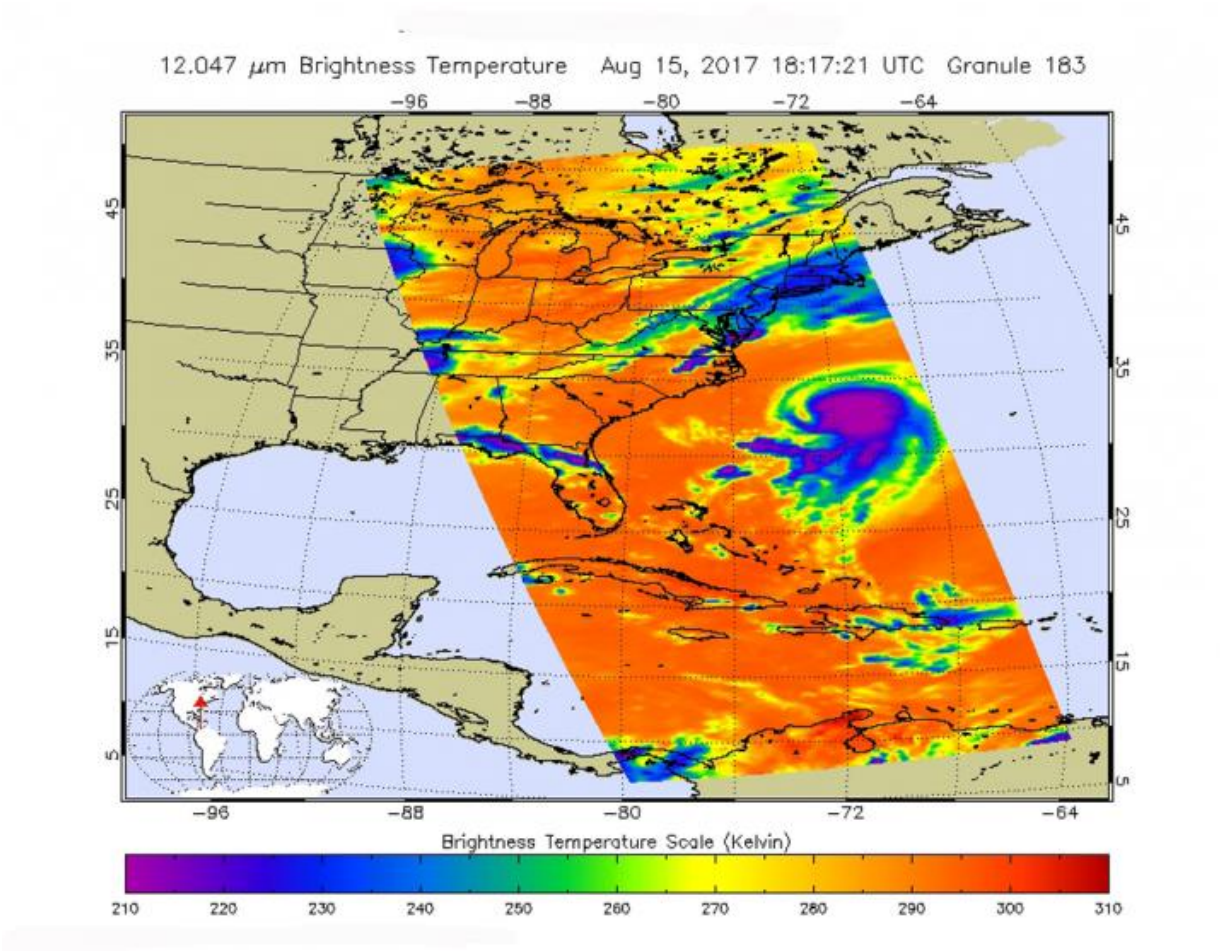
NASA's infrared look at Hurricane Gert

August 16 2017



On Aug. 15, 2017, at 2:17 p.m. EDT (1817 UTC) NASA's Aqua satellite analyzed Hurricane Gert's cloud top temperatures and found coldest temperatures and strongest storms around the center (purple). Credit: NASA JPL/Ed Olsen

NASA's Aqua satellite provided an infrared look at the power within Atlantic Hurricane Gert and saw the hurricane had very cold cloud top temperatures.

The Atmospheric Infrared Sounder or AIRS instrument that flies aboard NASA's Aqua satellite analyzed Gert in infrared light on Aug. 15 at 2:17 p.m. EDT (1817 UTC). AIRS data showed Gert's cloud pattern had become better organized than it was earlier in the day, and Gert had a well-defined convective band of thunderstorms around the center.

Some of the coldest cloud top temperatures exceeded minus 63 degrees Fahrenheit (minus 53 degrees Celsius). Storms with temperatures that cold are high in the troposphere and NASA research has shown they have the ability to generate heavy rain.

Earlier in the day, Gert had exhibited hints of an eye in visible satellite imagery, but the AIRS infrared imagery didn't show an eye when NASA's Aqua satellite analyzed the storm.

At 11 a.m. EDT (15900 UTC) on Wednesday, Aug. 16, 2017, the center of Hurricane Gert was located near 36 degrees north latitude and 68.4 degrees west longitude. That's about 355 miles (575 km) northwest of Bermuda and 510 miles (820 km) south-southwest of Halifax, Nova Scotia, Canada.

Gert was moving toward the northeast near 25 mph (41 kph). The National Hurricane Center (NHC) expects an even faster motion toward the northeast or east-northeast through early Friday, Aug. 18. The estimated minimum central pressure is 975 millibars. Maximum sustained winds increased to near 95 mph (150 kph) with higher gusts. Some additional strengthening is possible through Aug. 16 and then Gert is expected to weaken.

Gert is forecast to become an extratropical low pressure system by Thursday night, Aug. 17.

Although Gert is not close to the coast, the hurricane is stirring up rough seas that are affecting U.S. East coastal areas. The National Hurricane Center said "swells generated by Gert will spread northward along the east coast of the United States from Virginia northward to New England and Atlantic Canada during the next couple of days. Swells are also expected to continue to affect Bermuda through tonight. These swells are likely to cause life-threatening surf and rip current conditions."

Provided by NASA's Goddard Space Flight Center