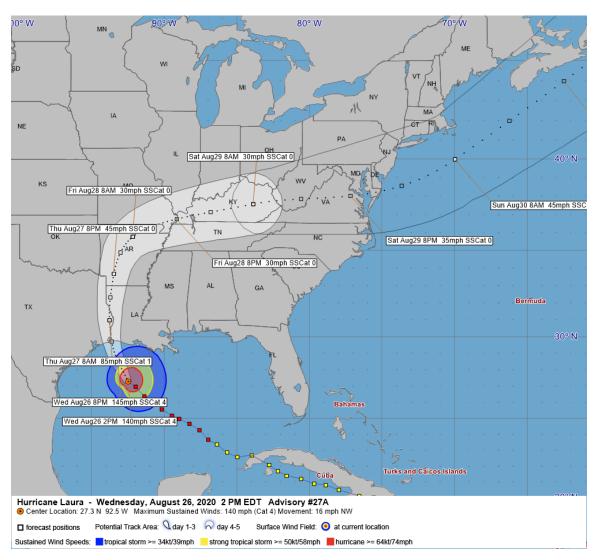
Storm Summary for Hurricane Laura

Wednesday, August 26, 2020 at 2 PM EDT

(Output from Hurrevac, based on National Hurricane Center Forecast Advisory #27A)

Laura is currently a Category 4 major hurricane on the Saffir-Simpson Hurricane Wind Scale, with maximum sustained winds of 140 mph (120 kts), moving northwest at 16 mph. The estimated minimum central pressure is 952 mb. Hurricane-force winds extend outward up to 70 miles (110 km) from the storm center. Tropical storm-force winds extend outward up to 175 miles (280 km) from the storm center.



000 WTNT33 KNHC 261742 TCPAT3

BULLETIN

Hurricane Laura Intermediate Advisory Number 27A NWS National Hurricane Center Miami FL AL132020 100 PM CDT Wed Aug 26 2020

...AIR FORCE HURRICANE HUNTER AIRCRAFT REPORTS LAURA HAS BECOME AN EXTREMELY DANGEROUS CATEGORY 4 HURRICANE...
...CATASTROPHIC STORM SURGE, EXTREME WINDS, AND FLASH FLOODING EXPECTED ALONG THE NORTHWEST GULF COAST TONIGHT...
...LITTLE TIME REMAINS TO PROTECT LIFE AND PROPERTY...

SUMMARY OF 100 PM CDT...1800 UTC...INFORMATION

LOCATION...27.3N 92.5W
ABOUT 200 MI...320 KM SSE OF LAKE CHARLES LOUISIANA
ABOUT 200 MI...320 KM SSE OF PORT ARTHUR TEXAS
MAXIMUM SUSTAINED WINDS...140 MPH...220 KM/H
PRESENT MOVEMENT...NW OR 315 DEGREES AT 16 MPH...26 KM/H
MINIMUM CENTRAL PRESSURE...952 MB...28.11 INCHES

WATCHES AND WARNINGS

CHANGES WITH THIS ADVISORY:

None

SUMMARY OF WATCHES AND WARNINGS IN EFFECT:

A Storm Surge Warning is in effect for...

* Freeport Texas to the Mouth of the Mississippi River

A Hurricane Warning is in effect for...

* San Luis Pass Texas to Intracoastal City Louisiana

A Tropical Storm Warning is in effect for...

- * Sargent Texas to San Luis Pass
- * East of Intracoastal City Louisiana to the Mouth of the Mississippi River

A Storm Surge Watch is in effect for...

- * Mouth of the Mississippi River to Ocean Springs Mississippi
- * Lake Pontchartrain, Lake Maurepas, and Lake Borgne

A Hurricane Watch is in effect for...

* East of Intracoastal City to west of Morgan City Louisiana

A Storm Surge Warning means there is a danger of life-threatening inundation, from rising water moving inland from the coastline in the indicated locations. For a depiction of areas at risk, please see the National Weather Service Storm Surge Watch/Warning Graphic, available at hurricanes.gov. This is a life-threatening situation. Persons located within these areas should take all necessary actions to protect life and property from rising water and the potential for other dangerous conditions. Promptly follow

evacuation and other instructions from local officials.

A Hurricane Warning means that hurricane conditions are expected somewhere within the warning area. Preparations to protect life and property should be rushed to completion.

A Storm Surge Watch means there is a possibility of lifethreatening inundation from rising water moving inland from the coastline in the indicated locations.

A Hurricane Watch means that hurricane conditions are possible within the watch area.

A Tropical Storm Warning means that tropical storm conditions are expected somewhere within the warning area.

For storm information specific to your area, including possible inland watches and warnings, please monitor products issued by your local National Weather Service forecast office.

DISCUSSION AND OUTLOOK

At 100 PM CDT (1800 UTC), the eye of Hurricane Laura was located near latitude 27.3 North, longitude 92.5 West. Laura is moving toward the northwest near 16 mph (26 km/h). A gradual turn toward the north-northwest and north is expected later today and tonight. On the forecast track, Laura will approach the Upper Texas and southwest Louisiana coasts this evening and move inland within that area tonight. The center of Laura is forecast to move over northwestern Louisiana tomorrow, across Arkansas Thursday night, and over the mid-Mississippi Valley on Friday.

Reports from an Air Force Reserve Hurricane Hunter aircraft indicate that maximum sustained winds have increased to near 140 mph (220 km/h) with higher gusts. Laura is an extremely dangerous category 4 hurricane on the Saffir-Simpson Hurricane Wind Scale. Some additional strengthening is possible this afternoon, and Laura is forecast to remain a category 4 hurricane through landfall tonight. Rapid weakening is expected after Laura makes over land.

Hurricane-force winds extend outward up to 70 miles (110 km) from the center and tropical-storm-force winds extend outward up to 175 miles (280 km). Tropical-storm-force winds have reached the coast of Louisiana and an observing site at Eugene Island recently measured sustained winds of 39 mph (63 km/h) and a gust to 64 mph (104 km/h).

The latest minimum central pressure estimated from reconnaissance aircraft data is 952 mb (28.11 inches).

HAZARDS AFFECTING LAND

Key messages for Laura can be found in the Tropical Cyclone Discussion under AWIPS header MIATCDAT3 and WMO header WTNT43 KNHC.

Storm surge and tropical-storm-force winds will arrive within the warning areas well in advance of Laura's center. All preparations to protect life and property should be rushed to completion in the next few hours.

STORM SURGE: The combination of a dangerous storm surge and the tide will cause normally dry areas near the coast to be flooded by rising waters moving inland from the shoreline. The water could reach the following heights above ground somewhere in the indicated areas if the peak surge occurs at the time of high tide...

Johnson Bayou LA to Rockefeller Wildlife Refuge including Calcasieu Lake...15-20 ft

Sea Rim State Park TX to Johnson Bayou LA including Sabine Lake...10-15 ft

Rockefeller Wildlife Refuge to Intracoastal City LA...10-15 ft Intracoastal City LA to Morgan City including Vermilion Bay...8-12

Port Bolivar TX to Sea Rim State Park...6-9 ft
Morgan City LA to Mouth of the Mississippi River...4-7 ft
Freeport TX to Port Bolivar including Galveston Bay...2-4 ft
Mouth of the Mississippi River to Ocean Springs MS including Lake
Borgne...2-4 ft

Lake Pontchartrain and Lake Maurepas...2-4 ft

The deepest water will occur along the immediate coast near and to the right of the landfall location, where the surge will be accompanied by large and destructive waves.

Unsurvivable storm surge with large and destructive waves will cause catastrophic damage from Sea Rim State Park, Texas, to Intracoastal City, Louisiana, including Calcasieu and Sabine Lakes. This storm surge could penetrate up to 30 miles inland from the immediate coastline in southwestern Louisiana and far southeastern Texas.

Surge-related flooding depends on the relative timing of the surge and the tidal cycle, and can vary greatly over short distances. For information specific to your area, please see products issued by your local National Weather Service forecast office.

WIND: Hurricane conditions are expected in the hurricane warning area tonight and Thursday, with catastrophic wind damage expected where Laura's eyewall makes landfall tonight. Tropical storm conditions are moving onshore of the coast of Louisiana within the tropical storm warning area and are expected to reach the coast in the hurricane warning area later this afternoon or evening.

Hurricane-force winds and damaging wind gusts are also expected to spread well inland into portions of eastern Texas and western Louisiana early Thursday.

RAINFALL: From this afternoon through Friday, Laura is expected to produce rainfall totals of 5 to 10 inches, with isolated maximum amounts of 15 inches across portions of the northwestern Gulf Coast from western Louisiana to far eastern Texas, and northward into much of Arkansas. This rainfall will cause widespread flash and urban flooding, small streams and creeks to overflow their banks, and minor to isolated moderate freshwater river flooding.

By Friday into Saturday, Laura will produce rainfall totals of 2 to 4 inches, with isolated maximum amounts of 6 inches across the mid-Mississippi and portions of the Lower Ohio and Lower Tennessee Valleys. This rainfall may lead to localized flash and urban flooding and rapid rises on small streams.

TORNADOES: A few tornadoes are expected this afternoon through tonight over Louisiana, far southeast Texas, and southwestern Mississippi. The risk for a few tornadoes should continue into Thursday across Louisiana, Arkansas, and western Mississippi.

SURF: Swells produced by Laura are affecting the entire U.S. Gulf coast from the west coast of Florida to Texas and northeastern Mexico. These swells are likely to cause life-threatening surf and rip current conditions. Please consult products from your local weather office.

NEXT ADVISORY

Next complete advisory at 400 PM CDT. Hourly Tropical Cyclone Updates will begin at 200 PM CDT. These can be found under WMO header WTNT63 KNHC and under AWIPS header MIATCUAT3.

\$\$ Forecaster Brown

000 WTNT43 KNHC 261515 CCA TCDAT3

Hurricane Laura Discussion Number 27...Corrected NWS National Hurricane Center Miami FL AL132020 1000 AM CDT Wed Aug 26 2020 Corrected 24-h status in forecast table to inland.

Laura has become a very powerful hurricane this morning. The satellite presentation has continued to improve with the eye becoming better defined, and cloud tops colder than -70C in the surrounding ring of deep convection. Both NOAA and Air Force hurricane hunter aircraft have provided valuable data this morning. The NOAA P-3 aircraft reported a peak flight-level wind of 125 kt at 8000 ft, and a peak SFMR wind of 104 kt, while the Air Force crew has observed peak 700-mb flight-level winds of 121 kt and peak SFMR winds of 104 kt. The lastest minimum pressure estimated from aircraft data is 956 mb, indicating a pressure drop of 27 mb over the past 12 hours. Based on the aircraft data, the initial wind speed was increased to 100 kt on the 1200 UTC intermediate advisory, and is now set at 110 kt based on the latest flight-level and SFMR winds.

Laura is likely to continue strengthening today while it moves over warm waters of the northwestern Gulf of Mexico and the vertical wind shear remains low. Laura's intensity could level-off by this evening due to the possibility of an eyewall replacement cycle and the expected increase in shear around the time of landfall. Even if the rate of strengthening eases, Laura is expected to be an extremely powerful category 4 hurricane when it reaches the northwestern Gulf coast. After landfall, rapid weakening will occur, but Laura will bring a swath of damaging winds well inland over western Louisiana and eastern Texas. The UKMET and ECMWF models suggest that there is some chance that Laura re-intensifies as a tropical cyclone off the mid-Atlantic coast, but given the uncertainties at that time range the forecast continues to show it

as a post-tropical cyclone at days 4 and 5.

Laura is moving northwestward at about 13 kt. A gradual turn toward the north-northwest and north are expected within the next 12-18 hours as the hurricane moves around the western portion of a midlevel ridge that extends from the western Atlantic into the southeastern United States. This motion will bring the center of Laura onshore in southwestern Louisiana or extreme eastern Texas tonight. By Thursday night, Laura is forecast to turn northeastward, and then east-northeastward on Friday as it becomes embedded in the mid-latitude westerlies. The dynamical track models are in good agreement, and little adjustment to the previous NHC forecast track was required.

Laura is a large hurricane and users are reminded to not focus on the precise track forecast since wind, storm surge, and rainfall hazards extend far from the center.

Key Messages:

- 1. Unsurvivable storm surge with large and destructive waves will cause catastrophic damage from Sea Rim State Park, Texas, to Intracoastal City, Louisiana, including Calcasieu and Sabine Lakes. This surge could penetrate up to 30 miles inland from the immediate coastline. Only a few hours remain to protect life and property and all actions should be rushed to completion.
- 2. Hurricane-force winds are expected tonight in portions of the hurricane warning area from San Luis Pass, Texas, to west of Morgan City, Louisiana, with catastrophic wind damage expected where Laura's eyewall makes landfall. Hurricane-force winds and widespread damaging wind gusts will spread well inland across portions of eastern Texas and western Louisiana early Thursday.

 3. Widespread flash flooding along small streams, urban areas, and
- roadways is expected to begin this afternoon into Thursday from far eastern Texas, across Louisiana and Arkansas. This will also lead to minor to isolated moderate freshwater river flooding. The heavy rainfall threat and localized flash and urban flooding potential will spread northeastward into the middle-Mississippi, lower Ohio and Tennessee Valleys Friday night and Saturday.

FORECAST POSITIONS AND MAX WINDS

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INIT 26/1500Z 27.0N 92.0W 110 KT 125 MPH

12H 27/0000Z 28.5N 93.2W 125 KT 145 MPH

24H 27/1200Z 31.0N 93.8W 75 KT 85 MPH...INLAND

36H 28/0000Z 33.7N 93.5W 40 KT 45 MPH...INLAND

48H 28/1200Z 35.8N 92.2W 25 KT 30 MPH...INLAND

60H 29/0000Z 37.2N 89.1W 25 KT 30 MPH...INLAND

72H 29/1200Z 37.6N 83.9W 25 KT 30 MPH...INLAND

96H 30/1200Z 40.0N 70.0W 40 KT 45 MPH...POST-TROP/EXTRATROP

120H 31/1200Z 48.0N 55.0W 45 KT 50 MPH...POST-TROP/EXTRATROP
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\$\$ Forecaster Brown