

GPM sees powerful storms within Tropical Storm Ida

September 21 2015, by Hal Pierce

The Global Precipitation Measurement or GPM mission satellite looked at Tropical Storm Ida in the Central Atlantic and identified the areas of heaviest rainfall.

The GPM core observatory [satellite](#) found that tropical Storm IDA contained some very powerful convective thunderstorms when the satellite passed over on September 21, 2015 at 0902 UTC (05:02 a.m. EDT). The satellite passed directly above the most powerful storms within Ida where rain was measured by GPM's Microwave Imager (GMI) and Dual-Frequency Precipitation Radar (DPR) instruments. DPR found that some thunderstorms were dropping rain at a rate of over 142 mm (5.6 inches) per hour.

GPM's DPR (Ku Band) radar data were used examine the 3-D structure of precipitation within [tropical storm](#) IDA. Some powerful convective storms within Ida were found to reach extremely high altitudes well above 17 km (10.5 miles). These very tall thunderstorms in the middle of a tropical cyclone are often a sign of intensification.

At a.m. EDT (1500 UTC) on Sept. 21, the center of Tropical Storm Ida was located near latitude 20.6 North, longitude 48.0 West. That's about 995 miles (1,605 km east-northeast of the Northern Leeward Islands. Ida was moving toward the north-northwest near 7 mph (11 kph). A north-northwest motion with a decrease in forward speed is expected today. A slow meandering motion is forecast to occur on Tuesday and Tuesday night.

Maximum sustained winds are near 50 mph (85 kph) with higher gusts. The National Hurricane Center noted that some strengthening is possible during the next 24 hours, then little change in strength is expected on Tuesday and Tuesday night. The estimated minimum central pressure is 1003 millibars.

Ida formed on September 18 at 1500 UTC (11 a.m. EDT) as a [tropical depression](#) about 870 miles (1,405 km) west-southwest of the Cape Verde Islands. It was the tenth tropical depression of the Atlantic Ocean [hurricane](#) season. By 11 p.m. that night, the depression became Tropical Storm Ida.

The National Hurricane Center predicts that Ida will become even more powerful and may become a hurricane within the next couple days.

Provided by NASA's Goddard Space Flight Center

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