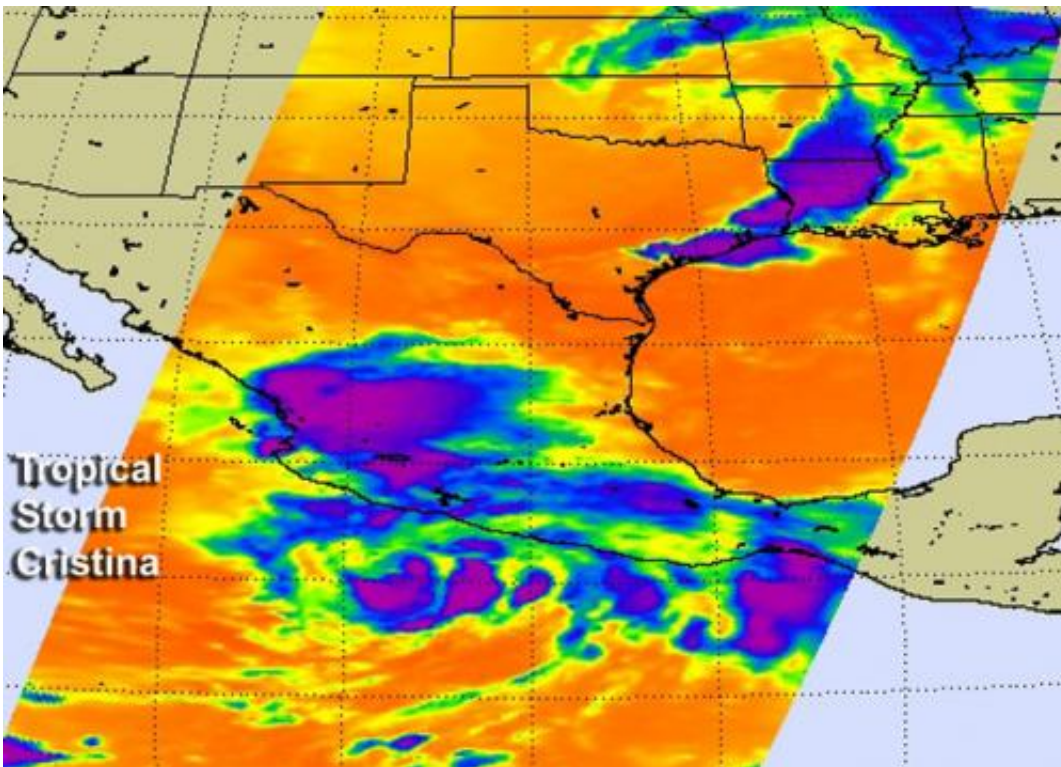


NASA sees Tropical Storm Christina's birth and severe weather in US South

June 10 2014, by Rob Gutro



This infrared image from June 10 at 4:23 a.m. EDT from NASA's Aqua satellite showed the strong thunderstorms (purple) associated with Tropical Storm Cristina on Mexico's west coast and severe weather in the south-central US. Credit: NASA JPL, Ed Olsen

NASA's Aqua satellite captured a picture of newborn Tropical Storm Cristina on June 10, marking the birth date of the Eastern Pacific Ocean's third tropical storm of the season. The same image showed the

severe weather affecting the south central U.S.

Although not at the coastline, the National Hurricane Center said that Cristina is near enough to cause dangerous surf conditions.

According to the National Hurricane Center (NHC), swells generated by Cristina are affecting portions of the south-central coast of western Mexico. These swells will likely continue through today, June 10, and could cause life-threatening surf and rip current conditions.

Early in the morning of June 9, forecasters at the NHC were watching a fast-developing tropical low pressure area designated as System 94E. By 5 p.m. EDT the Eastern Pacific Ocean had a new [tropical depression](#). Tropical depression 03E was born near 15.4 north latitude and 102.0 west longitude, about 160 miles (260 km) south of Zihuatanejo, Mexico. Maximum sustained winds were near 35 mph (55 kph).

Since then, Tropical Depression 3E strengthened and by June 10, it became a [tropical storm](#) and was renamed "Cristina."

At 08:23 UTC (4:23 a.m. EDT) when NASA's Aqua satellite passed over Cristina, the Atmospheric Infrared Sounder (AIRS) captured an infrared of the storm. The infrared image was false-colored to better identify temperature of [cloud tops](#). Higher, colder cloud tops indicate strongest storms, and those were seen wrapping sound of the center of circulation, and in a large band to the north, over coastal Mexico. Cloud top temperatures in those bands exceeded -63F (-53C), indicating they were near the top of the troposphere. NASA research showed that thunderstorms that high in the atmosphere have the capability to produce heavy rainfall.

The AIRS image also showed strong to severe thunderstorms associated with an area of low pressure in eastern Texas. A band of strong

thunderstorms with very cold, high cloud tops stretched from southeastern Texas north into Arkansas.

By 11 a.m. EDT (1500 UTC) the center of Tropical Storm Cristina was located near latitude 15.5 north latitude and 102.9 west longitude. The National Hurricane Center reported that Cristina's maximum sustained winds were near 45 mph (75 kph). Cristina is moving toward the west near 5 mph (7 kph) and is expected to continue in that direction, away from the Mexico coastline. The estimated minimum central pressure is 1003 millibars.

The NHC forecast calls for additional strengthening over the next day or two and Cristina could become a hurricane by Thursday, June 12.

Provided by NASA's Goddard Space Flight Center

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