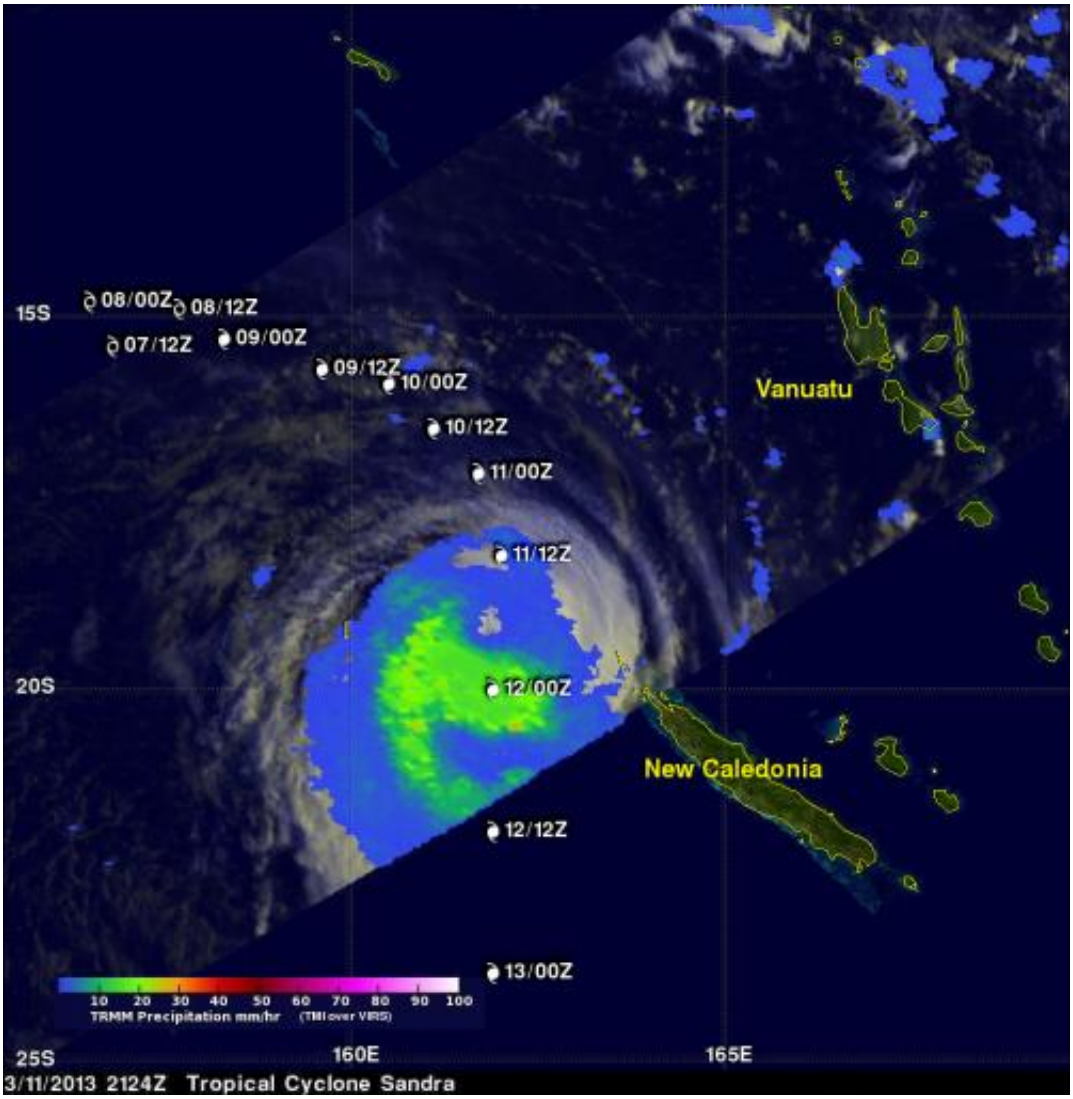
NASA sees large decrease in Cyclone Sandra's rainfall intensity

March 13 2013

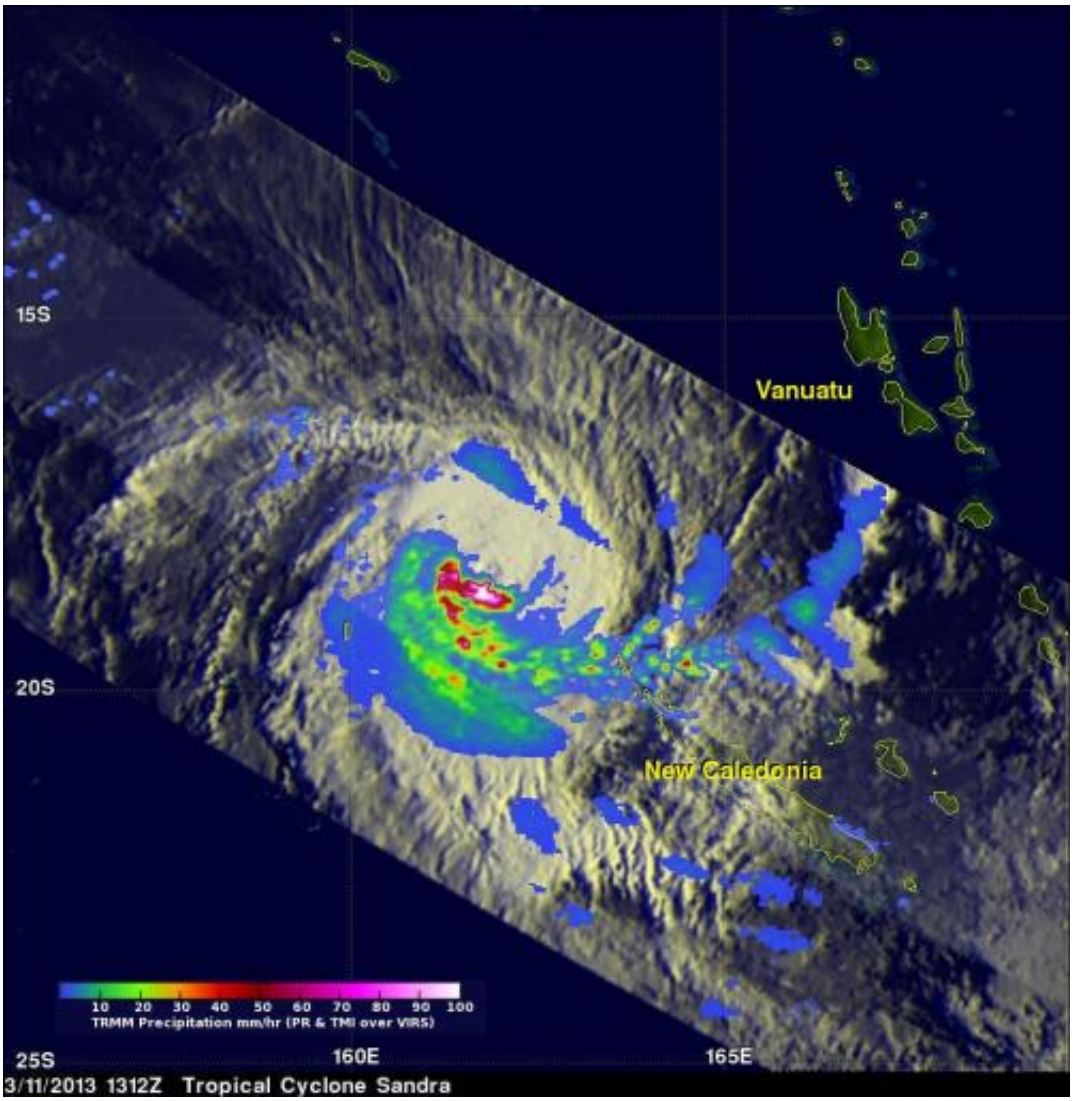


TRMM's Microwave Imager (TMI) data showed Sandra's rainfall on March 11, 2013 at 2124 UTC. Moderate rainfall appears in green. Sandra's previous and forecast locations are shown overlaid in white on this rainfall analysis. Credit:

NASA/SSAI, Hal Pierce

NASA's Tropical Rainfall Measuring Mission satellite, also known as TRMM, flew over Cyclone Sandra twice in one day and noticed a large decrease in rainfall intensity over a nine hour period.

On March 11, 2013, NASA's TRMM satellite twice flew above weakening tropical cyclone Sandra as it was passing to the west of New Caledonia in the southern Pacific Ocean. TRMM's Precipitation Radar (PR) had a very good view of Sandra as it passed directly above the tropical cyclone on March 11 at 1312 UTC (9:12 a.m. EST). TRMM PR measured rainfall at the extreme rate of over 206 mm (~8 inches) per hour in an area southwest of Sandra's eye. Those TRMM PR data also showed that very little rain was occurring north of the weakening tropical cyclone's eye.



TRMM's Precipitation Radar (PR) had a very good view of Sandra as it passed directly above the tropical cyclone on March 11, 2013 at 1312 UTC. Heavy rainfall (red and pink) was falling south of the center. Credit: Credit: NASA/SSAI, Hal Pierce

New Caledonia escaped the heaviest precipitation as the center of Sandra remained off-shore.

Later on that day at 2124 UTC (4:24 p.m. EDT), TRMM's Microwave Imager (TMI) data identified diminished rainfall rates. The heaviest

rains occurring south of Sandra's center at that time was falling at a rate of 30 mm (1.18 in) per hour. Wind shear continues to increase from the north and push the precipitation south of Sandra's center. Sandra's center has since become fully exposed to outside winds as the intensity of rainfall has diminished.

On Mar. 13 at 0300 UTC, Sandra's maximum sustained winds were near 55 knots (63.2 mph/101.9 kph). Sandra was located near 24.1 south and 161.5 east, about 270 nautical miles (310.7 miles/500 km) west-southwest of Noumea, New Caledonia. Sandra was moving to the south-southwest at 8 knots (9.2 mph/14.8 kph).

Sandra is moving into an area of high vertical wind shear and colder sea surface temperatures that are expected to make the storm transform into a cold-core system before it dissipates over the next couple of days.

Provided by NASA's Goddard Space Flight Center