

# Shareholders' Report 2007

National Weather Service • Weather Forecast Office • Peachtree City, Georgia



### Big News Items of 2007

- The Drought (p. 11)
- March 1st Tornadoes (p. 13)
- Storm-based Warnings (p. 14)
- Impressive Outreach (p. 14)

*In Fiscal Year 2007, Congress appropriated \$884,393,000 to the NWS, which equates to an "investment" of \$2.94 per U.S. citizen.*

*This Shareholders' Report provides an accounting of what your NWS office in Peachtree City is doing with that investment.*

### Inside this issue:

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## 2007 Weather Devastation: Sudden and Stealthy

Lans P. Rothfusz  
Meteorologist in Charge

When people think of devastating weather, the sudden, violent phenomena such as tornadoes usually come to mind. The most impactful weather, however, is not always that

obvious. Extreme drought and high heat can be considered just as devastating as the tornadoes that sometimes rake across Georgia.

2007 brought both kinds of devastation – the sudden and the stealthy – to the County Warning Area (CWA) of the Peachtree City NWS office.



Sumter Regional Hospital devastated by March 1st tornado.

Despite our best warning efforts, the tornadoes of March 1 and April 15 claimed three lives and caused 33 injuries. The heat of the summer claimed two lives and the continuing drought has caused incred-

ible economic hardship on our state.

Through it all, we in the Peachtree City NWS are striving to minimize the impact of the sudden and the stealthy weather hazards in our area. This "Shareholders' Report" describes several ways we are doing that. Even if you just scan through this report, I suspect you will be pleased with the efforts *your* talented and dedicated NWS employees are putting forth. I know I am. These are special people doing special things for the public good. With your continued support, perhaps someday we can eliminate the deadly impacts of both the sudden and the stealthy weather hazards. Enjoy the report! ☀

## Severe Weather Summary for 2007

Robert Beasley  
Meteorologist

If there is any silver lining to the Southeast U.S. drought of 2007, it would be an overall dearth of severe weather, with distinct exceptions noted. Two major tornado outbreaks occurred, one on March 1<sup>st</sup> and another on April 15<sup>th</sup>. August, usually marking a decrease in summer severe convection, proved to be the most active ever for Peachtree City County Warning Area (CWA) with 91 severe convective events. May, typically the most active severe weather month, saw only 14 severe convective events, the

lowest number ever recorded during that month for the CWA. August severe weather was likely a result of the extreme heat observed during the month.

The March and April tornado outbreaks were among the most significant seen in years. However, the remainder of the spring was eerily quiet. By the end of December, the CWA had not recorded a flash flood event in 19 months! Just as in 2006, tropical activity was at a minimum with the remnants of hurricane Humberto on September 14<sup>th</sup> the only tropical system to impact the

CWA. Only two noteworthy winter events affected north Georgia, one in mid-January and another in early February resulting in minor ice accumulations in several northeast Georgia counties and several inches of snow in the northeast Georgia mountains.

The year ended, as it has for the past two years, with a December tornado outbreak resulting in three tornadoes in the far southeast part of the CWA. Overall, 383 severe convective events were recorded during the year

(Continued on page 3)

### *Top 25 North and Central Georgia Weather Events for 2007*

| <b>Date</b> | <b>County</b> | <b>Cause</b>              | <b>Damage</b>     | <b>Deaths</b>                                                                                                                                                                                                                                                                                                                                                     | <b>Injuries</b> | <b>Cost</b> |      |
|-------------|---------------|---------------------------|-------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|-------------|------|
| <b>1</b>    | 1-Mar         | Sumter                    | Tornado (EF3)     | Tornado tracked 32 miles through the county. Up to one mile wide. Portion of Sumter Regional Hospital in Americus destroyed. Hundreds of homes and businesses destroyed or significantly damaged. Two deaths in Americus when a wall collapsed.                                                                                                                   | 2               | 8           | 110M |
| <b>2</b>    | August        | North and Central Georgia | Excessive Heat    | Temperatures reached levels in excess of 100 on a number of days. Atlanta woman found dead in her home. Rome man found dead in a camper trailer.                                                                                                                                                                                                                  | 2               | 0           | 0    |
| <b>3</b>    | 1-Mar         | Taylor                    | Tornado (EF2)     | Two mobile homes destroyed. Others damaged. One death and four injuries in these mobile homes.                                                                                                                                                                                                                                                                    | 1               | 4           | 500K |
| <b>4</b>    | 25-Jun        | Forsyth                   | Lightning         | A 27-year-old male construction worker was struck and killed by lightning.                                                                                                                                                                                                                                                                                        | 1               | 0           | 0    |
| <b>5</b>    | 26-Aug        | Fulton                    | Lightning         | A 15-year-old male was struck and killed by lightning.                                                                                                                                                                                                                                                                                                            | 1               | 0           | 0    |
| <b>6</b>    | 1-Mar         | Crawford                  | Tornado (EF3)     | Several homes and outbuildings were heavily damaged or destroyed along Sandy Point Road.                                                                                                                                                                                                                                                                          | 0               | 9           | 500K |
| <b>7</b>    | 1-Mar         | Webster                   | Tornado (EF3)     | A path of significant damage occurred in southeast portion of the county. Concrete block house and two machine shops near Chambliss destroyed. Three injuries resulted from these incidents. On a nearby farm, five cows killed by tornado. Tractor trailer overturned causing it to catch fire and burn. Georgia Public Television transmission tower destroyed. | 0               | 3           | 1M   |
| <b>8</b>    | 1-Mar         | Warren                    | Tornado (EF2)     | Significant damage to Briarwood Academy. A number of homes, mostly double-wide mobile homes, sustained significant or complete damage. 3 people injured from flying glass and debris.                                                                                                                                                                             | 0               | 3           | 700K |
| <b>9</b>    | 15-Apr        | Laurens                   | Tornado (EF2)     | Two tied-down, double-wide mobile homes completely destroyed, resulting in three injuries. Several other mobile homes and one site-built home sustained damage from falling trees.                                                                                                                                                                                | 0               | 3           | 400K |
| <b>10</b>   | 3-Mar         | Barrow                    | Strong Wind       | Strong winds developed behind strong low pressure system.                                                                                                                                                                                                                                                                                                         | 0               | 3           | 150K |
| <b>11</b>   | 15-Apr        | Dodge                     | Tornado (EF1)     | Greenhouse and announcer's booth at Eastman High School football field destroyed. Two unsecured mobile homes destroyed. A couple were injured when a home destroyed. One home was destroyed when a large tree crashed through it. Numerous trees fell on homes.                                                                                                   | 0               | 2           | 350K |
| <b>12</b>   | 1-Mar         | Muscogee                  | Tornado (EF2)     | Several homes in northwest Columbus suffered heavy damage with at least one injury. Several commercial buildings sustained damage or were destroyed. Hundreds of trees and power lines were blown down, some of which fell on cars.                                                                                                                               | 0               | 1           | 28M  |
| <b>13</b>   | 4-Apr         | Hall                      | Thunderstorm Wind | Microburst winds up to 110 mph damaged at least 35 homes. One home destroyed. Man injured when a locked door blew open and hit him.                                                                                                                                                                                                                               | 0               | 1           | 1M   |
| <b>14</b>   | 9-Jul         | Fayette                   | Lightning         | Moderate damage to two homes. One person injured by lightning.                                                                                                                                                                                                                                                                                                    | 0               | 1           | 250K |
| <b>15</b>   | 23-Aug        | DeKalb                    | Lightning         | Home set on fire and one person injured by lightning.                                                                                                                                                                                                                                                                                                             | 0               | 1           | 150K |
| <b>16</b>   | 24-Aug        | Jackson                   | Lightning         | Home set on fire and one person injured by lightning.                                                                                                                                                                                                                                                                                                             | 0               | 1           | 100K |
| <b>17</b>   | 4-Apr         | Heard                     | Thunderstorm Wind | Up to 20 trees snapped off near U.S. Hwy 27 and West Ferry Road. Recreational vehicle blown over causing injury to a woman inside.                                                                                                                                                                                                                                | 0               | 1           | 50K  |
| <b>18</b>   | 19-Jun        | Fulton                    | Thunderstorm Wind | Several trees were blown down around the city. One person was injured when a tree fell on their car.                                                                                                                                                                                                                                                              | 0               | 1           | 25K  |
| <b>19</b>   | 19-Jul        | Fulton                    | Lightning         | A 29-year-old male was struck by lightning while doing construction work.                                                                                                                                                                                                                                                                                         | 0               | 1           | 0    |
| <b>20</b>   | 4/7/07-4/9/07 | North & Central GA        | Frost/Freeze      | A late freeze caused significant damage to crops.                                                                                                                                                                                                                                                                                                                 | 0               | 0           | 160M |
| <b>21</b>   | 12-Jun        | DeKalb                    | Hail (2.50 in)    | Hail up to the size of tennis balls was reported.                                                                                                                                                                                                                                                                                                                 | 0               | 0           | 4.5M |
| <b>22</b>   | 12-Jun        | Gwinnett                  | Hail (1.75 in)    | Hail up the size of golf balls was reported.                                                                                                                                                                                                                                                                                                                      | 0               | 0           | 2.1M |
| <b>23</b>   | 12-Jun        | Rockdale                  | Hail (1.75 in)    | Hail up to the size of golf balls was reported.                                                                                                                                                                                                                                                                                                                   | 0               | 0           | 1.6M |
| <b>24</b>   | 12-Jun        | Henry                     | Hail (1.75 in)    | Hail up to the size of golf balls was reported.                                                                                                                                                                                                                                                                                                                   | 0               | 0           | 1.5M |
| <b>25</b>   | 12-Jun        | Henry                     | Hail (1.75 in)    | Hail up to the size of golf balls was reported.                                                                                                                                                                                                                                                                                                                   | 0               | 0           | 1.5M |

## Severe Weather 2007

(Continued from page 1)

contributing to \$143M in estimated damages, \$113M of which was a result of the devastating March/April tornadoes. The number of events (383) was on par with that observed in 2006 (378) and not far below the 12-year WFO FFC CWA average of 428. However, the \$143M in property damages marked a sharp increase over the \$32M of 2006. Summer was the only season with above normal convective activity, while the

| 2007 Deaths and Injuries |        |          |
|--------------------------|--------|----------|
| Event                    | Deaths | Injuries |
| Tornado                  | 3      | 33       |
| T-storm Wind             | 0      | 3        |
| Hail                     | 0      | 0        |
| Lightning                | 2      | 5        |
| Flash Flood              | 0      | 0        |
| Heat                     | 2      | 0        |

spring and fall periods fell far short of normal. August was quite active with 91 events, well above the normal 41. The seasonal breakdown and 12-year normals for severe convective events are as follows: January - March

(58/60), April - June (162/229), July - September (157/114), October- December (6/28).

28 tornadoes affecting 35 counties were confirmed within the CWA during 2007, tying the all-time record set in 2005, well above the 11-year average of 12. For the second consecutive year, none of the tornadoes were associated with land-falling tropical storms or hurricanes. The tornadoes



Home destroyed in Sandy Point, GA (Crawford County) by EF3 tornado. Nine injuries occurred with this tornado.

(Continued on page 5)

| Tornadoes in Peachtree City NWS Forecast Area in 2007 |                          |                                               |          |             |             |        |          |        |  |
|-------------------------------------------------------|--------------------------|-----------------------------------------------|----------|-------------|-------------|--------|----------|--------|--|
| Date                                                  | County                   | Location                                      | Strength | Path        |             | Deaths | Injuries | Damage |  |
|                                                       |                          |                                               |          | Length (mi) | Width (yds) |        |          |        |  |
| 5-Jan                                                 | Coweta                   | 5 SSW Sargent to 2 ESE Sargent                | F1       | 6           | 200         | 0      | 0        | 250K   |  |
| 5-Jan                                                 | Coweta                   | 2 SSW Senoia to 0.5 SSE Senoia                | F0       | 1.5         | 200         | 0      | 0        | 45K    |  |
| 7-Jan                                                 | Coweta                   | 8.25 SW Newnan to 5 SSW Newnan                | F2       | 4           | 200         | 0      | 0        | 350K   |  |
| 1-Mar                                                 | Stewart                  | 0.5 SW Richland to 1 NE Richland              | EF1      | 1.5         | 250         | 0      | 0        | 400K   |  |
| 1-Mar                                                 | Taylor                   | 3 SW Potterville to 2 E Reynolds              | EF2      | 8           | 448         | 1      | 4        | 500K   |  |
| 1-Mar                                                 | Crawford & Bibb          | 4 E Knoxville to 1 ESE Lizella                | EF3      | 9           | 448         | 0      | 9        | 525K   |  |
| 1-Mar                                                 | Crawford                 | 4.5 SSE Horns to 10.8 E Knoxville             | EF1      | 12          | 100         | 0      | 0        | 100K   |  |
| 1-Mar                                                 | Bibb                     | 6.5 W Payne to 7.5 WNW Macon                  | EF0      | 2.5         | 100         | 0      | 0        | 100K   |  |
| 1-Mar                                                 | Jones                    | 3 NW Griswoldville to 2 SW James              | EF1      | 4           | 150         | 0      | 0        | 500K   |  |
| 1-Mar                                                 | Muscogee                 | 1 WSW Green Island Hills to 3 W Midland       | EF2      | 9           | 300         | 0      | 1        | 28M    |  |
| 1-Mar                                                 | Jones                    | 3 SSE Haddock                                 | EF0      | 0.05        | 50          | 0      | 0        | 5K     |  |
| 1-Mar                                                 | Talbot                   | 7.5 W Talbotton to 4 WNW Talbotton            | EF1      | 4           | 100         | 0      | 0        | 50K    |  |
| 1-Mar                                                 | Warren                   | 4 ENE Warrenton to 3 SE Mesena                | EF2      | 2.5         | 448         | 0      | 3        | 700K   |  |
| 1-Mar                                                 | Webster, Sumter, & Macon | 5.7 SE Weston to 5 SSW Oglethorpe             | EF3      | 40          | 1760        | 2      | 11       | 2.1M   |  |
| 1-Mar                                                 | Bleckley                 | 2 NNE Cary to 3 NE Cary                       | EF0      | 1           | 448         | 0      | 0        | 250K   |  |
| 1-Mar                                                 | Wilkinson                | 4.5 WSW Nickelsville to 9 NE Nickelsville     | EF2      | 4.5         | 880         | 0      | 0        | 30K    |  |
| 1-Mar                                                 | Marion                   | 3 NNE Oakland to 5 NE Oakland                 | EF1      | 2.5         | 100         | 0      | 0        | 25K    |  |
| 15-Apr                                                | Dodge                    | 1 W Eastman to 4 NNE Eastman                  | EF1      | 4.5         | 100         | 0      | 2        | 350K   |  |
| 15-Apr                                                | Laurens                  | 8.5 SSW Dublin to 5.5 SSE Dublin              | EF2      | 6           | 200         | 0      | 3        | 400K   |  |
| 15-Apr                                                | Laurens                  | 4 NNE Cedar Grove to 1.5 NNE Lowery           | EF0      | 6           | 50          | 0      | 0        | 50K    |  |
| 15-Apr                                                | Emanuel                  | 1 SSE Orland to 5 W Norristown Junction       | EF1      | 10          | 440         | 0      | 0        | 710K   |  |
| 15-Apr                                                | Laurens & Johnson        | 5 SE Dublin to 5 SW Kite                      | EF1      | 19          | 100         | 0      | 0        | 275K   |  |
| 15-Apr                                                | Emanuel                  | 2 SE Twin City to 5 NE Twin City              | EF2      | 5           | 200         | 0      | 0        | 250K   |  |
| 15-Apr                                                | Crisp                    | 5.5 W Arabi to 3 NE Arabi                     | EF1      | 7.5         | 200         | 0      | 0        | 80K    |  |
| 15-Apr                                                | Dodge                    | 1 S Eastman to 3.5 E Eastman                  | EF2      | 4.5         | 200         | 0      | 0        | 500K   |  |
| 15-Dec                                                | Wilcox                   | 2 W Owensboro to 1.5 WNW Owensboro            | EF1      | 0.5         | 100         | 0      | 0        | 5K     |  |
| 15-Dec                                                | Dodge                    | 5.0 ENE Jay Bird Spgs - 5.5 ENE Jay Bird Spgs | EF0      | 0.5         | 25          | 0      | 0        | 25K    |  |
| 15-Dec                                                | Treutlen                 | 1 SW Lothair to to 2.5 NE Lothair             | EF2      | 3.5         | 200         | 0      | 0        | 100K   |  |

## General Weather Review

Paul Denault  
CWSU Meteorologist

*"A wet pattern during the last 17 days resulted in monthly rainfall surpluses for all, and prevented Atlanta and Athens from establishing their driest year ever."*

Persistent drought accompanied frequent record warmth in 2007. The warmth was apparent early when Columbus tied a record on January 7<sup>th</sup> with a high of 74°. Then, on the 15<sup>th</sup>, a new record was set in Atlanta when the mercury reached 73°. In February, cooler temperatures during the first 19 days reversed this trend, as all 4 cities posted negative

departures ranging from -0.6° in Athens to -1.8° in Columbus. However, a balmy March resulted in departures ranging from +3.6° in Macon to +5.9° in Atlanta. In late March, a string of highs in the 80s produced another record in Atlanta on the 25<sup>th</sup>, of 87°. The first 3 months were quite dry, as rainfall deficits rose quickly to 7.20" in Atlanta, 6.56" in Columbus, 5.42" in Macon, and 3.78" in Athens.

In April, both Atlanta and Athens received less than half their normal rainfall. A polar outbreak in early April gave Atlanta two record low temperatures with 28° on the 7<sup>th</sup>, and 30° on the 8<sup>th</sup>. The drought worsened in May with record and near-record dryness. Macon experienced their driest May, receiving just a trace of rainfall. Similarly, Columbus recorded their 2<sup>nd</sup> driest May when only 0.26" of rain fell on two separate days. By late spring, the moderate to severe drought had intensified to extreme over much of the area.

Despite near- or above-average rainfall in June at Atlanta, Columbus, and Macon, early heat waves beginning on the 4<sup>th</sup>, minimized relief from the drought. On 20 days, the mercury topped 90° or more in all four cities, the first June occurrence of this since 1986. This heat produced above-average temperatures again, ranging from +0.6° in Columbus to +2.7° in Atlanta. A brief reprieve from the heat occurred in July, as average temperatures were below normal by at least 1.2 degrees in all four cities. However, July proved to be another drier than average month for Atlanta and Athens, while Columbus and

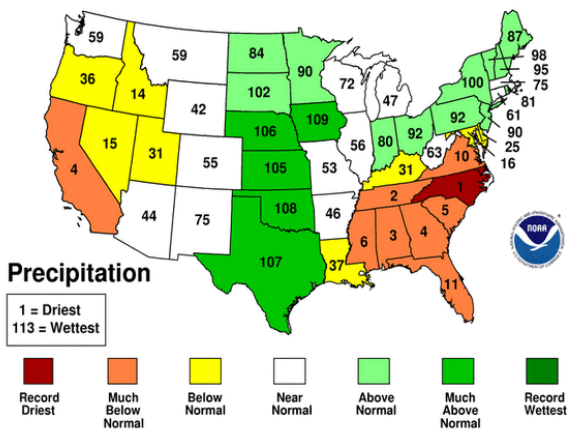
Macon recorded surpluses of 0.15" and 1.90", respectively.

In August, temperatures soared again. From the 8<sup>th</sup> through the 22<sup>nd</sup>, Atlanta reached 100° or more nine times, equaling 1980 for the most 100° readings and setting the record for any single month. During this period, nine record highs were either tied or broken in Atlanta, including 104° on the 22<sup>nd</sup>, which set the all-time record for August. With a monthly average of 85.6°, Atlanta had experienced its warmest month ever. By the end of August much of north and west Georgia was upgraded to an exceptional drought.

From September through November, all four climate sites recorded rainfall deficits each month. By the end of November, yearly deficits were approaching 20" in Atlanta and Athens and both were challenging 1954 for the driest year on record. After three consecutive months of above average temperatures, readings cooled in November by a series of polar fronts. Again, this trend was brief, as record warmth returned in early December. On the 9<sup>th</sup>, a high of 76° in Atlanta, 78° in Athens, 77° in Columbus, and a balmy 80° in Macon were all records. By the 14<sup>th</sup>, a total of eleven records had been equaled or exceeded. With December 5° or more above average, Atlanta had experienced its 2<sup>nd</sup> warmest year on record, while Athens tied 1990 for 4<sup>th</sup> warmest. A wet pattern during the last 17 days resulted in monthly rainfall surpluses for all, and prevented Atlanta and Athens from establishing their driest year ever. ☀

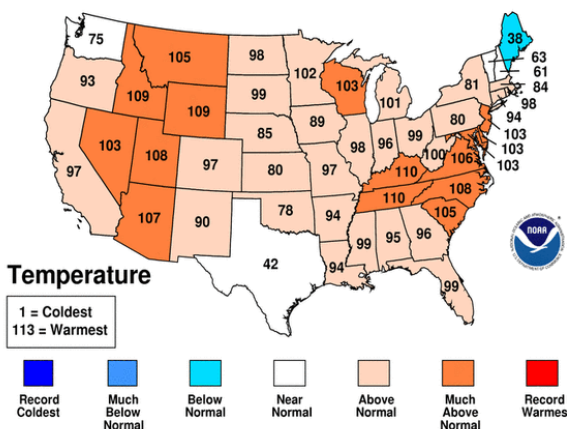
### January-December 2007 Statewide Ranks

National Climatic Data Center/NESDIS/NOAA



### January-December 2007 Statewide Ranks

National Climatic Data Center/NESDIS/NOAA



Precipitations charts showing the national variation in rainfall & temperatures for 2007.

## Severe Weather 2007

(Continued from page 3)

resulted in \$113.5M in damages.

### Deaths and Injuries

Seven weather-related fatalities were recorded during 2007, the most observed since 2003. Three were the result of the March 1<sup>st</sup> tornadoes, with two each from lightning and heat. There were 44 weather-related injuries, the highest since 2005. Thirty-three of these were due to tornadoes, with five attributable to lightning, and three to thunderstorm winds.

### Property Damage

Weather-inflicted property damage (\$156.6M) during 2007 was the second highest

| 2007 Weather-Related Damage |               |
|-----------------------------|---------------|
| Phenomenon                  | Losses        |
| Tornadoes                   | \$113,300,000 |
| Hail                        | \$21,800,000  |
| Lightning                   | \$12,700,000  |
| Thunderstorm Wind           | \$7,990,000   |
| Strong Winds                | \$341,500     |
| Heavy Rain                  | \$5,500       |
| High Winds                  | \$5,000       |
| Flash Floods                | \$0           |

amount recorded within the CWA, second only to 2005 with \$159.4M. Tornadoes topped the list of weather-related property damage at \$113.3M, the highest tornado-related damage figure ever recorded within the CWA. Other notable damages included hail (\$21.8M), lightning (\$12.7M), thunderstorm winds (\$8.0M), and strong, non-thunderstorm

winds (\$0.3M). Monetary hail damages are obtained from an empirically derived formula relating hail size and aerial coverage to home/property value. Actual hail damage figures are rarely provided to the NWS. Flash floods contributed zero in damages for 2007! Extensive crop damages resulted from one of the worst droughts in Georgia's history and a late season April freeze. Drought and freeze damages to crops were estimated as \$340M and \$155M, respectively. There were 56 weather-related events in 2007 with estimated damages \$250,000, compared with 30 in 2006. Additional details are provided in the tables below. ☀



Remains of a mobile home destroyed in the April 15th early-morning tornado near Dublin, GA. Three injuries were caused by this tornado.

*“Weather-inflicted property damage (\$156.6M) during 2007 was the second highest amount recorded within the CWA.”*

## Fine Tuning Our Forecast Operations

Shirley Lamback  
Senior Forecaster

Positive changes occurred during 2007 in forecast operations. One noteworthy change was to our product suite in which the Tabular State Forecast is now being produced for all of Georgia. This product gives easy access to forecasts for north, central and south Georgia for seven days.

There are now 18 forecast points in Georgia that are computed for the National Fire Danger Rating System (NFDRS). This is an increase from six. The NFDRS measures wildland fire danger at observation sites

throughout the contiguous U.S. Our forecast, combined with user input, allows the NFDRS software to predict the next day's fire danger indices. These indices impact agency resource management decisions, firefighter safety, and the protection of the public and property.

Some changes were made to our Situational Awareness Display System (SADS) to allow better monitoring of severe weather events. Tweaks and minor adjustments continue to be made (almost daily) in the GFE (Graphical Forecast Editor) to improve the “wording” of our many public products.

To allow more flexibility in operational demands, a new shift structure was implemented in 2007. The new structure puts a shift at mid-day (11 a.m. to 7 p.m. EST and 12 p.m. to 8 p.m. EDT) which allows the morning forecaster to pursue a daily “target of opportunity” such as hazardous weather operations, training, or outreach.

Future plans for forecast operations include the addition of hazardous weather grids. This would include grids to indicate the probability of tornadoes, damaging winds, flooding and dangerous fire weather conditions. A special team has been formed to work on this project. ☀

*“Our forecast, combined with user input, allows the NFDRS software to predict the next day's fire danger indices.”*

**Know someone interested in becoming a student volunteer? Contact Mr. Kent McMullen at the Peachtree City WFO (770-486-1133 or kent.mcmullen@noaa.gov).**

## Severe Weather Performance for 2007

Barry Gooden  
Warning Coordination Meteorologist  
& Robert Beasley  
Meteorologist

This year, WFO Peachtree City issued severe convective warnings for 688 counties, only six warnings above the 2006 total but below the 12-year average of 756. June proved to be the month during which the most warnings were issued (168), followed, surprisingly, by August (153). In fact, August set the record for the most warnings ever issued during that month since the inception of the Peachtree City office. June and August alone accounted for 47% of the warnings issued during the year. The spring months of April through June accounted for only 43% of the warnings issued during the year, and May set the record for the least number of warnings ever issued by the WFO during that month.

Only seven flash flood warnings were issued during the year, none of which were verified. This is the lowest number of flash flood warnings issued this decade, largely a result of the

*“Overall verification scores for 2007 decreased slightly, but there was a marked improvement in lead time.”*

|                            | Exclusive Verification Method* |         |              | Inclusive Verification Method** |
|----------------------------|--------------------------------|---------|--------------|---------------------------------|
|                            | Svr Tstm                       | Tornado | Flash Floods | Svr Tstm & Tornado              |
| <b>Warnings Issued</b>     | 591                            | 97      | 7            | 688                             |
| <b>Warned Events</b>       | 241                            | 30      | 0            | 288                             |
| <b>Unverified Warnings</b> | 313                            | 66      | 7            | 344                             |
| <b>Unwarned events</b>     | 107                            | 9       | 0            | 95                              |
| <b>Total Events</b>        | 348                            | 35      | 0            | 383                             |
| <b>POD</b>                 | 0.693                          | 0.857   | ****         | 0.752                           |
| <b>FAR</b>                 | 0.530                          | 0.680   | 1.000        | 0.500                           |
| <b>CSI</b>                 | 0.389                          | 0.303   | ****         | 0.429                           |
| <b>Lead Time (min.)</b>    | 9.1                            | 11.1    | ****         | 13.0                            |

**POD** = Probability of Detection, our ability to issue warnings before damage occurs. Optimum POD is 1.00.  
**FAR** = False Alarm Rate, the percentage of warnings not verified. Optimum FAR is 0.00.  
**CSI** = Critical Success Index, a combination of the POD and FAR. Optimum CSI is 1.00.  
**Lead Time** = The time between warning issuance and first damage.  
 \*Severe Thunderstorm warnings only verified by large hail or damaging winds. Tornado warnings verified by tornadoes only. Flooding only verified by flash floods.  
 \*\* Tornado warnings verified with tornadoes, large hail, or damaging winds. Tornadoes also verify severe thunderstorm warnings.

ongoing drought and lack of tropical activity. Note, the six-year average is 79.

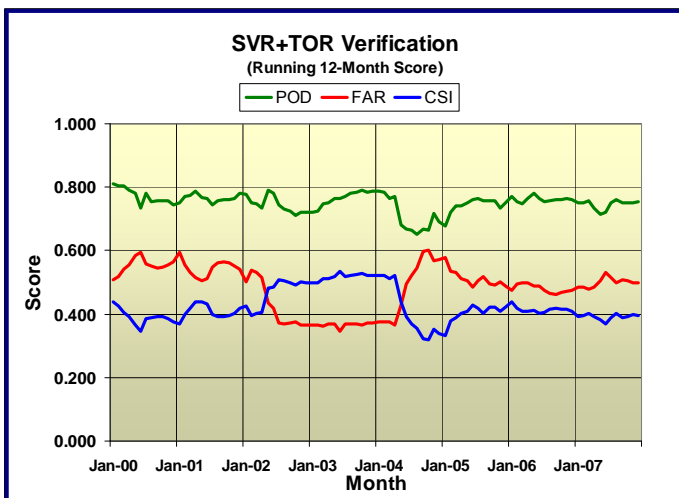
Overall verification scores for 2007 decreased slightly, but there was a marked improvement in lead time.

0.452 in 2006 to 0.429 in 2007. The optimum CSI is 1.00.

- The estimated average lead time (the time between warning issuance and first damage report) increased significantly from 8.8 minutes in 2006 to 13.0 minutes in 2007.

Skill scores using both the conventional method and the stricter, exclusive method (where tornado and severe thunderstorm warnings and events are treated separately) are shown in the table above. Other statistics developed by WFO Peachtree City are depicted in the rolling 12 month graph at left. The graph represents the period from when NEXRAD (Doppler radar) operations began to the end of 2007. ☼

- The Probability of Detection (POD), which measures our ability to issue warnings before damage occurs remained unchanged at 0.752 in 2007. The optimum POD is 1.00.
- The False Alarm rate (FAR), which provides the percentage of warnings not verified, increased from 0.475 in 2006 to 0.500 in 2007. The optimum FAR is 0.00.
- The Critical Success Index (CSI), a combination of the POD and FAR, decreased from



Performance statistics for severe weather warnings using a rolling, 12-month methodology. Low FAR, high POD and high CSI are desired.

## Forecasters Still Beating the Computers

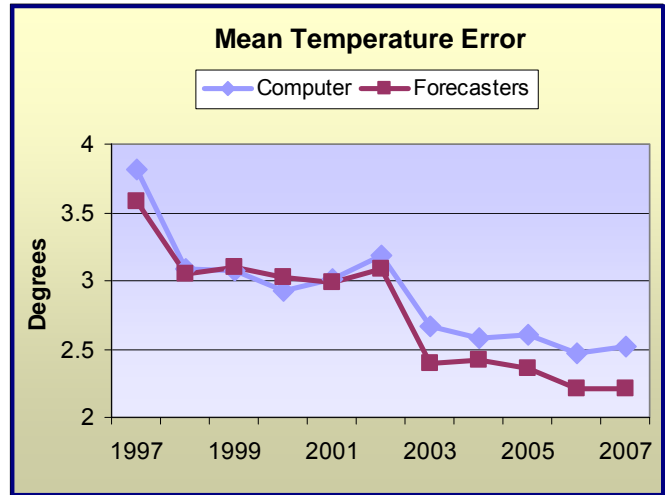
Trisha Palmer  
Meteorologist

In recent years, computer models used by NWS forecasters have undergone significant changes that have led to vast improvements in forecast accuracy. These improvements are due to a combination of years of scientific research and advances in technology. Thus, it speaks highly of our forecasters that, despite routine advances in computer models, we continue to improve upon the models. This is a direct result of our studies of model biases, training on model changes, and overall forecaster education and skill.

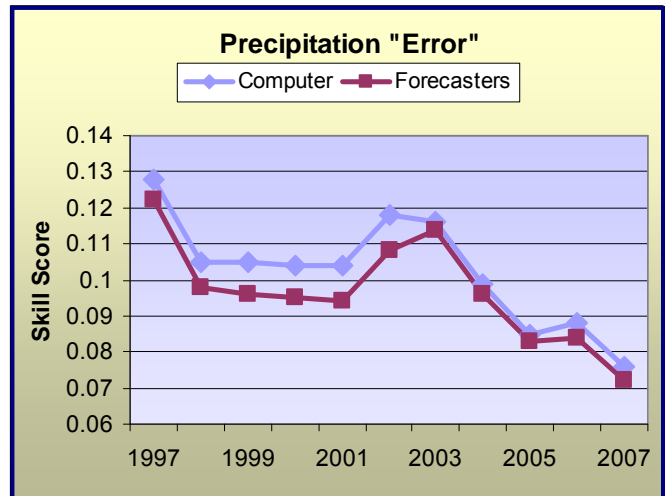
The adjacent charts show temperature and precipitation error since 1997 at five sites across our forecast area: Athens, Atlanta, Columbus, Macon, and Rome. For 2007, our forecasters yet again beat the models in both temperature and precipitation. In addition, for precipitation, we saw a

marked 86% improvement on forecasts from last year, likely because both our forecasters and the models have gotten a handle on the prolonged drought. It would not be surprising to see a decline in these scores when prolonged periods of rainfall return.

We also compare our forecasts to observed (actual) temperatures. Our goal is to forecast high and low temperatures within 3°F of the actual high and low. The bottom chart shows that we achieved this goal 79% of the time for the first period (12 hours) of each forecast for the five sites in 2007. Through the years, we have gradually increased the number of high/low temperature forecasts within this ±3°F range, while gradually decreasing the number of temperature forecasts greater than ±9°F. In other words, we have reduced the number of temperature forecast “busts,” which in turn provides much better service to our customers. ☀



Comparison of WFO Peachtree City forecasters' temperature forecasting skill versus that of the computer models they use. Lower scores are better.



Comparison of WFO Peachtree City forecasters' precipitation forecasting skill versus that of the computer models they use. Lower scores are better.

## Upper Air Successes and Changes

Mike Leary  
Hydrometeorological Technician

While 2006 remains the best Upper Air year we've ever had, 2007 was on par, with the lone exception of February 2007, when unusually strong low level jet stream winds played havoc with our instruments. Of the 58 flights we launched in February 2007, 38% had winds that pushed the balloon so far away from the weather station that it became situated less than 6 degrees above the horizon.

This position makes it very difficult for our ground-based tracking equipment to “hear” the instrument package signal. To alleviate this problem, we're receiving a completely redesigned, GPS-based, Upper Air system in early 2008.

September and October 2007 were the best back-to-back scoring months we've had since we began upper air reporting. The scores from 2007, combined with 2006 verify that our training strategy is on track.

☀

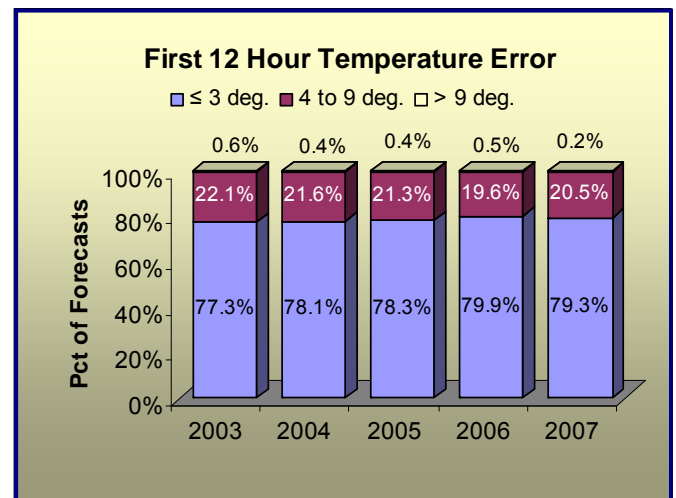


Chart showing combined distribution of first period (first 12 hours) forecast temperature errors for Atlanta, Athens, Rome, Macon, and Columbus.

## New Developments in Aviation Meteorology

Vaughn Smith  
Meteorologist

*“A major change for the NWS was the termination of the antiquated Transcribed Weather Enroute Broadcasts (TWEBs).”*

This was a year of change for our aviation program; not just in Atlanta but for the NWS as a whole. A major change for the NWS was the termination of the antiquated Transcribed Weather Enroute Broadcasts (TWEBs) as of September 30<sup>th</sup>. A TWEB was a forecast of weather impacting flights along a pre-defined route or in the vicinity of an airport. Customer comments collected in April and May indicated the TWEB was a little-used product. Airlines, for example, mainly fly over or around weather dangers, so having the NWS put more effort into writing a better Terminal Aerodrome Forecast (TAF) was more important to

them. TAFs are concise statements of the expected meteorological conditions at an airport during a specified period.

Another big change was how we forecast visibilities in our TAFs. Prior to the change, TAFs needed to include the prevailing visibility either at the surface or at the control tower level, whichever was less. The new TAF requirements from the FAA mandate that visibilities be surface only. This is not usually a problem at airports with short towers but it is an issue at Atlanta's Hartsfield-Jackson Airport with a tower over 400' tall. When the cloud ceiling (the height of the bottom of the clouds) gets to 400' or below, the tower visibility becomes obscured even though surface

visibilities are forecasted to be much higher. This complicates air traffic controllers' decisions because they can no longer see the airplanes as they land. They must reduce arrival and departure rates which backs up traffic, even though pilots may have excellent visibility below 400'. This will take some getting used to by all involved.

2007 TAF verification statistics for the WFO's seven airports are shown in the charts below left.

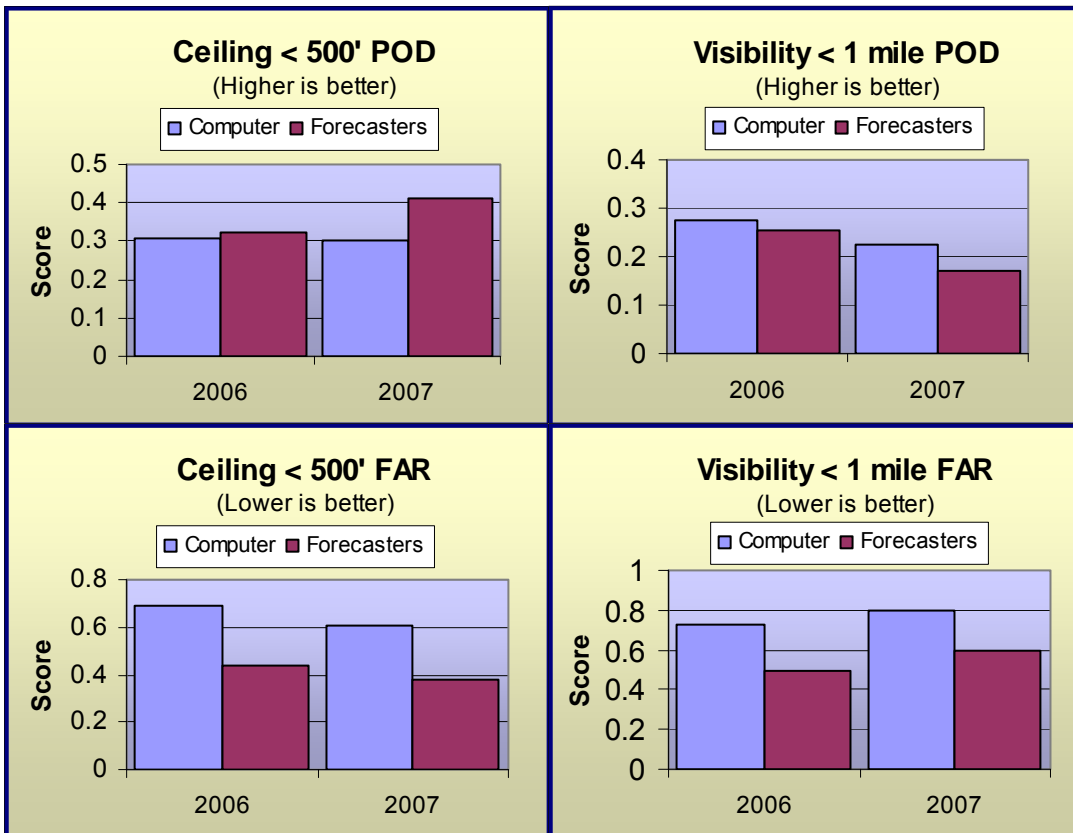


## New Weather Radio

Patricia Atwell  
Meteorologist

On November 7, 2007, a new NOAA Weather Radio transmitter in Wilkes County was activated. The transmitter operates at 300 watts which will service Wilkes County and surrounding areas. While the transmitter is still in a testing phase and has not officially been turned over to the National Weather Service, it can be accessed at 162.500 MHz. The new transmitter should officially be in service by the spring of 2008.

With the addition of the Washington-Wilkes County transmitter, the WFO in Peachtree City is now responsible for monitoring 17 transmitter sites. Several of our transmitters cover the same counties and use the same programming. For a listing of WFO Peachtree City's transmitters, as well as their frequency and the counties which are covered, go [www.weather.gov/atlanta/html/radio.shtml](http://www.weather.gov/atlanta/html/radio.shtml).



Forecast statistics for the seven airports in our area of responsibility. For Probability of Detection (POD), higher scores are better. For False Alarm Rate (FAR), lower scores are better. We improved upon computer model guidance forecasts in each case except our POD for visibilities < 1 nautical mile (top right chart).



## CWSU Innovates Again!

Dr. Chip West  
CWSU MIC

The Atlanta Center Weather Service Unit (CWSU) broke new ground this year in how they brief their detached aviation customers. Webcast weather briefings were developed and implemented for FAA controllers who have responsibility for the Atlanta (ATL) and Charlotte (CLT) International Airports.

The webcast briefings consist of a two-minute audio briefing which includes slides that show the synoptic weather situation, the Terminal Aerodrome Forecast (TAF), a tactical decision aid, upper level winds to 12,000 feet, significant weather hazards to aviation, and thunderstorm probability forecast for the arrival and departure gates for each airport. Each of these products can be viewed independently on the web page and are updated

as the changing weather requires.

The CWSU meteorologist has traditionally provide face-to-face weather consultation and briefings to the FAA at the Air Route Traffic Control facility to which they were assigned, but getting the same service to the air traffic control towers and terminal approach facilities, has been difficult. With this new webcasting technology, all the FAA facilities will have faster and more accurate weather information that will enhance commercial air travel efficiency and safety.

Atlanta CWSU's new TAF tactical decision aids, upper level wind profiles, thunderstorm gate forecasts and the audio web briefings for Atlanta Hartsfield-Jackson and Charlotte Douglas International Airports can be viewed at [www.srh.noaa.gov/ztl](http://www.srh.noaa.gov/ztl).

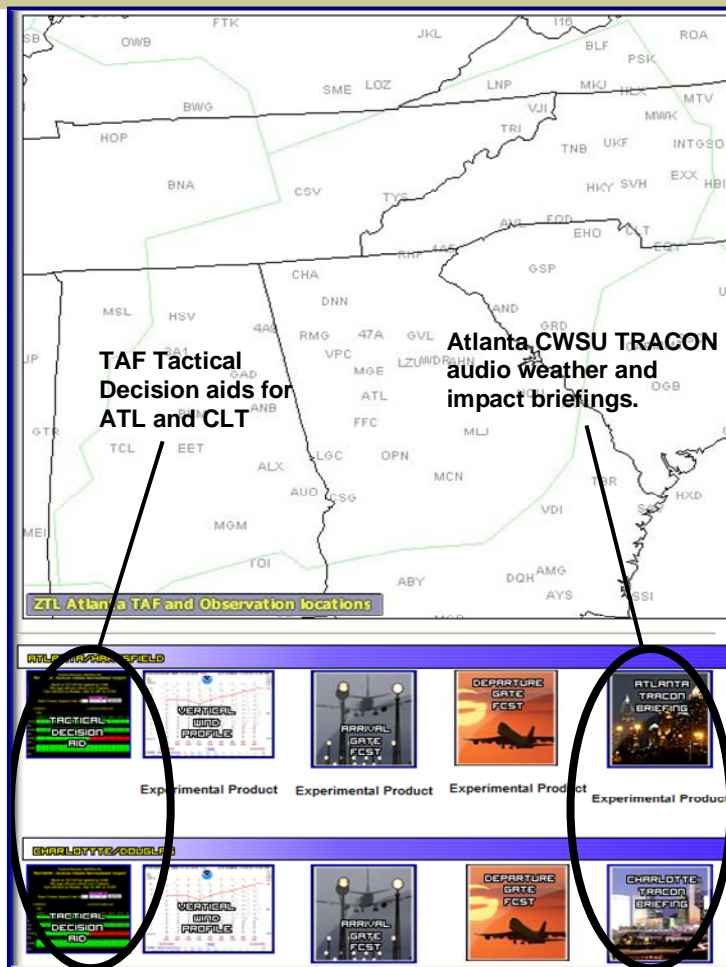


Image of the new CWSU website which provides several useful links.

## Fire Weather is HOT!!

Brian D. Lynn  
Meteorologist/IMET

The 2007 spring fire weather season in Georgia was very active with 3,565 Red Flag Warnings being issued. This was due to a dry late winter and spring that continued through the fall season. A total of 58 Red Flag events occurred that required the issuance of 4,328 warnings (one warning per county). This was an average of 75 of 97 fire zones per event.

Verification of the warnings continues to be near excellent. The national goals for

Probability of Detection (POD) and Lead Time for 2007 were set at 81% and 8.3 hours, respectively. Our POD for 2007 was 89% with a lead time of 16.8 hours. A perfect score for POD would be 100%. Our Red Flag Warning lead time of 16.8 hours is more than double the national goal.

In late May and early June, Brian Lynn traveled to north Florida for Incident Meteorologist (IMET) support on the Florida Bugaboo fire. Our IMET trainee, Kent Frantz, traveled to southeast Georgia in support of wildfires in the Okefenokee Swamp. These

fires were part of the record-setting fires over the southeast U.S.

In the spring of 2007 a new product was brought online called the "Fire Weather Point Forecast Matrices". This product is a point forecast of weather that includes fire weather parameters such as mixing heights, transport winds and dispersion. Given a Lat/Lon and elevation, a forecast can be produced for any location over the forecast area. Currently, Fire Weather Point Forecasts are being produced for all U.S. Forestry weather observation sites.

*"Our Red Flag Warning lead time of 16.8 hours is more than double the national goal."*



Florida Bugaboo fire in May 2007.

## Technology Development: New Tool for the Rivers

Clark Safford  
Information Technology Officer

Improving our river forecasting abilities is a never-ending task. Rivers change, development

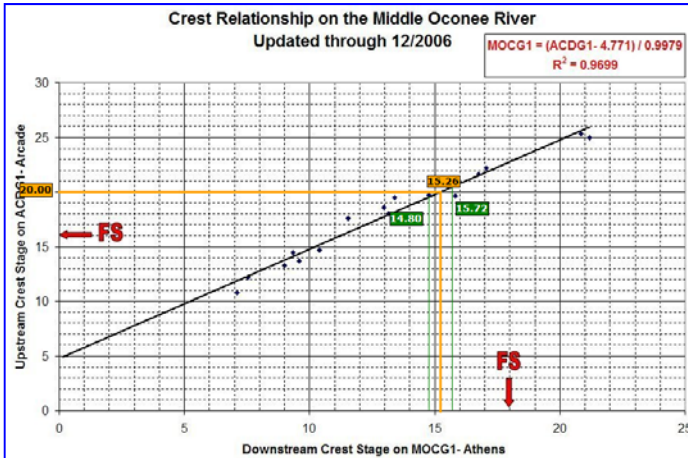
occurs along them, water usage along the river changes, etc. The work of calibrating the official forecast sites for changing conditions means few new sites can be added. As a result, there are many river gages for which official river stage forecasts are not made.

approximation can be derived for the height of a crests downstream.

In the past, forecasters had little on which to base the downstream crest forecast. This tool now gives forecasters mathematically-based insight into the possible height of the downstream crest. Mr. Jonathan Atwell, Senior Hydrologist at the Southeast River Forecast Center, also assisted in greatly expanding the number of gages and mathematical terms.

This powerful tool has been well received by WFO forecasters. Once it starts raining again, it should come in very handy! ☀

To change this situation for the better, Mr. Kent Frantz, Senior Service Hydrologist, and Ms. Karretta Venable, a NOAA Hollings Scholarship student who worked with us during the summer of 2007, developed a web-based, crest relationship tool. At the heart of this tool are regression analyses of historical crests of river gage pairs. In other words, based on the historical crests at one gage, a mathematical



New tool showing crest relationship between two river gages on the Middle Oconee River (Arcade and Athens). FS indicates flood stage.

## New Training Programs Implemented

Michael Griesinger  
Meteorologist Intern

*“All forecasters successfully completed the winter weather course and are now better prepared to serve the public when ice and/or snow threaten our area.”*

The Peachtree City office continued its tradition of aggressive training in 2007, with 1,475 hours of training time logged during the fiscal year!

Training began in late 2006 with a comprehensive set of training modules on winter

weather for all forecasters. The Winter Weather Advanced Warnings and Operations Course (AWOC) was designed to prepare forecasters for impending winter weather events and covered a wide range of winter weather topics. It also included an in-depth case study to put what was learned into practice. Although relatively rare in Georgia, winter storms have profound impacts on the day-to-day lives of Georgians. All forecasters successfully completed the winter weather course and are now better prepared to serve the public when ice and/or snow threaten our area.

a schedule of training on a monthly basis that addresses a particular meteorological phenomenon. For instance, in October the office presents focused training on winter weather. In January, fire weather training is presented. Other key training areas include aviation, severe weather, hydrological and tropical forecasting.

Another key feature of the Focus Month training is that the forecasters themselves develop the content and have freedom to use whatever methods they feel best addresses the specific phenomenon. The program, which is still in its infancy, has already shown signs of success. With this program in place, our local knowledge and awareness of hydrologic and meteorological issues specific to Georgia will certainly improve. ☀

A significant change was made to our training approach in October 2007 with the implementation of “Focus Month” training. Members of our Development, Science and Training Team (DS&T) outlined



An example of learning from the past: This newspaper headline describes the infamous Atlanta “Snow Jam” of January 1982. The event was the topic of the winter weather “Focus Month” training presentation.

## Water Worries Continue in Georgia

Kent Frantz  
Senior Service Hydrologist

Saying it was very dry in Georgia during 2007 is probably the understatement of the year. This was due to a moderate to strong La Nina pattern developing where below normal rainfall prevailed. The rainfall deficit was mainly over the north and west. Georgia received 30 to 90 percent of its normal annual rainfall with a few spots in central Georgia near normal. Consequently, a severe to exceptional drought developed over most of the state by June with gradual improvement in December. Selected locations with annual rainfall and departure amounts include:

- Atlanta (31.85", -18.35"),
- Athens (31.51", -16.32"),
- Columbus (37.84", -10.73")
- Macon (39.71", -5.29").

These rainfall deficits caused record low flows on numerous streams and a record low pool elevation on Lake Lanier. The old record pool level of 1052.63 feet was broken on November 20 and reached a new record low of 1050.75 feet on December 28.

The greatest annual rainfall of 45 to 50 inches occurred on the Tennessee Valley Divide ridge line from north of Dawsonville to Helen and Hiwassee and over scattered portions of central Georgia.

March was the most hydrologic impacted month, with minor to moderate flooding on the Ocmulgee and Oconee Rivers. This occurred when widespread 3" to 5" rainfall amounts occurred in less than 12 hours

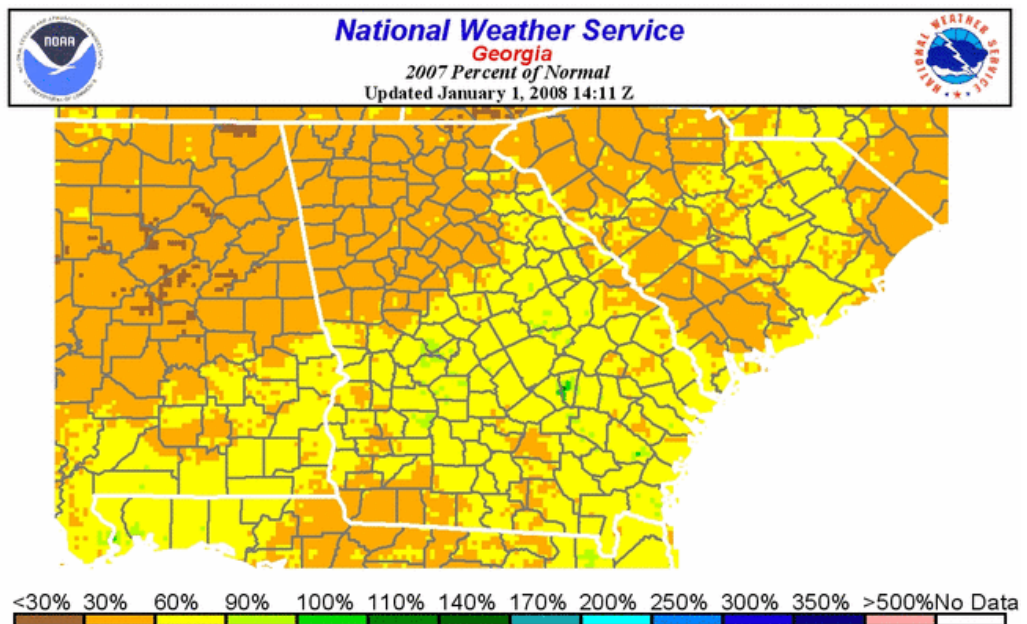
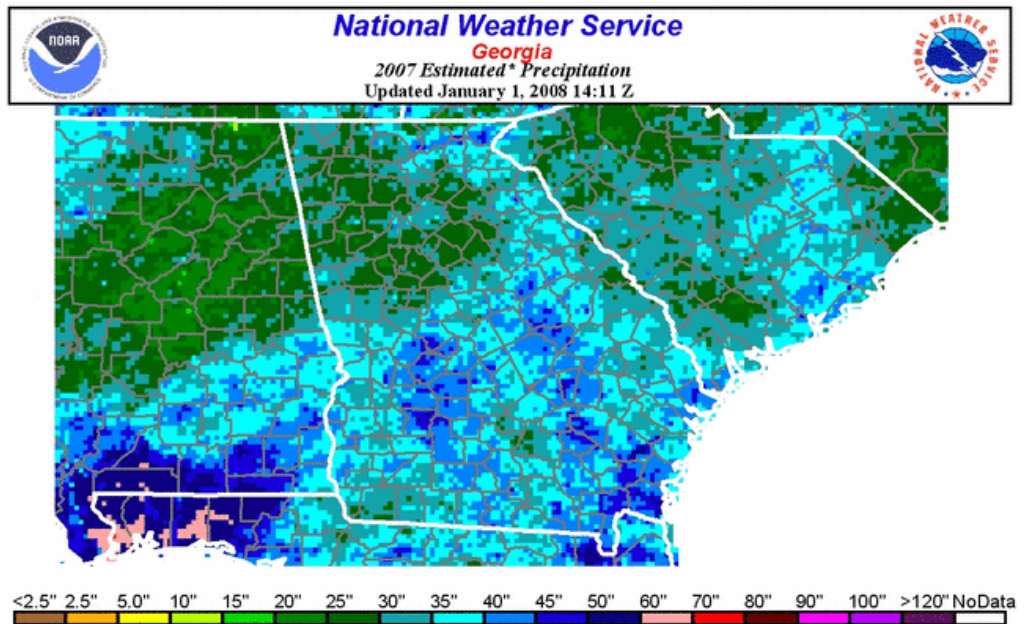
over the basins. This heavy rain event was associated with the March 1st tornado outbreak. Georgia had a minimal tropical season this year. Tropical Storm Barry in early June mainly brought heavy rain to southeast Georgia. In North and Central Georgia, up to 8 inches fell in 24 hours at Mount Vernon in Montgomery county. Tropical

Storm Humberto in mid-September affected portions of the northwest with isolated heavy rain.

During the year, we issued 7 flash flood warnings, 7 flash flood statements, 14 river flood warnings, 58 flood statements, and 22 drought information statements. ☀

### Hydro Tally for 2007

- 0 Flood Watches
- 7 Flash Flood Warnings
- 7 Flash Flood Statements
- 14 River Flood Warnings
- 58 Flood Statements
- 0 Flood Potential Outlooks
- 22 Drought Information Statements



*“Our crunching power has increased tenfold since the inception of AWIPS ten years ago...”*



*Penguin servers for the WSR-88D. The size of a typical DVD player, this server package is up to ten times more powerful (and ten times cheaper) than the old servers which required an entire 7' x 3' equipment rack..*

## Systems: Faster, Smaller, Cheaper and Better!

Richard Black  
Electronic Systems Analyst

To keep the Weather Service up and running at peak performance, we are constantly upgrading our systems with the latest technology available to meet the increasing demand for weather-based products. These products and their associated processes require extraordinary computing power. Over the

past few years, we have increased our computing power five times. Some of the specific program area changes made this year are described below.

**RADAR:** Our WSR-88D (NEXRAD) received a complete refresh on the operating system (OS) and main computer (ORPG). We changed the OS from Sun to LINUX and replaced an aging server with a dual core Xeon processor. This processor crunches incredible amounts of radar data to produce graphical displays easily interpreted by the meteorologists.

**AWIPS:** This is our core system for the origination of watches, warnings and general forecasts.

This system has been the recipient of numerous upgrades in 2007. We completely replaced most of the hardware with the latest computer technology available at the time. Our crunching power has increased tenfold since the inception of AWIPS ten years ago and has reduced its original footprint from eighteen square feet to a mere nine feet. This system would not be complete without an upgrade to our AWIPS client machines. These workhorses enable forecasters to interface with the servers to produce an array of weather products. Couple this shiny new hardware with the latest software enhancements has made this system the gem of the NWS. ✨

## New Website Pages for “Power Users”

Terry Murphy  
Meteorologist

The Drought was the weather story of the year, and our coverage on the web site expanded during the course of 2007. Bi-weekly updates of the general status of the overall situation were augmented with pages that tracked the historical context of the rainfall shortage. These pages were updated with increasing frequency and in more depth as it became clear that 2007 might go down as the driest year on record. We also began documenting the historically low water levels in area lakes/reservoirs. (There were 14 unique pages posted in

addition to the bi-weekly updates that appeared on our “Drought Information” page.) In response to customer requests, we also initiated an additional service, called “Additional Rainfall Information” that tracks rainfall departures from normal for rolling time periods (e.g. last 30 days, last 90 days, etc.).

Situational awareness during thunderstorm events became easier with the addition of the “Power Pages”. These pages form an advanced user interface for anticipating impacts from developing thunderstorm events, or for monitoring an event that is already underway. The interface allows display of a large variety of maps without

having to page or scroll. Choice of image is made by passing the computer’s mouse cursor over tabs, which can be done swiftly, resulting in image swaps that occur rapidly. This allows thorough investigation of radar, satellite and watch/warning information (and more) in a relatively short period of time.

For users of Geographic Information System (GIS) software or applications that support the KML/KMZ file format, we began providing the files necessary for exploring radar data and display of real-time NWS polygon warnings. These are distributed only via the internet at the URLs shown in the box below. ✨

### New Web Features for 2007

- Drought Status Reports
- Power Pages
- GIS radar and warning data.

Get real-time GIS-formatted warnings and radar data at  
[www.srh.noaa.gov/jetstream/doppler/gis.htm](http://www.srh.noaa.gov/jetstream/doppler/gis.htm) and  
[radar.weather.gov/ridge/kmzgenerator.php](http://radar.weather.gov/ridge/kmzgenerator.php)

## Special Feature: March 1st Tornadoes

Steve Nelson  
Science and Operations Officer

**D**evastating tornadoes took place across the Deep South on the afternoon and evening of March 1<sup>st</sup>. In Georgia and Alabama, 31 tornadoes resulted in 19 fatalities and 149 injuries. Tragically, one of the tornadoes struck a high school in Enterprise, AL, early in the afternoon, killing eight students. Another tornado hit a mobile home community near Newton, GA, killing six.

In the Peachtree City CWA, 17 tornadoes were reported, causing three fatalities and 28 injuries. Many different parts of the CWA were hit, including Columbus, Roberta, Oglethorpe, and Nicklesville (see adjacent map). The most destructive tornado in Georgia touched down around 9 p.m. EST near Chambliss before traveling

northeast nearly 40 miles. The tornado narrowly missed the city of Plains, but tore through the heart of Americus, a town of 17,000. Over 1,200 structures were damaged and 75 were destroyed, including a 143-bed regional hospital and a Red Cross regional headquarters. Given the vast amount of damage, the city was fortunate that only two people lost their lives and just eight were injured. This tornado was rated as an EF-3 on the Enhanced Fujita scale.

Forecasts and warnings from the NWS were timely and accurate. A Hazardous Weather Outlook first highlighted the threat for significant severe weather on February 26. Web-based conference calls conducted with Emergency Managers before the event indicated "a high risk of tornadoes, particularly over west-central Georgia between 5 and 10 p.m." The tornado



Paths of tornadoes affecting the Peachtree City County Warning Area on March 1, 2007.

warning and subsequent statement issued for Sumter county both indicated Americus was in the path of this dangerous storm, giving residents nearly 30 minutes of advance notice. As the Paulding County DPS Director stated, "Nobody was blind-sided by this system if they were paying attention to [the NWS]". ☀

*"...the Paulding County DPS Director stated, 'Nobody was blind-sided by this system if they were paying attention to [the NWS].'"*

## Administrative Update

Deborah Connell  
Administrative Support Assistant

**D**espite the seemingly endless series of changes in Federal administrative procedures and policies, the local office administration maintained a status quo. There were a few personnel changes in 2007, as shown below.

### Retirees:

Mr. Gary Beeley, our Science and Operations Officer for nearly 14 years, retired on January 3rd, 2007 after 38 years of Federal service. Thirty

of his years were spent in service to the Atlanta and Peachtree City offices.

### Promotions:

Mr. Steven Nelson was selected as the new Science and Operations Officer for the office. He was promoted from a Senior Meteorologist position within the Peachtree City office. Mr. Nelson served in NWS offices in Oklahoma City and Tulsa prior coming to Georgia.

### Transfers:

Mr. Robert Handel was selected for the Senior Forecaster

position vacated by Mr. Nelson. His credentials include tours of duty with the NWS in Greenville-Spartanburg, Miami and Chicago.

### New Hires:

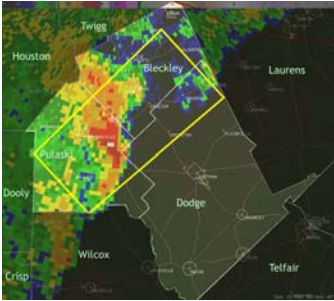
Mr. Stephen Konarik was selected to fill a vacant Meteorologist Intern position. Mr. Konarik received his Master's Degree from North Carolina State University and has a B.S. from Iowa State. Mr. Sean Ryan, a Georgia Tech meteorology major became our newest Student Intern in 2006 (this addition was omitted from last year's report). ☀

### Staffing Overview at Year's End

- 1 Meteorologist in Charge
- 1 Administrative Support Ass't
- 1 Warning Coordination Meteorologist
- 1 Science and Operations Officer
- 5 Senior Forecasters
- 7 General Forecasters
- 1 Senior Service Hydrologist
- 1 Information Technology Officer
- 1 Observations Program Leader
- 2 Hydrometeorological Technicians
- 2 Meteorologist Interns
- 1 Electronics Systems Analyst
- 3 Electronics Technicians
- 2 Student Interns

## Storm-Based Warnings Arrive

Rob Handel  
Senior Meteorologist



*This recent storm-based severe thunderstorm warning (yellow polygon) covered a 349 square mile portion of Pulaski, Bleckley, and Dodge Counties in Georgia - 64% less area than a legacy county-based warning. Hail was observed between Hawkinsville and Gresston.*

October officially marked the arrival of storm-based warnings, though it was December before severe thunderstorms in central Georgia necessitated our first issuance of the new warnings. These threat-based polygon warnings depict the specific meteorological or hydrological threat area and are not restricted to geopolitical boundaries.

Storm-based warnings promote improved graphical warning displays, and in partnership with the private sector, support wider warning distribution

through television, cell phone alerts, pagers, and web-enabled Personal Data Assistants (PDA). Several entities have already developed innovative means of displaying and distributing these geo-referenced warning products, and we expect many more uses to be realized in the upcoming months and years. Customers of our warning products accustomed to receiving warnings based on county may continue to do so, as our warning text still provides that information. NOAA Weather Radios work as before and continue to alert entire counties.

Along with more precise warnings comes the need for more detailed reports from our

communities impacted by severe storms. Reports of severe weather damage, hail, flooding or tornadoes are often vague in the immediate aftermath of an event, lacking specifics such as an address or intersection. It is a challenge to quickly determine those exact locations on a scale compatible with our storm-based warnings. To meet this need, we are increasingly utilizing a variety of Geographic Information System (GIS) software applications, creating ultra high-resolution maps which incorporate real-time meteorological data layers, local storm reports, and locations of potential weather spotters. These efforts will result in increasing precision in our Local Storm Report products. ☀

## Outreach Shows Impressive Numbers

Dan Darbe  
Senior Meteorologist

*“Our efforts surpassed previous years by conducting 23 spotter training classes with 720 attendees.”*

The Peachtree City WFO had another outstanding year in public outreach and education. The office recognized three new counties as StormReady, giving a total of 30 StormReady counties within our CWA (see opposite page).

Storm spotter classes were conducted from January through March and again from September through December. Our efforts surpassed previous years by conducting 23 spotter training classes with 720 attendees. Another six weather safety talks were given with over 200 attendees.

We hosted 75 office tours, giving us the opportunity to brief more than 1,275 visitors on severe weather safety, forecasting techniques and important warning generation and dissemination. Another 1,245 students were introduced to the world of meteorology through numerous school talks and career fairs.

Our largest outreach event was teaming up with the Air Force

Reserve “Hurricane Hunters” on May 26<sup>th</sup> at Falcon Field Airport in Peachtree City. The WC-130J Hurricane Hunter Aircraft and the Peachtree City Weather Office were opened for public touring in support of Hurricane Preparedness Week. Over 1,500 people toured the airplane, while over 620 people visited the office and/or our National Weather Service (NWS) booth located at the airport.

Other significant outreach events included the staffing of our NWS booth at the Great Georgia Airshow, Galleria Home & Garden Show, National Business Aviation Conference, and Georgia Science Teachers Conference. Combined, over 2,000 people were educated on critical services provided by the office to our various customers. ☀



*Hurricane Hunter (WC-130J) airplane visited Peachtree City.*

## Coop Program Report

Nathan Mayes  
Hydrometeorological Technician

Georgia's Cooperative Observers continue as one of the best networks in the nation. This is the result of the dedication and dependability of each and every one of you! Thanks for a job well done!

Plans continue for establishing a special network of weather data collection stations in Georgia. Upon completion,

these "Mesonet" stations will provide automated weather collection and reporting at fifteen (15) minute increments directly to the NWS. This will be a great addition in supplementing weather data which will aid forecasters dramatically!

The Coop Program accomplishments for the year 2007 included logging 17,767 travel miles, visiting 203 stations, and presenting 15 individual Length-Of-Service

awards. The highlight of the awards was the presentation of a 75-year Length-Of-Service Institution Award to the University of Georgia Agriculture & Research Station in Blairsville, Georgia. ☀



Frank Taylor and Mike Griesinger presenting a 75-year institutional Length-of-Service Award to employees of the UGA Ag & Research Station in Blairsville, GA.

### Coop Program Log for 2007

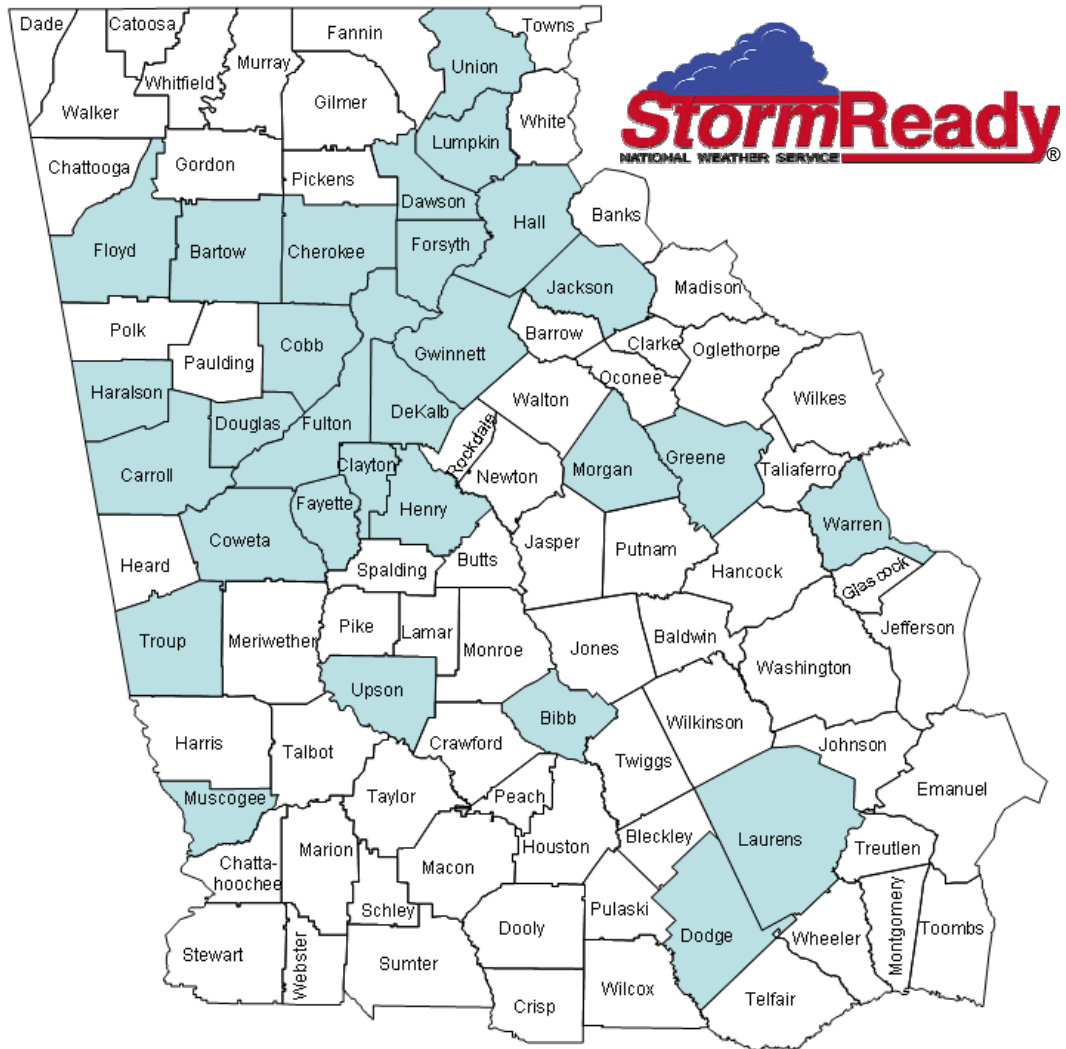
- 17,767 travel miles.
- 203 station visits.

## StormReady® News

Lans P. Rothfusz  
Meteorologist In Charge

The StormReady family continued its slow but steady growth in our CWA this past year. **Dawson, Greene and Forsyth** Counties were recognized as "StormReady" for the first time. **Fayette and Cherokee** Counties received their "second term" recognitions which means they have been in the program for six years. Congratulations to all new and second-term partners for demonstrating a proactive and comprehensive approach to hazardous weather preparedness in their communities!

As of December 31, 2007, there were 62 Georgia counties recognized in the StormReady program. These counties join nearly 1,300 StormReady counties nationwide. To become a StormReady county, local officials are encouraged to contact Mr. Barry Gooden, our Warning Coordination Meteorologist. StormReady has been proven to save lives in the communities that participate in it. **Are you StormReady?** ☀



StormReady Counties in the Peachtree City area of responsibility.



*National Weather Service • Weather  
Forecast Office • Peachtree City, Georgia*

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Phone: 770-486-1133 x222  
Fax: 770-486-9333  
Email: lans.rothfusz@noaa.gov

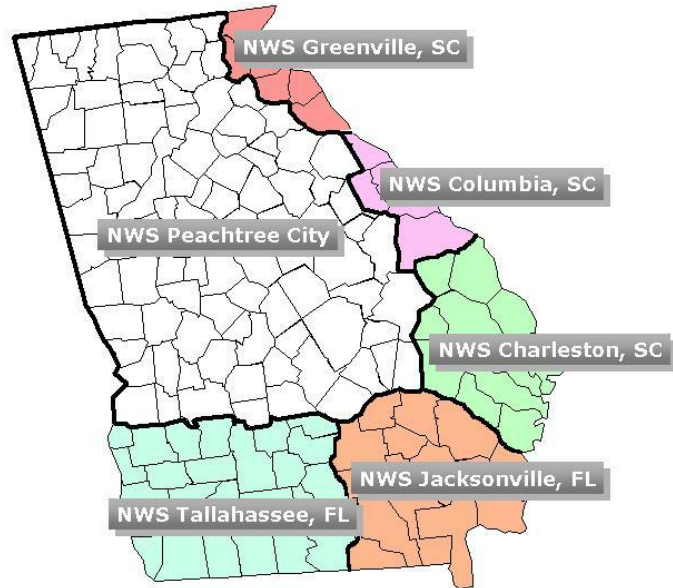
**We are your Weather Service**

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**[weather.gov/atlanta](http://weather.gov/atlanta)**

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The Weather Forecast Office in Peachtree City is a field office of the National Weather Service, an agency of the National Oceanic and Atmospheric Administration, which is part of the U.S. Department of Commerce. The office is responsible for weather and water forecast and warning services for 96 counties in north and central Georgia (see map below).



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4 Falcon Drive  
Peachtree City, GA 30269