

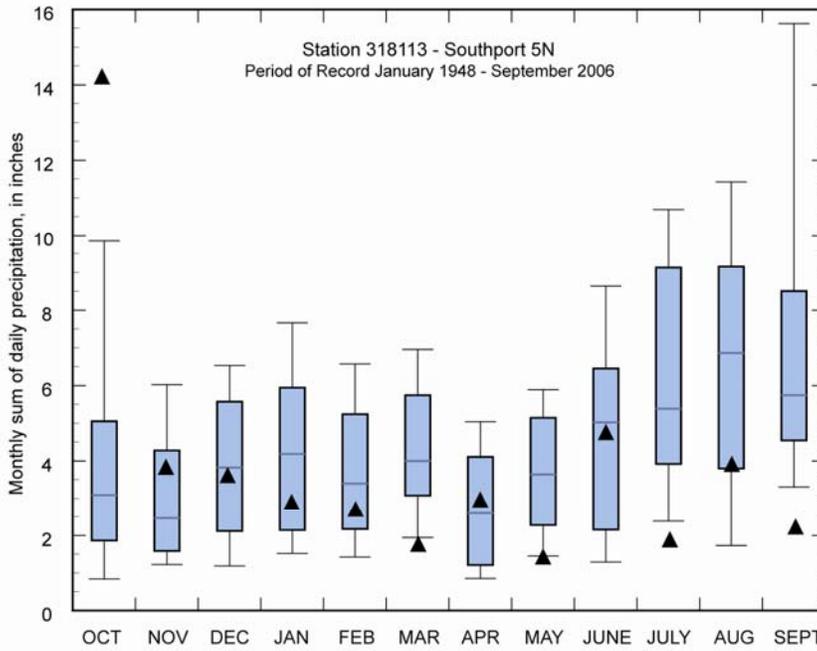
## ***Precipitation***

The State Climate Office of North Carolina maintains two long-term climactic data stations in Brunswick County (figure 1). Both stations have significant amounts of historic precipitation data with station 318113, located in southeastern Brunswick County near Southport, in operation since January 1948 and station 315116, located in western Brunswick County near Longwood, in operation since June 1972. Rainfall data is discussed because it is a significant contributor to recharge in the surficial aquifer, and as such can be an indicator for drought conditions. Box plots of the monthly sum of daily precipitation for the period-of-record were created for both the Southport and Longwood stations (figure 3). The monthly sum of daily precipitation for water year 2006 (represented by triangles) overlay the box plot, for comparison purposes.

For water year 2006, Southport station received within normal rainfall amounts for seven months of the year (figure 3A). However, March, May, July, and September 2006 were significantly below normal (drier) months with less than 10% of the period-of-record receiving as little rainfall. In contrast, October 2005 was significantly wetter than normal due to a very active late hurricane season with less than 10% of the period-of-record receiving as much rainfall.

Similarly, the Longwood station received within normal rainfall amounts for six months of the 2006 water year (figure 3B). January, March, and May 2006 received less than normal rainfall. In December 2005 and September 2006 Longwood received above normal amounts of rainfall. As was observed at the Southport station, October 2005 was significantly wetter than normal due to a very active late hurricane season with less than 10% of the period-of-record receiving as much rainfall.

A.



**EXPLANATON**

Box plot of monthly sum of daily precipitation for period of record, in inches

90th percentile —

75th percentile —

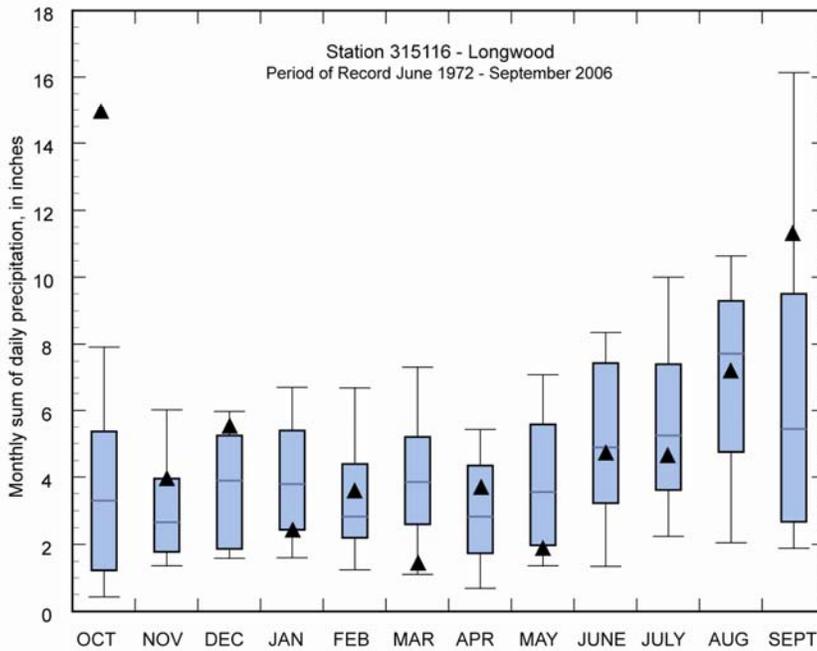
Median —

25th percentile —

10th percentile —

▲ - Monthly sum of daily precipitation for water year 2006, in inches

B.



**Figure 3.** Box plots comparing monthly sum of daily precipitation during water year 2006 to period-of-record monthly sum of daily precipitation at North Carolina State Climate Office stations (A) 318113 Southport 5N and (B) 315116 Longwood.