= Climate of the Tampa Bay area =

The Tampa Bay area has a humid subtropical climate (Köppen Cfa) , with warm and humid summers with frequent thunderstorms and drier winters with freezing temperatures occurring every 2 ? 3 years . The area experiences a significant summer wet season , as nearly two @-@ thirds of the annual precipitation falls in the months of June through September . The area is listed by the United States Department of Agriculture (USDA) as being in hardiness zone 10 , which is about the northern limit of where coconut palms and royal palms can be grown . Highs usually range between 65 and 95 ° F (18 and 35 ° C) year round . Though known for hot summers , Tampa 's official high has never reached 100 ° F (38 ° C) ? the city 's all @-@ time record temperature is 99 ° F (37 ° C) . St. Petersburg 's all @-@ time record high is exactly 100 ° F (38 ° C) .

Pinellas County lies on a peninsula between Tampa Bay and the Gulf of Mexico , and much of the city of Tampa lies on a smaller peninsula jutting out into Tampa Bay . This proximity to large bodies of water both moderates temperatures and introduces large amounts of humidity into the atmosphere . In general , the local communities farthest from the coast have larger temperature ranges , both during a single day and throughout the seasons of the year .

= = Seasonal weather = =

= = = Spring = = =

Spring in the Tampa area is usually mild and dry , with highs in the 70s (around 25 C) and lows in the 50s (around 13 C) . However , the calm is occasionally disturbed by the arrival of late @-@ season cold fronts . The collision of a cold air mass with warm and humid local air can create a squall line which brings brief heavy rain , strong winds , and sometimes small tornadoes to the area . A dramatic example of this was the Storm of the Century in March 1993 , but other smaller @-@ scale events (such as the brief but intense squall which caused a freighter to strike and partially collapse the original Sunshine Skyway bridge in May 1980) occur almost every year .

= = = Summer = = =

Temperatures are hot from around mid @-@ May through mid @-@ October , which coincides approximately with the rainy season . Summertime weather is very consistent , with highs in the low 90s ° F (around 32 ° C) , lows in the mid @-@ 70s ° F (around 24 ° C) , accompanied by high humidity and an almost daily chance of afternoon thundershowers .

The typical summer weather pattern is for heat @-@ produced thermals , powered by either the Gulf or Atlantic sea breeze (and occasionally both simultaneously) , to build puffy white cumulus clouds into threatening thunderheads over the interior of the Florida peninsula . Usually , the resulting storms drift slowly westward to the bay area , though they may rain themselves out before reaching Tampa if the easterly winds are light or the sea breeze from the Gulf of Mexico is too strong . Occasionally , the storms survive to move out over the Gulf of Mexico , where they can be seen at night from the beaches as spectacular light shows . Nighttime storms offshore are driven by the land @-@ breeze front which is the dermal counterpart of the daytime sea @-@ breeze front .

The afternoon storms typically bring brief periods of heavy rain with frequent cloud @-@ to @-@ ground lightning , and are usually followed by a pleasantly clear and cooler evening . At times , they can grow severe , bringing gusty winds , small hail , and torrential rain , and an occasional tornado . While Florida does rank # 1 in the USA in terms of tornadoes per square mile , the majority of the twisters are small , weak , and short @-@ lived . Waterspouts are relatively common in Tampa Bay and off the gulf coast during strong summer thunderstorms , occasionally moving onshore as a short @-@ lived tornado .

Though the Tampa Bay area is sometimes referred to as the " Lightning Capital of the World " , it is more accurately called the ? Lightning Capital of North America ? if measured by average number of

days with thunderstorm activity per year . During the summer , west @-@ central Florida receives as much lightning as the world ? s true lightning leaders such as the Lake Victoria region of Africa and the central Amazon River Basin . However , there are few thunderstorms in the Tampa Bay area from approximately October to May , decreasing the yearly average .

Every year , Florida averages 10 deaths and 30 injuries from lightning strikes , with several of these usually occurring in or around Tampa . University of Florida lightning expert Martin A. Uman has calculated that the average resident is within a half @-@ mile of 10 to 15 lightning strikes every year . TECO Energy , the local electric utility , spends over USD $ 1 @,@ 000 @,@ 000 annually to repair transformers and other equipment damaged by lightning strikes .

= = = Autumn = = =

Both the temperature and the average rainfall decline as September turns to October . Highs moderate into the 80s , and the lessening heat leads to lower evaporation @-@ generated humidity and fewer convection @-@ generated thundershowers , which are unusual after around mid @-@ October . While everyday rain is less frequent , the hurricane season extends until the end of November , and the area is sometimes affected by a drenching hurricane or tropical storm during the fall .

= = = Winter = = =

Winters in the Tampa Bay Area are generally dry and mild ; highs during the season average near 70 ° F (21 ° C) with mostly sunny skies . The occasional passage of a cold front will bring rain followed by a few days of cooler temperatures . Lows rarely drop below freezing 32 ° F (0 ° C) , an occurrence which happens , on average , once every other year . While deep freezes are very infrequent , serious cold snaps are a significant concern due to the diverse range of freeze @-@ sensitive agriculture and aquaculture industries in the area .

Frozen precipitation is very rare in the area . In the Great Blizzard of 1899 , Tampa suffered its one and only known blizzard , with " bay effect " snow coming off Tampa Bay .

The last officially measurable snow in Tampa fell on January 19 , 1977 . While the accumulation amounted to less than 0 @.@ 5 inches (13 mm) , the area is quite unaccustomed to and unprepared for frozen precipitation , so various schools , businesses , and roads closed , at least until the snow melted away that afternoon . Many residents of southern Pinellas County reported a light snowfall on December 23 , 1989 . However , no snow fell at official weather stations , and the weather record indicates that light sleet fell on St. Petersburg that day .

The winter of 2009 @-@ 2010 was one of the coldest in local history . Both Tampa and St. Petersburg set records for consecutive days in which the high temperature did not reach 60 ° F (16 ° C) , and Tampa experienced ten consecutive days with a low temperature below freezing . Much of the area received a " wintry mix " of rain , sleet , and possibly a few snowflakes on January 9 ? 10 .

Tampa 's all @-@ time record low temperature is 18 ° F (? 8 ° C) and St. Petersburg 's is 20 ° F (? 7 ° C) , both occurring during the same cold snap on December 13 , 1962 .

During El Niño , the Tampa Bay area receives cooler and wetter conditions during the dry season while during La Niña , the Tampa Bay area becomes drier and warmer than normal .

= = = Precipitation and sunshine trends = = =

Due to the frequent summer thunderstorms , Tampa has a pronounced wet season , receiving an average total of 28 inches (710 mm) of rain from June and September but only about 18 inches (460 mm) during the remaining eight months of the year combined . The historical averages during the late summer , especially September , are augmented by tropical cyclones , which can easily deposit many inches of rain in one day . Outside of the summer rainy season , most of the area 's precipitation is delivered by the occasional passage of a weather front .

Tampa 's precipitation data falls near the median for the area . Nearby communities to the interior tend to receive a bit more rain every year ; those closer to the coast a bit less .

The area receives plentiful sunshine throughout the year , averaging a total of 2920 hours , or 66 @.@ 7 % of the possible total . The daily sunshine amount is highest in May , when the sun 's angle of incidence has increased the hours of daylight and the rainy season has not yet begun .

= = Tropical systems = =

June through November is hurricane season in the Atlantic Basin and Caribbean Sea , with the most tropical activity occurring between mid @-@ August to mid @-@ October . Rain dropped by tropical systems is an important component of the area 's annual precipitation and is vital for replenishing the water supply of communities around Tampa Bay .

The area feels some effect from passing tropical systems almost every year , but direct hits are uncommon . Estimates of the probability of a hurricane making landfall in the Tampa Bay area during any given year range from 1 in 25 to 1 in 50 . While the historical record has shown that the area is vulnerable to a large storm (such as the Great Gale of 1848 , which destroyed most of the village of Tampa) , Tampa Bay has not seen the landfall of any hurricane since 1946 , and has not taken a hit from a major hurricane since 1921 .

= = = The 2004 Tropical Season = = =

The 2004 Atlantic Hurricane Season was historically busy for the Tampa Bay area . The region was affected by a record four hurricanes that year ; Frances , Jeanne , Charley , and to a lesser extent , Ivan . Jeanne and Frances passed over Tampa as tropical storms after making their way across the state from the east coast . Charley was forecast to make a direct hit on Tampa Bay from the south @-@ southwest , which would have been the worst @-@ case scenario for local storm surge flooding . But the storm made a sudden and unexpected turn to the northeast and brought only tropical storm force winds to the region , devastating the Ft . Myers / Port Charlotte area instead . Ivan also threatened the area as it moved north up the eastern Gulf of Mexico . It remained far to the west of central Florida , however , and brought only a bit of rain and wind to Tampa Bay before eventually slamming into coastal Alabama and the Florida Panhandle .

= = Tampa and St. Petersburg climate summaries = =