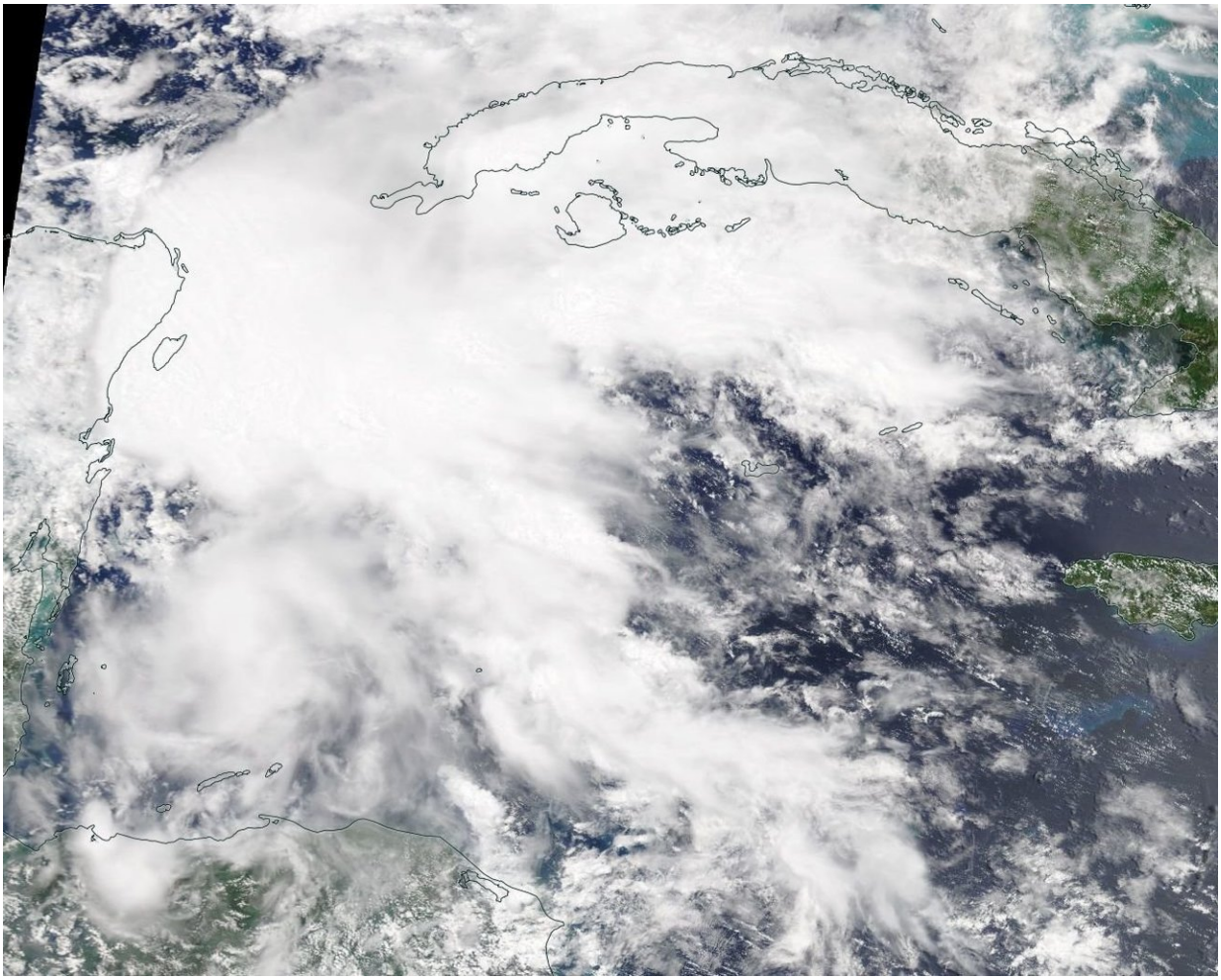
NASA satellites spot first Atlantic sub-tropical storm

May 29 2018



On May 24, the MODIS instrument aboard NASA's Terra satellite captured a visible light image of System 90L as it continued organizing in the northwestern Caribbean Sea. On May 25, the low pressure area became Tropical Storm Alberto. Credit: NASA

The tropical low pressure area known as System 90L that has been lingering in the western Caribbean Sea for a couple of days has consolidated and strengthened into the Atlantic Ocean basin's first tropical storm. NASA-NOAA's Suomi NPP satellite captured an image of the storm that became Tropical Storm Alberto.

On May 24, the Moderate Resolution Imaging Spectroradiometer or MODIS instrument aboard NASA's Terra satellite captured a visible light image of System 90L as it continued organizing in the northwestern Caribbean Sea. System 90L was showing banding features to the north and east of the center. On May 25, the low pressure area became Tropical Storm Alberto.

At approximately 3:23 a.m. CDT on May 25, NASA-NOAA's Suomi NPP satellite flew over System 90L. The waxing gibbous moon revealed some interesting features. In addition to the tropospheric gravity waves from the convection off the Yucatan Peninsula the satellite imagery showed the low level circulation center was located just to the west of the central convection and thunderstorms. The image also showed a lightning streak embedded in the convection near the circulation center.

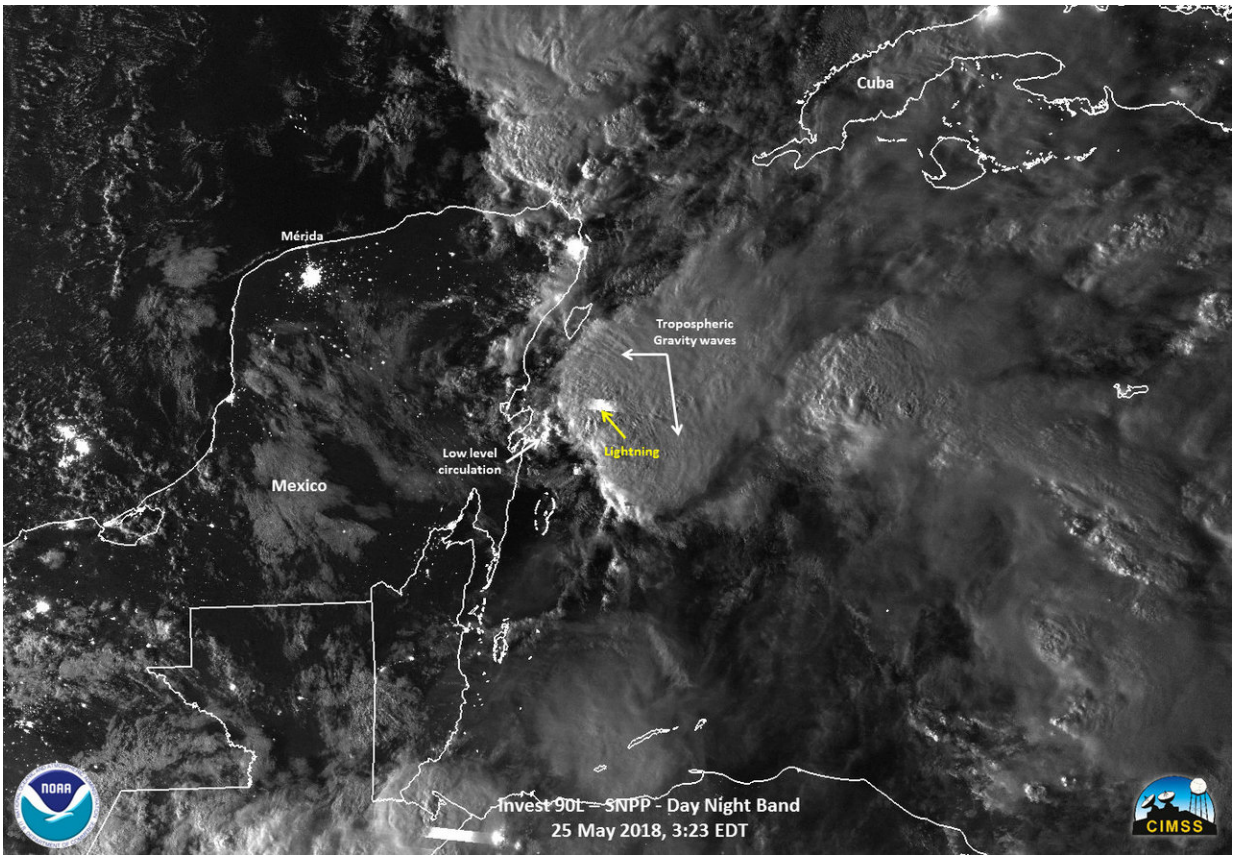
The National Hurricane Center noted at 11 a.m. EDT (1500 UTC) that a Tropical Storm Watch is in effect for Tulum to Cabo Catoche, Mexico and the Cuban province of Pinar del Rio.

Latest Position

At 11 a.m. EDT (1500 UTC), the center of Subtropical Storm Alberto was located near latitude 19.7 degrees north and longitude 86.8 degrees west.

The storm was moving toward the north-northeast near 6 mph (9 kph). A general slow motion toward the north is expected through the weekend,

followed by a northwest turn by Monday. On the forecast track, Alberto is expected to pass near the eastern coast of the Yucatan peninsula tonight, be near the western tip of Cuba Saturday morning, emerge over the southeastern Gulf of Mexico by Saturday night May 26, and approach the north-central Gulf Coast on Monday, May 28.



At approximately 3:23 a.m. CDT on May 25, NASA-NOAA's Suomi NPP satellite flew over System 90L and saw tropospheric gravity waves from the convection off the Yucatan Peninsula. It also showed the low level circulation just to the west of the convection and a lightning streak. Credit: NASA/NOAA/UWM/SSEC/CIMSS, William Straka III

Maximum sustained winds are near 40 mph (65 kph) with higher gusts. Gradual strengthening is forecast for the next 72 hours. Winds of 40 mph extend outward up to 115 miles (185 km) from the center. The estimated minimum central pressure is 1005 millibars.

Rainfall and Ocean Swells

The National Hurricane Center noted that Alberto is forecast to produce large rainfall totals.

Alberto is expected to produce total rain accumulations of 10 to 15 inches with isolated totals of 25 inches across the northeastern portions of the Yucatan Peninsula and western Cuba. These rains could produce life-threatening flash floods and mudslides. Rainfall accumulations of 4 to 8 inches with maximum amounts of 12 inches are possible across the Florida Keys and southern and southwestern Florida.

Swells generated by Alberto are affecting portions of the coast of eastern Yucatan Peninsula and western Cuba. These swells are likely to cause life-threatening surf and rip current conditions.

Effects on the U.S.

Heavy rain will likely begin to affect the central Gulf Coast region and the southeastern Untied

States later this weekend and continue into early next week. Flooding potential will increase across this region early next week as Alberto is forecast to slow down after it moves inland. Hazardous surf conditions are likely to develop along much of the central and eastern U.S. Gulf Coast this weekend.

Provided by NASA's Goddard Space Flight Center