

MIAMI-SOUTH FLORIDA

National Weather Service Forecast Office

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NWS South Florida 2024-2025 Winter/Dry Season **Outlook**

Outlook: Warmer and Drier Than Normal Winter and Dry Season as La Niña Expected to Return

November 18th, 2024: The likely return of La Niña this winter is expected to help set the stage and favor warmer and drier than normal conditions this winter and dry season.



South Florida 2024-2025 **Dry Season Outlook**



| | Element | Dec-Apr Outlook (most likely outcome) | Normal Values/Frequency |
|---|------------------------------|---|---|
| CAVEAT These values represent | Temperature Bracinitation | Above Normal (probable range 1-3F) Below Normal | Winter 64-67F Interior/W 68-70F East 12-18" Interior/W |
| average conditions over South Florida | Precipitation | (probable range 10-30% below normal) | 17-25" East 30-50 days with rainfall |
| Individual locations/areas could see | Storminess/Severe Weather | Below Normal (Probable range 3-5 episodes) | 6 episodes per season (wind/hail/tornado/flood) |
| higher/lower observed values | Freeze | Near Normal | 1-2 events per season |
| | Drought/Wildfire | Near Normal (at least through February) <i>Could increase</i> <i>March/April</i> | Moderate drought development late in season |

Temperature Outlook: there is moderate to high confidence in above normal temperatures. Confidence is moderate in one to two freeze events this winter, mainly over the typically favored interior areas.

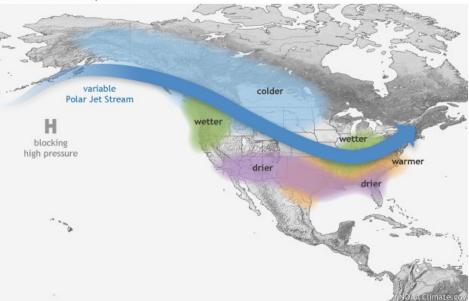
Precipitation Outlook: confidence in below normal precipitation and associated drought development is moderate to high, with probabilities increasing in the second half of the dry season.

Visit the <u>NOAA Climate Prediction Center website</u> for more details on the seasonal outlook for the United States, including discussions and other background information.

Dry Season Factors

La Niña conditions are most likely to emerge by December, and is expected to persist through March 2025. La Niña is the cold phase of the ENSO (El Niño/Southern Oscillation). La Niña winters are typically characterized by a jet stream which is displaced farther north over North America, leading to most winter and spring low pressure storm tracks staying well north of Florida. This normally causes cold fronts moving into Florida to have less moisture, thereby leading to drier than normal conditions as well as generally decreased "storminess" (tornado, severe thunderstorm and flood events). The jet stream being farther north can also limit the number of cold air outbreaks into Florida, although a few strong outbreaks of Arctic origin may still occur with freezing temperatures primarily over interior sections of the peninsula. The impact of freezing temperatures and associated impacts is magnified due to higher sensitivity to sporadic cold outbreaks during an otherwise warm winter.

Wintertime La Niña pattern



This La Niña episode is likely to remain weak and of shorter duration than other historical episodes, and would be less likely to result in conventional winter/dry season impacts. Therefore, **other factors could come into greater play**, including: intraseasonal cycles such as the North Atlantic Oscillation (NAO), Arctic Oscillation (AO), Pacific/North American Pattern (PNA), and Madden-Julian Oscillation (MJO). The NAO and AO, in particular, often play a significant role in the week-to-week weather patterns. Strongly negative (positive) phases of the AO and NAO often lead to colder (warmer) than normal weather across the eastern half of the United States, including Florida. These cycles are not reliably predictable beyond about 2 weeks.

Important Notes: these outlooks are always associated with a large degree of uncertainty with regards to specifics. The conditions reflected in this outlook are "average" conditions over the course of an entire season, and not representative of what is expected every day or week. Week-to-week or even month-to-month variation from the normal can be expected. Therefore, seasonal outlooks are most useful for **general planning** and overall awareness.

Potential Impacts

Drought/Wildfires: one concern of a drier and warmer than normal winter/dry season is the increased likelihood of drought development, especially during the second half of the dry season from February through early May. Each of the previous eight La Niña

winters have led to moderate to severe drought by spring over at least parts of South Florida. Droughts in South Florida typically lead to an increased threat of wildfires peaking during the latter part of the dry season. Everyone is encouraged to practice measures to prevent wildfires and heed advice from local officials when wildfires develop, as well as water conservations tips from water managers.

Rip Currents are also a present threat, particularly during the holiday season and during March and April when rip current-related fatalities and injuries typically increase at local beaches. Heed warning flags posted by ocean rescue personnel and always swim at beaches with lifeguards.

A drier than normal winter and dry season decreases the likelihood and frequency of severe weather events such as tornadoes, flooding, strong winds and hail, but does not totally eliminate them. During the most recent La Niña of 2022-2023 a strong EF-2 tornado affected Palm Beach Gardens and North Palm Beach in April, which occurred less than 2 weeks after the historic and catastrophic Ft. Lauderdale flood event. During the 2016-2017 La Niña, 3 tornadoes were observed in SE Florida (January and March). Also, as noted previously, a few strong cold snaps and freezes typically occur during La Niña winters, such as was the case in January 2022, even though the average temperatures over an extended period may be higher than normal.

Stay tuned to local media, NOAA Weather Radio and the National Weather Service South Florida website at <u>weather.gov/southflorida</u> for the latest weather information, including outlooks and forecasts of significant storm events. You can also visit our <u>Facebook</u> and <u>X</u> pages for the latest weather information.