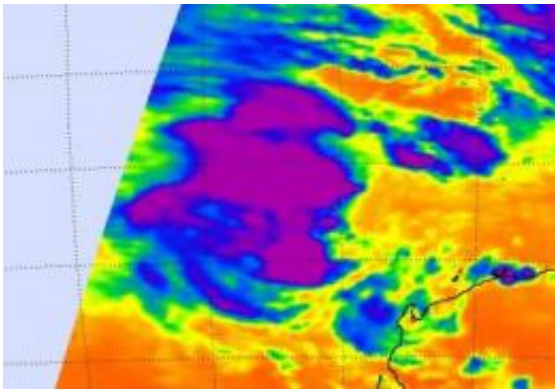


NASA infrared satellite data gives System 96S a fair shot at becoming a tropical cyclone

February 10 2011



A NASA AIRS instrument infrared image captured on Feb. 9 at 17:47 UTC (12:47 p.m. EST) showed some strong convection and strong thunderstorms (purple) with very cold cloud-top temperatures, around the center of System 96S. Credit: NASA/JPL, Ed Olsen

A low pressure area located a couple of hundred miles northwest of Western Australia appears in a better position for development into a tropical cyclone according to infrared NASA satellite imagery. Infrared imagery from NASA's Aqua satellite shows some strong convection in the low, named System 96S.

When Aqua passed over System 96S on Feb. 9 at 17:47 UTC (12:47 p.m. EST), the Atmospheric Infrared Sounder (AIRS) instrument showed some strong convection and strong thunderstorms with very cold cloud-top temperatures around the center of circulation. Those cloud top

temperatures were as cold as or colder than -63 Fahrenheit/-52 Celsius indicating strong convection, strong thunderstorms, and heavy rainfall. The imagery suggests that the convection is consolidating and increasing around the low's center.

Convection is limited on the eastern half of System 96S because of moderate vertical wind shear (winds that can weaken a storm) blowing near 30 knots (34 mph/55 kmh)! That wind shear, however, is expected to weaken and enable the low to strengthen. Another factor that will help System 96S strengthen is the warm [sea surface temperatures](#) that it's located in. Sea surface temperatures are estimated near 30 degrees Celsius (86 Fahrenheit). Tropical Cyclones need sea surface temperatures of at least 26.6 Celsius (80 Fahrenheit) to maintain strength or intensify.

At 2300 UTC on Feb. 9, (6 p.m. EST) System 96S had maximum sustained surface winds near 20 to 25 knots (23 mph/ 37 kmh to 29 mph/46 kmh). It was located about 260 miles (418 km) northwest of Barrow Island, Australia near 17.7 South and 112.2 East. Residents of Western Australia are keeping a close eye on this system for development.

Provided by NASA's Goddard Space Flight Center

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