GPM examines Tropical Storm Lester

August 26 2016, by Hal Pierce

The Global Precipitation Measurement mission or GPM core satellite analyzed Tropical Storm Lester after it became the 12th named storm of the 2016 eastern Pacific Ocean on Aug. 25.

GPM, a joint mission between NASA and the Japan Aerospace Exploration Agency, analyzed Lester's rainfall rates and cloud heights.

Lester was far away from the Mexican coast and headed toward the west-northwest. Low vertical wind shear and warm sea surface temperatures are expected to assist in Lester's intensification to hurricane status today, Aug. 26.

Tropical storm Lester had wind speeds of about 35 knots (40 mph) when the GPM core observatory satellite passed over on August 25, 2016 at 6:26 a.m. EDT (1026 UTC). Data from GPM satellite's Microwave Imager (GMI) and Dual-Frequency Precipitation Radar (DPR) instruments showed that Lester was getting organized. Moderate intensity bands of rain were revealed curving around the eastern side of the tropical storm. DPR found that rain was falling at a rate of over 54 mm (2.1 inches) per hour in these rain bands.

A 3-D examination of precipitation was performed on tropical storm Lester using DPR (Ku Band) radar data captured with this pass. This examination found that cloud top heights were reaching about 12km (7.4 miles) in the tallest storms.

Lester is currently located about 510 miles southwest of the southern tip

of Baja, California and is moving west at 7 miles per hour. The maximum sustained winds within the storm are 60 mph which is still below hurricane strength, however higher gusts have been reported. Some strengthening is forecast during the next 48 hours, and Lester could become a hurricane tonight or on Saturday. Tropical-storm-force winds extend outward up to 80 miles (130 km) from the center.

Provided by NASA's Goddard Space Flight Center