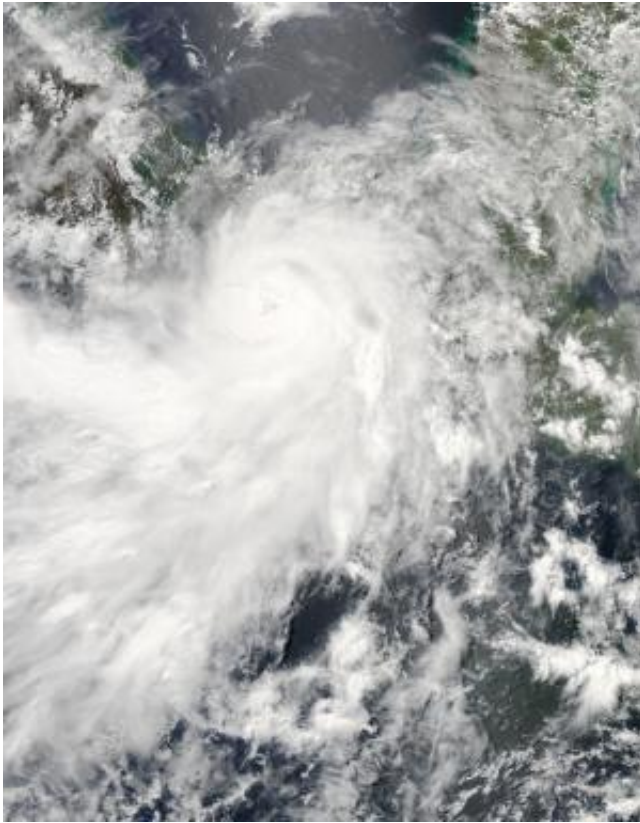


NASA sees Hurricane Barbara quickly weaken to a depression

May 30 2013



The MODIS instrument aboard NASA's Aqua satellite captured this visible image of Hurricane Barbara as it was making landfall in southwestern Mexico. The image was taken at 19:30 UTC (3:30 p.m. EDT). Credit: NASA Goddard MODIS Rapid Response Team

Tropical Storm Barbara strengthened into a hurricane just before it made landfall late on May 29, and after landfall it weakened into a tropical

depression. NASA satellite imagery showed that cloud tops warmed and thunderstorms became more fragmented around the storm's center after Barbara made landfall.

Barbara is moving across the Isthmus of Tehuantepec today, May 30. Barbara could regenerate over the Bay of Campeche, on the [Gulf of Mexico](#) side of Mexico, and [satellite imagery](#) is watching Barbara closely. The Bay of Campeche is surrounded on three sides by the Mexican states of Campeche, Veracruz and Tabasco and is part of the Gulf of Mexico.

At 2 p.m. EDT on May 29, Barbara became a hurricane with maximum sustained winds near 75 mph. Just three hours later Barbara was already moving over land. It brought heavy rainfall to eastern Oaxaca and Western Chiapas, Mexico.

The [MODIS instrument](#) aboard NASA's Aqua satellite captured a [visible image](#) of Hurricane Barbara as it was making landfall in southwestern Mexico. The image was taken at 19:30 UTC (3:30 p.m. EDT). The image showed a large "tail" of thunderstorms that extended into the [eastern Pacific Ocean](#).

By 8 p.m. EDT Barbara weakened back to tropical storm status as maximum sustained winds dropped to 60 mph. At 11 p.m. EDT, Barbara, still a tropical storm, although weaker was dropping a lot of rain. It was located near 17.1 north and 93.8 west, about 50 miles (85 km) west-northwest of Tuxtla Gutierrez, Mexico.

The Atmospheric Infrared Sounder (AIRS) instrument that flies aboard NASA's Aqua satellite captured [infrared images](#) of Barbara's cloud top temperatures on May 29 and May 30. The images showed that the interaction with landfall had a large toll on the organization and uplift of air within the storm. In an image from May 29 at 19:23 UTC (3:23 p.m.

EDT) Barbara contained a large area of powerful thunderstorms, where cloud top temperatures were as cold as -63F (-52C). Those storms had the potential for heavy rainfall. After Barbara made landfall, AIRS captured another infrared image that showed how the friction of Barbara's land interaction drastically reduced the uplift and thunderstorm development as cloud top temperatures warmed. The AIRS image, taken on May 30 at 07:35 UTC (3:35 a.m. EDT) showed fragmented strong thunderstorms around the center of circulation, with the largest area over the Gulf of Campeche.

By 5 a.m. EDT on May 30, Barbara weakened to a [tropical depression](#) with [maximum sustained winds](#) near 35 mph (55 kph). It was centered near 17.8 north and 93.9 west, about 40 miles (60 km) southeast of Coatzacoalcos, Mexico. Barbara is moving to the north at 8 mph (13 kph) and has a minimum central pressure of 1000 millibars. At that time, there were no warnings or watches in effect.

Barbara continues to be a big rainmaker over land. The National Hurricane Center (NHC) expects Barbara to produce total rain accumulations of 6 to 10 inches with isolated maximum amounts of 20 inches possible over portions of southeastern Mexico. The NHC reports that Arriaga, located in the State of Chiapas recorded a rainfall total of 16.02 inches (407 mm) in 18 hours from 11 a.m. EDT on May 29 to 5 a.m. EDT, May 30.

The Independent.ie reported that two people were killed as a result of the storm. A 26 year old Mexican resident was killed in an attempt to cross a rain swelled river and a 61-year-old U.S. man who was surfing at a Salina Cruz beach drowned during the storm.

The National Hurricane Center expects Barbara to keep dropping large amounts of rain over portions of southeastern Mexico today, May 30 as it heads for the Bay of Campeche. Barbara is expected to drop between

6 and 10 inches of rainfall with isolated maximum amounts up to 20 inches today, so inland flooding and mudslides are possible.

Provided by NASA's Goddard Space Flight Center

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