NASA finds weakening rainfall in Bud

June 13 2018, by Rob Gutro

NASA examined the rainfall rates occurring in former Hurricane Bud as it continued moving north in the Eastern Pacific Ocean, paralleling the western coast of Mexico. On June 13, Bud weakened to a tropical storm and warnings have been posted from the Mexican government.On June 12, 2018 at 7:27 p.m. EDT (2327 UTC), the Global Precipitation Measurement mission or GPM core observatory satellite passed above hurricane Bud in the eastern Pacific Ocean. Bud's movement over colder waters had caused its eye to become less defined as the storm weakened.

Data collected by GPM's Microwave Imager (GMI) showed that moderate to heavy precipitation was only present in the southeastern quadrant of the weakening hurricane. GPM's GMI also indicated that the heaviest rainfall in the area, of over 78 mm (3.1 inches) per hour, was occurring near the Mexico's coastline well to the northeast of Bud's center of circulation. GPM's Microwave Imager (GMI) and Dual Frequency Precipitation Radar (DPR) data were used in this image to show location and intensity of rainfall with hurricane Bud. GPM's radar swath only covered the nearly rain free area west of Bud's center of circulation. GPM is a joint mission between NASA and the Japan Aerospace Exploration Agency, JAXA.

On June 13, the government of Mexico has issued a Tropical Storm Warning for southern Baja California Sur from Santa Fe to La Paz, including Cabo San Lucas.

At 11 a.m. EDT (1500 UTC), the center of Tropical Storm Bud was located near latitude 19.4 degrees north and longitude 108.8 degrees

west. That's about 250 miles (405 km) south-southeast of Cabo San Lucas, Mexico. The National Hurricane Center (NHC) said "Bud is moving toward the north-northwest near 3 mph (6 kph) and this general motion is expected to continue today. Bud is forecast to accelerate northward on Thursday and continue that motion into Friday. On the forecast track, the center of Bud will cross southern Baja California Sur late Thursday and move over the Gulf of California later on Friday.

Maximum sustained winds have decreased to near 65 mph (100 kph) with higher gusts. Although additional weakening is expected during the next day or so, Bud is forecast to still be a tropical storm when it reaches southern Baja California Sur late Thursday, June 14."

The rainfall observed by GPM is expected to affect the warning area. NHC said "Bud is expected to produce additional rainfall of 1 to 2 inches across much of southwestern Mexico through Thursday, with isolated maximum amounts of 4 inches. These rains could cause life-threatening flash floods and mud slides. Bud is also expected to produce 1 to 3 inches of rain with isolated totals of 5 inches across southern portions of Baja California Sur and Sonora in northwestern Mexico through Saturday."

Moisture from Tropical Storm Bud is predicted to spread over the Desert Southwest over the weekend with possible heavy rainfall and flash floods in that area.

More information: For updated forecasts on Bud, visit: http://www.nhc.noaa.gov

Provided by NASA's Goddard Space Flight Center