



# CLIMATE-HEALTH INITIATIVES AT THE NOAA SOUTHEAST REGIONAL CLIMATE CENTER

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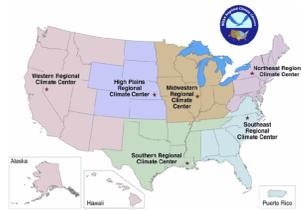


## Introducing SERCC

The Southeast Regional Climate Center (SERCC) is part of the developing National Climate Service. NOAA supports a 3-tier information service:

- National Climatic Data Center
- Regional Climate Centers (see map below)
- State Climate Offices

The three tiers can provide similar services, but each level has roles which are becoming more clearly defined as the National Climate Service develops. This development provides numerous opportunities for cooperation with both users and producers of climatic information – with SERCC having specific responsibility for climate-health linkages.



The six NOAA Regional Climate Centers

## Functions of RCCs

- Ingest data to maintain a national Climate Data Base from the beginning of record to “yesterday”
- Monitor the current climate and place it in historical context
- Provide operational user services to regional clients
- Explore links between climate and its impact for various sectors of the economy and society.

## Data Ingesting

The Regional Climate Centers ingest National Weather Service data on a daily basis, undertake preliminary quality control, and add the data onto the existing climatological data base. This provides the foundation for all of the Center’s activities, with data being stored, retrieved and analyzed using the Applied Climate Information System (ACIS)



## Climate Monitoring

The RCCs provide a monthly review of the regional climate, identifying the major climatic character and significant weather events of the past month. The ACIS system is used to place the month in a long-term context, providing historical perspective for information users.

Information is displayed on the regional web site, and is transmitted to the rest of the Federal government. Moves are underway to expand the report to include societal impacts as well as the climatic information.



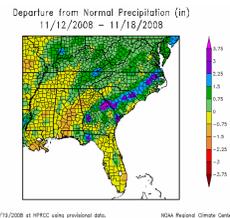
Fragment of Climate Monitoring Text

## Operational 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

## Collaborative Opportunity

Help in development of Web-based information system for health impacts.



Web-based information example: the precipitation departure from normal for a recent week.

## Climate-Health Impacts Linkages

The SERCC helps facilitate the use of climate information for societal benefit. The focus is on climate and health, but SERCC must be concerned with any and all climate impacts, and with all aspects of the links, from fundamental research to policy applications. The SERCC seeks to play a “clearinghouse” role, monitoring activities in such a way that it can identify:

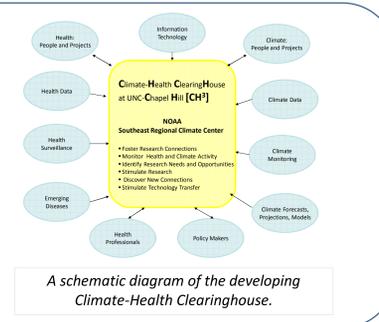
- Emerging issues in the area of impacts
- Emerging knowledge and expertise in climatology
- Needed impacts-related research
- Information needs for operations and policy decisions

## Climate-Health Clearinghouse

As the schematic at the right suggests, there is a vast range of aspects in linking climate and health. Potentially SERCC is involved in all of them.

Current development activities involve:

- Discussions with health professionals concerning data and information needs
- Identification of climate related issues and opportunities
- Identification of potential collaborators
- Preliminary exploratory research



A schematic diagram of the developing Climate-Health Clearinghouse.

## Preliminary Exploratory Research

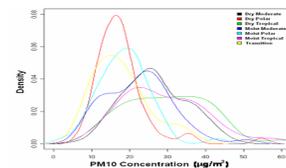
### Climate Extremes

Example: Change in the frequency of heat waves, 1960s-1980s. (Arrows show direction of change). Heat waves linked directly to heat-stress  
Update underway, (NOAA funding)



### Weather Patterns

Example: The relation between weather patterns and particulate matter concentrations, Charlotte, NC. Concentrations linked to asthma.  
Expansion underway (EPA funding)



### Respiratory Disease Impacts

Example: The effects of climate on influenza (See our other poster)

## Request for Participation:

SERCC intends, as resources permit, to expand the scope and utility of the Climate-Health Clearinghouse. BUT: a useful Clearinghouse can only be developed if there is active and open participation by a wide range of climatologists, health professionals and others interested in the linkage between climate, climate change, and public health. THEREFORE: your collaboration is encouraged.

## Contacts:

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