October 2012 Climate Summary for SOUTHEAST TEXAS
WFO Houston/ Galveston

Differences in the monthly average temperatures between October 2012 and one year ago in October 2011 were mixed at the major climate sites. Both the City of Houston and Galveston were fairly close, with the average of each month being within a half of a degree. College Station was almost eight degrees warmer this October than last, while Hobby Airport was about a degree and a half cooler. All four sites had a monthly average temperature that was between 0.5 and 1.5 degrees below the normal monthly average.

January 1st through October 31st, 2012 is still the warmest year on record for the City of Galveston. 2012 is in second place to 2011 at both Hobby Airport and College Station. 2012 has now slipped to third place behind 2011 and 1962 for the City of Houston. Interestingly, the top five warmest year-to-dates for three of the four major climate sites has occurred since the year 2000. Only the City of Houston has three of the five warmest years in the 20th Century (Figure 1).

One reason for the warmer 24-hour average temperatures since the year 2000 has been the warmer nighttime temperatures. A way of looking at this fact is to see how many record low maximum temperatures have been broken versus record high minimum temperatures. The following graph (Figure 2) shows the number of each for the major climate sites between 2000 and 2012. The length of history for each site varies with start years being 1902 in College Station, 1882 at the City of...
Houston, 1931 at Houston Hobby Airport, and 1871 at Galveston.

Figure 2: Number of record high minimums (blue) and record low maximums (red) broken between 2000 and October 2012
A dry weather pattern dominated most of the month of October. A series of fronts did move across Southeast Texas during the month. However, rainfall was limited and all climate stations ended with below normal rainfall (Figure 3).

Most of the rainfall fell during a frontal passage that occurred on the 14th and 15th of the month.

Although all sites received rainfall, the highest totals were mainly along and north of the Interstate 10 corridor and away from the coast. Three other fronts moved through the area, one on the 5th and the 7th, a second on the 18th, and a third on the 26th. Each only brought isolated rainfall coverage generally ranging from a trace to about a third of an inch. Most of Southeast Texas only received 50% or less of the normal rainfall for October (Figure 4). As mentioned above there were isolated areas that had higher amounts of rainfall seen in October (e.g., Grimes County).
Figure 4: October 2012 percent of normal precipitation