## NASA finds Tropical Storm Gordon's strength east of its center

September 42018


At 4:05 a.m. EDT (0805 UTC) on Sept. 4, the MODIS instrument aboard NASA's Aqua satellite looked at Tropical Storm Gordon in infrared light. MODIS found coldest cloud tops (red) had temperatures near minus 70 degrees Fahrenheit (minus 56.6 degrees Celsius) in three areas east of the center. Credit: NASA/NRL

After drenching south Florida, Tropical Storm Gordon moved into the eastern Gulf of Mexico and is headed to the northwest. NASA's Aqua satellite found three areas of the strongest storms east of Gordon's center when it passed overhead on Sept. 4 .

Infrared satellite data on Tuesday, Sept. 4 at 4:05 a.m. EDT (0805 UTC) from the Moderate Resolution Imaging Spectroradiometer or MODIS instrument aboard NASA's Aqua satellite revealed several strongest areas in Gordon where cloud top temperatures were indicative of strong storms and heavy rainmakers. In those areas, MODIS found coldest cloud tops had temperatures near minus 70 degrees Fahrenheit (minus 56.6 degrees Celsius). NASA research has found that cloud top temperatures that cold have the capability to generate heavy rainfall.

At 5 a.m. EDT (0900 UTC), the National Hurricane Center or NHC noted "The storm has a small CDO [central dense overcast] with convective banding features primarily over the eastern semicircle of the circulation." It is in the eastern semicircle where Aqua found the strongest storms.

There are numerous watches and warnings in effect as Gordon is forecast to track through the Gulf of Mexico and make landfall along the northern Gulf coast. NHC said A Storm Surge Warning is in effect for Shell Beach to Dauphin Island, Alabama. A Storm Surge Watch is in
effect from west of Shell Beach to the Mouth of the Mississippi River and east of Dauphin Island to Navarre, Florida. A Hurricane Warning is in effect for. The mouth of the Pearl River to the Alabama-Florida Border. A Tropical Storm Warning is in effect for west of the mouth of the Pearl River to east of Morgan City, Louisiana, including Lake Pontchartrain and Lake Maurepas and from the Alabama-Florida Border to Okaloosa-Walton County Line, Florida..

At 8 a.m. EDT (1200 UTC), the center of Tropical Storm Gordon was located near latitude 28.1 degrees north and longitude 86.2 degrees west. That's about 190 miles ( 305 km ) east-southeast of the mouth of the Mississippi River. Gordon is moving toward the west-northwest near 15 mph ( 25 kph ). A west-northwestward to northwestward motion with some decrease in forward speed is expected over the next few days.

NHC said that maximum sustained winds are near 65 mph ( 100 kph ) with higher gusts. Some strengthening is expected today, and Gordon is forecast to be a hurricane when it makes landfall along the north-central Gulf Coast. Rapid weakening is expected after Gordon moves inland.

On the forecast track, the center of Gordon will move across the eastern Gulf of Mexico today, and will approach the north-central Gulf Coast within the warning area late this afternoon or evening, and move inland over the lower Mississippi Valley tonight or early Wednesday, Sept. 5.

## Provided by NASA's Goddard Space Flight Center

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