

NOAA

# Southeast Regional Climate Center

## Climate Information for Tourism

Peter J. Robinson

November 14, 2008



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# National Climate Information Services

- **National Climate Data Center**
- **Regional Climate Centers**
- **State Climate Offices**
  
- **National Weather Service Offices**



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# Climate Information Services




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# Climate Information Services








# Data Resources - ACIS

The Southeast Regional Climate Center  The University of North Carolina Chapel Hill, NC

Home Climate Data Weather and Climate Events Special Topics Education and Research About Us



**Autumn Begins**   
Check out the latest Fall Foliage near you. [More...](#)

**U.S. Drought Monitor**   
September 28, 2008  
Southeast

State	Very Dry	Dry	Mod. Dry	Mod. Wet	Very Wet
AL	0.0	0.0	0.0	0.0	0.0
GA	0.0	0.0	0.0	0.0	0.0
FL	0.0	0.0	0.0	0.0	0.0
NC	0.0	0.0	0.0	0.0	0.0
SC	0.0	0.0	0.0	0.0	0.0

**Hurricane Season 2008**  
[Receive Email Alerts](#), [2008 Storm Names](#), [Forecast & Discussions](#), [Active Storms Satellite](#), and [Season Archive](#)... For More Information Check Out The [National Hurricane Center](#).

**Recent Southeast Weather and Climate News**  
[NOAA's Historical Hurricane Tracks](#) **New!**  
[A Warm Summer for U.S.A.](#) **New!**  
[Climate of 2008: U.S. Tornado Overview](#)  
[US National Climate Overview August 2008](#) **New!**  
[New Southeast Marine Weather Web Site](#) **New!**

**Climate Database (CLIMOD)**  
The Applied Climate Information System (ACIS) is a framework for managing real-time and historical climate data. [More](#)





**NOWData** — NOAA Online Weather Data [Click here](#)

**CoCoRaHS** — [Join In Your State](#)

**This Day in Weather History**  
October 6, 1985  
A tropical wave, later to become Tropical Storm Isabel, struck Puerto Rico. As much as 24 inches of rain fell in 24 hours, and the severe flooding and numerous landslides resulting from the rain claimed about 180 lives.

SERCC supports a three-tiered national climate services support program. The partners include: [National Climatic Data Center](#), [Regional Climate Centers](#), and [State Climate Offices](#).

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Tel: 919-943-0721  
Fax: 919-943-0950



# NOWdata: Now & Recent Past



**National Weather Service Forecast Office**

## Raleigh, NC



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**Local forecast by "City, St"**

City, St

**Current Hazards**

Local Outlook

National Outlooks

Watches/Warnings

Tropical/Hurricane

**Current Conditions**

WeatherCam

NC Roundup

NC Observations

Storm Reports

Snow/Ice Reports

**Satellite Imagery**

Various Images

**Radar Imagery**

Raleigh Radar

Experimental RIDGE

Nationwide

**Forecast**

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NDFD

UV Forecast

Aviation

Fire Weather

Space Weather

**Model Data**

NCEP Models

**NOWData - NOAA Online Weather Data**

1. Product »	2. Location »	3. Variable »	4. Year »	5. Units
<input type="radio"/> Daily data for a month <input type="radio"/> Daily almanac <input checked="" type="radio"/> Monthly avgs/totals <input type="radio"/> Monthly occurrences <input type="radio"/> Monthly extremes <input type="radio"/> Daily extremes <input type="radio"/> Daily/monthly normals <input type="radio"/> Record extremes <input type="radio"/> First/last dates	<input type="text" value="Greensboro Area"/> Raleigh Area Albemarle, NC Arcola, NC Burlington Fire, NC Carthage Water T, NC Chapel Hill 2 W, NC Clayton Wtp, NC Dunn 4 Nw, NC Durham, NC	<input checked="" type="radio"/> Max Temperature <input type="radio"/> Min Temperature <input type="radio"/> Avg Temperature <input type="radio"/> Precipitation <input type="radio"/> Snowfall <input type="radio"/> Snow Depth <input type="radio"/> Heating Degree Days <input type="radio"/> Cooling Degree Days <input type="radio"/> Growing Degree Days	<input checked="" type="radio"/> Current year <input type="radio"/> Last year <input type="radio"/> 1971-2000	

**Product Description:**

MONTHLY AVERAGES/TOTALS - calculates averages or totals, as appropriate, for the selected variable for each month of the year. This product is available for the current year, the previous year, or an average of the years 1971 through 2000. Additional stations and years of data are available from the Regional Climate Centers and the National Climatic Data Center.

- NCDC Map Service  
- Common question  
- Submit a question/comment

Powered by  NOAA Regional Climate Center

The [Applied Climate Information System \(ACIS\)](#) is a joint project of the [Regional Climate Centers](#), [National Climatic Data Center](#) and the [National Weather Service](#). Official data and data for additional locations and years are available from the Regional Climate Centers and the National Climatic Data Center.

Raleigh Weather Forecast Office  
1005 Capability Drive, Suite 300  
Raleigh, NC 27606  
Tel: (919) 515-8209  
Ask Questions/Webmaster  
Page last modified: 21-Jul-2006 2:40 AM

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# Now-data: example

- GREENVILLE (313638)
- Monthly Frequencies Number of Days with Minimum Temperature  $\leq$  32 degrees F
- Year: 2008
- Year Jan Feb Mar Apr --- Oct Nov Dec
- 2008 16 8 1 0 --- 2 - -

# Climate Monitoring

**Southeast Region:** *(Information provided by the [Southeast Regional Climate Center](#))*

- Average temperatures for October 2008 were slightly below normal over most of the region. A narrow area from southeastern AL to extreme SE NC displayed temperatures 2-4°F below normal. A high pressure persisted north or northeast of the region on many days allowing relatively cool and dry air to move southward across the region. On the 27th of the month, a strong cold front passed rapidly across the area in conjunction with the development of a strong cyclone northeast of the region. Strong northwesterly winds occurred in response to the tight pressure gradient associated with this system and a strong high pressure in the southern Great Plains. The resultant cold advection and nocturnal radiational cooling provided numerous daily record low temperatures across southern portions of the area. Both Tallahassee and Jacksonville, FL recorded all time record low temperatures of 29 and 33°F (-2 and 1°C), respectively, for the month of October. Interestingly, minimum temperatures were relatively warmer much farther to the north in portions of VA as persistent windy conditions during the nocturnal hours kept the surface air well mixed. Temperatures were cold enough at Beech Mountain for the resort to test its new snowmaking equipment.
- Monthly precipitation totals were below normal across VA, NC, extreme northern SC, northeast GA, and Puerto Rico with many locations reporting less than half of the normal precipitation. In contrast, large portions of GA and SC as well as eastern AL displayed above normal precipitation with many locations recording totals exceeding 150% of normal. Much of this rain was associated with the movement of two cyclonic systems across the region on the 9th to 11th and the 24th to 25th of the month. The second system produced exceptional totals in coastal GA and SC with Charleston, SC recording 6.57 inches (167mm) of rain. This rainfall contributed substantially to the monthly totals of 11.10 inches and 9.29 inches (282 and 236mm) at Charleston, SC and Savannah, GA, respectively, which rank as the 2nd and 4th wettest Octobers on record. Florida displayed much variability in monthly precipitation totals with Key West reporting over 12 inches (305mm) and Mayport, FL, immediately east of Jacksonville, reporting only 0.55 inches (14mm). Strong northwesterly flow produced orographic snowfall across higher elevations of the southern Appalachians during the late month cold air outbreak. Mount Mitchell NC and Burkes Garden, VA reported 4 inches and 2 inches (50 and 25mm) of snow, respectively, between the 27th and 29th



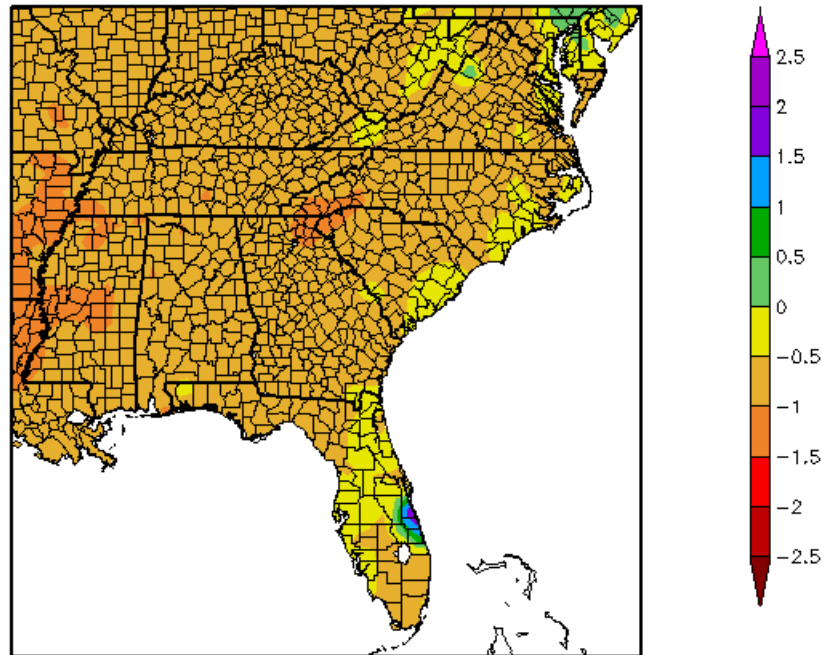
# Climate Data (=Information?)

- North Carolina State Averaged Precipitation Data

• Year	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	Annual
• -----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
• 1895	6.22	2.37	5.14	7.23	4.80	3.53	5.46	5.62	1.29	1.81	3.15	3.34	49.96
• 1896	2.71	5.53	2.53	1.96	4.25	5.36	8.52	2.36	5.50	1.85	4.67	2.46	47.70
• 1897	2.23	5.78	5.41	3.62	3.70	3.99	5.82	3.49	1.52	3.89	2.89	3.60	45.94
• 1898	2.55	1.01	3.92	3.64	3.66	3.41	7.26	8.11	4.39	6.25	3.24	2.69	50.13
• 1899	3.88	7.79	6.86	3.51	3.31	4.07	6.77	4.27	2.74	4.20	1.54	2.88	51.82
• 1900	3.23	5.68	4.37	4.66	2.68	6.05	4.20	3.07	2.54	3.06	4.17	4.41	48.12
• 1901	2.84	1.89	4.59	5.74	7.88	5.36	6.85	12.45	5.83	1.59	1.28	6.52	62.82
• 1902	2.30	5.93	3.71	2.40	2.57	4.50	2.85	4.02	4.72	3.52	3.99	3.79	44.30
• 1903	3.60	6.58	7.29	4.73	1.98	6.10	3.94	5.38	2.82	3.50	1.81	2.12	49.85
• 1904	2.86	3.65	4.01	1.45	3.41	4.60	5.63	6.38	3.38	1.34	3.36	3.27	43.34
• 1905	2.81	5.43	2.37	4.03	6.64	3.15	8.11	6.65	2.62	2.33	0.71	6.84	51.69
• 1906	5.68	3.16	5.68	1.58	2.99	7.32	9.60	9.46	4.54	4.20	1.83	3.45	59.49
• 1907	0.75	3.33	2.81	4.14	4.50	7.02	4.92	4.49	5.22	0.90	4.78	5.26	48.12
• 1908	4.31	4.66	4.83	3.07	3.83	4.82	8.46	10.40	2.79	5.31	1.65	4.17	58.30
• 1909	2.12	4.12	3.27	4.09	5.32	7.92	5.95	5.94	3.07	1.83	0.76	2.73	47.12
• 1910	3.14	4.13	1.60	3.22	4.96	7.39	5.27	7.44	3.08	3.35	0.77	3.57	47.92
• 1911	2.83	2.05	3.60	4.07	1.26	2.78	3.57	6.41	3.49	4.20	3.75	4.15	42.16

# SERCC – Climate Perspectives

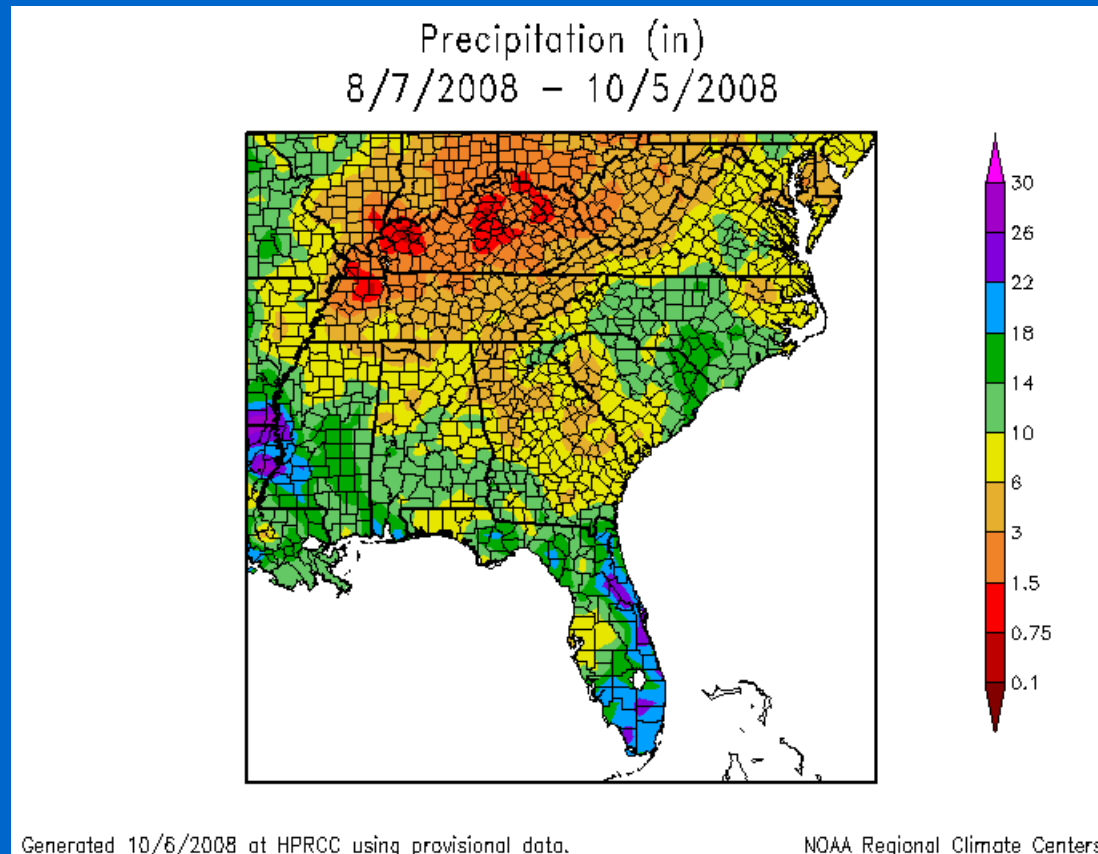
Departure from Normal Precipitation (in)  
10/28/2008 – 11/3/2008



Generated 11/4/2008 at HPRCC using provisional data.

NOAA Regional Climate Centers

# Perspectives for (e.g.) Drought



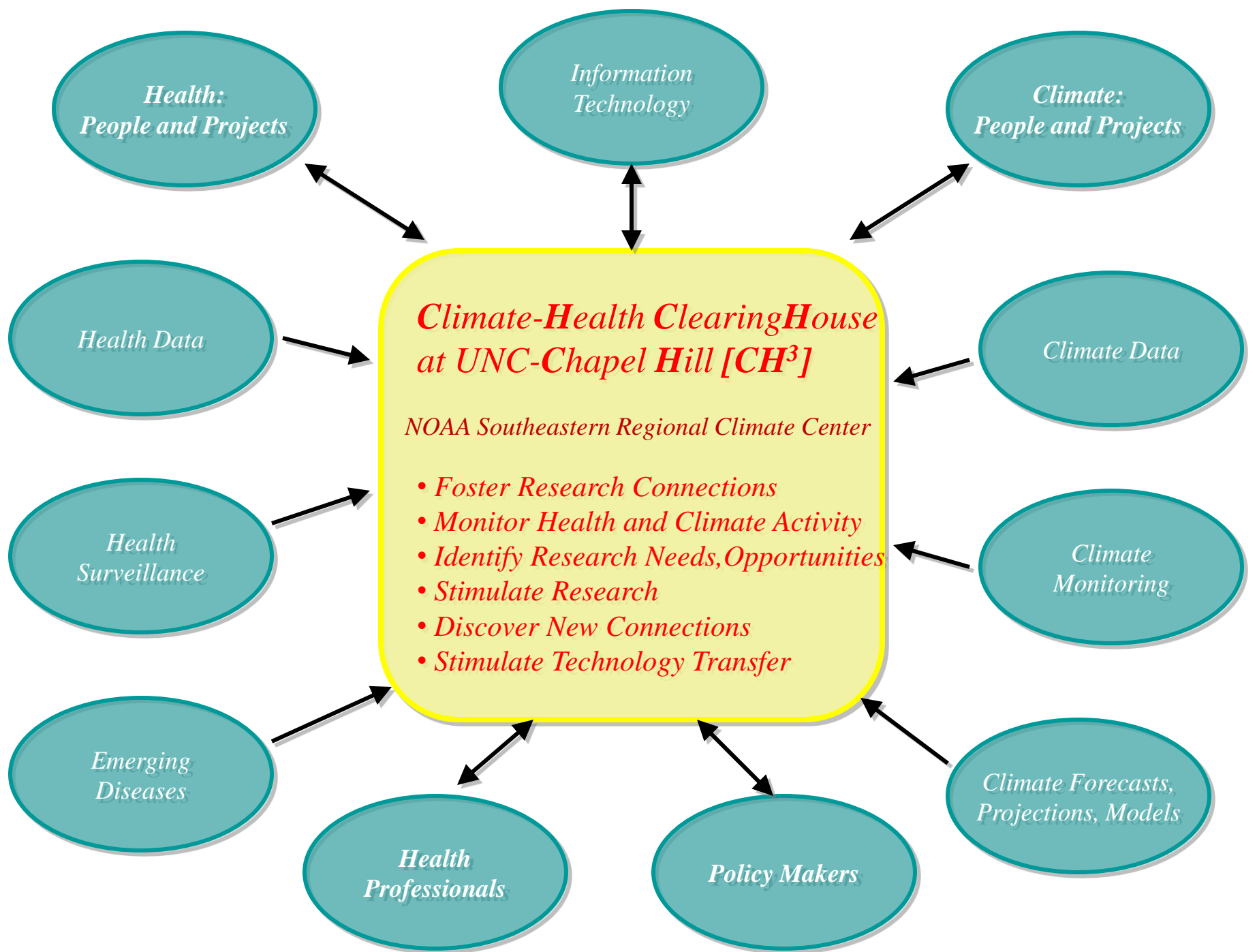
# Responding to Current Conditions

- Climate Monitoring (Current Climate Context)
- Climate Perspectives
- Historical (impact related) analyses
- Customized routines (part of above efforts)
- Response to specific requests

# Anticipating Future Needs

- Assessing climate trends, evaluating change
- Increasing climatological knowledge/skill
- Use of advanced technology
- Emerging (Tourism) - Climate Issues
- Increasing Climate-(Tourism) Link understanding
- Broad-scale (policy) dialog

## Clearing House Concept



# User Needs: Tourism – Queries

- **Monitoring**
  - Drought bad for tourism?
- **Local Changes/Variability**
  - Winter mountains – warming trend → less skiing?
  - Summer coast – drying trend → less water for guests?
  - Events anywhere – will recur → increase vacation worry?
- **Remote Long-Term Changes**
  - S. Ontario – warmer → less golf at Myrtle Beach?



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**Autumn Begins**

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**U.S. Drought Monitor**  
Southeast

September 30, 2008  
10:00 AM EDT

State	Very Dry	Dry	Mod. Dry	Wet
Alabama	0	0	0	0
Florida	0	0	0	0
Georgia	0	0	0	0
North Carolina	0	0	0	0
South Carolina	0	0	0	0
Tennessee	0	0	0	0
Virginia	0	0	0	0
West Virginia	0	0	0	0



Legend:  
Very Dry (Red)  
Dry (Orange)  
Mod. Dry (Yellow)  
Wet (Green)

For more information on drought conditions and how to help, visit the U.S. Drought Monitor website at <http://droughtmonitor.noaa.gov>



**Hurricane Season 2008**

[Receive Email Alerts](#), [2008 Storm Names](#), [Forecast & Discussions](#), [Active Storms Satellite](#), and [Season Archive](#)... For More Information Check Out The [National Hurricane Center](#).

**Recent Southeast Weather and Climate News**

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Explore Asheville Home > What to Do > Seasonal Fun > Fall

## fall foliage in the north carolina mountains

Discover the Asheville autumn experience

Fall Color Report

Fall Excursions

Budget Friendly

### Fall Pictures



### Fall Videos



In Asheville, we kick fall up a notch. You can get [aerial views](#) of fall foliage, or let our local experts teach you how to make your own [fall crafts](#). Use our [insider fall travel tips](#) to help your travel planning, such as finding the best deals on a [budget friendly fall getaway](#) to the Asheville area mountains.

#### Plan your fall vacation now:

- [Fall Color Report](#)
- [Fall Scenic Drives](#)
- [Eco-Friendly Fall Adventures](#)
- [Fall Crafts](#)
- [Fall Activities and Excursions](#)

Stay posted on the fall foliage, fall events and hot deals by [subscribing to the Asheville Travel Blog](#). You can even [get updates delivered as they happen in your email inbox](#).



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outdoor adventures

# SERCC Services

- **Web based information**
  - Established routine needs, various users
- **Response to specific enquiries\***
  - Customized responses to specific needs
- **Regular customized products\***
  - Regular (Monthly) data/information delivery
- **Information development actions\***
  - Research based analyses

\* May involve charges/fees

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•  
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# SERCC Contacts

- **Web:**

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