

October 2002 Summary

Summer Hangs On...and on...

Unlike a typical year, when October signifies the onset of cooler and more comfortable weather, October 2002 featured late summer humidity with above normal temperatures. Like a toasted bagel with cream cheese in the middle, October began with early September-like heat, was followed with a brief mid-month cool down, and concluded with more late summer heat and humidity. Rainfall patterns varied, as well. Several days featured sea breeze and boundary collisions more like mid summer than early autumn.

For the month, temperatures were the 5th warmest on record at Tampa (Table 1) and 6th warmest at Fort Myers (Table 2). For many, it seemed like summer just wouldn't end. In a sense, they were correct. Analysis of the combined September and October average temperature showed that, for 2002, the value was the highest on record (Table 3).

Table 1. Top 10 warmest Octobers in Tampa, since 1890.			Table 2. Top 10 warmest Octobers in Fort Myers, since 1948.			Table 3. Top 10 warmest Sept/Oct in Tampa, since 1890.		
RANK	AVG. TEMP.	YEAR	RANK	AVG. TEMP.	YEAR	RANK	AVG. TEMP.	YEAR
1	80.4	1919	1	81.8	1985	1	80.9	2002
2	79.6	1959	2	80.1	1959	2	80.7	1941
3	79.4	1941	3	80.0	1995	3	80.6	1959
4	79.2	1985	4	79.8	1981	3	80.6	1919
5	78.9	2002	5	79.5	1986	5	80.2	1990
6	78.3	1911	6	79.4	2002	6	80.0	1925
7	77.9	1975	6	79.4	1990	7	79.9	1995
7	77.9	1949	8	79.1	1996	7	79.9	1985
7	77.9	1918	8	79.1	1994	7	79.9	1975
10	77.8	1995	8	79.1	1979	10	79.8	1911

October 1 - 14: Summer's Swelter Continues

A strong upper level high pressure ridge remained parked across the southeastern United States for much of the first half of the month. This ridge maintained a hot and humid air mass across the peninsula. Across the suncoast, temperatures averaged 3 to 5 degrees above normal, with daytime highs near 90 and nighttime lows between 70 and 75.

Rainfall was scarce for the first ten days, as deep layer drying on the heels of Hurricane Lili, which passed well south and west of the region, took hold by the 3rd and was slow to be replaced by deep tropical moisture. Sea breeze collisions produced locally heavy rains from east of Tampa Bay through Manatee County on the 7th, and over interior sections of the Suncoast from Tampa through Levy County on the 12th. By the end of the period, rains became more widespread as a series of fronts approached.

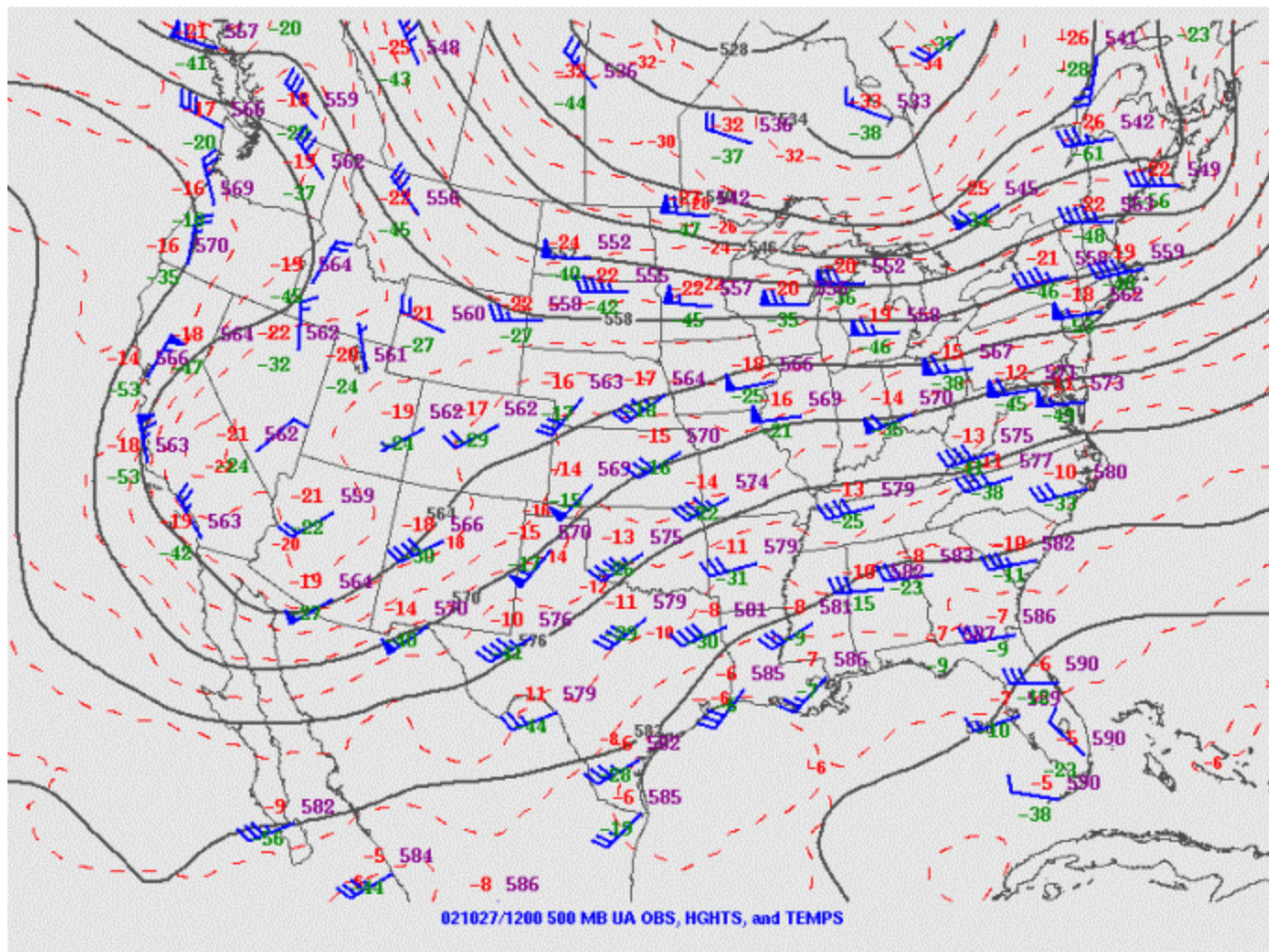


Figure 1. Example of upper ridge across Florida during late October, 2002 Level is at 500 mb (around 15,000 feet).

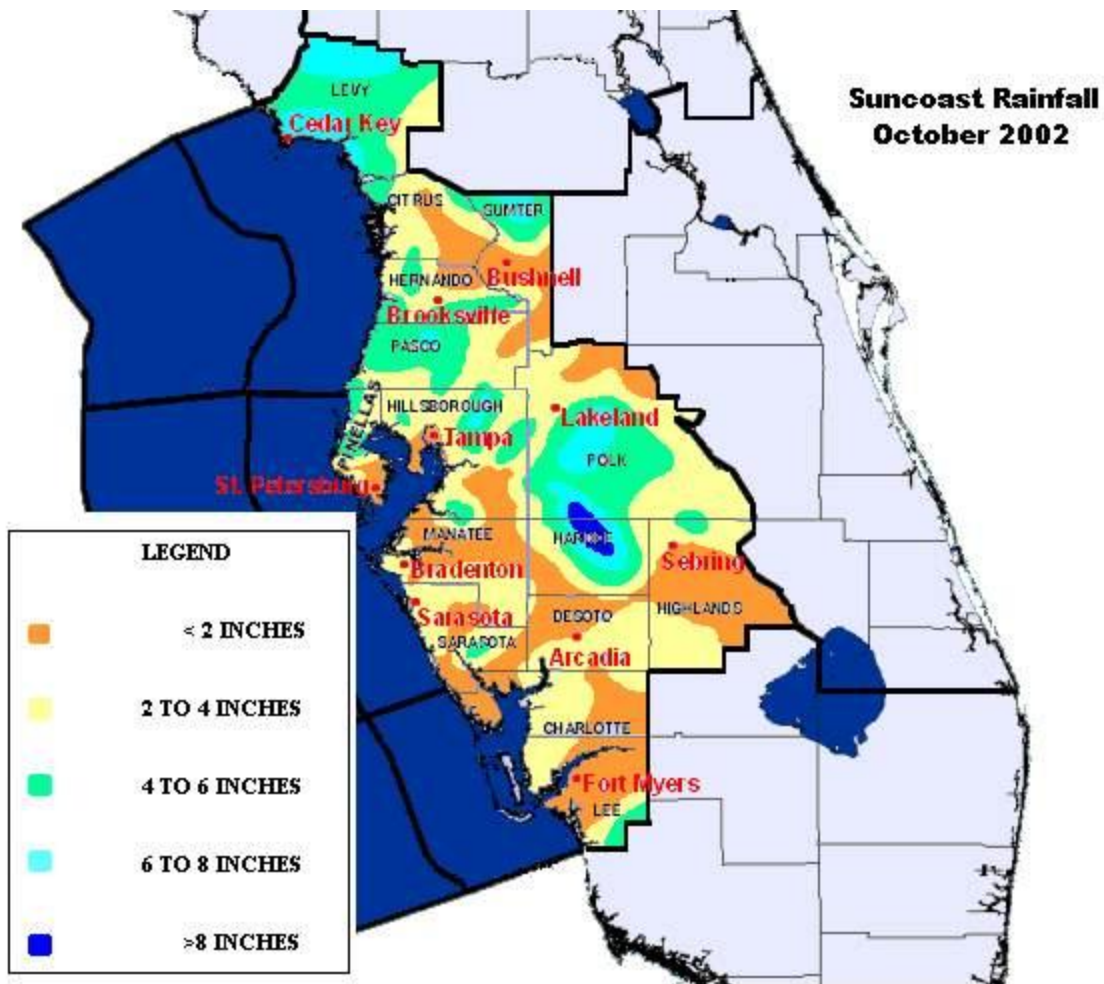


Figure 2. October 2002 Rainfall in West Central and Southwest Florida.

October 15 - 20: Brief Relief

A break in the weather occurred by mid month, as a cold front swept through the state. The front, preceded by clouds and widespread rain from the 13th through 15th, brought significantly cooler and drier. Average temperatures between the 15th and 20th averaged 2 to 4 degrees below normal. This pleasant change would be short lived, however, as the continental air quickly modified as high pressure (Figure 1) rebuilt east and south of the state, returning tropical moisture, and eventually more late summer heat.

October 21 - 31: Back to Summer...until Halloween

Heat and Humidity returned by the 4th week. Dry weather prevailed early, but a weak upper level disturbance, combined with sea breeze collisions, dumped torrential rains of more than 5 inches over portions of interior west central Florida on the 23rd. Figure 2 shows the monthly total. By the end of the 4th week, summer heat peaked, with high temperatures once again near 90 and lows between 70 and 75.

After the local deluge on the 23rd, precipitation was isolated, until the 30th, when a cold front approached the Nature Coast. By Halloween, the front had reached Sarasota County. Temperatures from Tampa Bay north held in the 70s for the first time since mid month. Figures 3 and 4 show the monthly temperature trends for Tampa and Fort Myers, respectively.

Maximum/Minimum Temperature

October 2002, Tampa

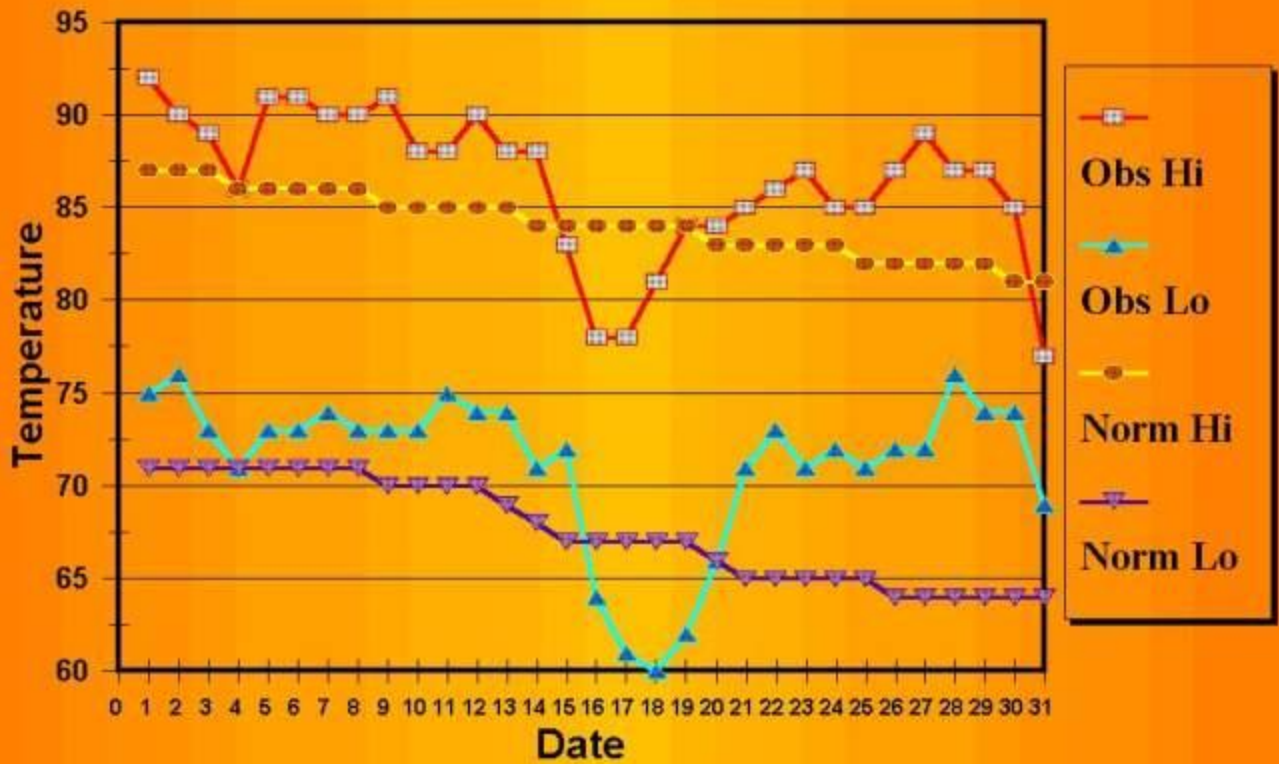


Figure 3. Preliminary October 2002 Maximum and Minimum Temperatures, along with 30 year normals, Tampa.

Maximum/Minimum Temperature

October 2002, Fort Myers

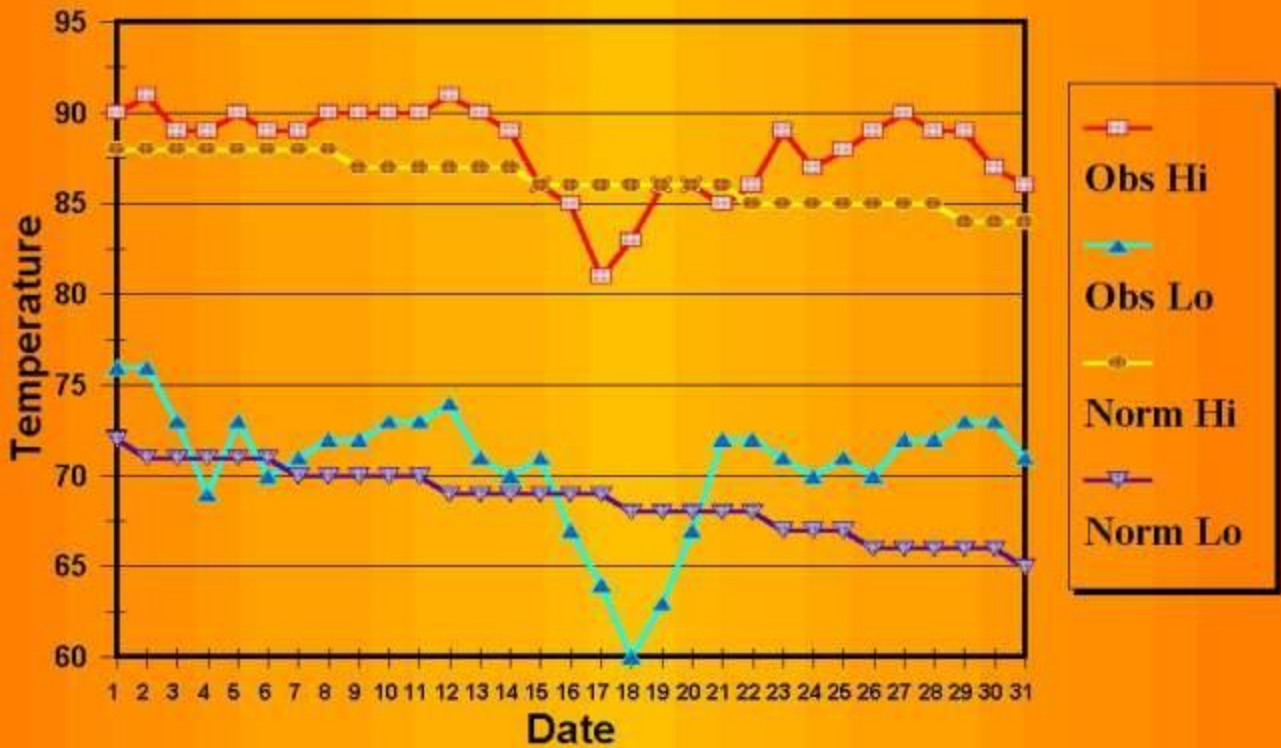


Figure 4. Preliminary October 2002 Maximum and Minimum Temperatures, along with 30 year normals, Fort Myers.

NWUS52 KTBW 241453
LSRTBW

PRELIMINARY LOCAL STORM REPORT
NATIONAL WEATHER SERVICE TAMPA BAY AREA - RUSKIN FL
1053 AM EDT THU OCT 24 2002

TIME (EDT)CITY LOCATION..... STATE ...EVENT/REMARKS...
.....COUNTY LOCATION.....

0700 PM MULBERRY FL URBAN FLOOD
10/23/02 POLK TORRENTIAL RAINS PRODUCED
BRIEF HIGH STANDING WATER
AT THE INTERSECTION OF SR
60 AND SR 37. SECOND EVENT
OCCURRED BETWEEN 830 AND 9
PM. REPORTED BY FIRE AND
RESCUE.

0730 PM FORT MEADE FL URBAN FLOOD

10/23/02	POLK		MINOR FLOODING OF ROADS BETWEEN 730 AND 830...AND AGAIN BETWEEN 11 PM AND MIDNIGHT. REPORTED BY LAW ENFORCEMENT.
0815 PM 10/23/02	LAKELAND POLK	FL	WIND DAMAGE SIGNIFICANT DAMAGE TO MOBILE HOME IN EAST LAKELAND. ROOF TORN OFF...5 WINDOWS BROKEN...A/C UNIT BLOWN OUT. NEARBY DAMAGE UNKNOWN. REPORTED BY PUBLIC.
0830 PM 10/23/02	ZOLFO SPRINGS HARDEE	FL	FLOOD WIDESPREAD AREAS OF 5 TO 7 INCHES ALONG SR 64 BETWEEN ZOLFO SPGS AND WAUCHULA. EIGHT ROADS CLOSED AT ONE TIME...1 TO 2 FEET OF WATER ACROSS. EVENT LASTED UNTIL 11 PM. REPORTED BY EMERGENCY MANAGEMENT.

BSG