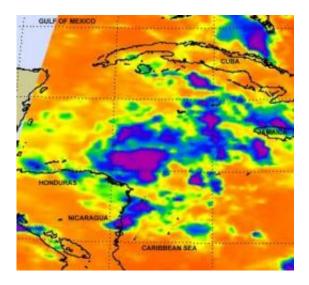


## NASA satellites see heavy rains for Central America from Tropical Depression 8

August 19 2011



NASA's Aqua satellite passed over Tropical Storm Don at 8:17 UTC (4:17 a.m. EDT) on July 29. The AIRS infrared image revealed a large area of powerful, high thunderstorms with cold cloud tops (purple) surrounding the center where cloud temperatures were colder than -63 Fahrenheit (-52 Celsius). Credit: NASA/JPL, Ed Olsen

The eighth tropical depression of the Atlantic Ocean hurricane season formed from the low pressure System 93L on August 19 at 8 a.m. EDT and satellite data from NASA shows strong rainmaking potential as the depression moves out of the Caribbean and inland this weekend.

Infrared satellite data gives forecasters a good idea at the strength and



height of thunderstorms, and the rainfall potential that they carry with them. When NASA's Aqua satellite passed over <u>Tropical Depression</u> 8 (TD8) today, August 19 at 6:59 UTC (2:59 a.m. EDT) the Atmospheric Infrared Sounder (AIRS) took the temperature of the cloud tops using infrared technology. AIRS data revealed a large area of powerful, high thunderstorms with cold cloud tops surrounding the center where cloud temperatures were colder than -63 Fahrenheit (-52 Celsius). The higher the thunderstorm cloud-top, the colder it is, and the more powerful they are, and typically, the heavier the rainfall.

The National Hurricane Center (NHC) today noted that TD8 is expected to produce total rainfall accumulations of 3 to 5 inches across Honduras, Guatemala, and Belize. Isolated amounts as high as 8 inches are possible in local areas, and these heavy rains could produce flash flooding and mudslides, especially over higher terrain.

As TD8 continues its western track, a tropical storm warning is in effect for the coast of the Bay Islands of Honduras. A tropical storm watch is in effect for Honduras, Guatemala, the Belize coast from Dangriga Town southward to the Guatemala border, and for the southeastern coast of the Yucatan Peninsula. Because of the depression's close proximity to land the NHC expected little to no strengthening over the next 24 to 36 hours before landfall.





GOES-13 captured Tropical Depression 8 at the Honduran coastline this morning, Aug. 19 at 1431 UTC (10:31 a.m. EDT). The western edge of TD8 was already over the coastlines of Guatemala and Honduras. Higher, stronger thunderstorms around TD8's center were visible in the image, as they cast shadows on the lower, surrounding thunderstorms. Credit: NASA/NOAA GOES Project

The <u>Geostationary Operational Environmental Satellite</u> called GOES-13 took a <u>visible image</u> of Tropical Depression 8 on August 19 at 1431 UTC (10:31 a.m. EDT). The western edge of TD8 was already over the coastlines of Guatemala and Honduras. Higher, stronger thunderstorms around TD8's center were visible in the image, as they cast shadows on the lower, surrounding thunderstorms.

The image was created at NASA's GOES Project, located at NASA Goddard Space Flight Center in Greenbelt, Md. NOAA manages the GOES-13 satellite and NASA uses its data to create images and animations.

At 11 a.m. EDT TD8's maximum sustained winds were near 35 mph. It was located about 195 miles (310 km) east of Isla Roatan, Honduras and about 315 miles (505 km) east-southeast of Belize City, Belize. That's



near 16.1 north and 83.7 west. The depression is moving toward the west near 10 mph (17 kmh) and is expected to continue moving in a general westward direction over the next couple of days. The National Hurricane Center noted that "On the forecast track, the center of TD8 will pass near the Bay Islands of Honduras tonight and move across the coast of Belize Saturday (August 20) or Saturday night." For updates on the storm, go to the NHC forecast page: <u>www.nhc.noaa.gov</u>.

As Tropical Depression 8 moves west through Central America this weekend, residents should be prepared for heavy rainfall, mudslides and flash flooding.

Forecasters are also watching two other low pressure areas in the Atlantic Ocean this weekend as both have a medium chance for development. One is a low about 900 miles east of the Lesser Antilles that is showing organization. The other is a low in the far eastern Atlantic, located between the Cape Verde Islands and Africa with a large area of thunderstorms.

Provided by NASA's Goddard Space Flight Center

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