
B MEANS BELOW
U.S. Drought Outlook

U.S. Seasonal Drought Outlook
Drought Tendency During the Valid Period

Valid for September 15 – December 31, 2016
Released September 15, 2016

Depicts large-scale trends based on subjectively derived probabilities guided by short- and long-range statistical and dynamical forecasts. Use caution for applications that can be affected by short lived events. "Ongoing" drought areas are based on the U.S. Drought Monitor areas (intensities of D1 to D4).

NOTE: The tan areas imply at least a 1-category improvement in the Drought Monitor intensity levels by the end of the period, although drought will remain. The green areas imply drought removal by the end of the period (D0 or none).

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http://go.usa.gov/3eZ73
TODAY’S PRESENTATION:

- [http://www.ncdc.noaa.gov/sotc/briefings](http://www.ncdc.noaa.gov/sotc/briefings)

**NOAA’s National Centers for Environmental Information:**
[www.ncdc.noaa.gov](http://www.ncdc.noaa.gov)


**NOAA’s Climate Prediction Center:** [www.cpc.ncep.noaa.gov](http://www.cpc.ncep.noaa.gov)

**Florida Office of the State Climatologist:** [http://climatecenter.fsu.edu/](http://climatecenter.fsu.edu/)

**U.S. Drought Monitor:** [http://drought.gov](http://drought.gov)

**Climate Portal:** [www.climate.gov](http://www.climate.gov)

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