

NASA sees Tropical Cyclone Stan threaten Australia's Pilbara Coast

January 29 2016, by Rob Gutro



RapidScat from 2016-01-28 21:44Z to 2016-01-28 23:17Z

On Jan. 28 at 6 p.m. EST, RapidScat saw Tropical Cyclone Stan's strongest winds (red) west of the center at 30 meters per second (67.1 mph/ 108 kph). Credit: NASA JPL, Doug Tyler



NASA satellites provided data as the tropical low pressure area known as System 92S has consolidated and intensified into Tropical Cyclone Stan, north of the Pilbara area of Western Australia. NASA provided forecasters cloud extent, winds and rainfall data.

On Jan. 28 at 6 p.m. EST, the International Space Station's RapidScat instrument measured the surface winds around developing Tropical Cyclone Stan in the Southern Indian Ocean. Rapidscat showed that Stan's strongest winds were occurring west of the center at 30 meters per second (67.1 mph/108 kph).

The Visible Infrared Imaging Radiometer Suite (VIIRS) instrument aboard NASA-NOAA's Suomi NPP satellite captured a visible light image of Tropical Cyclone Stan as it was approaching northwestern Australia's Pilbara Coast on 6:15 UTC (1:15 a.m. EST) on Jan. 29. The VIIRS image showed a thick band of strong thunderstorms wrapping into the low-level center from the western quadrant. It's the same quadrant where RapidScat showed the strongest winds were occurring.

At 1500 UTC (10 a.m. EST) Tropical cyclone Stan's maximum sustained winds were near 45 knots (51.7 mph/83.3 kph). It was centered near 18.2 degrees south latitude and 118.0 degrees east longitude. That puts Stan's center about 131 nautical miles north-northwest of Port Hedland, Australia. Stan is moving to the south-southeast at 4 knots (4.6 mph/7.4 kph).





NASA-NOAA's Suomi NPP satellite provided this visible look at Tropical



Cyclone Stan at 6:15 UTC (1:15 a.m. EST) on Jan. 29 approaching northwestern Australia's Pilbara Coast. Credit: NASA/NOAA/Jeff Schmaltz

The Australian Bureau of Meteorology (ABM) has posted a warning and a yellow and blue and alert. A tropical cyclone warning is in force from Bidyadanga to Mardie, Western Australia, extending inland to Marble Bar, Nullagine and Pannawonnica.

A Yellow Alert is in effect for Pardoo and Mardie including Port Hedland, South Hedland, Marble Bar, Wickham, Point Samson, Roebourne, Karratha, Whim Creek and Dampier. A Blue Alert is in effect between Bidyadanga to Pardoo including Sandfire and Pardoo and between Mardie and Pannawonica.

ABM's bulletin at 1302 UTC (8:02 a.m. EST) said "The system will track steadily towards the south southeast and make landfall along the Pilbara coast during Saturday afternoon or evening. Recent guidance has shifted the track slightly to the east and a little slower, aiding in further development of the system. Steering is being influenced by a mid-level ridge (elongated area of high pressure) to the east and an approaching upper level trough (elongated area of low pressure).

With favorable conditions until landfall, Stan should intensify to category 3 [severe tropical cyclone] prior to crossing the coast. Even after the system weakens over land, there is the potential for severe winds on the eastern side of the track well into the interior of Western Australia."

Provided by NASA's Goddard Space Flight Center



Citation: NASA sees Tropical Cyclone Stan threaten Australia's Pilbara Coast (2016, January 29) retrieved 7 August 2024 from https://phys.org/news/2016-01-nasa-tropical-cyclone-stan-threaten.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.