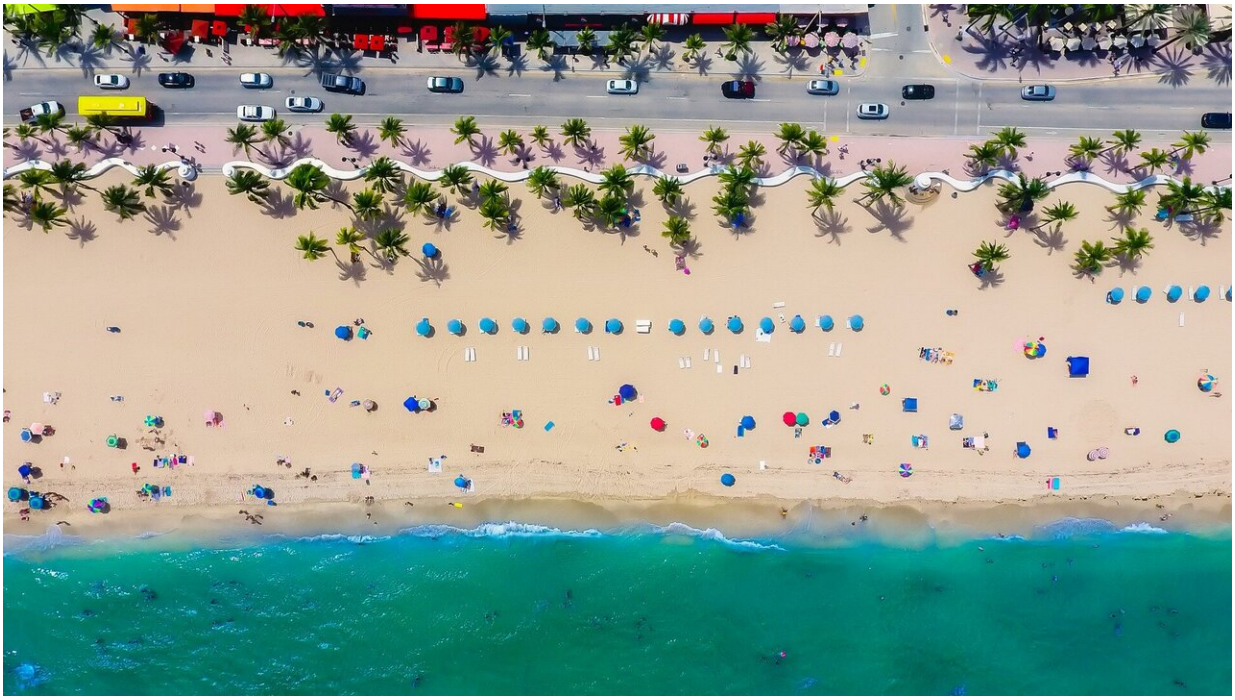
# Climate change brings summertime heat to Florida's early spring

April 21 2020, by Brian K Sullivan



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Florida is caught between a climate change-induced sauna of extreme spring temperatures and a steam bath caused by warming oceans. The result has been record-setting heat that has turned April into summertime across the peninsula, raising the risk that early season Atlantic storms could blossom off the coast.

Miami reached 93 degrees Fahrenheit on Wednesday, a record for the date and 10 degrees above normal, according to the National Weather Service. The combination of temperature and humidity has made many places in Florida feel closer to 100 degrees for weeks, said Jim Rouiller, lead forecaster at the Energy Weather Group.

This has been the way the spring has unfolded. To the west, the Gulf of Mexico has never been hotter: water temperatures reached 76.3 degrees Fahrenheit, 1.7 degrees above normal in charts that go back to 1982. To the east, the Caribbean almost set a record. The state, laying in the Atlantic like a hotdog in a bun, just had its warmest March on record.

"It's hard for Florida weather to be anything different from the oceans," said Ryan Truchelut, owner of Tallahassee-based commercial forecaster Weather Tiger.

"We have set some records the last couple of days across the peninsula. It's June-like warmth, there have been some upper 90s so that's record-breaking for April," Truchelut added. "There's been a lot of weirdness of Florida weather patterns this winter."

The Gulf and Caribbean are just part of the larger oceanic system that has been building to its second-warmest March on record, according to data from the U.S. National Centers for Environmental Information in Ashville, North Carolina. The entire globe, land and sea, also had its second warmest January through March, in records that go back to 1880.

"What is driving the long-term warming of the ocean and the land is the increase of greenhouse gases," Deke Arndt, chief of the monitoring section at the National Centers for Environmental Information, told reporters this week. He said the oceans play an active role because the sea water "remembers and holds onto heat" better than the atmosphere.

Every coastal county from Texas to Florida had its warmest March on record, Arndt said, and for the U.S. as a whole the month fell within the top-five warmest.

Jennifer Francis, a senior scientist at the Woods Hole Research Center in Massachusetts, has no doubt this unseasonal heat is related to climate change. "Oceans are absorbing about 90% of the heat trapped by extra greenhouse gases," she said.

The Gulf isn't the only source of Florida's wilting heat. The searing temperatures can also be traced back to a strong Arctic Oscillation this past winter that locked cold air at the North Pole. That dynamic didn't allow for the cold air to drive deep into the U.S. and dislodge the heat, Truchelut said.

With the approach of May, the warmth along the Florida's coastlines has meteorologists watching for tropical storms. Hurricane season doesn't officially start until June 1, but weather fronts moving off the U.S. can sometimes turn into tropical and subtropical storms in the Gulf and along the East Coast. That raises the chances for flooding rains, storm surges and damaging winds.

Forecasters "need to be on the lookout for early season development" of tropical systems, said Steve Baxter, a meteorologist with the U.S. Climate Prediction Center, on a conference call with reporters.

The U.S. will issue its official Atlantic season hurricane forecast next month, and in the meantime forecasters are already predicting the June 1 to Nov. 30 period will be above average for storms due, in part, to the heat building up in the Atlantic.

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