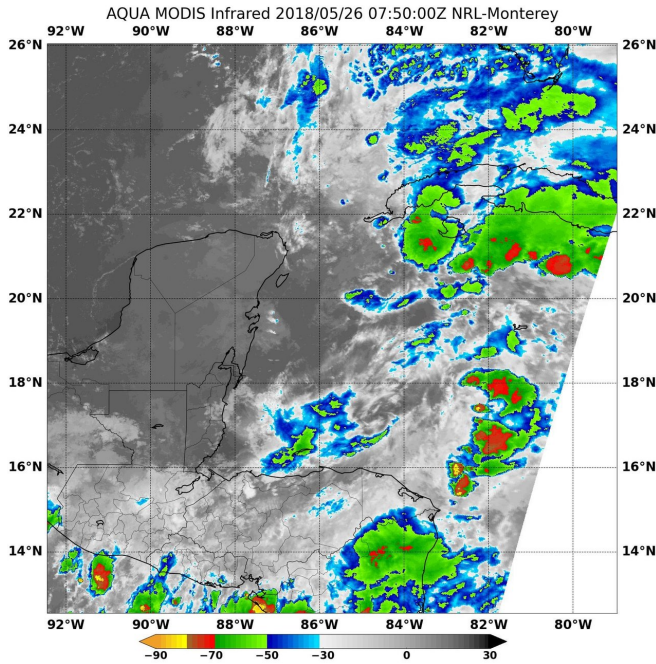


NASA sees Alberto's strongest storms fragmented near Florida

28 May 2018, by Rob Gutro



NASA's Aqua satellite revealed some cloud top temperatures in fragmented thunderstorms as cold or colder than minus 70 degrees (red) Fahrenheit (minus 56.6 degrees Celsius) on Tropical Storm Alberto on May 26 at 3:50 a.m. EDT (0750 UTC). Credit: NASA/NRL

Infrared data provides temperature information. The colder the temperature of a cloud top, the higher into the atmosphere the storm has pushed, and, as such, the stronger the storm.

The National Hurricane Center (NHC) posted a number of watches and warnings as Tropical Storm Alberto moves closer to the U.S. Gulf coast states. On Sunday, May 27, a Storm Surge Watch is in effect for Crystal River to the Mississippi/Alabama border. A Tropical Storm Warning is in effect for the Dry Tortugas and for Bonita Beach to the Mississippi/Alabama border. In addition, a Tropical Storm Watch is in effect for the Mississippi/Alabama border to the Mouth of the

Pearl River.

The Moderate Resolution Imaging Spectroradiometer (MODIS) instrument aboard NASA's Aqua satellite captured an infrared image of Tropical Storm Alberto on May 27 at 2:50 a.m. EDT (0650 UTC) which showed scattered strong storms north and east of Alberto's center over the Gulf of Mexico. The most powerful thunderstorms had cloud top temperatures as cold as or colder than -63 degrees Fahrenheit (-53 degrees Celsius). A small area, located over open waters south of the southern tip of Florida, had the coldest temperatures near -70 degrees Fahrenheit (-56.6 Celsius), indicating the strongest storms within the tropical storm. Storms with cloud top temperatures that cold have the capability to produce [heavy rainfall](#).

NHC forecaster Cangialosi noted "Alberto appears a little better organized this morning with an area of deep convection gradually expanding near and to the north of the center. A large band of showers and thunderstorms extends well to the east of the center from western Cuba to south Florida and the northwestern Bahamas."

The NHC said at 8 a.m. EDT (1200 UTC), the center of Subtropical Storm Alberto was located near latitude 26.3 degrees north and longitude 84.4 degrees west. That puts the center about 165 miles (265 km) southwest of Tampa, Florida.

Maximum sustained winds have increased to near 45 mph (75 kph) with higher gusts. Gradual strengthening is forecast until the system reaches the northern Gulf Coast.

The [storm](#) is moving toward the north near 15 mph (24 kph). A turn toward the north-northwest at a slower forward speed is forecast tonight, May 27. A north-northwestward to northward motion is expected Tuesday through early Wednesday. The estimated minimum central pressure based on data

from an Air Force Reserve reconnaissance aircraft data is 997 millibars.

NHC forecasters said "On the forecast track, the center of Alberto will cross the eastern and northern Gulf of Mexico today and approach the northern Gulf Coast in the warning area tonight or Monday. Heavy rainfall and [tropical storm](#) conditions will likely reach the northern Gulf Coast well before the arrival of the center of Alberto. Steady weakening is expected after Alberto makes landfall, and it is forecast to become a tropical depression by Monday night, May 28 or Tuesday, May 29. Alberto is expected to move northward into the Tennessee Valley on Tuesday and Wednesday."

For updated forecasts on Alberto, visit:
www.nhc.noaa.gov

Provided by NASA

APA citation: NASA sees Alberto's strongest storms fragmented near Florida (2018, May 28) retrieved 17 June 2021 from <https://phys.org/news/2018-05-nasa-alberto-strongest-storms-fragmented.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.