



**MIAMI-SOUTH FLORIDA**  
**National Weather Service**  
**Forecast Office**  
<http://www.weather.gov/miami>

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## November 2016 Weather Summary

### Dry and Seasonably Mild

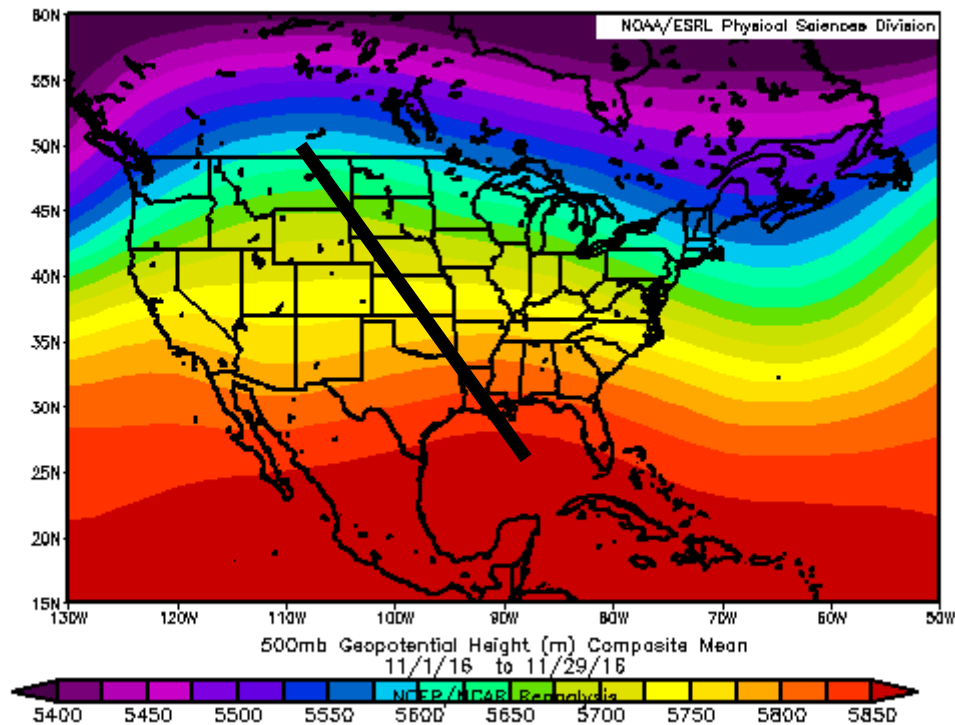
### Record Driest November in Naples and LaBelle

**December 5, 2016:** The first full month of the dry season lived up to its name in South Florida, as all areas recorded below normal precipitation. No measurable precipitation fell at Naples Municipal Airport during the entire month, the first time on record this has happened in the month of November. In fact, no measurable precipitation has fallen at Naples Municipal since October 6<sup>th</sup>, a streak of 59 days. Other locations which didn't receive any measurable precipitation in November include LaBelle and South Bay.

A total of 5 cold fronts passed through South Florida in November, however moisture and associated rainfall were limited with each of these fronts due to the presence of high pressure in the middle and upper levels of the troposphere over the Gulf of Mexico and much of the continental United States (Figure 1).

Most of these cold fronts were followed by only slightly cooler air, except for the cold front of November 20<sup>th</sup> which dropped temperatures into the upper 30s over interior sections of Southwest Florida on the morning of November 21<sup>st</sup>. Temperatures elsewhere across South Florida ranged from the mid to upper 40s along the Gulf coast to the lower and mid-50s along the east coast.

Tidal flooding was observed with the monthly high tides along the Intracoastal Waterway areas of Southeast Florida from November 13-15, with impacts not as significant as the October high tides. Otherwise, no significant impact weather occurred across South Florida in November.

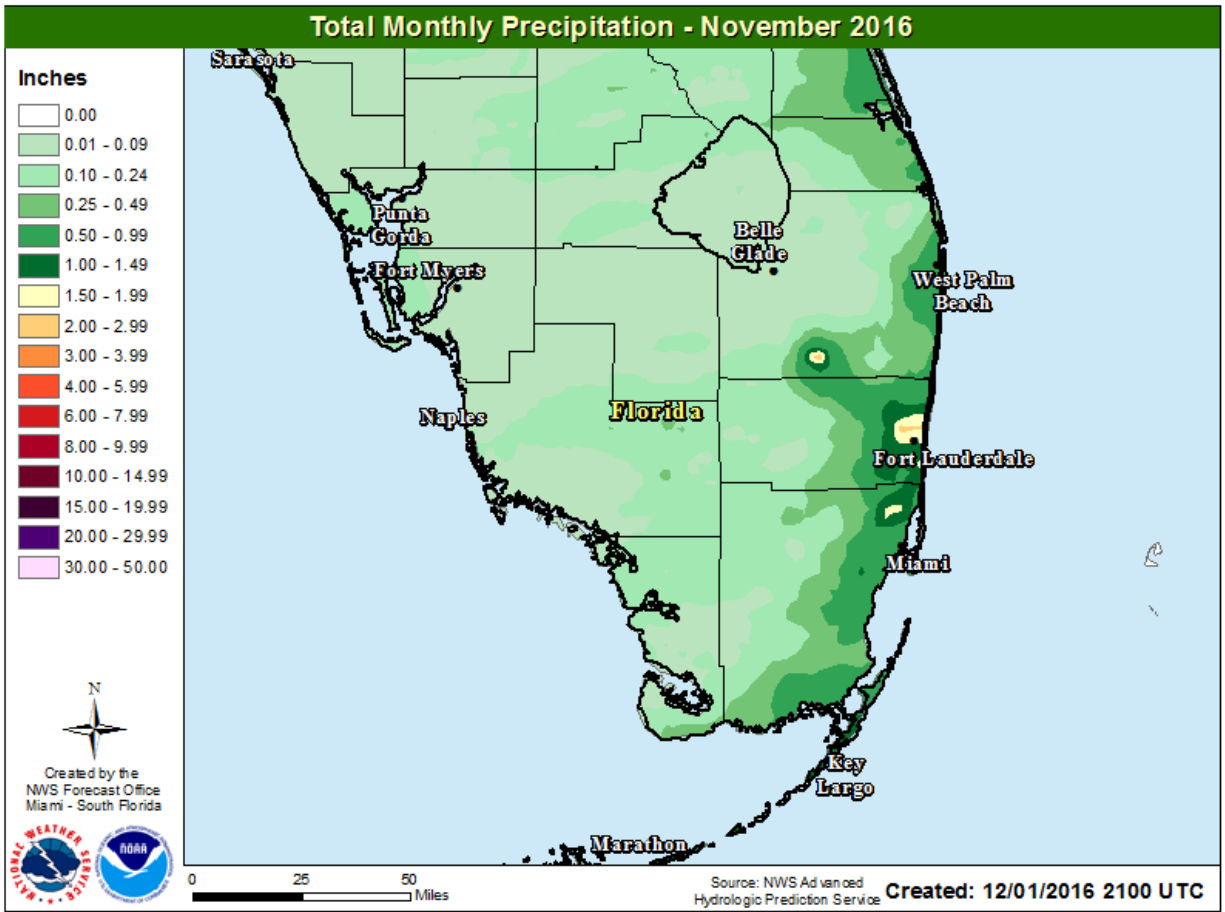


*Figure 1: Mean 500 mb (mid-tropospheric) pattern across United States during November. Black line denotes general center of high pressure aloft across much of United States*

## November Precipitation

Virtually all areas received less than an inch and a half of rain, with most locations not even reaching a half-inch of rain (0.5") for the entire month (Figure 2). Only isolated areas in central metro Broward County recorded over 2 inches of rain. Eastern areas received slightly more rainfall than interior and western areas. A total of 10 locations had among their top 10 driest Novembers on record.

Below are images of November rainfall and departure from normal, as well as a table of monthly rainfall and departure from normal for official reporting sites across South Florida:



*Figure 2*

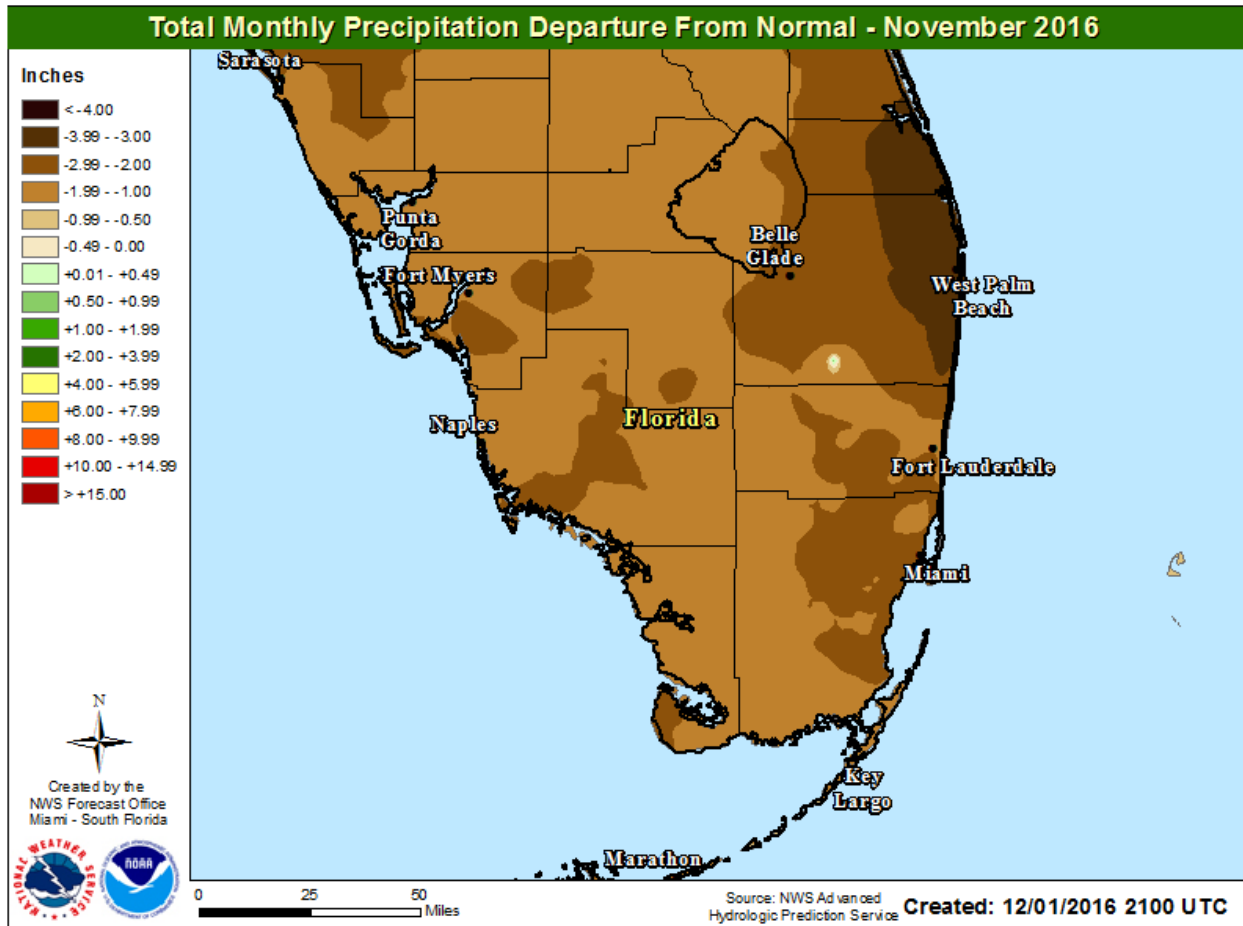


Figure 3

Location (Beginning of Period of Record)	November 2016 Rainfall (inches)	Departure from Normal	Rank (top 20)
Brighton Reservation – Glades County	0.17		
Canal Point (1941)	0.06	-2.61	2 <sup>nd</sup> driest
Cape Florida	0.72		
Clewiston	0.03	-1.69	
Everglades (1924)	0.05	-1.84	T-3 <sup>rd</sup> driest
Fort Lauderdale/Hollywood Int'l Airport (1913)	1.04	-2.20	16 <sup>th</sup> driest
Fort Lauderdale Beach	1.66		
Fort Lauderdale Dixie Water Plant	0.97	-2.93	
Fort Lauderdale Executive Airport	1.35		
Hialeah (1940)	0.86	-2.77	12 <sup>th</sup> driest
Hollywood Waste Water Plant	1.75	-1.49	

<b>Homestead General Airport (1990)</b>	<b>0.41</b>	<b>-2.18</b>	<b>4<sup>th</sup> driest</b>
<b>Immokalee (1970)</b>	<b>0.03</b>	<b>-2.03</b>	<b>2<sup>nd</sup> driest</b>
<b>Juno Beach</b>	<b>0.34</b>		
<b>LaBelle (1929)</b>	<b>0.00</b>	<b>-2.20</b>	<b>T-Driest on Rec</b>
<b>Loxahatchee NWR</b>	<b>0.33</b>		
<b>Marco Island</b>	<b>0.04</b>		
<b>Miami Beach (1927)</b>	<b>0.50</b>	<b>-2.24</b>	<b>T-6<sup>th</sup> driest</b>
<b>Miami International Airport (1911)</b>	<b>0.94</b>	<b>-2.33</b>	
<b>Moore Haven (1918)</b>	<b>0.01</b>	<b>-1.80</b>	<b>2<sup>nd</sup> driest</b>
<b>Muse</b>	<b>0.02</b>		
<b>Naples East/Golden Gate</b>	<b>0.38</b>		
<b>Naples Municipal Airport (1942)</b>	<b>T</b>	<b>-2.04</b>	<b>Driest on Rec.</b>
<b>North Miami Beach</b>	<b>1.05</b>		
<b>NWS Miami – Sweetwater</b>	<b>0.76</b>		
<b>Oasis Ranger Station (1978)</b>	<b>0.04</b>	<b>-2.01</b>	<b>3<sup>rd</sup> driest</b>
<b>Opa-Locka Airport</b>	<b>0.25</b>		
<b>Ortona</b>	<b>0.08</b>	<b>-1.57</b>	<b>2<sup>nd</sup> driest</b>
<b>Palm Beach Gardens</b>	<b>0.02</b>		
<b>Palm Beach Int'l Airport (1888)</b>	<b>1.00</b>	<b>-3.75</b>	
<b>Pembroke Pines – North Perry Airport</b>	<b>0.92</b>		
<b>Pompano Beach Airpark</b>	<b>0.90</b>		
<b>The Redland - Miami-Dade County (1942)</b>	<b>0.66</b>	<b>-2.31</b>	<b>11<sup>th</sup> driest</b>
<b>South Bay/Okeelanta</b>	<b>0.00</b>		
<b>West Kendall – Miami Executive Airport</b>	<b>0.94</b>		

## November Temperatures

The periodic cold fronts that passed through South Florida acted to keep temperatures near normal for most of the month. Average monthly temperatures were mainly within 0.5 degrees of the 30-year normal.

- **Miami International Airport** had an average November temperature of 74.6 degrees Fahrenheit. This is 0.3 degrees below the 30-year normal. The average high temperature

was 81F and the average low temperature was 68F. The warmest November temperature was 85 degrees on the 2<sup>nd</sup> and the coolest was 58 on the 21<sup>st</sup>.

- ***Palm Beach International Airport*** had an average November temperature of 73.2 degrees Fahrenheit. This is 0.4 degrees above the 30-year normal. The average high temperature was 80F and the average low temperature was 66F. The warmest November temperature was 85 degrees on the 2<sup>nd</sup> and the coolest was 51 on the 21<sup>st</sup>.

- ***Fort Lauderdale/Hollywood International Airport*** had an average November temperature of 74.8 degrees Fahrenheit. This is 0.7 degrees below the 30-year normal. The average high temperature was 81F and the average low temperature was 69F. The warmest November temperature was 85 degrees on the 2<sup>nd</sup> and the coolest was 56 on the 21<sup>st</sup>.

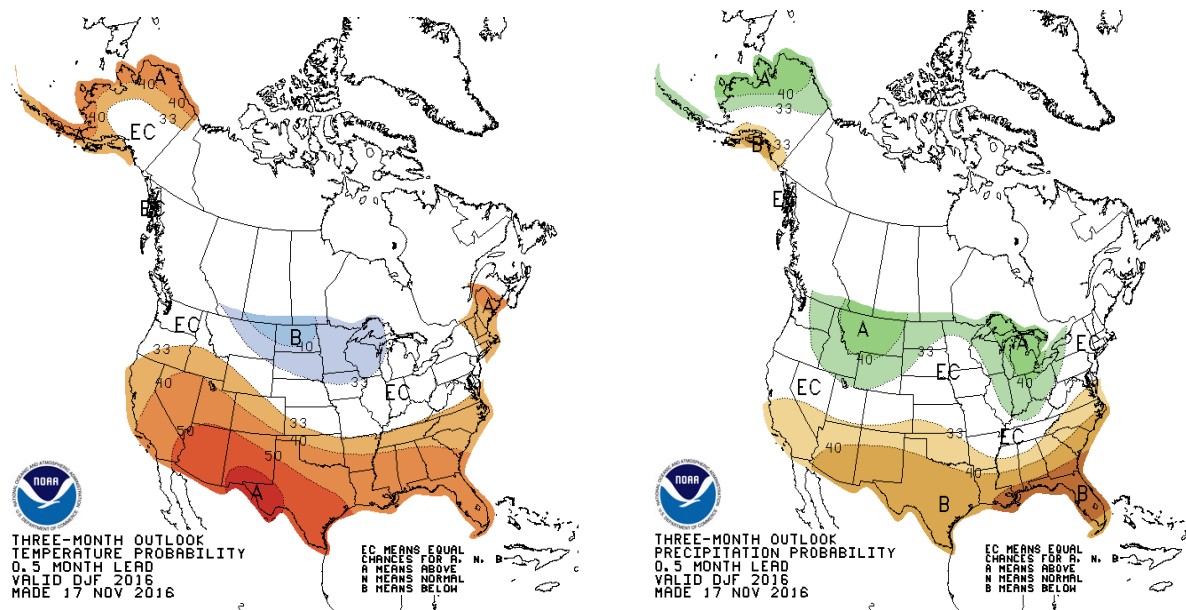
- ***Naples Municipal Airport*** had an average November temperature of 72.5 degrees Fahrenheit. This is 0.4 degrees above the 30-year normal. The average high temperature was 83F and the average low temperature was 62F. The warmest November temperature was 89 degrees on the 2<sup>nd</sup> and the coolest was 48 on the 21<sup>st</sup>.

## **Winter Outlook (December – February)**

Latest outlooks by the [NOAA Climate Prediction Center](#) (CPC, Figures 4 and 5) are for increased odds of above normal temperatures and below normal precipitation for the December to February period. The [current La Niña pattern](#) is one of the main factors leading to these possible conditions. Click on the link below for full details on the dry season outlook for South Florida.

Although the outlooks call for increased odds of warmer than normal temperatures, cold snaps can still occur which can lead to freezing conditions over at least parts of South Florida. The dry conditions prevalent in November are likely to continue through most of the winter. The National Weather Service will continue to closely monitor groundwater levels and be ready to alert of possible drought conditions if these dry conditions materialize over the next 1-2 months.

For the latest south Florida weather information, including the latest watches, advisories and warnings, please visit the National Weather Service Miami Forecast Office's web site at [weather.gov/southflorida](http://weather.gov/southflorida).



*Figures 4 and 5: December-February temperature probability (left) and precipitation probability (right) from NOAA's Climate Prediction Center (CPC).*