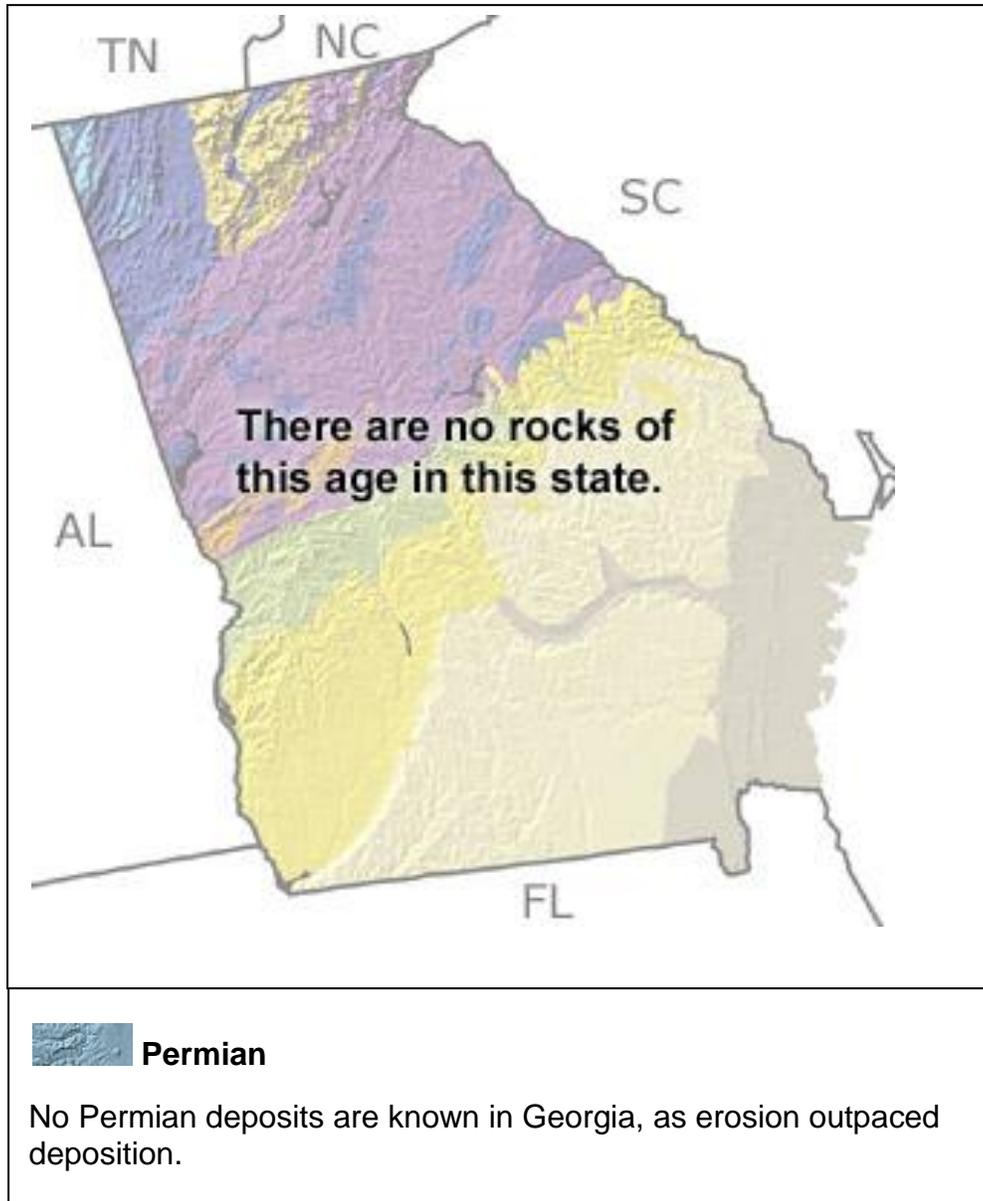
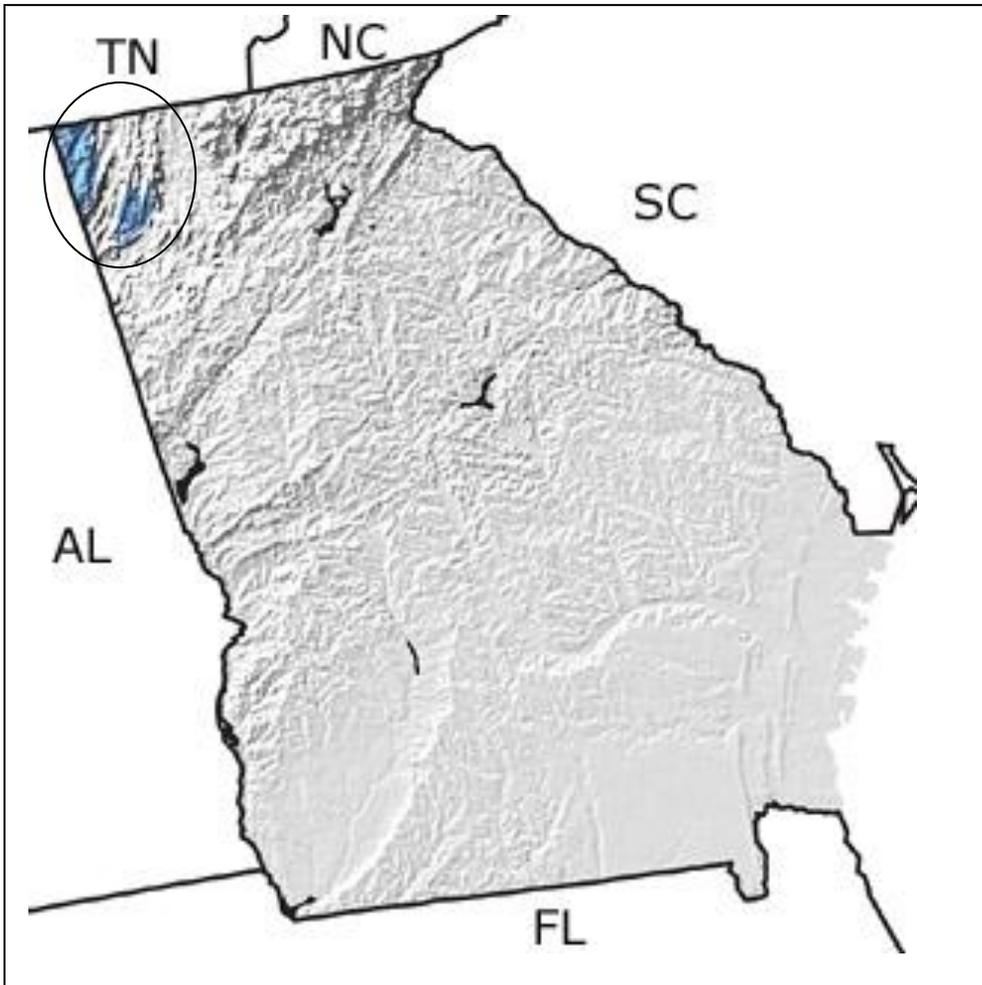


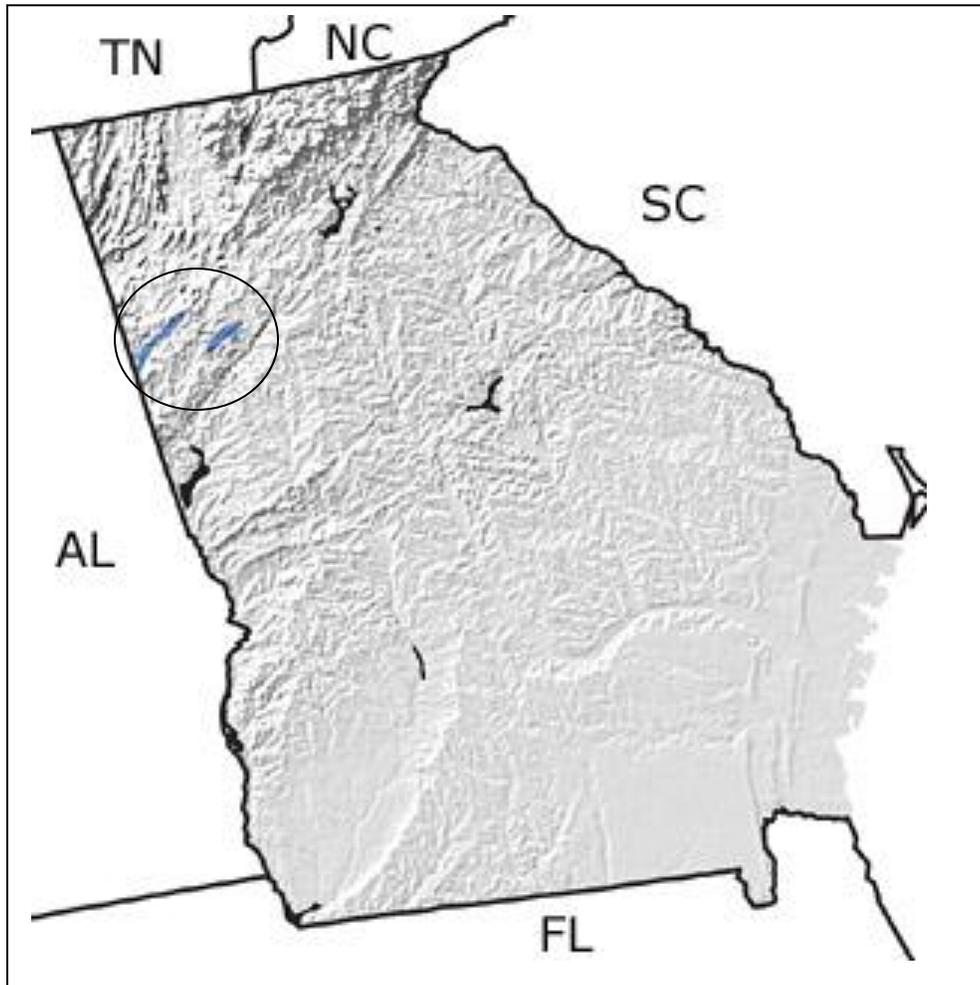
Georgia – Paleozoic Eras





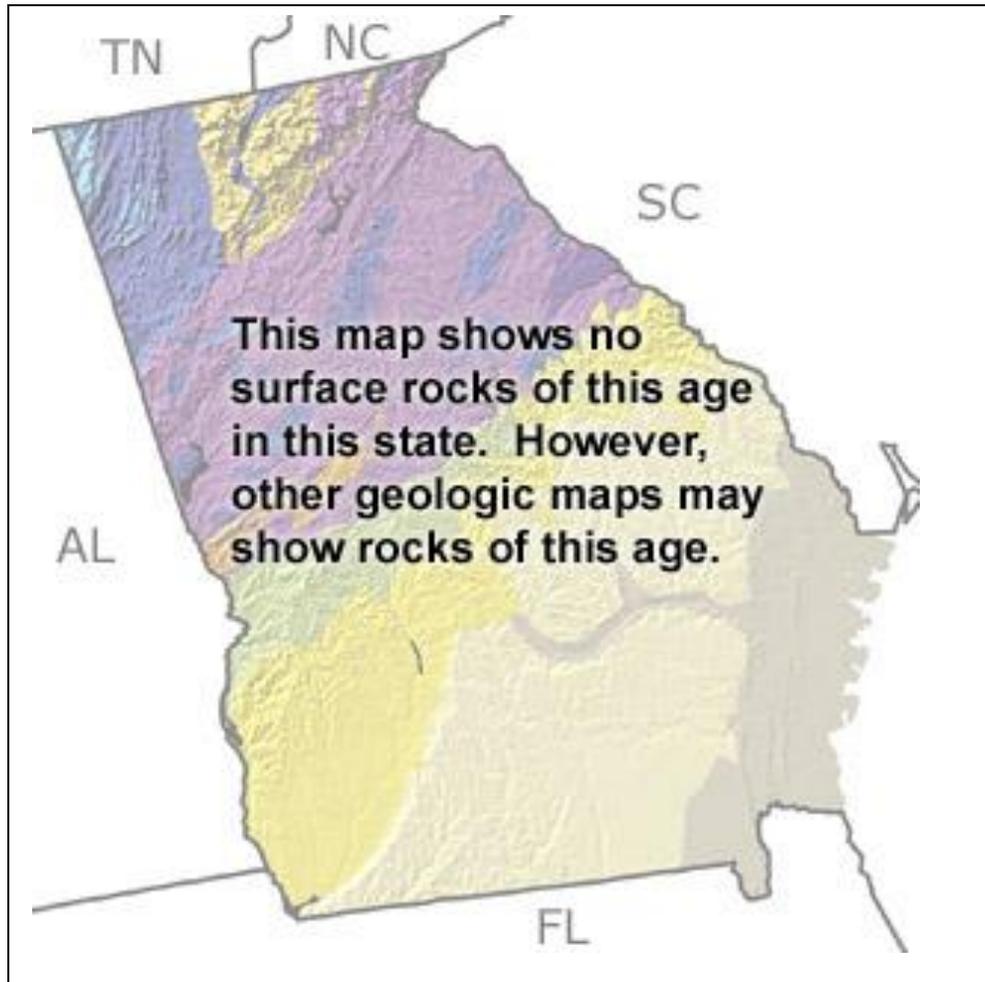
Carboniferous

During the first part of the Carboniferous, shallow marine environments, such as tidal flats and channels, were common. By the Late Carboniferous, the Appalachian Mountains were undergoing a third episode of mountain building (the Allegheny Orogeny), as Gondwana slammed into North America. Erosion increased and clastic sediments (mostly sand) were deposited, creating extensive deltas that replaced the previous marine environments. Coal-forming swamps developed in the extreme northwestern part of Georgia. Marine fossils include bryozoans and blastoids, while ferns and lycopod trees are typical fossils found in the coal deposits.



Devonian

In the Devonian, a broad and relatively deep marine environment spread into the northern part of Georgia. Reducing circulation caused oxygen-poor conditions and the deposition of muds rich in organic material. Not much marine life was able to live in these bottom waters, although some burrows indicate sporadic colonization of the sea floor. The Appalachians were undergoing a second episode of mountain building (the Acadian Orogeny), which was caused by the closing of the Iapetus Ocean. In the north-central part of Georgia, large bodies of igneous material solidified below the surface as a result of this orogeny. The most famous of these structures is Stone Mountain, a large granitic intrusion now exposed near Atlanta. This map indicates the presence of Devonian rocks in northwestern Georgia; however, no Devonian fossils are known from the state.



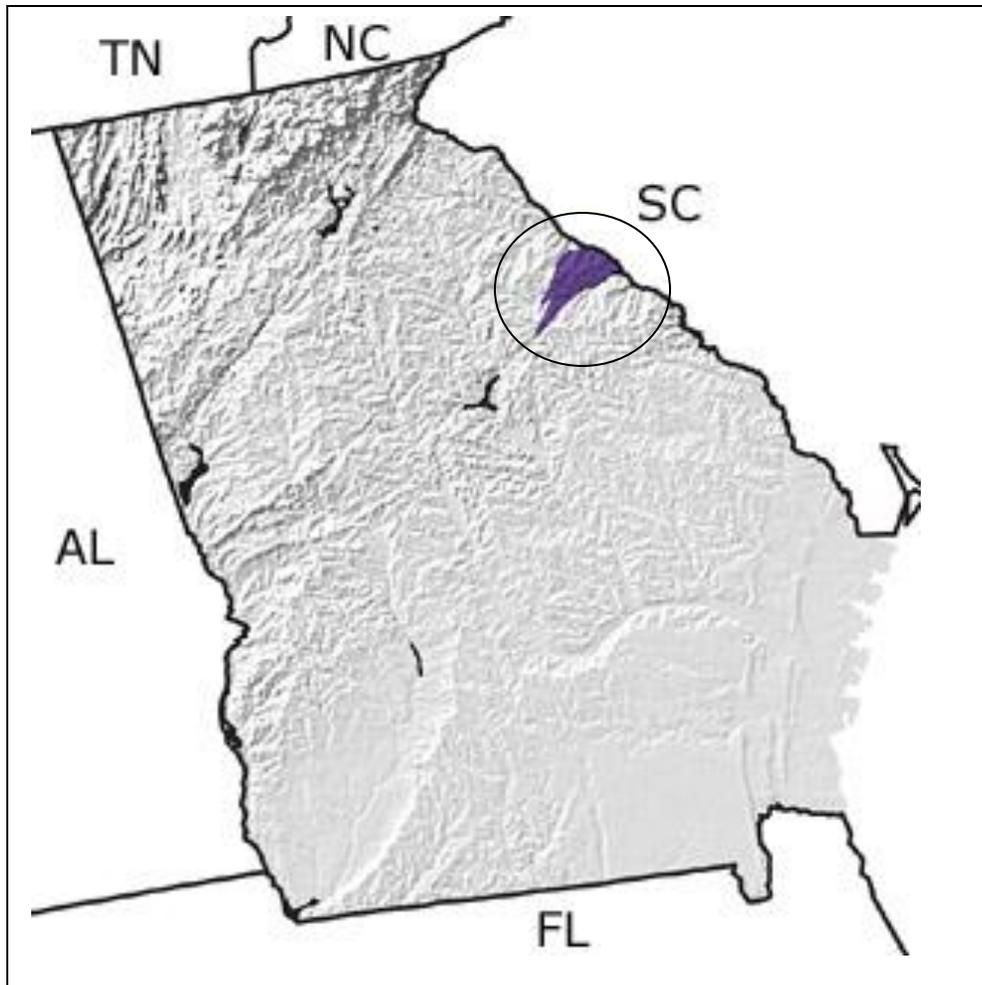
Silurian

During the Silurian, large amounts of sand and mud eroding from the ancestral Appalachian Mountains were deposited in shallow marine environments in the northern part of the state. These environments were frequently hit by tropical storms that deposited thick beds of sand, often burying the marine life that lived on the sea floor. Marine communities of the Silurian included brachiopods, cephalopods, crinoids, and some burrowers, probably trilobites.



Ordovician

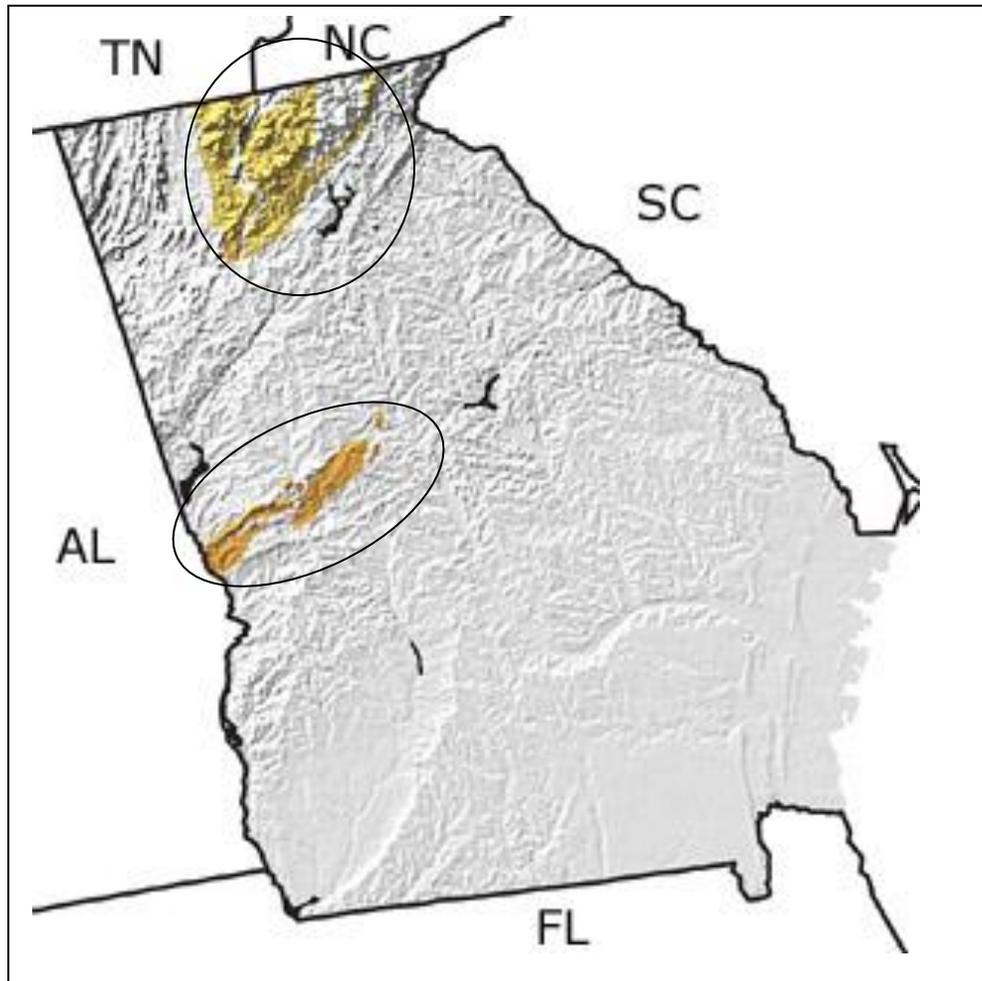
Early in the Ordovician, shallow marine environments covered much of Georgia. However, toward the end of the Ordovician, the ancient continent of Laurentia collided with an oceanic plate. This collision caused the first of three episodes of mountain building that contributed to the formation of the Appalachians. Large amounts of sediment eroding from the mountains were carried to the sea and formed extensive tidal flats. These were later replaced by estuaries as more fresh water flowed into the seaway. Typical Ordovician fossils include brachiopods and bivalves, as well as traces of burrows, most likely formed by trilobites.



 **Cambrian**

Shallow marine environments covered much of Georgia during the Cambrian. Thick layers of limy sediment built up on the sea floor, and stromatolites, corals, and trilobites thrived in the warm waters.

Georgia – Precambrian Era



Precambrian

During the Precambrian, Laurentia (North America) rifted from the supercontinent Pannotia. This tectonic activity resulted in the opening of the Iapetus Ocean and the deposition of shallow-marine clastic sediments that we see today in some areas of Georgia. However, little else is known about Precambrian environments or life in Georgia because the original sedimentary rocks of this time interval were later metamorphosed.