



## Hurricane Ida storms USA from Louisiana to New-York

Sentinel-3 SLSTR RBT acquired on 28 August 2021 from 03:07:26 to 04:12:08 UTC

Sentinel-1 CSAR IW acquired on 29 August 2021 from 00:02:02 to 00:02:27 UTC Sentinel-3 SLSTR RBT acquired on 02 September 2021 from 14:57:25 to 15:00:25 UTC Sentinel-2 MSI acquired on 02 September 2021 at 15:49:11 UTC

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Fig. 1 - S3 SLSTR (28.08.2021) - Hurricane Ida over Cuba, before it became strong eye to get a well defined eye. 3D view



Fig. 2 - S3 SLSTR (29.08.2021) - On its way to Louisiana the day after, its eye was well visible.



Exactly 16 years after Hurricane Katrina caused the death of over 1800 people in Louisiana, another category-5 hurricane made landfall in this states, killing over forty people.

3D view

2D view

Fig. 3 - S3 SLSTR (29.08.2021) - Cyclone Ida minutes before made landfall in Port Fourchon, on the southern coast of Louisiana



According to <u>Floodlist</u>, "Governor Edwards suggested the flooding could have been much worse in Louisiana and many areas that saw catastrophic floods during Hurricane Katrina in 2005 were spared this time around due to the improved levee system." "While this was an extremely catastrophic storm, if there is a silver lining our levee systems performed extremely well, particularly the hurricane risk reduction system in metro New Orleans. We don't believe single levee was breached/failed,' the governor said."

Fig. 4 - S1 (17.08.2021) - Port Souchon a fortnight before the landfall.



"However, the flood threat remains as river levels rise. National Weather Service in New Orleans said 'The winds have relaxed and the surge is lowering but we aren't done with the impacts. With widespread 10-15" of rain (probably higher in some areas due to underestimation) many local rivers are expected to be in moderate to major flood."

Fig. 5 - S1 (29.08.2021) - Most boats are no longer visible, probably moved to a safer area.



"Ida's strong winds (230 km/h) made it the fifth-strongest hurricane ever to hit mainland USA. Winds ravaged the electrical grid and more than 1 million homes and businesses in Louisiana and Mississippi were left without power. Governor Edwards added that 18 water systems were also knocked out affecting over 300 000 customers, while boil orders are in effect for another 329 000 customers."



On another report dedicated to the damages on the eastern coast, Floodlist <u>adds</u>: "Over 40 people have now lost their lives in catastrophic flooding after Hurricane Ida's remnants brought record rain to the Northeast and Mid-Atlantic regions of USA."

Fig. 7 - S3 SLSTR (31.08.2021) - It brought heavy rainfall on the Atlantic coast, sometimes a month worth of precipitations in hours. <u>3D view</u> ▲ ↓ ↓ + 🚱 I = 20 @

"Officials in New Jersey reported 23 people have died in the state, while 16 lost their lives in New York State, including 13 in New York City. Other fatalities were reported in Pennsylvania, Maryland and Connecticut." In the south, Hurricane Ida was blamed on the deaths of at least 4 people in Louisiana and Mississippi.



Fig. 8 - S3 SLSTR (01.09.2021) - Zoom on New-York and New-Jersey states which where particularly affected.

"National Weather Service New York said 01 September was the wettest day on record for Newark (214 mm of rain) and LaGuardia 175 mm. Some areas of the region recorded more than 9 inches of rain during the storm, including Cranford, NJ with 230 mm, Glen Cove NY with 231 mm and Staten Island, NY with 245 mm."

Fig. 9 - S2 (13.08.2021) - Philadelphia, Pennsylvania, before the storm.



"During the evening of 01 September, Newark in New Jersey received 82.3 mm and Central Park in New York saw 80 mm of rain in 1 hour. Both are all time records for the highest 1-hour rainfall totals in these locations. Central Park received a 24-hour total of 183 mm of rain by early 02 September, making it the fifth-largest daily rainfall in the past 150 years, according to New York City officials."



"The governors of New York and New Jersey both declared a state of emergency and have formally requested a Federal Emergency Declaration from the President." "Residents in Hurley, Virginia, are facing long periods without power and water. Officials are estimating at least 30 days for power to be restored, and estimated 1 year for public water to be restored."

<u>2D view</u>

Fig. 11 - S2 (13.08.2021) - New-York and New-Jersey recorded the worst of the human toll.



12 - S2 (02.09.2021) - The brownish waters show how they have been hit by the record rainfall. Fig

## <u>2D</u> view



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