

East Central Florida Heat Wave

June - July 1998

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A deep high pressure ridge persisted across the Gulf of Mexico and Florida from early May through early July and resulted in several long stretches of recording breaking temperatures across much of east central Florida. Gusty west winds held the sea breeze offshore many of the days and allowed temperatures to rise to between the upper 90s and 101 degrees. Even on days in which sea breezes developed... temperatures rose into the mid to upper 90s and set or tied records.

During the period from June 7-10, June 26-27, and through most of July, high temperatures were near or above normal, but did not set daily records. All newly established records (and previous records) are listed below for the observation sites at Melbourne, Orlando, and Daytona Beach. .

NEW RECORD HIGH TEMPERATURES

| Date | Melbourne new record | Melbourne previous record | Orlando new record | Orlando previous record | Daytona Beach new record | Daytona Beach previous record |
|---------|----------------------|---------------------------|--------------------|-------------------------|--------------------------|-------------------------------|
| June 1 | 96 (tie) | 96 (1985) | | 100 (1945) | | 98 (1985) |
| June 2 | 99 | 94 (1985) | | 96 (1985) | 101 | 97 (1937) |
| June 3 | 98 | 96 (1985) | | 96 (1985) | 100 | 98 (1985) |
| June 4 | 99 | 94 (1980) | | 100 (1985) | 100 | 95 (1990) |
| June 5 | 100 | 96 (1980) | 98 | 96 (1980) | 101 | 96 (1937) |
| June 6 | 101 | 96 (1971) | 98 | 97 (1949) | 100 | 97 (1949) |
| Date | Melbourne new record | Melbourne previous record | Orlando new record | Orlando previous record | Daytona Beach new record | Daytona Beach previous record |
| June 11 | 97 | 96 (1981) | | 97 (1977) | | 97(1941) |
| June 12 | 97 (tie) | 97 (1952) | | 99 (1952) | | 98 (1952) |
| June 13 | 97 | 96 (1963) | | 99 (1977) | 99 | 95 (1963) |
| June 14 | 101 | 98 (1963) | | 99 (1977) | 101 | 98 (1963) |
| June 15 | 100 | 96 (1963) | 97 (tie) | 97 (1958) | 99 | 96 (1981) |
| June 16 | 98 | 96 (1961) | 98 | 97 (1963) | 100 | 98 (1981) |
| June 17 | 99 | 93 (1971) | 100 | 98 (1981) | 98 (tie) | 98 (1981) |
| June 18 | 99 | 97 (1964) | 100 | 99 (1950) | | 99 (1985) |
| June 19 | 99 | 95 (1964) | 100 | 98 (1985) | 100 | 96 (1985) |
| June 20 | 99 | 96 (1990) | 99 | 98 (1948) | | 98 (1990) |
| June 21 | 98 | 97 (1961) | 98 | 97 (1948) | | 96 (1944) |
| June 22 | 97 | 95 (1992) | | 98 (1987) | 96 (tie) | 96 (1990) |
| June 23 | 96 | 95 (1964) | | 98 (1950) | | 100 (1944) |
| June 24 | 97 | 96 (1980) | | 99 (1944) | | 99 (1944) |
| June 25 | 96 | 96 (1980) | | 99 (1948) | | 99 (1944) |
| Date | Melbourne new record | Melbourne previous record | Orlando new record | Orlando previous record | Daytona Beach new record | Daytona Beach previous record |
| June 28 | | 97 (1954) | 97 | 96 (1954) | | 99 (1954) |
| June 29 | | 97 (1980) | 99 | 96 (1952) | 98 | 97 (1977) |
| June 30 | 99 | 95 (1972) | 99 | 96 (1948) | 100 | 96 (1988) |
| July 1 | 99 | 95 (1992) | 99 | 97 (1978) | 100 | 97 (1990) |
| July 2 | 100 | 95 (1997) | 101 | 97 (1972) | 99 | 96 (1970) |
| July 3 | 99 | 96 (1978) | 100 | 97 (1997) | 96 (tie) | 96 (1978) |
| July 4 | | 98 (1963) | 97 (tie) | 97 (1992) | | 97 (1997) |
| Date | Melbourne new record | Melbourne previous record | Orlando new record | Orlando previous record | Daytona Beach new record | Daytona Beach previous record |
| July 6 | 99 (tie) | 99 (1966) | | 98 (1980) | 98 | 97 (1980) |
| Date | Melbourne new record | Melbourne previous record | Orlando new record | Orlando previous record | Daytona Beach new record | Daytona Beach previous record |

| | | | | | | |
|---------|----------------------|---------------------------|--------------------|-------------------------|--------------------------|-------------------------------|
| July 8 | 97 | 96 (1961) | | 98 (1969) | | 98 (1981) |
| July 9 | 95 (tie) | 95 (1995) | | 97 (1992) | 96 | 95 (1995) |
| Date | Melbourne new record | Melbourne previous record | Orlando new record | Orlando previous record | Daytona Beach new record | Daytona Beach previous record |
| July 28 | 97 | 95 (1950) | | 99 (1949) | | 98 (1992) |

- **The high temperature at Melbourne has been at or above normal during 93 of the last 94 days.**
- **High temperature records were set or tied at Melbourne on 15 consecutive days during June and on 29 days since June 1st.**
- **High temperature records have been set or tied at Daytona Beach 19 days since June 1st.**
- **High temperature records have been set or tied at Orlando 14 days since June 1st.**
- **The hottest day ever recorded in Melbourne since records began in 1948 occurred on July 14, 1980...when the maximum temperature reached 102 degrees.**
- **The hottest day ever recorded in Daytona Beach since records began in 1935 occurred on June 24, 1944 and July 15, 1981 when the maximum temperature reached 102 degrees.**
- **The hottest day ever recorded in Orlando since records began in 1945 occurred on May 31, 1945 when 102 degrees was reached.**

Number of days since June 1 that maximum temperatures reached at least 95 and 100 degrees across East Central Florida

| Melbourne | Melbourne | Daytona Beach | Daytona Beach | Orlando | Orlando |
|-----------------|------------------|-----------------|------------------|-----------------|------------------|
| 95 F or greater | 100 F or greater | 95 F or greater | 100 F or greater | 95 F or greater | 100 F or greater |
| 40 | 5 | 36 | 10 | 37 | 5 |

Recent WET and DRY periods

November 1997 - July 1998

Extremely wet conditions occurred across east central Florida during the Winter - normally the "dry season". A majority of the rainfall was associated with the passage of numerous "Gulf Lows" and associated cold fronts.

Weather patterns shifted drastically by late March, resulting in a 3 1/2 month period of abnormally dry conditions. The dry weather persisted into the Summer - delaying the typical onset of the "wet season". By mid-late May...persistent dry conditions began to lead to numerous wildfires. Extremely hot, dry, and often breezy conditions in June allowed wildfires to grow and spread quickly. Wildfires became extreme during the first few days of July, forcing evacuation of over 100,000 residents. While scattered lightning storms brought some local relief from the high temperatures and dry conditions, associated lightning strikes also ignited additional wildfires.

Widespread showers and thunderstorms returned to central Florida on July 6 and lasted for several days. A Climatologically "normal" rainfall became established by mid July as scattered thunderstorms occurred daily across the region.

Excessive WET period: November 1 1997 - March 20 1998

| Location | Total Rainfall | Normal rainfall | Departure from normal |
|---------------|----------------|-----------------|-----------------------|
| Melbourne | 28.91" | 11.97" | +16.94" (242%) |
| Orlando | 31.77" | 11.99" | +19.78" (265%) |
| Daytona Beach | 26.28" | 13.26" | +13.02" (198%) |

Excessive DRY period: March 21 1998 - July 5 1998

| Location | Total rainfall | Normal rainfall | Departure from normal |
|----------|----------------|-----------------|-----------------------|
|----------|----------------|-----------------|-----------------------|

| | | | |
|---------------|-------|--------|---------------|
| Melbourne | 1.92" | 13.37" | -11.45" (14%) |
| Orlando | 5.27" | 14.92" | -9.65" (35%) |
| Daytona Beach | 1.25" | 13.54" | -12.09 (9%) |

Another Excessive WET period: July 6-28, 1998

| Location | Total rainfall | Normal rainfall | Departure from normal |
|---------------|----------------|-----------------|-----------------------|
| Melbourne | 9.08" | 3.46" | +5.62" (262%) |
| Orlando | 7.78" | 5.33" | +2.45" (146%) |
| Daytona Beach | 5.18" | 3.95" | +1.23" (131%) |