NASA-NOAA satellite nighttime imagery tracks Tropical Depression Laura over US
28 August 2020

This animation of nighttime imagery from NASA-NOAA’s Suomi NPP satellite shows track of Hurricane Laura from the landfall northeast over Louisiana to the Mississippi Valley from Aug. 23 to 28, 2020 (0000 UTC). Credit: NASA Worldview, Earth Observing System Data and Information System (EOSDIS)

A new animation of nighttime imagery from NASA-NOAA’s Suomi NPP satellite followed the path of former Hurricane Laura from its landfall in southwestern Louisiana to its movement over the Mississippi Valley.

As Laura tracks across the eastern U.S., it is generating heavy rain and has triggered watches.

On Aug. 28, Flash Flood Watches were posted for portions of northeast Arkansas, southeast Missouri, western Kentucky and Tennessee, northern of Mississippi, and northwest Alabama.

NASA’s Night-Time Imagery Tracks Laura

The Visible Infrared Imaging Radiometer Suite (VIIRS) instrument aboard Suomi NPP provided days of infrared nighttime imagery of the now former hurricane Laura. Using the Worldview Application at NASA’s Goddard Space Flight Center, Greenbelt, Md. an animation was created of nighttime imagery from Aug. 23 to 28, 2020 (0000 UTC) that showed the track of Hurricane Laura from the landfall and movement from southwestern Louisiana to the Mississippi Valley.

Tropical Depression Laura’s Status on Aug. 28

At 11 a.m. EDT (1500 UTC) on Aug. 28, NOAA’s Weather Prediction Center (WPC) noted the center of Tropical Depression Laura was located near latitude 36.6 north, longitude 90.5 west. That puts the center about 85 miles (140 km) northwest of Memphis, Tenn. and about 105 miles (170 km) west-southwest of Paducah, Kentucky. The depression was moving toward the east-northeast near 20 mph (31 km/h) and this motion is expected to continue as Laura tracks along and south of the Ohio Valley through tonight. Maximum sustained winds were near 30 mph (45 kph) with higher gusts. The estimated minimum central pressure is 1001 millibars.

NASA-NOAA’s Suomi NPP satellite captured a nighttime
image of Tropical Depression Laura during the early morning hours of Aug. 28, 2020 as its center exited Arkansas and was moving in an easterly direction over the US toward the Atlantic Ocean. What appears to be blurred lighting is a result of the clouds associated with Laura over an area in the imagery. Credit: NASA Worldview, Earth Observing System Data and Information System (EOSDIS)

Hazards Laura Brings Along its Path

NOAA's WPC provided a look at the hazards that Tropical Depression Laura is expected to bring along its path toward the Atlantic Ocean over the next 2 days: "Expect 1 to 3 inches, with isolated 5-inch totals from western and central Kentucky and Tennessee into northern Alabama and Mississippi. One to 2 inches, with isolated 4-inch totals are possible over southern parts of Louisiana, Mississippi, and Alabama. By Saturday, 1 to 3 inches of rain is forecast from the central and southern Appalachians to the Mid-Atlantic States. This rainfall will continue to contribute to isolated flash and urban flooding, and overflow of small streams and creeks across the aforementioned regions. Minor to moderate river flooding is occurring or forecast in Louisiana and Arkansas.

Gusty winds of 25-30 mph will accompany Laura's circulation as it moves toward the Lower Ohio Valley through the afternoon. Stronger gusts are possible within thunderstorms.

A few tornadoes remain possible, mainly over parts of Mississippi, Tennessee and southern Kentucky. The risk for a couple of tornadoes should redevelop Saturday afternoon and evening over parts of the mid-Atlantic from Virginia to North Carolina."

Forecast for Laura

Eventually, the remains of Laura will cross the central Appalachians Saturday, before becoming absorbed by an approaching cold front that is forecast to move off the mid-Atlantic coastline by late Saturday.

Provided by NASA's Goddard Space Flight Center