2005 Weather Capsule

Rainfall Varies Across the Suncoast Portions of Tampa Bay Very Dry; Southwest Florida Soaked

Calendar year 2005 featured the usual variety of weather events found along Florida's Suncoast, but will be ultimately remembered as The Year We Were Spared. Though a record shattering 27 named tropical cyclones formed, including 11 which affected the Gulf of Mexico and Bay of Campeche, only minimal damage was reported along the Suncoast. Considering that, at last check, an estimated \$115 billion in damage occurred, nationwide, from all storms, we were indeed lucky.

Similar to 2004, January began pleasantly, with a warm first half followed by a brief cold snap, then finishing nice once again. During the cold snap, a widespread freeze affected all but southwest Florida and the immediate coastline, with temperatures in the 20s to lower 30s. Interestingly, the freeze occurred on the exact date of a harder, more damaging event two years earlier. February featured mild temperatures with a brief cool down mid-month. Rainfall was scarce until the last few days of the month, when a fairly strong (996 mb as it crossed Cedar Key) area of low pressure allowed deep tropical air to lift northward along a developing warm front, producing 1 to 2 inches in the Tampa Bay through Lakeland region but a swath of locally heavy rainfall, in excess of 5 inches, from Sarasota northeast through southern and eastern Polk County. This same system produced a short lived but damaging F1 Tornado in Brevard County on Florida's Atlantic coast.

Spring featured the typical increasing variety of weather, ranging from chilly rains to very large hail, by Florida standards. The season came in like a lion, with temperatures some 5 to 10 degrees below normal for the first three weeks of March. A well documented microburst struck Tampa on March 14th, followed by another week of cool weather before a warming trend began. While March went out like a lamb, April thundered in with two vigorous cold fronts, the second which produced widespread gale force wind gusts as well as numerous severe events, including damaging winds in excess of 60 mph in southern Hillsborough, Polk, and coastal Sarasota County. Additional severe weather occurred on the 23rd, ahead of an unusually strong late season cold front. An F1 tornado caused damage in Mulberry during the early evening. Behind the front, high temperatures struggled to escape the 60s from Tampa Bay northward on the 24th. The active pattern, which kept temperatures in check, continued into early May. Large hail, and some damaging winds, accompanied a complex frontal system on May 3rd and 4th. Warmer, drier weather followed for the rest of the month, but was book-ended by heavy rains and locally severe weather, including another F1 tornado, in southern Pasco County just before midnight on June 1st.

Summer trended from very wet in June, to extremely dry in September, across most of west central and southwest Florida, with the sole exception being Lee and Charlotte Counties, as well as pockets of central Florida, where enough rain fell between June and September to push totals substantially (at least 5 inches) above normal. Portions of Tampa Bay, particularly around the immediate periphery of the Bay, had summer rainfall deficits of nearly 10 inches below normal, most of the deficit occurring between July and September (Figure 4). With the dry conditions came the heat (Figure 3), which was often stifling in the early evening. These conditions were a far cry from the summer of 2004, when heavy rains began in late July and continued through September.

Tropical air remained entrenched across the Florida peninsula through most of October. Moderate rains occurred early in the month, aided by deep tropical moisture initially associated with Tropical Storm Tammy and soon after aided by an easterly wave. Relief arrived, temporarily, at mid month as humidity fell and nighttime temperatures dropped into the 50s and 60s. However, a persistent ridge of high pressure remained across much of Florida, the eastern Gulf, and the Caribbean, which helped the eventual development of powerful Hurricane Wilma. Wilma combined with the autumn's first bona-fide cold front while racing across Florida on the 24th, effectively ending summer.

November was rather uneventful, with below normal precipitation over all but southwest Florida and slightly warmer than normal temperatures. A fairly strong cold front arrived just before Thanksgiving, bringing the coolest weather of the autumn. The year closed on a chilly but dry note, with temperatures generally 2 to 4 degrees below normal. The season's first minor freeze occurred across interior portions of the Nature Coast on the 22nd, when low temperatures fell into the 20s there and 30s elsewhere.

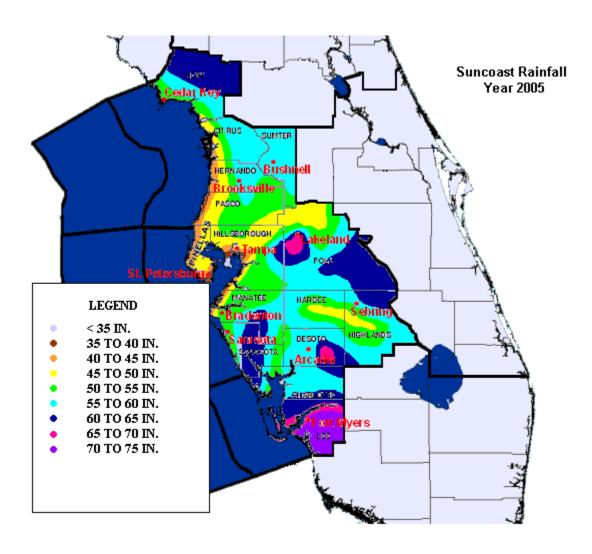


Figure 1. Total rainfall, 2005.

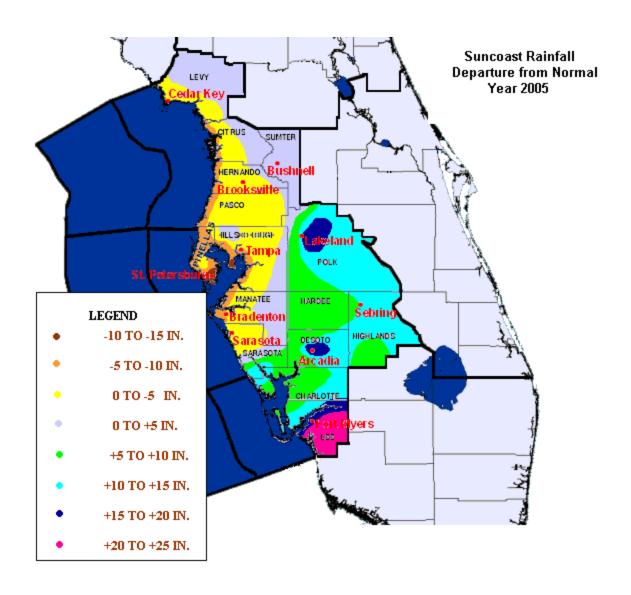


Figure 2. 2005 Departure from normal annual rainfall

TAMPA INTL. AIRPORT, FLORIDA

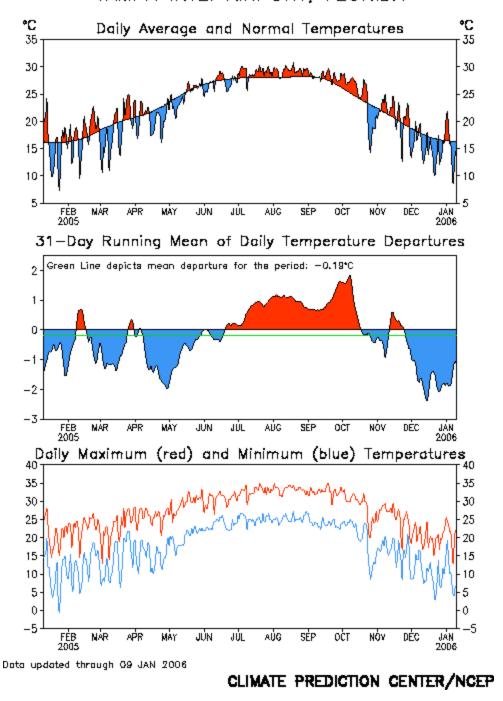


Figure 3. 2005 Temperatures at Tampa International Airport.

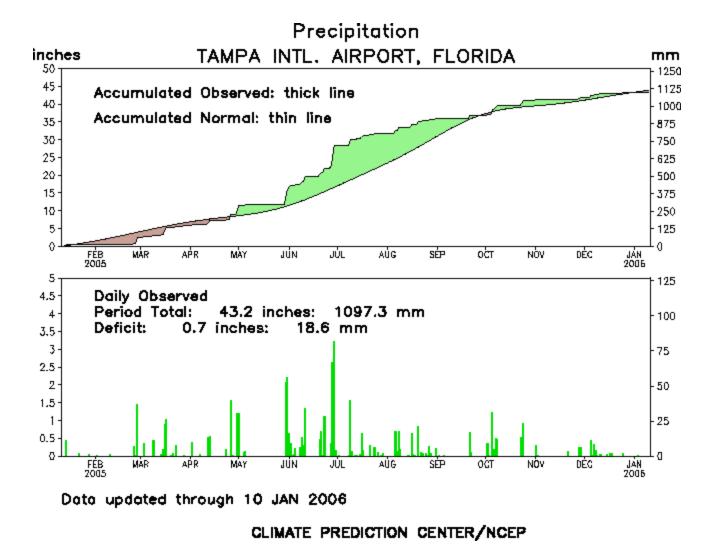


Figure 4. 2005 Rainfall at Tampa International Airport.