



# MIAMI-SOUTH FLORIDA

## National Weather Service Forecast Office

<http://www.weather.gov/miami>

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## 2017 Mid-Rainy Season Update

### Mainly Wetter and Hotter Than Normal

**August 3<sup>rd</sup>, 2017:** the first half of Rainy Season 2017 was wetter than normal over most of South Florida (Figure 1), along with warmer than normal temperatures. After a wet and stormy first 2 weeks of June which featured monthly rain totals of over 20 inches across parts of Southwest Florida, July continued the wet pattern over most interior and western sections of southern Florida. Over eastern metro areas of southern Florida, a wet June was followed by a near-normal July. A few exceptions to this were near the eastern shore of Lake Okeechobee as well as western sections of Glades and Hendry counties which averaged below normal in July.

Preliminary data from the South Florida Water Management District indicates that it was the wettest June/July on record with an average total of 23.45 inches across the district (which includes parts of Central Florida).

For the June/July time frame, Golden Gate received the most rainfall of any official NWS reporting stations with a whopping 37 inches, followed closely by Marco Island with 33.9 inches and South Bay/Okeelanta at 32.73 inches! At Immokalee, the 28.33 inches recorded made it the wettest June/July period on record. On the other end of the spectrum, LaBelle recorded only 13.98 inches, followed by 14.38 inches at Cape Florida.

The first 10-14 days of June were plagued by an area of low pressure which persisted over the Gulf of Mexico and provided Florida with a very moist and unstable atmosphere, resulting in periods of heavy rainfall. This pattern was most evident on June 6<sup>th</sup> and 7<sup>th</sup> when a strong mid-level low pressure over the Gulf helped to produce massive amounts of rain over most of South Florida. 24-hour rain totals were in the 12-14 inch range over southern Collier County, especially in Ochopee, Everglades City and the Big Cypress Preserve. Weekly rain totals from June 2-9 ranged from 10-15 inches

from eastern Collier County across most of Broward and Palm Beach counties (Figure 2). Isolated spots within this area received as much as 20 inches in southwestern Collier and southern Palm Beach counties. This prolonged and copious rainfall led to major flooding in these areas. Streets in Marco Island and Everglades City were closed due to standing water. Many streets and neighborhoods were also significantly impacted by flooding in Broward County and southern Palm Beach County, some areas remaining with standing water for days after the heaviest rains.

The persistent trough in the Gulf gave way to strong high pressure from the Atlantic for the latter half of June and first half of July. This pattern led to a predominantly easterly wind flow and heavier precipitation concentrated over the western portions of South Florida, although even east coast areas received a few episodes of heavy rain as well. By the latter part of July, a trough returned to the Southeast United States which brought back episodes of high moisture and instability to the region. Tropical Storm Emily formed on July 31 from a frontal system which penetrated unusually far to the south into the Gulf of Mexico and caused heavy rainfall and flooding once again across Southwest Florida.

Here are rainfall totals from June 1 through July 31, as well as departure from normal and ranking for select South Florida sites:

<b>Location (Beginning of Period of Record)</b>	<b>June 1-July 31 Rainfall (inches)</b>	<b>June 1-July 31 Departure from Normal</b>	<b>Rank</b>
Big Cypress Reservation - Hendry County	<b>24.02</b>		
Brighton Reservation – Glades County	<b>17.07</b>		
Canal Point (1941)	<b>17.18</b>	<b>+0.84</b>	
Cape Florida	<b>14.38</b>		
Everglades (1924)	<b>29.42</b>	<b>+9.09</b>	<b>3<sup>rd</sup> Wettest</b>
Fort Lauderdale/Hollywood Int'l Airport (1913)	<b>17.58</b>	<b>+1.44</b>	
Fort Lauderdale Beach	<b>21.72</b>		
Fort Lauderdale Dixie Water Plant	<b>19.48</b>	<b>-0.84</b>	
Fort Lauderdale Executive Airport	<b>17.68</b>		
Hialeah (1940)	<b>22.48</b>	<b>+0.42</b>	
Hollywood Waste Water Plant	<b>19.46</b>	<b>+0.99</b>	
Homestead General Airport (1990)	<b>18.77</b>	<b>-0.36</b>	

Immokalee (1970)	<b>28.33</b>	<b>+11.3</b>	<b>Wettest on rec.</b>
Juno Beach	<b>16.34</b>		
LaBelle (1929)	<b>13.98</b>	<b>-4.73</b>	
Marco Island	<b>33.90</b>		
Miami Beach (1927)	<b>16.55</b>	<b>+1.44</b>	
Miami International Airport (1911)	<b>28.42</b>	<b>+12.25</b>	<b>7<sup>th</sup> Wettest</b>
Moore Haven (1918)	<b>19.21</b>	<b>+2.99</b>	
Muse	<b>21.28</b>		
Naples East/Golden Gate	<b>37.00</b>		
Naples Municipal Airport (1942)	<b>25.87</b>	<b>+9.78</b>	<b>5<sup>th</sup> Wettest</b>
North Miami Beach	<b>17.01</b>		
NWS Miami – FIU/University Park	<b>24.46</b>		
Oasis Ranger Station (1978)	<b>30.04</b>	<b>+9.04</b>	
Opa-Locka Airport	<b>24.86</b>		
Ortona	<b>17.68</b>	<b>-1.82</b>	
Palm Beach Gardens	<b>17.45</b>		
Palm Beach Int'l Airport (1888)	<b>17.76</b>	<b>+3.70</b>	
Pembroke Pines – North Perry Airport	<b>18.77</b>		
Pompano Beach Airpark	<b>20.23</b>		
The Redland - Miami-Dade County (1942)	<b>22.82</b>	<b>+3.28</b>	
South Bay/Okeelanta	<b>32.73</b>		

## TEMPERATURES

Despite the periods of heavy rain, temperatures in June and July were about 1 degree above normal across South Florida, as the subtropical high pressure which dominated the weather pattern from mid-June to mid-July kept the atmosphere over the region warmer than normal. At Miami International Airport, a streak of days above 90 degrees began on June 19<sup>th</sup> and continued until July 31<sup>st</sup> for a total of 41 days, the second longest such streak on record. All four official climate sites (Miami International Airport average temperature 84.7F), Fort Lauderdale/Hollywood International Airport at 83.4F, Palm Beach International Airport at 83.1F and Naples Municipal Airport also at 83.1F) recorded top 10 warmest June/July periods on record. Miami International Airport's

average July temperature of 85.7F not only broke the monthly record for July, but for any calendar month!

In June and July, daily warm minimum temperature records were tied or broken on 13 days in Miami, 8 days in Fort Lauderdale, 7 days in West Palm Beach and 5 days in Naples. Most of these records were for lows at or above 80 degrees. In contrast, 2 record cool maximum temperature records in the upper 70s and lower 80s were set in Fort Lauderdale and West Palm Beach on June 6<sup>th</sup> and July 31<sup>st</sup> due to day-long clouds and rain.

## **Outlook for August-October**

[The outlook by the NOAA Climate Prediction Center](#) for August through October calls for an increased likelihood of above normal temperatures to continue across South Florida, along with equal chances of above, below or near normal precipitation (Figure 3). Current outlook for the month of August shows increased confidence in above normal precipitation, with low confidence for September and October

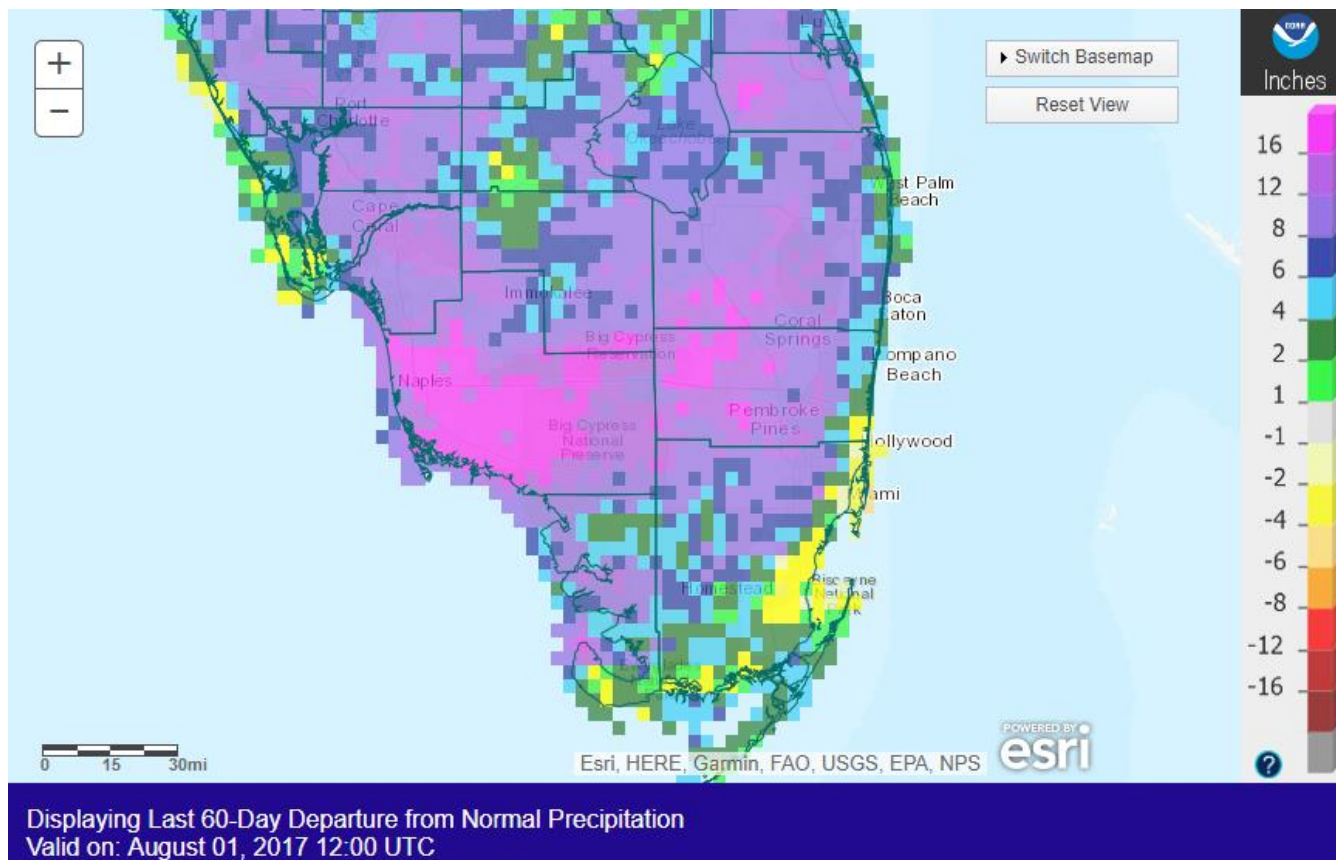
Lightning continues to be a primary threat throughout this period, especially in August. Good lightning safety tips can be found [at this site](#).

Rip currents can also occur on days of moderate to strong onshore winds which are most common along the Atlantic coast. Beachgoers are strongly urged to heed the advice of Ocean Rescue lifeguards and swim near a lifeguard. [Visit the National Weather Service Rip Current Awareness page](#) for more information.

Last but not least, hurricane season peaks in August and September, which means there's no better time than now to begin getting ready. Websites such as [ready.gov](#) provide good preparedness tips.

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](#).

## Figures



**Figure 1:** Precipitation Departure from Normal June 1-July 31

# 7-Day Rainfall - Thru 8 AM June 09, 2017

Source: ASOS, AWOS, AWSS, Co-Op observers, CoCoRaHS observers, SFWMD and AHPS data  
 Red dots are actual observations. Yellow dots are estimated values. Values between the observations have been interpolated and enhanced using AHPS data. The CoCoRaHS list was last updated on 6/3/14. This information is not official and should be considered as an estimation.

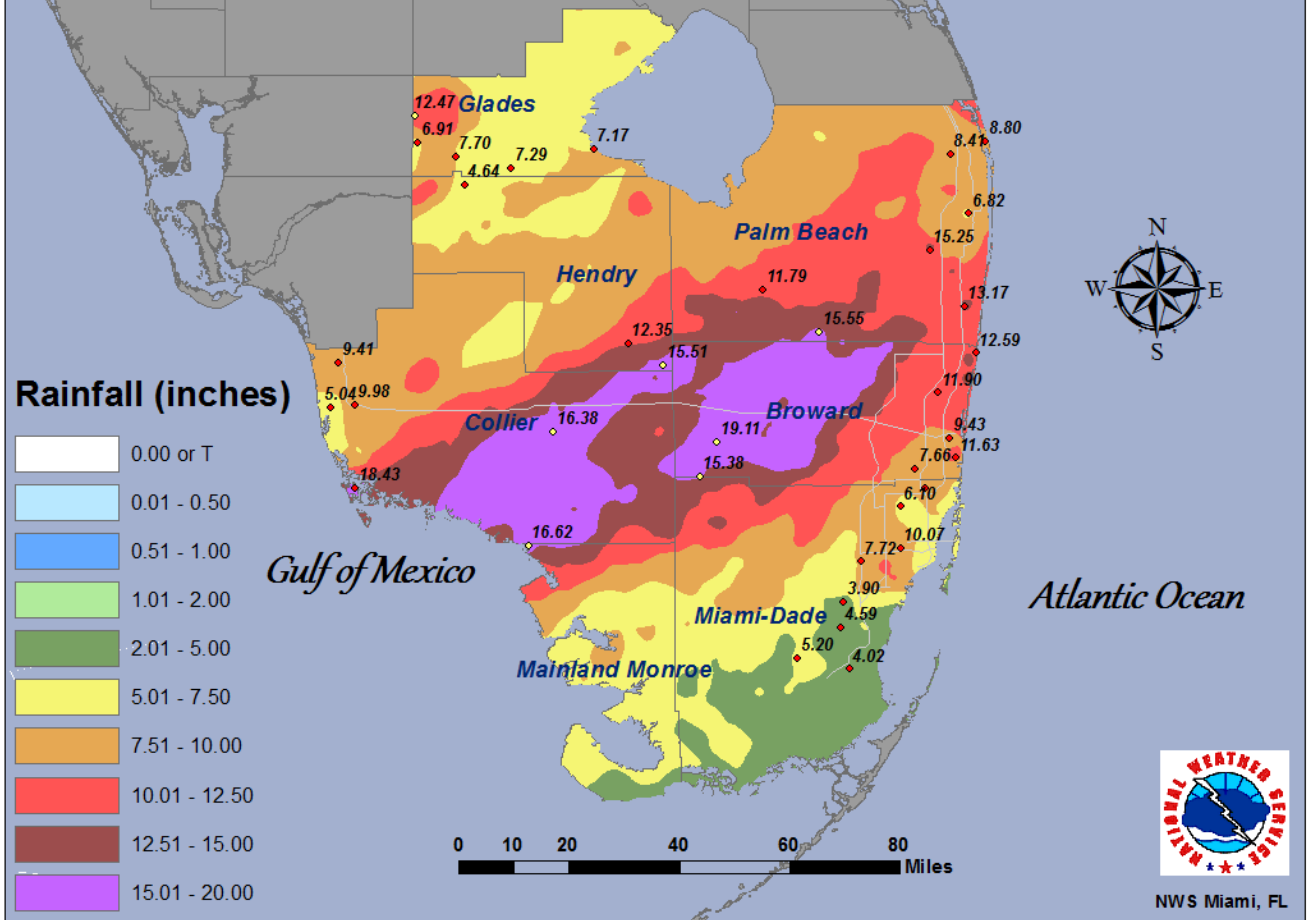
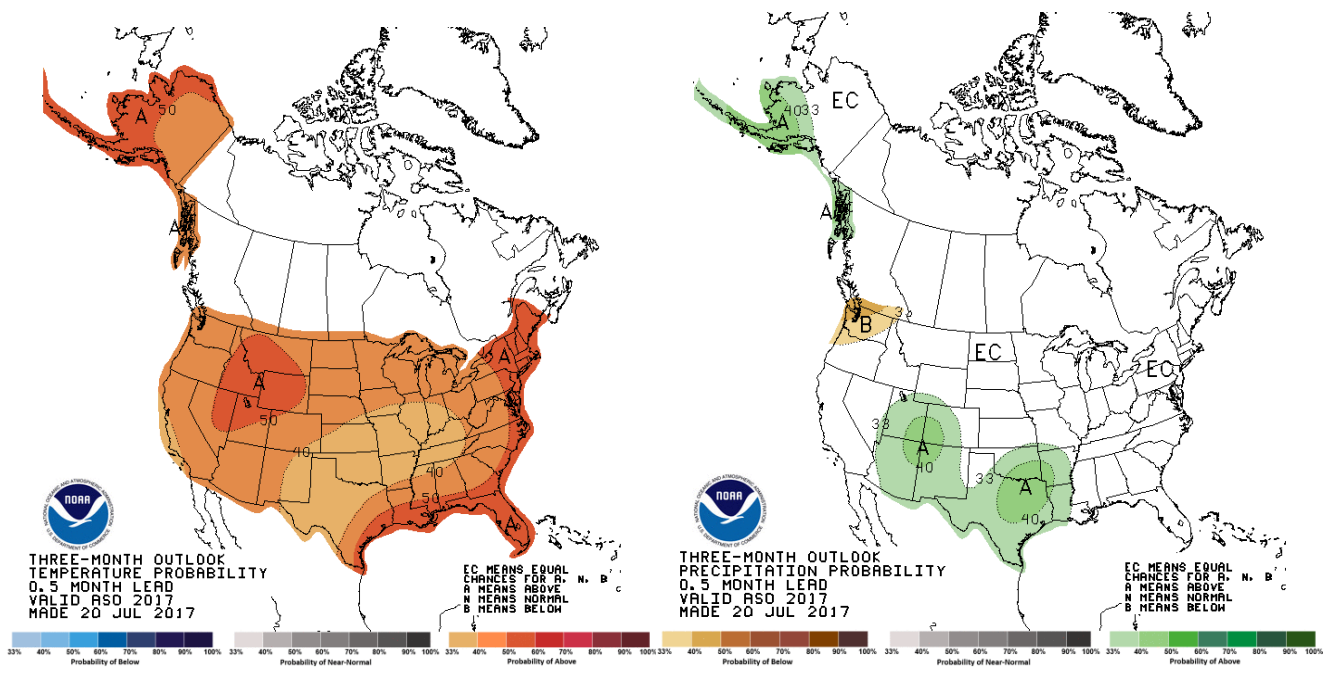


Figure 2: Rainfall June 2-9



**Figure 3:** NOAA Climate Prediction Center Temperature (left) and Precipitation (right) outlooks for August-October.