



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

SOUTH FLORIDA WINTER 2024-2025 SUMMARY

Slightly Above Normal Temperatures and Below Normal Rainfall

March 3, 2025: The prevailing weather pattern during the recently-concluded meteorological winter was mostly typical of [La Niña winters in North America](#), characterized by a stronger-than-normal mid to upper-level high pressure over the southern tier of the United States (Figure 1), and the upper-level subtropical branch of the jet stream in the upper levels was mainly positioned from the Mississippi Valley to the mid-Atlantic states (Figure 2), reflecting a general storm track well to the north of South Florida. Under this pattern, cold fronts entering Florida typically had less atmospheric support and moisture since the parent low pressure systems were situated along the aforementioned storm track well to our north. This led to less rainfall associated with the cold fronts, as well as limited intrusions of Canadian or Arctic air deep into Florida which contribute to slightly warmer than normal temperatures for the winter season as a whole.

There were exceptions to this pattern, primarily in January, when the high pressure over the southern U.S. wasn't as strong and allowed for more frontal systems to affect Florida and ushered in seasonably cool temperatures. In fact, it was the coolest January since 2010, with temperatures averaging 2-3 degrees F below normal for the month.

Following is a summary of Winter 2024-2025 temperature and precipitation, as well as significant weather events.

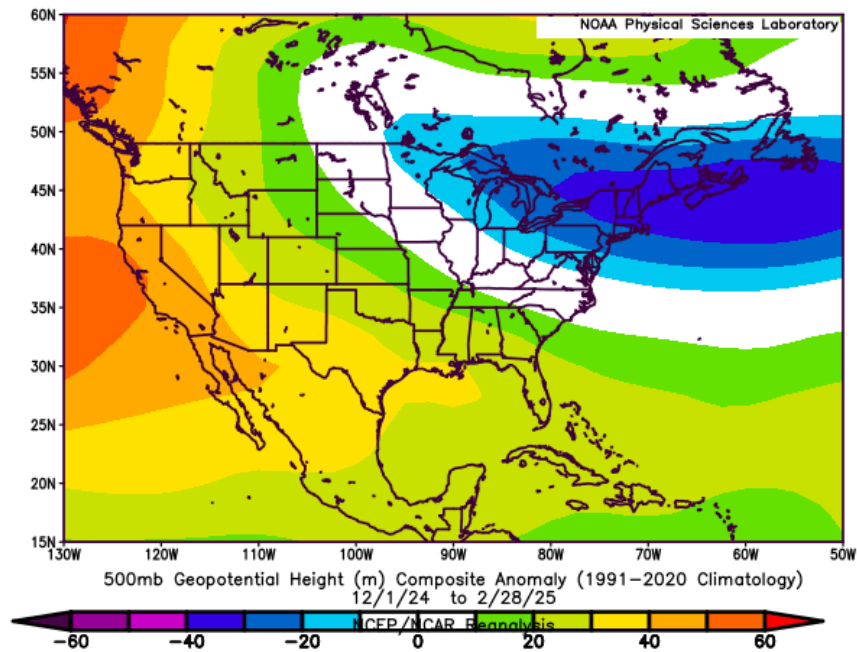


Figure 1: 500 mb (mid-tropospheric) height anomalies for December 2024-February 2025. Yellow colors reflect stronger high pressure at the 500 mb level, and blue colors reflect stronger low pressure

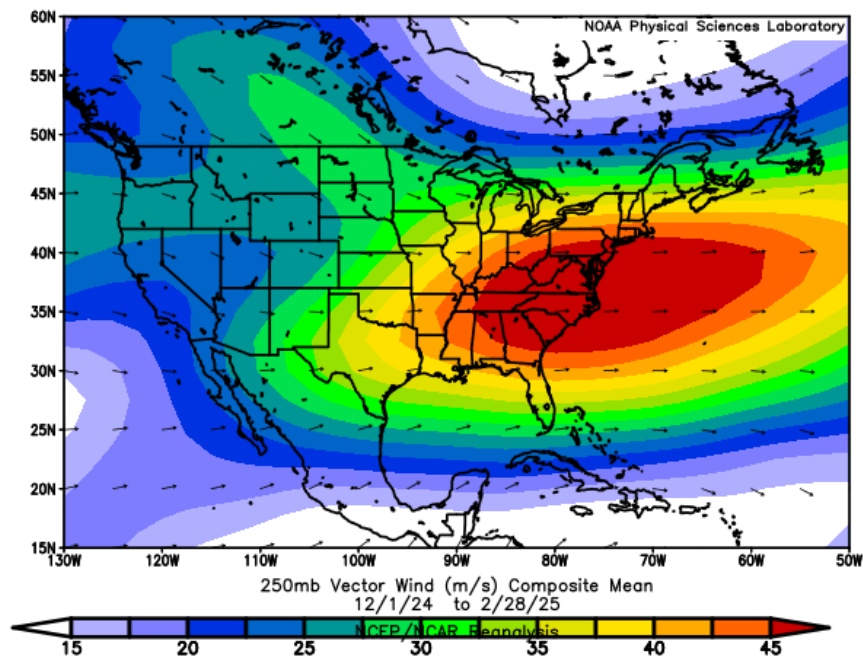
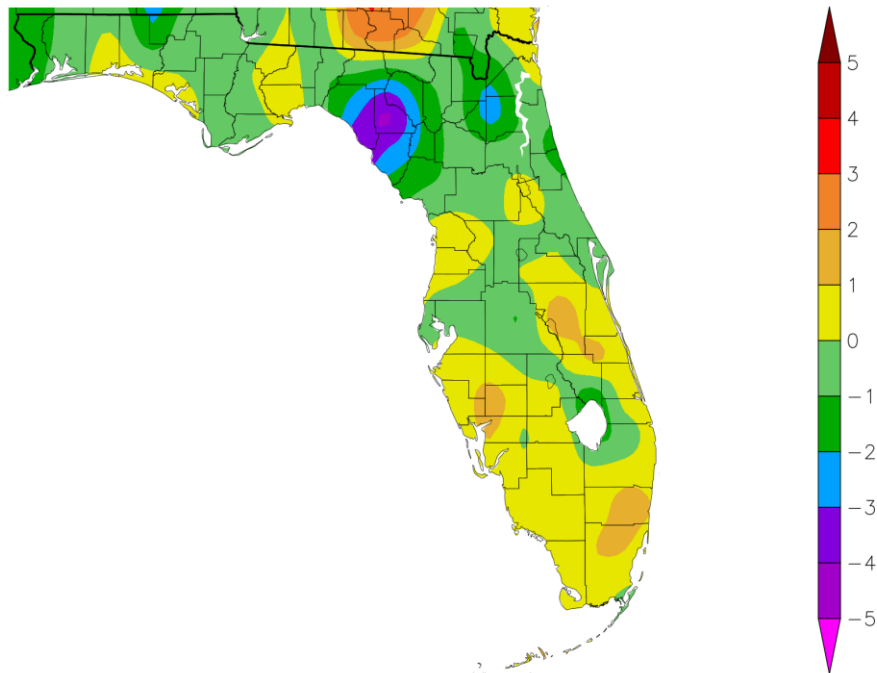


Figure 2: 250 mb mean wind for December 2024-February 2025. Red colors reflect the mean position of the upper-level jet stream and general winter storm track

Temperatures

Average winter temperatures were slightly above normal across South Florida (Figures 3 and 4), generally about 0.5 to 1.5F above normal.

Departure from Normal Temperature (F)
12/1/2024 – 2/28/2025

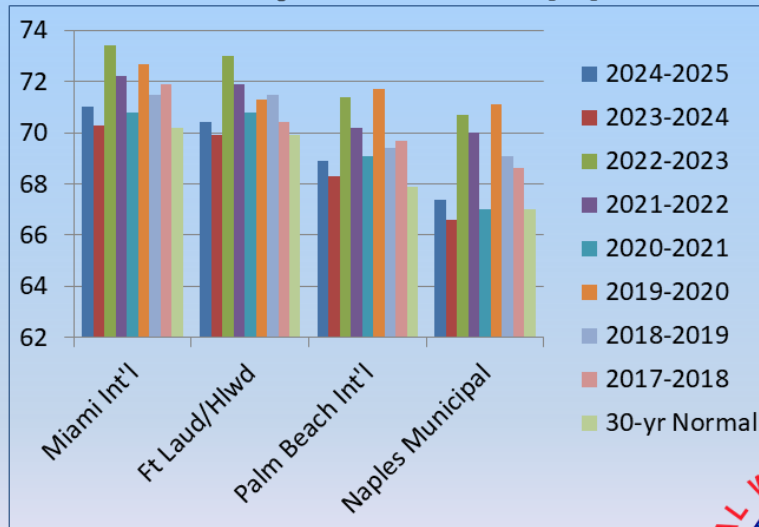


Generated 3/2/2025 at HPRCC using provisional data.

NOAA Regional Climate Centers

Figure 3: Temperature Departure from Normal across Florida for December 2024-February 2025

Winter 2024-2025 Average Temperatures (F)



Last cooler than normal winter was 2010-2011



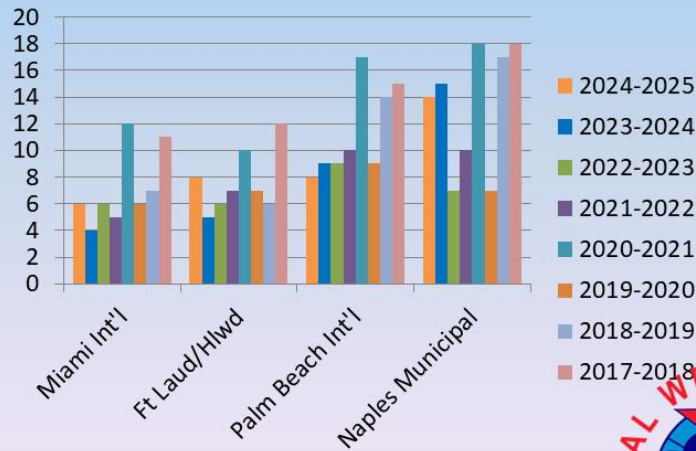
Figure 4: Average winter temperatures 2018-2025 for main South Florida climate sites

Although a top-10-warm February and a slightly above average December more than made up for a cool January, 2024-2025 winter temperatures ended up lower than several recent winters. The number of 80+ degree days (defined arbitrarily as “warm”) ranged from 31 days in Fort Lauderdale to 44 days in Miami, which were near to slightly below the 30-year normal.

The relatively few intrusions of continental/arctic air masses into South Florida following cold fronts this winter can be shown in the low number of sub-50F degree days, ranging from 3 in Miami to 11 in Naples. The lowest regional temperature at NWS sites was 33F in Moore Haven (Glades County) on January 25th. A couple of readings near 32F were recorded at unofficial sites in Glades and Hendry counties on the mornings of January 10th and 25th.

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

Number of Winter "Cool" Days

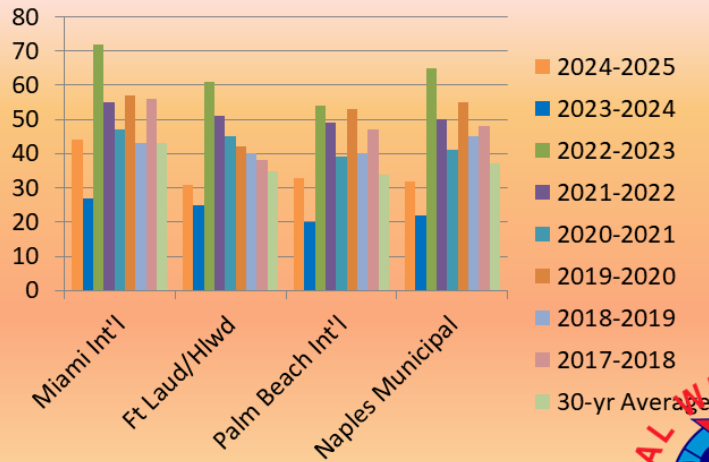


Cool days arbitrarily defined as days with max below 70F and/or min below 50F



Figure 5: Number of days of sub-70F degree highs and/or sub-50F degree lows.

Number of Winter "Warm" Days



Number of Days of 80F or greater

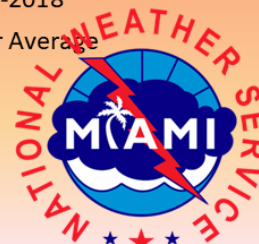


Figure 6: Number of days greater than or equal to 80 degrees F

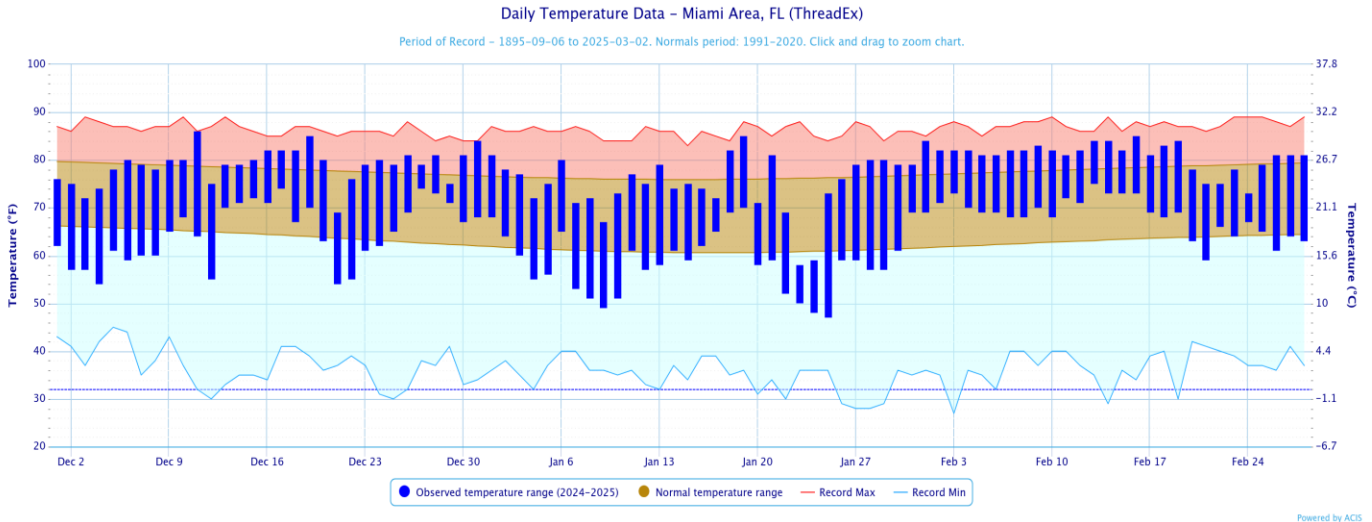


Figure 7: Daily temperature data for Miami International Airport for December 2024- February 2025. This is generally representative of winter temperature trends at all South Florida locations

Here are average December 2024-February 2025 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 2024-Feb 2025 Avg Temp	Departure from Normal (F)
Miami (1895)	71.0	+0.8
Fort Lauderdale (1912)	70.4	+0.5
West Palm Beach (1888)	68.9	+1.0
Naples (1942)	67.4	+0.4

Other noteworthy statistics and data:

- **Miami International Airport:** The highest temperature recorded was 86 degrees set on December 11th, and the lowest temperature recorded was 47 degrees on January 25th. The temperature reached or exceeded 80 degrees on **44 days**, near the 30-year average of 43 days. There were **3 days** below 50 degrees, half of the 30-year average number of days of 6.

- **Palm Beach International Airport:** The highest temperature recorded was 87 degrees on February 16th, and the lowest temperature recorded was 44 degrees on January 9th. The temperature reached or exceeded 80 degrees on **33 days**, near the 30-year average of 34 days. The number of days below 50 degrees was **6** which is well below the 30-year average of 14 days.

- **Fort Lauderdale/Hollywood International Airport:** The highest temperature recorded was 86 degrees on February 16th, and the lowest temperature recorded was 46 degrees on January 9th and 25th. The temperature reached or exceeded 80 degrees on **31 days**, below the 30-year average of 35 days. There were **5 days** below 50 degrees, below the 30-year average of 8.

- **Naples Municipal Airport:** The highest temperature recorded was 87 degrees on February 14th, and the lowest temperature recorded was 42 degrees on January 25th. The temperature reached or exceeded 80 degrees on **32 days**, below the 30-year average of 37 days. The number of days below 50 degrees was **11** which is below the 30-year average of 17.

Precipitation

As indicated above, the more northerly mean position of the upper-level jet stream favored storm systems to track farther north across the central and eastern U.S., with the stabilizing influence of high pressure aloft leading to relatively few instances of rainfall.

Rainfall amounts were quite uniform across the region, mainly in the 3-5-inch range with a few spots in metro SE Florida ranging from as little as 2 inches to as much as 9 inches (Figure 8). Relative to normal, these values were about 3-5 inches below normal over most of metro SE Florida, and about 1-2 inches below normal over SW Florida (Figure 9). Portions of northern Palm Beach County were 5-7 inches below normal. The drier than normal winter led to the development of moderate (D1) drought conditions across the Lake Okeechobee area into Palm Beach County in late January. The moderate drought conditions spread across most of the rest of South Florida in February, with an area of severe (D2) drought conditions across northern Palm Beach County and northeastern Hendry County.

Much of this winter's rainfall occurred in association with a few events. Two notable rainfall events include:

- **December 18:** An influx of moist southerly winds in advance of a cold front led to locally heavy rainfall across portions of metro Broward County. Some areas of Fort Lauderdale and Pompano Beach received between 3-4 inches of rain which caused street flooding

- **December 29th**: Early morning showers and thunderstorms ahead of a cold front produced rainfall of 1-2 inches across most of Collier County.

- **February 18th**: A low pressure trough across South Florida helped to produce afternoon showers and even a few thunderstorms across portions of metro SE Florida, with some areas receiving anywhere from 1 to 2.5 inches of rainfall along with minor street flooding

- **February 24th**: Showers and thunderstorms ahead of a cold front produced up to 1 to 1.5 inches of rain across portions of SW Florida.

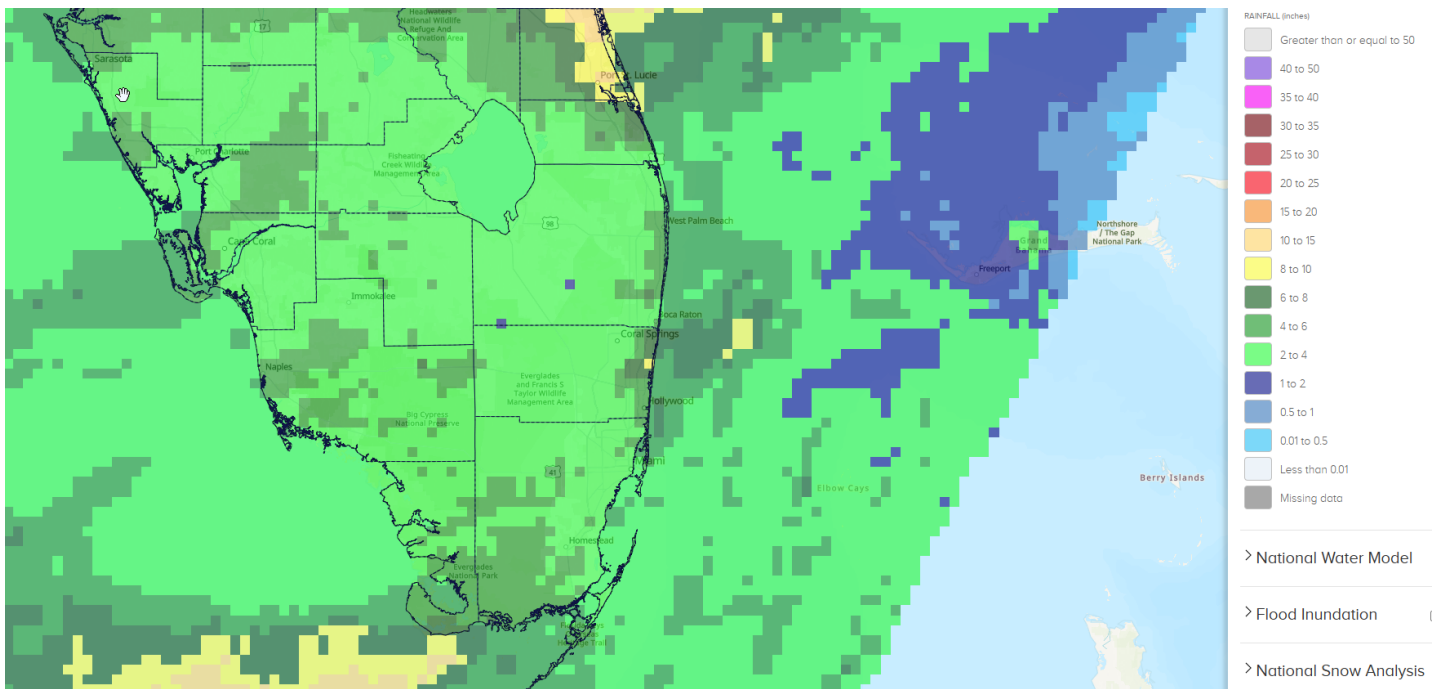


Figure 8: Observed Precipitation for Winter 2024-2025

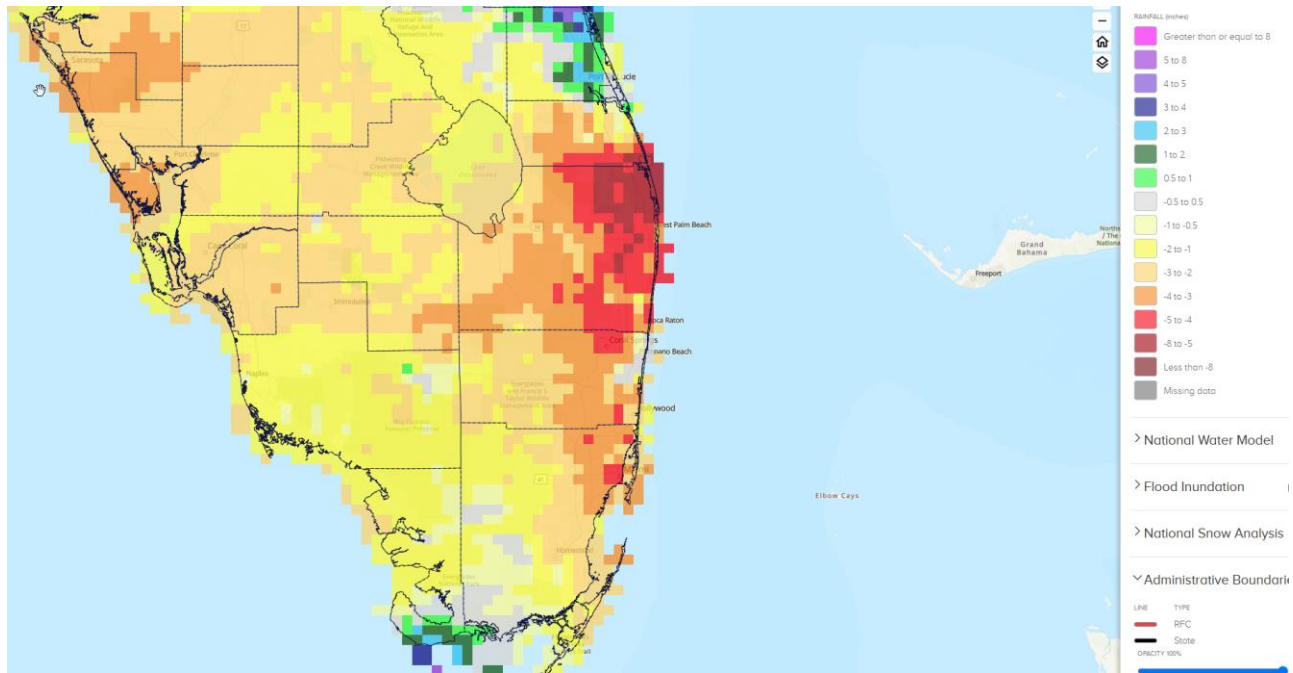


Figure 9: Departure from Normal Precipitation for Winter 2024-2025

Following are December 2024-February 2025 rainfall totals, departure from normal in inches and ranking for selected locations:

Location (Beginning of Period of Record)	Dec 2024-Feb 2025 Rainfall (inches)	Departure from Normal	Top 20 Rank
Cape Florida (1998)	3.50	-3.18	6th Driest
Devils Garden (1956)	5.11	-0.79	
Fort Lauderdale/Hollywood Int'l (1912)	4.51	-3.55	
Fort Lauderdale Exec. Airport (1998)	6.64	-0.48	
Fort Lauderdale Dixie Water Plant	8.76	+0.42	
Hialeah (1942)	3.80	-3.32	19th Driest
Hollywood Water Plant (2000)	5.46	-2.57	8th Driest
Homestead General Airport (1990)	3.69	-1.99	10th Driest
Marco Island (2002)	4.93	-1.19	
Miami International Airport (1895)	2.79	-3.63	18th Driest
Moore Haven (1917)	4.96	-0.97	
Muse (2009)	4.31	-2.09	
Naples Municipal Airport (1942)	4.62	+0.22	
North Miami Beach	4.55	-3.13	6th Driest

NWS Miami (1999)	4.59	-2.03	7 th Driest
Opa-Locka Airport (1998)	2.14	-4.20	3 rd Driest
Palm Beach International Airport (1888)	4.04	-6.17	
Pembroke Pines North Perry Apt (1999)	3.02	-4.70	2 nd Driest
Pompano Beach Airpark	6.83	-0.56	
Okeelanta (Palm Beach County)	3.56	-3.35	
West Kendall/Miami Exec. Airport	3.06	-2.92	7 th Driest

Severe Thunderstorms/Tornadoes/Flooding

No severe weather (winds, hail, tornadoes) was reported across South Florida this past winter, consistent with the general La Niña-influenced pattern of limited rainfall associated with cold fronts and low pressure systems which are the typical sources of wintertime severe weather in South Florida.

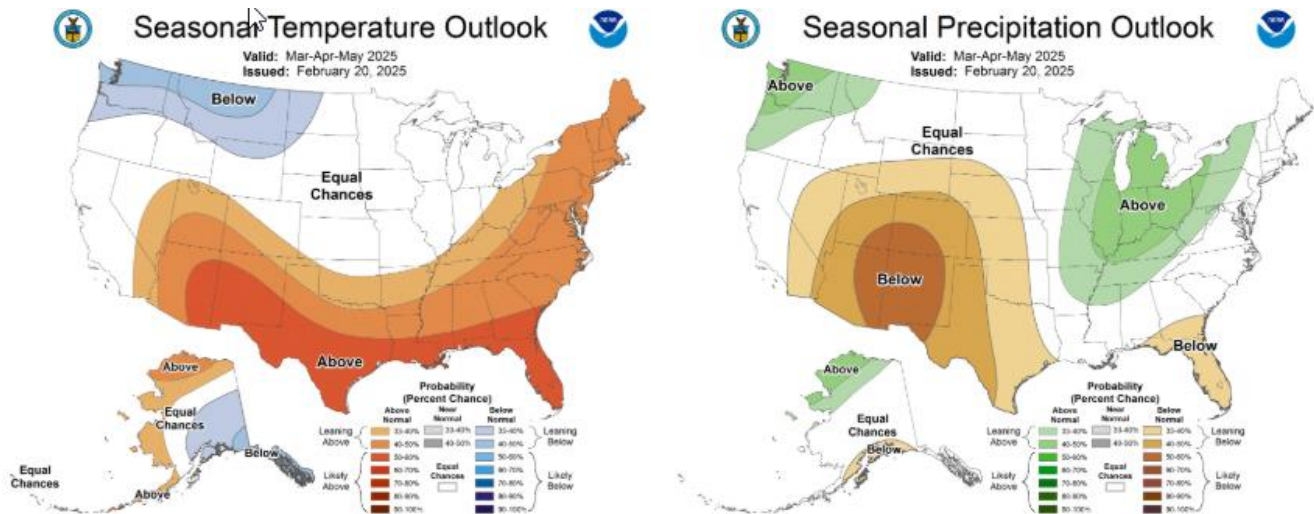
Outlook for March-May

[The outlook by the NOAA Climate Prediction Center](#) for the period from March through May (Figures 10 and 11) is for likely above normal temperatures, and leaning towards below normal precipitation across South Florida. Even though La Niña is expected to wane later this spring, its lingering influence could lead to continued spells of dry weather through May.

The ongoing drought conditions, combined with lingering spring dryness, means an [above normal potential for significant wildland fires through May](#) across South Florida. Spring is the peak of wildfire season in South Florida, and 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 periods of strong and gusty winds to the area along with an increase in beach-goers. This significantly increases the risk of rip currents at all South Florida 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](https://www.weather.gov/southflorida).



Figures 10 and 11: NOAA Climate Prediction Center outlook for March-May.