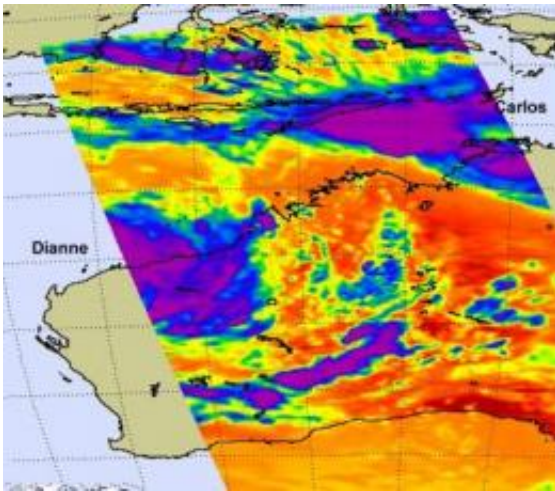


NASA sees tropical cyclone double-trouble for Australia

February 16 2011



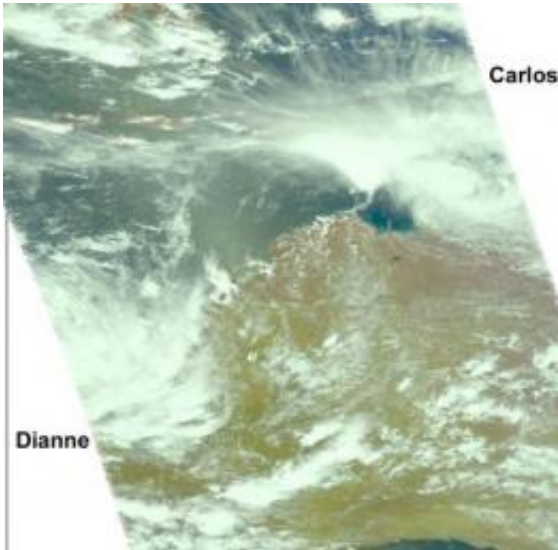
NASA's Aqua satellite passed over Australia on Feb. 16 at 05:17 UTC (12:17 a.m. EST/ 2:47 p.m. Australia/Darwin local time). The Atmospheric Infrared Sounder (AIRS) instrument on Aqua captured an infrared image of Tropical Storm Dianne (left) and Tropical Storm Carlos (right) and found each to have strong convection (purple) with cloudtop temperatures as cold as -52C. Credit: NASA JPL, Ed Olsen

NASA's Aqua satellite captured an infrared image today of tropical cyclones affecting Australia in the western and northern areas of the country. Newly formed Tropical Storm Carlos is bringing heavy rains and gusty winds to Darwin and the Northern Territory, while Tropical Storm Dianne is bringing rains and winds to Western Australia.

NASA's Aqua satellite passed over Australia today, Feb. 16 at 05:17 UTC (12:17 a.m. EST/ 2:47 p.m. Australia/Darwin local time. The Atmospheric Infrared Sounder (AIRS) instrument captured an infrared image of both tropical storms and found each to have strong convection (rapidly rising air that forms the thunderstorms that power a tropical cyclone). Convection was so strong in Carlos and Dianne that the [cloud tops](#) of the thunderstorms within were as cold as or colder than -52 Celsius/ -63 Fahrenheit.

At 0900 UTC (4 a.m. EST/6:30 p.m. Australia/Darwin local time) Tropical Storm Carlos, formerly System 99S, had [maximum sustained winds](#) near 35 knots (40 mph/64 kmh) and its center at that time was 15 miles (24 km) south of Darwin, Australia, near 12.7 South and 130.9 East. Eight hours later, by 12 p.m. EST (2:30 a.m. Feb. 17 Australia/Darwin local time), Carlos' center had moved southeast and was inland near Middle Point. Carlos was moving toward the southeast but is expected to turn to the southwest.

Carlos was bringing bands of rainfall to Cape Don, Snake Bay, Cape Fouroroy, and inland over an area that includes Annaburroo, Emerald Springs and Batchelor. For radar from the Australian Bureau of Meteorology, go to: >
<http://www.bom.gov.au/products/IDR632.loop.shtml>.



Tropical Storm Dianne (left) is bringing rainfall to Western Australia today and Tropical Storm Carlos (right) is bringing rains and gusty winds to Australia's Northern Territory today. Credit: NASA JPL, Ed Olsen

A Cyclone Warning for Carlos is in effect for coastal areas from Daly River Mouth to Goulburn Island, including Darwin, Croker Island and the Tiwi Islands. A Cyclone Watch continues for coastal areas from Port Keats to Daly River Mouth. The Joint Typhoon Warning Center and Australian Bureau of Meteorology expect Carlos to eventually track southwest over land for the next several days.

Near Western Australia, System 97S intensified into Tropical Storm Dianne overnight. On Feb. 16 at 1500 UTC (10 a.m. EST/12:30 a.m. Feb. 17, Australia/Darwin local time), [Tropical Storm](#) Dianne had maximum sustained winds near 40 knots (46 mph / 74 kmh). It was still over open waters in the Southern Indian Ocean, near 18.9 South latitude and 111.3 East longitude, about 250 nautical miles (287 miles/463 km) northwest of Learmonth, Australia.

A Cyclone Watch is currently in effect for coastal areas of Western

Australia from Exmouth to Cape Cuvier. During the morning hours (Eastern Time/U.S.) bands of showers were pushing southeast from Dianne from Pardoo (in the east) through Port Hedland southwest to Exmouth. It is currently drifting to the northeast but is expected to loop and move south then southwest after the next day or two.

The Joint Typhoon Warning Center expects Dianne to continue strengthening under an environment of warm sea surface temperatures and low wind shear for the next three days before running into adverse conditions. During that time, however, it is forecast to reach hurricane force and bring gusty winds and heavy rainfall to Learmonth as its center passes to the west.

Provided by NASA's Goddard Space Flight Center

Citation: NASA sees tropical cyclone double-trouble for Australia (2011, February 16) retrieved 26 April 2024 from

<https://phys.org/news/2011-02-nasa-tropical-cyclone-double-trouble-australia.html>

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.