

NASA observed the once-hurricane Aletta intensify, now weakening quickly

June 11 2018, by Rob Gutro

When Tropical Storm Aletta intensified and became a hurricane in the eastern Pacific Ocean the Global Precipitation Measurement mission or GPM core satellite passed overhead to analyze the major hurricane's rainfall rates. Over the weekend of June 9 and 10, however, Aletta ran into adverse conditions and weakened quickly.

Aletta was a powerful hurricane with winds of about 85 knots (98 mph) when the GPM core observatory satellite passed over head on June 7, 2018 at 8:38 p.m. EDT (June 8, 2018 at 0038 UTC). GPM's Microwave Imager (GMI) and Dual Frequency Precipitation Radar (DPR) instruments showed that hurricane Aletta contained powerful storms that were producing heavy precipitation. Very strong convective storms were producing heavy rainfall in Aletta's eye wall while the most extreme downpours were shown in a large feeder band wrapping around the eastern side of the hurricane. GPM's radar (DPR Ku Band) data indicated that precipitation in that area was coming down at a rate of over 142 mm (5.6 inches) per hour.

The western edge of the satellite's radar (DPR Ku Band) swath measured the intensity and heights of storms in the eastern side of <u>hurricane</u> Aletta's eye wall. At NASA's Goddard Space Flight Center in Greenbelt, Maryland, a 3-D cross-section view was created looking toward the southwest. That 3-D image showed a few of those tall convective towers were reaching heights above 15 km (9.3 miles). The heat released by condensation within these tall thunderstorms provided fuel for Aletta's intensification.



By Monday, June 11, 2018 at 5 a.m. EDT (0900 UTC), Aletta had weakened to a tropical <u>storm</u>. The center of Tropical Storm Aletta was located near latitude 17.0 degrees north and longitude 116.7 degrees west. That puts the center far from land, about 600 miles (965 km) southwest of the southern tip of Baja California.

The National Hurricane Center (NHC) said that Aletta is moving toward the west-northwest near 6 mph (9 kph) and a westward motion is expected to begin today, followed by turn toward the west-southwest and a reduction in forward speed on Tuesday. Aletta is forecast to become nearly stationary by mid-week.

Maximum sustained winds have decreased to near 40 mph (65 kph) with higher gusts. Weakening is expected over the next several days and Aletta is forecast to become a remnant low later today or tonight.

Provided by NASA's Goddard Space Flight Center

Citation: NASA observed the once-hurricane Aletta intensify, now weakening quickly (2018, June 11) retrieved 10 May 2024 from <u>https://phys.org/news/2018-06-nasa-once-hurricane-aletta-weakening-quickly.html</u>

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