

NASA's Aqua and Terra satellites view Tropical Storms Blas and Celia

June 21 2010



On June 19 at 17:30 UTC (1:30 p.m. EDT) the MODIS instrument on NASA's Terra satellite captured this visible image of Tropical Storm Blas (left) and the newly developed Tropical Storm Celia (right). Credit: NASA Goddard/MODIS Rapid Response Team

Tropical cyclones Blas and Celia are both spinning in the Eastern Pacific Ocean, and two NASA satellites captured them in visible and infrared imagery.

On June 19 at 17:30 UTC (1:30 p.m. EDT) the Moderate Resolution Imaging Spectroradiometer (MODIS) instrument on NASA's Terra satellite captured a visible image of Blas when it was still a <u>tropical</u> <u>storm</u> and the newly developed Tropical Storm Celia. Celia formed on June 19 and by 1500 UTC (11 a.m. EDT) had strengthened into a



tropical storm. The storm was "born" about 355 miles south-southeast of Acapulco, Mexico, near 12.5 North and 97.1 West.

The following day, June 20 at 08:47 UTC (4:47 a.m. EDT), the Atmospheric Infrared Sounder (AIRS) instrument on NASA's Aqua satellite captured an <u>infrared image</u> of both Tropical Storm Blas and Celia. The infrared image measured the temperature of each cyclone's clouds, and the warm ocean waters that surround them.

The AIRS infrared image revealed that the convection in Blas was waning and the areas of strong convection (rapidly rising air that condenses and forms the thunderstorms that make up a tropical cyclone) were less than they were the day before.

Convection in Celia had increased and AIRS imagery revealed a larger area of strong convection than on June 19. The imagery showed very cold thunderstorm cloud tops (as cold as or colder than -63 degrees Fahrenheit). That increased area of high, cold thunderstorm cloud tops indicated that Celia was strengthening.



On June 20 at 08:47 UTC (4:47 a.m. EDT), the AIRS instrument on NASA's Aqua satellite captured this infrared image of both Tropical Storm Blas (left) and Celia (right). The purple area represents more powerful convection and thunderstorms. Blas has less and Celia has more, which indicates Blas'



weakening and Celia strengthening. Credit: NASA JPL, Ed Olsen

By the morning of June 21 (EDT), Blas had weakened further and is now a <u>tropical depression</u> with maximum sustained winds near 35 mph. Blas is located about 575 miles southwest of Cabo San Lucas, Mexico, near 18.0 North and 117.1 West. Blas continues to move west around 12 mph (11 knots) further into open waters. Blas is forecast to dissipate sometime on June 22.

Meanwhile, Celia has continued to strengthen and is now a hurricane with <u>maximum sustained winds</u> near 80 mph (70 knots). Tropical-storm force winds extend out to 70 miles from the center, making the storm about 140 miles in diameter. Hurricane-force winds only extend out to 15 miles from Celia's center. Celia is located about 380 miles southsouthwest of Acapulco, Mexico near 11.8 North and 102.1 West. She's moving west at 9 mph (8 knots). Celia is no threat to land and will continue to move west, then west-northwest, farther away from land.

Provided by NASA's Goddard Space Flight Center

Citation: NASA's Aqua and Terra satellites view Tropical Storms Blas and Celia (2010, June 21) retrieved 12 May 2024 from <u>https://phys.org/news/2010-06-nasa-aqua-terra-satellites-view.html</u>

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.