

SUNCOAST OBSERVER

A quarterly newsletter brought to you by the National Weather Service Tampa Bay Area, FL

www.weather.gov/tampabay

9.22.2022

Top stories in this newsletter

Best Three Consecutive Months at Tampa

Had the Warmest Three Consecutive Months since records began in 1890!

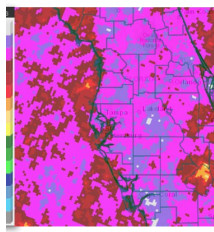
Rank	Average Temperature (°F)	Warmest Three Consecutive Months	Rank	Average High (°F)
1	85.7	Jul-Aug 2022	1	92.5
2	84.8	Jun-Aug 2020	2	92.4
3	84.6	Jun-Aug 2012	3	92.3
4	84.5	Jul-Aug 2018	4	92.0
5	84.5	Jun-Aug 2010	5	92.0
6	84.4	Jul-Sep 2021	6	91.9
7	84.4	Jul-Aug 2011	7	91.9
8	84.3	Jul-Aug 2017	8	91.8
9	84.2	Jul-Sep 2015	9	91.7
10	84.2	Jul-Aug 1999	10	91.5

Records from Tampa begin in April 1890.
Source: www.weather.gov/tampabay

Tampa Experiences Hottest Summer on Record



WFO Ruskin IMET provides DSS during 2022 Western Wildfire Season



Heavy Rains Have Saturated Grounds and Caused River Flooding



Why the Slow Start to Hurricane Season?

Tampa Experiences Hottest Summer on Record

Record Warmest Three Consecutive Months at Tampa

Tampa has set a new record for the warmest three consecutive months since records began in 1890!

Rank	Average Temperature (°F)	Warmest Three Consecutive Months	Rank	Average High (°F)
1	85.7	Jul-Aug 2022	1	92.5
2	84.8	Jun-Aug 2020	2	92.4
3	84.6	Jun-Aug 2012	3	92.3
4	84.5	Jul-Aug 2018	4	92.0
5	84.5	Jun-Aug 2010	5	92.0
6	84.4	Jul-Sep 2021	6	91.9
7	84.4	Jul-Aug 2011	7	91.9
8	84.3	Jul-Aug 2017	8	91.8
9	84.2	Jul-Sep 2015	9	91.7
10	84.2	Jul-Aug 1999	10	91.5

Records from Tampa begin in April 1890.
Source: www.weather.gov/tampabay

By: Austen Flannery

For Tampa, 2022 continues to be a record-setting year. The official climate site for the city (located at Tampa International Airport), recorded the hottest summer ever, with an average daily temperature of 85.7°F. Not only did Tampa experience the warmest summer, the three-month average temperature surpasses the three warmest months ever recorded for the location by 0.9°F.

Why has Tampa been so hot? Several meteorological factors have contributed. For starters, afternoon high temperatures have been running above normal. In addition to having the warmest summer, Tampa has also recorded the most days with a high temperature of 95°F or greater. Persistent easterly winds have delayed the development of the sea breeze (which acts to moderate temperatures) and thunderstorms have arrived later in the day in response. Overnight lows have also been warmer than normal on many days where winds have been blowing warm air from Tampa Bay over the site, contributing to a higher average temperature for the day.

While the upcoming months are sure to provide some relief, the [Climate Prediction Center](#) is predicting a 40-50% chance of above normal temperatures generally prevailing through at least November. If this trend continues, Tampa may end up seeing the hottest calendar year on record. Observations for the Tampa Area date back to 1890.

Please see the [August and Summer 2022 Climate Summary](#) for additional information.

Tampa Bay Incident Meteorologist (IMET) provides Decision Support Services during 2022 Western Wildfire Season

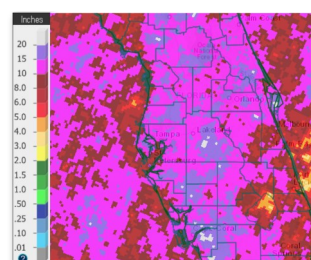


By: Rick Davis

IMET Rick Davis was dispatched and provided on-site weather and Impact-Based Decision Support Services at the Four Corners Wildfire in West Central Idaho from late August to mid-September. Rick worked with several incident management teams from numerous and different multi-agency and multi-jurisdictional teams ranging in complexity levels. Critical and specific weather and smoke forecasts, numerous briefings, weather updates, alerts and warnings were provided to hundreds of partners from a wide variety of Federal, State and local responders, fire crews, operations personnel, aviation resources, media, as well as private cooperators and land owners.

Numerous challenges were overcome during the wildfire assignment from long term drought and record heat to active fire behavior during red flag events with single digit Relative Humidities as well as severe thunderstorms with wind gusts over 50 mph. The fire grew to nearly 14,000 acres and threatened hundreds of structures and homes as control and containment increased to over 98% due to the tireless fire fighter work. The wildfire was burning in steep and complex terrain near Lake Cascade ID, from about 4,000 to 8,000 feet elevation with numerous fuel types including grasses, shrubs, and timber such as sub alpine fir and other mixed conifer stands. The late season western U.S. wildfires produced significant media attention, structure loss and injuries, along with smoke producing poor and unhealthy air quality impacting large populations in the region daily.

Heavy Rains Have Saturated Grounds and Caused River Flooding



By: Jen Hubbard

Late August and the first half of September were rather wet across Wet-Central and Southwest Florida. A series of cold fronts stalled just to the north of the area, with the one most recent to this publication then settling south over the Nature Coast. A weak trough from that boundary then lingered there for over a week as a weak trough also remained aloft. Winds were rather light and moisture was very high, with over 2 inches of precipitable waters in place for much of the period. Every day saw numerous slow-moving thunderstorms across the area, with several spots receiving 3-5 inches of rain in a short period of time. That high volume of rain in a short period led to several Flood Advisories as streets and low-lying areas temporarily flooded.

With all of this heavy rainfall, the grounds became saturated and rivers started responding. Several forecast points went into minor to moderate flood, where they remain as of this posting. Three points along the Peace River rose into moderate flood. Minor flooding was also seen on the Myakka River, Cypress Creek, and Horse Creek. Continued high daily rainfall has kept most of these locations in flood or near flood, with the Alafia River and Little Manatee River seeing elevated near-flood levels. Drier air is expected to move into the area shortly after this publication, which should allow these rivers to gradually subside.

Why the Slow Start to Hurricane Season?



By: Daniel Noah

It's the first time in 80 years that there were no named storms in the Atlantic Basin from July 3 through August 21, 2022. The first week of September produced Hurricanes Danielle and Earl, both remained in the Atlantic. The slow start was due to dry Saharan dust in the main development region of the tropical Atlantic. Also, westerly winds aloft were relatively strong and if a storm tried to develop, the bottom would move west and the top would move east, ripping a potential storm apart.

The 2022 Atlantic hurricane Seasonal Outlook issued in August continues to call for an above normal season with up to 20 named storms, of which up to 10 could become hurricanes, and 3-5 major hurricanes with winds greater than 110 mph. The normal number of named storms is 14.

Things to know about Hurricane Hazards:

- Storm Surge is water pushed ashore by the tropical system, mostly by the wind, and surge is typically the most destructive hazard of a hurricane. Half of all U.S. tropical cyclone fatalities were due to storm surge.
- Flooding from heavy rain is the second greatest threat and can damage homes and wash out roadways well away from the coast. A quarter of all U.S. fatalities were due to flooding rain.
- Hurricane wind can top 110 mph and the greatest damage is usually near the eye wall on the right side of the storm relative to its movement. About 8% of U.S. fatalities were due to wind.
- Tornadoes are common in tropical cyclones as they move ashore. They are not typically long-lived, but can cause plenty of damage. About 3% of U.S. fatalities were due to tornadoes.
- Rip Currents and rough seas are common with storms as they near land. Swimming or surfing can be very dangerous.

For Hurricane Safety information, visit <https://weather.gov/hurricanesafety>