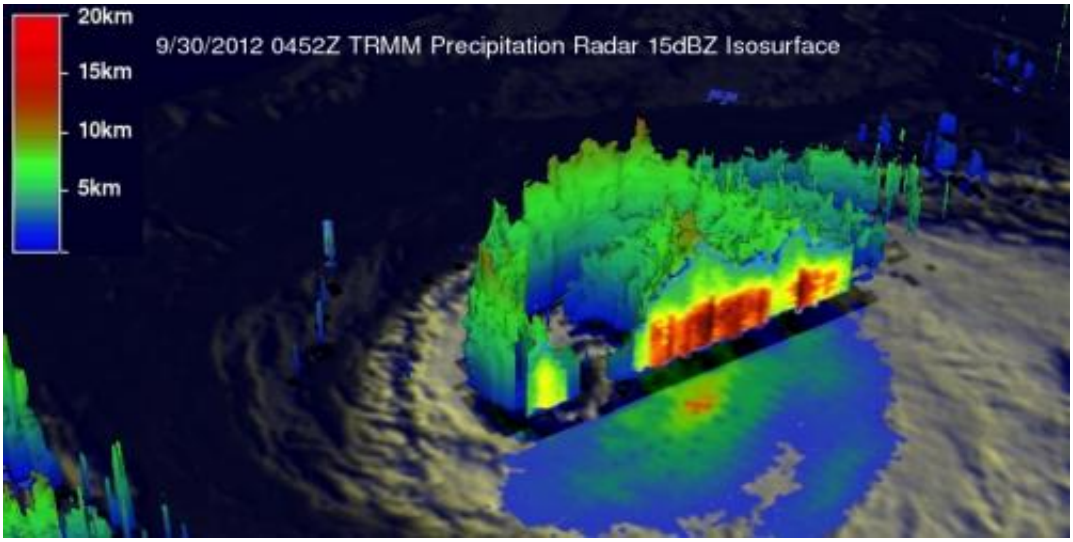
NASA sees Nadine weaken to a tropical storm again

October 1 2012



TRMM satellite data from Sept. 30 were used to make this 3-D view of Nadine from the northeast. Convective thunderstorms appear in the northwestern part of the hurricane were reaching to heights of about 12km (~7.5 miles). Credit: SSAI/Hal Pierce

NASA satellites continue to watch the long-lived Nadine in the eastern Atlantic. Today, Oct. 1, NASA satellite data revealed that Nadine has weakened from a hurricane and is now a tropical storm.

Over the weekend of Sept. 29 and 30, Hurricane Nadine dramatically rebounded. On September 19, 2012 Nadine appeared to be dissipating quickly and was expected to become post-tropical but after over a week

of meandering near the Azores, Nadine sprang to life again as a hurricane on Friday September 28, 2012.

NASA's Tropical Rainfall Measuring Mission (TRMM) satellite's path took it almost directly above hurricane Nadine on Sept. 30 at 0452 UTC (12:52 a.m. EDT) when it was still a hurricane.

At NASA's Goddard Space Flight Center in Greenbelt, Md. an enhanced infrared image from TRMM's Visible and InfraRed Scanner (VIRS) was overlaid with a rainfall analysis derived from TRMM's TRMM Microwave Imager (TMI) and Precipitation Radar (PR). The final image revealed that Nadine had a well-defined but ragged eye with the heaviest rainfall of about 50mm/hour (~2 inches) located on the western side of the hurricane.

TRMM PR data were used to also create a 3-D view from the northeast that showed convective thunderstorms in the northwestern part of the hurricane were reaching to heights of about 12km (~7.5 miles).

On Oct. 1 at 11 a.m. EDT, the center of Tropical Storm Nadine was 690 miles (1,110 km) west of the Azores near latitude 35.8 north and longitude 39.2 west. Maximum sustained winds have decreased to near 70 mph (110 kph). Nadine is moving toward the south-southeast near 5 mph (7 kph) and expected to do a counter-clockwise loop over the next day, turning southeast and east.

A Tropical Storm Watch is again in effect for the Azores.

Satellite data reveals that the strongest thunderstorms within Nadine are in the northern and eastern quadrants. Wind shear is increasing and sea surface temperatures are below the 80 degree Fahrenheit (26.6 Celsius) threshold needed to keep a tropical storm going, so weakening is expected.

Infrared imagery from NASA's Atmospheric Infrared Sounder (AIRS) instrument aboard the Aqua satellite show that sea surface temperatures near Nadine are around 23 Celsius (73.4 Fahrenheit), too cold to maintain a tropical storm.

According to the National Hurricane Center, tropical storm conditions are possible in the Azores by late Wednesday, Oct. 3.

Provided by NASA's Goddard Space Flight Center