Temperature and Precipitation Summary

While March was wet across much of North Carolina, April was dry, especially in central and eastern parts of the state. Also of particular note was were record-setting maximum temperatures reported across NC during the 3rd week of April.

Temperatures in April were generally near-normal or slightly cooler than normal. However, the 3rd week of April brought a warm air mass for several days, tying or breaking several maximum temperature records across the state, including Raleigh and Grandfather Mountain. These extreme temperatures contributed to April average temperatures that were overall near-normal to above-normal across the state.

Rainfall amounts in April were greatest in the southern Mountains and southwestern Piedmont regions. Central and eastern NC generally experienced drier conditions; several gages in the east reported less than one inch of total precipitation for the month. Based on gage-calibrated radar estimates from National Weather Service, the driest locations were in the upper Neuse and upper Tar River basins.
Impacts to Agriculture
Drier conditions in April allowed growers to prepare fields and early planting. Pastures benefited from wet conditions in March, and continued to be in fair to good shape across most of the state through April. However, after several weeks of dryness and several days with near-record setting heat have reduced soil moisture. Some parts of central and eastern NC are now experiencing soil moisture conditions that are considered short. However, most of North Carolina continues to take advantage of favorable conditions for planting.

Impacts to Water Resources
Most water resources across the state benefited from the wet conditions in March. Most reservoirs across the state continue to be near or above levels typical for April. However, dry conditions during April in central and eastern NC did impact stream flow and groundwater levels in the upper Neuse, upper Tar, and lower Roanoke River basins. While drought impacts continued to lessen in western NC, drier conditions in eastern NC lead to the introduction of D0 conditions in the US Drought Monitor.
SCO News Update

- Each year the SCO offers a hands-on opportunity for students at Centennial Campus Middle School to study various aspects of weather and climate. From mid-fall through early spring, each student works with archived data to answer climate-related questions using the scientific method. This year the SCO hosted 7th graders Lilly Stell, Lauren Harris, and Illirik Smirnov. Their projects can be found here.
- The SCO’s Weather Photo Contest began April 1st and will extend through June 30th of this year. Youth, ages 7-16, may send in their pictures and descriptions for a chance to win a spot on the SCO website and a prize. Each interested participant may upload up to 5 photos to the SCO website, or may send them directly to our office.
- In February 2009 the SCO constructed a new ECOnet station in Durham County. This new station, North Durham Water Reclamation Facility (DURH), is supported by the City of Durham. Real-time observations are now available and can be accessed here.
Statewide Summary for April 2009

As part of the monthly newsletter, the SCO provides a basic summary of monthly conditions for all locations that have an automated reporting station. A daily version of this product is available online at: http://www.nc-climate.ncsu.edu/cronos/review/

<table>
<thead>
<tr>
<th>Station</th>
<th>Avg Daily Max Temp</th>
<th>Avg Daily Min Temp</th>
<th>Total Rainfall</th>
<th>Avg Daily Wind Speed</th>
<th>Max Daily Wind Speed</th>
<th>Vector Avg Wind Speed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aurora, NC (AURO)</td>
<td>72.6° F (1° F)</td>
<td>51.7° F (-2.9° F)</td>
<td>1.1 in</td>
<td>5.8 mph</td>
<td>26.8 mph</td>
<td>West Southwest (241°)</td>
</tr>
<tr>
<td>Boone, NC (BOON)</td>
<td>61.9° F (3.4° F)</td>
<td>40.3° F (-3.1° F)</td>
<td>4.3 in</td>
<td>7 mph</td>
<td>36.4 mph</td>
<td>4 mph West (265°)</td>
</tr>
<tr>
<td>Buckland, NC (BUCK)</td>
<td>72.9° F (0.9° F)</td>
<td>46.7° F (-3.1° F)</td>
<td>2.4 in</td>
<td>2.9 mph</td>
<td>23.4 mph</td>
<td>West Southwest (239°)</td>
</tr>
<tr>
<td>Burnsville, NC (BURN)</td>
<td>63.2° F (-1° F)</td>
<td>40.3° F (-3.4° F)</td>
<td>3.2 in</td>
<td>4.8 mph</td>
<td>56.6 mph</td>
<td>1.6 mph Northwest (310°)</td>
</tr>
<tr>
<td>Castle Hayne, NC (CAST)</td>
<td>71.8° F (-2.7° F)</td>
<td>46.5° F (-2.5° F)</td>
<td>1.9 in</td>
<td>4.7 mph</td>
<td>26.7 mph</td>
<td>West Southwest (257°)</td>
</tr>
<tr>
<td>Clayton, NC (CLAY)</td>
<td>72.6° F (0.9° F)</td>
<td>50.1° F (-4.7° F)</td>
<td>0.9 in</td>
<td>5.8 mph</td>
<td>33.6 mph</td>
<td>West Southwest (254°)</td>
</tr>
<tr>
<td>Clayton, NC (CLA2)</td>
<td>74.3° F (2.6° F)</td>
<td>45.5° F (0.1° F)</td>
<td>0.8 in</td>
<td>3.8 mph</td>
<td>22.9 mph</td>
<td>West Southwest (256°)</td>
</tr>
<tr>
<td>Clinton, NC (CLIN)</td>
<td>73.5° F (0.4° F)</td>
<td>50.6° F (-2.2° F)</td>
<td>1.4 in</td>
<td>5.8 mph</td>
<td>31.7 mph</td>
<td>West Southwest (236°)</td>
</tr>
<tr>
<td>Fletcher, NC (FLET)</td>
<td>67.1° F (0.5° F)</td>
<td>41.6° F (-2.6° F)</td>
<td>3.2 in</td>
<td>4 mph</td>
<td>20.7 mph</td>
<td>0.8 mph North (349°)</td>
</tr>
<tr>
<td>Franklin, NC (WINE)</td>
<td>56.3° F (-12.2° F)</td>
<td>36.2° F (-2.7° F)</td>
<td>4.8 in</td>
<td>8.9 mph</td>
<td>31.2 mph</td>
<td>4.8 mph West (261°)</td>
</tr>
<tr>
<td>Frying Pan Mountain, NC</td>
<td>57.3° F (-8.6° F)</td>
<td>36.8° F (-1.4° F)</td>
<td>0.3 in</td>
<td>11.7 mph</td>
<td>41.6 mph</td>
<td>6.9 mph South Southwest (207°)</td>
</tr>
<tr>
<td>Goldsboro, NC (GOLD)</td>
<td>72.7° F (-2.3° F)</td>
<td>48.3° F (-1.4° F)</td>
<td>1.2 in</td>
<td>7.5 mph</td>
<td>35.6 mph</td>
<td>3.8 mph South Southwest (196°)</td>
</tr>
<tr>
<td>Greensboro, NC (NCAT)</td>
<td>71.2° F (1.5° F)</td>
<td>48.2° F (2.7° F)</td>
<td>2.8 in</td>
<td>4.5 mph</td>
<td>25.3 mph</td>
<td>2.1 mph West Southwest (253°)</td>
</tr>
<tr>
<td>Hamlet, NC (HAML)</td>
<td>73.6° F (-1.3° F)</td>
<td>49.1° F (-4.4° F)</td>
<td>2.1 in</td>
<td>5.6 mph</td>
<td>26.2 mph</td>
<td>2.9 mph Southwest (226°)</td>
</tr>
<tr>
<td>Location</td>
<td>Temperature</td>
<td>Pressure</td>
<td>Wind Speed</td>
<td>Wind Direction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>----------------------</td>
<td>-------------------</td>
<td>-------------------</td>
<td>------------</td>
<td>----------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hendersonville, NC (BEAR)</td>
<td>57.5° F (-11.5° F)</td>
<td>13.2 mph</td>
<td>North (11°)</td>
<td>8.3 mph</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High Point, NC (HIGH)</td>
<td>71.3° F (-1° F)</td>
<td>3.6 mph</td>
<td>West Southwest (254°)</td>
<td>1.7 mph</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jackson Springs, NC (JACK)</td>
<td>72.7° F (+0.6° F)</td>
<td>7.5 mph</td>
<td>Southwest (232°)</td>
<td>3.9 mph</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kinston, NC (KINS)</td>
<td>74° F (-2.2° F)</td>
<td>6.3 mph</td>
<td>Southwest (235°)</td>
<td>4 mph</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Laurel Springs, NC (LAUR)</td>
<td>61.4° F (+0.3° F)</td>
<td>5.8 mph</td>
<td>West (267°)</td>
<td>2.7 mph</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lewiston, NC (LEWS)</td>
<td>72.7° F (+1.3° F)</td>
<td>7.4 mph</td>
<td>West Southwest (246°)</td>
<td>4.2 mph</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lilesville, NC (LILE)</td>
<td>74.3° F (+1.1° F)</td>
<td>4.7 mph</td>
<td>Southwest (230°)</td>
<td>2.8 mph</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mount Mitchell, NC (MITC)</td>
<td>50.3° F (-0.3° F)</td>
<td>8 mph</td>
<td>West (262°)</td>
<td>6.8 mph</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oxford, NC (OXFO)</td>
<td>70.4° F (+0.4° F)</td>
<td>5.3 mph</td>
<td>North (3°)</td>
<td>5.2 mph</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Plymouth, NC (PLYM)</td>
<td>72.2° F (-2° F)</td>
<td>7.4 mph</td>
<td>West (265°)</td>
<td>3.8 mph</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Raleigh, NC (LAKE)</td>
<td>72.5° F (-0.2° F)</td>
<td>6.1 mph</td>
<td>West (260°)</td>
<td>3.7 mph</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reidsville, NC (REID)</td>
<td>69.2° F (-0.2° F)</td>
<td>6.4 mph</td>
<td>West (270°)</td>
<td>3.2 mph</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Salisbury, NC (SALI)</td>
<td>71.2° F (+1.2° F)</td>
<td>4.6 mph</td>
<td>West (261°)</td>
<td>2.2 mph</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Siler City, NC (SILR)</td>
<td>71.4° F (+0.4° F)</td>
<td>5.7 mph</td>
<td>West (259°)</td>
<td>2.6 mph</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Taylorsville, NC (TAYL)</td>
<td>69.4° F</td>
<td>3.1 mph</td>
<td>West (259°)</td>
<td>1.1 mph</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wallace, NC (WILD)</td>
<td>73.9° F (-2.9° F)</td>
<td>5.9 mph</td>
<td>West Southwest (241°)</td>
<td>3 mph</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Waynesville, NC (WAYN)</td>
<td>65.8° F (-0.1° F)</td>
<td>4.4 mph</td>
<td>West Southwest (243°)</td>
<td>1.2 mph</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Location, NC (Abbreviation)</td>
<td>Temperature (°F) and Departure</td>
<td>Wind Speed (mph)</td>
<td>Wind Direction</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------------------</td>
<td>--------------------------------</td>
<td>----------------</td>
<td>----------------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Whiteville, NC (WHIT)</td>
<td>73.3° F (-3.1° F)</td>
<td>24.9 mph</td>
<td>2.3 mph Southwest (228°)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>50° F (+2.3° F)</td>
<td>4.9 mph</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3.5 in</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0 mi</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0 mi</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Williamston, NC (WILL)</td>
<td>72.9° F (+1.7° F)</td>
<td>27.8 mph</td>
<td>3.2 mph West Southwest (250°)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>49.4° F (+1.8° F)</td>
<td>5.4 mph</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1.1 in</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>4 mi</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Legend:**
- Parameter's value approximated from hourly data.
- (+/- Departure from normal)
- Distance to reference station