Climate Summary for Florida – March 2022

Prepared by the Florida Climate Center, The Florida State University, Tallahassee, Florida
Online at: http://climatecenter.fsu.edu/products-services/summaries

Key Points

- A warm and wet pattern emerged for much of the state in March, with above normal rainfall for the northern half of the state, alleviating drought in some locations, but the south received below normal rainfall.
- An active storm pattern returned across the south and southeast U.S., which included a wildfire outbreak early in the month in the Florida Panhandle and a severe weather outbreak late in the month.
- During the first week of March, moderate drought (D1) impacted much of Florida, including the Panhandle and western Peninsula, with severe drought (D2) emerging in Dixie and Levy counties. By the end of March, drought had improved across the Panhandle and Big Bend regions as rainfall returned, but much of south Florida continues to experience moderate drought or abnormally dry conditions.
- A La Niña advisory is expected the continue through summer, but its influence may begin to wane, as the precipitation outlook through the summer calls for equal chances below, above, or near normal in Florida.

Average temperatures in March were above normal across the state. Average temperature departures from normal ranged from +1.9℉ in Tallahassee to +5.5℉ in Fort Myers for the month (see Table 1 and Appendix 1 for select cities). Several stations recorded one of their top five warmest months of March on record. Fort Myers recorded its warmest March on record, while Orlando, Tampa, and Jacksonville Beach had their 3rd-warmest March on record. Several daily high maximum and high minimum temperature records were tied or broken throughout the month (see appendix 2 for daily high maximum temperature records).

Table 1. March average temperatures and departures from normal (℉) for selected cities.

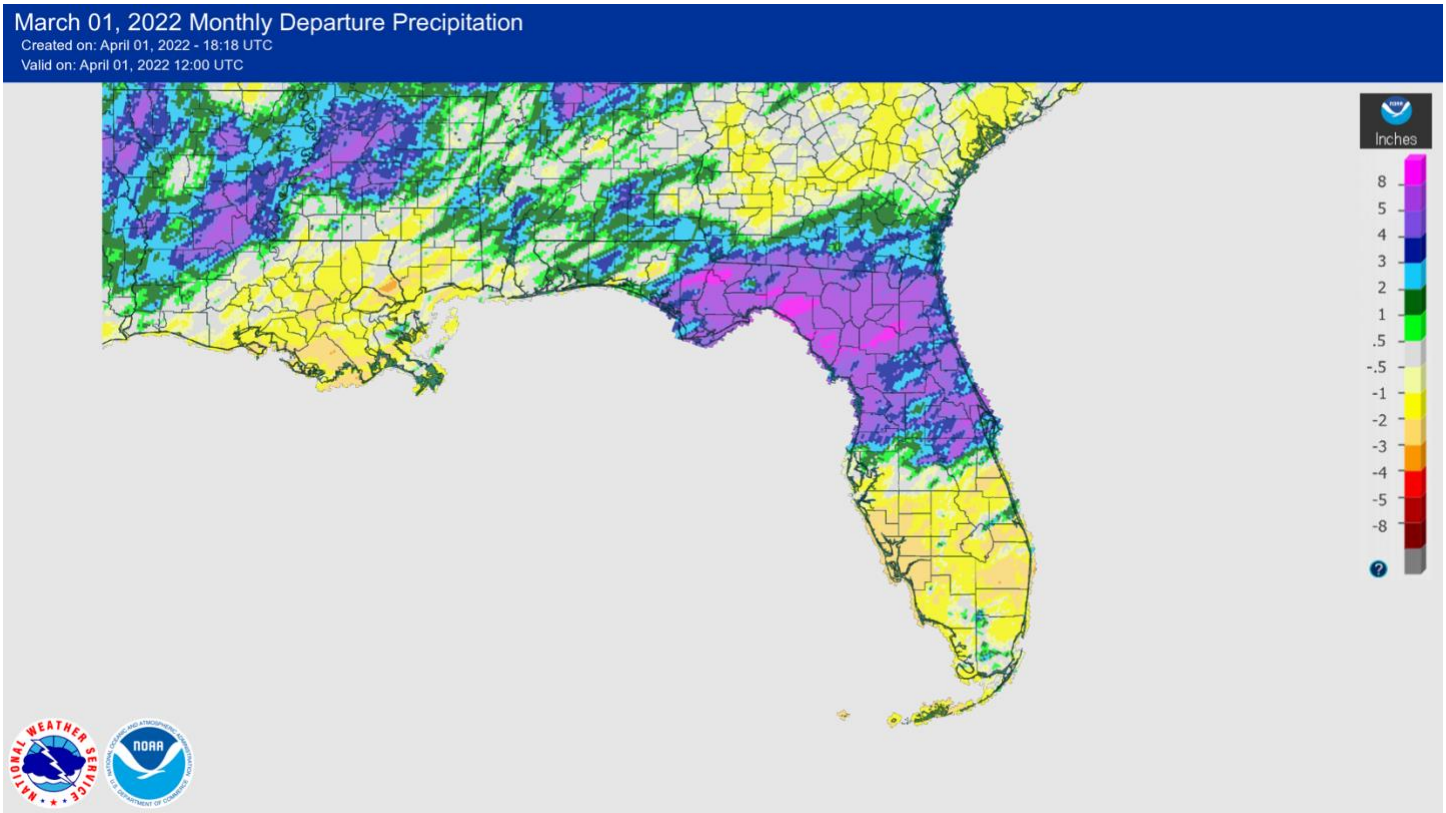
Station	Mean Temperature	Departure from Normal
Pensacola	65.1	+2.8
Tallahassee	63.3	+1.9
Jacksonville	64.5	+2.1
Orlando	72.5	+5.2
Tampa	73.9	+5.3
Miami	76.2	+3.1
Key West	76.5	+2.1

Rainfall totals in March were above normal for much of the northern half of the state and below normal in the south. The monthly precipitation departures from normal ranged from -0.97 inches in Key West to +9.1 inches in Gainesville (Table 2 and Appendix 1). Most southerly locations in the state recorded a precipitation deficit for the month, but some places especially in north-central Florida saw a surplus of rainfall (Figure 1). Gainesville and Cross City recorded their wettest March on record, while Fort Lauderdale had its 7th-driest March on record. As a result of continued dryness, moderate drought and abnormally dry conditions continue to impact much of the southern Peninsula (see below).

Table 2. March precipitation totals and departures from normal (inches) for selected cities.

Station	Total Rainfall	Departure from Normal
Pensacola	6.09	+0.84
Tallahassee	9.05	+3.81
Jacksonville	9.95	+6.66
Orlando	5.76	+2.73
Tampa	2.91	+0.39
Miami	2.03	-0.43
Key West	0.56	-0.97

Figure 1. A graphical depiction of the monthly rainfall departure from normal (in inches) for March (courtesy of NOAA).



La Niña Advisory Continues.

La Niña, the cool phase of the ENSO climate pattern, is favored to continue into the Northern Hemisphere summer (53% chance during June-August), with a 40-50% chance of La Niña or ENSO-neutral thereafter. After weakening in January, below-average sea surface temperatures strengthened during February 2022 across the central and east-central tropical Pacific as the weekly Niño-3.4 index decreased from -0.6˚C in early February to -1.1˚C in the last week of February.

Hazardous Weather Events in March.

According to the Local Storm Reports issued by the local National Weather Service offices serving Florida, there were 483 individual local reports of hazardous weather events recorded across the state during the month of March 2022 (see Table 4 for a breakdown by event type). Early in the month, wildfires broke out across the Panhandle as below-normal rainfall and warm weather led to the development of abnormally dry and moderate drought conditions. Another factor contributing to this wildfire outbreak was the unusual amount of fuel on the ground as a result of Hurricane Michael nearly four years ago, which decimated forests on private land in this area. Wildfires threatened several communities and led to the evacuation of a community and nursing home in Bay County. On the 31st, a tornado in Washington County, Florida resulted in two fatalities and two injuries, part of a severe weather outbreak across 7 states that generated at least 30 tornadoes in total.

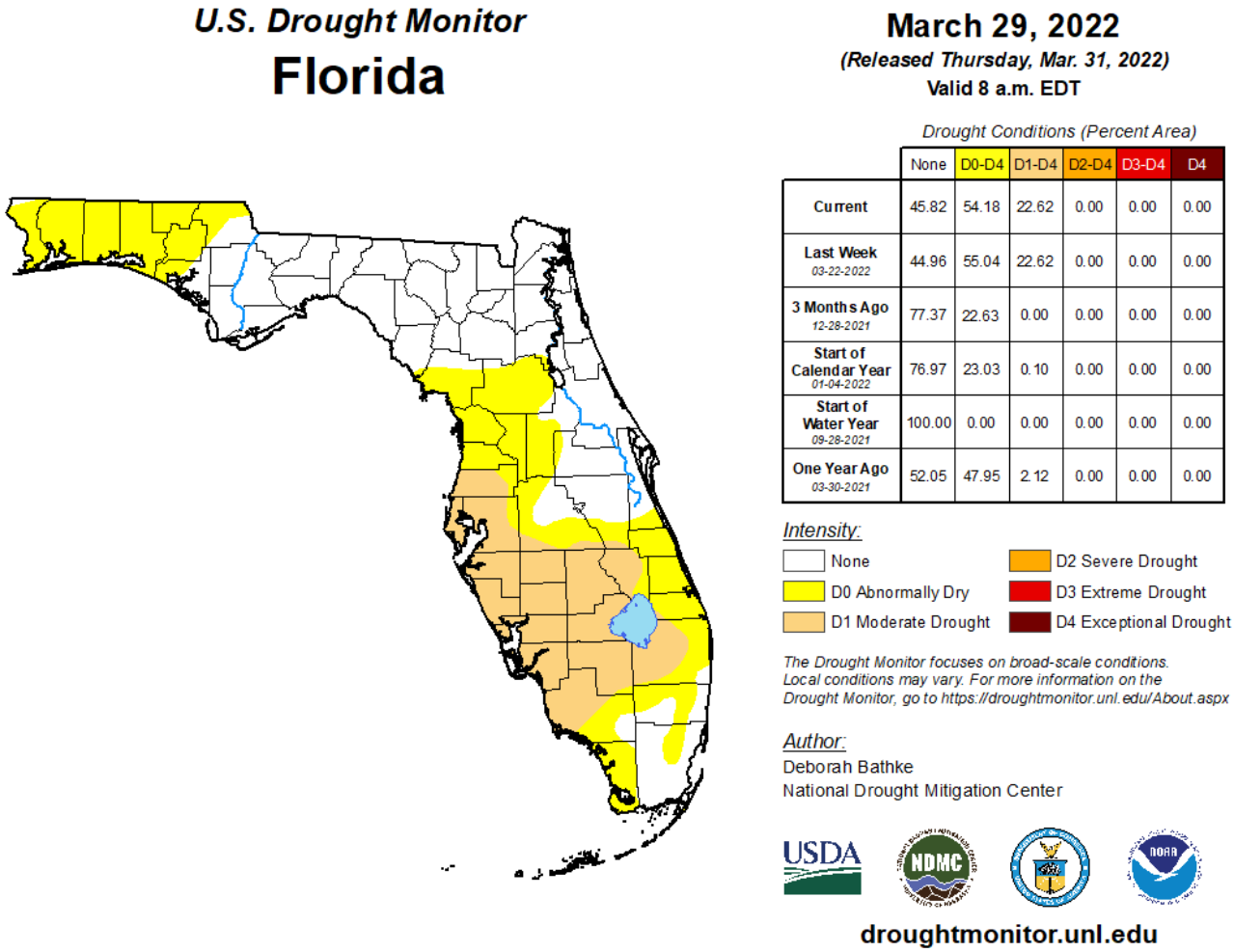
Table 4. Breakdown of storm reports submitted in Florida during the month of March (compiled from Iowa State University/Iowa Environmental Mesonet).

Report Type	Number of Reports
Flash Flood	18
Heavy Rain	29
Flood	8
Hail	38
Lightning	1
Dense Fog	0
Marine Thunderstorm Wind	51
Non-Thunderstorm Wind Gust	131
Non-Thunderstorm Wind Damage	11
Tornado/Waterspout/Funnel Cloud	20 / 5 / 2
Thunderstorm Wind Damage	71
Thunderstorm Wind Gust	91
Wildfire	7

Drought-Related Impacts.

During the first week of March, much of Florida was experiencing drought. About 2% of the state was in severe drought (D2), 50% of the state was in moderate drought (D1), and 36% was experiencing abnormally dry conditions, according to the U.S. Drought Monitor. Conditions improved in northern Florida throughout the month as a wet pattern emerged. By the end of the month, no areas were in severe drought (D2), 23% of the state (southwestern Florida) was in moderate drought (D1), and 32% was abnormally dry (Figure 2).

As of March 31, the Lake Okeechobee water level was 13.78 ft. above sea level (Feet-NGVD29**)**, which is below average for this time of the year. The water level fell below average early in the month and continued to decline. At the first of the month, the water level was around 14.52 ft. above sea level.



Agriculture-Related Impacts.

While temperatures were above normal for the month of March, a mid-month frost led to some damage to crops including to berries, watermelon, and planted corn in the northern part of the state. Pasture conditions were poor to good throughout the state due to late cool weather and frost. Cattle remained in mostly good condition due to supplemental hay feeding. Sugarcane harvest was close to completion in the southern part of the Peninsula. Strawberry harvest continued and should conclude soon. Several vegetable crops were marketed including tomatoes, peppers, eggplant, sweet corn, green beans, yellow squash, zucchini, herbs, and avocadoes. Citrus fruit harvested included white and red grapefruit, oranges, tangerines, and tangelos. For more information, consult the Crop Progress – State Stories, which is produced monthly December through March.

Appendix 1. Additional March departures from normal data for select Florida locations (source: NWS).

Station	Average Temperature (ºF)	Departure from Normal (ºF)	Total Rainfall (in.)	Departure from Normal (in.)
Gainesville	66.1	+3.4	12.59	+9.10
Sarasota	71.7	+3.6	2.51	-0.34
Melbourne	71.8	+3.2	5.09	+2.40
Fort Myers	75.8	+5.5	0.43	-1.64
West Palm Beach	75.2	+4.1	2.69	-0.62

Appendix 2. Select daily record high maximum temperatures broken or tied during March (compiled from NOAA).

Location	Date	Record (ºF)	Broken/Tied	Last
Key West	3	93	Broken	85 in 2019
Tampa	4	89	Broken	88 in 1961
Crestview	4	86	Broken	83 in 1951
Tarpon Springs	5	88	Broken	87 in 1997
Fort Myers	5	90	Tied	90 in 1961
Jacksonville Beach	6	89	Broken	88 in 1945
Live Oak	6	88	Broken	86 in 2003
Panama City	6	81	Broken	80 in 2004
Venice	6	89	Broken	86 in 2003
Tampa	6	89	Broken	86 in 1983
Key West	6	87	Broken	84 in 2015
Bradenton	7	87	Broken	86 in 1985
Cross City	7	86	Broken	85 in 1961
Usher Tower	7	88	Tied	88 in 1974
Gainesville	7	87	Broken	86 in 1961
Tampa	7	88	Broken	86 in 1995
Key West	7	88	Broken	85 in 2008
Clermont	8	90	Broken	87 in 2003
Hastings	8	87	Broken	84 in 1996
Kissimmee	8	88	Broken	87 in 2003
Orlando	8	89	Broken	87 in 1991
Key West	8	89	Broken	88 in 1967
Fort Lauderdale Beach	9	85	Broken	84 in 2003
Jacksonville Beach	9	86	Broken	84 in 1951
Gainesville	9	85	Tied	85 in 2019
Key West	9	88	Broken	85 in 2003
Daytona Beach	10	85	Broken	83 in 1964
Hastings	10	85	Broken	83 in 2000
Jacksonville Beach	10	86	Broken	83 in 1993
Perrine	11	89	Broken	87 in 2017
Plant City	11	91	Broken	90 in 2019
Key West	11	89	Broken	86 in 2019
Miami	12	90	Broken	87 in 2014
Key West	12	90	Broken	87 in 1968

Perrine	13	89	Broken	87 in 2019
Key West	17	89	Broken	87 in 1975
Bradenton	18	89	Broken	87 in 2020
Plant City	18	94	Broken	92 in 1945
Orlando	18	91	Broken	90 in 1982
Key West	18	89	Broken	86 in 2003
Lakeland	18	91	Broken	89 in 1963
Clermont	19	94	Broken	91 in 2020
Key West	19	89	Broken	86 in 2020
Ochopee	20	91	Broken	89 in 2003
Key West	21	89	Broken	85 in 2020
Venice	22	88	Broken	87 in 2012
Tampa	22	88	Broken	86 in 2020
Key West	22	93	Broken	87 in 1977
Key West	23	92	Broken	85 in 2020
Naples	25	88	Tied	88 in 1975
Fort Myers	29	91	Tied	91 in 2020
Key West	30	90	Broken	87 in 1991