

2018 Field Trip Information (Oct 5-7)

The 2018 Annual Field Trip of the Georgia Geological Society will headquarter in Augusta, Georgia. It will be led by planetary geologists and impact stratigraphers Scott Harris (Fernbank Science Center) and Steven Jaret (American Museum of Natural History). The objective of the trip is to introduce the community to two new discoveries in the Upper Coastal Plain succession of Georgia and South Carolina and to discuss how future asteroid impact deposits can be identified and how they can help us understand the sequence architecture of the region.

On Saturday, October 6, we will venture to Gaston, South Carolina to examine a rare exposure of the Cretaceous-Paleogene boundary. In most places throughout Georgia and the Carolinas, the catastrophic transition from the Maastrichtian to the Danian is missing. However, on the crests of drainage divides between Eocene estuarine channels, the contact has been preserved, allowing a unique opportunity to investigate impact ejecta from the Chicxulub crater and to understand the effects it may have had on coastal depositional systems.

Outbound to Gaston and on our afternoon return, we will visit a couple of kaolin mines in the Aiken, South Carolina area to explore the upper Eocene. We now know that the Earth was hit by an enhanced flux of asteroids during the late Eocene. Ejecta from one large collision, the Chesapeake Bay impact in coastal Virginia, rained down across the Southeast about 35.5 million years ago. While those ejecta can be found with great time, patience, and a microscope in the sediments near the base of the Dry Branch Formation, a slightly older unit, the Albion Member of the Clinchfield Sand Formation, looks much more “catastrophic” in the field. Recently we have been able to demonstrate the connection to a second strike, possibly a deeper Atlantic Ocean impact, around 36 Ma through the identification of impactor debris in the sediment.

On Sunday, October 7, we will have a morning for the hard rockers among us as we visit a quarry into the Permian granites of the Grovetown/Appling area.

WE ARE WORKING ON ESTABLISHING THE HOTEL FOR THE HEADQUARTERS. As soon as we get a final confirmation, we will post the registration page.

Best regards,

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