



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

## SOUTH FLORIDA WINTER 2019-2020 SUMMARY

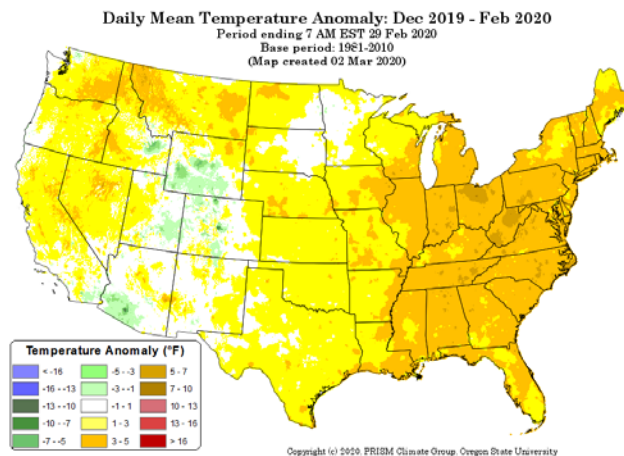
### Warmer and Mostly Wetter than Normal Winter

**March 4, 2020:** Another meteorological winter has concluded, and the 2019-2020 winter was yet another warm one across South Florida. For the 9<sup>th</sup> consecutive winter, temperatures averaged above normal for the season. Three of the 4 main climate sites (Miami, West Palm Beach, and Naples) ranked among the top 5 warmest winters on record. More information in the temperature section below.

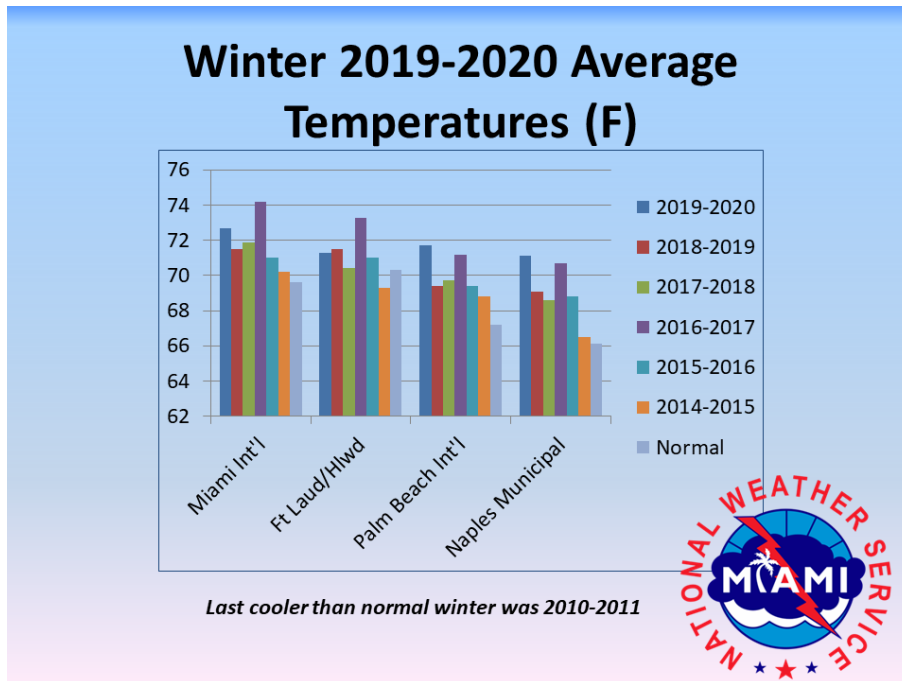
The general weather pattern this winter was for higher than normal pressures aloft over much of the Continental United States. This is likely a reflection of fewer and less intense cold air outbreaks originating from Arctic airmasses, and as result most of the cold air outbreaks in Florida this winter were rather mild and of short duration.

### Temperatures

Average winter temperatures were mostly 3 to 5 degrees above normal across most of South Florida (Figure 1).



**Figure 1:** Temperature Departure from Normal across the U.S. for December 2019-February 2020

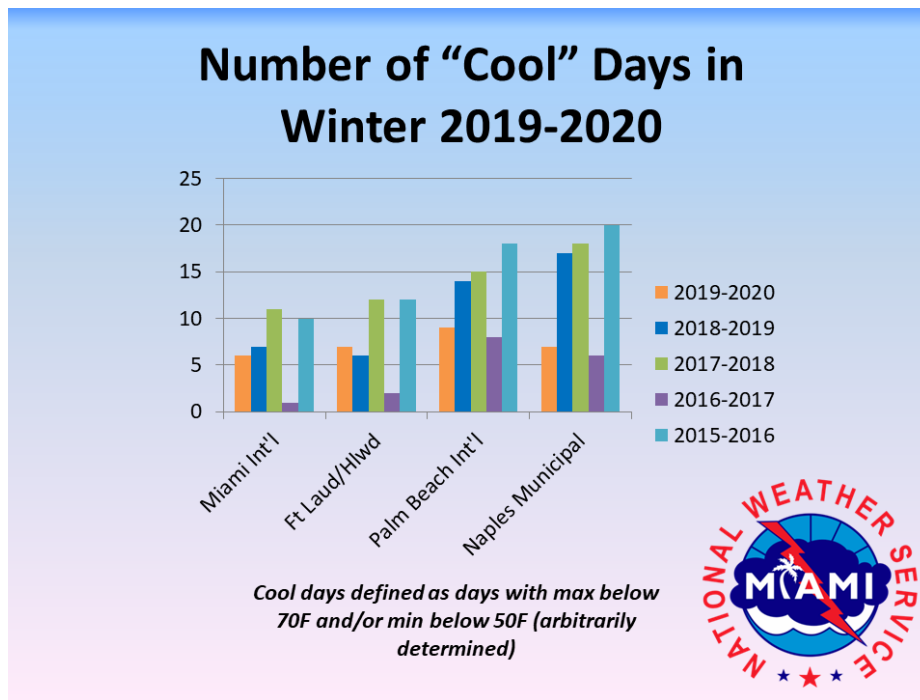


**Figure 2:** Average winter temperatures 2015-2020 for Main South Florida Climate Sites

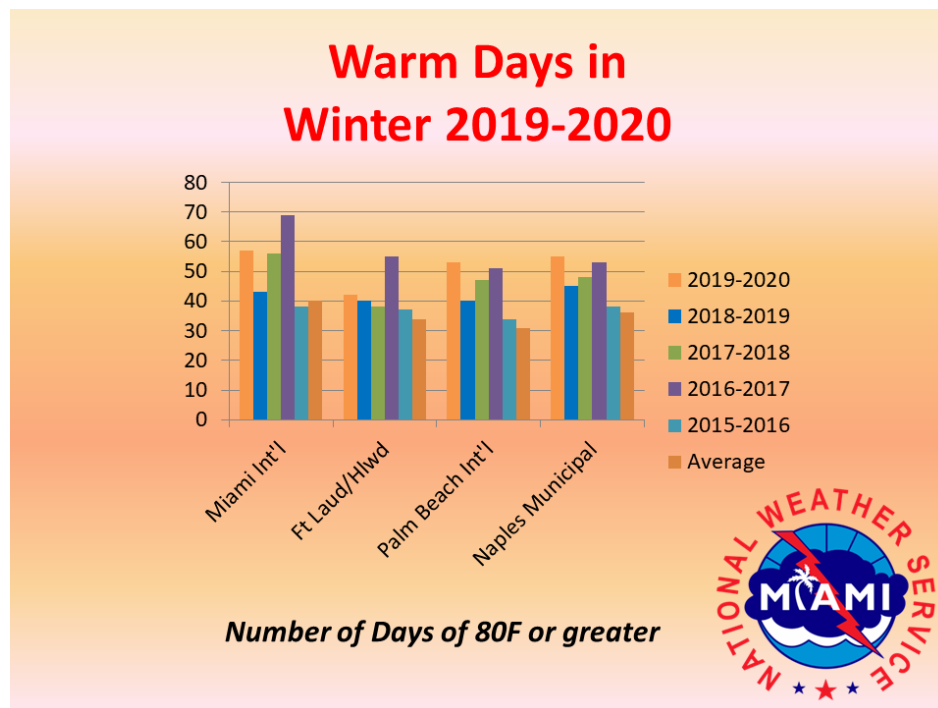
The lowest temperatures of the winter occurred after the passage of a strong cold front that swept through South Florida on Tuesday, January 20<sup>th</sup>. Low temperatures on the morning of January 22<sup>nd</sup> dropped into the 30s over most of South Florida, with lower 40s confined to the urban core and coastal areas of Southeast and Southwest Florida. The lowest official NWS temperature was 33F in Moore Haven and South Bay, although several unofficial sites across interior SW Florida got down to as low as 30F for one to two hours and resulted in a light freeze in those areas.

In contrast, the temperature reached or exceeded 80F on anywhere from about 40 to 60 days this winter. Naples on February 18<sup>th</sup> reached 90F, the earliest 90-degree day on record.

Below are graphics with additional temperature data for the four main climate sites in South Florida:



**Figure 3:** Number of days of sub-70F degree highs and/or sub-50F degree lows.



**Figure 4:** Number of days greater than or equal to 80 degrees

Here are average December 2019-February 2020 temperatures, departure from normal in degrees F and ranking for the four main South Florida climate sites:

Location (beginning of period of historical record)	Dec 2019-Feb 2020 Avg Temp	Departure From Normal (F)	Top 25 Rank
Miami (1911)	72.7	+3.1	4 <sup>th</sup> warmest
Fort Lauderdale (1912)	71.3	+1.0	T-12 <sup>th</sup> warmest
West Palm Beach (1888)	71.7	+4.5	3 <sup>rd</sup> warmest
Naples (1942)	71.1	+5.0	2 <sup>nd</sup> warmest

Other noteworthy statistics and data:

- **Miami International Airport:** The highest temperature recorded was 87 degrees set on December 14<sup>th</sup>, January 4<sup>th</sup>, and February 14<sup>th</sup>, and the lowest temperature recorded was 40 degrees on January 22<sup>nd</sup>. The temperature reached or exceeded 80 degrees on 57 days, well above the average of 40 days. The number of days below 50 degrees was three (3) which is well below the 30-year mean of 8.

- **Palm Beach International Airport:** The highest temperature recorded was 88 degrees on January 4<sup>th</sup>, February 14<sup>th</sup>, and February 26<sup>th</sup>, and the lowest temperature recorded was 41 degrees on January 22<sup>nd</sup>. The temperature reached or exceeded 80 degrees on 53 days, well above the average of 31 days. The number of days below 50 degrees was seven (7) which is well below the 30-year mean of 16.

- **Fort Lauderdale/Hollywood International Airport:** The highest temperature recorded was 87 degrees on January 4<sup>th</sup> and the lowest temperature recorded was 39 degrees on January 22<sup>nd</sup>. The temperature reached or exceeded 80 degrees on 42 days, well above the average of 34 days. The number of days below 50 degrees was three (3) which is well below the 30-year mean of 11.

- **Naples Municipal Airport:** The highest temperature recorded was 90 degrees on February 18<sup>th</sup> and the lowest temperature recorded was 40 degrees on January 22<sup>nd</sup>. The temperature reached or exceeded 80 degrees on 55 days, well above the average of 36 days. The number of days below 50 degrees was five (5) which is well below the 30-year mean of 21.

## Precipitation

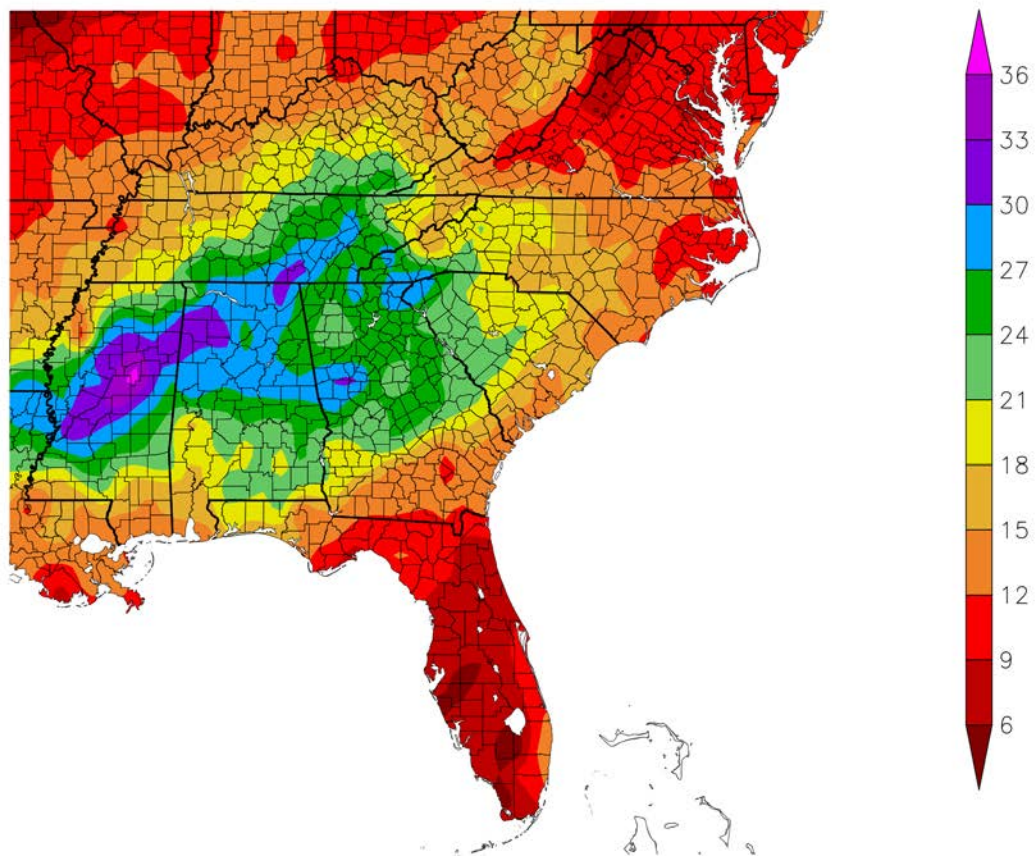
Most of South Florida received above normal rainfall this winter, with a few heavy rain events most notably over metro Southeast Florida. The most significant event was on the evening of December 22<sup>nd</sup> and early morning of December 23<sup>rd</sup> when a frontal system moved through South Florida, and rain bands associated with the front brought as much as 8 to 12 inches of rain to portions of southern metro Broward and northern metro Miami-Dade counties (a summary of the event can be found here: <https://www.weather.gov/mfl/dec2019flooding>)

Other heavy rain events occurred on December 12<sup>th</sup>, 27<sup>th</sup>, and 28<sup>th</sup>, and January 31<sup>st</sup> all over SE Florida and in association with cold fronts. December and February precipitation were mostly above normal, with January being the only drier than normal month across most of the area.

The only area to remain below normal for precipitation this winter was over a small part of interior South Florida south of Lake Okeechobee. Dry conditions in the fall of 2019 over interior South Florida lingered through January and led to moderate drought conditions, but the heavy rainfall at the end of January eliminated the drought.

The highest measured rainfall total was 22.55 inches in Juno Beach, and the lowest was 5.17 inches south of South Bay.

Precipitation (in)  
12/1/2019 – 2/29/2020

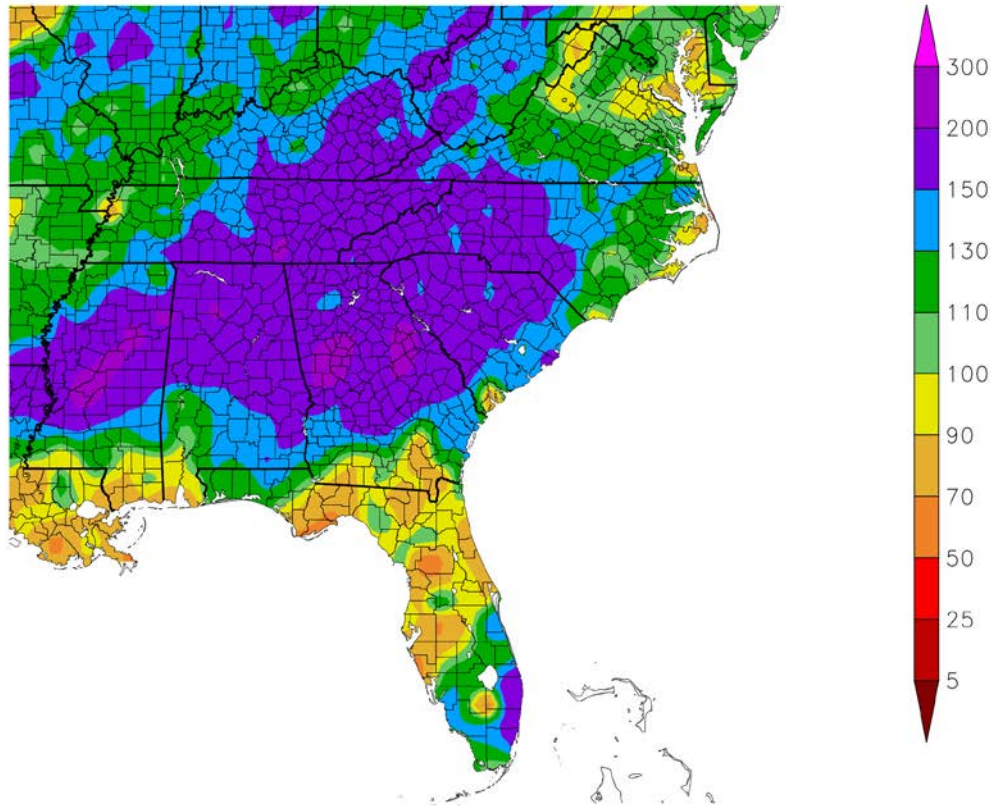


Generated 3/2/2020 at HPRCC using provisional data.

NOAA Regional Climate Centers

**Figure 5:** Observed SE U.S. Precipitation for Winter 2019-2020

Percent of Normal Precipitation (%)  
12/1/2019 – 2/29/2020



Generated 3/2/2020 at HPRCC using provisional data.

NOAA Regional Climate Centers

**Figure 6:** Southeast U.S. Percent of Normal Precipitation for Winter 2019-2020

Following are December 2019-February 2020 rainfall totals, departure from normal in inches and ranking for selected locations:

Location (Beginning of Period of Record)	Dec 2019-Feb 2020 Rainfall (inches)	Departure from Normal	Top 20 Rank
Canal Point (1941)	8.84	+2.40	
Cape Florida (1998)	7.75		4 <sup>th</sup> Wettest
Devils Garden (1957)	5.41	-0.47	
Fort Lauderdale/Hollywood Int'l (1912)	15.01	+5.96	7 <sup>th</sup> Wettest
Fort Lauderdale Executive Airport	16.31	+9.74	
Fort Lauderdale Dixie Water Plant	13.94	+5.69	

Hollywood (1963)	<b>16.67</b>	<b>+7.62</b>	
Immokalee (1970)	<b>6.66</b>	<b>+0.21</b>	
Juno Beach (2003)	<b>22.55</b>	<b>+12.78</b>	<b>Wettest on Record</b>
Loxahatchee NWR (1990)	<b>15.31</b>	<b>+6.23</b>	<b>6<sup>th</sup> Wettest</b>
Marco Island	<b>7.54</b>	<b>+1.32</b>	
Miami Beach (1928)	<b>15.53</b>	<b>+9.06</b>	<b>3<sup>rd</sup> Wettest</b>
Miami International Airport (1895)	<b>11.36</b>	<b>+5.45</b>	<b>8<sup>th</sup> Wettest</b>
Moore Haven (1918)	<b>8.37</b>	<b>+2.83</b>	<b>12<sup>th</sup> Wettest</b>
Muse	<b>6.15</b>		
Naples Municipal Airport (1942)	<b>6.56</b>	<b>+1.16</b>	<b>18<sup>th</sup> Wettest</b>
NWS Miami	<b>8.79</b>	<b>+2.94</b>	
Palm Beach Gardens	<b>16.96</b>		
Palm Beach International Airport (1888)	<b>13.69</b>	<b>+4.36</b>	<b>15<sup>th</sup> Wettest</b>
Pembroke Pines – North Perry Airport	<b>10.68</b>	<b>+2.89</b>	
Pompano Beach Airpark	<b>13.24</b>	<b>+6.01</b>	
Miami Executive Airport – W. Kendall	<b>7.99</b>	<b>+1.58</b>	
The Redland (1942)	<b>8.44</b>	<b>+2.32</b>	<b>13<sup>th</sup> Wettest</b>
South Bay 15S	<b>5.17</b>		

## Severe Thunderstorms/Tornadoes

The only severe weather events of note this winter occurred with the following weather events:

- January 29th: a thunderstorm wind gust of 58 mph was recorded at Juno Beach Pier at 10:14 PM ahead of a cold front
- January 31<sup>st</sup>: a radar-indicated tornado (depicted by a tornadic debris signature) was observed in Mainland Monroe County well away from populated areas at 10:35 PM ahead of a strong cold front

## Outlook for March-May

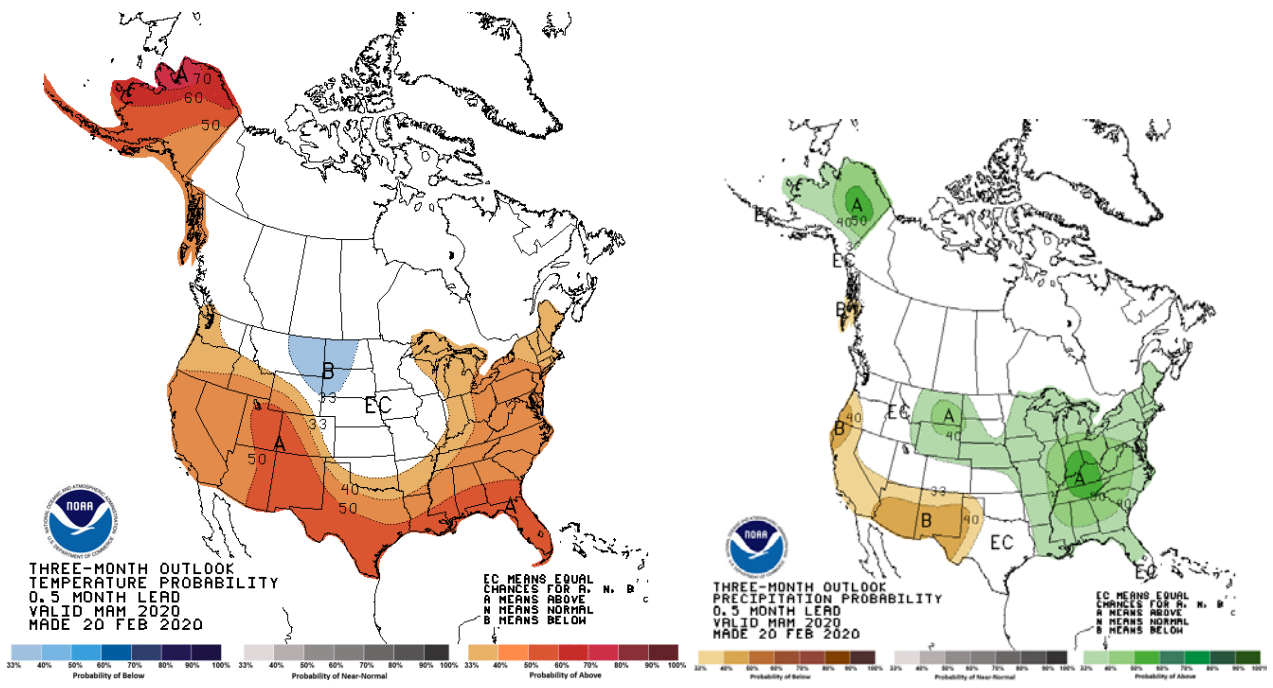


[The outlook by the NOAA Climate Prediction Center](#) for the period from March through May (Figures 7 and 8) calls for a greater than 50% chance of above normal temperatures, and equal chances of above, below, and near precipitation. A drier than normal pattern is more likely to be the case in March.

Although the mostly wetter than normal winter may act to mitigate the threat of wildfires, only a couple of weeks of drier than normal conditions during the spring months would increase the wildfire threat during what is typically the peak of wildfire season. All persons are urged to take measures to reduce the chance of wildfires. Visit the [Florida Forest Service web site](#) for more information on how to help prevent wildfires.

March and April also bring an increase in easterly winds to the area along with an increase in beach-goers. This significantly increases the risk of rip currents along the east coast beaches. A sharp increase in rip current-related drowning deaths and rescues occurs during the spring months due in part to this shift in the wind patterns and more people in the water. All residents and visitors visiting area beaches 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.

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 7 and 8: NOAA Climate Prediction Center outlook for March-May.