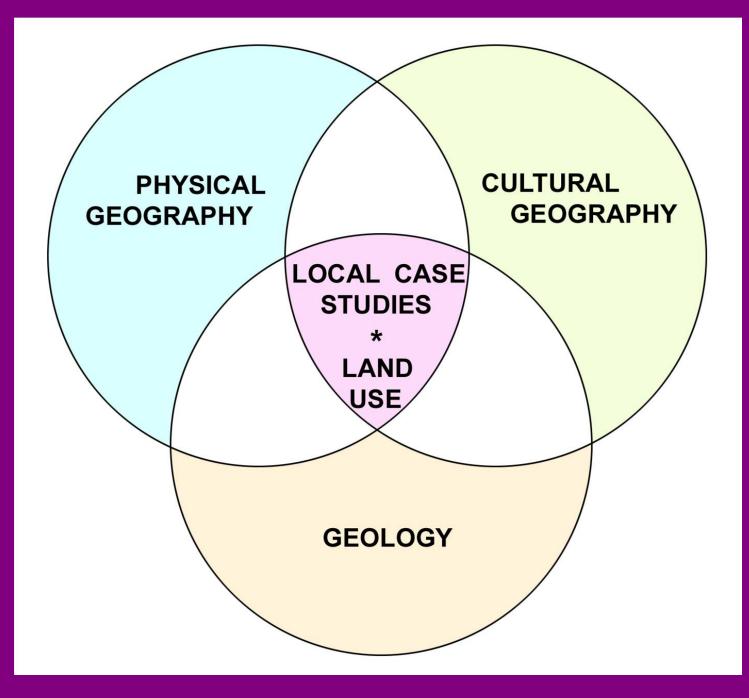


TEACHING GEOSCIENCE WITHIN AN INTERDISCIPLINARY CULTURAL CONTEXT USING LOCAL CASE STUDIES

What is SE MAPS?

- Interdisciplinary curriculum supplement
- Unique landscape perspective (aerial view)
- Fully integrated, standards-based lessons
- Thematic study of human & natural history
- Inquiry-based student activities
- Teacher background information included
- Case studies and problem-solving focus



The SE MAPS curriculum was designed to help students make:

- geological
- economical
- historical
- mathematical
- Cultural
- and environmental

connections to our region and world.



The Southeastern USA is a region of unique landscapes



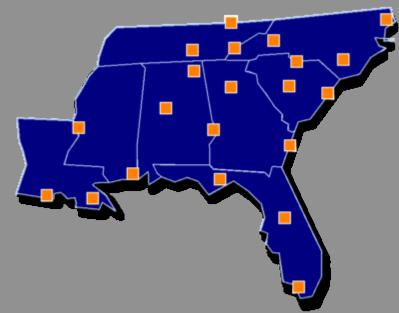
The Southeast has diverse:

- geography
- landforms
- 📖 cultures
- historical development
- anatural resources
- regional customs

ORGANIZATION OF SE MAPS ACTIVITIES

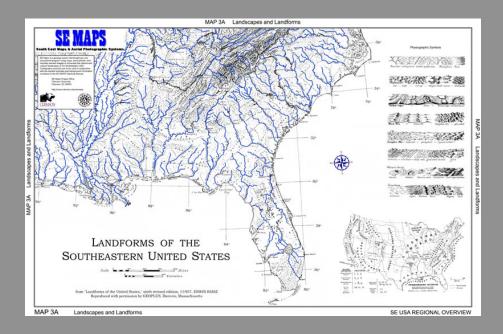
7 landform regions -21 study sites

- Appalachian Plateau
- Valley & Ridge
- Blue Ridge
- Piedmont
- Coastal Plain
- Coastal Zone
- Florida Peninsula



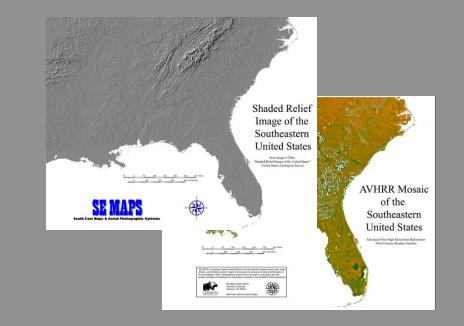
Cartographic Products

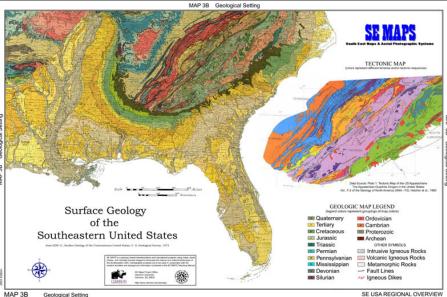
- Base Maps:
 - Shaded relief maps / political maps / cultural & historical maps
 - USGS Topographic Maps and geologic maps at various scales
 - Physiographic maps / digital elevation maps / land use-land cover maps
 - 3-D Anaglyph maps
- Satellite Imagery:
 - AVHRR thermal infrared images
 - LANDSAT and EOSAT false-color infrared images
- Aerial Photography:
 - NAPP & NHAP false-color Infrared Aerial Photographs
 - SCS B&W Aerial Photographs
 - SLAR (Side Looking Radar) images



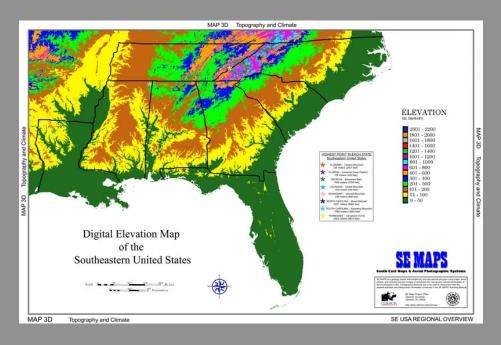
Regional Maps

- Physiographic Map
 - Landscapes and Landforms
- Geologic Map \bullet
 - Geological Setting
- Mosaic + Shaded Relief •
 - Landscape Patterns





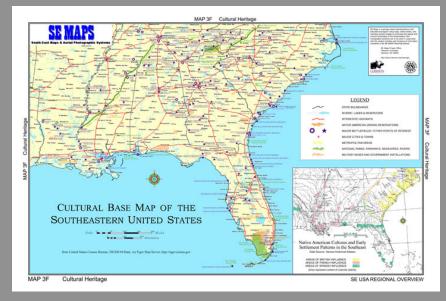
MAP 3B Geological Setting



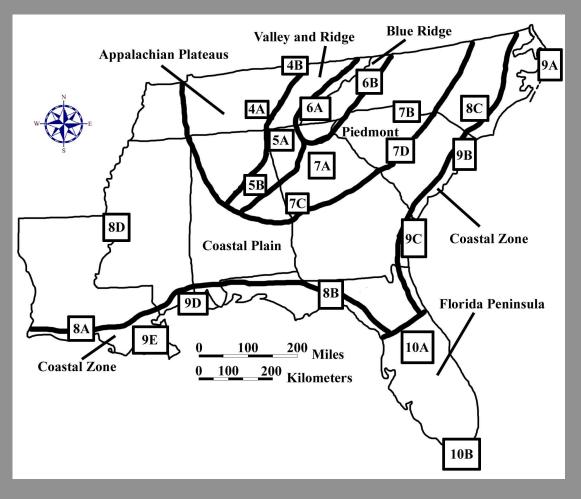
Regional Maps

- Digital Elevation Map
 - Topography & Climate
- Political Base Map
 - Political Setting
- Cultural Base Map
 - Cultural Setting





Appalachian Plateau Study Sites

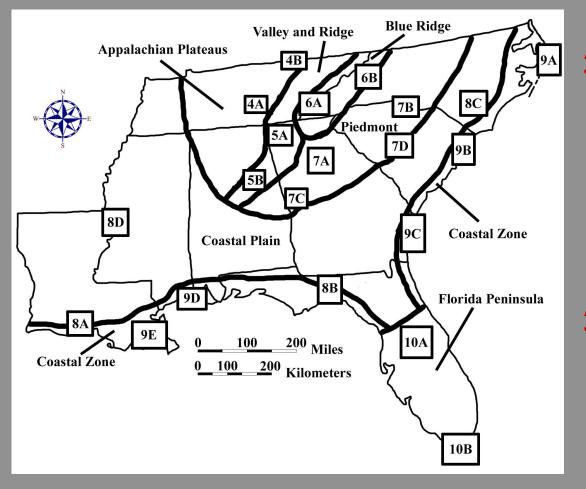


4A – Cumberland Plateau/Sequatchie Valley

- Karst Topography
- Influence of Geologic Structures
- Pumped Storage Hydropower
- **4B Cumberland** Gap
 - Cumberland Escarpment
 - Middlesboro Basin
 - The Wilderness Road

Valley and Ridge

Study Sites

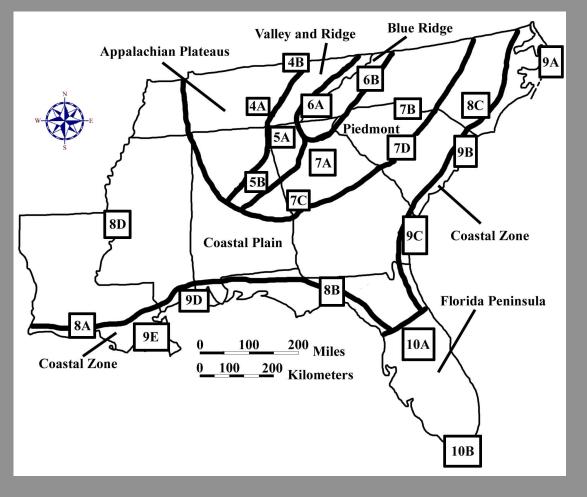


5A – Lookout Mountain

- Topographic Patterns
- Little River Canyon
- DeSoto's Historic Travels
- **5B** Birmingham
 - Mining Activities
 - Growth and decline of a Steel Mill Town

Blue Ridge

Study Sites

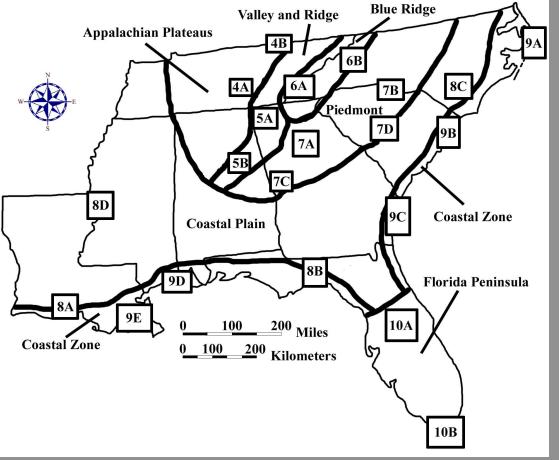


6A – Great Smoky Mountains

- Landscapes and land use
- Cades Cove
- Environmental Hazards
- 6B Blue Ridge Front
 - The Blue Ridge Parkway
 - Grandfather Mt. & Mt. Mitchell
 - The Blue Ridge Escarpment

Piedmont

Study Sites

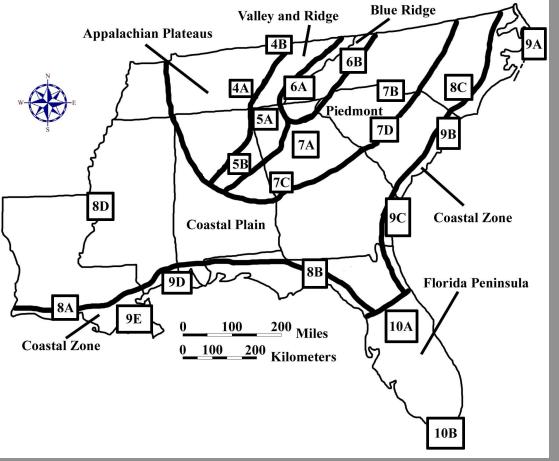


7A – Metro Atlanta

- Stone Mountain
- Urbanization
- Soapstone Ridge & Archeology
- **7B** Kings Mountain
 - Transportation Corridor
 - Kings Mountain Battlefield
 - Mining and Restoration

Piedmont

Study Sites

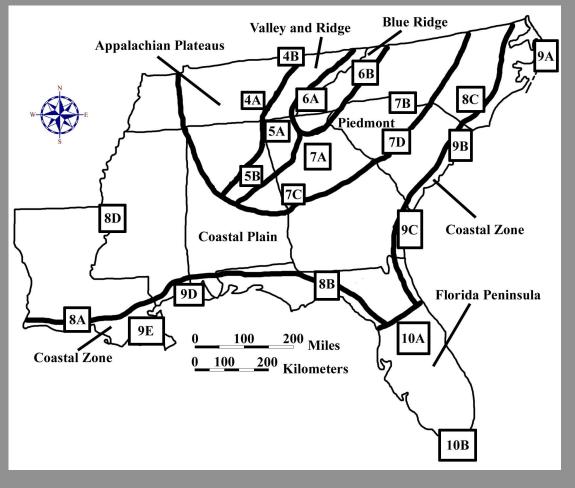


7C – Pine Mountain

- Geology of Pine Mountain Belt
- Warm Springs & Pres. Roosevelt
- Depression Era Farms
- 7D Columbia
- The Fall Line Zone
- Columbia and the Civil War
- Life in a Mill Village

Coastal Plain

Study Sites



8A – Salt Domes

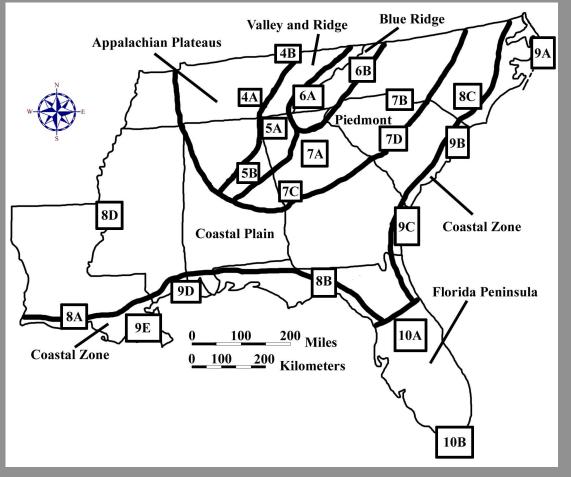
- Salt Dome Geology/Geography
- Cajun & other Cultural Heritage
- Exploration & Exploitation

8B – Woodville Karst Region

- Leon Sinks & Ground Water
- Springs & Ground Water Table
- Freshwater Discharge at Coast

Coastal Plain

Study Sites



8C – Carolina Bays

- Physical Setting of Bays

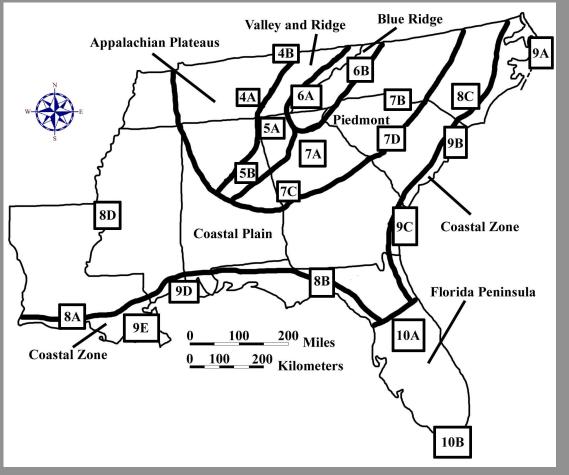
- Ecology/Environmental Issues

8D – Mississippi Alluvial Plain

- River & Floodplain Features
- Settlements & Agriculture
- Vicksburg & Civil War

Coastal Zone

Study Sites



9A – Outer Banks

- Barrier Island Migration

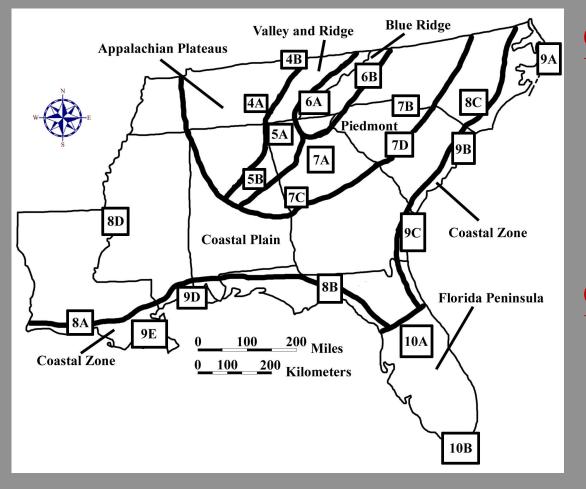
- Navigation and Land Use
- Historical Milestones

9B – Grand Strand

- A Changing Coastline
- Undersea Topography
- Tourism & Land-use Decisions

Coastal Zone

Study Sites

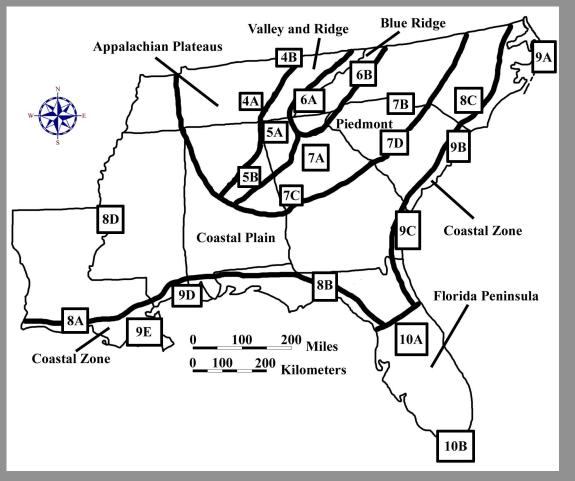


9C – Georgia Coastal Corridor

- Sea Island Coastal Geology
- Agriculture & Forestry
- Savannah and Human History
- **9D** Mississippi Gulf Coast
 - Barrier Islands & Hurricanes
 - Human Impacts on the Coast

Coastal Zone

Study Sites

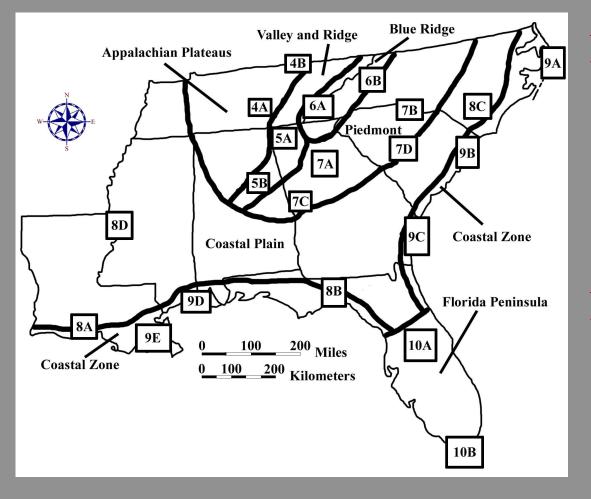


9E – New Orleans to Gulf of Mexico

- Geology of Delta Processes
- Water Themes
- History/Future of New Orleans

Florida Peninsula

Study Sites



10A – Central Peninsula

- Compare Gulf & Atlantic Coast
- Ridges on Central Highlands
- The Space Coast/Human Impact

10B – South Florida

- Everglades & Water Issues
- The Florida Keys
- Historic Landmarks & Land Use