



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

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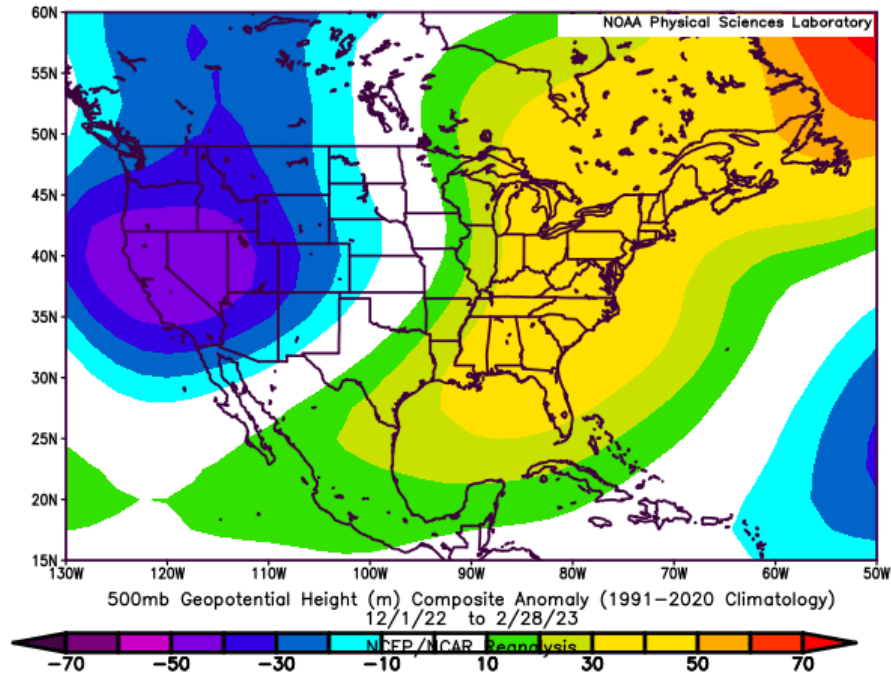
## **SOUTH FLORIDA WINTER 2022-2023 SUMMARY**

### **Much Warmer and Mainly Drier than Normal Winter**

**March 3, 2023:** It may sound like a broken record, but South Florida experienced yet another warmer than normal winter. In fact, the recently concluded meteorological winter (December – February) was in the top 5 at all local climate sites, even reaching the second warmest in Miami and Fort Lauderdale. More information in the temperature section below.

The prevailing winter weather pattern was characterized by a stronger-than-normal mid to upper level high pressure over eastern North America, the Gulf of Mexico, and the western Atlantic Ocean (Figure 1), and the mean upper level jet stream position was over the Central U.S. and mid-Atlantic states. The average position of these large-scale weather features is a hallmark of La Niña winters in North America, and led to fewer cold fronts moving through Florida. As a result, our area experienced longer warm spells and only a few relatively brief (but noteworthy) cold episodes. The relative lack of frontal systems affecting South Florida also led to little rainfall (with the exception of portions of SE Florida) and no severe weather events this winter.

Winter 2022-2023 temperature and precipitation summaries are below.

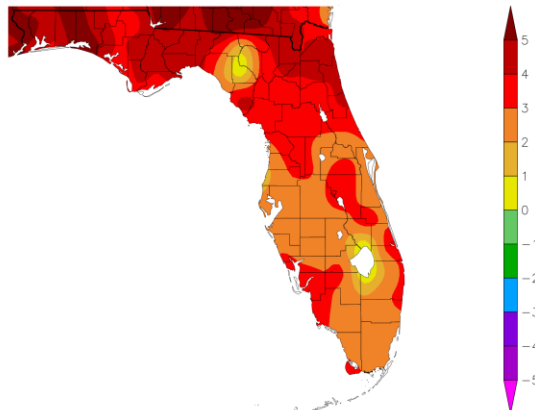


**Figure 1:** 500 mb height anomalies for December 2022-February 2023. Yellow colors reflect stronger high pressure at the 500 mb level, and blue colors reflect stronger low pressure

## Temperatures

Average winter temperatures were mostly 3 to 4 degrees above normal across South Florida (Figures 2 and 3).

Departure from Normal Temperature (F)  
12/1/2022 - 2/28/2023

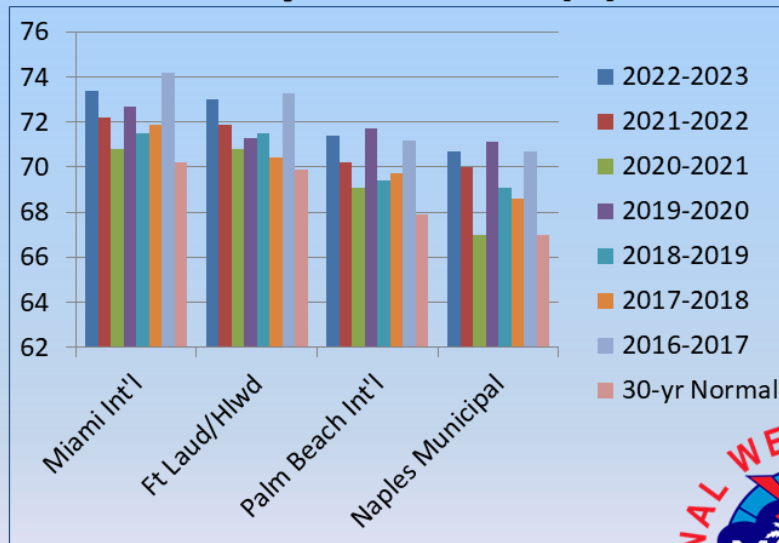


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**Figure 2:** Temperature Departure from Normal across Florida for December 2022-February 2023

## Winter 2022-2023 Average Temperatures (F)



*Last cooler than normal winter was 2010-2011*

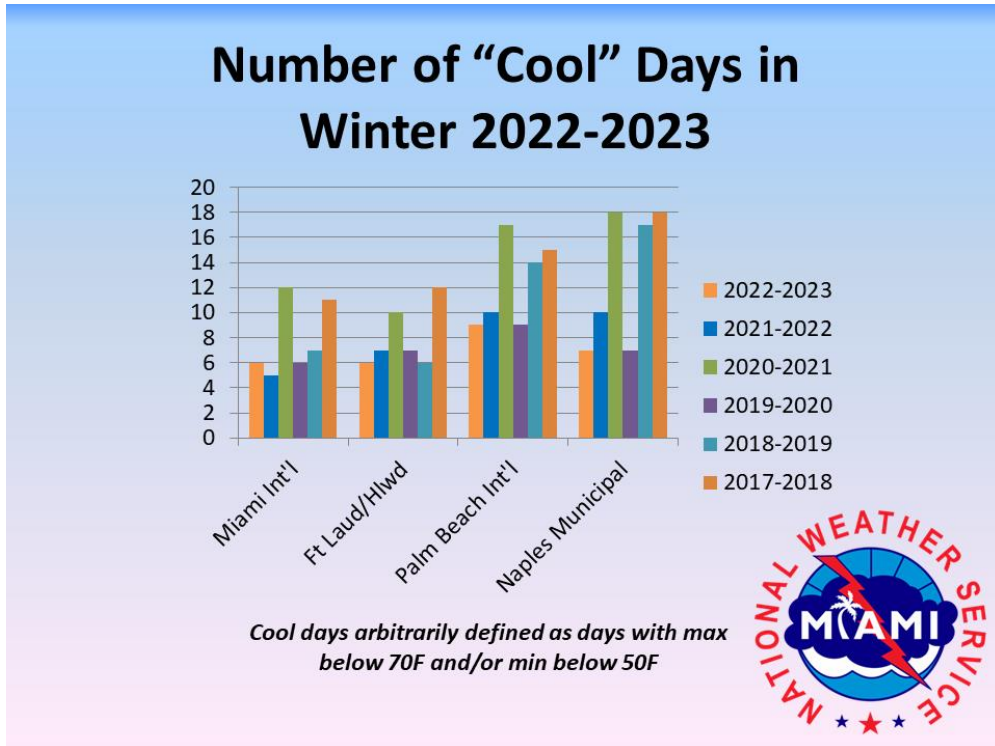


**Figure 3:** Average winter temperatures 2016-2023 for main South Florida climate sites

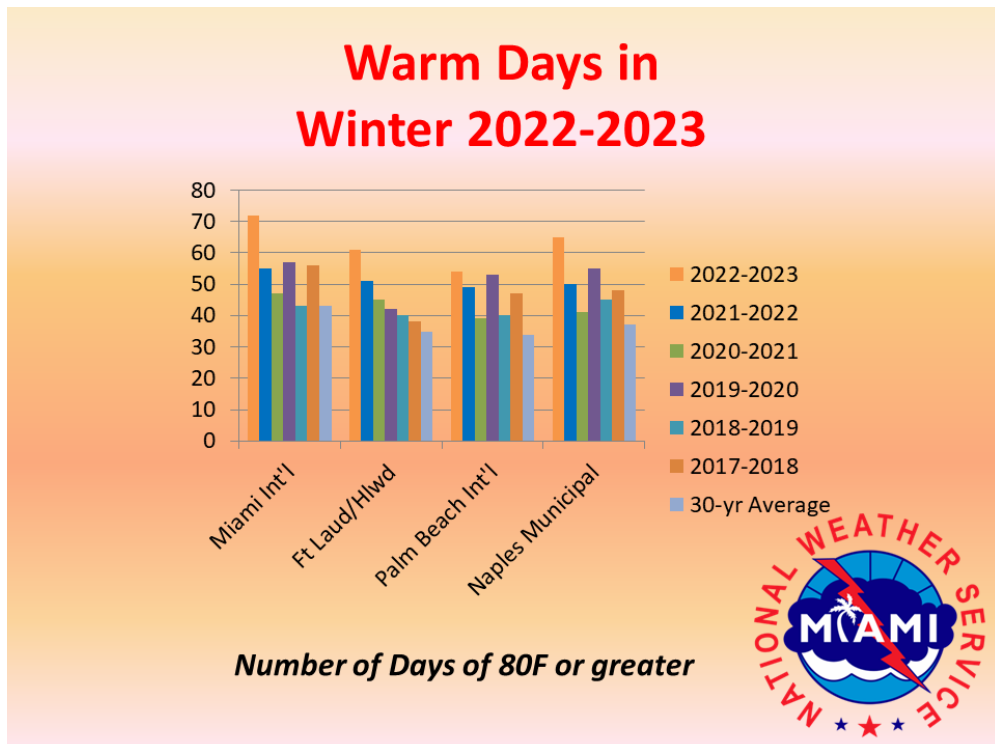
Above-normal temperatures were observed on more than 80% of the days this winter, and up to 87% at Miami International Airport. In fact, Miami International Airport reached 80 degrees on 72 days which is the highest number on record going back to 1895. An all-time winter high temperature record of 90F was tied at Palm Beach International Airport on February 28<sup>th</sup>.

Only 2 cold episodes occurred this winter, December 24-26 and January 14-16. Although few in number, they were especially noteworthy given the prevailing winter warmth. The Christmas cold episode featured temperatures failing to reach 60F for 3 consecutive days, and a cold Christmas Day in which the high temperature barely reached 50F in a few locations. On January 15<sup>th</sup> and 16<sup>th</sup>, temperatures dropped into the 30s and 40s, with freezing temperatures observed in a few locations over the interior. The lowest recorded temperature at NWS sites was 34F in Moore Haven on the 16<sup>th</sup>, although unofficial readings of 30F were recorded in Palmdale on the 15<sup>th</sup>, and 32F in Immokalee on the 15<sup>th</sup>. Some damage to crops was noted, especially in western Palm Beach County.

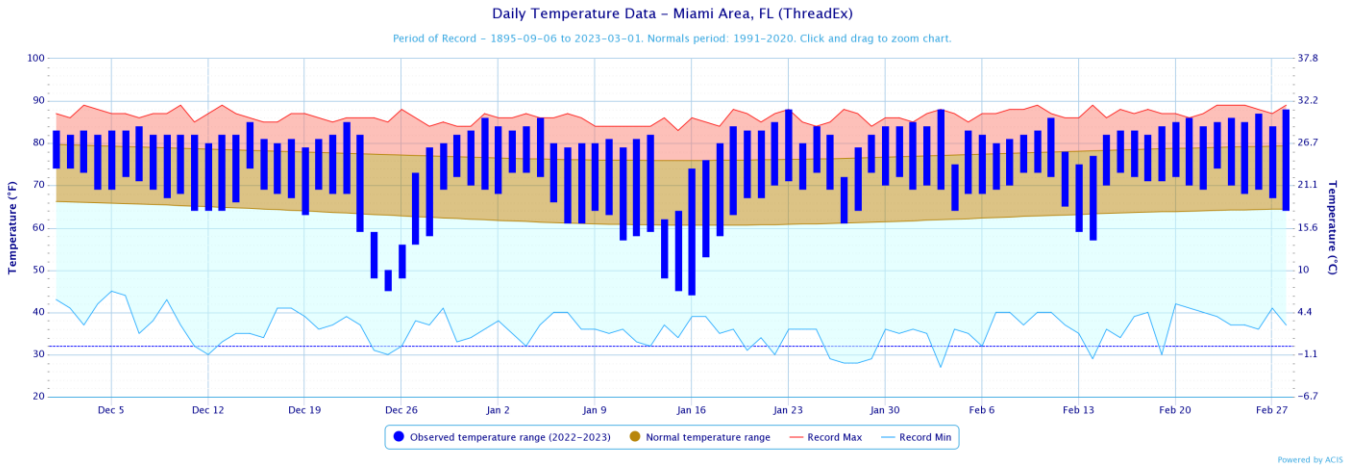
Below are graphics with additional temperature data for the four main climate sites in South Florida:



**Figure 4:** Number of days of sub-70F degree highs and/or sub-50F degree lows.



**Figure 5:** Number of days greater than or equal to 80 degrees F



**Figure 6:** Daily temperature data for Miami International Airport for December 2022- February 2023. This is generally representative of winter temperature trends at all South Florida locations

Here are average December 2022-February 2023 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 2022-Feb 2023 Avg Temp	Departure from Normal (F)	Rank
Miami (1895)	73.4	+3.2	T-2 <sup>nd</sup> warmest
Fort Lauderdale (1912)	73.0	+3.1	T-2 <sup>nd</sup> warmest
West Palm Beach (1888)	71.4	+3.5	5 <sup>th</sup> warmest
Naples (1942)	70.7	+3.7	T-3 <sup>rd</sup> warmest

Other noteworthy statistics and data:

- **Miami International Airport:** The highest temperature recorded was 88 degrees set on January 23<sup>rd</sup>, February 3<sup>rd</sup>, and February 28<sup>th</sup>, and the lowest temperature recorded was 44 degrees on January 16<sup>th</sup>. The temperature reached or exceeded 80 degrees on **72 days**, well above the average of 43 days and the highest number on record. The number of days below 50 degrees was **6** which equals the 30-year average.

- **Palm Beach International Airport:** The highest temperature recorded was 90 degrees on February 28<sup>th</sup>, and the lowest temperature recorded was 40 degrees on January 15<sup>th</sup>. The temperature reached or exceeded 80 degrees on **54 days**, which is well above the average of 34 days. The number of days below 50 degrees was **8** which is well below the 30-year average of 14 days.

- **Fort Lauderdale/Hollywood International Airport:** The highest temperature recorded was 88 degrees on February 28<sup>th</sup>, and the lowest temperature recorded was 43 degrees on January 15<sup>th</sup>. The temperature reached or exceeded 80 degrees on **61 days**, well above the average of 35 days. The number of days below 50 degrees was **6** which is below the 30-year average of 8.

- **Naples Municipal Airport:** The highest temperature recorded was 87 degrees on February 23<sup>th</sup> and February 24<sup>th</sup>, and the lowest temperature recorded was 41 degrees on January 16<sup>th</sup>. The temperature reached or exceeded 80 degrees on **65 days**, well above the average of 37 days. The number of days below 50 degrees was **6** which is well below the 30-year average of 17.

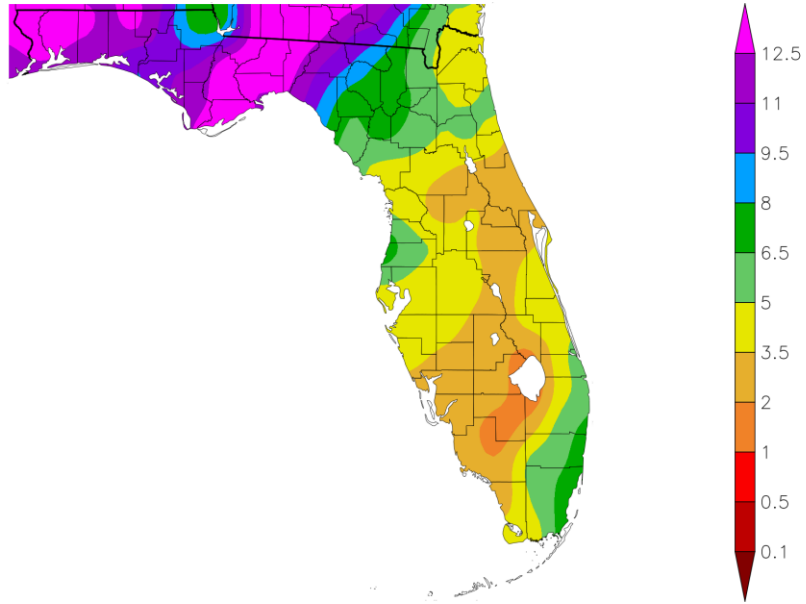
## Precipitation

The same pattern that led to the much warmer than normal winter also contributed to a drier than normal winter for most of southern Florida (Figures 7 & 8). The western half of South Florida received only about 1.5 to 3 inches which is less than half of the normal winter rainfall. Palm Beach County received anywhere from 2 to 6 inches, with values increasing from west to east.

Broward and Miami-Dade counties were the only parts of South Florida to have near to slightly above normal rainfall, with about 6-8 inches on average. Most of this precipitation fell in only a few days, and 3-5 inches of rain fell on February 5<sup>th</sup> alone in association with a front stalled across SE Florida.

The lack of rainfall over most of South Florida has led to the [development of moderate drought conditions](#) as of the first week of March.

Precipitation (in)  
12/1/2022 – 2/28/2023

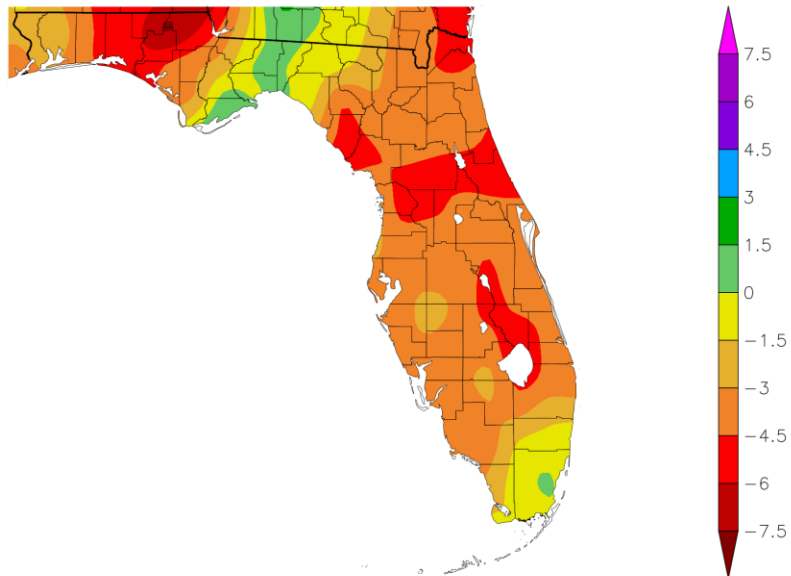


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**Figure 7:** Observed Precipitation for Winter 2022-2023

Departure from Normal Precipitation (in)  
12/1/2022 – 2/28/2023



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**Figure 8:** Departure from Normal Precipitation for Winter 2022-2023

Following are December 2022-February 2023 rainfall totals, departure from normal in inches and ranking for selected locations:

<b>Location (Beginning of Period of Record)</b>	<b>Dec 2022-Feb 2023 Rainfall (inches)</b>	<b>Departure from Normal</b>	<b>Top 20 Rank</b>
Canal Point (1941)	<b>1.80</b>	<b>-4.57</b>	<b>6<sup>th</sup> Driest</b>
Cape Florida (1998)	<b>6.24</b>	<b>-0.44</b>	
Fort Lauderdale/Hollywood Int'l (1912)	<b>6.71</b>	<b>-1.35</b>	
Fort Lauderdale Exec. Airport (1998)	<b>4.42</b>	<b>-2.70</b>	<b>8<sup>th</sup> Driest</b>
Fort Lauderdale Dixie Water Plant	<b>8.24</b>	<b>-0.10</b>	
Hollywood Water Plant (2000)	<b>10.02</b>	<b>+1.99</b>	
Marco Island (2002)	<b>1.49</b>	<b>-4.63</b>	<b>3<sup>rd</sup> Driest</b>
Miami International Airport (1895)	<b>7.50</b>	<b>+1.08</b>	
Muse (2009)	<b>3.65</b>	<b>-2.75</b>	
Naples Municipal Airport (1942)	<b>2.21</b>	<b>-2.19</b>	<b>18<sup>th</sup> Driest</b>
NWS Miami (1999)	<b>7.74</b>	<b>+1.12</b>	
Opa-Locka Airport (1998)	<b>6.33</b>	<b>-0.31</b>	
Palm Beach Gardens (2002)	<b>6.02</b>	<b>-3.76</b>	
Palm Beach International Airport (1888)	<b>4.86</b>	<b>-4.72</b>	
Pembroke Pines North Perry Apt (1999)	<b>5.82</b>	<b>-1.90</b>	
Pompano Beach Airpark	<b>5.64</b>	<b>-0.75</b>	
The Redland (1942)	<b>7.94</b>	<b>+1.38</b>	
West Kendall/Miami Exec. Airport	<b>7.64</b>	<b>+1.66</b>	

### **Severe Thunderstorms/Tornadoes/Flooding**

No severe thunderstorm, tornado, or flooding events occurred this winter. Two brief episodes of gusty winds in the 35-40 mph occurred in January and February ahead of frontal systems, and only minor flooding was observed with the rain event of February 5<sup>th</sup>.

There was a rip current-related death at Juno Beach on December 20<sup>th</sup>.



## Outlook for March-May

[The outlook by the NOAA Climate Prediction Center](#) for the period from March through May (Figures 9 and 10) is for above normal temperatures likely across South Florida, as well as leaning towards below normal precipitation. Even though La Niña is expected to wane this spring, its lingering influence is the main feature leading to the mainly warmer and possibly drier than normal conditions persisting through May.

The current dry conditions over most of South Florida along with the possibility of a drier than normal spring means that drought conditions are likely to worsen and expand in area in the coming weeks, especially as temperatures increase and fuels become dry. The [significant wildland fire potential](#) is above normal through May for all of South Florida. 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.

Spring also brings 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.

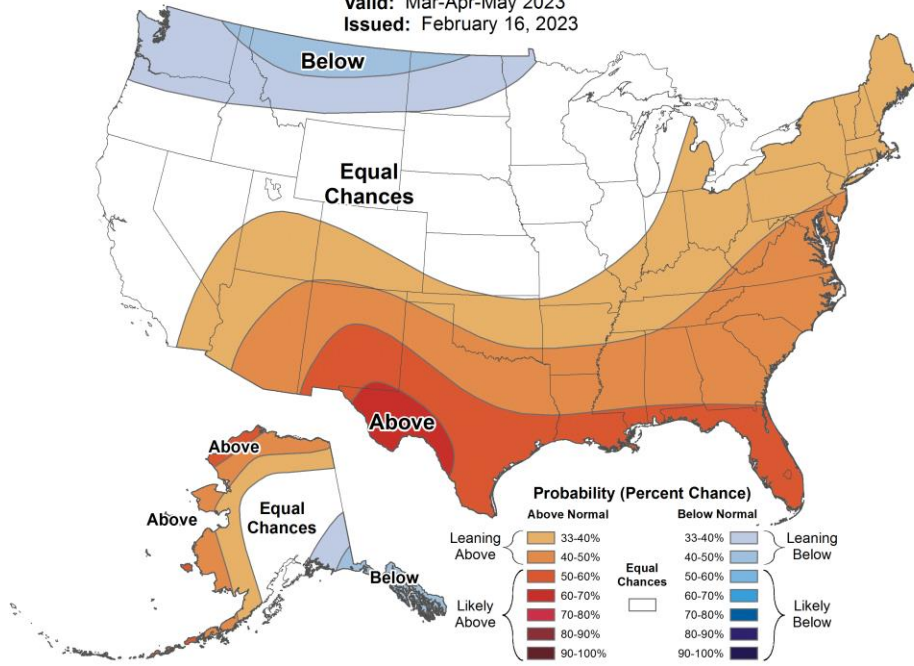
For the latest south Florida weather information, including the latest watches, advisories and warnings, please visit the National Weather Service Miami Forecast Office's web site at [weather.gov/southflorida](http://weather.gov/southflorida).



# Seasonal Temperature Outlook



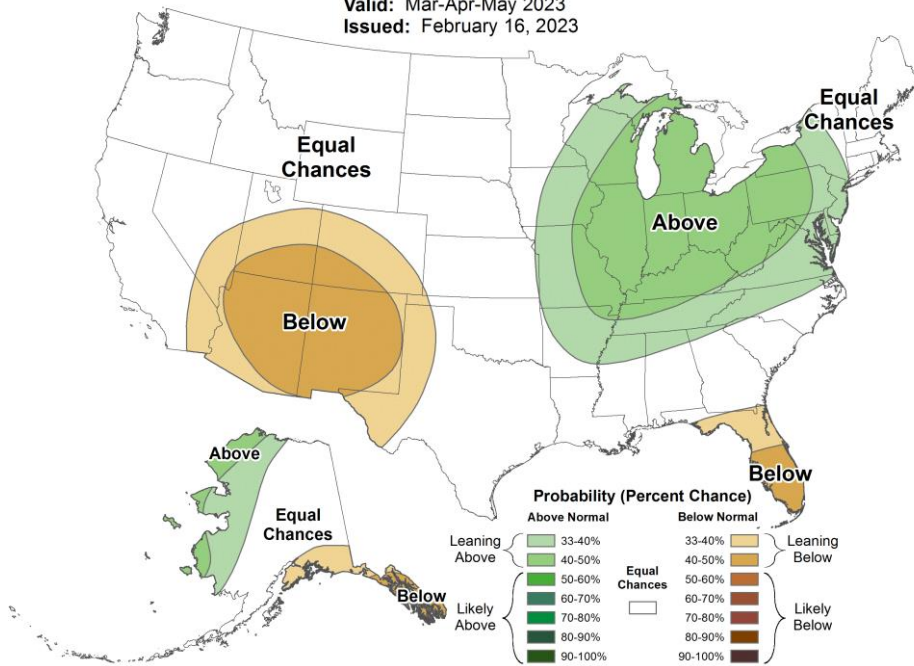
Valid: Mar-Apr-May 2023  
Issued: February 16, 2023



# Seasonal Precipitation Outlook



Valid: Mar-Apr-May 2023  
Issued: February 16, 2023



Figures 9 and 10: NOAA Climate Prediction Center outlook for March-May.