NATIONAL HURRICANE CENTER
TROPICAL CYCLONE REPORT

HURRICANE IDA

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26 August–1 September 2021

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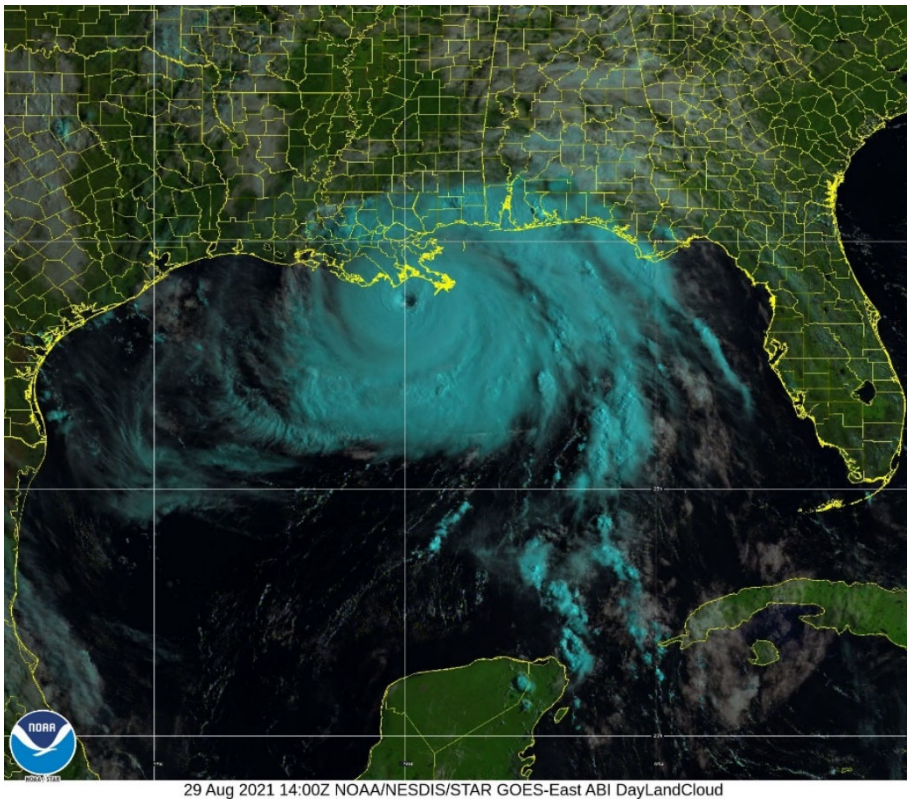

GOES-16 DAY CLOUD CONVECTION IMAGE OF IDA A FEW HOURS BEFORE LANDFALL AT PORT FOURCHON., LOUISIANA, AT 1400 UTC 29 AUGUST 2021. IMAGE COURTESY OF NOAA/NESDIS/STAR.

Ida was a category 4 hurricane (on the Saffir-Simpson Hurricane Wind Scale) that caused catastrophic damage when it made landfall in southeastern Louisiana. It also made landfall in western Cuba as a category 1 hurricane. Ida later became an extratropical low that caused heavy rain and deadly flooding in the northeastern United States.

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Hurricane Ida

26 AUGUST – 1 SEPTEMBER 2021

SYNOPTIC HISTORY

Ida formed from a combination of multiple low-latitude weather systems, starting with a tropical wave emerging from the coast of Africa on 14 August. This wave was weak and hard to track as it moved slowly westward through the monsoon trough environment over the eastern tropical Atlantic. The wave moved into the trade wind environment west of 45°W on 21 August, accompanied by an area of convection that was elongated from east to west, and this convection increased in coverage as the wave moved through the Windward Islands on 23 August. By 24 August, the wave was near Aruba, Bonaire, and Curacao, and it began to interact with a broad area of low pressure located along the northern coast of South America. This interaction resulted in a large area of pressures near or below 1006 mb by late that day, along with widespread heavy rains over portions of Venezuela. The next day, the convection became more concentrated near a vorticity maximum on the eastern side of a broad low-pressure area over the southwestern Caribbean Sea. The disturbance turned north-northwestward on 26 August on the southwestern side of the subtropical ridge, and the associated convection became better organized while the circulation became better defined. It is estimated that a tropical depression formed near 1200 UTC that day about 150 n mi southwest of Kingston, Jamaica. The "best track" chart of the tropical cyclone's path is shown in Fig. 1, with the wind and pressure histories shown in Figs. 2 and 3, respectively. Table 1 lists the best track positions and intensities[1].

The cyclone was moving north-northwestward at the time of genesis. A few hours later, it turned northwestward as it was steered by the flow on the southwestern side of the subtropical ridge, and this general motion continued for the next three days. The cyclone strengthened to a tropical storm 6 h after genesis, and slow strengthening continued as the center passed northeast of Grand Cayman Island early on 27 August. Rapid strengthening occurred after the center passed Grand Cayman, and Ida became a hurricane with 70-kt winds before the center reached the Isle of Youth, Cuba, at 1800 UTC 27 August. After crossing the Isle of Youth, the center made landfall in mainland Cuba near Playa Dayaniguas in the province of Pinar del Rio near 2325 UTC that day. Continuing northwestward, Ida's center subsequently emerged over the southeastern Gulf of Mexico between 0100–0200 UTC 28 August.

Passage over land and entrainment of dry air into the hurricane's southwestern quadrant halted intensification as Ida crossed Cuba, and little change in strength occurred during the first several hours after the hurricane reached the Gulf of Mexico. However, during this time microwave satellite imagery (Fig. 4) and radar data from Cuba showed the central core re-organizing with the formation of a convective ring around the center. This, combined with the

[1] A digital record of the complete best track, including wind radii, can be found on line at ftp://ftp.nhc.noaa.gov/atcf. Data for the current year's storms are located in the *btk* directory, while previous years' data are located in the *archive* directory.

favorable conditions of light vertical wind shear (near 10 kt) and sea surface temperatures at or above 30°C, led to a second round of rapid strengthening that started at 1200 UTC 28 August and continued for the next 24 h. During this intensification phase, the maximum winds increased from 70 kt to 90 kt in the first 12 h, and then from 90 kt a peak of 130 kt in the next 12 h. Additionally, the central pressure fell from 986 to 929 mb. By the end of this rapid intensification period, Ida had moved northwestward to a position not far southwest of the Mouth of the Mississippi River (cover image). A continued northwestward motion brought the 15-n-mi-wide eye to the Louisiana coast at Port Fourchon at 1655 UTC 29 August (Fig. 5). The maximum winds at landfall were 130 kt – category 4 on the Saffir-Simpson Hurricane Wind Scale – and the central pressure was near 931 mb. As best as can be determined, the 130-kt landfall intensity is equal to that of Hurricane Laura of August 2020 and the Last Island Hurricane of August 1856, with these three category 4 storms tied for the strongest on record to make landfall in Louisiana west of the Mouth of the Mississippi River[2].

Shortly after landfall, Ida turned north-northwestward, and this motion brought the eye across southeastern Louisiana between Houma and New Orleans. A continued north-northwestward motion early on 30 August brought the center just west of LaPlace and then between Baton Rouge and Hammond. The cyclone's intensity steadily decreased as it moved inland, and it weakened to a tropical storm before the center moved into southwestern Mississippi between 0600–1200 UTC that day. Ida then turned northeastward as it moved around the western end of the subtropical ridge, with the center passing just west of Jackson, Mississippi, around 1800 UTC. Soon thereafter, the cyclone weakened to a tropical depression as it moved into northeastern Mississippi. The system then accelerated northeastward across northwestern Alabama, central and eastern Tennessee, and portions of Kentucky and Virginia before reaching southern West Virginia near 1200 UTC 1 September. Ida began extratropical transition as it moved through the Tennessee Valley, and the system became an extratropical low as it moved over West Virginia later that day.

Once it became extratropical, Ida moved east-northeastward in the mid-latitude westerly flow through West Virginia, northern Virginia, and central Maryland to southeastern Pennsylvania by 0000 UTC 2 September. At that time, the system acquired gale-force winds over the Atlantic east of the center. A continued east-northeastward motion brought the center across northern New Jersey and into the Atlantic just south of Long Island, New York, to near Nantucket, Massachusetts by 1200 UTC that day. The low then turned northeastward and strengthened a little, reaching western Nova Scotia late on 2 September and moving into the Gulf of St. Lawrence on 3 September. This was followed by a cyclonic loop over the Gulf of St. Lawrence on 3–4 September while the low maintained maximum winds of 40–45 kt. The low degenerated to a trough late on 4 September as a new mid-latitude low formed to the east.

[2] Hurricane Camille in August 1969 is the strongest hurricane of record to hit Louisiana. It was category 5 on the Saffir-Simpson Hurricane Wind Scale when it passed over coastal Louisiana east and north of the Mouth of the Mississippi River enroute to its final landfall in Mississippi.

METEOROLOGICAL STATISTICS

Observations in Ida (Figs. 2 and 3) include subjective satellite-based Dvorak technique intensity estimates from the Tropical Analysis and Forecast Branch (TAFB) and the Satellite Analysis Branch (SAB), objective Advanced Dvorak Technique (ADT) estimates and Satellite Consensus (SATCON) estimates from the Cooperative Institute for Meteorological Satellite Studies/University of Wisconsin-Madison. Observations also include flight-level, stepped frequency microwave radiometer (SFMR), and dropwindsonde observations from flights of the 53rd Weather Reconnaissance Squadron of the U.S. Air Force Reserve Command and the NOAA Aircraft Operations Center. Data and imagery from NOAA polar-orbiting satellites including the Advanced Microwave Sounding Unit (AMSU), the NASA Global Precipitation Mission (GPM), the European Space Agency's Advanced Scatterometer (ASCAT), and Defense Meteorological Satellite Program (DMSP) satellites, among others, were also useful in constructing the best track of Ida. Data from weather radars in the Cayman Islands, Cuba, and the United States also provided important data on Ida.

Ship reports of winds of tropical storm force associated with Ida are given in Table 2, and selected surface observations from land stations and data buoys are given in Table 3. Table 4 contains supplemental rainfall reports from National Weather Service Cooperative (COOP) stations and the Community Collaborative Rain, Hail and Snow Network (CoCoRaHS) sites. Table 5 gives details about the tornadoes observed with Ida.

Winds and Pressure

1) Aircraft-based assessments:

The Air Force Reserve Hurricane Hunters made eight flights into Ida and reported 22 center fixes. The NOAA Hurricane Hunters flew six missions into the storm with 8 center fixes, and there were three synoptic surveillance missions flown by the NOAA G-IV jet. During these missions, the maximum flight-level winds reported in the hurricane's core were 148 kt from a NOAA aircraft at a flight level of 750 mb at 1249 UTC 29 August. The aircraft also reported flight-level winds of 147 kt at 1154 UTC that day. These flight-level winds support surface wind estimates of 125–135 kt. There were also multiple surface wind estimates from the SFMR of about 130 kt during that flight. It should be noted that two eyewall dropsondes reported instantaneous surface winds of 130–140 kt near 1300 UTC 29 August. However, the average winds over the lowest layers (150 m) of these dropsondes suggest more representative sustained surface winds of 120–130 kt. A blend of these data is the basis for the peak intensity of 130 kt at 1200 UTC August 29.

A dropsonde from a NOAA P-3 aircraft reported a pressure of 932 mb and surface winds of 34 kt near 1200 UTC 29 August, and these data are the basis for the 929 mb minimum pressure. Although radar data (Fig. 5) subsequently showed that an outer eyewall started to form, Air Force Reserve fixes just prior to landfall observed minimum central pressures of 931–932 mb, suggesting little change in strength occurred during the last five hours before landfall. This pressure data, combined with the earlier winds, was used to set the Louisiana landfall intensity at 130 kt.

A few hours before landfall in Cuba on 27 August, an Air Force Reserve aircraft reported flight-level winds of 76 kt at 700 mb, along with SFMR surface winds estimates of 76 kt. The minimum central pressure at that time was 987 mb, and a blend of these data – along with the observations from Cuba noted below - was used to initially upgrade Ida to a hurricane and set the landfall intensity in Cuba at 70 kt. While Ida was over western Cuba, a NOAA aircraft reported 700-mb flight-level winds of 83 kt in the northeastern eyewall at 2330 UTC 27 August. However, since these winds were measured over land, the best track intensity at the time was set at a possibly conservative 70 kt. It is also notable that a NOAA aircraft reported 700-mb flight-level winds of 85 kt at 1104 UTC 27 August. However, these winds were well northeast of the center, and detailed analysis suggests these winds were associated with a mesocyclone that was not representative of the strength of Ida at the time.

Ida was initially upgraded to a tropical storm based on 925-mb flight-level winds of 47 kt to the northeast of the center at 2106 UTC 26 August. The aircraft-reported central pressures near that time were 1006-1007 mb.

2) In the United States:

Ida produced major hurricane conditions near the landfall area in southeastern Louisiana. However, there are no reliable wind reports from the coastal area where the eyewall came ashore. The highest reported sustained wind close to the landfall area was 101 kt at 1630 UTC 29 August from a United States Geological Survey (USGS) station located 11 n mi north-northeast of Grand Isle, Louisiana (anemometer elevation unknown). In addition, a National Ocean Service (NOS) station at the Southwest Pass of the Mississippi River reported sustained winds of 92 kt at 1248 UTC 29 August with a peak gust of 111 kt (elevation 20 m), and a nearby NOAA Coastal Marine Automated Network station reported sustained winds of 90 kt and a peak gust of 114 kt (elevation 38 m),

It should be noted that two ships moored at Port Fourchon reported instantaneous wind gusts of 194 kt and 150 kt as Ida passed over. The details of these reports, including the elevation and exposure of the instruments, are unavailable at this time, and thus they are not considered in the landfall intensity determination or included in the data tables. This report will be updated if detailed data from these ships becomes available.

Hurricane conditions occurred over much of the remainder of southeastern Louisiana south and east of Baton Rouge. Hurricane conditions occurred as far north as the north shore of Lake Pontchartrain, where WeatherFlow stations reported sustained winds at or near 65 kt along with a peak gust of 96 kt in Mandeville.

Several oil platforms in the northern Gulf of Mexico also reported hurricane-force winds as the eye of Ida passed over or near them. However, the records from the stations closest to the center are incomplete.

Elsewhere across the southeastern United States, tropical-storm conditions occurred west of the area of hurricane winds into the coastal areas of south-central Louisiana, and as far east as the coast of the western Florida Panhandle. These winds also extended northward along the track of the center into southwestern Mississippi. Wind gusts of tropical-storm force were reported

over central and northern Mississippi and the inland portions of southwestern Alabama. A separate area of short-lived tropical-storm-force winds occurred over the Lower Florida Keys in association with an outer rainband.

As an extratropical low over the northeastern United States, Ida generally caused sustained winds of 25–35 kt – with a few locally higher observations – over the coastal regions from the Chesapeake Bay to the Gulf of Maine. Gusts to tropical-storm force were reported over the adjacent land areas and as far south as coastal North Carolina.

Data in Table 3 include stations hit by strong to severe thunderstorms embedded in Ida's circulation. In the northeastern United States, the stronger wind gusts reported from these storms on 1-2 September include 68 kt and 63 kt at the WeatherFlow stations in Eaton's Neck and Bayville, New York, respectively, 62 kt at a Pennsylvania Department of Transportation station in Ft. Washington (associated with the passage of a tornado), and 60 kt at the NOS station at Burlington, New Jersey. The latter station also reported a minimum pressure of 995.1 mb, which was likely associated with a mesocyclone in one of the thunderstorms. In the southeastern United States, several clusters of strong-to-severe thunderstorms also occurred, the most notable of which moved from eastern Georgia across western South Carolina into western North Carolina on 31 August.

The lowest pressure reported in the landfall area was 934.0 mb at 1719 UTC 29 August by a private weather station just northeast of Port Fourchon. Additionally, the Louisiana Offshore Oil Port reported a minimum pressure of 934.1 mb at 1536 UTC that day. However, the records from both stations are incomplete, and it is unclear whether these were the lowest pressures that occurred. A USGS portable station near Golden Meadow, Louisiana, reported a minimum pressure of 921.4 mb as the eye passed overhead. However, detailed examination of the data suggests the station's pressures were at least 9–10 mb too low, and thus this observation is discounted for the best track pressure and intensity.

3) Cuba, Canada, the Cayman Islands, and elsewhere:

Ida brought hurricane conditions to portions of western Cuba, although there were no reports of sustained hurricane-force winds. The maximum sustained wind observed was 59 kt with a gust to 76 kt at Bahia Honda in the province of Artemisa at 2300 UTC 27 August, and hurricane-force gusts were also reported on the Isle of Youth and in Pinar del Rio. The lowest pressure observed in Cuba was 989.6 mb at Punta del Este on the Isle of Youth at 1800 UTC 27 August.

While data from the Cayman Islands are incomplete, a gust of 39 kt was reported at Cayman Brac at 1400 UTC 27 August. Grand Cayman Island reported a minimum pressure of 1003.0 mb at 0800 UTC 27 August as the center passed northeast of the island.

Post-tropical Ida produced gale conditions in eastern Canada, with Wreckhouse, Newfoundland reporting the strongest sustained winds of 44 kt and a gust to 59 kt at 0200 UTC 3 September. The lowest observed pressure was 992.8 mb at Summerside on Prince Edward Island at 0600 UTC 3 September.

Other than those at Port Fourchon, ships generally avoided Ida's extreme winds. Table 2 shows reports from a few ships that encountered tropical-storm or gale-force winds.

Storm Surge[3]

Ida produced a devastating storm surge that penetrated well inland from the immediate coastline across portions of southeastern Louisiana, including on both the east and west banks of the Mississippi River and bordering portions of Lake Pontchartrain. Storm surge levels were high enough in some locations to overtop local levee systems. The analysis of peak inundation levels indicated below are based on tide and stream gauges, high water mark surveys, and storm surge hindcasts produced by the NHC Storm Surge Unit. Table 3 and Figs. 6a and 6b (zoomed into the highest-impacted area) provide observations from various tide stations, water level sensors, and surveyed high water marks along much of the U.S. northern Gulf coast.

East Bank (Louisiana):
Plaquemines Parish (East Bank): 9 to 14 ft AGL
St. Bernard Parish: 6 to 11 ft AGL

Maximum inundation levels of 9 to 14 ft above ground level (AGL) occurred along the east bank of the Mississippi River in Plaquemines Parish, where USGS gauges at American Bay near Pointe a la Hache and Black Bay recorded water levels of 11.5 ft above Mean Higher High Water (MHHW) (before failing) and 11.3 ft MHHW, respectively. A USGS water level sensor deployed at a marina just outside of the local levee at Pointe a la Hache also measured a peak water level of 9.4 ft MHHW. These data suggest that peak water levels could have been higher in some locations, and the storm surge hindcast shows that water levels of 12 to 14 ft AGL likely occurred against the east bank levee in lower portions of the parish. Elsewhere on the east bank, a U.S. Army Corps of Engineers (USACE) gauge in St. Bernard Parish at the Bayou Dupre Flood Gate recorded a water level of 8.5 ft MHHW before it failed, and the NOS tide gauge at Shell Beach measured a peak water level of 6.9 ft MHHW.

West Bank (Louisiana):
Jefferson (West Bank) and Lafourche Parishes: 6 to 12 ft AGL
Plaquemines Parish (West Bank): 6 to 9 ft AGL
St. Charles Parish: 5 to 8 ft AGL
Terrebonne Parish: 3 to 6 ft AGL

In Grand Isle (southern Jefferson Parish), just to the east of where Ida's center made landfall in Port Fourchon, several USGS water level sensors recorded wave-filtered water levels

[3] Several terms are used to describe water levels due to a storm. **Storm surge** is defined as the abnormal rise of water generated by a storm, over and above the predicted astronomical tide, and is expressed in terms of height above normal tide levels. Because storm surge represents the deviation from normal water levels, it is not referenced to a vertical datum. **Storm tide** is defined as the water level due to the combination of storm surge and the astronomical tide, and is expressed in terms of height above a vertical datum, i.e. the North American Vertical Datum of 1988 (NAVD88) or Mean Lower Low Water (MLLW). **Inundation** is the total water level that occurs on normally dry ground as a result of the storm tide, and is expressed in terms of height above ground level. At the coast, normally dry land is roughly defined as areas higher than the normal high tide line, or Mean Higher High Water (MHHW).

of about 10 ft MHHW (Fig. 7 as an example), and a high-water mark of 10.2 ft AGL was surveyed by a team from the Harris County Flood Control District (HCFCD) and National Weather Service. A USGS gauge in Barataria Bay north of Grand Isle also recorded 10.2 ft MHHW before it failed. In northern Jefferson Parish and the west bank of Plaquemines Parish, numerous high-water marks of 6 to 9 ft AGL were surveyed by the team in Lafitte, Jean Lafitte, Ironton, Alliance, and Empire, resulting from storm surge overtopping the local levees surrounding those locations. In southern Lafourche Parish, the team measured high water marks of 10.1 ft and 9.8 ft AGL at Golden Meadow (outside of the federal levee) and Leeville, respectively.

Around Lake Pontchartrain:
St. John the Baptist and St. Charles Parishes (East Bank): 6 to 11 ft AGL
Tangipahoa and western St. Tammany Parishes: 6 to 9 ft AGL
Eastern St. Tammany Parish: 4 to 7 ft AGL
Orleans and Jefferson (East Bank) Parishes (outside HSDRRS): 5 to 8 ft AGL

Significant flooding occurred on the western side of Lake Pontchartrain due to strong easterly winds pushing water into the lake. In St. John the Baptist Parish, two high water marks of 9.9 ft AGL were surveyed near Frenier Landing, while a high-water mark of 8.8 ft AGL was measured at Ruddock. In Laplace, the highest measured mark was 8.2 ft AGL. The highest mark surveyed in St. Charles Parish was 5.9 ft AGL in Norco, although the storm surge hindcast indicates that water levels as high as 11 ft likely occurred north of town closer to the lake. On the north side of Lake Pontchartrain, USACE gauges recorded peak water levels of 7.9 ft MHHW on the Tchefuncte River at Madisonville and 7.1 ft MHHW at Mandeville. High water marks of 7.6 ft and 7.3 ft AGL were also surveyed in each respective city. In eastern St. Tammany Parish, water levels of 5.3 ft and 5.2 ft MHHW were recorded by gauges near Slidell and the Rigolets, and the storm surge hindcast shows higher inundation heights between there and the Mississippi border. In metropolitan New Orleans, a USACE gauge outside of the Hurricane and Storm Damage Risk Reduction System (HSDRRS) at Lakefront Airport recorded a water level of 8.5 ft MHHW before failing, and the storm surge hindcast shows several areas of 6 to 8 ft AGL in eastern Orleans Parish. High water marks of 5.9 ft AGL and 5.4 ft AGL were surveyed outside the HSDRRS in Kenner and in the Venetian Isles area of eastern New Orleans, respectively.

Elsewhere on the Gulf Coast:
Mississippi coast: 4 to 7 ft AGL
Alabama (Mobile Bay): 2 to 4 ft AGL
Florida Panhandle: 1 to 2 ft AGL
Central/Southwestern Louisiana: 1 to 3 ft AGL

On the coast of Mississippi, the highest inundation occurred in Hancock County and gradually decreased to the east. The highest water level measurement was 7.1 ft MHHW at a USGS stream gauge on the Pearl River near Claiborne, and the NOS tide gauge at the Bay Waveland Yacht Club measured 6.9 ft MHHW. Farther east, the NOS gauge at Pascagoula measured 3.8 ft MHHW. In Alabama, the highest recorded water levels were 3.8 ft MHHW by the NOS gauges at the Coast Guard Sector Mobile and the Bayou Le Batre Bridge. The highest water level measured in Florida was 2.5 ft MHHW at Apalachicola. A tight gradient of inundation occurred across Terrebonne Parish in Louisiana, and inundation heights west of the parish in

Louisiana were less than 3 ft AGL, with the highest measurement being 1.7 ft MHHW at Eugene Island in Atchafalaya Bay.

Northeastern United States:

As an extratropical low, Ida caused a surge of 1–3 ft above normal tide levels and similar levels of inundations along portions of the east coast of the United States from the Chesapeake Bay to Massachusetts Bay, primarily in areas of onshore flow in sounds, bays, and estuaries. In some areas, particularly along the tidal portions of the Delaware River, the inundations were likely aided by freshwater flooding caused by heavy rains. Overall, the above normal tides in the northeastern United States had little significant impact.

Rainfall and Flooding

Ida produced widespread rainfall along its track, with four areas of significant totals: 1) the US. Gulf coast states, 2) the US. Mid-Atlantic and New England states, 3) western Cuba, and 4) the Canadian Maritimes provinces (Tables 3 and 4, as well as Fig. 8).

As a tropical cyclone, Ida produced widespread heavy rains along portions of the northern Gulf coast states northward and eastward into the Tennessee Valley. Rainfall totals of more than 10 inches occurred over portions of southeastern Louisiana, southeastern Mississippi, and southwestern Alabama, with a maximum storm total of 15.04 inches at Ponchatoula, Louisiana, and a storm total of 13.65 inches near Kiln, Mississippi. Rainfall totals of 5–9 inches with locally higher amounts occurred over much of the remainder of eastern Mississippi, southwestern Alabama, and the western Florida Panhandle. Rainfall totals of 3–5 inches occurred over other portions of western and northern Alabama, northwestern Georgia, eastern Tennessee, and central and eastern Kentucky. These rains produced freshwater flooding, especially along the Tangipahoa, Tchefuncte, Tickfaw, and Bogue Falaya Rivers in southeastern Louisiana and the Tchoutacabouffa, Biloxi, Wolf, and Jourdan Rivers in southeastern Mississippi.

When Ida became extratropical, a swath of heavy rains with local rainfall rates near or above 3 inches per hour developed north of the center and affected a long area extending from northern West Virginia, across western Maryland, southeastern Pennsylvania, northern New Jersey, southeastern New York, Connecticut, and Rhode Island to southeastern Massachusetts, including the New York City metropolitan area. Maximum storm total rainfalls in these areas include 10.10 inches at Downingtown, Pennsylvania, 10.06 inches at Manville, New Jersey, 9.64 inches at Staten Island, New York, 9.22 inches at Uncasville, Connecticut, and 8.16 inches near Frederick, Maryland. The extreme rainfall rates and heavy rainfall caused major freshwater flooding in these areas, including deadly and damaging flash flooding and urban flooding across portions of the New York City metropolitan area and northern New Jersey.

Ida's passage across western Cuba produced storm total rainfalls of generally 2–4 inches with locally higher amounts. A maximum total of 5.97 inches was reported at Pinar del Rio.

In Canada, post-tropical Ida produced storm total rainfalls of generally 2–4 inches across portions of Nova Scotia, New Brunswick, and Prince Edward Island. The maximum reported storm total was 5.61 inches at Stanhope, Prince Edward Island.

The complex pre-Ida disturbance caused widespread heavy rains and deadly flooding over portions of Venezuela. However, there are currently no data available regarding rainfall totals.

Tornadoes

Ida was responsible for 35 known tornadoes (Table 5). As a tropical cyclone, the system produced 24 tornadoes, including 2 in Louisiana, 13 in Mississippi, 7 in Alabama, and 2 in Virginia. All of them were rated EF-1 or EF-0 on the enhanced Fujita scale. These tornadoes generally had minor impact, although three people were injured by a tornado in Mobile County, Alabama. The tornadoes in Mississippi were concentrated in the coastal counties of Harrison, Hancock, and Jackson, and several of them were waterspouts that moved onshore.

Ida produced 11 more tornadoes after it became extratropical. Ten of these occurred in an outbreak across portions of eastern Maryland (3), southeastern Pennsylvania (5), and southern New Jersey (2) on the afternoon of 1 September (Fig. 9). The strongest of these tornadoes was an EF-3 in Gloucester County, New Jersey that caused two injuries (Fig. 10). An EF-2 tornado in Montgomery County, Pennsylvania, caused one fatality and other injuries, and other EF-2 tornadoes occurred in Anne Arundel County, Maryland and Chester County, Pennsylvania. The last known tornado associated with Ida occurred in Barnstable County, Massachusetts, early on 2 September.

CASUALTY AND DAMAGE STATISTICS

The locations of the 55 deaths Ida directly caused in the United States are shown in Fig. 11, while the locations of the 32 deaths indirectly associated with the storm in the United States are shown in Fig. 12.

Ida directly caused six deaths[4] as a tropical cyclone – four in Louisiana and two in Mississippi. One death in Louisiana was a drowning in storm surge in Lafite in Jefferson Parish, while a second was a drowning when a car was driven into freshwater flooding in New Orleans. The two other deaths in Louisiana were due to high winds that damaged buildings in Ascension and St. James Parishes. The two direct deaths in Mississippi occurred when flooding washed out a bridge in George County, resulting in seven cars running off the road and into the floodwaters.

Ida was also indirectly responsible for 28 deaths along the Gulf coast, including 26 in Louisiana and 2 in Alabama. Post-Ida heat exhaustion due to power outages caused 13 deaths, while 5 deaths were associated with medical issues for evacuees at a nursing home in Tangipahoa Parish, Louisiana. Other deaths resulted from carbon monoxide poisoning (6 deaths

[4] Deaths occurring as a direct result of the forces of the tropical cyclone are referred to as “direct” deaths. These would include those persons who drowned in storm surge, rough seas, rip currents, and freshwater floods. Direct deaths also include casualties resulting from lightning and wind-related events (e.g., collapsing structures). Deaths occurring from such factors as heart attacks, house fires, electrocutions from downed power lines, vehicle accidents on wet roads, etc., are considered indirect” deaths.

in Louisiana), electrocutions during repairs to the power grid (2 deaths in Alabama), and a fall during roof repairs (Louisiana). One indirect death in Louisiana resulted from a man being attacked by an alligator near a flooded marsh in St. Tammany Parish.

In the Mid-Atlantic and New England states, Ida (as a post-tropical cyclone) is known to have directly caused 49 deaths, including 26 in New Jersey, 16 in New York, 5 in Pennsylvania, 1 in Maryland, and 1 in Connecticut. Forty-eight of these fatalities were due to freshwater flooding, with the majority of them resulting from people drowning in cars or people outside being swept away by fast-moving floodwaters. However, eleven people in New York, two in New Jersey, and one in Maryland drowned in their homes or apartments due to flooding. The remaining direct death occurred in Upper Dublin Township in Montgomery County, Pennsylvania, due to the EF-2 tornado. Four indirect deaths also occurred in this region – one due to a traffic accident in New York, one due to a flooding-related medical emergency in New Jersey, and two others due to electrocution in New Jersey. It should be noted there are two other deaths associated with Ida (one in New York and one in New Jersey) where the exact cause remains unknown.

Ida caused severe to catastrophic damage in southeastern Louisiana, and substantial damage in portions of the northeastern United States, with the National Centers for Environmental Information estimating that Ida's winds, rains, storm surges and tornadoes caused a total of $75 billion in damages in the United States. Current estimates are that Ida's devasting winds and storm surge caused about $55 billion of damage in Louisiana. In addition, the freshwater flooding in the northeastern United States caused about $8–10 billion of damage apiece in New Jersey, $7.5–9 billion of damage in New York, and $2.5–3.5 billion of damage in Pennsylvania. This report will be updated if these figures change significantly in the future.

In southeastern Louisiana, thousands of buildings were damaged by Ida's wind and surge. The worst hit areas were the coastal portions of Lafourche and Jefferson Parishes, where almost every structure was damaged, and many of them in the town of Leeville (Lafourche Parish) and on Grand Isle (Jefferson Parish) were destroyed (Fig. 13). While the property damage gradually diminished inland along the track, wind damages to structures occurred as far inland as southwestern Mississippi. In addition to the damage, widespread electrical power failures occurred due to Ida's winds in southeastern Louisiana, including the New Orleans metropolitan area. All power was lost in Lafourche and Jefferson Parishes, with the failure in the latter parish aided by the collapse of a large transmission tower along the Mississippi River west of New Orleans. Additional widespread power outages occurred in the River Parishes of Louisiana northwest of New Orleans. Farther inland, Point Coupee Parish, Louisiana (located northwest of Baton Rouge), and Amite County, Mississippi (located west of McComb), both experienced power failures to about 50% of their areas. Localized power outages were reported as far north as central Mississippi.

In the northeastern United States, there are no precise figures on the number of damaged structures. However, it is known that thousands of structures were affected by the flash flooding along small streams and rivers, the longer-term river flooding, and the fast-developing urban flooding where the basements of many buildings were inundated.

There were no reports of casualties from Cuba. Media reports indicate that Ida caused damage across portions of western Cuba, including homes being destroyed in the state of Pinar del Rio. AON Benfield estimates that the hurricane caused $250 million in damage in Cuba.

There were no reports of casualties or significant damage due to Ida from the Cayman Islands or eastern Canada.

Media reports indicate that heavy rains and flooding caused by the pre-Ida disturbance led to 20 deaths in Venezuela, along with more than 1,000 buildings being destroyed. However, there are currently no monetary estimates of the damage available.

FORECAST AND WARNING CRITIQUE

Genesis

The genesis of Ida was somewhat poorly forecast. The disturbance from which Ida developed was introduced in the Tropical Weather Outlook 78 h prior to genesis with a low probability (<40%) of development during the 5-day period (Table 6). The 5-day probabilities were raised to the medium category (40-60%) 66 h prior to genesis and to the high category (>60%) 30 h prior to genesis. In the 48-h outlook, the system was introduced with a low chance of development 42 h prior to genesis. The 48-h probabilities were subsequently raised to the medium category 24 h before genesis and the high category 6 h before genesis. The genesis forecasts correctly expected a low-pressure area to form over the southwestern Caribbean Sea with the potential to become a tropical cyclone, but they underestimated how quickly the low would subsequently undergo tropical cyclogenesis. This may have been due in part to model guidance forecasting the system to pass closer to Central America than it actually did.

Track

A verification of NHC official track forecasts for Ida is given in Table 7a. Official track forecast errors were much lower than the mean official errors for the previous 5-yr period for the 12–96 h forecast periods, and they were a little higher than the mean official errors at 120 h. A homogeneous comparison of the official track errors with selected guidance models is given in Table 7b and Fig. 14. As low as the official errors were, some guidance models outperformed the official forecast. The most noteworthy were the COAMPS-TC model (CTCI), which had lower errors from 12–48 h, the NWS Global Forecast System model (GFSI), which had lower errors from 60–120 h, and the deep-layer version of the Trajectory and Beta Advection model (TABD), which had the lowest track forecast errors at 120 h. Examination of the individual official track forecasts (Fig. 15) shows that they well captured the general sense of the motion, and from the first NHC advisory they consistently showed Ida making landfall in southeastern Louisiana. However, while the overall performance was very good, there were a couple of error sources. First, the track forecasts prior to landfall in Louisiana had a slight bias toward the south and west. Second, the larger errors near the end of the period resulted from a slow bias in the forward speed after recurvature.

Intensity

A verification of NHC official intensity forecasts for Ida is given in Table 8a. Official intensity forecast errors were lower than the mean official errors for the previous 5-yr period, although the 96-h forecast errors have larger errors than climatology and persistence (OCD5) and thus are lacking in forecast skill. A homogeneous comparison of the official intensity errors with selected guidance models is given in Table 8b and Fig. 16. The official forecasts generally had lower errors than all the guidance except at the 96-h forecast time. Examination of the individual official intensity forecasts (Fig. 17) shows that the NHC forecasts consistently called for steady to rapid intensification – particularly over the Gulf of Mexico – and showed Ida being at or near major hurricane strength at landfall in Louisiana. This trend continued even when the intensity guidance somewhat backed off on forecasting rapid strengthening on 28 August. However, despite the overall good forecasts, there were three notable challenges. First, while the NHC forecasts aggressively forecast strengthening, few of them were as strong as the observed peak of 130 kt. Second, the 96-h forecasts had a high bias caused by underestimating how quickly Ida would weaken after landfall, with the forecasts consistently showing a higher intensity than what was observed. Third, Ida's first round of rapid intensification was underforecast, with the cyclone strengthening into a hurricane before it reached Cuba.

Storm Surge Forecasts and Warnings

Storm surge watches and warnings associated with Ida are given in Table 9 and shown in Fig. 18. A Storm Surge Watch was first issued for the northern Gulf coast from Sabine Pass to the Alabama/Florida border, including Lake Pontchartrain, Lake Maurepas, Lake Borgne, Vermilion Bay, and Mobile Bay at 0300 UTC 27 August. The portion of the watch area east of the Rockefeller Wildlife Refuge, Louisiana, to the Mississippi/Alabama border was upgraded to a Storm Surge Warning at 2100 UTC 27 August. The warning was then extended eastward to the Alabama/Florida border at 2100 UTC 28 August. Sustained tropical-storm-force winds first reached the coast of southeastern Louisiana at the Mouth of the Mississippi River around 0300 UTC 29 August; therefore, the initial Storm Surge Watch provided a lead time of about 48 h while the Storm Surge Warning provided a lead time of about 30 h, as compared to the typically provided 48 h and 36 h advanced notice for the watch and warning, respectively.

The Storm Surge Warning verified for much of southeastern Louisiana, coastal Mississippi, and parts of the Alabama coast. Numerous tide and stream gauges, water level sensors, and surveyed high water marks within the Storm Surge Warning area in Lafourche, St. John the Baptist, and Tangipahoa Parishes eastward through the remainder of southeastern Louisiana, the coast of Mississippi, and the coast of Alabama (especially Mobile Bay) indicated that storm surge inundation of 3 ft or greater above normally dry ground (which NHC uses as a first-cut threshold for the storm surge watch/warning) occurred within these areas (white markers, Fig. 19). A few tide gauges and high-water marks also indicated that the Storm Surge Warning verified in Livingston Parish (on the west side of Lake Maurepas) and in St. Charles Parish, and the storm surge hindcast indicates that the warning likely verified in portions of Terrebonne Parish as well (but there were no available observations from there).

Tide gauges from western Terrebonne Parish westward across the remainder of the central and western Louisiana coast registered peak water levels of less than 3 ft MHHW. Therefore, it is likely that much of the Storm Surge Warning covering St. Mary, Iberia, and Vermilion Parishes did not verify. However, Ida's oblique northwestward trajectory toward the Louisiana coast meant that even a slight westward deviation in the track would have caused much more significant surge in those areas, and the risk of life-threatening storm surge inundation was therefore high enough to warrant the issuance of the warning.

The Storm Surge Warnings issued across southeastern Louisiana included areas within the Larose to Golden Meadow Hurricane Protection System (labelled **A** in Fig. 19) and areas of the West Bank of metropolitan New Orleans within the Hurricane and Storm Damage Risk Reduction System (HSDRRS) (labelled **B** in Fig 19). These leveed areas were placed under Storm Surge Warnings because there was a significant risk that the levee systems could have been overtopped under realistic scenarios. Post-storm assessments indicate that Ida produced water levels high enough to overtop some sections of the Golden Meadow levee, and water levels reached just a few feet below the top of the West Bank HSDRSS levee.

To illustrate the sensitivity of storm surge to a storm's specific characteristics, Fig. 19 shows the difference in storm surge heights that would have occurred between Ida's actual track (solid cyan line), and if the hurricane had made landfall about 15 n mi farther east (dashed cyan line). As shown in the image, storm surge heights against the southern edge of the West Bank HSDRSS levee would have been 5 to 7 ft higher if Ida had moved onshore only 15 n mi farther east, and those higher water levels would have overtopped the levee. Given that NHC's forecasts of a tropical cyclone's track are off by an average of 50 n mi at 36 h (when warnings are typically first issued), a 15-n mi eastward shift in Ida's track (which is about equal to the 12-h official track forecast error shown in Table 7a) was well within the realm of possibilities. It is important to remember that warnings are a tool to communicate risk and do not constitute an explicit forecast. In this case, overtopping of these particular levee systems could not be discounted and thus required the issuance of the Storm Surge Warning.

The initial peak storm surge inundation forecast issued at 0300 UTC 27 August, simultaneous with the Storm Surge Watch, was 7 to 11 ft above normally dry ground somewhere between Morgan City, Louisiana, and Ocean Springs, Mississippi, including Lake Borgne. When the Storm Surge Warning was issued at 2100 UTC 27 August, the peak storm surge inundation forecast was raised to 10 to 15 ft above normally dry ground somewhere between Morgan City and the mouth of the Mississippi River. By 0900 UTC 29 August, the day of landfall, the peak storm surge forecast was increased further to 12 to 16 ft above normally dry ground somewhere between Port Fourchon and the mouth of the Mississippi River, and 8 to 12 ft AGL westward to Morgan City and eastward to Bay St. Louis, Mississippi. For the west bank, the low end of the forecast range verified (maximum inundation was about 12 ft AGL), while on the east bank the forecast range of 8 to 12 ft AGL was a little low (maximum inundation was 14 ft AGL). Table 10 provides comparisons of initial peak inundation forecast ranges, final peak inundation forecast ranges, and estimated peak inundation ranges at select locations across southeastern Louisiana, Mississippi, and Alabama.

Wind Watches and Warnings

Wind watches and warnings associated with Ida are given in Table 11. On the northern Gulf coast, the watches and warnings were timely. A Hurricane Watch was issued for the landfall area at 0300 UTC 27 August, about 62 h before the eye of Ida made landfall and about 48 h before tropical-storm-force winds were first observed in the watch area. A Hurricane Warning was issued at 2100 UTC 27 August, which was about 44 h before landfall and about 30 h before the arrival of tropical-storm-force winds.

In Cuba, the warnings were less timely, partly due to the intensity forecasts not calling for Ida to become a hurricane before reaching Cuba. On the good side, a Tropical Storm Warning was issued for western Cuba 27 h before the center reached the Isle of Youth and about 32 h before the center reached western Cuba. On the other hand, no Hurricane Watch was issued for the area, and a Hurricane Warning was issued only 3 h before the center reached the Isle of Youth and about 8 h before the center made landfall in western Cuba.

In the Cayman Islands, a Tropical Storm Warning was issued about 15 h before the center of Ida passed through the islands. While detailed surface observations are not available, scatterometer data suggest tropical-storm-force winds began over Little Cayman and Cayman Brac islands about 9 h after the warning was issued.

Although sustained tropical-storm-force winds briefly occurred in the Lower Florida Keys, these conditions were related to squalls outside of the main area of tropical-storm-force winds associated with Ida. Thus, no tropical cyclone watches or warnings were issued for this area.

Impact-based Decision Support Services (IDSS) and Public Communication

The NHC began communication with emergency managers on 24 August as Ida was just forming over the west-central Caribbean, through landfall in southeastern Louisiana, and until the storm weakened into a depression over inland Mississippi on 30 August. This communication included briefings and Federal video-teleconferences with FEMA HQ and FEMA Regions 4 and 6, along with Gulf Coast States. These decision support briefings were coordinated through the FEMA Hurricane Liaison Team, embedded at the NHC. In addition, the NHC director maintained direct communications with senior state emergency management officials to discuss the evolving threat to the Gulf coast.

The Tropical Analysis and Forecast Branch of NHC provided additional meteorological coordination on Ida through nine live briefings to the U.S. Coast Guard District 8 in New Orleans from 26-30 August in support of USCG's life-saving mission.

During Ida, the NHC media pool was active from 7 AM to 7 PM EDT on 28 and 29 August, with 67 interviews provided. These included: 1) 18 network broadcast/cable outlets including MSNBC, CNN, FOX News, FOX LiveNOW, PBS, CBSN; 2) 21 cable weather outlets including WeatherNation and AccuWeather; and 3) 8 local affiliate outlets including WGNO-TV (ABC) New

Orleans, LA; WAFB-TV (CBS) Baton Rouge, LA; WBRZ-TV (ABC) Baton Rouge, LA; WLOX-TV (ABC) Biloxi, MS.

Regarding social media, posts from the NHC had a large reach with Facebook and Twitter. During Ida, NHC's main operational Twitter account had 6.9 million impressions per day and topped out at 23.6 million organic impressions on 29 August. Facebook had a reach of about 6.9 million people from 24–30 August, with a reach of about 4 million on 29 August alone. In addition, Facebook Live videos from the NHC garnered more than 1 million views.

The NHC web pages were accessed approximately 86 million times between 26 August and 2 September resulting in approximately 1.6 billion hits (Ida generated most of the traffic during this period). A majority of the page views went to graphical products such as the key messages, cone graphic, and the wind speed probabilities. The key messages graphics for Ida were viewed approximately 27 million times on the NHC website from 26–30 August.

ACKNOWLEDGEMENTS

Much of the data in this report came from Post Tropical Cyclone (PSH) Reports issued by NWS Weather Forecast Offices (WFOs) in Lake Charles, New Orleans, and Shreveport, Louisiana; Mobile, Alabama; and Jackson, Mississippi. Additional NWS data was provided by the WFOs in Birmingham and Hunstville, Alabama; Tallahassee, Florida; Greenville, South Carolina; Nashville and Morristown, Tennessee; Jackson, Kentucky; Charleston, West Virginia; Roanoke and Sterling, Virginia; Pittsburgh and State College, Pennsylvania; Mt. Holly, New Jersey; Upton and Binghamton, New York; and Norton, Massachusetts. Chris Fogarty of the Canadian Hurricane Centre provided summaries of the data in Canada. John P. Cangialosi produced the track map. Matt Elliott of the Storm Prediction Center provided the tornado graphic. David Roth of the NOAA Weather Prediction Center produced the rainfall map and much of the rainfall data. Tiffany O'Connor and Matthew Green supplied the IDSS briefing information. Jay Titlow of WeatherFlow provided data from its network, while Texas Tech University provided the data from its StickNet network. Sytske Kimball of the University of South Alabama and Josie Crouch of the New York Mesonet provided the data from their respective networks. Data from the New Jersey Weather Network (including information on rainfall rates), the Delaware Environmental Observing System, and the Kentucky Mesonet are courtesy of their websites. The MesoWest and CoCoRaHS web sites were also a valuable source for the data in Tables 3 and 4. The Remote Sensing Division of NOAA provided the damage imagery. The National Centers for Environmental Information and AON Benfield provided the monetary damage estimates for the United States and Cuba, respectively. Anna Weis, @NashWX, and the New Jersey Weather Network provided the image of the Gloucester County, New Jersey, tornado.

TABLES

Table 1. Best track for Hurricane Ida, August 26–1 September 2021.

Date/Time (UTC)	Latitude (°N)	Longitude (°W)	Pressure (mb)	Wind Speed (kt)	Stage
26 / 1200	16.5	78.9	1006	30	tropical depression
26 / 1800	17.4	79.5	1006	35	tropical storm
27 / 0000	18.3	80.2	1004	40	"
27 / 0600	19.4	80.9	1002	45	"
27 / 1200	20.4	81.7	996	55	"
27 / 1800	21.5	82.6	987	70	hurricane and landfall on the Isle of Youth, Cuba
27 / 2325	22.4	83.2	988	70	landfall at Playa Dayaniguas, Cuba
28 / 0000	22.6	83.5	989	70	"
28 / 0600	23.5	84.7	987	70	"
28 / 1200	24.4	85.7	986	70	"
28 / 1800	25.6	86.6	976	80	"
29 / 0000	26.7	87.6	967	90	"
29 / 0600	27.6	88.7	950	115	"
29 / 1200	28.5	89.6	929	130	"
29 / 1655	29.1	90.2	931	130	landfall at Port Fourchon, Louisiana
29 / 1800	29.2	90.4	932	125	"
30 / 0000	29.9	90.6	944	105	"
30 / 0600	30.6	90.8	978	65	"
30 / 1200	31.5	90.9	992	40	tropical storm
30 / 1800	32.2	90.5	996	35	"
31 / 0000	33.0	90.0	996	30	tropical depression
31 / 0600	33.8	89.4	996	25	"
31 / 1200	34.4	88.4	996	25	"

Date/Time (UTC)	Latitude (°N)	Longitude (°W)	Pressure (mb)	Wind Speed (kt)	Stage
31 / 1800	35.1	87.1	999	20	"
01 / 0000	35.8	85.5	1000	20	"
01 / 0600	36.7	83.6	1000	20	"
01 / 1200	37.7	81.5	1000	25	extratropical
01 / 1800	39.0	78.5	999	30	"
02 / 0000	39.8	75.6	997	35	"
02 / 0600	40.6	72.8	997	40	"
02 / 1200	41.4	69.7	997	40	"
02 / 1800	43.3	67.2	996	40	"
03 / 0000	45.4	64.7	995	40	"
03 / 0600	46.6	63.6	992	45	"
03 / 1200	47.5	62.7	991	45	"
03 / 1800	48.6	62.4	992	45	"
04 / 0000	48.8	63.1	992	45	"
04 / 0600	48.7	63.9	992	40	"
04 / 1200	47.5	63.9	996	35	"
04 / 1800	46.6	63.5	999	30	"
05 / 0000					dissipated
29 / 1200	28.5	89.6	929	130	maximum wind and minimum pressure
27 / 1800	21.5	82.6	987	70	landfall on the Isle of Youth, Cuba
27 / 2325	22.4	83.2	988	70	landfall at Playa Dayaniguas, Cuba
29 / 1655	29.1	90.2	931	130	landfall at Port Fourchon, Louisiana

Table 2. Selected ship reports with winds of at least 34 kt for Hurricane Ida, 26 August–1 September 2021.

Date/Time (UTC)	Ship call sign	Latitude (°N)	Longitude (°W)	Wind dir/speed (kt)	Pressure (mb)
28 / 0100	WTEC	24.3	81.6	330 / 37	1012.4
28 / 0500	WTEC	24.5	80.9	150 / 37	1014.4
29 / 1100	WDF731	26.1	89.0	200 / 35	1012.9
01 / 2000	C6RZ7	36.8	74.5	210 / 39	1005.4
02 / 0000	C6RZ7	36.0	74.6	240 / 40	1005.4
02 / 0400	C6XS7	40.0	72.9	190 / 44	1003.3
02 / 1100	WCE506	41.5	71.4	010 / 37	1000.8

Table 3. Selected surface observations for Hurricane Ida, 26 August–1 September 2021. When possible, stations are sorted by station identifier.

Location	Minimum Sea Level Pressure		Maximum Surface Wind Speed			Storm surge (ft)[c]	Storm Tide (ft)[d]	Estimated Inundation (ft)[e]	Total rain (in)
	Date/time (UTC)	Press. (mb)	Date/time (UTC)[a]	Sustained (kt)[b]	Gust (kt)				
Jamaica									
International Civil Aviation Organization (ICAO) Sites									
Kingston (MKJP) (17.94N 76.79W)	26/2200	1008.0	26/2100	28	35				
Cayman Islands									
International Civil Aviation Organization (ICAO) Sites									
Cayman Brac (MWCB) (19.69N 79.88W)	27/1200	1008.0[i]		27[i]	39[i]				
Grand Cayman (MWCR) (19.29N 81.36W)	27/0800	1003.0	27/1200		23				
Cuba									
Artemisa									
Bahia Honda (78318) (22.92N 83.17W)			27/2300	59	76				
Güira De Melena (78320) (22.78N 82.52W)			27/2050	22	35				
Bauta (78376) (22.97N 82.53W)			27/2140	32	37				
Isla de la Juventud									
Cuba-Francia (78309) (21.94N 82.97W)	27/1930	993.1	27/1838	43	66				2.25
La Fe (78321) (21.83N 82.77)	27/1858	991.3	27/1750	56	65				1.79
Punta del Este (78324) (21.55N 82.53W)	27/1800	989.6							2.73
Cayo Largo del Sur (MUCL) (21.62N 81.55W)	27/1605	1005.0	27/1605	38	52				
La Habana									
Havana (MUHA) (22.99N 82.41W)	27/2155	1007.0	27/2255	22	38				
Mayabeque									
Batabanó (78322) (22.72N 82.28W)	27/2100	1003.4	27/2110	38	50				2.76

Location	Minimum Sea Level Pressure		Maximum Surface Wind Speed			Storm surge (ft)[c]	Storm Tide (ft)[d]	Estimated Inundation (ft)[e]	Total rain (in)
	Date/time (UTC)	Press. (mb)	Date/time (UTC)[a]	Sustained (kt)[b]	Gust (kt)				
Tapaste (78374) (23.02N 82.13W)									3.22
Pinar del Río									
Santa Lucia (78312) (22.67N 83.97W)	28/0115	995.8	28/0204		52				3.17
San Juan y Martinez (78314) (22.28N 83.83W)	27/2300	1002.8	28/0126	27	31				5.07
Pinar del Rio (78315) (22.42N 83.68W)	28/0000	996.7	28/0130	30	46				5.87
La Palma (78316) (22.77N 83.55W)	28/0100	994.6	27/2330	38	68				3.67
Paso Real de San Diego (78317) (22.55N 83.30W)	27/2300	990.0	27/2300	38	56				3.85
Buoys									
NOAA 41025 (35.01N 75.45W) (3.8m)	02/0620	1005.0	02/0020	29 (1-min)	34				
NOAA 42003 (25.93N 85.62W) (3.2m)	28/1950	1004.3	28/1948	47 (1-min)	54				
NOAA 42012 (30.06N 87.55W) (3.2m)			29/1351	41 (1-min)	47				
COMPS 42023 (26.01N 83.09W) (3.1m)	28/1000	1012.9	28/0800	27	39				
COMPS 42026 (25.17N 83.48W) (3.2m)	28/0830	1010.1	28/0500	32	43				
NOAA 42039 (28.79N 86.01W) (4.1m)	28/2340	1013.1	28/2052	36 (1-min)	39				
NOAA 42040 (29.21N 88.24W) (4.1m)	29/0930	1006.1	29/0550	47 (1-min)	54				
Shell 42365 (28.20N 88.12W)			29/1130	54[i]					
NOAA 44005 (43.20N 69.13W) (4.9m)	02/1250	999.4	02/1110	35 (1-min)	39				
NOAA 44008 (40.50N 69.25W) (4.1m)	02/1250	999.2	02/1318	38 (1-min)	46				
NOAA 44009 (38.45N 74.68W) (3.8m)	02/0430	1000.1	02/0137	32 (1-min)	36				
NOAA 44011 (41.09N 66.56W) (4.9m)	02/1830	1001.8	02/1632	30 (1-min)	36				
NOAA 44013 (43.20N 69.13W) (4.9m)	02/0910	1001.5	02/0707	33 (1-min)	40				
NOAA 44017 (40.69N 72.05W) (4.1m)	02/0700	997.4	02/1003	36 (1-min)	42				
NOAA 44020 (41.49N 70.28W) (4.9m)	02/1000	997.8	02/1111	35 (1-min)	41				

Location	Minimum Sea Level Pressure		Maximum Surface Wind Speed			Storm surge (ft)[c]	Storm Tide (ft)[d]	Estimated Inundation (ft)[e]	Total rain (in)
	Date/time (UTC)	Press. (mb)	Date/time (UTC)[a]	Sustained (kt)[b]	Gust (kt)				
NERACOOS 44024 (42.33N 65.91W) (4.0m)	02/1850	998.3	02/1910	28	36				
NOAA 44025 (40.25N 73.16W) (4.1m)	02/0520	997.2	02/0338	33 (1-min)	40				
NOAA 44027 (44.28N 67.30W) (5.0m)			02/1457	37 (1-min)	41				
NERACOOS 44029 (42.52N 70.57W) (4.0m)	02/1230	1000.8	02/0920	33	40				
NERACOOS 44037 (43.50N 67.88W) (4.0m)	02/1600	997.0	02/1710	31	42				
CBIBS 44042 (38.03N 76.34W) (3.0m)			01/1812	31	44				
CBIBS 44058 (37.57N 76.26W) (3.0m)			02/0206	27	37				
CBIBS 44062 (38.56N 76.42W) (3.0m)			01/1900	34	45				
NOAA 44065 (40.37N 73.70W) (4.1m)	02/0330	996.9	02/0328	38 (1-min)	47				
NOAA 44066 (39.62N 72.64W) (4.1m)	02/0700	998.5	02/0428	36 (1-min)	42				
Stony Brook 44069 (40.70N 73.09W) (3.0m)			02/0400	27	36				
OOI 44075 (40.36N 70.88W) (4.7m)	02/0920	998.5	02/0800	28					
Canada 44137 (42.26N 62.00W) (5.0m)	03/0120	1005.8	03/0120	28	38				
Canada 44150 (42.51N 64.02W) (5.0m)	02/2120	1001.5	02/2120	28	39				
Canada 44488 (45.44N 60.95W)	03/0430	999.6	03/0840	32	40				
Canada 44489 (45.49N 61.14W)	03/0630	998.5	03/0700	33	42				
Canada 44490 (44.66N 66.37W)	02/2020	997.8	02/1520	34	47				
Offshore Oil Platforms									
Mississippi Canyon 807 (42394) (28.20N 89.20W)			29/0930	85[i]					
West Delta 27A (KDLP) (29.12N 89.55W) (35m)			29/1435	76[i] (2-min)	97[i]				
Mississippi Canyon (KDSF) (28.35N 88.27W) (130m)	29/0840	995.6	29/0740	69	82				
Eugene Island 215 (KEIR) (28.63N 91.49W) (25m)	29/2124	996.0	29/2224	46	55				
Salsa (KGHB) (27.84N 91.99W) (9.1m)			30/0835	36	41				

Location	Minimum Sea Level Pressure		Maximum Surface Wind Speed			Storm surge (ft)[c]	Storm Tide (ft)[d]	Estimated Inundation (ft)[e]	Total rain (in)
	Date/time (UTC)	Press. (mb)	Date/time (UTC)[a]	Sustained (kt)[b]	Gust (kt)				
Green Canyon 338 (KGRY) (27.63N 90.44W) (18m)	29/1030	1002.7	29/0550	35	47				
Mississippi Canyon 311A (KMDJ) (28.64N 89.79W) (90m)			29/1150	83[i] (2-min)	102[i]				
Main Pass 140B (KMIS) (29.30N 88.44W) (85m)			29/0915	45 (2-min)	62				
Main Pass 289C (KVKY) (29.26N 88.44W) (115m)			29/0855	51 (2-min)	63				
LA Offshore Oil Port (LOPL1) (28.89N 90.02W) (58m)	29/1536	934.1[i]	29/1231	74[i] (2-min)					
United States									
Louisiana									
International Civil Aviation Organization (ICAO) Sites									
Vidalia (K0R4) (31.56N 91.51W)	30/0855	997.3	30/0855	24	37				0.10
New Orleans (K7N0) (29.95N 90.08W)	29/2303	988.5[i]	29/2300	27[i]	49[i]				
New Iberia (KARA) (30.03N 91.88W)	30/0253	1001.8	30/0053	24	39				0.59
Reserve (KAPS) (30.09N 90.58W)	30/0135	959.4	30/0315	51[i]	69[i]				8.87
Slidell (KASD) (30.35N 89.82W)	30/0048	998.7	30/0355	38[i]	60[i]				10.78
Baton Rouge (KBTR) (30.54N 91.15W)	30/0453	988.4	30/0050	34[i]	55[i]				1.33
Bogalusa (KBXA) (30.81N 89.86W)	30/0555	1002.7[i]	30/0515	31[i]	45[i]				
Galliano (KGAO) (29.44N 90.26W)	29/1915	959.4	29/2035	61[i]	85[i]				
Hammond (KHDC) (30.52N 90.42W)	30/0104	994.2[i]	30/0044	30[i]	49[i]				
New Roads (KHZR) (30.72N 91.48W)	30/0715	994.9	30/0335	28	38				
Lafayette (KLFT) (30.20N 91.99W)	30/0653	1001.8	291953	26	39				2.10
Boothville (KLNQ) (29.44N 90.26W)	30/0909	1006.1[i]	30/0909	21[i]	40[i]				
New Orleans (KMSY) (29.98N 90.25W)	29/2355	977.1	30/0105	56[i]	78[i]				4.73
New Orleans (KNBG) (29.84N 90.02W)			30/0155		51[i]				
New Orleans (KNEW) (30.04N 90.03W)	29/2253	990.4[i]	29/2216	57[i]	75[i]				

Location	Minimum Sea Level Pressure		Maximum Surface Wind Speed			Storm surge (ft)[c]	Storm Tide (ft)[d]	Estimated Inundation (ft)[e]	Total rain (in)
	Date/time (UTC)	Press. (mb)	Date/time (UTC)[a]	Sustained (kt)[b]	Gust (kt)				
Salt Point (KP92) (29.56N 91.53W)	29/1859	1001.0[i]	29/1759		40[i]				
Patterson (KPTN) (29.71N 91.34W)	29/2056	997.3	29/2056	25	40				
Gonzalez (KREG) (30.17N 90.94W)	30/0235	979.0	30/0135	41	65				4.50
Tallulah (KTVR) (32.35N 91.03W)	30/1953	999.5	30/1241	24	36				1.66
Hydrometeorological Automated Data System (HADS) Sites (NWS)									
Abita Springs (ASBL1) (30.48N 90.04W)									7.50
Amite 2.0 ENE (AMIL1) (30.73N 90.48W)									10.24
Baker 4.0 E (BAKL1) (30.60N 91.09W)									3.16
Bush 1.0 NNE (BSHL1) (30.63N 89.90W)									11.02
Bogalusa 2E (BXAL1) (30.80N 89.82W)									8.60
Inniswold 4.0 E (CBAL1) (30.39N 91.01W)									3.70
Cocodrie 18.0 SW (CCOL1) (29.08N 90.87W)			29/1900	63			2.98	2.1	
Camp Covington (CGSL1) (30.60N 90.15W)									12.44
Sorrento (CONL1) (30.17N 90.84W)									6.93
Covington (CVEL1) (30.48N 90.09W)									13.01
Caillou Lake (DCLL1) (29.25N 90.92W)			29/1930	63			3.30	2.3	
Galliano 12.0 ENE (DOSL1) (29.47N 90.10W)			29/1600	53[i]					
Denham Springs 3.0 SW (DENL1) (30.46N 90.99W)									4.42
Folsom (FLSL1) (30.62N 90.25W)									11.31
Franklinton 1.0 SW (FRNL1) (30.84N 90.16W)									9.11
French Settlement (FSLL1) (30.28N 90.78W)									6.33

Location	Minimum Sea Level Pressure		Maximum Surface Wind Speed			Storm surge (ft)[c]	Storm Tide (ft)[d]	Estimated Inundation (ft)[e]	Total rain (in)
	Date/time (UTC)	Press. (mb)	Date/time (UTC)[a]	Sustained (kt)[b]	Gust (kt)				
Grand Pass (GRPL1) (30.12N 89.25W)			30/0100	55			5.95	4.7	
Grangeville (GVLL1) (30.74N 90.84W)									4.07
Holden (HOLL1) (30.50N 90.68W)									10.77
Millerville (JCHL1) (30.44N 91.04W)									3.00
Kentwood (KENL1) (30.93N 90.48W)									9.46
Liverpool (LPOL1) (30.93N 90.67W)									8.28
Montpelier (MONL1) (30.69N 90.54W)									9.64
Barataria Bay (NGIL1) (29.42N 89.95W)			29/1630	101[i]			11.10[l]	10.2[l]	
Hammond 5.0 W (NRBL1) (30.50N 90.55W)									11.19
Baton Rouge Highland Road (OWCL1) (30.36N 91.02W)									3.32
Gonzales Panama Canal (PANL1) (30.17N 90.92W)									5.66
Pearl River (PERL1) (30.39N 89.74W)									11.60
New Orleans Lakefront Arpt. (PLAL1) (30.05N 90.03W)							9.06[l]	8.5[l]	10.74
Pride 2.0 SE (PRIL1) (30.67N 90.96W)									4.10
Port Vincent (PVLL1) (30.33N 90.85W)			30/0230	24					9.95
Rigolets Lake Pontchartrain (RIGL1) (30.16N 89.74W)			03/0100	38			6.31	5.3	8.96
Robert (ROBL1) (30.51N 90.36W)									11.73
Seabrook (SBCL1) (30.03N 90.04W)			30/0200	56					
Michoud 2.0 SE (SBEL1) (30.01N 89.90W)			29/1915	49[i]					
Cypremort Point (VCPL1) (29.71N 91.88W)			29/2200	38			2.55	1.2	

Location	Minimum Sea Level Pressure		Maximum Surface Wind Speed			Storm surge (ft)[c]	Storm Tide (ft)[d]	Estimated Inundation (ft)[e]	Total rain (in)
	Date/time (UTC)	Press. (mb)	Date/time (UTC)[a]	Sustained (kt)[b]	Gust (kt)				
Coastal-Marine Automated Network (C-MAN) Sites									
SW Pass (BURL1) (28.91N 89.43W) (38m)			29/1250	90 (10-min)	114				
National Ocean Service (NOS) Sites									
Amerada Pass (AMRL1) (29.45N 91.34W) (11m)	29/2148	995.7	29/2254	37	52	1.85	2.12	1.4	
Bulk Terminal (BKTL1) (30.19N 93.30W)						1.68	1.87	1.2	
Bayou Gauche (BYGL1) (29.79N 90.42W) (31m)	29/2312	947.9	29/2300	62[i] (2-min)	82[i]			3.4**	
Calcasieu Pass (CAPL1) (29.77N 93.34W)	30/2118	1004.4	29/2148	22	26	1.86	1.55	1.2	
Carrollton (CARL1) (29.93N 90.14W)								4.6**	
Eugene Island (EINL1) (29.37N 91.38W) (4.0m)	29/2124	996.0	29/2224	46	55	2.13		1.7	
Frenier Landing (FREL1) (30.11N 90.42W) (10m)	30/0154	974.6	29/2300	57[i] (1-min)	77[i]				
Freshwater Canal Locks (FRWL1) (29.55N 92.31W)			29/1830	23	28	2.26	2.75	1.9	
Grand Isle (GISL1) (29.27N 89.96W) (6.6m)	29/1706	970.8	29/1730	64 (2-min)	86	5.51	5.83	5.5	
Lake Charles (LCLL1) (30.22N 93.22W)						1.63	1.92	1.2	
New Canal (NWCL1) (30.03N 90.11W) (9.9m)	30/0006	986.4	29/1800	44	66				
Pilottown (PILL1) (29.18N 89.56W) (9.5m)	29/1248	995.2	29/1624	55 (2-min)	74	4.35		4.0	
Pilot's Station East (PSTL1) (28.93N 89.41W) (20m)	29/1236	982.0	29/1248	92[i] (2-min)	111[i]	4.37		4.0	
Port Fourchon (PTFL1) (29.11N 90.20W)						3.62[l]		3.1[l]	
Shell Beach (SHBL1) (29.87N 89.67W) (16m)	29/2218	997.4	30/0018	58 (2-min)	73	7.62	7.60	6.9	
Berwick (TESL1) (29.67N 91.24W) (13m)	29/2300	993.3	29/2124	26	47	1.19	2.42	0.2	
WeatherFlow									
Baton Rouge (XBTR) (30.50N 91.19W) (10m)	30/0503	986.0	30/0317	29 (1-min)	48				

Location	Minimum Sea Level Pressure		Maximum Surface Wind Speed			Storm surge (ft)[c]	Storm Tide (ft)[d]	Estimated Inundation (ft)[e]	Total rain (in)
	Date/time (UTC)	Press. (mb)	Date/time (UTC)[a]	Sustained (kt)[b]	Gust (kt)				
Bayou Bienvenue (XBYU) (30.00N 89.90W) (27m)	29/2305	988.1	29/2216	75 (1-min)	86		12.13	10.9	
Dulac (XDUL) (29.35N 90.73W) (10m)	29/1756	982.0	29/2001	87 (1-min)	120				
Waggaman (XJEF) (29.94N 90.23W) (10m)	29/2341	975.4	29/2340	63 (1-min)	80				
New Orleans (XLKF) (30.04N 90.03W) (10m)	29/2321	989.0	29/2202	55 (1-min)	69				
Mandeville (XMVL) (30.40N 90.09W) (10m)	30/0146	992.8	30/0204	63 (1-min)	96				
Mid-Lake Pontchartrain (XPTN) (30.20N 90.12W) (12m)	30/0057	988.0	29/2317	65 (1-min)	76				
Galliano FCMP T1 (XUF1t) (29.44N 90.26W) (10m)			29/2035	87 (1-min)	106				
Raceland FCMP T5 (XUF5t) (29.76N 90.56W) (10m)	29/2315	945.3	30/0100	68 (1-min)	86				
Remote Automated Weather Stations (RAWS)									
Big Branch Marsh (BBNL1) (30.32N 89.94W)									9.66
Flatpoint (CLCL1) (30.27N 89.91W)			30/0454	30	43				7.38
Fritchie (SFPL1) (30.24N 89.72W)			30/0117		34				
SE LA Portable (TS947) (30.11N 89.86W) (1m)			29/2334	46	64				3.51
Texas Tech Univ. HRT Sticknet									
Gray 2.0 W (TTU101) (29.68N 90.82W) (2.3m)	29/2243	970.1	29/2152	52 (1-min)	68				
Raceland 2.0 E (TTU102) (29.71N 90.57W) (2.3m)	29/2241	942.6	29/2206	60 (1-min)	83				
Thibodaux 4.2 NW (TTU108) (29.84N 90.87W) (2.3m)	30/0028	975.0	30/0120	46 (1-min)	64				
Vacherie 3.7 NE (TTU224) (30.03N 90.67W) (2.3m)	29/2202	956.5	29/2334	49 (1-min)	75				
Violet 7.8 SE (TTU325) (29.86N 89.77W) (2.3m)	29/2250	992.6	29/2228	60 (1-min)	79				

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	Date/time (UTC)	Press. (mb)	Date/time (UTC)[a]	Sustained (kt)[b]	Gust (kt)				
Live Oak 1.0 N (TTU326) (29.77N 90.03W) (2.3m)	29/2347	984.5	29/2306	64	86				
Waggaman 1.0 NW (TTU327) (29.93N 90.24W) (2.3m)	29/2354	979.2	29/2342	44 (1-min)	67				
Luling 1.0 W (TTU328) (29.93N 90.39W) (2.3m)	30/0126	964.0	29/2255	56 (1-min)	71				
Paincourtville 2.2 NW (TTU329) (30.00N 91.09W) (2.3m)	30/0052	986.4	30/0344	37 (1-min)	48				
Vacherie 4.7 S (TTU330) (29.94N 90.71W) (2.3m)	30/0347	957.6	30/0002	61 (1-min)	77				
Killona 1.0 NW (TTU332) (30.02N 90.49W) (2.3m)	30/0033	958.2	29/2346	70 (1-min)	96				
Vacherie 4.0 W (TTU333) (29.99N 90.79W) (2.3m)	30/0100	962.9	29/2221	51 (1-min)	70				
White Castle 2.1 SE (TTU334) (30.16N 91.12W) (2.3m)	30/0147	985.5	30/0154	43 (1-min)	56				
White Castle 4.2 SW (TTU335) (30.13N 91.19W) (2.3m)	30/0151	990.3	30/0325	32 (1-min)	42				
Napoleonville 3.5 SE (TTU336) (29.90N 90.99W) (2.3m)	30/0045	981.7	30/0002	42 (1-min)	60				
Slidell (TTU441) (30.29N 89.75W) (2.3m)	30/0044	998.2	30/0309	38 (1-min)	57				
Eden Isle 1.0 SE (TTU442) (30.21N 89.79W) (2.3m)	30/0045	997.0	30/0053	53 (1-min)	67				
Mandeville (TTU443) (30.39N 90.00W) (2.3m)	30/0043	994.2	30/0025	30 (1-min)	57				
Hammond 2.5 E (TTU444) (30.51N 90.42W) (2.3m)	30/0417	985.4	30/0403	45 (1-min)	64				
Livingston 1.9 S (TTU445) (30.47N 90.75W) (2.3m)	30/0423	968.6	30/0334	43 (1-min)	62				
LSU 2.0 SE (TTU446) (30.47N 91.17W) (2.3m)	30/0327	987.9	30/0327	32 (1-min)	45				
Sorrento 2.0 SW (TTU448) (30.15N 90.89W) (2.3m)	30/0221	974.3	30/0130	42 (1-min)	60				

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	Date/time (UTC)	Press. (mb)	Date/time (UTC)[a]	Sustained (kt)[b]	Gust (kt)				
Louisiana Agriclimatic Information System									
Baton Rouge (LSU01) (30.36N 91.17W)	30/0406	993.2	30/0328	43	52				2.07
Iberia (LSU05) (29.96N 91.71W)	30/0053	1003.4	30/0009	27	38				0.19
Hammond (LSU08) (30.50N 90.78W) (14m)	30/0436	992.6[i]	30/0317	40[i]	62[i]				11.44
WeatherSTEM									
LSU Alex Box Stadium (1313W) (30.41N 91.19W)	30/0410	988.5	30/0240	32	41				
LSU Tiger Stadium (30.41N 91.18W)	30/0410	986.5	30/0310	48	61				
Union Pacific Railroad Sites									
Armant (UP272) (30.00N 90.72W)			29/2110	53	74				
Allemania (UP390) (30.26N 91.22W)			30/0125	48					
Donvle (UP866) (30.06N 90.93W)			30/0055	62	68				
Public/Other									
Edgar USARRAY (545BX) (30.04N 90.49W)	30/0035	962.7							
Lockport (Brite)	29/2212	940.3							
Belle Chasse (C3916) (29.84N 90.00W)	29/2331	987.1	29/1924	35[i]	55[i]				
Harahan (C4185) (29.95N 90.20W) (3m)	30/0006	979.7	30/0109	30	60				3.42
Gramercy (C7580) (30.06N 90.70W)	29/2025	994.2[i]	29/2020	34[i]	53[i]				
Raceland (D1103) (29.70N 90.57W) (3m)	29/2108	966.5[i]	29/2015	43[i]	75[i]				
Metairie (E1090) (30.01N 90.14W)	29/2357	986.1	29/2333		36				8.80
Baton Rouge (E1616) (30.41N 90.95W)	30/0406	981.0	30/0235		38				4.26
Belle Chasse (E3364) (29.86N 89.99W)	29/2331	990.9	29/1800	35[i]	57[i]				
Houma (E5037) (29.54N 90.67W)	29/1718	992.2[i]	29/1718	40[i]	54[i]				
Hammond (E5825) (30.49N 90.43W)	30/0155	989.8[i]	30/0054		40[i]				

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	Date/time (UTC)	Press. (mb)	Date/time (UTC)[a]	Sustained (kt)[b]	Gust (kt)				
New Orleans (E6362) (29.97N 90.09W) (1m)	29/2346	987.1	29/2201	35	65				5.78
Zachary (E6422) (30.61N 91.05W)	30/0330	989.8	30/0150		39				
Lockport (E6903) (29.66N 90.54W)	29/2200	941.4							
Gretna (E8473) (29.91N 90.05W)	29/1835	998.0[i]	29/1755	21[i]	40[i]				
Covington (E9369) (30.44N 90.16W)	30/0000	997.6[i]	29/2330	11[i]	43[i]				
Kenner (F1110) (30.03N 90.22W)	30/0000	982.1	30/0130	27[i]	57[i]				
Thibodaux (F4663) (29.77N 90.79W) (4m)	29/2331	970.9	29/2300	45	76				
Slidell (F7679) (30.23N 89.80W)	30/0044	995.3	30/0014	37[i]	57[i]				
Prairieville (F7886) (30.29N 90.97W)	30/0335	981.0	30/0324	34	69				2.53
Houma (iCyclone) (29.60N 90.75W)	29/2159	963.8							
Bourg (KLABOURG19) (29.55N 90.63W) (2m)	29/2134	943.4	29/2014	70					
Spokane (KLAFERRI7) (31.70N 90.46W)			30/0754	33	34				
Port Fourchon 2.0 NE (KLAGOLDE1) (29.16N 90.18W) (6.1m)	29/1719	934.0[i]	29/1744	53[i]	89[i]				
Laplace (KLALAPLA7) (30.07N 90.50W) (7.9m)	30/0044	963.8	29/2354	86[i]					
Braithwaite (KLALOUIS3) (29.87N 89.95W) (11m)	29/2319	993.6	29/2129	55	56				
Slidell (KLASLIDE15) (30.22N 89.82W) (7.3m)	29/2145	1001.3[i]	29/2000	42[i]	65[i]				
Vidalia (KLAVIDAL15) (31.57N 91.44W)			30/0714		36				
Westwego (KLAWESTW16) (29.19N 90.14W) (3m)	29/2345	984.8	29/1930	39	63				
New Orleans (WVUE) (29.96N 90.10W) (18m)					98				
US Geological Survey (USGS) Storm Tide Sensors									
Grand Isle – South End (LAJEF27108) (29.20N 90.04W)							10.56	9.6	
Pointe a la Hache (LAJPLA7142) (29.57N 89.76W)	29/1919	990.2					10.73	9.4	

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Buras (LAPLA27153) (29.30N 89.55W)							6.97	5.7	
Pass Manchac (LATAN23291) (30.29N 90.40W)							6.53	5.5	
Shell Beach (LASTB00004) (29.86N 89.68W)							7.79	6.5	
Slidell - Rigolets (LASTT23298) (30.18N 89.73W)							6.29	5.2	
Mandeville (LASTT27187) (30.34N 90.05W)	30/0126	994.1							
USGS Stream Gauges									
Bayou Perot at Point Legard (BPPL1) (29.57N 90.17W)							6.35[l]	5.7[l]	
Crooked Bayou near Delacroix (CBDL1) (29.71N 89.72W)							9.96	8.6	
Caminada Pass NW of Grand Isle (CPGL1) (29.23N 90.05W)							8.43	7.6	
Barataria Bay near Grand Terre Island (GTEL1) (29.32N 89.94W)							9.47[l]	8.6[l]	
American Bay near Point-a-la-Hache (PLHL1) (29.57N 89.70W)							12.90[l]	11.5[l]	
Black Bay near Pointe-a-la-Hache (PSIL1) (29.63N 89.56W)							8.52[l]	7.2[l]	
Black Bay near Stone Island (SIPL1) (29.57N 89.51W)							12.63	11.3	
US Army Corps of Engineers (USACE) Gauges									
Bayou Dupre Flood Gate (BDML1) (29.94N 89.84W)							9.72[l]	8.5[l]	
Chef Manteur Pass near Lake Borgne (CMPL1) (30.07N 89.80W)							6.70[l]	5.6[l]	

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	Date/time (UTC)	Press. (mb)	Date/time (UTC)[a]	Sustained (kt)[b]	Gust (kt)				
Lake Pontchartrain at Mandeville (LPML1) (30.37N 90.09W)							7.78	7.1	
Bayou Bienvenue Flood Gate (MBBL1) (30.00N 89.92W)							4.55	3.4	
Tchefuncte River at Madisonville (MSVL1) (30.40N 90.15W)							8.57	7.9	
Pass Manchac (PMPL1) (30.28N 90.40W)							6.46	5.5	
Gulf Intracoastal Waterway near Paris Bridge Road (PRSL1) (30.01N 89.94W)							4.19	3.0	
Mississippi River SW Pass at East Jetty (SWBL1) (28.93N 89.41W)							4.07[l]	2.4[l]	
Lake Pontchartrain – West End (WEGL1) (30.02N 90.12W)							5.94	5.5	
NWS/Harris County Flood Control District High Water Marks									
Grand Isle (29.20N 90.04W)							11.2	10.2	
Golden Meadow (29.34N 90.25W)							11.6	10.1	
Laplace – Frenier Landing (30.11N 90.43W)							11.4	9.9	
Laplace – West side of Lake Pontchartrain (30.15N 90.45W)							11.4	9.9	
Leeville (29.26N 90.21W)							10.3	9.8	
Between Grand Isle and Port Fourchon (29.18N 90.10W)							10.7	9.7	
Lafitte (29.69N 90.09W)							9.5	9.5	
Grand Isle (29.20N 90.07W)							10.3	9.3	
Grand Isle (29.20N 90.04W)							10.25	9.3	
Ruddock (30.21N 90.42W)							10.3	8.8	
Ironton (29.63N 89.93W)							9.75	8.8	
Ironton (29.65N 89.96W)							9.5	8.5	

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	Date/time (UTC)	Press. (mb)	Date/time (UTC)[a]	Sustained (kt)[b]	Gust (kt)				
Ironton (29.62N 89.93W)							9.3	8.3	
Ironton (29.65N 89.96W)							9.3	8.3	
Port Fourchon (29.11N 90.19W)							9.7	8.2	
Laplace (30.09N 90.45W)							9.7	8.2	
Lafitte (29.67N 90.11W)							9.6	8.1	
Lafitte (29.66N 90.11W)							9.5	8.0	
Alliance (29.69N 89.98W)							9.0	8.0	
West Pointe-a-la-Hache (29.60N 89.86W)							9.2	7.7	
Port Fourchon (29.15N 90.18W)							9.2	7.7	
Grand Isle (29.21N 90.03W)							8.6	7.6	
Madisonville (30.39N 90.21W)							9.1	7.6	
Pointe-a-la-Hache Ferry Landing (29.57N 89.80W)							8.5	7.5	
Laplace (30.09N 90.46W)							8.95	7.5	
Port Fourchon (29.15N 90.18W)							8.8	7.3	
Mandeville (30.37N 90.10W)							8.7	7.3	
West Pointe-a-la-Hache (29.54N 89.78W)							8.1	7.1	
Madisonville (30.38N 90.16W)							8.55	7.1	
Laplace (30.08N 90.47W)							8.5	7.0	
Lafitte (29.67N 90.11W)							8.4	6.9	
Empire (29.39N 89.61W)							7.8	6.8	
Between Lafitte and Jean Lafitte (29.72N 90.11W)							8.3	6.8	
Grand Isle (29.22N 90.02W)							7.75	6.8	
Between Lafitte and Jean Lafitte (29.71N 90.11W)							8.4	6.4	
Galva (30.28N 90.40W)							7.7	6.2	
Jean Lafitte (29.73N 90.12W)							7.6	6.1	

Location	Minimum Sea Level Pressure		Maximum Surface Wind Speed			Storm surge (ft)[c]	Storm Tide (ft)[d]	Estimated Inundation (ft)[e]	Total rain (in)
	Date/time (UTC)	Press. (mb)	Date/time (UTC)[a]	Sustained (kt)[b]	Gust (kt)				
Norco (30.02N 90.40W)							8.4	5.9	
Kenner (30.05N 90.28W)							7.6	5.9	
Laplace (30.06N 90.43W)							8.3	5.8	
Grand Isle (29.26N 89.96W)							6.8	5.8	
Grand Isle (29.25N 89.98W)							6.7	5.7	
Lafitte (29.67N 90.10W)							7.1	5.6	
Jean Lafitte (29.76N 90.11W)							7.1	5.6	
Grand Isle (29.23N 90.00W)							6.42	5.5	
New Orleans – Venetian Isles (30.07N 89.81W)							6.9	5.4	
New Orleans – Venetian Isles (30.07N 89.82W)							6.8	5.3	
Jean Lafitte (29.77N 90.08W)							6.75	5.3	
Jean Lafitte (29.77N 90.09W)							6.7	5.2	
Akers (30.29N 90.40W)							6.7	5.2	
Lafitte (29.73N 90.12W)							6.58	5.1	
Jean Lafitte (29.77N 90.08W)							6.63	5.1	
Jean Lafitte (29.76N 90.10W)							6.56	5.1	
Kenner (30.04N 90.24W)							6.55	5.1	
Belle Chasse – West Gate Complex (29.81N 90.07W)							6.8	5.0	
Grand Isle (29.26N 89.96W)							6.0	5.0	
Grand Isle (29.24N 89.98W)							6.0	5.0	
Pontchatoula – Lee's Landing (30.40N 90.32W)							7.25	4.8	
Galva (30.28N 90.40W)							6.2	4.7	
Grand Isle State Park (29.25N 89.96W)							5.33	4.3	
New Orleans – Irish Bayou (30.13N 89.87W)							5.1	4.1	
Maurepas (30.32N 90.68W)							5.3	3.8	
Cilo (30.31N 90.61W)							5.82	3.2	

Location	Minimum Sea Level Pressure		Maximum Surface Wind Speed			Storm surge (ft)[c]	Storm Tide (ft)[d]	Estimated Inundation (ft)[e]	Total rain (in)
	Date/time (UTC)	Press. (mb)	Date/time (UTC)[a]	Sustained (kt)[b]	Gust (kt)				
Laplace (30.09N 90.48W)							7.3	2.8	
Mississippi									
International Civil Aviation Organization (ICAO) Sites									
Brookhaven (K1R7) (31.61N 90.41W)			30/0615		32				3.59
Winona (K5A6) (33.47N 89.73W)			30/1635		26				3.41
Biloxi (KBIX) (30.43N 88.92W)	30/2301	1005.0	29/2258	35	46				9.54
Columbus AFB (KCBM) (33.65N 88.45W)	31/0956	997.3	30/2331	22	30				6.35
Greenville (KGLH) (33.48N 90.99W)	30/2153	1000.5	30/1224	28	40				
Gulfport (KGPT) (30.40N 89.07W)	30/2207	1004.4	30/0730	42	64				10.71
Columbus (KGTR) (33.45N 88.58W)	31/0853	998.9	30/2334	22	35				
Greenwood (KGWO) (31.56N 91.51W)	31/0053	997.8	30/1657	24	35				
Hattiesburg (KHBG) (31.27N 89.26W)	30/2235	1002.4	26/2107	28	40				4.95
Natchez (KHEZ) (31.62N 91.30W)	30/1056	996.1	30/0812	26	38				
Jackson Hawkins (KHKS) (32.33N 90.22W)	30/1825	996.8	30/1224	22	36				3.91
Jackson (KJAN) (32.32N 90.08W)	30/2054	997.9	30/1323	24	42				3.00
Laurel (KLUL) (31.67N 89.17W)	30/2235	1002.0	30/1235	25	37				
Madison (KMBO) (32.44N 90.10W)	30/2105	996.8	30/1115		28				2.31
McComb (KMCB) (31.18N 90.47W)	30/1040	994.9[i]	30/0815	28[i]	45[i]				6.24
Meridian (KMEI) (32.34N 88.75W)	31/0058	1001.0	31/0047	22	37				3.58
Picayune (KMJD) (30.49N 89.65W)			30/0155	34	48				
Meridian NAS (KNMM) (32.34N 88.75W)	31/0056	1002.3	30/1928	22	35				3.84
Hattiesburg (KPIB) (31.47N 89.33W)	30/2256	1002.4	30/1056	22	37				
Pascagoula (KPQL) (30.46N 88.53W)	30/0253	1005.9	30/0053	28	43				12.47
Starkville (KSTF) (33.43N 88.85W)	31/0915	997.6	30/2135	20	34				
Tupelo (KTUP) (34.26N 88.77W)	31/0953	996.0	31/0153	21	32				2.88

Location	Minimum Sea Level Pressure		Maximum Surface Wind Speed			Storm surge (ft)[c]	Storm Tide (ft)[d]	Estimated Inundation (ft)[e]	Total rain (in)
	Date/time (UTC)	Press. (mb)	Date/time (UTC)[a]	Sustained (kt)[b]	Gust (kt)				
Vicksburg (KVKS) (32.23N 90.93W)	30/1915	998.3	30/1035		34				
Hydrometeorological Automated Data System (HADS) Sites (NWS)									
Bentonia 3.0 S (BTAM6) (32.59N 90.37W)									3.69
Brooklyn 1.0 SW (BKMM6) (31.05N 89.20W)									5.52
Bovina (BOVM6) (32.35N 90.70W)									3.24
Carthage (CARM6) (32.70N 89.53W)									4.54
Chunky (CKYM6) (32.33N 88.91W)									3.49
Columbia (CLMM6) (31.23N 89.85W)									7.17
Collins 10.0 NE (CLSM6) (31.71N 89.41W)									6.26
Columbus 2.0 NE (CLUM6) (33.51N 88.40W)									3.46
Corinth 4.0 W (COHM6) (34.93N 88.60W)									3.87
Caesar 3.0 WSW (CREM6) (30.57N 89.59W)									10.93
Damascus 1.0 S (DAMM6) (32.48N 88.82W)									3.39
D'iberville 4.0 N (DIBM6) (30.48N 88.90W)									10.41
Dlo (DLOM6) (31.98N 89.88W)									3.56
Edinburg (ENBM6) (32.80N 88.33W)									4.00
Enterprise (ENSM6) (31.28N 88.82W)									4.94
Fulton 2.0 W (FULM6) (34.27N 88.45W)									3.62
Hattiesburg 10.0 NW (HBGM6) (31.43N 89.41W)									6.64
Holcut (HCTM6) (34.73N 88.29W)									3.62

Location	Minimum Sea Level Pressure		Maximum Surface Wind Speed			Storm surge (ft)[c]	Storm Tide (ft)[d]	Estimated Inundation (ft)[e]	Total rain (in)
	Date/time (UTC)	Press. (mb)	Date/time (UTC)[a]	Sustained (kt)[b]	Gust (kt)				
Jackson 1.0 SSE (JACM6) (32.28N 90.18W)									4.69
Ross Barnett Reservoir (JSNM6) (32.38N 90.07W)									4.60
Kiln 2.0 S (KLNM6) (30.39N 89.44W)									10.48
Kosciusko 2.0 SSE (KSCM6) (33.03N 89.58W)									3.62
Lyman 4.0 E (LYMM6) (30.48N 89.03W)									9.48
McLain 1.0 E (MCLM6) (31.1N 88.81W)									6.39
McNeill 3.0 W (MNLM6) (30.66N 89.69W)									11.78
Merrill (MRRM6) (30.98N 89.73W)									6.53
Monticello (MTCM6) (31.55N 90.08W)									6.59
New August 1.0 N (NAGM6) (31.22N 89.05W)									4.65
Pearl River 6.2 E (NAPM6) (30.35N 89.65W)			30/0100	26					12.63
Ofahoma (OFAM6) (32.71N 89.67W)									3.52
Arundel (ORAM6) (32.30N 88.75W)									3.48
Osyka (OSYM6) (31.01N 90.46W)									8.76
Fannin 3.0 S (PECM6) (32.39N 89.95W)									3.38
Philadelphia 5.0 N (PLAM6) (32.84N 90.10W)									3.48
Ludlow 7.0 NW (RATM6) (32.59N 89.84W)									5.32
Runnelstown 3.0 S (RNTM6) (31.33N 89.11W)									6.30
Rockport 1.0 E (ROCM6) (31.78N 90.15W)									5.70
Rosetta (RSAM6) (31.32N 91.11W)									4.49

Location	Minimum Sea Level Pressure		Maximum Surface Wind Speed			Storm surge (ft)[c]	Storm Tide (ft)[d]	Estimated Inundation (ft)[e]	Total rain (in)
	Date/time (UTC)	Press. (mb)	Date/time (UTC)[a]	Sustained (kt)[b]	Gust (kt)				
Shucktown 1.0 N (SHKM6) (32.56N 88.77W)									3.07
Tibbee (TBBM6) (33.53N 88.63W)									6.21
Gulfport (TCGM6) (30.42N 89.08W)									11.61
Tylertown (TYTM6) (31.18N 90.28W)									7.44
Waldrup (WALM6) (31.97N 89.12W)									4.10
White Plains (WPTM6) (30.59N 88.91W)									11.22
Walnut 6.0 E (WLTM6) (34.93N 88.79W)									4.39
Industrial 3.0 WSW (WSWM6) (30.57N 89.81W)									5.48
Walnut Grove (WTGM6) (32.59N 89.47W)									3.51
Waynesboro 3.0 WNW (WYNM6) (31.68N 88.68W)									5.02
National Ocean Service (NOS) Sites									
Pascagoula NOAA Lab (PNLM6) (30.37N 88.56W)						4.11	4.72	3.8	
Petit Bois Island (PTBM6) (30.21N 88.50W) (4.6m)	30/2148	1006.8	30/1318	38 (10-min)	48				
Waveland (WYCM6) (30.33N 89.33W) (10m)			30/0112	47 (2-min)	58	7.36	7.89	6.9	
WeatherFlow									
Biloxi (XBIL) (30.44N 88.98W) (15m)	30/0439	1005.0	30/1114	27 (1-min)	42				
Gulfport (XGPT) (30.36N 89.11W) (10m)	30/0443	1005.8	30/0727	46 (1-min)	63				
Ship Island (XSHI) (30.23N 88.98W) (12m)	29/2202	1004.0	30/1345	52 (1-min)	58				
Remote Automated Weather Stations (RAWS)									
Black Creek (BLCM6) (30.85N 89.03W) (6.1m)			30/0900		34				6.88
Bude 3S (BDEM6) (31.41N 90.85W) (6.1m)			30/0705	21	58				2.98

Location	Minimum Sea Level Pressure		Maximum Surface Wind Speed			Storm surge (ft)[c]	Storm Tide (ft)[d]	Estimated Inundation (ft)[e]	Total rain (in)
	Date/time (UTC)	Press. (mb)	Date/time (UTC)[a]	Sustained (kt)[b]	Gust (kt)				
Camp Keller (CKWM6) (30.52N 88.98W) (6.1m)			30/0000		41				8.86
Crystal Springs (CYSM6) (31.95N 90.38W) (6.1m)			30/1009	21	42				3.77
Ragland Hills (FRGM6) (31.20N 90.18W) (6.1m)			28/0700		28				6.43
Bienville (FSTM6) (32.30N 89.48W) (6.1m)			30/1006		30				3.92
Grand Bay (GRBM6) (30.36N 88.42W) (6.1m)			30/1000		37				7.64
Wasau (LAUM6) (31.53N 88.89W) (6.1m)			30/1009		31				4.07
Greene (LKKM6) (31.14N 88.60W) (6.1m)			30/1514		25				6.54
Monroe (MFCM6) (33.79N 88.35W) (6.1m)			31/0214		24				5.37
Pike County (MPAM6) (31.19N 90.48W) (6.1m)			30/0709	27 (10-min)	50				7.27
Hancock (NNHM6) (30.62N 89.41W) (6.1m)			30/0109		35				12.99
Noxubee (NOXM6) (33.28N 88.79W) (6.1m)			30/1958		24				8.04
Covington (RHCM6) (31.75N 89.52W) (6.1m)			30/0709		31				5.48
Lauderdale (RLDM6) (32.37N 88.46W) (6.1m)			30/1813		29				5.44
Marion (RMAM6) (31.21N 89.62W) (6.1m)			30/0709		26				6.07
Neshoba (RNEM6) (32.80N 89.12W) (6.1m)			30/1813		31				3.50
Gautier (SHCM6) (30.45N 88.66W) (6.1m)			30/0951		34				7.49
Tishomingo (TISM6) (34.78N 88.17W) (6.1m)			30/1914		26				3.88
Tombigbee (TNFM6) (33.28N 88.14W) (6.1m)			30/2000		23				5.40
Troy (TR876) (34.09N 88.14W) (6.1m)									3.14
Yalabusha (YALM6) (33.99N 89.80W) (6.1m)			30/1909		21				3.08
Texas Tech Univ. HRT Sticknet									
Long Beach 1.3E (TTU437) (30.33N 89.22W) (2.3m)	30/0438	1004.7	29/1515	45 (1-min)	55				
Long Beach 1W (TTU438) (30.31N 89.26W) (2.3m)	30/1013	1005.3	30/0325	37 (1-min)	47				

Location	Minimum Sea Level Pressure		Maximum Surface Wind Speed			Storm surge (ft)[c]	Storm Tide (ft)[d]	Estimated Inundation (ft)[e]	Total rain (in)
	Date/time (UTC)	Press. (mb)	Date/time (UTC)[a]	Sustained (kt)[b]	Gust (kt)				
Henderson Point (TTU439) (30.31N 89.28W) (2.3m)	30/1012	1005.8	30/0059	40 (1-min)	51				
Gulfport 1.8W (TTU440) (30.36N 89.12W) (2.3m)	30/1022	1006.1	29/2131	40 (1-min)	48				
South Alabama Mesonet									
Pascagoula (101) (30.36N 88.50W)									7.24
Agricola (201) (30.82N 88.50W)									8.73
Public/Other									
Neshoba County EMA (32.78N 89.13W)			30/1730		52				
Ross Barnett Reservoir (32.40N 90.06W)			30/1130		47				
Long Beach (F6464) (30.36N 89.19W)	302245	1004.4	29/2316		38				
Brookhaven (KMSBROOK3) (31.58N 90.44W)			30/0934		40				
Lucedale (KMSLUCED20) (30.84N 88.78W)									10.86
Perkinston (KMSPERKI8) (30.74N 89.13W)									9.24
Richton (KMSRICHI2) (31.36N 88.79W)									7.79
Newton 5.0 ENE CRN (NTEM6) (32.34N 89.07W)									4.11
Starkville SCAN (STKM6) (33.63N 88.77W)									6.06
Advanced Hydrological Prediction Service (AHPS) Sites									
Stennis L&D (CBUM6) (33.52N 88.49W)									5.85
Dennis 6.0 WSW (DNNM6) (3\4.52N 88.32W)									3.39
Smithville L&D (LKBM6) (34.05N 88.42W)									4.09

Location	Minimum Sea Level Pressure		Maximum Surface Wind Speed			Storm surge (ft)[c]	Storm Tide (ft)[d]	Estimated Inundation (ft)[e]	Total rain (in)
	Date/time (UTC)	Press. (mb)	Date/time (UTC)[a]	Sustained (kt)[b]	Gust (kt)				
Fulton L&D (LKCM6) (34.25N 88.42W)									3.69
Fulton 13.0 N (LKEM6) (34.45N 88.35W)									3.55
Laurel (LURM6) (31.68N 89.20W)									6.06
Graham Ferry (PGFM6) (30.61N 88.64W)									7.16
USGS Water Level Sensors									
Pearlington - East Pearl River (MSHAN06615) (30.24N 89.61W)							8.10	6.7	
Gulfport (MSHAR25057) (30.36N 89.09W)							6.53	5.1	
Bayou Cumbest (MSJAC25056) (30.40N 88.45W)							4.45	3.3	
USGS Stream Gauges									
Pearl River near Claiborne (EPCM6) (30.19N 89.53W)							8.43	7.1	
Old Fort Bayou at Ocean Springs (OFBM6) (30.42N 88.83W)							5.92	4.5	
Alabama									
International Civil Aviation Organization (ICAO) Sites									
Haleyville (K1M4) (34.28N 87.60W)			31/0534		27				4.04
Auburn (KAUO) (32.62N 85.43W)	31/2107	1006.1	30/2120	22	34				3.00
Mobile Downtown (KBFM) (30.64N 88.07W)	31/0910	1006.1	30/1133	27	40				4.67
Birmingham (KBHM) (33.57N 86.75W)	31/1353	1002.6	31/0607		28				3.10
Cullman (KCMD) (34.27N 86.86W)			31/1635		21				4.13
Fairhope (KCQF) (30.46N 87.88W)			30/1135	24	33				3.80
Dothan (KDHN) (31.32N 85.45W)	31/2253	1006.8	30/1945	21	32				3.39

Location	Minimum Sea Level Pressure		Maximum Surface Wind Speed			Storm surge (ft)[c]	Storm Tide (ft)[d]	Estimated Inundation (ft)[e]	Total rain (in)
	Date/time (UTC)	Press. (mb)	Date/time (UTC)[a]	Sustained (kt)[b]	Gust (kt)				
Evergreen (KGZH) (30.68N 88.25W)	31/1053	1005.8	30/2225	22	33				5.01
Fort Rucker (KHEY) (31.35N 85.67W)	31/2203	1005.4	28/2315	25	37				
Gulf Shores (KJKA) (30.29N 87.67W)	31/0915	1006.8	29/1415	27	36				
Huntsville Madison Cnty. (KMDQ) (34.86N 86.56W)									3.41
Mobile Regional (KMOB) (30.68N 88.25W)	31/0856	1005.8	30/1656	26	47				9.37
Montgomery (KMGM) (32.30N 86.41W)	31/2040	1004.7	29/1841	23	38				1.20
Muscle Shoals (KMSL) (34.74N 87.60W)	31/1353	998.5	31/0515	21	31				2.83
Maxwell AFB (KMXF) (32.38N 86.37W)	31/1956	1004.1	29/1848	32	40				
Ozark Cairns AAF (KOZR) (31.27N 85.73W)	31/2054	1005.7	30/1920	21	27				3.82
Selma (KSEM) (33.33N 86.98W)			31/1855		25				3.44
Tuscaloosa (KTCL) (33.21N 87.62W)	31/0953	1000.7	31/0358		29				3.60
Hydrometeorological Automated Data System (HADS) Sites (NWS)									
Aliceville L&D (ALVA1) (33.21N 88.29W)									4.98
Bleeker (BLEA1) (32.59N 85.17W)									3.35
Coffeeville L&D (CLDA1) (31.76N 88.13W)									11.10
Red Bay 12.0 NNE (CCPA1) (34.55N 87.97W)									3.62
Dime (DMEA1) (34.33N 87.66W)									4.25
Estill Fork (ESFA1) (34.91N 87.04W)									4.79
Silverhill 3.0 W (FSHA1) (30.55N 87.80W)									6.43
Grove Oak (GVOA1) (34.43N 86.02W)									3.93
Hodges (HGSA1) (34.39N 87.89W)									3.79
Lim Rock (LIMA1) (34.68N 86.19W)									4.83

Location	Minimum Sea Level Pressure		Maximum Surface Wind Speed			Storm surge (ft)[c]	Storm Tide (ft)[d]	Estimated Inundation (ft)[e]	Total rain (in)
	Date/time (UTC)	Press. (mb)	Date/time (UTC)[a]	Sustained (kt)[b]	Gust (kt)				
Lake Tuscaloosa (LKTA1) (33.27N 86.73W)									3.17
Moulton (MLTA1) (34.40N 87.32W)									3.94
East Lake Roebuck (VGRA1) (33.58N 86.72W)									3.31
Huntsville (WCHA1) (34.79N 86.59W)									3.16
Coastal-Marine Automated Network (C-MAN) Sites									
Dauphin Island (DPIA1) (30.25N 88.08W) (14m)	31/1000	1006.6	29/1700	36 (10-min)	52				
Weeks Bay NERRS (WKXA1) (30.42N 87.83W) (7.6m)	31/0900	1007.4	30/1145		22				6.59
National Ocean Service (NOS) Sites									
Bayou La Batre Bridge (BLBA1) (30.41N 88.25W)						4.14	4.75	3.8	
Dog River Bridge (BYSA1) (30.57N 88.09W)						3.71		3.4	
Chickasaw Creek (CIKA1) (30.78N 88.07W)						4.33	4.79	3.5	
Dauphin Island (DILA1) (30.25N 88.08W)			29/1130	28	36	3.24	3.52	2.8	
East Fowl River Bridge (EFRA1) (30.44N 88.11W)						3.79	3.92	3.1	
Fort Morgan (FMOA1) (30.25N 88.08W) (36m)	30/2318	1007.3	29/1654	46	60				
Mobile CG (MCGA1) (30.65N 88.06W) (7m)	31/0906	1005.0	30/1712	25 (2-min)	36	4.33	4.96	3.8	
Mobile State Docks (OBLA1) (30.71N 88.04W)	31/0906	1005.9				3.95	4.77	3.6	
West Fowl River Bridge (WFRA1) (30.38N 88.16W)						4.06	4.27	3.4	
WeatherFlow									
Buccaneer Yacht Club (XBUC) (30.58N 88.07W) (10m)	31/0910	1004.3	29/1724	38	51				

Location	Minimum Sea Level Pressure		Maximum Surface Wind Speed			Storm surge (ft)[c]	Storm Tide (ft)[d]	Estimated Inundation (ft)[e]	Total rain (in)
	Date/time (UTC)	Press. (mb)	Date/time (UTC)[a]	Sustained (kt)[b]	Gust (kt)				
Gulf Shores (XGLF) (30.36N 87.65W) (10m)	31/0904	1002.8	29/1422	28	34				
Mill Point (XMLP) (30.30N 87.51W) (6m)	31/0908	1005.5	30/0026	33	42				
Remote Automated Weather Stations (RAWS)									
Bankhead (BHFA1) (34.34N 87.34W) (6.1m)									3.76
Bon Secour (BONA1) (30.25N 87.81W) (6.1m)			29/1717		25				8.61
SRS (DXCA1) (31.01N 87.06W) (6.1m)									4.29
Grove Hill (GHAA1) (31.69N 87.76W) (6.1m)			30/1926		27				4.43
Liri (LWRA1) (34.46N 85.60W) (6.1m)									4.05
Eutaw (TT400) (32.91N 87.90W)			29/2026		27				3.32
Oneonta (TT404) (33.94N 86.39W)									4.13
South Alabama Mesonet									
Mount Vernon (301) (31.09N 88.00W) (10m)			30/1504		26				5.72
Grand Bay (304) (30.51N 88.40W) (10m)			30/1133	31 (1-min)	38				7.11
Mobile Dog River (305) (30.56N 88.10W) (10m)			30/1760	29 (1-min)	36				6.43
Saraland (306) (30.83N 88.10W) (10m)			30/1207		24				7.78
USA Campus West (307) (30.69N 88.20W) (10m)			30/1654		28				8.16
Bay Minette FS (401) (30.88N 87.80W) (10m)			31/1413	21 (1-min)	28				7.80
Robertsdale (402) (30.58N 87.70W) (10m)			29/1449	24 (1-min)	28				5.41
Elberta (403) (30.41N 87.60W) (10m)			30/2316		27				5.58
Fairhope (404) (30.54N 87.90W) (10m)			30/1142	31 (1-min)	35				4.78
Foley (405) (30.37N 87.60W) (10m)			29/1426	28 (1-min)	33				4.10
Loxley (406) (30.64N 87.70W) (10m)			29/2120	30 (1-min)	32				3.93
Gasque (407) (30.24N 87.90W) (10m)			31/1038	28 (1-min)	34				7.52

Location	Minimum Sea Level Pressure		Maximum Surface Wind Speed			Storm surge (ft)[c]	Storm Tide (ft)[d]	Estimated Inundation (ft)[e]	Total rain (in)
	Date/time (UTC)	Press. (mb)	Date/time (UTC)[a]	Sustained (kt)[b]	Gust (kt)				
Atmore (501) (31.02N 87.40W) (10m)			30/2017	20 (1-min)	26				6.67
Dixie (502) (31.16N 86.70W) (10m)			30/1554		22				3.02
Florala (701) (31.00N 86.30W) (10m)			01/0254		20				3.55
Geneva (901) (31.06N 85.80W) (10m)			30/1837		24				4.48
Ashford North (1001) (31.20N 85.30W) (10m)			31/1338		23				3.09
Castleberry (1301) (31.30N 87.00W) (10m)			31/0052		21				3.33
Public/Other									
Butler 3.0 N (32.13N 88.19W)									4.50
Fowl River Bridge E (30.44N 88.11W)									8.42
Mobile Regional AP 3S (30.64N 88.24W)									9.54
Spanish Fort (30.67N 87.91W)									8.30
Uriah (31.31N 87.50W)									9.30
Huntsville AAMU SCAN (AAMA1) (34.78N 86.56W)									3.85
Huntsville (AR191) (34.74N 86.53W)	31/2053	997.3	31/0733	20	36				
Clanton 2.0 NE CRN (CLXA1) (32.85N 86.61W)			31/0625		20				3.07
Cullman-NAHRC SCAN (CNSA1) (34.19N 86.80W)									5.65
Gulf Shores (D2229) (30.25N 87.72W)	31/0903	1006.4	30/0033	21	41				
Gulf Shores (D9919) (30.29N 87.51W)	31/0915	1006.4	29/1815	20	36				
Florence (F9704) (34.92N 87.65W)			31/0433	24	36				
Fairhope 3.0 NE CRN (FRPA1) (30.55N 87.88W)			29/1500		25				6.00
Gainesville 2.0 NE CRN (GVXA1) (32.84N 88.14W)									5.06
Isbell Farm SCAN (ISBA1) (34.82N 87.99W)									4.51

Location	Minimum Sea Level Pressure		Maximum Surface Wind Speed			Storm surge (ft)[c]	Storm Tide (ft)[d]	Estimated Inundation (ft)[e]	Total rain (in)
	Date/time (UTC)	Press. (mb)	Date/time (UTC)[a]	Sustained (kt)[b]	Gust (kt)				
Koptis Farms SCAN (KOPA1) (30.52N 87.70W)									5.59
Livingston SCAN (LVSA1) (32.61N 88.20W)									5.78
Northport 2.0 S (NXPA1) (33.21N 87.59W)									3.97
Perdido River Farms SCAN (PRDA1) (31.11N 87.55W)									5.50
Russleville 4.0 SSE CRN (RUXA1) (34.45N 87.71W)									3.71
Selma 6.0 SSE CRN (SLXA1) (32.34N 86.98W)			29/1820		26				3.44
Gadsden 19.0 N CRN (SMCA1) (34.29N 85.96W)									3.57
Sudduth Farms SCAN (SUDA1) (34.18N 87.46W)									4.39
Thomasville 2.0 S CRN (TOXA1) (31.93N 87.74W)			31/0445		26				5.05
Valley Head 1.0 SSW CRN (VHXA1) (34.57N 85.62W)									3.30
Advanced Hydrological Prediction Service (AHPS) Sites									
Blue Pond 4.0 NE (BLPA1) (34.329N 85.68W)									3.04
Florida									
International Civil Aviation Organization (ICAO) Sites									
Tri-County Arpt (K1J0) (30.85N 85.60W)	31/2058	1002.8	31/0903		34				
Apalachicola (KAAF) (29.73N 85.02W)	31/2153	1009.2	31/1715	23	36				3.22
Destin (KDTS) (30.40N 86.47W)	31/2053	1007.3	29/1856	24	41				5.13
Panama City (KECP) (30.36N 85.80W)	31/0253	1008.9	31/1536	24	45				4.77
Key West (KEYW) (24.56N 81.76W)	28/0853	1012.3	28/0525	37	56				0.28

Location	Minimum Sea Level Pressure		Maximum Surface Wind Speed			Storm surge (ft)[c]	Storm Tide (ft)[d]	Estimated Inundation (ft)[e]	Total rain (in)
	Date/time (UTC)	Press. (mb)	Date/time (UTC)[a]	Sustained (kt)[b]	Gust (kt)				
Hurlburt Field (KHRT) (30.43N 86.68W)	31/1148	1007.2	30/2011	23	44				
Marianna (KMAI) (30.84N 81.18W)	31/2353	1007.1	31/1110	21	27				3.59
Marathon (KMTH) (24.73N 81.05W)	28/0853	1012.1	28/0535	22	37				0.38
Whiting Field South (KNDZ) (30.70N 87.02W)	31/2056	1005.1	30/2123		36				3.02
Pensacola NAS (KNPA) (30.35N 87.32W)	31/1056	1006.8	30/2311	31	42				
Key West NAS (KNQX) (24.58N 81.69W)	28/0853	1012.1	28/0653	24	40				
Whiting Field (KNSE) (30.73N 87.02W)	31/2056	1005.1	30/2351	27	38				4.50
Tyndall AFB (KPAM) (30.06N 85.56W)	31/2256	1008.7	31/1629	35	45				2.48
Pensacola (KPNS) (30.47N 87.20W)	31/0853	1006.7	30/2057	30	47				6.39
Tyndall AFB Drone (KTDR) (30.03N 87.53W)	31/2356	1008.5	31/1626	29	36				
Valparaiso (KVPS) (30.48N 86.52W)	31/2030	1007.3	30/1608	30	38				0.79
Hydrometeorological Automated Data System (HADS) Sites (NWS)									
Altha 3.0 SW (ALTF1) (30.53N 85.17W)									3.07
Marianna 5.0 ENE (MBSF1) (30.79N 85.14W)									4.18
Milton 7.0 ESE (MLYF1) (30.57N 86.92W)									4.63
Scott's Ferry (SCTF1) (30.29N 85.14W)									3.24
Bristol 3.0 E (TELF1) (30.43N 84.93W)									3.65
Coastal-Marine Automated Network (C-MAN) Sites									
Long Key (LONF1) (24.84N 80.86W) (16m)	27/1950	1012.8	28/0550	30	34				
Sand Key (SANF1) (24.46N 81.88W) (16m)	28/0830	1012.3	28/0600	36 (1-min)	46				
Sombrero Key (SMKF1) (24.63N 81.11W) (4.8m)	27/2100	1011.8	28/0533	33	37				

Location	Minimum Sea Level Pressure		Maximum Surface Wind Speed			Storm surge (ft)[c]	Storm Tide (ft)[d]	Estimated Inundation (ft)[e]	Total rain (in)
	Date/time (UTC)	Press. (mb)	Date/time (UTC)[a]	Sustained (kt)[b]	Gust (kt)				
Tyndall AFB Tower (SGOF1) (29.41N 84.86W) (35m)	01/0000	1009.7	31/1810	29 (10-min)	36				
National Ocean Service (NOS) Sites									
Apalachicola (APCF1) (29.73N 84.98W) (7.0m)	31/2136	1010.0	29/0412	22	36	2.42	3.35	2.5	
Cedar Key (CKYF1) (29.14N 83.03W)						2.22	3.11	1.6	
Key West (KYWF1) (24.56N 81.81W) (15m)	28/0830	1012.3	28/0530	26	39				
Panama City (PACF1) (30.15N 85.67W) (8m)			31/1054	29 (2-min)	38	2.17	2.62	1.8	
Panama City Beach (PCBF1) (30.21N 85.88W) (8.6m)	31/2020	1008.6	29/1354	33	40	2.43	2.84	2.0	
Pensacola (PCLF1) (30.40N 87.21W) (6.8m)	31/0906	1006.5	30/2324	29	40	2.92	3.36	2.4	
WeatherFlow									
Alligator Reef Light (24.85N 80.62W) (7.5m)			28/0547	27	34				
Key West CG (24.57N 81.80W) (10m)			28/0529	27	39				
Marathon Key (24.74N 80.98W) (10m)			28/0536	24	35				
Smith Shoal Light (24.72N 81.92W) (19m)			28/0546	41	52				
Crystal Beach (XCBS) (30.39N 86.41W) (14m)	31/2025	1005.0	31/0945	23	44				
Ft. Walton Beach (XFWB) (30.40N 86.56W) (7m)	31/1300	1005.1	30/1536	35	42				
Gulf Breeze (XGBZ) (30.36N 87.16W) (15m)	31/1053	1004.5	30/1238	30	43				
Santa Rosa Sound (XSRS) (30.38N 87.01W) (7m)	31/0912	1006.2	29/1432	38	43				
St. Andrew Bay (XSTA) (30.13N 85.72W) (9.4m)	31/1325	1006.5	29/1848	36	39				
Remote Automated Weather Stations (RAWS)									
Naval Live Oaks (NLOF1) (30.37N 87.14W)			29/1922		32				7.61
Blackwater Forestry Cntr. (TT670) (30.86N 86.87W)			30/2159		25				5.50

Location	Minimum Sea Level Pressure		Maximum Surface Wind Speed			Storm surge (ft)[c]	Storm Tide (ft)[d]	Estimated Inundation (ft)[e]	Total rain (in)
	Date/time (UTC)	Press. (mb)	Date/time (UTC)[a]	Sustained (kt)[b]	Gust (kt)				
Florida Automated Weather Network									
DeFuniak Springs (DFSFL) (30.88N 86.21W)			29/2015		30				3.00
Jay (JAYF1) (30.78N 87.14W)			31/0000		29				5.10
Marianna (MAIF1) (30.85N 85.17W)			01/2245		37				5.25
South Alabama Mesonet									
Jay (1601) (30.95N 87.20W) (10m)			30/2141	28 (1-min)	32				3.80
WeatherSTEM									
St. Teresa (0054W) (29.92N 84.51W)	31/2210	1008.1	29/0730	24	35				
Choctawhatchee (0241W) (30.45N 86.62W)	31/2120	1006.8	30/1540	21	36				
Gulf Breeze (0327W) (30.36N 87.17W)	31/1220	1007.5	29/1830	28	39				
Navarre Beach (0401W) (30.38N 86.86W)	31/2050	1006.8	29/1440	33	39				
Brent (0402W) (30.50N 87.25W)	31/1010	1004.1	29/1430	24	41				
St. George Island Bridge (0569W) (29.71N 84.89W)	31/2200	1008.8	29/1950	34	39				
Pensacola (1199W) (30.43N 87.22W)	31/0920	1007.1	31/1010	24	34				
Pensacola (1201W) (30.48N 87.21W)	31/2040	1006.4	31/1240	25	40				
Northwest Pensacola (1203W) (30.49N 87.30W)	31/0900	1006.4	30/2340	25	36				
Public/Other									
Southport (AT414) (30.31N 85.61W)	31/2059	1008.1	31/1009		36				
Bonifay 2.0 W (BFYF1) (30.80N 85.72W)									3.79
Niceville (C7473) (30.49N 86.46W)	31/2132	1007.5	30/1600	25	34				
Valparaiso (D6507) (30.50N 86.49W)	31/2117	1006.8	29/1916	30	44				

Location	Minimum Sea Level Pressure		Maximum Surface Wind Speed			Storm surge (ft)[c]	Storm Tide (ft)[d]	Estimated Inundation (ft)[e]	Total rain (in)
	Date/time (UTC)	Press. (mb)	Date/time (UTC)[a]	Sustained (kt)[b]	Gust (kt)				
Pensacola (E4624) (30.31N 87.42W)	31/1045	1006.8	30/0902	25	35				
Ft. Walton Beach (F5286) (30.39N 86.59W)	31/1159	1006.1	31/1330	28	44				
Perdido Key (F7996) (30.33N 87.37W)	31/1056	1008.1	30/0046	29	41				
Alligator Point (F9222) (29.90N 84.40W)			31/1510	29	39				
Milton (KFLMILTO113) (30.85N 87.05W)									7.82
Molino (KFLMOLIN5) (30.73N 87.34W)									7.63
Panama City (PCYF1) (30.20N 85.63W)									3.40
Georgia									
International Civil Aviation Organization (ICAO) Sites									
Albany (KABY) (31.54N 84.20W)	31/2253	1007.1	30/1915	26	34				3.45
Alma (KAMG) (31.54N 82.51W)	01/2253	1007.2	31/1756		37				0.46
Claxton (KCWV) (32.20N 81.87W)			31/1915		37				
Blairsville (KDZJ) (34.85N 84.00W)			31/1755		29				3.66
Atlanta Fulton Cnty. (KFTY) (34.85N 84.00W)	31/2153	1002.7	31/1515	20	36				0.89
Rome (KRMG) (34.35N 85.16W)	31/2153	1000.9	31/1721		25				4.29
Reidsville (KRVJ) (32.06N 82.15W)			31/1855		42				0.14
Savannah (KSAV) (32.13N 81.20W)	01/2153	1006.0	31/2036	26	35				0.07
Hydrometeorological Automated Data System (HADS) Sites (NWS)									
Atlanta (AANG1) (33.82N 84.41W)									3.82
Armuchee 4.0 SE (ARCG1) (34.36N 85.14W)									3.30
Blue Ridge 3.0 NE (BRDG1) (34.88N 84.28W)									3.30
Calhoun 1.0 N (CALG1) (34.52N 84.95W)									4.75

Location	Minimum Sea Level Pressure		Maximum Surface Wind Speed			Storm surge (ft)[c]	Storm Tide (ft)[d]	Estimated Inundation (ft)[e]	Total rain (in)
	Date/time (UTC)	Press. (mb)	Date/time (UTC)[a]	Sustained (kt)[b]	Gust (kt)				
Carters (CATG1) (34.59N 84.70W)									4.54
Flintstone 1.0 NNE (CCFG1) (34.96N 85.33W)									3.35
Cedar Springs (CEDG1) (31.18N 85.04W)									3.44
Dalton 5.0 ESE (CHCG1) (34.74N 84.88W)									4.34
Chickamauga (CHIG1) (34.87N 85.29W)									3.62
Choestoe (CHOG1) (34.80N 83.90W)									5.44
Canton (CNNG1) (34.24N 84.50W)									4.68
Dahlonega 3E (DGAG1) (34.53N 83.94W)									6.02
Epworth 5 SW (EPWG1) (34.90N 84.44W)									5.10
Chatworth 6.0 NW (ETNG1) (34.83N 84.85W)									4.66
Talking Rock 5.0 NE (FCTG1) (34.57N 84.47W)									6.27
Helen (HCNG1) (34.72N 83.73W)									4.22
Hurst 6.0 SSW (HRSG1) (34.77N 84.22W)									4.25
Acworth 5.0 SSW (MAHG1) (34.00N 84.69W)									3.20
Morgan 1.0 SE (MGNG1) (31.53N 84.58W)									4.78
Ellijay 6.0 NW (MNCG1) (34.70N 84.54W)									6.42
Powder Springs 3.0 NW (PDSG1) (33.83N 84.72W)									3.50
Macedonia (PLYG1) (34.91N 83.73W)									4.30
Redbud 2.0 NNW (RDBG1) (34.56N 84.83W)									3.02

Location	Minimum Sea Level Pressure		Maximum Surface Wind Speed			Storm surge (ft)[c]	Storm Tide (ft)[d]	Estimated Inundation (ft)[e]	Total rain (in)
	Date/time (UTC)	Press. (mb)	Date/time (UTC)[a]	Sustained (kt)[b]	Gust (kt)				
Rome (RTMG1) (34.26N 85.17W)									4.72
Suches (SCHG1) (34.72N 84.07W)									4.42
Ringgold (SCKG1) (34.92N 85.13W)									3.95
Whitesburg 3.0 NNW (SNKG1) (33.53N 84.93W)									4.06
Hinton (TKRG1) (34.52N 84.61W)									5.11
Lakemont (TLCG1) (34.89N 83.53W)									3.01
Thomasville (TMLG1) (30.88N 84.05W)									4.17
Titus (TUSG1) (34.95N 83.62W)									4.26
Waleska 5.0 SSW (WALG1) (34.26N 84.60W)									4.86
Young Harris 1.0 N (YGHG1) (34.95N 83.85W)									3.53
Remote Automated Weather Stations (RAWS)									
Helen 7.0 N (BRSG1) (34.80N 83.71W)									6.51
Baxley (BXYG1) (31.71N 82.39W) (6.1m)			31/1904		35				0.29
Cohutta (COHG1) (34.92N 84.66W) (6.1m)			31/1805		28[i]				4.67
Camp Merrill (CPMG1) (34.61N 84.13W) (6.1m)									4.25
Dallas (DLSG1) (33.83N 84.74W) (6.1m)			31/1402		24				3.44
Chatsworth (EJAG1) (34.77N 84.76W) (6.1m)			31/1202		26				4.40
Armuchee (NAOG1) (34.69N 85.17W) (6.1m)			31/1205		26				4.24
Toccoa (TCCG1) (34.77N 84.07W) (6.1m)			31/1605		24				4.55
Tallulah (TULG1) (34.90N 83.33W) (6.1m)			31/1906		22				4.08
South Carolina									
International Civil Aviation Organization (ICAO) Sites									
Greenville Downtown (KGMU) (34.85N 82.35W)	01/0753	1003.0	31/2012	26	34				0.71

Location	Minimum Sea Level Pressure		Maximum Surface Wind Speed			Storm surge (ft)[c]	Storm Tide (ft)[d]	Estimated Inundation (ft)[e]	Total rain (in)
	Date/time (UTC)	Press. (mb)	Date/time (UTC)[a]	Sustained (kt)[b]	Gust (kt)				
Greenwood Cnty. (KGRD) (34.25N 82.15W)	01/0756	1004.5	31/1931	26	38				0.01
Greenville-Spartanburg (KGSP) (34.88N 82.22W)	01/0953	1002.7	31/2021	26	37				1.33
Laurens Cnty. (KLUX) (34.51N 81.95W)			31/1955		37				0.25
Orangeburg (KOGB) (33.46N 80.85W)	01/2153	1005.4	31/2022		35				0.31
Hydrometeorological Automated Data System (HADS) Sites (NWS)									
Rocky Bottom 3.1 E (SFMS1) (35.05N 82.75W)									4.24
Remote Automated Weather Stations (RAWS)									
Carolina Sandhills (JEFS1) (34.66N 80.27W) (6.1m)			31/2214		36				0.34
Savannah NWR (SRSS1) (32.17N 81.12W) (6.1m)			31/1923		37				0.53
Public/Other									
Salem (F9474) (34.89N 82.97W)									3.16
South Carolina Dept. of Transportation									
I-385/US-221 (SC010) (34.55N 82.01W)			31/2000		37				
North Carolina									
International Civil Aviation Organization (ICAO) Sites									
Hyde Cnty. Arpt. (K7W6) (35.56N 75.96W)	01/2235	1004.7	01/1855	22	34				0.22
Elizabeth City (KECG) (36.26N 76.17W)	01/2154	1003.2	01/1945	27	34				0.14
Manteo (KMQI) (35.92N 75.70W)			01/1955	31	37				
Piney Island (KNBT) (35.02N 76.46W)	01/1956	1005.5	01/2027	27	39				0.21
Bogue Field (KNJM) (34.69N 77.03W)	01/2057	1005.5	01/1717	25	35				0.06

Location	Minimum Sea Level Pressure		Maximum Surface Wind Speed			Storm surge (ft)[c]	Storm Tide (ft)[d]	Estimated Inundation (ft)[e]	Total rain (in)
	Date/time (UTC)	Press. (mb)	Date/time (UTC)[a]	Sustained (kt)[b]	Gust (kt)				
Pitt-Greenville (KPGV) (35.64N 77.39W)			01/1555	20	35				0.34
Andrews-Murphy (KRHP) (35.19N 83.86W)									4.37
Hydrometeorological Automated Data System (HADS) Sites (NWS)									
Chatuge Dam (CHAN7) (35.02N 83.79W)									3.02
Fontana Dam (FONN7) (35.45N 82.81W)									3.40
Frying Pan Mtn. (FRYN7) (35.39N 82.77W)									3.29
Highlands 1.0 NW (HDSN7) (35.07N 83.22W)									4.52
Hiwassee Dam (HIWN7) (35.15N 84.18W)									3.92
Marble 1.0 NNE (MBLN7) (35.18N 83.92W)									4.04
Black Mountain 10.0 NNE (MMTN7) (35.76N 82.27W)									4.63
Murphy (MPYN7) (35.09N 84.04W)									3.44
Rosman (RMNN7) (35.14N 82.82W)									3.60
Stratton Meadows (STMN7) (35.34N 84.03W)									6.47
Tapoco 1.0 ESE (TAPN7) (35.44N 83.92W)									3.68
Wallace Gap (WLGN7) (35.10N 83.55W)									3.89
National Ocean Service (NOS) Sites									
Beaufort (BFTN7) (34.72N 76.67W) (7.0m)	01/2218	1005.8	01/2006	30	36				
Duck (DUKN7) (36.18N 75.75W) (8.6m)	01/2124	1003.2	01/2206	28	36				
Oregon Inlet (ORIN7) (35.80N 75.55W) (6.7m)	02/0636	1004.3	01/2218	32	40	1.73	1.66	1.2	
Wrightsville Beach (JMPN7) (34.21N 77.79W) (8.0m)	01/2124	1004.3	01/1706	31	37				

Location	Minimum Sea Level Pressure		Maximum Surface Wind Speed			Storm surge (ft)[c]	Storm Tide (ft)[d]	Estimated Inundation (ft)[e]	Total rain (in)
	Date/time (UTC)	Press. (mb)	Date/time (UTC)[a]	Sustained (kt)[b]	Gust (kt)				
WeatherFlow									
Alligator Bridge (35.90N 76.01W) (12m)			01/2115	36	48				
Avon Ocean (35.35N 75.50W) (12m)			01/1935	27	39				
Avon Sound (35.37N 75.51W) (4.6m)			01/2214	28	35				
Croatan Sound (35.87N 75.66W) (7.9m)			01/2138	30	37				
Federal Point (33.96N 77.94W) (15m)			01/1411	30	42				
Fort Macon (34.70N 76.69W) (10m)			01/2012	25	35				
Frisco Woods (35.25N 75.63W) (6.1m)			01/2201	28	40				
Jennettes Pier (35.91N 75.59W) (18m)			01/2159	29	39				
KHK Resort (35.58N 75.47W) (16m)			01/2224	37	46				
Oak Island (33.91N 78.12W) (10m)			01/2126	27	37				
Ocracoke (35.15N 76.01W) (7.6m)			01/2121	33	43				
Oregon Inlet (35.80N 75.55W) (10m)			01/2213	30	42				
Oregon Inlet CG (35.77N 75.53W) (10m)			01/2218	30	41				
Pamlico Sound (35.43N 75.83W) (13m)			01/2157	34	41				
REAL Slick (35.57N 75.49W) (6.1m)			01/2219	31	41				
Roanoke Sound Channel L36 (35.94N 75.66W) (5.2m)			01/2122	29	37				
Waves (35.57N 75.47W) (11m)			01/2229	31	44				
Remote Automated Weather Stations (RAWS)									
Busick (BSKN7) (35.77N 82.19W)									3.93
Davidson River (DARN7) (35.35N 82.78W)									3.76
Highlands (HGLN7) (35.09N 83.22W)									4.02
Locust Gap (TOPN7) (35.18N 83.53W)									3.10

Location	Minimum Sea Level Pressure		Maximum Surface Wind Speed			Storm surge (ft)[c]	Storm Tide (ft)[d]	Estimated Inundation (ft)[e]	Total rain (in)
	Date/time (UTC)	Press. (mb)	Date/time (UTC)[a]	Sustained (kt)[b]	Gust (kt)				
Public/Other									
Belle Oaks IFLOWS (BOKN7) (35.18N 80.94W)									3.17
Highlands (C0930) (35.09N 83.17W)									5.27
Rainbow Springs (C8322) (35.08N 83.59W)									4.89
Sylva (D7110) (35.29N 83.30W)									3.17
Black Mountain (D8032) (35.59N 82.27W)									4.17
Davey Mountain IFLOWS (DVYN7) (35.00N 83.86W)									3.80
Blowing Rock (E6088) (36.12N 81.72W)									3.82
Highlands IFLOWS (HILN7) (35.06N 83.18W)									4.08
Bear Creek IFLOWS (IBCN7) (35.21N 84.09W)									4.36
Wolf Mountain IFLOWS (ICKN7) (35.23N 82.94W)									4.11
Rock Bridge IFLOWS (IRBN7) (35.20N 82.99W)									4.07
Robinson Creek IFLOWS (IRCN7) (35.18N 83.06W)									5.16
Balsam Lake IFLOWS (IWCN7) (35.27N 82.97W)									4.28
Linville Falls 2.0 NE IFLOWS (JSRN7) (35.95N 81.90W)									3.23
Beaver Creek IFLOWS (MRBN7) (35.11N 83.90W)									7.62
Peachtree IFLOWS (PCHN7) (35.11N 83.90W)									5.10
Stecoah Gap IFLOWS (STGN7) (35.34N 83.69W)									3.80

Location	Minimum Sea Level Pressure		Maximum Surface Wind Speed			Storm surge (ft)[c]	Storm Tide (ft)[d]	Estimated Inundation (ft)[e]	Total rain (in)
	Date/time (UTC)	Press. (mb)	Date/time (UTC)[a]	Sustained (kt)[b]	Gust (kt)				
Tennessee									
International Civil Aviation Organization (ICAO) Sites									
Portland (K1M5) (36.59N 86.48W)									3.88
Dayton (K2A0) (35.48N 84.93W)									3.27
Lawrenceburg (K2M2) (35.23N 87.26W)			31/0615		26				4.22
Jacksboro (KJAU) (36.33N 84.16W)									3.91
Athens (KMMI) (35.40N 84.56W)									4.13
Monroe Cnty. Arpt. (KMNV) (35.54N 84.38W)			31/2035		23				4.00
Smyrna (KMQY) (36.01N 86.52W)	31/2156	1001.6							3.90
Oak Ridge (KOQT) (36.02N 84.23W)	01/0453	1000.9							3.39
Knoxville (KTYS) (34.85N 82.35W)	01/0353	1000.7							2.74
Hydrometeorological Automated Data System (HADS) Sites (NWS)									
Powell (BCPT1) (36.02N 84.05W)									4.70
Rogana (BLCT1) (36.45N 86.33W)									3.16
Bethpage (BPGT1) (36.49N 86.31W)									3.05
Halls Crossroads (BRCT1) (36.11N 83.99W)									3.64
Bull Run (BRST1) (36.02N 84.16W)									3.39
Bruceton (BRUT1) (36.04N 88.26W)									3.16
Crab Orchard (CBOT1) (35.91N 84.89W)									3.89
Charleston 1.0 WSW (CHTT1) (35.28N 84.77W)									3.66
Cleveland 4.0 NE (CLET1) (35.18N 84.82W)									3.53
Collinwood (CLLT1) (35.16N 87.75W)									4.85
Cordell Hull Headwater (COHT1) (36.29N 85.94W)									3.13

Location	Minimum Sea Level Pressure		Maximum Surface Wind Speed			Storm surge (ft)[c]	Storm Tide (ft)[d]	Estimated Inundation (ft)[e]	Total rain (in)
	Date/time (UTC)	Press. (mb)	Date/time (UTC)[a]	Sustained (kt)[b]	Gust (kt)				
Copperhill 1.0 N (CPRT1) (35.00N 84.39W)									3.98
Decatur 1.0 NW (DECT1) (35.52N 84.80W)									3.12
Dunn (DNNT1) (35.20N 87.33W)									3.49
Dayton (DYNT1) (35.50N 85.01W)									4.90
Etowah (ETOT1) (35.33N 84.52W)									3.03
Franklin (FRAT1) (35.92N 86.87W)									3.12
Isoline (ISOT1) (36.08N 85.06W)									3.70
Jamestown 5.0 W (JAMT1) (36.42N 85.03W)									3.88
Jena (JENT1) (35.65N 84.15W)									3.54
Kingston 1.0 NNW (KNST1) (35.90N 84.52W)									3.02
Lascassas 3.0 SW (LAST1) (35.91N 86.33W)									3.30
Lebanon 3.0 SE (LBST1) (36.18N 86.23W)									3.17
Lafayette (LFTT1) (36.52N 86.03W)									3.92
Manchester (MANT1) (35.47N 86.08W)									3.53
Milledgeville 2.0 S (MDGT1) (35.36N 88.37W)									3.60
Lenior City 7.0 NNW (MHDT1) (35.88N 84.30W)									3.51
Mount Pleasant (MPLT1) (35.52N 87.23W)									3.62
Murfreesboro 5.0 N (MUGT1) (35.87N 86.43W)									4.36
Mile Straight (NCCT1) (35.21N 85.22W)									3.46
Newcomb (NEWT1) (36.54N 84.17W)									4.59

Location	Minimum Sea Level Pressure		Maximum Surface Wind Speed			Storm surge (ft)[c]	Storm Tide (ft)[d]	Estimated Inundation (ft)[e]	Total rain (in)
	Date/time (UTC)	Press. (mb)	Date/time (UTC)[a]	Sustained (kt)[b]	Gust (kt)				
Bryson City 13.0 N (NFGT1) (35.61N 83.43W)									5.76
Nolensville (NLVT1) (36.01N 86.70W)									3.25
Norris 2.0 NNW (NRST1) (36.22N 83.09W)									4.97
Oneida (ONIT1) (36.50N 84.52W)									3.84
Orlinda (ORLT1) (36.60N 86.72W)									3.38
Ocoee 4.0 SSE (PKST1) (35.10N 84.65W)									3.22
Port Royal (PORT1) (36.55N 87.14W)									3.01
Petros (PTST1) (36.10N 84.45W)									3.97
Raccoon Mtn. (RACT1) (35.06N 85.39W)									3.79
Salem (SLMT1) (35.09N 86.25W)									3.41
Savannah 4.0 SE (SNNT1) (35.16N 88.24W)									3.14
Solway (SOLT1) (35.97N 84.18W)									4.58
Statesville (STLT1) (36.02N 86.12W)									3.22
Sweetwater (SWET1) (35.58N 84.47W)									4.12
Tims Ford Dam (TFDT1) (35.20N 86.27W)									3.10
Tellico Plains 2.0 NW (TLPT1) (35.38N 84.32W)									4.11
Appalachia Dam (TURT1) (35.18N 84.44W)									3.36
Unionville (UNVT1) (35.62N 86.59W)									3.56
Spring City 7.0 SE (WBOT1) (35.61N 84.79W)									3.47
Remote Automated Weather Stations (RAWS)									
Ocoee (BOCT1) (35.16N 84.59W)									5.19

Location	Minimum Sea Level Pressure		Maximum Surface Wind Speed			Storm surge (ft)[c]	Storm Tide (ft)[d]	Estimated Inundation (ft)[e]	Total rain (in)
	Date/time (UTC)	Press. (mb)	Date/time (UTC)[a]	Sustained (kt)[b]	Gust (kt)				
Crossville (CSST1) (36.07N 84.96W)									3.02
Delano (DLOT1) (35.25N 84.58W)									3.82
Fort Campbell (FCRT1) (36.63N 87.54W)									3.00
Indian Grave (IGGT1) (35.62N 83.81W)									3.80
Lenoir City (LCLT1) (35.64N 83.81W)									4.72
Lafayette Work Center (LFFT1) (36.54N 86.00W)									4.54
Lewisburg Tower (LSBT1) (35.38N 86.77W)									3.31
Meriwether Lewis (MERT1) (35.50N 86.46W)									3.22
Prentice Cooper SF (PCFT1) (35.13N 85.43W)			31/1306		22				3.32
Shiloh NMP (SHOT1) (35.16N 88.32W)									3.15
Public/Other									
Allen Farms SCAN (ALFT1) (35.07N 86.89W)									3.29
Karns (AV702) (36.01N 84.07W)									6.74
Chattanooga (D1057) (35.12N 85.37W)									4.19
Maryville (E0035) (35.70N 84.02W)									4.03
Eastview Farm SCAN (EAST1) (35.14N 86.19W)									3.41
Lenoir City (F7007) (35.84N 84.30W)									6.35
Ten Mile (F8637) (35.69N 84.70W)									3.99
Kentucky									
Hydrometeorological Automated Data System (HADS) Sites (NWS)									
Alvaton (ALVK2) (36.90N 86.38W)									4.45

Location	Minimum Sea Level Pressure		Maximum Surface Wind Speed			Storm surge (ft)[c]	Storm Tide (ft)[d]	Estimated Inundation (ft)[e]	Total rain (in)
	Date/time (UTC)	Press. (mb)	Date/time (UTC)[a]	Sustained (kt)[b]	Gust (kt)				
Brownsville 1.0 NE (BNWK2) (37.20N 86.26W)									3.02
Taylorsville (BRCK2) (38.03N 85.33W)									3.11
Bowling Green (BWGK2) (37.00N 86.43W)									4.36
Elkton 3.0 NE (EKTK2) (36.78N 87.17W)									3.12
Livermore (LVMK2) (37.49N 87.14W)									3.41
Pikeville (PKYK2) (37.47N 82.53W)									3.22
Remote Automated Weather Stations (RAWS)									
Houchin Meadow (CDSK2) (37.13N 86.15W)									3.45
Kentucky Mesonet									
Shepherdsville 6.0 SE (CRMT) (37.92N 85.66W)									3.15
Bowling Green 6.0 NE (EWBK) (37.04N 86.35W)					21				3.03
Shelbyville 10.0 W (FCHV) (38.16N 85.38W)									3.61
Hardinsburg 2.0 SSW (HARD) (37.76N 86.46W)									4.77
Lebanon 8.0 NW (LRTO) (37.63N 85.37W)									3.13
Frankfort 7.0 S (LSML) (38.12N 84.88W)									4.35
Franklin 4.0 SW (SWZR) (36.67N 86.61W)					23				3.17
Elkton 5.0 SW (ZION) (36.76N 87.21W)									3.64
Public/Other									
Mammoth Cave SCAN (BAWK2) (37.19N 86.04W)									3.38

Location	Minimum Sea Level Pressure		Maximum Surface Wind Speed			Storm surge (ft)[c]	Storm Tide (ft)[d]	Estimated Inundation (ft)[e]	Total rain (in)
	Date/time (UTC)	Press. (mb)	Date/time (UTC)[a]	Sustained (kt)[b]	Gust (kt)				
Mammoth Cave CRN (BOWK2) (37.25N 86.23W)									3.48
Advanced Hydrological Prediction Service (AHPS) Sites									
Owensboro (OWBK2) (37.79N 87.14W)									3.24
Ohio									
Hydrometeorological Automated Data System (HADS) Sites (NWS)									
Buckeye Lake (BCLO1) (39.90N 82.53W)									4.83
Granville 1.0 W (GRNO1) (40.07N 82.55W)									3.87
North Salem 2.0 SE (SILO1) (40.13N 81.52W)									3.14
Remote Automated Weather Stations (RAWS)									
Blue Rock (BLRO1) (40.01N 82.13W)									3.28
Public/Other									
Crescent 1.0 SE (40.12N 80.86W)									4.20
Dresden (40.12N 82.02W)									4.25
Advanced Hydrological Prediction Service (AHPS) Sites									
Martins Ferry 4 SSE (MTRO1) (40.13N 80.82W)									3.71
St. Clairsville (SATO1) (40.14N 81.03W)									3.38
West Virginia									
International Civil Aviation Organization (ICAO) Sites									
Cumberland (KCBE) (39.62N 78.76W)			01/1735	22	30				4.19

Location	Minimum Sea Level Pressure		Maximum Surface Wind Speed			Storm surge (ft)[c]	Storm Tide (ft)[d]	Estimated Inundation (ft)[e]	Total rain (in)
	Date/time (UTC)	Press. (mb)	Date/time (UTC)[a]	Sustained (kt)[b]	Gust (kt)				
Wheeling (KHLG) (40.17N 80.64W)	01/0953	1005.2	01/1253		24				3.53
Martinsburg (KMRB) (39.40N 77.95W)	01/1853	999.8	01/2315	23	37				3.67
Hydrometeorological Automated Data System (HADS) Sites (NWS)									
Albright (ABRW2) (39.49N 79.65W)									3.97
Bellington (BELW2) (39.03N 79.94W)									3.46
Burnsville Lake (BULW2) (38.84N 80.63W)									3.06
Bruceton Mills (BUMW2) (39.66N 79.64W)									3.43
Enterprise (ENTW2) (39.42N 80.28W)									3.14
Frametown (FRMW2) (38.59N 80.88W)									4.36
Guardian (GUAW2) (38.64N 80.47W)									3.26
Headsville 4.0 NE (HDSW2) (39.43N 78.82W)									4.20
Herold 1.0 NE (HRLW2) (38.57N 80.80W)									4.70
Birch River (IRCW2) (38.50N 80.75W)									3.06
Wildcat Ridge (RWLW2) (39.22N 79.67W)									4.30
Shepherdstown (SHEW2) (39.43N 77.80W)									3.50
Sutton 2.0 SE (SUSW2) (38.66N 80.71W)									3.53
Wheeling 2.0 N (WHLW2) (40.15N 80.70W)									4.21
Walkersville (WKVW2) (38.87N 80.45W)									3.99
Remote Automated Weather Stations (RAWS)									
Flatwoods (FLRW2) (38.64N 80.62W)									3.73

Location	Minimum Sea Level Pressure		Maximum Surface Wind Speed			Storm surge (ft)[c]	Storm Tide (ft)[d]	Estimated Inundation (ft)[e]	Total rain (in)
	Date/time (UTC)	Press. (mb)	Date/time (UTC)[a]	Sustained (kt)[b]	Gust (kt)				
Kingwood (KGWW2) (39.41N 79.70W)									4.71
Augusta (NATW2) (39.30N 78.65W)									3.34
West Virginia Dept. of Transportation									
I-64/Milton (WV007) (38.44N 82.12W)									3.90
Public/Other									
Kline Gap 2.0 ESE (39.07N 79.16W)									4.48
Martinsburg 1.0 NW (39.41N 78.00W)									4.30
Millville 1.0 ESE (39.29N 77.76W)									3.56
Philippi 3.0 SE (39.11N 79.99W)									4.62
Bellington 5.0 WSW IFLOWS (AZRW2) (39.00N 80.02W)									3.04
Bardane IFLOWS (BDNW2) (39.34N 77.87W)									3.18
Beech Fork IFLOWS (BRDW2) (38.67N 81.16W)									4.14
Caddell Mtn. IFLOWS (CDMW2) (39.43N 79.61W)									3.99
Ridge 3.0 NW IFLOWS (CPNW2) (39.47N 78.35W)									3.60
Adrian 2.0 ESE IFLOWS (FHKW2) (38.88N 80.23W)									3.65
Keyser 4.0 SE IFLOWS (FOUW2) (39.38N 78.92W)									3.87
Greenwood Hollow IFLOWS (GNHW2) (39.48N 78.69W)									3.04
Short Gap 1.0 N IFLOWS (KBTW2) (39.55N 78.80W)									3.79
Slanesville 3.0 W IFLOWS (LCMW2) (39.38N 78.58W)									3.01

Location	Minimum Sea Level Pressure		Maximum Surface Wind Speed			Storm surge (ft)[c]	Storm Tide (ft)[d]	Estimated Inundation (ft)[e]	Total rain (in)
	Date/time (UTC)	Press. (mb)	Date/time (UTC)[a]	Sustained (kt)[b]	Gust (kt)				
Mount Storm 1.0 E (MNSW2) (39.27N 79.22W)									4.12
Maysville 10.0 WSW IFLOWS (RDCW2) (39.03N 79.30W)									3.45
Glengary 4.0 NE IFLOWS (RDTW2) (39.41N 78.08W)									3.53
Thrasher Knob IFLOWS (THKW2) (39.20N 78.87W)									3.44
Crawford 1.0 S IFLOWS (VANW2) (38.91N 80.41W)									3.60
Advanced Hydrological Prediction Service (AHPS) Sites									
Bloomington Lake (BLMW2) (39.43N 79.12W)									3.55
Virginia									
International Civil Aviation Organization (ICAO) Sites									
Charlottesville (KCHO) (38.14N 78.46W)	01/1953	999.7	01/1649		26				3.08
Culpepper (KCJR) (38.53N 77.86W)			01/0535	22	38				
Washington National Arpt. (KDCA) (38.85N 77.03W)	01/2152	998.3	02/0325	22	35				1.34
Williamsburg (KJGG) (37.24N 76.72W)			01/1915		49				0.48
Langley AFB (KLFI) (37.08N 76.35W)	01/2056	1002.0	01/2212	26	37				0.21
Fentriss NALF (KNFE) (36.70N 76.13W)	01/2156	1002.5	01/2056		36				0.16
Oceana NAS (KNTU) (36.82N 76.03W)	01/2056	1002.1	01/1756	20	45				0.32
Quantico MCAS (KNYG) (38.50N 77.30W)	01/2056	999.1	01/2131	24	34				0.06
Newport News (KPHF) (37.13N 76.49W)	01/2054	1001.0	01/2135	22	36				0.32
Tangier Island (KTGI) (37.83N 76.00W)			02/0035	29	36				0.55
Wallops Island (KWAL) (37.94N 75.47W)	01/2254	1001.0	01/2045	28	35				0.01

Location	Minimum Sea Level Pressure		Maximum Surface Wind Speed			Storm surge (ft)[c]	Storm Tide (ft)[d]	Estimated Inundation (ft)[e]	Total rain (in)
	Date/time (UTC)	Press. (mb)	Date/time (UTC)[a]	Sustained (kt)[b]	Gust (kt)				
Hydrometeorological Automated Data System (HADS) Sites (NWS)									
Apalachia (APLV2) (36.90N 82.79W)									3.18
Lovettsville (LVRV2) (39.27N 77.64W)									3.32
National Ocean Service (NOS) Sites									
Chesapeake BBT (CHBV2) (37.03N 76.08W) (4.6m)	01/2112	1000.5	01/1824	27	40				
Dominion Terminal (DOMV2) (36.96N 76.42W)	01/2100	1000.9	01/1906	27	35				
Kiptopeke (KPTV2) (37.17N 75.99W) (7.2m)			01/2124	29	41				
Rappahannock Light (RPLV2) (37.54N 76.01W) (17m)	01/2148	1001.1	01/2248	37	49				
Wachapreague (WAHV2) (37.61N 75.69W) (7.0m)	01/2300	1000.9	01/2218	28	35				
Willoughby Degaussing (WDSV2) (36.98N 76.32W)	01/2054	1000.9	01/1806	29	40				
York River East (YKRV2) (37.25N 76.34W)			01/1942	29	36				
Yorktown USCG (YKTV2) (37.23N 76.48W) (9.6m)	01/2100	1000.2	02/0230	31	36				
WeatherFlow									
Lafayette River (36.89N 76.32W) (6.1m)			02/0332	25	34				
Lynnhaven Inlet Light (36.92N 76.09W) (7.9m)			01/1854	26	43				
Middle Ground Lighthouse (36.95N 76.39W) (20m)			01/1855	31	38				
Plantation Flats (37.24N 76.03W) (13m)			01/2051	30	43				
Poquoson (37.11N 76.32W) (10m)			01/2218	28	36				
Poquoson River Light (37.16N 76.38W) (6.7m)			02/0241	23	35				
Rudee Inlet (36.83N 75.97W) (8.8m)			01/1724	27	41				
Sandbridge (36.70N 75.93W) (4.6m)			01/2028	30	41				

Location	Minimum Sea Level Pressure		Maximum Surface Wind Speed			Storm surge (ft)[c]	Storm Tide (ft)[d]	Estimated Inundation (ft)[e]	Total rain (in)
	Date/time (UTC)	Press. (mb)	Date/time (UTC)[a]	Sustained (kt)[b]	Gust (kt)				
Silver Beach (37.49N 75.97W) (7.6m)			02/0005	29	41				
South Norfolk (36.81N 76.29W) (59m)			01/2257	28	38				
Tangier Sound Light (37.79N 75.97W) (16m)			02/0043	34	50				
Thimble Shoals (37.05N 76.26W) (6.1m)			01/1946	27	34				
Third Island (37.04N 76.08W) (16m)			01/1737	35	52				
Tower 70 (38.33N 77.02W) (10m)			01/2212	25	35				
Wachapreague (37.60N 75.69W) (10m)			01/2235	30	40				
Virginia Dept. of Transportation									
Rt-9/WV Line (VA035) (39.26N 77.76W)									3.07
James River Bridge (VA103) (37.00N 76.47W)			02/0315	29	39				0.16
Public/Other									
Cedar Grove 2.0 ENE (39.28N 78.16W)									4.88
Edinburg 2.0 E (38.82N 78.53W)									3.55
Hollymead 1.0 NNW (38.13N 78.44W)									3.95
Leesburg 1.0 NNW (39.12N 77.57W)									3.80
Manassas (38.75N 77.48W)									3.72
Newcomb Hall 3.0 SSW (37.99N 78.53W)									3.50
Staunton 1.0 NNE (38.17N 79.05W)									3.21
Stringtown 2.0 WSW (38.18N 78.02W)									4.19
Winchester 2.0 S (39.14N 78.17W)									3.08
Mountain Lake DYACON (DY005) (37.35N 80.54W)			01/2130	25	36				2.72
Fork Mountain IFLOWS (FKMV2) (38.48N 78.42W)									4.31
Irish Gap (IRIV2) (37.80N 79.18W)									3.34

Location	Minimum Sea Level Pressure		Maximum Surface Wind Speed			Storm surge (ft)[c]	Storm Tide (ft)[d]	Estimated Inundation (ft)[e]	Total rain (in)
	Date/time (UTC)	Press. (mb)	Date/time (UTC)[a]	Sustained (kt)[b]	Gust (kt)				
Mountain Lake IFLOWS (MBHV2) (33.38N 80.52W)									3.13
Mustoe IFLOWS (MSTV2) (38.27N 76.67W)									3.20
District of Columbia									
National Ocean Service (NOS) Sites									
Washington (WASD2) (38.87N 77.02W) (9.0m)	01/2148	997.7	01/1810		22	1.92	2.91	1.1	
Maryland									
International Civil Aviation Organization (ICAO) Sites									
Aberdeen (KAPG) (39.47N 76.17W)	01/2340	997.2	01/1938	20	26				4.52
Baltimore/ Washington Intl. (KBWI) (39.17N 76.68W)	01/2254	998.0	01/0832		35				4.33
Cambridge (KCGE) (38.54N 76.03W)			01/1915	26	39				1.05
Carroll Cnty. Arpt. (KDMW) (39.61N 77.01W)			01/2255		28				3.00
Weide (KEDG) (39.39N 76.29W)			01/1955		37				
Hagerstown (KHGR) (39.71N 77.73W)	01/1953	1001.5	01/1948	21	30				3.91
Hydrometeorological Automated Data System (HADS) Sites (NWS)									
Grantsville 1.0 ENE (GNTM2) (39.70N 79.14W)									4.52
Kitzmiller (KITM2) (39.39N 79.18W)									3.35
Swanton (NGLM2) (39.51N 79.25W)									4.28
Norrisville (NRGM2) (39.70N 76.53W)									3.39
Oakland (OAKM2) (39.42N 79.42W)									3.67
Potomac River Dam #5 (PDFM2) (39.61N 77.92W)									4.02

Location	Minimum Sea Level Pressure		Maximum Surface Wind Speed			Storm surge (ft)[c]	Storm Tide (ft)[d]	Estimated Inundation (ft)[e]	Total rain (in)
	Date/time (UTC)	Press. (mb)	Date/time (UTC)[a]	Sustained (kt)[b]	Gust (kt)				
Bloomington 4.0 NW (SRDM2) (39.51N 79.14W)									5.05
Whiteford (WRGM2) (39.71N 76.35W)									3.77
Coastal-Marine Automated Network (C-MAN) Sites									
Thomas Point (TPLM2) (38.90N 76.44W) (18m)	01/2100	999.6	01/1900	32 (2-min)	40				
National Ocean Service (NOS) Sites									
Annapolis (APAM2) (38.98N 76.48W)	01/2230	997.8	02/0330	20	26	2.50	2.74	2.1	
Bishops Head (BISM2) (38.22N 76.04W) (7.1m)	01/2024	999.7	02/0036	33	42	2.02	2.70	1.9	
Baltimore (BLTM2) (39.27N 76.58W) (7.0m)	01/2300	997.4	02/0130	21	30	2.51	2.33	1.5	
Cambridge (CAMM2) (38.57N 76.07W) (6.4m)	01/2242	998.8	02/0454	23	34	2.41	3.15	2.2	
Delaware City (CHCM2) (39.53N 75.81W) (6.8m)	01/2336	998.2	01/2230	20	44	2.84	4.24	2.6	
Ocean City (OCIM2) (38.33N 75.09W) (8.5m)	02/0306	1001.5	02/0212	30	35				
Solomons Island (SLIM2) (38.32N 76.45W)	01/2236	999.0	01/1900	26	33	1.91	2.59	2.0	
Tolchester Beach (TCBM2) (39.21N 76.24W) (6.7m)	01/2348	998.3	02/0300	29	38	2.70	2.46	1.7	
WeatherFlow									
Assateague South Point (38.21N 75.20W) (4.0m)			02/0106	29	37				
Baber Point (38.31N 77.03W) (6.4m)			01/2212		34				
Blackwalnut Harbor (38.68N 76.33W) (6.7m)			01/1909	32	43				
Cobb Point (38.24N 76.82W) (7.3m)			01/1817	27	37				
Crisfield (37.97N 75.88W) (6.4m)			01/2245	30	43				
Cuckold Creek (38.31N 76.93W) (5.5m)			01/2223	25	36				
Greenbury Point (38.97N 76.46W) (7.6m)			01/1825	30	38				

Location	Minimum Sea Level Pressure		Maximum Surface Wind Speed			Storm surge (ft)[c]	Storm Tide (ft)[d]	Estimated Inundation (ft)[e]	Total rain (in)
	Date/time (UTC)	Press. (mb)	Date/time (UTC)[a]	Sustained (kt)[b]	Gust (kt)				
Grove Point Range (39.40N 76.04W) (11m)			02/0251	27	38				
Hart/Miller (39.25N 76.37W) (18m)			01/2004	24	37				
Herring Bay (38.73N 76.54W) (7.3m)			01/1858		38				
Kent Island (38.92N 76.36W) (4.9m)			01/1918	26	39				
Lower Hooper Island (38.26N 76.18W) (8.5m)			01/2045	30	50				
Monroe Creek (38.23N 76.95W) (12m)			01/1928	23	37				
Ocean City (38.32N 75.08W) (10m)			02/0109	31	42				
Point Lookout (38.04N 76.32W) (11m)			01/2019	30	53				
Potomac Lt. 33 (38.34N 76.99W) (13m)			01/2218	30	41				
Raccoon Point (38.14N 75.79W) (6.1m)			02/0059	28	42				
Sandy Point (39.01N 76.40W) (11m)			01/1729		35				
Saunders Point Light (38.88N 76.48W) (6.1m)			01/1815	30	45				
Tolly Point (38.94N 76.44W) (6.1m)			01/1820	30	35				
Remote Automated Weather Stations (RAWS)									
Antietam (ANBM2) (39.49N 77.75W) (6.1m)			01/2313		24				4.06
Assateague Island (ASTM2) (38.08N 75.20W) (6.1m)			01/2140	25	37				
Blackwater (BLWM2) (38.45N 76.09W) (6.1m)			01/1955		38				0.63
Catoctin Mountain (FOXM2) (39.65N 77.49W) (6.1m)									4.29
Green Ridge (GRDM2) (39.69N 78.42W) (6.1m)									3.25
Patuxent (PREM2) (39.05N 76.82W) (6.1m)									3.56
Susquehanna (SSQM2) (39.61N 76.16W) (6.1m)									5.48
Maryland Dept. of Transportation									
Choptank (MD004) (38.58N 76.06W)			01/2350		34				

Location	Minimum Sea Level Pressure		Maximum Surface Wind Speed			Storm surge (ft)[c]	Storm Tide (ft)[d]	Estimated Inundation (ft)[e]	Total rain (in)
	Date/time (UTC)	Press. (mb)	Date/time (UTC)[a]	Sustained (kt)[b]	Gust (kt)				
MD-30/PA Line (MD020) (39.72N 76.92W)			01/2355		35				
US-13/ US-50 (MD037) (38.37N 75.54W)			01/2225		34				
US-50/MD-331 (MD038) (38.50N 75.84W)			02/0100	20	35				
Kent Narrow Bridge (MD040) (38.97N 76.25W)			02/0525	21	40				
WPL Pier 31 (MD068) (39.00N 76.42W)			02/0239	40					
US-13/US-113 (MD070) (38.06N 75.55W)			01/1950	22	37				
Hatem Bridge (MD072) (39.55N 76.06W)			01/2345	29	37				
Knapps Narrows Drawbridge (MD073) (38.72N 76.33W)			02/0410	27	37				
Thomas Johnson Bridge (MD147) (38.33N 76.47W)			01/1840	27	36				
Delaware Environmental Observing System (DEOS)									
Fair Hill (DE033) (39.71N 75.84W) (3.0m)	01/2300	997.6							3.79
Northeast (DE052) (39.60N 75.91W) (6.0m)			01/2020	20	32				4.63
Public/Other									
Abingdon 2.0 NW (39.48N 76.31W)									5.87
Florence 3.0 S (39.27N 77.11W)									5.40
Odenton 1.0 S (39.05N 76.70W)									3.05
Woodland 1.0 NNE (39.63N 78.94W)									5.16
Woodlawn 2.0 ENE (39.65N 76.04W)									6.18
Powder Mill SCAN (PWDM2) (39.02N 76.85W)									3.18

Location	Minimum Sea Level Pressure		Maximum Surface Wind Speed			Storm surge (ft)[c]	Storm Tide (ft)[d]	Estimated Inundation (ft)[e]	Total rain (in)
	Date/time (UTC)	Press. (mb)	Date/time (UTC)[a]	Sustained (kt)[b]	Gust (kt)				
Advanced Hydrological Prediction Service (AHPS) Sites									
Cumberland (CBEM2) (39.62N 78.77W)									4.54
Delaware									
International Civil Aviation Organization (ICAO) Sites									
Dover AFD (KDOV) (39.13N 75.47W)	01/2353	999.0	01/2221	27	40				1.15
Georgetown (KGED) (38.69N 75.36W)	01/2254	999.5	01/2335	24	36				0.85
Wilmington (KILG) (39.67N 75.61W)	01/2351	998.3	01/2048	28	52				2.30
National Ocean Service (NOS) Sites									
Brandywine Shoal Light (BRND1) (38.99N 75.11W) (21m)	01/2300	999.5	02/0006	36	45				
Delaware City (DELD1) (39.58N 75.59W) (7.2m)	02/0012	998.0	02/0330	24	31	2.53		2.1	
Lewes (LWSD1) (38.78N 75.12W) (9.5m)	01/2318	999.3	02/0600	34	41				
Reedy Point (RDYD1) (39.56N 75.57W)	02/0012	997.5				2.43	5.01	2.1	
WeatherFlow									
Dewey Beach (38.68N 75.08W) (11m)			01/2237	30	55				
Lewes (38.79N 75.16W) (13m)			02/0552	33	43				
Delaware Environmental Observing System (DEOS)									
Hockessin (DE000) (39.79N 75.65W) (3.0m)			01/2050		25				5.24
Glasgow (DE001) (39.61N 75.73W) (3.0m)	01/2300	998.6							3.49
Greenville (DE002) (39.80N 75.61W) (3.0m)			01/2055		26				4.61
Laurel Arpt. (DE013) (38.54N 75.59W) (3.0m)	01/2200	1000.2	01/2315		35				1.15
Indian River Inlet (DE020) (38.63N 75.07W) (3.0m)			01/2240	21	35				0.11
Wilmington - Prices Corner (DE035) (39.75N 75.61W) (3.0m)			01/2050		26				3.97

Location	Minimum Sea Level Pressure		Maximum Surface Wind Speed			Storm surge (ft)[c]	Storm Tide (ft)[d]	Estimated Inundation (ft)[e]	Total rain (in)
	Date/time (UTC)	Press. (mb)	Date/time (UTC)[a]	Sustained (kt)[b]	Gust (kt)				
Claymont - Park (DE038) (39.81N 75.46W) (3.0m)	01/2300	999.2							3.14
Newark – White Clay Creek (DE039) (39.73N 75.73W) (3.0m)			02/0150		23				5.04
Delaware Dept. of Transportation									
US-1/Appoquinimink River (DEL13) (39.44N 75.66W) (10m)			01/2029		35				
I-95/Marsh Road (DEL14) (39.78N 75.51W) (10m)			01/2109		36				
SR1 IRIB North (DEL18) (38.61N 75.06W) (10m)			01/2209	25	37				
Public/Other									
Pike Creek (39.73N 75.70W)									5.63
Pennsylvania									
International Civil Aviation Organization (ICAO) Sites									
Allentown (KABE) (40.65N 75.45W)	01/2251	1001.7	01/2120	28	37				4.15
Allegheny Cnty. (KAGC) (40.36N 79.92W)	01/1053	1005.8	01/1953		21				3.47
Altoona (KAOO) (40.30N 78.32W)	01/2053	1005.2	01/1619		25				5.21
Wilkes-Barre/ Scranton (KAVP) (41.33N 75.73W)	01/2354	1005.3	01/2236		21				5.09
Harrisburg (KCXY) (40.22N 76.86W)	01/2056	1001.8	01/1901		22				5.33
Bedford Cnty. Arpt. (KHMZ) (40.09N 78.51W)			01/1730	20	31				4.65
Hazelton (KHZL) (40.98N 75.99W)			01/2355		21				4.83
Johnstown (KJST) (40.31N 78.83W)	01/1954	1005.4	01/1605		25				4.08
Lancaster (KLNS) (40.12N 76.29W)	01/2153	999.5	01/2355	22	40				5.99
Harrisburg Intl. (KMDT) (40.19N 76.76W)	01/1956	1001.0	01/1930		27				6.64

Location	Minimum Sea Level Pressure		Maximum Surface Wind Speed			Storm surge (ft)[c]	Storm Tide (ft)[d]	Estimated Inundation (ft)[e]	Total rain (in)
	Date/time (UTC)	Press. (mb)	Date/time (UTC)[a]	Sustained (kt)[b]	Gust (kt)				
Mount Pocono (KMPO) (41.14N 75.38W)	02/0153	1005.0	01/2325	22	33				5.56
Muir AAF (KMUI) (40.44N 76.56W)	01/2056	1002.1	01/2351		30				5.69
Brandywine Arpt. (KOQN) (39.99N 75.58W)			02/0215		27				5.91
Philadelphia Intl. (KPHL) (39.87N 75.23W)	01/2254	998.5	02/0139	23	30				2.38
Pittsburg Intl. (KPIT) (40.50N 80.27W)	01/0951	1006.2							3.30
NE Philadelphia (KPNE) (40.08N 75.01W)	01/2254	999.0	01/2250		33				3.53
Pottstown (KPTW) (40.24N 75.55W)	01/2154	999.8	02/0050	21	31				5.38
Reading (KRDG) (40.37N 75.96W)	01/2154	1001.0	02/0030	22	33				4.95
Penn Valley Arpt. (KSEG) (40.82N 76.87W)	01/2153	1004.7	01/2207		31				4.96
York (KTHV) (39.92N 76.88W)	01/1853	1000.5	01/1913		27				6.59
Quakertown Arpt. (KUKT) (40.44N 75.38W)			02/0115		28				7.59
Queen City Arpt. (KXLL) (40.57N 75.49W)			01/2015	20	29				4.83
Hydrometeorological Automated Data System (HADS) Sites (NWS)									
Avella (AVLP1) (40.27N 80.42W)									5.40
Aylesworth Lake (AYLP1) (41.52N 75.53W)									3.32
Berne (BREP1) (40.52N 76.00W)									4.32
Chadds Ford (CDFP1) (39.87N 75.59W)									5.24
Central City (CTLP1) (40.11N 76.81W)									3.42
Dowingtown 3.0 SE (DWNP1) (39.97N 78.83W)									6.93
Falmouth (FALP1) (40.15N 76.69W)									6.00
Graterford (GRAP1) (40.23N 76.45W)									5.55

Location	Minimum Sea Level Pressure		Maximum Surface Wind Speed			Storm surge (ft)[c]	Storm Tide (ft)[d]	Estimated Inundation (ft)[e]	Total rain (in)
	Date/time (UTC)	Press. (mb)	Date/time (UTC)[a]	Sustained (kt)[b]	Gust (kt)				
Harrisburg (HARP1) (40.25N 76.89W)									5.06
Honesdale (HONP1) (41.56N 75.25W)									4.21
Huntingdon (HUJP1) (40.48N 78.02W)									5.30
Hawley (HWYP1) (41.48N 75.17W)									5.10
Milton 1.0 W (ILTP1) (41.02N 76.87W)									3.57
Landingville (LGVP1) (40.63N 76.13W)									4.96
Lehighton (LHTP1) (40.83N 75.71W)									4.15
Slickville 3.0W (LYLP1) (40.46N 79.45W)									3.23
Modena (MODP1) (39.96N 75.80W)									8.18
Meyersdale 2.0 SSE (MYDP1) (39.82N 79.04W)									3.34
Natrona 1.0 N (NATP1) (40.62N 79.72W)									3.65
Northbrook (NBKP1) (39.93N 75.69W)									6.69
Norristown (NRSP1) (40.11N 75.35W)									4.80
Prompton (PRMP1) (41.59N 75.33W)									3.68
Pottstown (PTNP1) (40.24N 75.65W)									4.80
Reading (RDRP1) (40.33N 75.94W)									5.36
Shermans Dale (SMDP1) (40.32N 77.17W)									4.10
Stoddartsville (STDP1) (41.13N 75.63W)									5.84
Seward (SWDP1) (40.42N 79.03W)									4.14
Blakeslee 1.5 SW (TBYP1) (41.08N 75.60W)									7.75
Tamaqua (TQAP1) (40.81N 75.97W)									5.28
Valley Forge (VFGP1) (40.08N 75.46W)									7.43
White Haven 4.0 NE (WHNP1) (41.11N 75.72W)									4.84

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	Date/time (UTC)	Press. (mb)	Date/time (UTC)[a]	Sustained (kt)[b]	Gust (kt)				
Walnutport (WNTP1) (40.76N 75.60W)									5.31
York 3.0 SSW (YRKP1) (39.92N 76.75W)									5.68
National Ocean Service (NOS) Sites									
Bridesburg (BDSP1) (39.98N 75.08W) (1.6m)	01/2224	997.8							
Marcus Hook (MRCP1) (49.81N 75.42W)	01/2100	997.6				2.86	5.60	2.4	
Newbold (NBLP1) (40.14N 74.75W) (6.4m)	01/2312	997.9	01/2318		31				
Philadelphia (PHBP1) (39.93N 75.14W) (6.4m)	01/2218	997.6							
Remote Automated Weather Stations (RAWS)									
Big Knob (BGNP1) (40.30N 77.59W) (6.1m)									4.33
Bears Head (BHDP1) (40.81N 76.01W) (6.1m)			01/2208		23				4.98
Blair Helibase (BLHP1) (40.44N 78.42W)									4.87
Loch Lomond (LOLP1) (41.20N 74.89W) (6.1m)			02/0144		23				4.65
Manada Gap (MNGP1) (40.41N 76.71W)			01/2318		25				5.27
Hopewell (TT136) (40.25N 75.79W) (6.1m)									6.45
Thornhurst (TT137) (41.23N 75.62W) (6.1m)									5.90
Indiantown Run (TT462) (40.46N 76.62W)			01/2113		30				5.94
Forney Trail (TT575) (39.99N 77.96W)									4.30
Tumbling Run (TT576) (40.02N 77.35W)			01/2049		21				4.98
Camp William Penn (TT602) (41.15N 75.15W) (6.1m)									4.42
Ashely (TT608) (41.20N 75.89W)									6.35
Chestnut Springs (TT609) (40.69N 77.70W)									4.22
Yellow Creek SP (TT613) (40.57N 79.02W)									3.42

Location	Minimum Sea Level Pressure		Maximum Surface Wind Speed			Storm surge (ft)[c]	Storm Tide (ft)[d]	Estimated Inundation (ft)[e]	Total rain (in)
	Date/time (UTC)	Press. (mb)	Date/time (UTC)[a]	Sustained (kt)[b]	Gust (kt)				
Trexler (TT618) (40.66N 75.62W)			02/0143		23				5.35
Bear Gap (WLFP1) (40.84N 76.54W) (6.1m)			01/2208		25				5.35
Pennsylvania Dept. of Transportation									
Fort Washington (PA008) (40.13N 75.20W)			01/2145		62[i]				
Olde Richmond (PA017) (39.89N 75.20W)	01/2150	997.3	01/2135	26	38				
Shrewsbury (PA018) (39.77N 76.67W)			02/0020		34				
Luzern (PA042) (41.04N 76.02W)			01/2159		35				
Pennsylvania Environmental Monitoring Network									
Rock Springs (PMN01) (40.71N 77.95W)			01/2052		21				3.33
PSU Altoona (PMN02) (40.54N 78.41W)									3.11
PSU Fruit Research (PMN03) (39.94N 77.26W)			01/2248		30				4.65
Lancaster (PMN04) (40.12N 76.43W)			01/1951	26	34				
PSU Schuykill (PMN08) (40.64N 76.16W)									6.11
PSU Campus (PMN11) (40.81N 77.88W)									3.01
PSU Berks (PMN12) (40.37N 75.98W)			02/0033		23				5.02
Delaware Environmental Observing System (DEOS)									
West Grove (DE031) (39.86N 75.84W) (3.0m)	01/2340	997.7	02/0115	22	34				6.43
Kennett Square Longwood (DE032) (39.87N 75.68W) (3.0m)			02/0050		26				4.73
West Chester (DE040) (39.94N 75.55W) (3.0m)	01/2300	999.4	02/0250		22				4.97
Nottingham-Park (DE041) (39.74N 76.05W)	01/2100	1000.0	01/2050		21				5.82
Atglen-Wolf's Hollow (DE042) (39.92N 75.99W) (3.0m)	01/2200	1000.3	02/0025		23				5.70

Location	Minimum Sea Level Pressure		Maximum Surface Wind Speed			Storm surge (ft)[c]	Storm Tide (ft)[d]	Estimated Inundation (ft)[e]	Total rain (in)
	Date/time (UTC)	Press. (mb)	Date/time (UTC)[a]	Sustained (kt)[b]	Gust (kt)				
Glenmore (DE043) (40.07N 75.78W) (3.0m)	01/2200	1000.4							7.30
Warwick-Park (DE044) (40.16N 75.73W) (3.0m)	01/2200	1001.0							6.28
Devault-Tredyffrin (DE045) (40.07N 75.47W) (3.0m)	01/2200	999.6	01/2230		23				8.14
Chester Springs (DE046) (40.09N 75.62W) (3.0m)	01/2200	1001.1							8.20
Marshallton (DE047) (39.94N 75.72W) (3.0m)	01/2300	998.4							7.24
Public/Other									
Ancient Oaks 1.0 SSW (40.54N 75.60W)									6.45
Bethlehem (40.64N 75.38W)									7.50
Downington (39.97N 75.67W)									10.10
Eagleville (40.16N 75.40W)									7.70
Herndon (40.71N 76.85W)									6.50
Huffs Church (40.44N 75.61W)									7.43
Jefferson Hills 3.0 NW (40.30N 79.97W)									5.72
Littlestown 1.0 NNW (39.76N 77.09W)									7.02
Liverpool 1.0 NE (40.58N 76.98W)									6.61
Mechanicsburg (40.21N 77.01W)									6.24
Mifflinburg (40.92N 77.05W)									4.16
Potters Mills 1.0 NE (40.78N 77.62W)									4.25
Saltillo 3.0 WSW (40.20N 78.06W)									6.10
Spry 1.0 ENE (39.92N 76.68W)									7.46
Tobyhana (41.18N 75.52W)									5.20
Williamsburg (40.46N 78.20W)									6.70
Yeagertown (40.64N 77.58W)									4.64
Thornhurst (AP538) (41.22N 75.60W)									6.39

Location	Minimum Sea Level Pressure		Maximum Surface Wind Speed			Storm surge (ft)[c]	Storm Tide (ft)[d]	Estimated Inundation (ft)[e]	Total rain (in)
	Date/time (UTC)	Press. (mb)	Date/time (UTC)[a]	Sustained (kt)[b]	Gust (kt)				
Newmanstown (AS590) (40.34N 76.20W)									6.56
Hershey (AV729) (40.30N 76.67W)			01/2306		27				7.16
Meyersdale (AV777) (39.81N 79.03W)									4.74
Avondale 2N CRN (AVOP1) (39.86N 75.79W)			02/0400		20				6.39
Lancaster (C0562) (40.07N 76.39W)									7.96
Bear Creek Twp. (D6378) (41.19N 75.78W)									6.29
Gouldsboro (E7892) (41.24N 75.46W)			02/0525		24				6.80
Greencastle (E9743) (39.77N 77.74W)									4.43
Tower City (F0336) (40.59N 76.53W)			01/2051		23				7.90
Falls (F6662) (41.49N 75.83W)									3.24
Spring City (F8514) (40.17N 75.59W)									8.37
Milroy (MLYP1) (40.73N 77.63W)									4.30
Mount Carmel (MTCP1) (40.78N 76.44W)									5.20
Perulack (PRLP1) (40.37N 77.65W)									4.90
Saxton (SAXP1) (40.20N 78.25W)									5.70
Spangeville (SPGP1) (40.33N 75.75W)									7.11
Tamaqua (TMQP1) (40.85N 76.00W)									5.35
Upper Strasburg (USBP1) (40.08N 77.72W)									5.90
New Jersey									
International Civil Aviation Organization (ICAO) Sites									
Andover (K12N) (41.01N 74.74W)	01/2354	1002.5	02/0138		32				4.64
Atlantic City (KACY) (39.45N 74.57W)	02/0354	999.1	01/2354	20	42				0.65
Caldwell (KCDW) (40.88N 74.28W)	01/0111	1001.6	02/0253		24				6.20

Location	Minimum Sea Level Pressure		Maximum Surface Wind Speed			Storm surge (ft)[c]	Storm Tide (ft)[d]	Estimated Inundation (ft)[e]	Total rain (in)
	Date/time (UTC)	Press. (mb)	Date/time (UTC)[a]	Sustained (kt)[b]	Gust (kt)				
Newark (KEWR) (40.68N 74.17W)	01/2351	998.9	01/2322	26	38				8.44
Sussex (KFWN) (41.20N 74.63W)	02/0415	1003.4	02/0145	21	40				4.22
Linden (KLDJ) (40.62N 74.24W)	02/0035	999.3	02/0435		27				5.67
Lakehurst (KNEL) (40.04N 74.35W)	02/0018	997.7	02/0030		35				1.80
Somerville (KSMQ) (40.62N 74.67W)	01/2330	1000.0	01/2331		33				5.56
Teterboro (KTEB) (40.86N 74.06W)	02/0051	999.7[i]	02/0105	25	51				7.16
Trenton (KTTN) (40.28N 74.82W)	01/2353	997.6	01/2010	20	33				5.60
McGuire AFB (KWRI) (40.02N 74.60W)	01/2352	998.2	02/0342	21	34				1.86
Wildwood (KWWD) (39.02N 74.92W)	02/0356	1000.2	01/2255	27	34				0.54
Hydrometeorological Automated Data System (HADS) Sites (NWS)									
Bound Brook (BDBN4) (40.57N 74.55W)									7.73
Basking Ridge (BKRN4) (40.70N 74.50W)									6.76
Belle Meade (BMDN4) (40.47N 74.65W)									7.24
Boonton (BOON4) (40.90N 74.40W)									4.89
Canoe Brook 2.0 E (CHMN4) (40.74N 74.35W)									6.52
Essex Fells (ESXN4) (40.83N 74.29W)									7.08
Ewingville (EWGN4) (40.27N 74.77W)									5.20
Far Hills (FHLN4) (40.71N 74.64W)									5.63
Flatbrookville (FLAN4) (41.11N 74.95W)									4.88
Franklin Lakes (FLKN4) (40.99N 74.20W)									5.96
Highland Lakes 3.0 NE (HLLN4) (41.19N 74.41W)									4.00
Ironia (IRON4) (40.84N 74.64W)									4.60
Lake Hopatcong (LAKN4) (40.92N 74.67W)									4.31

Location	Minimum Sea Level Pressure		Maximum Surface Wind Speed			Storm surge (ft)[c]	Storm Tide (ft)[d]	Estimated Inundation (ft)[e]	Total rain (in)
	Date/time (UTC)	Press. (mb)	Date/time (UTC)[a]	Sustained (kt)[b]	Gust (kt)				
Lincoln Park (LNPN4) (40.92N 74.30W)									5.54
Lodi (LOIN4) (40.88N 74.09W)									6.92
Middlesex (MDSN4) (40.59N 74.51W)									8.04
Middlebush (MIDN4) (40.50N 74.52W)									7.53
Monksville (MONN4) (41.14N 74.31W)									4.44
Maplewood (MPLN4) (40.73N 74.27W)									8.16
Martinsville (MRTN4) (40.61N 74.59W)									8.64
Morris Plains (MSPN4) (40.83N 74.52W)									5.28
Morristown (MSTN4) (40.80N 74.42W)									5.80
Montague (MTGN4) (41.31N 74.80W)									4.86
Mountainside (MTSN4) (40.68N 74.38W)									7.30
Neshanic (NESN4) (40.47N 74.73W)									8.12
Old Bridge (ODBN4) (40.42N 74.35W)									5.20
Oakland (OKLN4) (41.03N 74.25W)									5.51
Orange (ORAN4) (40.76N 74.29W)									7.08
Oak Ridge Reservoir (ORRN4) (41.04N 74.50W)									4.56
Little Falls (PEKN4) (40.87N 74.22W)									6.47
Franklin (PELN4) (41.13N 74.58W)									4.17
Rockaway (PIKN4) (40.95N 74.56W)									3.82
Park Ridge (PKRN4) (41.04N 74.04W)									5.53
Pottersville (POTN4) (40.70N 74.70W)									5.59
Pompton Plains (PPPN4) (40.97N 74.28W)									4.99
Riegelsville (RGLN4) (40.59N 75.19W)									6.90
Ringwood (RINN4) (41.12N 74.24W)									4.24

Location	Minimum Sea Level Pressure		Maximum Surface Wind Speed			Storm surge (ft)[c]	Storm Tide (ft)[d]	Estimated Inundation (ft)[e]	Total rain (in)
	Date/time (UTC)	Press. (mb)	Date/time (UTC)[a]	Sustained (kt)[b]	Gust (kt)				
Ridgewood (RNWN4) (40.99N 74.15W)									5.40
Skillman (SKIN4) (40.42N 74.70W)									8.08
Somerville (SMVN4) (40.58N 74.62W)									7.17
Stockton (STKN4) (40.40N 74.98W)									8.65
Washington Crossing (WASN4) (40.30N 74.87W)									7.29
Wanaque (WNQN4) (41.04N 74.29W)									5.04
Hillsdale (WOON4) (41.01N 74.05W)									5.43
Watchung (WTCN4) (40.64N 74.45W)									5.44
West Milford (WTMN4) (41.13N 74.35W)									4.20
Garrett Mountain (WTPN4) (40.88N 74.18W)									6.36
West Wharton (WWNN4) (40.91N 74.60W)									4.36
Wayne (WYNN4) (40.91N 74.25W)									4.72
Coastal-Marine Automated Network (C-MAN) Sites									
Jacques Cousteau NERRS (JCRN4) (39.54N 74.46W) (13m)	02/0415	998.6	02/0100	22	35				
National Ocean Service (NOS) Sites									
Burlington (RBRN4) (40.08N 74.87W) (21m)	01/2300	995.1	01/2306	24	60				
Cape May (CMAN4) (40.08N 74.87W) (21m)	02/0018	999.6	02/0012	24	36				
Robbins Reef (ROBN4) (40.66N 74.07W) (21m)	02/0048	997.2	01/2342	37	49				
Sandy Hook (SDHN4) (40.47N 74.01W) (5.5m)						2.51	3.00	0.6	
WeatherFlow									
Barnegat Inlet Light (36.76N 74.09W) (12m)			02/0239	36	46				
Bayonne (40.67N 74.09W) (10m)			01/2356	33	44				

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	Date/time (UTC)	Press. (mb)	Date/time (UTC)[a]	Sustained (kt)[b]	Gust (kt)				
Brick (40.01N 74.06W) (10m)			02/0022	24	34				
Cape May (38.97N 74.96W) (10m)			02/0559	25	37				
Kite Island (39.79N 74.17W) (14m)			02/0141	32	50				
LBI Island Surf (39.66N 74.21W) (6.4m)			02/0124	34	47				
Ludlam Bay (39.18N 74.70W) (6.1m)			01/2340	28	39				
Ocean City (39.22N 74.64W) (10m)			02/0011	31	48				
PT Point (39.37N 74.50W) (5.8m)			02/0047	20	42				
Seaside Heights (39.94N 74.07W) (14m)			02/0031	27	39				
Trixies (39.87N 74.14W) (9.8m)			02/0044	30	45				
Tuckerton (39.52N 74.32W) (10m)			02/0321	26	40				
Remote Automated Weather Stations (RAWS)									
Teetertown (CALN4) (40.75N 74.86W) (6.1m)			02/0310		34				4.37
Coyle Field (CTWN4) (39.81N 74.43W) (6.1m)			02/0110		37				1.40
New Middlesex Cnty. (DEAN4) (40.41N 74.49W) (6.1m)			02/0110		28				6.02
EB Forsythe (OCVN4) (39.46N 74.45W) (6.1m)			01/2325	22	36				0.43
Ringwood (RAWN4) (41.11N 74.24W) (6.1m)			02/0410		20				5.39
Blue Mountain Lakes (TS717) (41.09N 74.91W) (6.1m)			02/0114		23				4.49
Walkill River (WALN4) (41.26N 74.54W) (6.1m)			02/0256		24				7.01
New Jersey Weather Network									
Dennis Twp. (NJ02) (39.20N 74.89W) (3.0m)			01/2235	24	36				0.98
Hamilton (NJ06) (40.25N 74.66W) (3.0m)									3.82
Hackettstown (NJ08) (40.85N 74.84W) (7.0m)									4.62
Holmdel (NJ09) (40.38N 74.18W) (3.0m)									3.45

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	Date/time (UTC)	Press. (mb)	Date/time (UTC)[a]	Sustained (kt)[b]	Gust (kt)				
Harvey Cedars (NJ11) (39.70N 74.14W) (11m)			02/0150	29	40				0.38
Jersey City (NJ12) (40.71N 74.05W) (10m)			01/2215	23	29				6.81
New Brunswick (NJ13) (40.47N 74.42W) (10m)					22				7.18
Walpack (NJ19) (41.16N 74.88W) (8.0m)									5.32
Atlantic City Marina (NJ25) (39.38N 74.42W) (10m)			01/2210	31	37				0.29
Kingwood (NJ32) (40.52N 75.00W) (7.0m)									6.78
Parsippany (NJ36) (40.83N 74.52W) (7.0m)									5.55
Point Pleasant (NJ37) (40.07N 74.06W) (7.0m)			02/0205	21	34				1.49
Seaside Heights (NJ39) (39.94N 74.07W) (12m)			02/0220	22	36				1.82
Haworth (NJ48) (40.96N 74.01W) (3.0m)					26				6.81
Berkely Twp. (NJ49) (39.93N 74.30W) (10m)			02/0045	27	39				1.92
Basking Ridge (NJ51) (40.70N 74.52W) (10m)									8.04
Sea Girt (NJ52) (40.12N 74.03W) (10m)			02/0040	30	36				1.51
Pittstown (NJ53) (40.56N 74.96W) (10m)			02/0215	23	33				7.05
Woodbine (NJ55) (39.22N 74.79W) (10m)			02/0020	31	38				0.90
Ramsey (NJ57) (41.07N 74.15W) (7.0m)					22				5.64
Pequest (NJ58) (40.84N 74.95W) (10m)					26				5.46
High Point (NJ59) (41.31N 74.67W) (10m)					25				4.89
Charlotteburg Reservoir (NJ60) (41.03N 74.42W) (10m)					23				4.79
High Point Monument (NJ61) (41.32N 74.66W) (7.0m)			02/0025	25	37				4.92
Hopewell Twp. (NJ64) (40.35N 74.78W) (10m)					22				7.81
Lyndhurst (NJ65) (40.78N 74.10W) (5.0m)			01/2355	23	32				7.64
Fortescue (NJ67) (39.24N 75.18W) (10m)			02/0005	35	41				1.32
West Deptford (NJ68) (39.88N 75.14W) (10m)					24				3.16

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	Date/time (UTC)	Press. (mb)	Date/time (UTC)[a]	Sustained (kt)[b]	Gust (kt)				
Pennsauken (NJ71) (39.99N 75.04W) (10m)			02/0135	26	34				3.49
Logan Twp. (NJ72) (39.80N 75.37W) (10m)			01/2130	26	35				2.23
Lower Alloways Creek (NJ74) (39.48N 75.54W) (10m)			01/1955	30	35				0.76
Sandyston (NJ75) (41.23N 74.75W) (3.0m)									4.72
Hillsborough (NJ76) (40.54N 74.63W) (10m)			02/0040	21	46				8.68
East Brunswick (NJ77) (40.47N 74.39W) (10m)			01/2220	20	33				6.82
Vernon Twp. (NJ78) (41.18N 74.50W)			02/0110	27	38				4.51
Wantage Twp. (NJ79) (41.29N 74.65W) (5.0m)			02/0050		30				5.07
Public/Other									
Manville (40.55N 74.60W)									10.06
Matawan (40.41N 74.23W)									5.18
Washington (40.76N 74.98W)									5.70
Waldwick (C2073) (41.02N 74.12W)									8.59
Hasbrouck Heights (D8219) (40.86N 74.08W)			02/0134		26				8.01
Hasbrouck Heights (D9142) (40.26N 74.79W)									5.64
Skillman (E0478) (40.42N 74.70W)									8.17
West Caldwell (E0732) (40.86N 74.28W)									6.63
West Orange (E1297) (40.77N 74.28W)									6.66
Passaic (E4570) (40.85N 74.13W)									8.43
Kearny (E9345) (40.78N 74.15W)			02/0001		25				6.70
Hoboken (F1417) (40.75N 74.03W)			02/0137		31				4.92
Ringoes (F1999) (40.44N 74.87W)									9.73
Carteret (F5744) (40.58N 74.24W)	02/0025	998.0	02/0035		26				9.10

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	Date/time (UTC)	Press. (mb)	Date/time (UTC)[a]	Sustained (kt)[b]	Gust (kt)				
Carteret (F9434) (40.69N 74.47W)									7.56
Advanced Hydrological Prediction Service (AHPS) Sites									
Easton (ESTN4) (40.69N 75.19W)									3.97
New York									
International Civil Aviation Organization (ICAO) Sites									
Westhampton (KFOK) (40.85N 72.62W)	02/0453	998.6	02/0900	22	36				1.74
Farmingdale (KFRG) (40.73N 73.42W)	02/0253	998.5	02/0312	32	44				2.01
White Plains (KHPN) (41.06N 73.70W)	02/0256	1000.0	02/0256	23	36				6.16
Islip (KISP) (40.79N 73.10W)	02/0356	998.5	02/0740	24	37				2.64
New York Kennedy Arpt. (KJFK) (40.64N 73.76W)	02/0151	999.0	02/0505	26	38				2.78
New York Manhattan (KJRB) (40.70N 74.01W)	01/2356	999.9	01/2356	22	37				
New York LaGuardia Arpt. (KLGA) (40.78N 73.88W)	02/0051	999.3	01/2351	35	41				6.90
Montgomery (KMGJ) (41.51N 74.27W)	02/0454	1004.0	02/0120	26	33				5.65
Monticello (KMSV) (41.70N 74.80W)	02/0256	1006.1	02/1456		23				3.33
Montauk (KMTP) (41.07N 71.92W)	02/0554	998.6	02/0935		32				3.20
New York Central Park (KNYC) (40.78N 73.97W)	02/0251	1000.2	01/2356		35				7.19
Poughkeepsie (KPOU) (41.63N 74.88W)	02/0553	1003.3	02/0053		22				5.64
Hydrometeorological Automated Data System (HADS) Sites (NWS)									
Nanuet (NUTN6) (41.09N 74.03W)									5.96
Sterling Forest (STGN6) (41.23N 74.24W)									5.44
Suffern (SUFN6) (41.12N 74.13W)									5.68

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	Date/time (UTC)	Press. (mb)	Date/time (UTC)[a]	Sustained (kt)[b]	Gust (kt)				
National Ocean Service (NOS) Sites									
The Battery (BATN6) (40.70N 74.01W)	02/0048	998.2				2.44	2.92	0.6	
Bergen Point (BGNN6) (40.64N 74.15W) (9.0m)	02/0036	998.0				2.53		0.5	
Kings Point (KPTN6) (40.81N 73.77W) (8.6m)	02/0106	999.7	02/0212	36	43	3.18	5.02	1.5	
Mariners Harbor (MHRN6) (40.64N 74.16W) (46m)			01/2354	36	40				
Montauk (MTKN6) (41.05N 71.96W)	02/0636	997.8				2.28	1.73	0.8	
WeatherFlow									
Bannerman Island (41.46N 73.99W) (19m)			02/0625	25	34				
Bayville (40.90N 73.63W) (14m)			02/0207	45	63				
Blue Point (40.73N 73.03W) (12m)			02/0402	30	45				
Breezy Point (40.55N 73.93W) (10m)			02/0045	23	38				
East Moriches CG (40.79N 72.75W) (10m)			02/0505	31	44				
Eaton's Neck (40.95N 73.40W) (22m)			02/0250	57	68				
Fire Island CG (40.62N 73.26W) (10m)			02/0246	29	41				
Fishers Island (41.25N 72.03W) (10m)			02/0524	26	41				
Great Gull Island (41.20N 72.16W) (10m)			02/0841	37	46				
Great South Bay (40.66N 73.40W) (11m)			02/0320	29	41				
Jones Beach CG (40.59N 73.56W) (10m)			02/0655	25	40				
Larchmont Harbor (40.92N 72.73W) (10m)			02/0041	37	44				
Mecox Bay (40.91N 72.32W) (10m)			02/0511	23	35				
Nepeague (41.01N 72.06W) (9.8m)			02/0934	34	43				
Point of Woods (40.65N 73.14W) (5.8m)			02/0737	30	43				
Shinnecock Light (40.84N 72.48W) (12m)			02/0738	32	46				
Sinai Harbor (40.96N 73.04W) (7.0m)			02/0708	30	43				
State Boat Channel (40.65N 73.30W) (4.9m)			02/0711	29	39				

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Tappan Zee Light (41.14N 73.88W) (13m)			02/0737	28	37				
Remote Automated Weather Stations (RAWS)									
USMA (TS745) (41.37N 74.03W) (6.1m)			02/0155		23				5.73
New York Mesonet									
Beacon (BEAC) (41.53N 73.95W)			02/0615		26				6.07
Brooklyn 3.2 ESE (BKLN) (40.63N 73.95W)			02/0050		34				5.62
Brewster 3.6 NE (BREW) (41.44N 73.58W)			02/0415		22				5.20
Bronx 2.4 NW (BRON) (40.87N 73.89W)			02/0120	21	41				7.40
Dover Plains 2.2 N (DOVE) (41.77N 73.58W)			02/0220		16				5.03
Eldred 0.9 NNE (ELDR) (41.54N 74.88W)									5.12
High Falls 1.9 S (HFAL) (41.80N 74.12W)			02/0210		17				3.88
Manhattan 1.1 SSE (MANH) (40.77N 73.96W)			02/0105		34				7.55
Otisville 1.9 E (OTIS) (41.48N 74.50W)			02/0055		20				5.30
Queens 1.2 WNW (QUEE) (40.73N 73.82W)			02/0110	20	37				5.76
Red Hook 0.6 NW (REDH) (42.00N 73.88W)			02/0530		20				3.07
Shenorock 2.1 SW (SOME) (41.31N 73.77W)			02/0145		26				5.33
Southold 2.7 SW (SOUT) (41.04N 72.47W)			02/0530	23	44				3.69
Staten Island 3.3N (STAT) (40.60N 74.15W)			01/2315		30				8.44
Stony Brook 0.7 SE (STON) (40.92N 73.13W)			02/0315		26				6.08

Location	Minimum Sea Level Pressure		Maximum Surface Wind Speed			Storm surge (ft)[c]	Storm Tide (ft)[d]	Estimated Inundation (ft)[e]	Total rain (in)
	Date/time (UTC)	Press. (mb)	Date/time (UTC)[a]	Sustained (kt)[b]	Gust (kt)				
Suffern 3.3 ENE (SUFF) (41.13N 74.09W)			02/0315		28				5.16
Wallkill 2.5 NE (WALL) (41.63N 74.15W)			02/0115		23				4.85
Warwick 1.9 SW (WARW) (41.24N 74.39W)			02/0225		23				5.35
Woodbourne 0.5 SE (WBOU) (41.75N 74.59W)			02/0125		17				3.65
Public/Other									
East Tremont 1.0 NE (40.89N 73.85W)									7.79
Glen Cove (40.87N 73.64W)									9.09
Mahopac (41.37N 73.74W)									7.28
Mount Kisco 1.0 N (41.22N 73.73W)									8.46
Old Field 1.0 ENE (40.97N 73.11W)									7.20
Scarsdale 2.0 SSE (40.96N 73.75W)									8.09
Stewart Airpt. 2.0 SW (41.48N 74.12W)									7.32
Saint James (C9244) (40.88N 73.15W)									5.02
Vails Gate (D4236) (41.47N 74.04W)			02/0156		22				5.74
Tarrytown (D5082) (41.05N 73.85W)									6.97
Eltingville (D8569) (40.55N 74.16W)									5.78
Dyker Heights (E1296) (40.62N 74.01W)			02/0105		23				4.48
Armonk (E1980) (41.13N 72.71W)			02/0453		20				6.78
Stony Brook (E5676) (40.80N 73.10W)			02/0317		34				3.77
Staten Island (E7893) (40.62N 74.15W)									8.92
Smithtown (E8502) (40.84N 73.24W)									3.23
Beechhurst (F1633) (40.80N 73.81W)	02/0212	998.6	02/0027	33	41				3.90
New Rochelle (F2966) (40.92N 73.76W)	02/0230	999.7	02/0115		27				7.12

Location	Minimum Sea Level Pressure		Maximum Surface Wind Speed			Storm surge (ft)[c]	Storm Tide (ft)[d]	Estimated Inundation (ft)[e]	Total rain (in)
	Date/time (UTC)	Press. (mb)	Date/time (UTC)[a]	Sustained (kt)[b]	Gust (kt)				
Ossining (F7184) (41.18N 73.85W)									6.44
East Setauket (F7551) (40.94N 73.11W)									6.86
Brooklyn South Slope (F8726) (40.67N 73.98W)									7.01
Miller Place (F9050) (40.96N 73.01W)									6.69
Brooklyn (F9483) (40.70N 74.00W)									7.76
Connecticut									
International Civil Aviation Organization (ICAO) Sites									
Bradley Windsor Locks (KBDL) (41.94N 72.68W)	02/0351	1004.5	02/0232	21	33				5.27
Bridgeport (KBDR) (41.16N 73.13W)	02/0317	998.3	02/0317	28	40				5.94
Danbury (KDXR) (41.37N 73.48W)	02/0540	1001.9	02/0523		25				4.65
Groton (KGON) (41.33N 72.05W)	02/0556	998.0	02/0556	30	39				3.64
Hartford (KHFD) (41.74N 72.65W)			02/0616	22[i]	31[i]				5.12
New Haven (KHVN) (41.26N 72.89W)	02/0305	1000.0	02/0551	30	39				4.53
Willimantic (KIJD) (41.74N 72.18W)	02/0436	1001.4	02/0433	24	34				4.36
Meriden (KMMX) (41.51N 72.83W)	02/0335	1001.0	02/0304	24	33				4.96
Oxford (KOXC) (41.48N 73.13W)	02/0320	1003.3	02/0403	24	37				4.72
Hydrometeorological Automated Data System (HADS) Sites (NWS)									
Chaplin (CHAC3) (41.82N 72.11W)									
East Hampton 4.0 SE (EHMC3) (41.55N 72.44W)									5.90
Falls Village (FLVC3) (41.95N 73.37W)									4.90
Hotchkissville (HKVC3) (41.56N 73.21W)									4.89
Merrow (MANC3) 41.82N 72.31W)									5.62
Mansfield (MFDC3) (41.72N 72.20W)									6.08

Location	Minimum Sea Level Pressure		Maximum Surface Wind Speed			Storm surge (ft)[c]	Storm Tide (ft)[d]	Estimated Inundation (ft)[e]	Total rain (in)
	Date/time (UTC)	Press. (mb)	Date/time (UTC)[a]	Sustained (kt)[b]	Gust (kt)				
Hartford Park River (NBPC3) (41.78N 72.71W)									5.43
Southington (QPCC3) (41.60N 72.88W)									5.59
Old Saybrook (SABC3) (41.28N 72.35W)			02/0315	32					5.77
West Suffield (STBC3) (41.96N 72.71W)									5.70
Stamford (STDC3) (41.04N 73.53W)	02/0330	999.3	02/0300	21					6.78
Thomaston Lake (TMSC3) (41.69N 73.06W)									5.83
Thomaston 2.0 NE (TRBC3) (41.66N 73.11W)									5.72
Union City (UNCC3) (41.51N 73.07W)									5.06
Wallingford (WALC3) (41.45N 72.84W)									3.72
West Thompson Lake (WTHC3) (41.94N 71.90W)									5.11
Norwich (YTCC3) (41.56N 72.12W)									7.49
National Ocean Service (NOS) Sites									
Bridgeport (BRHC3) (41.17N 73.18W)	02/0306	998.6	02/0306	20	31	2.40	3.99	0.5	
New London (NLNC3) (41.36N 72.09W) (8.2m)	02/0512	999.5				1.65	1.94	0.7	
New Haven (NWHC3) (41.28N 72.91W) (6.7m)	02/0500	999.8	02/0506	26	41	2.69		0.4	
WeatherFlow									
Hammonasset (41.27N 72.59W) (14m)			02/0607	21	37				
Norwalk Light (41.08N 73.38W) (10m)			02/0114	37	43				
Stonington Outer Breakwater (41.32N 71.91W) (11m)			02/0740	33	46				
USCG Academy (41.37N 72.09W) (17m)			02/0533	33	43				
Public/Other									
Clinton (41.28N 73.53W)									8.37

Location	Minimum Sea Level Pressure		Maximum Surface Wind Speed			Storm surge (ft)[c]	Storm Tide (ft)[d]	Estimated Inundation (ft)[e]	Total rain (in)
	Date/time (UTC)	Press. (mb)	Date/time (UTC)[a]	Sustained (kt)[b]	Gust (kt)				
Seymour (41.40N 73.06W)									8.72
Vernon-Rockwell (C2340) (41.86N 72.44W)									5.30
Westbrook (E1210) (41.31N 72.44W)									5.91
Hamden (E3721) (41.37N 73.96W)									5.72
Milford (E4944) (41.24N 73.08W)									6.50
Danbury (F1480) (41.42N 73.52W)									6.64
Bristol (F6122) (41.70N 72.91W)									6.06
Armonk (F8740) (41.09N 72.70W)									6.92
Middletown (F8789) (41.57N 72.68W)									6.96
Branford (F9368) (41.30N 72.79W)									5.15
New London (F9395) (41.34N 72.10W)									5.72
Fairfield (G0038) (41.13N 73.24W)									5.86
Rhode Island									
International Civil Aviation Organization (ICAO) Sites									
Providence (KPVD) (41.72N 71.43W)	02/0751	1000.7	02/0815	24	35				3.89
Newport (KUUU) (41.53N 71.28W)	02/0653	998.5	02/0725	28	42				6.23
Westerly (KWST) (41.25N 70.06W)	02/0553	999.4	02/0645	28	37				3.87
Hydrometeorological Automated Data System (HADS) Sites (NWS)									
Woonsocket North (WFWR1) (42.01N 71.50W)									3.31
Watch Hill (WHLR1) (41.31N 71.86W)	02/0630	996.9	02/0630	33					3.61
Coastal-Marine Automated Network (C-MAN) Sites									
Prudence Island NERRS (NAXR1) (41.64N 71.34W) (10m)	02/0700	999.0	02/0745	25	35				4.29

Location	Minimum Sea Level Pressure		Maximum Surface Wind Speed			Storm surge (ft)[c]	Storm Tide (ft)[d]	Estimated Inundation (ft)[e]	Total rain (in)
	Date/time (UTC)	Press. (mb)	Date/time (UTC)[a]	Sustained (kt)[b]	Gust (kt)				
National Ocean Service (NOS) Sites									
Newport (NWPR1) (41.50N 71.33W) (8.4m)	02/0606	999.0	02/0742	23	36	1.52	1.97	0.1	
Quonset Point (QPTR1) (41.59N 71.41W) (7.0m)	02/0754	999.1	02/0800	27	42				
WeatherFlow									
Beavertail (41.45N 71.40W) (12m)			02/0707		35				
Block Island (41.19N 71.59W) (11m)			02/0910	40	46				
Bristol Harbor (41.65N 71.29W) (9.4m)			02/0744	32	41				
Fogland (41.56N 71.22W) (9.4m)			02/0723	29	42				
Halfway Rock (41.56N 71.33W) (8.5m)			02/0720	35	47				
Ninigret Pond (41.34N 71.69W) (11m)			02/0854	31	41				
Point Judith (41.36N 71.50W) (16m)			02/0707	38	50				
Rose Island (41.50N 71.34W) (11m)			02/0723	30	37				
Sabin Point (41.76N 71.37W) (8.5m)			02/0952	29	36				
Sakonnet Vineyards (41.53N 71.19W) (10m)			02/0743	24	43				
URI (41.49N 71.42W) (10m)			02/1009	37	48				
Remote Automated Weather Stations (RAWS)									
Ninigret (NINR1) (41.38N 71.58W) (6.1m)			02/1032		35				5.75
Public/Other									
Gloucester (41.90N 71.63W)									4.70
Greene (41.69N 71.75W)									5.10
North Kingstown (AP73) (41.57N 71.49W)									5.39
Cranston (E7318) (41.78N 71.49W)									4.62
Jamestown (E8410) (41.55N 71.37W)									4.82

Location	Minimum Sea Level Pressure		Maximum Surface Wind Speed			Storm surge (ft)[c]	Storm Tide (ft)[d]	Estimated Inundation (ft)[e]	Total rain (in)
	Date/time (UTC)	Press. (mb)	Date/time (UTC)[a]	Sustained (kt)[b]	Gust (kt)				
Bristol (G0203) (41.71N 71.26W)			02/0848		21				5.38
Massachusetts									
International Civil Aviation Organization (ICAO) Sites									
Nantucket (KACK) (41.25N 70.06W)	02/1105	997.2	02/1525	28	35				
Westfield (KBAF) (42.16N 72.72W)	02/0853	1004.8	02/0715		26				3.73
Bedford (KBED) (42.47N 71.29W)	02/1040	1004.2	02/1225		22				4.07
Boston Logan Arpt. (KBOS) (42.36N 71.01W)	02/1054	1003.4	02/1120	22	31				4.23
Beverly (KBVY) (42.58N 70.92W)	02/0840	1002.4	02/0850		29				3.83
Westover AFB (KCEF) (42.20N 72.53W)	02/0810	1004.9	02/1456		22				4.27
New Bedford (KEWB) (41.67N 70.96W)	02/0653	999.1	02/0435	20	30				4.89
Fitchburg (KFIT) (42.55N 71.76W)	09/0920	1005.0	02/1552		22				3.15
Marshfield (KGHG) (42.10N 70.67W)	02/0915	999.7	02/0635		37				
Hyannis (KHYA) (41.67N 70.27W)	02/0956	998.0	02/1335	22	45				4.57
Lawrence (KLWM) (42.71N 71.12W)	02/1054	1004.1	02/0830	22	28				3.58
Martha's Vineyard (KMVY) (41.39N 70.62W)	02/0853	998.0	02/1041	26	36				2.66
Worcester (KORH) (42.27N 71.87W)	02/0945	1003.8	02/0532		29				4.43
Norwood (KOWD) (42.19N 71.17W)	02/1053	1002.7	02/0832		29				3.77
Provincetown (KPVC) (42.07N 70.22W)	02/0756	999.4	02/0856	28	42				
Plymouth (KPYM) (41.91N 70.73W)	02/0852	1000.4	02/0900	27	37				5.15
Taunton (KTAN) (41.88N 70.02W)	02/0640	1000.0	02/1052		24				4.72
Hydrometeorological Automated Data System (HADS) Sites (NWS)									
Andover (ANDM3) (42.67N 71.15W)									3.73
Barre Falls Dam (BRRM3) (42.43N 72.03W)									4.32

Location	Minimum Sea Level Pressure		Maximum Surface Wind Speed			Storm surge (ft)[c]	Storm Tide (ft)[d]	Estimated Inundation (ft)[e]	Total rain (in)
	Date/time (UTC)	Press. (mb)	Date/time (UTC)[a]	Sustained (kt)[b]	Gust (kt)				
Charlton (CHLM3) (42.12N 71.91W)									4.56
Hardwick 1.0 ENE (HRDM3) (42.39N 72.24W)									3.42
Huntington (HUGM3) (42.24N 72.90W)									3.06
Brookline (MUDM3) (42.34N 71.11W)									5.05
Northampton (NHMM3) (42.31N 72.62W)									3.49
Peabody (PEBM3) (42.54N 71.01W)									3.45
Sturbridge (STBM3) (42.08N 72.05W)									4.20
Uxbridge (UXBM3) (42.10N 71.61W)									5.07
Ware River Intake (WRIM3) (42.39N 72.07W)									4.49
Coastal-Marine Automated Network (C-MAN) Sites									
Buzzards Bay (BUZM3) (41.40N 71.03W) (25m)	02/0800	998.5	02/0750	33 (10-min)	42				
Waquoit Bay NERRS (WAXM3) (41.58N 70.52W) (10m)			02/0500		20				4.44
National Ocean Service (NOS) Sites									
Borden Flats Light (BLTM3) (41.70N 71.17W) (16m)	02/0618	997.8	02/0618	39	48				
Woods Hole (BZBM3) (41.52N 70.67W)	02/0854	997.6				1.94	1.88	1.0	
Chatham (CHTM3) (41.69N 69.95W) (7.5m)	02/1018	997.8	02/1430	26	35				
Nantucket (NTKM3) (41.29N 70.10W) (8.5m)	02/1048	997.5	02/1242	23	32	1.81		0.2	
WeatherFlow									
Boston Pleasure Bay (42.33N 71.02W) (14m)			02/0550	29	34				
Chapin Island (41.73N 70.23W) (9.4m)			02/0522	34	49				
Chatham (41.66N 69.98W) (9.1m)			02/1025	26	34				
Children's Island (42.51N 70.82W) (9.1m)			02/0836	33	40				

Location	Minimum Sea Level Pressure		Maximum Surface Wind Speed			Storm surge (ft)[c]	Storm Tide (ft)[d]	Estimated Inundation (ft)[e]	Total rain (in)
	Date/time (UTC)	Press. (mb)	Date/time (UTC)[a]	Sustained (kt)[b]	Gust (kt)				
Deer Island (42.34N 70.95W) (17m)			02/0607	32	40				
Dread Ledge (42.46N 70.89W) (11m)			02/0625	30	36				
Duxbury (42.06N 70.65W) (12m)			02/0916	44	56				
Duxbury Bay (42.04N 70.67W) (15m)			02/0637	30	42				
Gloucester (42.58N 70.67W) (14m)			02/0913	35	45				
Hatch Beach (41.82N 70.00W) (10m)			02/1732	27	40				
Horseneck Beach (41.51N 71.09W) (11m)			02/0754	29	38				
Hull (42.31N 70.89W) (12m)			02/0853	32	42				
Kalmus (41.63N 70.28W) (10m)			02/0822	31	50				
Nantucket Harbor AIB (41.32N 70.04W) (10m)			02/1229	26	38				
Scituate (42.20N 70.72W) (10m)			02/0717	36	54				
Squantum (42.28N 71.01W) (16m)			02/0613	24	34				
Vineyard Haven (41.46N 70.59W) (10m)			02/1046	34	43				
Waquoit Bay (41.56N 70.51W) (17m)			02/0834	21	39				
Wellfleet (41.93N 69.98W) (16m)			02/0555	33	45				
West Dennis (41.65N 70.17W) (13m)			02/0817	30	42				
West Falmouth (41.60N 70.65W) (10m)			02/0830	25	37				
West Island (41.58 70.82W) (10m)			02/0555	29	39				
Woods Hole Passage Light (41.52N 70.68W) (12m)			02/0920	30	42				
Remote Automated Weather Stations (RAWS)									
Blue Hills (BLUM3) (42.21N 71.11W) (6.1m)									3.89
Caco (CAOM3) (41.98N 70.02W) (6.1m)			02/1151		29				5.66
Oxbow (OXBM3) (42.51N 71.62W) (6.1m)									3.97

Location	Minimum Sea Level Pressure		Maximum Surface Wind Speed			Storm surge (ft)[c]	Storm Tide (ft)[d]	Estimated Inundation (ft)[e]	Total rain (in)
	Date/time (UTC)	Press. (mb)	Date/time (UTC)[a]	Sustained (kt)[b]	Gust (kt)				
Public/Other									
North Milford (D0552) (42.18N 71.53W)									5.32
Bourne (D9451) (41.73N 70.61W)									5.23
Belchertown (E5291) (42.25N 72.39W)									4.43
Haverhill (E7590) (42.77N 71.14W)									4.22
Wareham (E8080) (41.74N 70.73W)			02/1124		32				6.50
Somerset (F1460) (41.77N 71.15W)			02/0801		20				5.01
Dover (F2089) (42.25N 71.28W)									5.31
Somerville (F2140) (42.39N 71.11W)									5.01
Shutesbury (F6786) (42.44N 72.44W)									3.06
Tolland (F9241) (42.06N 73.01W)									4.61
New Hampshire									
Hydrometeorological Automated Data System (HADS) Sites (NWS)									
Brentwqood (EXTN3) (42.98N 71.04W)									3.15
Coastal-Marine Automated Network (C-MAN) Sites									
Isle of Shoals (IOSN3) (42.97N 70.62W) (19m)	02/1200	1002.4	02/0650	35	41				
Maine									
Coastal-Marine Automated Network (C-MAN) Sites									
Mt. Desert Rock (MDRM1) (43.97N 68.13W) (23m)	02/1700	1000.2	28/0310	40 (10-min)	47				
Canada									
New Brunswick									
International Civil Aviation Organization (ICAO) Sites									
Bouctouche (CABT) (46.43N 64.77W)	03/0200	998.0	03/0000	23	33				3.06
Fundy Park (CAFY) (45.60N 64.95W)			03/0800		21				4.01

Location	Minimum Sea Level Pressure		Maximum Surface Wind Speed			Storm surge (ft)[c]	Storm Tide (ft)[d]	Estimated Inundation (ft)[e]	Total rain (in)
	Date/time (UTC)	Press. (mb)	Date/time (UTC)[a]	Sustained (kt)[b]	Gust (kt)				
Mechanic Settlement (CAMS) (45.69N 65.17W)	02/2200	999.0	03/0600		26				3.90
Miscou Island (CWMI) (48.02N 64.50W)	04/0900	995.9	03/0700	41	48				
Grand Manan (CXGM) (44.71N 66.80W)	02/1900	999.0	02/1400	26	35				4.02
Moncton (CYQM) (46.12N 64.68W)	03/0300	996.0	02/2343	31	40				2.81
St. John (CYSJ) (45.33N 65.88W)	02/2200	997.5	03/0500	20	34				
Newfoundland									
International Civil Aviation Organization (ICAO) Sites									
Wreckhouse (CAWR) (47.71N 59.31W)			03/0200	44	59				
Ferolle Point (CWXI) (51.01N 57.10W)			03/1500	32	40				
Stephenville (CYJT) (48.33N 58.55W)	03/0854	1001.3	03/0400	29	38				1.29
Nova Scotia									
International Civil Aviation Organization (ICAO) Sites									
Bedford Basin (CABB) (44.71N 63.63W)	03/0000	996.9	02/2130	28	36				
Osborne Head (CAOS) (44.61N 63.42W)	03/0000	996.9	02/1700	29	35				
Hart Island (CWRN) (45.35N 60.98W)	03/0400	999.9	03/0800	25	39				
Sable Island (CWSA) (43.93N 60.00W)			03/0941	28	37				
Beaver Island (CWVB) (44.82N 66.33W)			03/0300	37	44				
Brier Island (CWVU) (44.29N 66.35W)	02/2000	996.4	02/1400	32	39				4.93
Western Head (CWWE) (43.98N 64.67W)	02/2300	997.0	02/1500	27	35				0.13
Grand Etang (CWZQ) (46.55N 61.05W)	03/0500	996.1	02/2100	34	51				
Ingonish Beach (CXIB) (46.67N 60.40W)	03/0600	996.8	03/0449		34				1.69
Kentville (CXKT) (45.07N 64.48W)	03/0100	995.1	02/2122		23				3.02
McNabs Island (CXMI) (44.60N 63.53W)	03/0100	996.6	03/0100	28	36				

Location	Minimum Sea Level Pressure		Maximum Surface Wind Speed			Storm surge (ft)[c]	Storm Tide (ft)[d]	Estimated Inundation (ft)[e]	Total rain (in)
	Date/time (UTC)	Press. (mb)	Date/time (UTC)[a]	Sustained (kt)[b]	Gust (kt)				
North Mountain (CXNM) (46.82N 63.53W)			03/1600	23	36				1.07
Nappan (CXNP) (45.76N 64.24W)	03/0300	994.9	03/0701		28				3.21
Tracadie (CXTD) (45.62N 61.68W)	03/0400	998.1	03/0500	22	35				0.78
Lunenberg (CXYB) (44.37N 64.30W)	03/0000	995.9	02/1400	34	47				
Shearwater (CYAW) (44.64N 63.51W)			02/1700	24[i]	37[i]				0.19
Halifax Intl. Arpt. (CYHZ) (44.88N 63.50W)	03/0100	996.7	02/2300	24	44				0.90
Yarmouth (CYQI) (43.83N 66.08W)	02/2048	996.1	02/1554	26	38				0.74
Sydney (CYQY) (46.17N 60.05W)	03/0700	999.2	03/0800	24	44				
Prince Edward Island									
International Civil Aviation Organization (ICAO) Sites									
Harrington (CAHR) (46.35N 63.17W)	03/0600	993.6	02/2200		27				4.52
East Point (CWEP) (46.45N 61.97W)	03/0400	994.8	02/2000	27	37				2.11
North Point (CWNE) (47.08N 64.00W)	03/0700	993.1	03/1000	41	53				
Summerside (CWSD) (46.43N 63.85W)	03/0600	992.8	02/2300	28	38				4.75
St. Peters (CZSP) (46.45N 62.58W)	03/0800	995.0	03/1200	21	35				3.78
Public/Other									
Stanhope (46.42N 63.08W)									5.61
Quebec									
International Civil Aviation Organization (ICAO) Sites									
Chevery (CWDM) (50.47N 59.63W)	04/1900	1007.0	03/1300	27	45				
Heath Point (CWHP) (47.42N 61.78W)			03/1000	45					
Ile Aux Perroquets (CWQR) (50.22N 64.21W)			04/0200	30[i]	40[i]				
Cape Whittle (CWQW) (50.17N 60.07W)			03/1500	46[i]	57[i]				

Location	Minimum Sea Level Pressure		Maximum Surface Wind Speed			Storm surge (ft)[c]	Storm Tide (ft)[d]	Estimated Inundation (ft)[e]	Total rain (in)
	Date/time (UTC)	Press. (mb)	Date/time (UTC)[a]	Sustained (kt)[b]	Gust (kt)				
Cap D'Espoir (CWRZ) (48.42N 64.32W)	04/0700	994.3	03/0800	37	53				
Cap Madeline (CWSF) (49.25N 65.33W)	04/0400	1005.1	04/0400	30	45				
Pointe-Des-Monts (CWTG) (49.32N 67.38W)	04/0500	1009.6	02/2200	26	34				
Blanc Sablon (CYBX) (51.45N 57.18W)	04/1800	1006.3	03/1600	30	42				
Iles de la Madeline Arpt. (CYGR) (47.42N 61.78W)	03/1200	993.2	03/0118	35	45				
Havre St Pierre (CYGV) (50.28N 63.62W)	03/2203	1004.9	04/0238	25	38				
Natashquan (CYNA) (50.18N 61.82W)	03/1800	1003.1	03/1126	31	44				

[a] Date/time is for sustained wind when both sustained and gust are listed.
[b] Except as noted, sustained wind averaging periods for C-MAN and land-based reports are 2 min; buoy averaging periods are 8 min.
[c] Storm surge is water height above normal astronomical tide level.
[d] Storm tide is water height above the North American Vertical Datum of 1988 (NAVD88).
[e] Estimated inundation is the maximum height of water above ground. For NOS tide gauges and USGS water level sensors, the height of the water above Mean Higher High Water (MHHW) is used as a proxy for inundation. Values marked with two asterisks (**) are from non-tidal stations, and the water level is referenced above Mean Sea Level (MSL).
[i] Incomplete record. Peak values may have exceeded the reported value.

Table 4. Selected storm-total rainfalls from National Weather Service Cooperative Observer Program stations and Community Collaborative Rain, Hail and Snow Network sites for Hurricane Ida, 26 August–1 September 2021. When possible, stations are sorted by station identifier.

Location	Total Rainfall (in)	Location	Total Rainfall (in)
United States			
Louisiana			
NWS Cooperative Observer Program (COOP) Sites			
Covington (ABRL1) (30.46N 90.10W)	7.62	NWS Slidell (KLIX) (30.34N 89.74W)	11.64
Baton Rouge Sherwood (BRSL1) (30.45N 91.05W)	3.50	Meraux (MERL1) (29.93N 89.93W)	10.96
Bayou Manchac Point (BYML1) (30.35N 90.89W)	5.28	Ponchatoula (PONL1) (30.42N 90.38W)	15.04
Dutchtown #2 (DCHL1) (30.25N 90.99W)	3.79	Slidell (SISL1) (30.27N 89.77W)	11.94
Donaldsonville 4.0 SW (DVLL1) (30.07N 91.03W)	3.09	Talisheek (TALL1) (30.52N 89.87W)	7.23
Gonzales (GZLL1) (30.20N 90.92W)	4.18		
Community Collaborative Rain, Hail and Snow Network (CoCoRaHS) Sites			
Gonzales 4.0 S (LA-AS-4) (30.16N 90.92W)	4.68	New Orleans 5.0 N (LA-OR-9) (30.02N 90.07W)	7.77
Shenandoah 1.5 E (LA-EB-22) (30.40N 90.98W)	3.32	Grammercy 0.4 NW (LA-SJ-2) (30.06N 90.70W)	5.96
Brownfields 4.0 E (LA-EB-23) (30.55N 91.05W)	3.25	Covington 4.0 NNE (LA-ST-11) (30.53N 90.09W)	7.88
Central 2.2 SE (LA-EB-31) (30.54N 91.01W)	3.45	Madisonville 3.2 NNW (LA-ST-15) (30.43N 90.19W)	10.09
River Ridge 0.7 N (LA-JF-5) (29.97N 90.22W)	6.05	Pearl River 2.0 S (LA-ST-20) (30.34N 89.75W)	12.06
Metairie 2.8 ENE (LA-JF-14) (30.01N 90.13W)	6.02	Slidell 3.3 NE (LA-ST-22) (30.32N 89.74W)	11.66
Denham Springs 6.8 N (LA-LV-2) (30.58N 90.97W)	4.33	Ponchatoula 4.9 E (LA-TG-10) (30.43N 90.36W)	11.99
Mississippi			
NWS Cooperative Observer Program (COOP) Sites			
Aberdeen L&D (ABEM6) (33.83N 88.52W)	4.92	Okatibbee Reservoir (MRDM6) (32.48N 88.81W)	3.49
Belmont 2.0 SSE (BEMM6) (34.48N 88.20W)	4.18	Ocean Springs (OCSM6) (30.41N 88.79W)	5.62

Location	Total Rainfall (in)	Location	Total Rainfall (in)
Beaumont Ag. (BESM6) (31.68N 88.67W)	6.21	P. H. Big Creek WP (PBCM6) (31.68N 89.33W)	4.00
Coffeeville (CFFM6) (33.98N 89.67W)	3.51	Philadelphia 1.0 WSW (PHLM6) (32.794N 89.27W)	4.52
Collinsville 7.0 SE (CLLM6) (32.42N 88.76W)	3.92	Poplarville (POPM6) (30.84N 89.55W)	7.34
Columbia (COLM6) (31.25N 89.84W)	6.48	Pontotoc (PTCM6) (34.27N 89.00W)	3.94
Crandall 8.0 N (CRDM6) (32.08N 88.53W)	5.14	P. H. Turkey WP (PTKM6) (32.40N 89.15W)	3.91
Crystal Springs (CRSM6) (31.97N 90.37W)	3.65	Purvis (PVSM6) (31.18N 89.42W)	4.63
Guntown 3.0 NW (GNTM6) (34.49N 88.70W)	3.66	Raleigh 6.0 N (RALM6) (32.14N 88.55W)	6.88
Houston (HOUM6) (33.88N 89.01W)	5.82	Mississippi St. University (SCSM6) (33.47N 88.78W)	5.49
Hattiesburg 4.0 SSW (HTTM6) (31.25N 89.34W)	7.04	Shubuta (SHBM6) (31.87N 88.70W)	5.08
Kosciusko (KOSM6) (33.06N 88.20W)	4.13	Sumrall (SMAM6) (31.42N 89.54W)	5.40
Liberty (LIBM6) (31.17N 90.82W)	4.82	Topton (TOPM6) (32.47N 88.61W)	4.80
Amory L&D (LKAM6) (34.01N 88.49W)	4.33	Tupelo (TWPM6) (34.23N 88.70W)	3.20
Leakesville (LKKM6) (31.15N 88.56W)	5.77	Waynesboro 2.0 W (WAYM6) (31.68N 88.67W)	5.66
Macon 3.0 N (MACM6) (33.15N 88.59W)	5.20	Walnut Grove (WLTM6) (32.60N 89.46W)	4.04
Mize 3.0 SW (MIZM6) (31.84N 89.60W)	6.54	Winona 5.0 E (WNOM6) (33.48N 89.62W)	4.69
Community Collaborative Rain, Hail and Snow Network (CoCoRaHS) Sites			
Liberty 6.4 ENE (MS-AM-01) (31.20N 90.70W)	8.36	Collinsville 0.4 NNE (MS-LD-13) (32.50N 88.84W)	3.58
Hazelhurst 0.8 WSW (MS-CP-3) (33.86N 90.40W)	4.11	Tupelo 2.0 S (MS-LE-8) (34.23N 88.73W)	3.04
Vaiden 4.8 WNW (MS-CR-1) (33.36N 89.83W)	3.98	Hattiesburg 8.0 WSW (MS-LM-2) (31.28N 89.44W)	5.92
Ackerman 4.9 W (MS-CT-2) (33.31N 89.26W)	5.54	Brookhaven 4.0 NNE (MS-LN-5) (31.86N 90.40W)	3.65
West Point 4.3 N (MS-CY-3) (33.67N 88.63W)	5.45	Columbus 5.3 N (MS-LW-2) (33.59N 88.40W)	5.20
Hattiesburg 4.4 SSW (MS-FR-14) (31.25N 89.34W)	7.04	Madison 5.7 WNW (MS-MD-8) (32.49N 90.20W)	3.84
Petal 0.7 N (MS-FR-17) (31.35N 89.25W)	5.99	Aberdeen 5.6 ENE (MS-MN-6) (33.88N 88.47W)	5.94

Location	Total Rainfall (in)	Location	Total Rainfall (in)
Grenada 7.9 NNW (MS-GD-9) (33.89N 89.25W)	3.90	Columbia 6.3 NE (MS-MR-3) (31.31N 89.74W)	5.39
Lucedale 13.0 SE (MS-GG-2) (30.79N 89.84W)	9.20	Philadelphia 9.6 W (MS-NS-10) (33.79N 89.27W)	4.38
Diamondhead 0.9 NNW (MS-HC-5) (30.39N 89.38W)	10.81	Union 1.6 W (MS-NW-5) (32.57N 89.14W)	3.85
Kiln 3.3N (MS-HC-9) (30.46N 89.43W)	13.65	Starkville 5.0 S (MS-OK-6) (33.38N 88.81W)	8.12
Waveland 1.0 NW (MS-HC-13) (30.30N 89.40W)	12.83	Jayess 5.6 SSW (MS-PK-2) (31.30N 90.26W)	5.15
Bay St. Louis 1.4 WSW (MS-HC-23) (30.30N 89.35W)	13.12	McComb 4.1 ESE (MS-PK-4) (31.23N 90.40W)	6.33
Terry 5.7 NW (MS-HD-12) (32.17N 90.36W)	3.99	Picayune 5.6 ENE (MS-PR-4) (30.55N 89.59W)	12.83
Jackson 6.0 NE (MS-HD-18) (32.38N 90.14W)	3.73	Carriere 3.8 SE (MS-PR-12) (30.58N 89.61W)	12.57
Pass Christian 5.0 N (MS-HR-19) (30.39N 89.25W)	11.34	Brandon 1.9 NE (MS-RN-3) (32.30N 89.98W)	3.66
Saucier 1.7 NNE (MS-HR-22) (30.66N 89.13W)	10.14	Richland 0.3 WSW (MS-RN-7) (32.23N 90.17W)	4.06
Biloxi 13.1 NNW (MS-HR-34) (30.57N 89.05W)	13.29	Florence 1.0 WSW (MS-RN-33) (32.15N 90.15W)	4.25
Mantachie 3.4 N (MS-IT-1) (34.37N 88.49W)	3.88	Pearl 2.0 W (MS-RN-40) (32.27N 90.13W)	3.81
Ocean Springs 1.7W (MS-JC-15) (30.41N 88.83W)	9.41	Pelahatchie 4.7 S (MS-RN-43) (32.25N 89.80W)	4.10
Gautier 4.9N (MS-JC-22) (30.46N 88.65W)	8.59	Doddsville 4.0 W (MS-SF-4) (33.66N 90.59W)	3.43
Moss Point 1.2 NNW (MS-JC-27) (30.44N 88.53W)	12.78	Taylorsville 6.0 E (MS-SM-3) (31.82N 89.33W)	4.19
Vancleave 1.6 NNE (MS-JC-28) (30.56N 88.65W)	10.71	New Hebron 8.7 WNW (MS-SP-1) (31.79N 90.11W)	5.02
Biloxi 5 ENE (MS-JC-29) (30.44N 88.85W)	10.60	Perkinston 1.7 NE (MS-ST-4) (30.80N 89.12W)	7.93
Pascagoula 1.4 SE (MS-JC-31) (30.35N 88.53W)	8.58	New Albany 5.3 SSE (MS-UN-1) (34.42N 88.98W)	3.27
Laurel 7.6 E (MS-JN-7) (31.70N 89.02W)	3.16	Eupora 6.4 W (MS-WB-5) (33.53N 89.39W)	6.39
Scooba 0.2 SSW (MS-KM-4) (32.83N 88.48W)	8.64	Louisville 8.6 SSE (MS-WN-9) (33.01N 89.00W)	4.87
Meridian 2.9 SW (MS-LD-9) (32.34N 88.74W)	4.66		
Alabama			
NWS Cooperative Observer Program (COOP) Sites			
Auburn #2 (ABNA1) (32.60N 85.47W)	3.05	Geneva (GVNA1) (31.04N 85.87W)	5.11

Location	Total Rainfall (in)	Location	Total Rainfall (in)
Aliceville L&D (ALVA1) (33.21N 88.29W)	4.98	Hamilton (HAMA1) (34.14N 88.00W)	3.89
Anderson (ANDA1) (34.91N 87.27W)	3.17	Helena (HELA1) (33.27N 86.83W)	3.55
Arkadelphia (ARKA1) (33.93N 87.11W)	3.91	Hanceville (HNCA1) (34.07N 86.79W)	3.09
Athens (ATHA1) (34.78N 86.95W)	3.34	Holly Tree (HTAA1) (34.80N 86.28W)	3.97
Atmore (ATMA1) (31.18N 87.44W)	3.91	Haleyville (HVLA1) (34.23N 87.64W)	4.50
Bay Minette (BAYA1) (30.88N 87.79W)	4.65	Jackson (JCKA1) (31.79N 86.61W)	3.18
Big Creek Dam (BCDA1) (30.72N 88.30W)	6.48	Jopa 1.0 SW (JOPA1) (34.29N 86.57W)	3.82
Bankhead L&D (BLDA1) (33.45N 87.36W)	4.02	Jasper (JPRA1) (33.91N 87.32W)	4.31
Boaz (BOZA1) (34.20N 86.16W)	3.07	Moulton (MOUA1) (34.49N 87.30W)	3.42
Brewerton 3.0 ENE (BRWA1) (31.14N 87.05W)	3.97	Oakman (OMNA1) (33.72N 87.38W)	3.84
Sand Mountain (CSMA1) (34.29N 85.97W)	3.67	Oneonta (ONEA1) (33.95N 86.47W)	3.92
Centre (CTRA1) (34.15N 85.68W)	3.10	Reform (RFMA1) (33.37N 88.01W)	3.32
Dauphin Island (DAUA1) (30.25N 88.08W)	5.81	Russellville 2 (RUSA1) (34.51N 87.73W)	3.95
Dora (DORA1) (33.75N 87.06W)	6.92	Oliver L&D (TODA1) (33.21N 87.59W)	3.16
Fairhope 2.0 NE (FHPA1) (30.55N 87.88W)	6.25	Vernon (VRNA1) (33.74N 88.13W)	3.03
Fayette (FYTA1) (33.71N 87.82W)	4.24	Winfield 2.0 SW (WINA1) (33.91N 87.85W)	5.45
Gainesville Lock (GNSA1) (32.83N 88.13W)	3.87	Walnut Grove (WLGA1) (34.07N 86.31W)	3.67
Guntersville Water Plant (GUTA1) (34.33N 86.33W)	3.64		
Community Collaborative Rain, Hail and Snow Network (CoCoRaHS) Sites			
Springville 5.3 WNW (AL-BL-5) (33.80N 86.56W)	3.77	Florence 2.0 NNE (AL-LD-47) (34.85N 87.65W)	3.33
Blountsville 1.3 NW (AL-BL-6) (34.09N 86.61W)	4.72	Vernon 1.1 NNE (AL-LM-4) (33.77N 88.10W)	7.01
Oneonta 4.9 SE (AL-BL-9) (33.94N 86.46W)	4.73	Trinity 1.7 SSW (AL-LR-5) (34.58N 87.12W)	3.12
Arab 7.0 S (AL-BL-21) (34.23N 86.48W)	3.71	Moulton 3.1 ENE (AL-LR-7) (34.50N 87.23W)	3.75

Location	Total Rainfall (in)	Location	Total Rainfall (in)
Daphne 1.0 NNW (AL-BW-3) (30.64N 87.91W)	7.20	Hillsboro 4.1 SSW (AL-LR-8) (34.58N 87.21W)	3.05
Foley 7.4 SW (AL-BW-8) (30.34N 87.78W)	6.70	Danville 10.6 WSW (AL-LR-9) (34.35N 87.25W)	3.63
Fairhope 4.0 NNW (AL-BW-13) (30.57N 87.90W)	7.30	Lester 10.5 S (AL-LS-15) (34.83N 87.17W)	4.16
Loxley 0.4 SSW (AL-BW-26) (30.62N 87.76W)	5.40	Athens 2.5 WSW (AL-LS-36) (34.78N 87.00W)	3.22
Spanish Fort 1.2 NE (AL-BW-58) (30.68N 87.87W)	7.38	Wilmer 8.0 SE (AL-MB-24) (30.74N 88.27W)	11.24
Bay Minette 10.9N (AL-BW-59) (31.04N 87.74W)	8.82	Tillmans Corner 9.0 WNW (AL-MB-63) (30.61N 88.33W)	11.11
Summerdale 2.7 WNW (AL-BW-85) (30.50N 87.74W)	6.95	Mobile 10.4 W (AL-MB-71) (30.67N 88.26W)	11.13
Point Clear 0.6 SW (AL-BW-86) (30.48N 87.91W)	5.35	Theodore 6.8 SSE (AL-MB-86) (30.45N 88.14W)	7.49
Elberta 3.9 S (AL-BW-96) (30.36N 87.61W)	4.27	Gurley 2.7 S (AL-MD-2) (34.67N 88.37W)	3.60
Gulf Shores 5.5 WSW (AL-BW-99) (30.23N 87.78W)	6.76	Hazel Green 1.2 NW (AL-MD-6) (34.94N 88.58W)	3.09
Gulf State Park (AL-BW-103) (30.26N 87.64W)	5.54	Huntsville 7.9 SSE (AL-MD-12) (34.60N 86.58W)	3.02
Repton 5.7 S (AL-CC-2) (31.33N 87.24W)	5.12	Madison 8.0 N (AL-MD-82) (34.82N 86.73W)	3.00
Grove Hill 0.4 NNW (AL-CK-9) (31.71N 87.78W)	6.31	Ryland 0.3 ENE (AL-MD-99) (34.77N 86.48W)	3.11
Thomasville 5.2 SSW (AL-CK-10) (31.84N 87.77W)	3.81	Falkville 5.1 E (AL-MG-9) (34.36N 88.83W)	3.62
Hanceville 1.6 E (AL-CM-4) (34.07N 86.74W)	3.51	Lacey's Spring 3.4 SSW (AL-MG-12) (34.49N 88.63W)	3.73
Cullman 3.0 ENE (AL-CM-6) (34.10N 86.93W)	4.05	Somerville 7.7 SE (AL-MG-27) (34.41N 88.70W)	3.09
Alexander City 10.0 SW (AL-CS-3) (32.82N 86.05W)	3.62	Uriah 8.1 W (AL-MN-3) (31.29N 87.64W)	4.77
Tuscumbia 8.9 SW (AL-CT-1) (34.62N 87.79W)	4.29	Frisco City 5.0 WSW (AL-MN-6) (31.41N 87.48W)	4.90
Muscle Shoals 9.7 NNE (AL-CT-14) (34.78N 87.47W)	3.14	Mexia (AL-MN-7) (30.67N 88.26W)	4.65
Toxey 6.0 N (AL-CW-1) (32.00N 88.29W)	3.65	Guin 1.1 NW (AL-MR-1) (33.98N 87.92W)	5.01
Flat Rock 6.3 ENE (AL-DK-17) (34.81N 85.60W)	3.31	Guntersville 2.2 SW (AL-MS-6) (34.33N 86.29W)	4.04
Crossville 2.2 NNE (AL-DK-18) (34.32N 85.98W)	5.10	Douglas 6.8 NW (AL-MS-19) (34.25N 86.39W)	3.92
Boaz 4.6 E (AL-DK-19) (34.21N 86.08W)	4.29	Albertville 5.5 N (AL-MS-22) (33.34N 88.21W)	3.52
Fort Payne 3.4 SSW (AL-DK-20) (34.41N 85.72W)	4.34	Pelham 0.6 NNW (AL-SH-27) (33.31N 86.80W)	3.21

Location	Total Rainfall (in)	Location	Total Rainfall (in)
Pollard 2.4 N (AL-ES-1) (31.06N 87.17W)	4.00	Alabaster 2.2 SSW (AL-SH-52) (33.20N 86.34W)	3.10
Fayette 5.6 N (AL-FY-10) (33.73N 87.84W)	5.01	Holt 11.4 SSE (AL-TS-3) (33.08N 87.40W)	3.45
Rehobeth 2.1 SSW (AL-HS-13) (31.10N 85.46W)	4.19	Tuscaloosa 1.3 ENE (AL-TS-22) (33.24N 87.52W)	3.58
Woodville 8.0 NNE (AL-JC-12) (34.73N 86.21W)	4.23	Northport 18.7 N (AL-TS-25) (33.51N 87.61W)	4.65
Argo 1.5 NW (AL-JF-24) (32.00N 88.29W)	3.41	Jasper 3.4 SE (AL-WK-4) (33.82N 87.22W)	4.82
Vestavia Hills 1.8 E (AL-JF-39) (33.43N 86.76W)	3.22	Double Springs 3.2 NNE (AL-WN-1) (34.19N 87.39W)	4.81
Trussville 5.8 N (AL-JF-62) (33.72N 86.59W)	5.40	Jackson 4.3 WSW (AL-WS-1) (31.51N 87.96W)	6.69
Center Point 2.1 SE (AL-JF-70) (33.62N 86.65W)	3.26	Pine Hill 3.6 WSW (AL-WX-1) (31.97N 87.64W)	5.47
Hoover 3.4 NNW (AL-JF-73) (33.42N 86.84W)	3.42	Camden 1.0 NNE (AL-WX-2) (32.02N 87.29W)	3.02
Florida			
NWS Cooperative Observer Program (COOP) Sites			
Chipley (CHPF1) (30.78N 85.55W)	3.70	Panama City 5.0 N (PNAF1) (30.25N 85.66W)	4.16
Marianna 7.0 NNE (MARF1) (30.73N 85.03W)	4.98	Pensacola (PSAF1) (30.53N 87.20W)	4.71
Niceville (NCVF1) (30.53N 86.49W)	4.10	Wewahitchka (WEWF1) (30.12N 85.20W)	4.70
Community Collaborative Rain, Hail and Snow Network (CoCoRaHS) Sites			
Panama City Beach 0.3 SW (FL-BY-7) (30.21N 85.86W)	7.09	Destin 1.2 NW (FL-OK-33) (30.40N 86.49W)	3.03
Fountain 3.4 SSE (FL-BY-15) (30.43N 85.40W)	4.07	Niceville 2.1 SE (FL-OK-37) (30.51N 86.46W)	6.11
Lynn Haven 1.0 W (FL-BY-23) (30.24N 85.67W)	5.74	Shalimar 1.2 NNW (FL-OK-41) (30.46N 86.59W)	5.33
Gonzalez 2.1 E (FL-ES-15) (30.57N 87.25W)	7.34	Valparaiso 1.4 N (FL-OK-42) (30.51N 86.50W)	5.12
Century 12.0 W (FL-ES-39) (30.96N 87.47W)	8.18	Ft. Walton Beach 1.7 ESE (FL-OK-43) (30.42N 86.59W)	4.08
Pensacola 4.7 N (FL-ES-53) (30.51N 87.18W)	7.66	Navarre 6.2 E (FL-SR-21) (30.41N 86.81W)	3.50
Apalachicola 0.8 WNW (FL-FR-2) (29.73N 85.01W)	3.40	Milton 2.9 NW (FL-SR-26) (30.66N 87.08W)	4.74
Alford 0.6 SSE (FL-JK-2) (30.69N 85.39W)	3.91	Vernon 10.6 WSW (FL-WS-1) (30.57N 85.87W)	5.84

Location	Total Rainfall (in)	Location	Total Rainfall (in)
Marianna 0.8 NNE (FL-JK-6) (30.78N 85.23W)	4.19	Freeport 3.4 S (FL-WT-2) (30.45N 86.14W)	5.74
Tallahassee 5.7 SE (FL-LN-4) (30.39N 84.22W)	5.22	Miramar Beach 9.5 ESE (FL-WT-3) (30.35N 86.20W)	5.21
Eglin AFB 5.6 NNE (FL-OK-2) (30.52N 86.49W)	4.44	DeFuniak Springs 2.9 N (FL-WT-12) (30.76N 86.12W)	5.35
Mary Esther 0.6 E (FL-OK-29) (30.41N 86.65W)	3.27	Inlet Beach 0.7 E (FL-WT-14) (30.27N 86.00W)	4.54
Georgia			
NWS Cooperative Observer Program (COOP) Sites			
Adairsville 5.0 SE (ADAG1) (34.34N 84.83W)	3.19	Montezuma (MTZG1) (32.29N 84.03W)	3.71
Adel 2.0 S (AELG1) (31.11N 83.43W)	3.82	Newnan (NNNG1) (33.44N 84.79W)	4.09
Cleveland (CLVG1) (34.59N 83.77W)	3.54	Rome (RMGG1) (34.24N 85.16W)	3.85
Carters Dam (CTRG1) (34.61N 84.67W)	4.55	Summerville (SMRG1) (34.45N 85.39W)	3.90
Chatworth LARC (CWTG1) (34.76N 84.76W)	4.29	Sautee 3.0 WSW (STEG1) (34.66N 83.73W)	3.63
Germany Valley (GERG1) (34.91N 83.46W)	3.85		
Community Collaborative Rain, Hail and Snow Network (CoCoRaHS) Sites			
Kennesaw 5.6 SW (GA-CB-6) (33.96N 84.67W)	3.77	Cairo 3.7 ESE (GA-GY-3) (30.86N 84.15W)	3.00
Powder Springs 2.5 NNW (GA-CB-45) (33.90N 84.70W)	3.27	Waverly Hall 8.2 S (GA-MS-7) (32.57N 84.75W)	5.84
Albany 7.3 W (GA-CE-33) (34.26N 84.52W)	4.04	Jasper 0.6 ENE (GA-PC-1) (34.47N 84.42W)	5.18
Summerville 9.4 ENE (GA-CG-11) (34.54N 85.20W)	3.87	Nelson 6.6 NE (GA-PC-7) (34.45N 84.29W)	3.02
Villa Rica 1.1 SSE (GA-CL-7) (33.72N 84.91W)	3.11	Marble Hill 4.7 ENE (GA-PC-8) (34.45N 84.26W)	3.30
Tunnel Hill 4.8 N (GA-CS-12) (34.92N 85.04W)	4.40	Dillard 3.5 NE (GA-RB-1) (34.99N 83.30W)	4.55
Newnan 5.7 W (GA-CW-4) (33.37N 84.89W)	3.34	Rabun Gap 2.1 SW (GA-RB-4) (34.94N 83.42W)	4.73
Albany 7.3 W (GA-DH-10) (31.58N 84.30W)	4.11	Tiger 1.9 NW (GA-RB-13) (34.87N 83.46W)	3.78
Douglasville 2.8 NE (GA-DS-3) (33.78N 84.72W)	3.73	Hiawassee 4.8 SSE (GA-TW-1) (34.89N 83.71W)	4.88
Jakin 10.7 NNW (GA-ER-3) (31.23N 85.07W)	3.80	Young Harris 3.6 NNW (GA-TW-7) (34.98N 83.88W)	3.95

Location	Total Rainfall (in)	Location	Total Rainfall (in)
Rome 5.2 N (GA-FL-21) (34.34N 85.19W)	4.13	Blairsville 2.6 W (GA-UN-12) (34.88N 84.00W)	4.11
Calhoun 9.9 WSW (GA-FL-23) (34.43N 85.10W)	4.48	La Fayette 11.0 W (GA-WA-3) (34.71N 85.47W)	3.76
Blue Ridge 9.4 WNW (GA-FN-1) (34.92N 84.48W)	5.46	Dalton 7.8 SE (GA-WF-4) (34.68N 84.90W)	5.08
Morganton 3.1 SSE (GA-FN-7) (34.83N 84.22W)	4.11	Cleveland 0.6 NE (GA-WH-7) (34.60N 83.76W)	3.47
Sugar Valley 2.9 NW (GA-GD-3) (34.58N 85.05W)	6.74	Helen 3.5 NE (GA-WH-11) (34.73N 83.67W)	3.97
Ellijay 9.9 NW (GA-GM-4) (34.80N 84.61W)	7.36		
South Carolina			
NWS Cooperative Observer Program (COOP) Sites			
Caesars Head (CAES1) (35.11N 82.63W)	3.22	Jocassee 8.0 WNW (JOCS1) (34.99N 83.07W)	4.89
Community Collaborative Rain, Hail and Snow Network (CoCoRaHS) Sites			
Salem 1.9 NE (SC-OC-92) (34.91N 82.95W)	3.19		
North Carolina			
NWS Cooperative Observer Program (COOP) Sites			
Highlands (HLDN7) (35.06N 83.20W)	6.26	Murphy 4.0 ESE (MURN7) (35.07N 83.97W)	3.95
Community Collaborative Rain, Hail and Snow Network (CoCoRaHS) Sites			
Jonas Ridge 1.4 S (NC-BK-13) (35.95N 81.89W)	3.13	Highlands 1.4 NE (NC-MC-33) (35.07N 83.18W)	6.16
Murphy 12.1 WSW (NC-CK-20) (35.00N 84.21W)	4.07	Cedar Mountain 1.9 E (NC-TR-27) (35.15N 82.61W)	3.50
Hayesville 5.2 E (NC-CY-3) (35.05N 83.73W)	4.27	Sapphire 4.6 SW (NC-TR-29) (35.06N 83.01W)	5.76
Tuckasegee 3.7 ESE (NC-JC-19) (35.26N 83.06W)	3.42	Brevard 10.1 S (NC-TR-32) (35.09N 82.76W)	4.52
Franklin 3.4 ESE (NC-MC-28) (35.16N 83.33W)	3.39	Seven Devils 0.1 E (NC-WT-48) (36.15N 81.81W)	3.06

Location	Total Rainfall (in)	Location	Total Rainfall (in)
Tennessee			
NWS Cooperative Observer Program (COOP) Sites			
Newfound Gap (35.61N 83.43W)	5.76	Mt Leconte (MTLT1) (35.66N 83.44W)	6.75
Athens (AHNT1) (35.43N 84.58W)	5.09	Norris (NORT1) (36.21N 84.06W)	4.78
Brentwood (BRTT1) (35.99N 86.78W)	3.16	Old Hickory (NSHT1) (36.25N 86.56W)	3.35
Clarksville #2 (CLKT1) (36.50N 87.34W)	3.05	Oneida (ONET1) (36.50N 84.53W)	3.94
Cleveland (CVLT1) (35.22N 84.80W)	3.54	Pulaski (PULT1) (35.18N 87.04W)	3.48
Fall Creek Falls (FCFT1) (35.64N 85.36W)	3.21	Rockwood (RKWT1) (35.85N 84.70W)	3.36
Gainesboro (GAIT1) (36.37N 85.65W)	3.87	Smithville 2.0 SE (SMIT1) (35.20N 85.92W)	3.45
Jamestown (JAMT1) (36.43N 84.94W)	3.24	Spring City (SPIT1) (35.68N 84.85W)	4.27
Kingston (KGST1) (35.88N 84.51W)	4.61	Sewanee (SWNT1) (35.20N 85.92W)	3.23
Morristown WFO (KMRX) (36.17N 83.40W)	5.24	Townsend 5.0 S (TNST1) (35.00N 83.78W)	3.35
Lenior City (LENT1) (35.79N 84.26W)	4.81	Tullahoma Water Plant (TULT1) (35.34N 86.22W)	3.22
Lookout Mtn. (LKMT1) (35.01N 85.34W)	3.67	Waynesboro (WAYT1) (35.30N 87.76W)	3.28
Lewisburg 2.0 SSW (LWST1) (35.42N 86.81W)	3.39	White House (WHST1) (36.45N 86.65W)	3.97
Lynchburg (LYCT1) (35.30N 86.36W)	3.20	Warner Park (WPKT1) (36.06N 86.91W)	3.69
Monteagle (MTET1) (35.22N 85.84W)	4.51		
Community Collaborative Rain, Hail and Snow Network (CoCoRaHS) Sites			
Norris 0.6 NW (TN-AN-8) (36.20N 84.08W)	5.28	Harriman 4.1 NNE (TN-MG-1) (35.99N 84.55W)	4.05
Clinton 4.9 S (TN-AN-12) (35.17N 84.13W)	5.17	Petros 0.2 E (TN-MG-3) (36.10N 84.44W)	4.40
Oak Ridge 5.4 NE (TN-AN-13) (36.02N 84.23W)	4.59	Oliver Springs 9.0 W (TN-MG-10) (36.06N 84.49W)	4.12
Bell Buckle 2.0 SE (TN-BF-4) (35.57N 86.33W)	3.14	Lewisburg 5.1 SW (TN-ML-6) (35.39N 86.84W)	3.84
Shelbyville 7.5 NW (TN-BF-3) (35.55N 86.56W)	3.17	Cornersville 3.6 SE (TN-ML-10) (35.32N 86.79W)	3.48
Petersburg 7.3 N (TN-BF-14) (35.42N 86.62W)	3.00	Chapel Hill 4.3 NNE (TN-ML-16) (35.68N 86.65W)	4.88

Location	Total Rainfall (in)	Location	Total Rainfall (in)
Pikeville 7.5 SW (TN-BL-2) (35.54N 85.30W)	3.84	Etowah 0.7 NNW (TN-MM-2) (35.34N 84.53W)	5.01
Graysville 5.5 WNW (TN-BL-18) (35.47N 86.18W)	4.79	Rockwood 11.3 S (TN-MM-6) (35.64N 84.62W)	3.98
Camden 0.7 SE (TN-BN-6) (36.06N 88.09W)	3.33	Finger 4.1 ENE (TN-MN-3) (35.38N 88.55W)	3.81
Cleveland 5.2 SE (TN-BR-16) (35.12N 84.81W)	4.11	Madisonville 1.2 NNE (TN-MR-4) (35.54N 84.35W)	4.70
Friendsville 3.6 NW (TN-BT-9) (35.80N 84.17W)	4.57	Ten Mile 2.2 NW (TN-MS-1) (35.68N 84.71W)	3.43
Maryville 4.1 SSW (TN-BT-1) (35.70N 84.01W)	3.51	Decatur 8.9 SSW (TN-MS-2) (35.41N 84.87W)	3.07
Manchester 2.4 NNW (TN-CF-27) (35.50N 86.10W)	3.24	Cunningham 0.5 NW (TN-MT-77) (36.40N 87.39W)	3.35
Fairfield Glade 0.1 NNW (TN-CM-4) (36.00N 84.90W)	3.66	Clarksville 4.9 NW (TN-MT-79) (36.56N 87.44W)	4.38
Crossville 7.2 SE (TN-CM-38) (35.88N 84.95W)	3.82	Columbia 0.3 WSW (TN-MY-26) (35.62N 87.05W)	3.02
Red Boiling Springs 6.7 NNE (TN-CY-3) (36.61N 85.79W)	3.95	Hampshire 2.7 SW (TN-MY-31) (35.57N 87.33W)	3.80
Vanleer 2.8 SE (TN-DC-15) (36.21N 87.41W)	3.33	Livingston 1.9 NNW (TN-OV-4) (36.41N 85.34W)	3.15
Madison 1.2 WSW (TN-DV-11) (36.25N 86.73W)	4.15	Benton 2.3 ESE (TN-PK-1) (35.17N 84.61W)	6.87
Belle Meade 0.4 W (TN-DV-45) (36.10N 86.86W)	5.16	Cookeville 4.6 WNW (TN-PM-10) (36.19N 85.58W)	3.50
Berry Hill 1.6 WNW (TN-DV-47) (36.13N 86.80W)	3.04	Cedar Hill 4.4 NNE (TN-RB-38) (36.61N 86.98W)	3.16
Mount Juliet 5.2 SSW (TN-DV-79) (36.14N 86.57W)	4.35	Greenbrier 1.9 SE (TN-RB-46) (36.40N 86.78W)	3.98
Antioch 4.3 ENE (TN-DV-81) (36.08N 86.60W)	4.30	Murfreesboro (TN-RD-65) (35.88N 86.44W)	5.14
Goodlettsville 1.5 W (TN-DV-131) (36.34N 86.73W)	4.42	La Vergne 2.1 SW (TN-RD-70) (35.98N 86.60W)	3.03
Hermitage 3.2 SSW (TN-DV-143) (36.15N 86.63W)	4.14	Smyrna 3.0 ESE (TN-RD-99) (35.96N 86.47W)	5.68
Old Hickory 1.6 SSE (TN-DV-166) (36.24N 86.64W)	3.49	Oak Grove 3.0 E (TN-SL-1) (36.41N 82.38W)	3.06
Nashville 4.7 SW (TN-DV-172) (36.11N 86.41W)	3.65	Carthage 8.7 NNE (TN-SM-1) (36.38N 85.90W)	3.24
Winchester 5.4 SSE (TN-FK-16) (35.12N 86.06W)	4.37	Graysville 11.6 WSW (TN-SQ-27) (35.38N 85.27W)	4.69
Sardis 3.2 W (TN-HD-9) (35.44N 88.35W)	3.16	Hendersonville 2.9 NE (TN-SR-11) (36.22N 86.56W)	3.05
Ooltewah 6.7 NNE (TN-HL-14) (35.15N 85.05W)	4.47	Westmoreland 5.4 NNE (TN-SR-32) (36.64N 86.21W)	3.84
Chattanooga 5.1 ENE (TN-HL-31) (35.10N 85.18W)	3.01	Forest Hills 4.3 WSW (TN-WL-5) (36.03N 86.90W)	7.51

Location	Total Rainfall (in)	Location	Total Rainfall (in)
Signal Mtn. 2.2 NE (TN-HL-50) (35.15N 85.31W)	4.18	Brentwood 2.7 SSE (TN-WL-38) (35.96N 86.77W)	3.46
East Ridge 0.9 NW (TN-HL-51) (35.01N 85.24W)	3.02	Eagleville 3.9 WSW (TN-WL-41) (35.72N 86.72W)	3.67
Farragut 2.8 ENE (TN-KX-23) (36.02N 84.14W)	6.04	Fairview 1.9 ENE (TN-WL-75) (35.99N 87.10W)	3.52
Knoxville 10.6 WSW (TN-KX-53) (35.94N 84.13W)	5.92	College Grove 0.3 SSW (TN-WL-82) (35.78N 86.68W)	3.75
Fayetteville 6.1 NNW (TN-LC-2) (35.23N 86.61W)	4.90	Franklin 4.3 W (TN-WL-85) (35.92N 86.92W)	3.74
Frankewing 4.0 ENE (TN-LC-20) (35.21N 86.78W)	4.66	Nolensville 2.4 SW (TN-WL-90) (35.93N 86.68W)	3.46
Greenback 2.1 ENE (TN-LN-10) (35.67N 84.14W)	5.18	Spring Hill 3.2 NE (TN-WL-93) (35.78N 86.89W)	4.41
Loudon 5.3 E (TN-LN-11) (35.75N 84.27W)	4.60	Greenhill 3.1 NNE (TN-WN-19) (36.28N 86.55W)	3.27
Loretto 5.2 NE (TN-LR-7) (35.14N 87.38W)	3.60	Mount Juliet 2.9 WSW (TN-WN-42) (36.19N 86.57W)	3.15
Lawrenceburg 8.8 SE (TN-LR-9) (35.25N 87.38W)	3.72	Lebanon 8.4 SSW (TN-WN-66) (36.10N 86.37W)	4.02
Hohenwald 0.3E (TN-LS-5) (35.55N 87.55W)	3.18	Sparta 5.6 NW (TN-WT-20) (35.98N 85.55W)	3.01
Jackson 9.3 NE (TN-MD-31) (35.73N 88.71W)	3.10	Waynesboro (TN-WY-19) (35.43N 87.78W)	3.35
Lynchburg 0.7 WNW (TN-ME-1) (35.29N 86.36W)	3.33		
Kentucky			
NWS Cooperative Observer Program (COOP) Sites			
Bowling Green WKU (36.95N 86.37W)	4.13	Millerstown 4.0 E (MLTK2) (37.43N 86.01W)	4.58
Elkton (36.81N 87.15W)	3.05	Russellville (RUSK2) (36.86N 86.89W)	3.52
Corners (CNRK2) (37.79N 86.23W)	4.93	Scottsville (SCTK2) (36.75N 86.23W)	3.45
Herndon (HRNK2) (36.67N 87.56W)	3.15	Stearns 2.0 S (STRK2) (36.67N 84.48W)	3.31
Mammoth Cave (MAMK2) (37.13N 86.15W)	3.15	Taylorsville 2.0 SW (TLRK2) (38.01N 85.37W)	3.10
Community Collaborative Rain, Hail and Snow Network (CoCoRaHS) Sites			
Scottsville 5.5 N (KY-AL-17) (36.83N 86.18W)	3.69	Lewisburg 0.2 E (KY-LG-9) (36.99N 86.95W)	3.74
Lawrenceburg 3.1 WSW (KY-AN-9) (38.02N 84.95W)	4.04	Flaherty 2 SE (KY-MD-8) (37.82N 86.04W)	3.43

Location	Total Rainfall (in)	Location	Total Rainfall (in)
Webster 2.2 WSW (KY-BK-9) (37.87N 86.37W)	4.89	Berea 8.5 ENE (KY-MN-3) (37.60N 84.14W)	5.02
Radcliff 1.2 SSE (KY-HD-15) (37.81N 85.93W)	4.01	Richmond 5.8 SSE (KY-MN-19) (37.66N 84.26W)	3.53
Elizabethtown 7.9 ENE (KY-HD-20) (37.75N 85.74W)	5.27	Bardstown 4.6 NW (KY-NL-1) (37.85N 85.53W)	3.12
Hanson 2.2 NE (KY-HP-1) (37.44N 87.44W)	4.70	Masonville 6 SSE (KY-OH-9) (37.59N 86.99W)	3.51
Madisonville 1.6 NE (KY-HP-15) (37.36N 87.49W)	3.46	Trenton 2.3 SSW (KY-TD-5) (36.69N 87.28W)	3.28
Russellville 1.3 NNE (KY-LG-3) (36.86N 86.89W)	3.42	Smiths Grove 0.3 SE (KY-WR-15) (37.05N 86.20W)	3.91
Auburn 0.3 SW (KY-LG-4) (36.86N 86.72W)	3.92	Bowling Green 5.8 SSE (KY-WR-30) (36.89N 86.41W)	3.48
Ohio			
NWS Cooperative Observer Program (COOP) Sites			
Jackson 3 NW (JACO1) (39.08N 82.71W)	3.08		
Community Collaborative Rain, Hail and Snow Network (CoCoRaHS) Sites			
Nelsonville 1.4 W (OH-AT-26) (39.46N 82.25W)	3.55	Mount Pleasant 1.4 WSW (OH-JF-9) (40.16N 80.82W)	4.06
Cedarville 3.6 ESE (OH-GR-11) (39.72N 83.75W)	3.04	Granville 5.6 N (OH-LC-14) (40.15N 82.51W)	5.18
Beavercreek 2.0 NE (OH-GR-20) (39.75N 84.03W)	3.24	Norwich 1.1 SE (OH-MK-12) (39.98N 81.78W)	3.75
Cambridge 1.3 N (OH-GY-8) (40.04N 81.58W)	4.82	Centerville 3.9 S (OH-MY-39) (39.59N 84.15W)	3.08
West Virginia			
NWS Cooperative Observer Program (COOP) Sites			
Bayard (BAYW2) (39.27N 79.37W)	3.15	Martinsburg (MTGW2) (39.47N 77.97W)	4.22
Buckhannon (BKNW2) (38.98N 80.22W)	3.47	Rock Cave (RCVW2) (38.84N 80.33W)	3.15
Bailey Lake Dam (BLYW2) (37.60N 81.82W)	4.46	Rowlesburg 1.0 NE (ROWW2) (39.34N 79.67W)	3.29
Gassaway (GASW2) (38.66N 80.77W)	3.33	Snowshoe (SNOW2) (38.42N 80.00W)	3.60
Keyser 2.0 SSW (KEYW2) (39.42N 79.01W)	3.86	Sutton Lake (SUTW2) (38.65N 80.68W)	3.47

Location	Total Rainfall (in)	Location	Total Rainfall (in)
Community Collaborative Rain, Hail and Snow Network (CoCoRaHS) Sites			
Falling Water 2.4 NW (WV-BY-2) (39.59N 77.92W)	3.61	Valley Grove 3.5 NNE (WV-OH-6) (40.14N 80.54W)	3.52
Martinsburg 2.9 SE (WV-BY-13) (39.43N 77.93W)	4.26	Terra Alta 4.9 NNE (WV-PR-10) (39.51N 79.51W)	4.61
Harper's Ferry 7.2 SSW (WV-JF-12) (39.23N 77.80W)	3.08	Buckhannon 5.2 E (WV-UP-2) (38.98N 80.13W)	3.59
Virginia			
NWS Cooperative Observer Program (COOP) Sites			
Charlottesville (CRVV2) (38.03N 78.52W)	3.02	Purcell (PURV2) (39.14N 77.71W)	3.54
Dale Enterprise (DALV2) (38.45N 78.94W)	3.27	Williamsville 2.0 S (WLMV2) (38.18N 79.58W)	3.03
Mount Weather 3 (MWRV2) (39.07N 77.90W)	3.56		
Community Collaborative Rain, Hail and Snow Network (CoCoRaHS) Sites			
Charlottesville 6.8 NNE (VA-AB-18) (38.13N 78.43W)	3.03	Reston 1.8 N (VA-FX-76) (38.98N 77.35W)	3.32
Berryville 0.9 NNW (VA-CK-2) (39.16N 77.89W)	3.76	Vienna 4.1 NNW (VA-FX-110) (38.96N 77.28W)	3.46
Stephens City 2.2 E (VA-FD-1) (39.10N 78.18W)	3.25	Round Hill 2.7 WSW (VA-LD-13) (39.12N 77.82W)	3.65
Winchester 1.7 E (VA-FD-10) (39.18N 78.14W)	3.25	Barboursville 1.1 NW (VA-OR-1) (38.19N 78.29W)	3.08
Herndon 3.3 S (VA-FX-1) (38.92N 77.38W)	3.79	Massanutten 1.3 SE (VA-RH-11) (38.40N 78.72W)	3.24
McClean 2.3 SE (VA-FX-41) (38.92N 77.14W)	3.01	Bridgewater 0.3 SE (VA-RH-15) (38.38N 78.97W)	3.01
Fairfax 4.1 W (VA-FX-54) (38.86N 77.37W)	3.28	Harrisonburg 2.1 N (VA-RH-18) (38.47N 78.88W)	3.17
Oak Hill 0.3 WSW (VA-FX-72) (38.91N 77.41W)	3.59	Strasbourg 3.7 N (VA-SH-2) (39.04N 78.35W)	3.53
District of Columbia			
Community Collaborative Rain, Hail and Snow Network (CoCoRaHS) Sites			
Washington 5.1 NW (DC-DC-14) (43.96N 77.08W)	3.63		

Location	Total Rainfall (in)	Location	Total Rainfall (in)
Maryland			
NWS Cooperative Observer Program (COOP) Sites			
South Cumberland (CBLM2) (39.63N 78.75W)	4.48	Millers 4.0 NE (MLLM2) (39.72N 76.80W)	3.96
Conowingo Dam (CNWM2) (39.66N 76.18W)	5.37	Deep Creek Lake (OKLM2) (39.52N 79.41W)	4.40
Emmitsburg (EMMM2) (39.68N 77.30W)	6.10	Sharpsburg (SHRM2) (39.40N 77.72W)	3.30
Frostburg (FRSM2) (39.66N 78.94W)	4.96	Savage River Dam (SRDM2) (39.51N 79.14W)	5.02
Hagerstown 1.0 E (HGCM2) (39.64N 77.70W)	4.02	Williamsport (WLLM2) (39.58N 77.85W)	6.48
Community Collaborative Rain, Hail and Snow Network (CoCoRaHS) Sites			
Severn 2.0 W (MD-AA-4) (39.13N 76.73W)	3.50	McHenry 4.8 SSE (MD-GR-4) (39.49N 79.32W)	6.09
Linthicum 0.4 ENE (MD-AA-35) (39.21N 76.66W)	4.73	Havre de Grace 4.0 WNW (MD-HR-4) (39.57N 76.17W)	5.75
Odenton 3.0 NNW (MD-AA-78) (39.10N 76.71W)	3.33	Kingsville 2.5 NNE (MD-HR-6) (39.48N 76.39W)	3.78
Cresaptown-Bel Air 0.9 SSE (MD-AL-2) (39.58N 78.85W)	4.76	Bel Air 1.7 W (MD-HR-11) (39.54N 76.38W)	3.35
White Marsh 2.3 ESE (MD-BL-25) (39.37N 76.42W)	4.30	Forrest Hill 1.7 SSE (MD-HR-15) (39.57N 76.37W)	3.48
Kingsville 1.2 E (MD-BL-28) (39.45N 76.40W)	3.89	Norrisville 0.6 WSW (MD-HR-23) (39.70N 76.54W)	3.63
Elkton 7.0 NNW (MD-CC-10) (39.70N 75.87W)	4.97	Jarretsville 1.9 ESE (MD-HR-28) (39.59N 76.44W)	3.08
Chesapeake City 6.5 WSW (MD-CC-21) (39.49N 75.92W)	3.31	Elkridge 1.8 W (MD-HW-3) (39.20N 76.78W)	3.28
Rising Sun 0.8 E (MD-CC-22) (39.70N 76.05W)	5.15	Worton 3.9 NW (MD-KN-4) (39.32N 76.13W)	3.53
Mount Airy 0.2 SE (MD-CR-3) (39.37N 77.16W)	3.62	Norbeck 1.1 ESE (MD-MG-5) (39.10N 77.06W)	3.01
Taneytown 4.1 NE (MD-CR-5) (39.64N 77.11W)	6.39	Colesville 1.1 NNW (MD-MG-20) (39.10N 77.01W)	3.02
East New Market 1.9 SE (MD-DR-11) (38.58N 75.90W)	3.12	Bethesda 2.0 WNW (MD-MG-66) (39.00N 77.16W)	3.22
Hurlock 1.9 SW (MD-DR-15) (38.61N 75.89W)	3.18	Silver Spring 5.6 N (MD-MG-71) (39.07N 77.04W)	3.30
New Market 4.8 WSW (MD-FR-4) (39.35N 77.36W)	3.34	Rockville 0.6 SE (MD-MG-74) (39.07N 77.15W)	3.85
Thurmont 0.8 SSE (MD-FR-10) (39.61N 77.41W)	5.87	Potomac 2.6 NE (MD-MG-123) (39.06N 77.17W)	3.28
Middletown 1.8 ESE (MD-FR-11) (39.43N 77.52W)	4.65	Williamsport 2.8 ENE (MD-WH-1) (39.61N 77.77W)	4.61

Location	Total Rainfall (in)	Location	Total Rainfall (in)
Adamstown 0.7 ESE (MD-FR-23) (39.31N 77.46W)	3.65	Funkstown 2.3 SW (MD-WH-2) (39.58N 77.73W)	5.03
Jefferson 1.6 SSE (MD-FR-24) (39.34N 77.52W)	4.69	Hagerstown 1.0 ENE (MD-WH-3) (39.64N 77.70W)	4.85
Union Bridge 0.8 SSW (MD-FR-37) (39.48N 77.24W)	3.35	Hancock 0.8 ESE (MD-WH-11) (39.70N 78.16W)	3.32
Frederick 2.7 N (MD-FR-40) (39.47N 77.42W)	8.16	Keedysviille 2.0 SSE (MD-WH-20) (39.46N 77.68W)	3.65
Delaware			
NWS Cooperative Observer Program (COOP) Sites			
Newark (NEWD1) (39.67N 75.75W)	4.80		
Community Collaborative Rain, Hail and Snow Network (CoCoRaHS) Sites			
Newport 2.4 WNW (DE-NC-10) (39.73N 75.65W)	3.90	Wilmington 5.6 WSW (DE-NC-75) (39.72N 75.63W)	5.86
Newark 2.3 NNW (DE-NC-34) (39.71N 75.78W)	4.80	Bridgeville 3.0 ESE (DE-SS-80) (38.72N 75.55W)	3.14
Hockessin 2.7 ESE (DE-NC-62) (39.77N 75.65W)	5.23		
Pennsylvania			
NWS Cooperative Observer Program (COOP) Sites			
Acmetonia Lock 3 (ACMP1) (40.54N 79.82W)	4.64	Morgantown (MGNP1) (40.16N 75.89W)	3.65
Altoona 1.0 E (ALOP1) (40.53N 78.37W)	5.85	Millersville 1.0 S (MILP1) (39.66N 76.36W)	4.63
Biglerville 1.0 W (BGLP1) (39.93N 77.25W)	3.91	Millersville 1.0 S (NHDP1) (40.08N 76.07W)	5.31
Confluence 1.0 SW Dam (CFLP1) (39.80N 79.37W)	3.59	Oakford (OAKP1) (40.15N 74.93W)	4.19
Canadensis (CNDP1) (41.19N 75.24W)	5.40	Cashtown 1.0 S (ORTP1) (39.88N 77.35W)	4.89
Conshohocken (CSHP1) (40.07N 75.32W)	5.09	Pine Grove Furnace (PGFP1) (40.03N 77.30W)	6.20
Ebensberg (EBNP1) (40.47N 78.73W)	3.84	Glendale Lake (PGLP1) (40.65N 78.55W)	3.34
Emsworth (EMSP1) (40.50N 80.08W)	3.44	Blue Marsh Lake (PLVP1) (40.38N 76.03W)	4.78
Freepoirt 1.0 NE (FREP1) (40.68N 79.67W)	3.32	Laughlintown (RRFP1) (40.20N 79.22W)	3.16

Location	Total Rainfall (in)	Location	Total Rainfall (in)
Glencoe (GLNP1) (39.82N 78.85W)	6.17	Raystown HQ (RTOP1) (40.38N 78.08W)	5.20
Glenmoore (GNMP1) (40.10N 75.78W)	6.53	Safe Harbor Dam (SAHP1) (39.93N 76.39W)	5.75
Hamburg (HBGP1) (40.55N 75.98W)	4.50	Stroudsberg 1.0 N (SDBP1) (41.0N 75.18W)	4.75
Holtwood (HLTP1) (39.83N 76.33W)	5.83	Selinsgrove (SLGP1) (40.78N 76.86W)	5.43
Harrisburg 1.0 NE (HRBP1) (40.28N 76.87W)	5.47	Salina (SLNP1) (40.50N 79.55W)	3.69
Hidden Valley (HVJP1) (40.04N 79.26W)	3.36	Somerset (SMRP1) (40.00N 79.08W)	3.10
Indiana (INDP1) (40.60N 79.12W)	3.04	Shippensburg (SPBP1) (40.06N 77.52W)	3.87
Lewisburg (LBGP1) (40.95N 76.88W)	4.11	Springtown 1.0 NNE (SPRP1) (40.57N 75.28W)	7.39
Lancaster 2.0 NE (LCRP1) (40.05N 76.28W)	5.30	State College (STCP1) (40.79N 77.87W)	3.37
Lebanon (LEBP1) (40.32N 76.47W)	5.57	Tyrone (TYRP1) (40.66N 78.22W)	3.10
Leighton (LGHP1) (40.83N 75.72W)	4.69	Francis Walter Dam (WHNP1) (41.12N 75.73W)	5.97
Lewistown (LSTP1) (40.58N 77.57W)	6.03	Williamsburg (WMGP1) (40.47N 78.20W)	5.63
Mahanoy City 2.0 N (MAYP1) (40.83N 76.14W)	6.04	Wolfsburg (WOLP1) (40.04N 78.52W)	6.21
Community Collaborative Rain, Hail and Snow Network (CoCoRaHS) Sites			
Abbottstown 2.4N (PA-AD-2) (39.92N 76.99W)	6.87	Richmondale 0.1 NE (PA-LC-27) (41.64N 75.48W)	3.21
York Springs 0.7 SE (PA-AD-3) (40.00N 77.11W)	4.82	Clarks Green 0.5 N (PA-LC-28) (41.51N 75.70W)	3.41
Gettysburg 7.1 SSE (PA-AD-24) (39.73N 77.20W)	6.91	Slatington 6.0 WSW (PA-LH-1) (40.71N 75.71W)	5.00
Fairfiled 1.8 NNW (PA-AD-43) (39.81N 77.38W)	5.46	Schnecksville 2.7 SW (PA-LH-5) (40.65N 75.65W)	5.01
New Oxford 0.3 WSW (PA-AD-45) (39.86N 77.06W)	6.16	Bethlehem 1.4 WSW (PA-LH-16) (40.62N 75.39W)	5.41
Biglerville 2.0 WSW (PA-AD-47) (39.91N 77.28W)	5.02	Allentown 2.6 NNW (PA-LH-24) (40.60N 75.53W)	5.19
Orrtanna 0.3W (PA-AD-48) (39.84N 77.37W)	5.11	Adamstown 2.5 SSE (PA-LN-3) (40.21N 76.05W)	5.13
Littlestown 2.3 WNW (PA-AD-66) (39.76N 77.13W)	6.65	Lancaster 5.8 WNW (PA-LN-7) (40.06N 76.41W)	6.62
Bridgeville 1.4 SW (PA-AL-1) (40.34N 80.12W)	5.35	Salunga-Landisville 1.3 SSE (PA-LN13) (40.08N 76.41W)	5.50

Location	Total Rainfall (in)	Location	Total Rainfall (in)
Carnot-Moon 0.9 S (PA-AL-30) (40.51N 80.21W)	3.35	Lititz 0.3 WNW (PA-LN-22) (40.16N 76.31W)	5.85
Robinson Twp. 2.2 WNW (PA-AL-39) (40.47N 80.17W)	3.25	Gap 0.3 NSW (PA-LN-23) (39.99N 76.03W)	5.68
McCandless Twp 1.9 S (PA-AL-64) (40.56N 80.04W)	3.43	West Hazleton 3.2 NNE (PA-LZ-6) (41.02N 76.00W)	5.98
Pittsburg 4.2 ESE (PA-AL-67) (40.42N 79.92W)	5.70	Duryea 0.3 SE (PA-LZ-15) (41.35N 75.77W)	4.86
Aspinwall (PA-AL-92) (40.49N 79.90W)	4.18	Forty Fort 0.4 NNE (PA-LZ-24) (41.29N 75.87W)	5.16
North Apollo (PA-AR-2) (40.59N 79.56W)	3.18	Beach Haven 0.8 E (PA-LZ-25) (41.07N 76.16W)	6.75
Rainsburg 5.0 NNW (PA-BD-5) (39.96N 78.56W)	5.06	Mountain Top 1.0 SW (PA-LZ-26) (41.15N 75.91W)	5.85
Everett 3.4 SW (PA-BD-6) (39.98N 78.41W)	5.94	Hazleton 1.6 NW (PA-LZ-27) (40.97N 75.99W)	5.74
Doylestown 3.7 W (PA-BK-26) (40.31N 75.20W)	7.26	Stroudsberg 5.1 W (PA-MN-7) (40.99N 75.30W)	4.97
Quakertown 1.9 NNE (PA-BK-33) (40.46N 75.33W)	7.95	Saylorsburg 4.0 W (PA-MN-14) (40.89N 75.40W)	4.81
Langhorne 3.4 NNE (PA-BK-35) (40.22N 74.89W)	5.13	Mount Pocono 0.7 N (PA-MN-16) (41.13N 75.36W)	5.74
Sellersville 0.3 W (PA-BK-38) (40.36N 75.31W)	6.14	Blue Bell 2.3 NW (PA-MT-13) (40.17N 75.30W)	5.23
Perkasie 0.8 NE (PA-BK-39) (40.38N 75.28W)	7.08	Ardmore 0.5 NW (PA-MT-48) (40.01N 75.30W)	5.42
Riegelsville 9.1 SE (PA-BK-40) (40.50N 75.09W)	7.31	Hatfield 2.0 WSW (PA-MT-56) (40.27N 75.33W)	7.74
Altoona 1.0 NNE (PA-BL-10) (40.52N 78.39W)	3.76	Limerick 1.1 W (PA-MT-68) (40.23N 75.54W)	7.15
Reading 3.5 SW (PA-BR-2) (40.32N 75.99W)	5.56	Skippack 2.6 ESE (PA-MT-85) (40.20N 75.36W)	7.69
Bernville 1.3 SW (PA-BR-5) (40.42N 76.13W)	6.04	Harleysville 3.9 WNW (PA-MT-87) (40.31N 75.45W)	7.67
Kutztown 2.2 NNE (PA-BR-12) (40.55N 75.77W)	5.88	Wyncote 0.3 ENE (PA-MT-89) (40.94N 75.14W)	6.41
Wyomissing 0.3 SW (PA-BR-14) (40.33N 75.97W)	5.69	Green Lane 0.9 ESE (PA-MT-90) (40.33N 75.45W)	7.29
Alburtis 4.7 SW (PA-BR-21) (40.47N 75.67W)	6.21	Ambler 0.7 W (PA-MT-101) (40.16N 75.23W)	5.70
Hamburg 0.7 NW (PA-BR-25) (40.57N 75.99W)	4.35	Lansdale 3.9 SW (PA-MT-102) (40.20N 75.33W)	6.42
Mohrsville 2.2 SW (PA-BR-28) (40.45N 76.01W)	5.15	North Wales 0.9 W (PA-MT-105) (40.21N 75.29W)	6.03
Mohnton 0.1 SW (PA-BR-33) (40.29N 75.99W)	5.95	Pennsburg 1.3 ENE (PA-MT-106) (40.40N 75.47W)	6.80
New Morgan 1.8 WNW (PA-BR-35) (40.18N 75.92W)	5.63	Red Hill 2.7 SW (PA-MT-108) (40.35N 75.52W)	6.66

Location	Total Rainfall (in)	Location	Total Rainfall (in)
Fleetwood 4.8 ESE (PA-BR-41) (40.42N 75.74W)	5.38	Plymouth Meeting 2.1 NW (PA-MT-112) (40.13N 75.31W)	5.51
Bowmanstown 3.0 WSW (PA-CB-12) (40.78N 75.71W)	5.43	Hatboro 0.3 NW (PA-MT-113) (40.18N 75.11W)	6.72
Jim Thorpe 1.1 NNE (PA-CB-16) (40.89N 75.73W)	5.41	Jenkintown 0.2 SSE (PA-MT-117) (40.09N 75.13W)	4.61
Leighton 3.3 WSW (PA-CB-18) (40.81N 75.77W)	4.91	Martins Creek 0.2E (PA-NH-8) (40.78N 75.18W)	4.08
Lake Harmony 2.4 WNW (PA-CB-33) (41.07N 75.63W)	5.66	Nazareth 1.1 W (PA-NH-14) (40.74N 75.33W)	3.68
Mechanicsburg 1.0 NNW (PA-CD-6) (40.22N 77.01W)	5.10	Portland 2.7 WNW (PA-NH-15) (40.94N 75.14W)	4.52
Enola 1.7 N (PA-CD-11) (40.31N 75.94W)	5.60	Tatamy 0.2 WNW (PA-NH-18) (40.74N 75.26W)	4.26
Shiremanstown 0.4 SE (PA-CD-17) (40.22N 76.95W)	6.57	Bangor 2.4 E (PA-NH-23) (40.87N 75.16W)	5.75
Carlisle 7.2 SSW (PA-CD-19) (40.11N 75.28W)	5.41	Muncy 4.7 SSE (PA-NM-3) (41.14N 76.77W)	3.04
Unionville 2.2 NE (PA-CH-11) (39.92N 75.70W)	7.91	Rockledge 1.3 SE (PA-PH-2) (40.07N 75.07W)	3.62
West Chester 1.8 SE (PA-CH-21) (39.94N 75.58W)	7.26	Philadelphia 4.7 NE (PA-PH-4) (40.06N 75.08W)	3.73
Chadds Ford 3.1 SW (PA-CH-27) (39.84N 75.64W)	4.78	Wyndmoor 3.0 SSW (PA-PH-6) (40.05N 75.22W)	5.38
Kennett Square 4.1 NNE (PA-CH-28) (39.90N 75.68W)	7.26	Milford 8.7 NW (PA-PK-22) (41.42N 74.91W)	5.79
Modena 1.1 NNE (PA-CH-34) (39.98N 75.94W)	8.55	Lords Valley 4.0 S (PA-PK-23) (41.31N 75.05W)	5.50
Phoenixville 2.9 W (PA-CH-35) (40.14N 75.57W)	8.17	Valley View 0.5 W (PA-SC-8) (40.64N 76.55W)	6.06
Alburtis 4.7 SW (PA-CH-38) (39.95N 75.98W)	4.94	Auburn 0.1 WNW (PA-SC-10) (40.60N 76.10W)	7.10
Wickerton 0.4 NW (PA-CH-41) (39.80N 75.83W)	6.18	Berlin 3.1 NW (PA-SM-2) (39.95N 78.99W)	4.58
Downingtown 1.7 NE (PA-CH-46) (40.02N 75.68W)	8.39	Rockwood 4.3 W (PA-SM-6) (39.92N 79.24W)	3.41
Exton 1.5 WNW (PA-CH-47) (40.04N 75.66W)	7.75	Selinsgrove 2.6 WNW (PA-SN-2) (40.82N 76.91W)	5.22
West Grove 2.5 NNW (PA-CH-51) (39.86N 75.84W)	6.32	Forest 0.2 SE (PA-SS-6) (41.65N 75.47W)	3.56
Chester Springs 3.2 WSW (PA-CH-54) (40.08N 75.68W)	9.02	Gilbertsville 0.9 S (PA-MT-1) (40.31N 75.61W)	6.20
Bloomsburg 1.8 E (PA-CLM-9) (41.01N 76.42W)	5.80	Moscow 9.7 ESE (PA-WN-2) (41.29N 75.36W)	6.53
Belmont 0.1 NE (PA-CM-4) (40.28N 78.89W)	5.16	Dyberry – 19 (PA-WN-12) (41.60N 75.28W)	3.21
Geistown (PA-CM-11) (40.29N 78.87W)	7.46	Hawley – 15 (PA-WN-13) (41.50N 75.16W)	6.06

Location	Total Rainfall (in)	Location	Total Rainfall (in)
State College 2.4 ENE (PA-CN-3) (40.81N 77.82W)	3.33	Prompton 2.0 S (PA-WN-25) (41.58N 75.34W)	3.92
Bellefonte 4.3 E (PA-CN-10) (40.92N 77.69W)	3.01	Caanan – 11 (PA-WN-26) (41.59N 75.36W)	3.68
Boalsburg 1.2 ENE (PA-CN-28) (40.78N 77.77W)	3.75	Cherry Ridge 13A (PA-WN-38) (41.52N 75.27W)	4.75
Spring Mills 1.4 S (PA-CN-34) (40.83N 77.56W)	4.26	McMurray 0.2 NE (PA-WS-5) (40.28N 80.08W)	5.49
Bryn Mawr 0.7 W (PA-DL-15) (40.02N 75.33W)	3.97	Finleyville 0.5 NNW (PA-WS-21) (40.26N 80.01W)	5.03
Media 1.4 N (PA-DL-16) (39.94N 75.38W)	3.81	Canonsburg 3.7 NW (PA-WS-22) (40.30N 80.24W)	5.29
Paxtonia 1.7 E (PA-DP-6) (40.31N 76.76W)	4.38	New Florence 0.2 ESE (PA-WT-18) (40.38N 79.07W)	3.89
Middletown 2.9 NW (PA-DP-14) (40.23N 76.76W)	5.64	Leechburg 1.4 SW (PA-WT-19) (40.62N 79.62W)	3.83
Harrisburg 1.6 NNE (PA-DP-24) (40.30N 76.87W)	5.65	Adamsburg 0.2 NNE (PA-WT-29) (40.31N 79.65W)	4.36
Dauphin 2.6 NNE (PA-DP-32) (40.41N 76.91W)	5.59	New Stanton 3.3 NNW (PA-WT-37) (40.26N 79.64W)	3.55
Hershey 2.1 NW (PA-DP-32) (40.30N 76.67W)	6.74	New Kensington 3.9 E (PA-WT-41) (40.56N 79.68W)	3.97
Greencastle 0.3 SSE (PA-FN-1) (39.79N 77.73W)	4.08	Valley Green 0.8 ENE (PA-YR-8) (40.16N 76.78W)	8.61
Fayetteville 3.2 S (PA-FN-16) (39.87N 77.56W)	4.25	York 2.5 NNW (PA-YR-17) (40.00N 76.75W)	6.32
Wood 0.1 S (PA-HN-2) (40.17N 78.14W)	8.57	Mount Wolf 1.0 SE (PA-YR-20) (40.05N 76.69W)	7.42
Huntingdon 1.3 N (PA-HN-3) (40.52N 78.02W)	4.93	Dover 2.2 E (PA-YR-24) (40.00N 76.80W)	6.93
Brush Valley 0.6 SE (PA-IN-5) (40.52N 79.06W)	3.85	Hanover 1.3 SSE (PA-YR-27) (39.80N 76.97W)	7.49
Lebanon 1.3 SW (PA-LB-17) (40.33N 76.44W)	5.46	Yorkana 1.4 SE (PA-YR-35) (39.96N 76.57W)	6.12
Palmyra 1.4 SE (PA-LB-20) (40.30N 76.57W)	6.88	East Berlin 3.4 ESE (PA-YR-37) (39.91N 76.92W)	6.58
Montdale 0.8 SE (PA-LC-11) (41.53N 75.60W)	3.05	Stewartstown 0.5 S (PA-YR-38) (39.75N 76.59W)	3.33
Archbald 1.6 SSW (PA-LC-24) (41.49N 75.56W)	3.72		
New Jersey			
NWS Cooperative Observer Program (COOP) Sites			
Flemington (FLMN4) (40.52N 74.80W)	7.23	Lambertville (LBVN4) (40.37N 74.95W)	8.77
Freehold (FRHN4) (40.31N 74.25W)	3.39	New Brunswick 3.0 SE (NBRN4) (40.47N 74.43W)	7.18

Location	Total Rainfall (in)	Location	Total Rainfall (in)
Highland Lakes 1.0 SW (HGHN4) (41.16N 74.46W)	4.95	Pennsauken (PENN4) (39.93N 75.00W)	3.18
Hightstown (HGTN4) (40.27N 74.57W)	3.50	Sussex 1.0 NW (SUXN4) (41.22N 74.62W)	4.75
Harrison (HSNN4) (40.75N 74.13W)	8.72	Wertsville (WRTN4) (40.45N 74.80W)	9.07
Community Collaborative Rain, Hail and Snow Network (CoCoRaHS) Sites			
Tenafly (NJ-BG-3) (40.91N 73.98W)	7.28	Kinnelon 1.4 SE (NJ-MS-16) (40.97N 74.37W)	6.30
North Arlington 0.7 WNW (NJ-BG-15) (40.79N 74.14W)	8.80	Long Hill Twp. 1.8 WSW (NJ-MS-19) (40.67N 74.52W)	7.65
Glen Rock 0.7 SSE (NJ-BG-17) (40.95N 74.12W)	6.38	Mine Hill Twp. 0.4 NE (NJ-MS-23) (40.88N 74.59W)	5.75
Palisades Park 0.2 WNW (NJ-BG-18) (40.85N 74.00W)	6.86	Denville Twp. 0.8 N (NJ-MS-35) (40.90N 74.49W)	4.90
Oakland 0.9 SSE (NJ-BG-23) (41.02N 74.23W)	5.48	Chatham 0.6 NW (NJ-MS-40) (40.75N 74.39W)	6.96
River Edge 0.4 NNE (NJ-BG-39) (40.93N 74.04W)	4.25	Roxbury Twp. 1.2 ESE (NJ-MS-51) (40.88N 74.63W)	3.11
Riverton 0.3 SSW (NJ-BT-71) (40.01N 75.02W)	3.33	Madison 0.8 WSW (NJ-MS-59) (40.75N 74.43W)	6.45
Mount Ephraim 0.2 NNE (NJ-CN-24) (39.88N 75.09W)	3.20	Chester Twp. 0.6 ENE (NJ-MS-60) (40.78N 74.68W)	5.47
Pennsauken Twp. 1.1 ESE (NJ-CN-27) (39.96N 75.04W)	3.40	Boonton 0.7 WS (NJ-MS-78) (40.90N 74.42W)	5.47
Maplewood Twp. 0.9 SE (NJ-ES-18) (40.73N 74.27W)	8.39	Mendham 1.5 W (NJ-MS-82) (40.77N 74.63W)	5.27
West Caldwell Twp. 1.3 NE (NJ-ES-19) (40.86N 74.28W)	7.10	Mount Arlington 0.8 S (NJ-MS-87) (40.91N 74.64W)	5.91
Verona Twp. 2.0 NNE (NJ-ES-40) (40.83N 74.26W)	6.00	Jefferson Twp. 4.4 SW (NJ-MS-94) (40.96N 74.62W)	4.29
Livingston Twp. 2.0 NNE (NJ-ES-41) (40.81N 74.31W)	6.49	Parsippany-Troy Hills Twp. 2.4 W (NJ-MS-97) (40.88N 74.43W)	5.30
Kearny 1.7 NW (NJ-HD-2) (40.77N 74.14W)	7.12	Harding Twp. 2.4 W (NJ-MS-98) (40.74N 74.55W)	5.68
Califon 0.6 NW (NJ-HN-1) (40.73N 74.84W)	5.46	Hawthorne 1.0 SSE (NJ-PS-14) (40.94N 74.15W)	6.40
Clinton 1.6 ENE (NJ-HN-3) (40.64N 74.88W)	6.51	Paterson 2.0 W (NJ-PS-18) (40.92N 74.20W)	7.46
Bethlehem Twp. 0.6 S (NJ-HN-7) (40.66N 75.01W)	7.70	Ringwood 3.0 SSE (NJ-PS-22) (41.07N 74.26W)	5.53
Holland Twp. 0.6 S (NJ-HN-12) (40.63N 75.10W)	7.54	Little Falls Twp. 0.2 NE (NJ-PS-28) (40.88N 74.22W)	7.46
Lebanon 2.8 N (NJ-HN-21) (40.68N 74.84W)	6.85	West Milford Twp. 5.7 N (NJ-PS-32) (41.19N 74.38W)	5.77

Location	Total Rainfall (in)	Location	Total Rainfall (in)
Kingwood Twp. 2.5 S (NJ-HN-22) (40.45N 75.01W)	7.62	Bloomingdale 1.6 S (NJ-PS-38) (41.01N 74.33W)	6.89
Frenchtown 0.5 N (NJ-HN-31) (40.53N 75.06W)	7.37	Pompton Lakes 1.0 ENE (NJ-PS-40) (41.01N 74.27W)	5.41
Union Twp. 1.2 SW (NJ-HN-32) (40.62N 74.98W)	6.79	Wayne Twp. 2.3 ESE (NJ-PS-42) (40.93N 74.21W)	6.51
Lambertville 0.6 SSE (NJ-HN-42) (40.36N 74.94W)	8.44	Bernards Twp. 0.9 ENE (NJ-SM-2) (40.68N 74.55W)	7.33
Stockton 3.8 NNW (NJ-HN-52) (40.46N 75.00W)	7.75	Bridgewater Twp. 3.3 NW (NJ-SM-5) (40.63N 74.65W)	8.94
Raritan Twp. 2.4 N (NJ-HN-57) (40.54N 74.87W)	7.91	Bedminster Twp. 2.9 ESE (NJ-SM-11) (40.66N 74.63W)	7.62
Flemington 2.9 ESE (NJ-HN-58) (40.50N 74.81W)	9.20	Somerville 0.2 ENE (NJ-SM-13) (40.57N 74.61W)	8.36
Pennington 0.5 ENE (NJ-MC-1) (40.34N 74.78W)	7.36	Franklin Twp. 3.9 NNW (NJ-SM-64) (40.53N 74.58W)	7.62
Hamilton Twp. 1.2 N (NJ-MC-2) (40.28N 74.79W)	3.64	Peapack-Gladstone 1.2 NW (NJ-SM-71) (40.73N 74.67W)	5.12
Lawrence Twp. 1.2 N (NJ-MC-9) (40.27N 74.73W)	4.49	Warren Twp. 1.3 W (NJ-SM-82) (40.63N 74.54W)	8.94
Hopewell Twp. 2.4 NW (NJ-MC-27) (40.37N 74.83W)	9.02	Branchburg Twp. 2.0 NE (NJ-SM-84) (40.59N 74.69W)	7.69
Ewing Twp. 2.3 NE (NJ-MC-29) (40.23N 74.65W)	5.29	Hillsborough Twp. 2.6 ESE (NJ-SM-89) (40.49N 74.63W)	9.45
East Windsor Twp. 1.6 W (NJ-MC-38) (40.26N 74.56W)	3.95	Andover Twp. 1.7 W (NJ-SS-1) (41.02N 74.76W)	4.53
Princeton 2.3 E (NJ-MC-44) (40.36N 74.63W)	6.15	Vernon Twp. 1.7 W (NJ-SS-3) (41.22N 74.49W)	5.77
Hopewell 0.4 SSW (NJ-MC-46) (40.38N 74.77W)	8.43	Hardyston Twp. 1.7 W (NJ-SS-7) (41.09N 74.54W)	3.93
West Windsor Twp. 2.6 N (NJ-MC-46) (40.33N 74.63W)	5.05	Montague Twp. 1.7 W (NJ-SS-28) (41.30N 74.78W)	5.05
North Brunswick Twp. 1.5 W (NJ-MD-2) (40.45N 74.51W)	7.58	Fredon Twp. 2.4 NE (NJ-SS-37) (41.06N 74.79W)	4.47
South Brunswick Twp. 3.1 NW (NJ-MD-9) (40.41N 74.57W)	5.86	Wantage Twp. 2.4 NE (NJ-SS-39) (41.23N 74.60W)	5.07
Piscataway Twp. 1.0 WSW (NJ-MD-24) (40.54N 74.48W)	8.23	Stillwater Twp. 2.4 NE (NJ-SS-40) (41.07N 74.89W)	4.24
New Brunswick 0.3 NE (NJ-MD-28) (40.49N 74.44W)	8.44	Branchville 4.3 NE (NJ-SS-46) (41.17N 74.68W)	5.76
Edison Twp. 1.9 N (NJ-MD-38) (40.56N 74.37W)	7.60	Sparta Twp. 3.6 SSW (NJ-SS-54) (41.01N 74.66W)	4.37
Woodbridge Twp. 3.0 NNW (NJ-MD-50) (40.60N 74.31W)	7.66	Newton 0.3 W (NJ-SS-59) (41.05N 74.76W)	3.56
Matawan 1.1 WSW (NJ-MD-60) (40.41N 74.25W)	4.66	Linden 2.2 NW (NJ-UN-3) (40.64N 74.27W)	7.70
Old Bridge Twp. 5.1 NE (NJ-MD-62) (40.46N 74.24W)	5.42	New Providence 0.8 ESE (NJ-UN-10) (40.69N 74.39W)	7.43

Location	Total Rainfall (in)	Location	Total Rainfall (in)
South River 0.3 WSW (NJ-MD-63) (40.44N 74.38W)	6.01	Crawford Twp. 1.1 NNW (NJ-UN-17) (40.67N 74.31W)	9.05
Plainsboro Twp. 1.8 ESE (NJ-MD-69) (40.33N 74.55W)	4.50	Springfield Twp. 0.7 NNE (NJ-UN-28) (40.71N 74.32W)	6.91
East Brunswick Twp. 0.8 NNE (NJ-MD-78) (40.44N 74.41W)	5.76	Clark Twp. 1.3 ENE (NJ-UN-36) (40.63N 74.29W)	7.57
Highland Park 0.4N (NJ-MD-86) (40.51N 74.43W)	7.94	Greenwich Twp. 1.6 S (NJ-WR-1) (40.66N 75.12W)	6.63
Metuchen 3.3 N (NJ-MD-88) (40.59N 74.37W)	8.54	Hackettstown 0.8 W (NJ-WR-5) (40.85N 74.84W)	4.62
Sayreville 0.9 ENE (NJ-MD-93) (40.47N 74.30W)	5.66	Oxford 0.6 SSW (NJ-WR-20) (40.80N 75.00W)	5.56
Middlesex 0.1 ENE (NJ-MD-95) (40.58N 74.50W)	8.42	White Twp. 1.7 S (NJ-WR-23) (40.80N 75.04W)	5.33
South Amboy 0.7 S (NJ-MD-98) (40.48N 74.28W)	5.24	Phillipsburg 1.7 NNE (NJ-WR-33) (40.71N 75.17W)	4.41
Middletown Twp. (NJ-MN-11) (40.43N 74.12W)	4.05	Blairstown Twp. 2.4 E (NJ-WR-34) (40.98N 74.95W)	4.34
Upper Freehold Twp. (NJ-MN-70) (40.12N 74.52W)	3.03	Washington Twp. 1.8 SE (NJ-WR-35) (40.74N 74.96W)	5.61
Morris Twp. 0.8 NW (NJ-MS-3) (40.81N 74.50W)	5.60	Frelinghuysen Twp. 1.5 WNW (NJ-WR-37) (40.97N 74.92W)	4.01
Rockaway 0.4 NNW (NJ-MS-6) (40.90N 74.52W)	6.54	Knowlton Twp. 1.7 S (NJ-WR-42) (40.91N 75.06W)	4.34
Randolph Twp. 2.2 SE (NJ-MS-8) (40.82N 74.55W)	5.52		
New York			
NWS Cooperative Observer Program (COOP) Sites			
Baiting Hollow (BTGN6) (40.93N 72.74W)	3.02	Phoenicia 2.0 W (PHON6) (42.06N 74.34W)	3.05
Carmel 4.0 N (CARN6) (41.47N 73.66W)	6.05	Port Jervis (PJRN6) (41.39N 74.69W)	4.80
Vanderbilt Museum (CTPN6) (40.88N 73.37W)	4.67	Rock Hill 3.0 SW (RKHN6) (41.59N 74.61W)	5.34
Mt. Sinai (MSIN6) (40.93N 73.02W)	5.66	Rosendale 2.0 E (ROSN6) (41.85N 74.05W)	3.51
Shrub Oak (OAKN6) (41.33N 73.84W)	4.57	Riverhead Research Farm (RRHN6) (40.96N 72.72W)	3.03
Orient Point (OSPN6) (41.13N 72.26W)	3.70	Syosset (SYON6) (40.82N 73.49W)	4.55
Community Collaborative Rain, Hail and Snow Network (CoCoRaHS) Sites			
Ancramdale 0.2N (NY-CB-15) (42.02N 73.59W)	3.93	Queens 3.4 NNW (NY-QN-27) (40.79N 73.81W)	6.91

Location	Total Rainfall (in)	Location	Total Rainfall (in)
Copake 0.3 WNW (NY-CB-18) (42.10N 73.55W)	3.00	Howard Beach 0.4 NNW (NY-QN-33) (40.66N 73.84W)	4.99
Wappingers Falls 1.6 ESE (NY-DT-5) (41.59N 73.89W)	6.26	Staten Island 4.5 SSE ‘(NY-RC-1) (40.54N 74.15W)	9.64
Millbrook 3.2 SE (NY-DT-8) (41.75N 73.65W)	5.51	Stony Point 0.7 NW (NY-RL-8) (41.23N 74.01W)	5.90
Lagrangeville 3.4 NE (NY-DT-12) (41.68N 73.72W)	5.97	Northport 1.6 NNE (NY-SF-16) (40.92N 73.33W)	4.03
Beacon 0.7 SE (NY-DT-23) (41.50N 73.96W)	6.76	Bayshore 0.5 ESE (NY-SF-34) (40.72N 73.24W)	3.31
Red Hook 1.2 NNE (NY-DT-24) (42.01N 73.86W)	3.13	Nesconset 1.4 SSW (NY-SF-77) (40.83N 73.16W)	3.91
Rhinebeck 5.2 SE (NY-DT-28) (41.88N 73.84W)	3.57	Smithtown 2.0 SSW (NY-SF-79) (40.83N 73.23W)	3.66
Poughkeepsie 5.3 S (NY-DT-29) (41.62N 73.91W)	6.91	Centereach 1.3NE (NY-SF-84) (40.89N 73.07W)	6.63
Hopewell Junction 2.8 NE (NY-DT-34) (41.61N 73.76W)	6.33	Port Jefferson Station 0.3 SSW (NY-SF-100) (40.92N 73.07W)	6.64
Pleasant Valley 1.7 S (NY-DT-35) (41.72N 73.82W)	4.74	Islip Terrace 1.1 NNE (NY-SF-110) (40.76N 73.18W)	3.52
Hyde Park 1.5 E (NY-DT-38) (41.76N 73.87W)	4.81	Fishers Island 0.5 NE (NY-SF-114) (41.26N 72.02W)	3.81
Poughquag (NY-DT-40) (41.58N 73.67W)	4.29	Setauket-East Setauket 0.7 SSW (NY-SF-134) (40.92N 73.11W)	5.67
Brooklyn 3.1 NW (NY-KN-25) (40.68N 73.99W)	7.00	New Paltz 2.4 S (NY-UL-6) (41.71N 74.09W)	4.69
Floral Park 0.4 W (NY-NS-7) (40.72N 73.71W)	4.85	Stony Ridge 0.7N (NY-UL-15) (41.85N 74.15W)	3.72
Hicksville 1.3 ENE (NY-NS-18) (40.77N 73.50W)	3.80	Rosendale Village 1.8 WNW (NY-UL-16) (41.86N 74.11W)	4.31
Port Washington 0.8 N (NY-NS-27) (40.84N 73.68W)	6.70	Ulster Park 0.9 NNW (NY-UL-20) (41.87N 73.99W)	3.89
Locust Valley 0.3 E (NY-NS-32) (40.88N 73.58W)	6.72	Kingston 2.1 N (NY-UL-22) (41.96N 74.00W)	3.10
Lynbrook 0.6 ENE (NY-NS-41) (40.66N 73.66W)	4.04	Kerhonkson 3.7 N (NY-UL-28) (41.83N 74.30W)	3.85
Albertson 0.2 SSE (NY-NS-42) (40.77N 73.65W)	4.96	Highland 0.2 SW (NY-UL-29) (41.71N 73.97W)	4.65
New York 6.8 NNW (NY-NY-82) (40.76N 73.99W)	9.55	Hurley 2.2 S (NY-UL-31) (41.88N 74.06W)	3.68
Cornwall on Hudson 0.6 NNW (NY-OR-2) (41.45N 74.02W)	5.78	Esopus 0.8 NNE (NY-UL-32) (41.84N 73.96W)	4.10
Warwick 3.2 WNW (NY-OR-4) (41.27N 74.42W)	5.43	Wallkill 3.7 E (NY-UL-34) (41.62N 74.09W)	5.08
Pine Bush 3.4 WSW (NY-OR-17) (41.59N 74.36W)	5.25	South Salem 2.1 NW (NY-WC-6) (41.30N 73.57W)	5.57
Walden 1.3 S (NY-OR-18) (41.54N 74.19W)	5.58	Peekskill 0.4 N (NY-WC-11) (41.29N 73.22W)	3.44

Location	Total Rainfall (in)	Location	Total Rainfall (in)
Greenwood Lake 3.0 SW (NY-OR-19) (41.19N 74.33W)	5.61	Briarcliff Manor 1.3 NE (NY-WC-32) (41.15N 73.82W)	5.90
Port Jervis 2.9 ESE (NY-OR-21) (41.36N 74.64W)	5.21	Thornwood 0.7 NW (NY-WC-34) (41.12N 73.78W)	6.55
Beacon 4.2 ESE (NY-PT-2) (41.48N 73.89W)	5.57		
Connecticut			
NWS Cooperative Observer Program (COOP) Sites			
Bakersville (BAKC3) (41.84N 73.01W)	5.77	Norfolk 2.0 SW (NFKC3) (41.97N 73.22W)	4.34
Barkhamstead (BRKC3) (41.92N 72.96W)	4.10	Norwich (NRWC3) (41.53N 72.07W)	6.34
Burlington (BRLC3) (41.79N 72.93W)	6.10	Stafford (SFVC3) (42.00N 72.26W)	4.55
Putnam Lake (GREC3) (41.08N 73.64W)	7.96	Storrs (STRC3) (41.80N 72.23W)	5.53
Guildford (GULC3) (41.29N 72.67W)	5.55	West Thompson Lake (WTPC3) (41.95N 71.90W)	5.11
Hampton (HMTC3) (41.77N 72.06W)	4.67		
Community Collaborative Rain, Hail and Snow Network (CoCoRaHS) Sites			
New Canaan 1.9 ENE (CT-FR-3) (41.15N 73.46W)	6.34	Middlefield 0.6 SE (CT-MD-25) (41.51N 72.71W)	5.85
Darien 3.6 N (CT-FR-5) (41.10N 73.49W)	6.99	Higganum 0.8 NE (CT-MD-26) (41.50N 72.55W)	5.97
Brookfield 3.3 SSE (CT-FR-9) (41.44N 73.39W)	6.85	Chester Center 2.7 WNW (CT-MD-30) (41.42N 72.50W)	6.46
Westport 2.5 ENE (CT-FR-20) (41.13N 73.30W)	5.94	Prospect 1.9 ENE (CT-NH-14) (41.51N 72.94W)	5.88
Shelton 1.3 W (CT-FR-23) (41.31N 73.16W)	5.18	East Haven 3.5 SSW (CT-NH-21) (41.25N 72.89W)	5.87
Ridgefield 3.7 NNE (CT-FR-24) (41.32N 73.48W)	6.93	West Haven 0.8 W (CT-NH-39) (41.27N 72.98W)	6.33
Norwalk 2.9 NNW (CT-FR-25) (41.13N 73.45W)	6.61	Wallingford Center 1.9 WNW (CT-NH-44) (41.46N 72.85W)	5.26
Monroe 0.8 W (CT-FR-32) (41.33N 73.22W)	5.17	Naugatuck 1.7 NNE (CT-NH-45) (41.51N 73.04W)	4.90
Bethel 3.5 NNE (CT-FR-41) (41.42N 73.40W)	6.63	Madison Center 4.1 N (CT-NH-50) (41.33N 72.62W)	5.83
Stratford 0.2 ESE (CT-FR-46) (41.20N 73.13W)	6.04	Guildford Center 2.7 WSW (CT-NH-56) (41.27N 72.73W)	5.84
Trumbull 0.9 W (CT-FR-57) (41.26N 73.23W)	5.40	New Haven 2.9 NNW (CT-NH-57) (41.35N 72.94W)	4.36

Location	Total Rainfall (in)	Location	Total Rainfall (in)
Fairfield 1.5 NE (CT-FR-60) (41.16N 73.25W)	5.74	Waterbury 1.3 WNW (CT-NH-67) (41.56N 73.06W)	5.41
Wilton 1.9 NW (CT-FR-63) (41.21N 73.47W)	5.37	Cheshire 0.9 W (CT-NH-69) (41.51N 72.93W)	5.54
Newtown 4.6 SE (CT-FR-65) (41.38N 73.24W)	5.41	Milford 2.8 SSW (CT-NH-71) (41.19N 73.09W)	6.02
Bridgeport 2.9 NNW (CT-FR-70) (41.23N 73.21W)	4.71	Northford 0.8 SW (CT-NH-72) (41.39N 72.80W)	6.77
Redding 1.4 E (CT-FR-78) (41.31N 73.37W)	5.58	Meriden 2.8 WSW (CT-NH-75) (41.53N 72.85W)	4.97
Stamford 4.8 S (CT-FR-93) (41.03N 73.57W)	8.10	Seymour 1.2 WSW (CT-NH-80) (41.39N 73.09W)	8.72
Enfield 1.5 SE (CT-HR-5) (41.96N 72.57W)	5.41	Uncasville 1.6 ENE (CT-NL-8) (41.46N 72.10W)	9.22
North Granby 1.3 ENE (CT-HR-8) (42.02N 72.82W)	4.63	Griswold 0.9 N (CT-NL-21) (41.61N 71.93W)	6.09
Newington 0.8 ENE (CT-HR-19) (41.69N 72.72W)	5.40	Central Waterford 2.7 SSW (CT-NL-22) (41.31N 72.15W)	5.02
East Hartford 1.3 E (CT-HR-22) (41.76N 72.59W)	5.77	Stonington 1.4 NNW (CT-NL-24) (41.35N 71.91W)	4.68
Southington 0.9 SSE (CT-HR-23) (41.58N 72.87W)	6.15	East Lyme 0.5 SW (CT-NL-29) (41.35N 72.24W)	7.36
North Canton 0.8 SSW (CT-HR-28) (41.89N 72.90W)	4.83	Niantic 1.1 SW (CT-NL-32) (41.31N 72.21W)	4.15
Bristol 2.7 WNW (CT-HR-31) (41.70N 72.99W)	5.96	Old Lyme 3.4 ESE (CT-NL-38) (41.30N 72.27W)	6.52
Farmington 4.9 WSW (CT-HR-41) (41.70N 72.88W)	6.32	Pawcatuck 1.8 SSE (CT-NL-40) (41.35N 71.85W)	4.17
Central Manchester 0.8 N (CT-HR-52) (41.79N 72.52W)	5.36	Mystic 3.4 NW (CT-NL-46) (41.39N 72.00W)	4.99
Suffield Depot 3.3 NNE (CT-HR-57) (42.03N 72.63W)	5.48	Norwich 5.4 SE (CT-NL-50) (41.49N 72.02W)	7.51
West Hartford 1.1 NNE (CT-HR-63) (41.78N 72.75W)	5.91	Ledyard 2.8 NNE (CT-NL-72) (41.48N 71.99W)	5.86
Rocky Hill 1.3 E (CT-HR-68) (41.66N 72.64W)	5.51	Central Somers 0.3 N (CT-TL-15) (42.00N 72.44W)	4.17
Canton 1.5 W (CT-HR-70) (41.82N 72.93W)	5.53	Hebron 5.3 NW (CT-TL-18) (41.72N 72.43W)	5.96
Kensington 0.7 WSW (CT-HR-80) (41.62N 72.78W)	6.19	Broad Brook 2.6 ESE (CT-TL-26) (41.89N 72.50W)	5.15
Plainville 1.7 SW (CT-HR-83) (41.66N 72.88W)	5.80	Willington 2.7 SE (CT-TL-27) (41.84N 72.22W)	5.51
Suffield 3.6 ENE (CT-HR-99) (42.01N 72.64W)	5.39	Mansfield Center 2.7 NE (CT-TL-30) (41.79N 72.16W)	5.50
Manchester 0.4 ENE (CT-HR-100) (41.78N 72.51W)	5.17	Tolland 3.6 NNE (CT-TL-33) (41.92N 72.34W)	4.45
Windsor Locks 3.2 SW (CT-HR-102) (41.89N 72.70W)	5.86	Somersville 0.2 ENE (CT-TL-35) (41.98N 72.48W)	4.75

Location	Total Rainfall (in)	Location	Total Rainfall (in)
Southwood Acres 0.3 WSW (CT-HR-106) (41.96N 72.58W)	5.07	Somers 0.3 S (CT-TL-41) (41.98N 72.45W)	4.43
Wethersfield 1.4 NNE (CT-HR-108) (41.72N 72.66W)	5.93	Willimantic 3.8 SW (CT-TL-42) (41.68N 72.27W)	6.13
Berlin 0.2 NW (CT-HR-112) (41.62N 72.75W)	5.35	Union 2.1 SW (CT-TL-43) (41.97N 72.18W)	4.95
Litchfield 2.3 NNE (CT-LT-7) (41.77N 73.17W)	5.16	Stafford Springs 3.3 W (CT-TL-44) (41.95N 72.37W)	4.78
Watertown 0.5 S (CT-LT-14) (41.60N 73.12W)	5.70	Andover 1.5 S (CT-TL-45) (41.72N 72.36W)	5.09
New Hartford Center 1.5 N (CT-LT-18) (41.90N 72.98W)	5.14	Vernon 1.6 N (CT-TL-50) (41.84N 72.48W)	4.94
Warren 2.4 WNW (CT-LT-20) (41.75N 73.39W)	4.02	Coventry 3.4 SE (CT-TL-51) (41.75N 72.29W)	6.54
Salisbury 3.8 NE (CT-LT-24) (42.02N 73.36W)	4.01	East Killingly 1.3 SW (CT-WN-4) (41.84N 71.84W)	4.59
New Milford 2.3 W (CT-LT-27) (41.59N 73.45W)	5.57	Dayville 2.0 ENE (CT-WN-6) (41.86N 71.85W)	4.72
Canaan 4.2 ESE (CT-LT-28) (42.01N 73.26W)	4.25	Moosup 1.7 NE (CT-WN-8) (41.73N 71.85W)	5.33
Woodbury Center 1.5 SSW (CT-LT-34) (41.53N 73.22W)	5.09	South Windham 1.3 NNE (CT-WN-10) (41.70N 72.18W)	5.05
Winsted 3.8 ESE (CT-LT-43) (41.90N 73.00W)	5.41	Eastford 2.0 W (CT-WN-12) (41.90N 72.12W)	5.14
Westbrook Center 1.5 NE (CT-MD-11) (41.30N 72.43W)	7.02	East Brooklyn 2.6 W (CT-WN-16) (41.78N 71.95W)	4.43
Essex Village 0.9 S (CT-MD-18) (41.34N 72.39W)	6.53	Sterling 2.6 N (CT-WN-25) (41.75N 71.84W)	4.79
East Hampton 2.1 N (CT-MD-22) (41.60N 72.49W)	5.24	Danielson 3.2 ESE (CT-WN-26) (41.79N 71.83W)	4.89
Durham 1.2 W (CT-MD-24) (41.48N 72.70W)	5.50		
Rhode Island			
NWS Cooperative Observer Program (COOP) Sites			
Coventry 2 (CTYR1) (41.67N 71.56W)	4.42	Kingston (KGNR1) (41.49N 71.54W)	6.01
Community Collaborative Rain, Hail and Snow Network (CoCoRaHS) Sites			
Barrington 1.3 WNW (RI-BR-5) (41.74N 71.34W)	4.51	Foster 4.8 SSE (RI-PR-81) (41.79N 71.72W)	4.61
Bristol 2.0 NNW (RI-BR-11) (41.71N 71.29W)	4.44	Woonsocket 1.8 WNW (RI-PR-89) (42.01N 71.53W)	4.45
Greene 1.4 E (RI-KN-14) (41.69N 71.72W)	4.11	Valley Falls 1.1 W (RI-PR-106) (41.93N 71.41W)	3.74

Location	Total Rainfall (in)	Location	Total Rainfall (in)
Warwick 1.6 SE (RI-KN-41) (41.69N 71.40W)	4.80	East Providence 0.8 SSW (RI-PR-108) (41.79N 71.37W)	3.81
East Greenwich 2.7 NE (RI-KN-53) (41.66N 71.42W)	4.97	Central Falls 1.2 W (RI-PR-116) (41.89N 71.42W)	4.05
Coventry 1.0 E (RI-KN-58) (41.69N 71.55W)	4.42	Pawtucket 1.8 E (RI-PR-118) (41.88N 71.34W)	3.73
Middletown 1.1 SW (RI-NW-4) (41.53N 71.30W)	6.42	Hope Valley 3.7 S (RI-WS-1) (41.46N 71.72W)	5.18
Tiverton 0.8 SSW (RI-NW-11) (41.64N 71.21W)	6.95	Little Compton 1.7 NW (RI-WS-5) (41.53N 71.19W)	4.65
Jamestown 0.3 SSE (RI-NW-18) (41.49N 71.37W)	5.67	Rockville 0.4 E (RI-WS-25) (41.52N 71.75W)	5.83
Portsmouth 2.3 S (RI-NW-19) (41.58N 71.25W)	8.32	Westerly 2.4 NNW (RI-WS-30) (41.40N 71.83W)	4.44
Newport 1.3 SW (RI-NW-27) (41.47N 71.34W)	6.55	Kingston 2.4 SW (RI-WS-37) (41.45N 71.55W)	6.55
Cumberland 2.4 ENE (RI-PR-21) (41.98N 71.41W)	3.53	North Kingston 1.5 SSW (RI-WS-44) (41.54N 71.46W)	5.70
North Smithfield 0.7 SE (RI-PR-28) (41.96N 71.54W)	4.19	Richmond 2.4 SSE (RI-WS-51) (41.46N 71.65W)	5.11
Greenville 0.7 NNW (RI-PR-33) (41.89N 71.56W)	4.23	Wakefield-Peacedale 3.1NE (RI-WS-52) (41.48N 71.46W)	6.52
Manville 0.4 WSW (RI-PR-45) (41.97N 71.48W)	3.69	North Kingstown 2.7 WSW (RI-WS-54) (41.54N 71.50W)	5.63
Harrisville 1.2 SSE (RI-PR-50) (41.95N 71.67W)	4.21	Wakefield 0.8 ENE (RI-WS-55) (41.45N 71.49W)	6.30
Cumberland Hill 0.9 NW (RI-PR-59) (41.98N 71.47W)	3.75	Narragansett 2.9 N (RI-WS-66) (41.49N 71.45W)	6.41
North Providence 0.9 E (RI-PR-60) (41.86N 71.44W)	3.78	Charlestown 0.7 E (RI-WS-67) (41.38N 71.63W)	5.25
Providence 1.6 NE (RI-PR-67) (41.84N 71.39W)	3.93	Exeter 3.9 S (RI-WS-69) (41.52N 71.53W)	5.84
Cranston 1.3 N (RI-PR-71) (41.79N 71.48W)	5.15	Saunderstown 0.1 SE (RI-WS-76) (41.51N 71.42W)	6.04
Riverside 0.8 SE (RI-PR-77) (41.76N 71.35W)	4.35	South Kingston 4.3 WSW (RI-WS-80) (41.42N 71.60W)	5.78
Massachusetts			
NWS Cooperative Observer Program (COOP) Sites			
Amherst (AHRM3) (42.39N 72.54W)	3.54	Leverett #2 (LEVM3) (42.64N 71.36W)	3.02
Hubbardston 3 SSW (BARM3) (42.43N 72.03W)	4.32	Lowell (LLLM3) (42.45N 72.53W)	3.38
Belchertown (BCNM3) (42.28N 72.35W)	4.24	Middleboro (MDLM3) (41.88N 70.91W)	4.52
Beverly (BEVM3) (42.59N 70.84W)	3.99	Middleton (MIDM3) (42.59N 71.02W)	3.66

Location	Total Rainfall (in)	Location	Total Rainfall (in)
Blue Hill (BLHM3) (42.21N 71.11W)	4.00	Milford (MILM3) (42.16N 71.51W)	4.85
Fiskdale 1.0 WSW (EBRM3) (42.12N 72.13W)	4.57	Norton West (NRNM3) (41.99N 71.17W)	3.57
East Freetown (EFRM3) (41.78N 70.92W)	6.41	Northbridge 2 (NTHM3) (42.12N 71.68W)	4.93
East Sandwich (ESNM3) (41.71N 70.47W)	6.87	Oxford 2.0 W (OXFM3) (42.12N 71.90W)	4.95
Fitchburg (FCHM3) (42.62N 71.80W)	3.58	Southbridge 3.0 SW (SBRM3) (42.06N 72.07W)	5.04
Hingham (HINM3) 42.23N 70.91W)	3.74	Sunderland (SDLM3) (42.44N 72.55W)	3.02
Hardwick 2 ESE (HRKM3) (42.35N 72.15W)	4.11	Taunton WFO (TNTM3/KBOX) (41.96N 71.14W)	4.20
Hyannis (HYSM3) (41.66N 70.30W)	4.10	Vineyard Haven (VYHM3) (41.45N 70.60W)	3.54
Jamaica Plain (JPBM3) (42.30N 71.12W)	4.75	Walpole (WALM3) (42.16N 71.25W)	4.45
Community Collaborative Rain, Hail and Snow Network (CoCoRaHS) Sites			
East Sandwich 2.3 SE (MA-BA-10) (41.72N 70.42W)	5.95	Lincoln 1.5 SW (MA-MD-80) (42.40N 71.32W)	3.63
East Falmouth 1.4 ESE (MA-BA-11) (41.57N 70.53W)	5.65	Wakefield 0.5 NNW (MA-MD-81) (42.51N 71.07W)	3.75
Waquoit 0.6 SSW (MA-BA-18) (41.58N 70.53W)	4.61	Wilmington 2.2 WNW (MA-MD-85) (42.57N 71.21W)	3.93
Yarmouth 0.9 NNW (MA-BA-22) (41.72N 70.24W)	5.19	Sudbury 3.6 W (MA-MD-89) (42.36N 71.47W)	4.23
Wellfleet 0.7 NW (MA-BA-27) (41.94N 70.04W)	5.46	Westford 1.4 SSW (MA-MD-93) (42.57N 71.45W)	3.74
Truro 0.8 E (MA-BA-52) (42.00N 70.05W)	4.98	Lexington 0.3 NE (MA-MD-96) (42.45N 71.23W)	4.45
Falmouth 5.7 N (MA-BA-57) (41.63N 70.62W)	6.54	Framingham 1.7 E (MA-MD-107) (42.31N 71.40W)	4.16
Barnstable 3.6W (MA-BA-59) (41.69N 70.37W)	5.82	Natick 1.9 NNE (MA-MD-120) (42.31N 71.34W)	4.45
Hyannis 0.7 WNW (MA-BA-60) (41.66N 70.31W)	4.61	Newton 1.8 NNW (MA-MD-121) (42.35N 71.22W)	5.03
Sandwich 1.5 SSE (MA-BA-64) (41.74N 70.49W)	6.73	Tewksbury 3.6 SSE (MA-MD-125) (42.57N 71.20W)	3.89
Eastham 1.9 WSW (MA-BA-68) (41.83N 70.00W)	3.32	Melrose 0.5 NE (MA-MD-126) (42.46N 71.05W)	4.10
Mashpee 2.5 W (MA-BA-83) (41.64N 70.53W)	5.49	Sherborn 1.1 NW (MA-MD-158) (42.25N 71.38W)	4.85
Great Barrington 0.4 N (MA-BE-2) (42.20N 73.36W)	3.06	Reading 1.2 N (MA-MD-160) (42.55N 71.10W)	3.73
Lee 3.7 SE (MA-BE-20) (42.27N 73.20W)	3.31	Pepperell 2.1 SSW (MA-MD-169) (42.64N 71.61W)	3.59

Location	Total Rainfall (in)	Location	Total Rainfall (in)
Sheffield 1.6 NW (MA-BE-23) (42.12N 73.37W)	3.22	Somerville 0.5 W (MA-MD-170) (42.39N 71.11W)	4.45
Rehoboth 2.1 N (MA-BR-2) (41.86N 71.27W)	3.68	Arlington 0.2 SW (MA-MD-176) (42.42N 71.17W)	4.91
Dartmouth 2.5 SSW (MA-BR-8) (41.81N 71.14W)	5.66	Hudson 0.7 NW (MA-MD-179) (42.38N 71.59W)	4.32
Dighton 1.1 WSW (MA-BR-14) (41.53N 71.02W)	4.82	Watertown 1.1 W (MA-MD-186) (42.38N 71.20W)	4.65
Attleboro 0.9 ENE (MA-BR-23) (41.94N 71.28W)	3.40	Ayer 0.4 SSE (MA-MD-192) (42.56N 71.58W)	3.84
Taunton 3.9 N (MA-BR-30) (41.96N 71.08W)	4.34	Littleton 1.4 W (MA-MD-195) (42.53N 71.50W)	4.02
Westport 0.9 ESE (MA-BR-37) (41.66N 71.08W)	5.34	Norwood 1.3 NW (MA-NF-1) (42.20N 71.21W)	4.57
New Bedford 4.3 N (MA-BR-52) (41.72N 70.94W)	5.67	Millis 2.0 SW (MA-NF-11) (42.15N 71.38W)	5.80
Mansfield 2.4 ENE (MA-BR-61) (42.04N 71.17W)	3.14	Bellingham 2.4 S (MA-NF-26) (42.06N 71.47W)	3.91
Swansea 2.1 W (MA-BR-63) (41.75N 71.22W)	4.90	Stoughton 1.2 E (MA-NF-31) (42.12N 71.08W)	3.36
Somerset 0.8 NE (MA-BR-64) (41.75N 71.15W)	5.98	Quincy 1.8 WSW (MA-NF-32) (42.25N 71.04W)	3.95
Norton 0.8 S (MA-BR-68) (41.96N 71.18W)	5.95	Weymouth 2.3 N (MA-NF-39) (42.24N 70.95W)	3.96
Fall River 2.9 WSW (MA-BR-71) (41.70N 71.16W)	4.25	Franklin 1.4 SW (MA-NF-62) (42.07N 71.41W)	3.87
Fairhaven 1.9 ENE (MA-BR-79) (41.65N 70.87W)	6.34	Norfolk 1.1 W (MA-NF-63) (42.12N 71.34W)	4.16
West Tisbury 2.9 N (MA-DK-5) (41.42N 70.69W)	3.65	Medway 2.1 W (MA-NF-64) (42.14N 71.44W)	4.65
Vineyard Haven 2.1 WSW (MA-DK-8) (41.44N 70.65W)	3.72	Milton 1.3 N (MA-NF-65) (42.26N 71.08W)	4.23
Marblehead 0.8 SW (MA-ES-8) (42.49N 70.88W)	4.04	Foxborough 3.1 E (MA-NF-73) (42.06N 71.19W)	3.15
Boxford 2.4 S (MA-ES-12) (42.64N 70.98W)	3.47	Sagamore Beach 1.0 NW (MA-PL-2) (41.81N 70.56W)	6.17
West Newbury 1.8 SSE (MA-ES-19) (42.77N 70.99W)	3.91	Kingston 3.3 WNW (MA-PL-5) (42.02N 70.77W)	5.04
Haverhill 0.7N (MA-ES-20) (42.79N 71.09W)	3.21	Bridgewater 1.8 SSE (MA-PL-15) (41.97N 70.94W)	4.43
Rockport 1.0 E (MA-ES-22) (42.64N 70.60W)	3.99	Plympton 0.9 NNE (MA-PL-17) (41.96N 70.81W)	4.21
Gloucester 4.4 N (MA-ES-25) (42.68N 70.65W)	4.27	East Bridgewater 0.3 WSW (MA-PL-22) (42.03N 70.95W)	3.86
Danvers 0.8 ESE (MA-ES-41) (42.57N 70.94W)	3.88	Duxbury 3.7W (MA-PL-30) (42.04N 70.75W)	4.84
Nahant 0.4 N (MA-ES-45) (42.42N 70.92W)	3.70	Abington 1.2 NNE (MA-PL-31) (42.13N 70.95W)	3.50

Location	Total Rainfall (in)	Location	Total Rainfall (in)
Andover 0.6 E (MA-ES-48) (42.66N 71.13W)	3.93	Hingham 0.8 ESE (MA-PL-36) (42.23N 70.87W)	3.85
Groveland 0.8 S (MA-ES-55) (42.74N 71.03W)	3.64	Marshfield 1.5 NNW (MA-PL-48) (42.11N 70.72W)	4.25
Newburyport 1.0 ESE (MA-ES-56) (42.81N 70.87W)	3.66	Plymouth 12.5 SSE (MA-PL-54) (41.80N 70.56W)	6.49
Middleton 1.4 SSW (MA-ES-58) (42.58N 71.03W)	3.81	Carver 2.3 E (MA-PL-55) (41.88N 70.72W)	5.35
Amesbury 1.2 N (MA-ES-59) (42.87N 70.93W)	3.28	Chelsea 0.8 N (MA-SF-10) (42.41N 71.04W)	4.71
North Andover 0.3 NW (MA-ES-66) (42.70N 71.12W)	3.77	Charlestown 0.4 SSE (MA-SF-30) (42.38N 71.06W)	4.30
Beverly 0.5 SW (MA-ES-84) (42.55N 70.85W)	4.10	Milford 2.3 NNW (MA-WR-1) (42.18N 71.53W)	4.79
Shutesbury 2.9 SW (MA-FR-38) (42.42N 72.43W)	3.12	Fitchburg 1.6 SSW (MA-WR-8) (42.57N 71.82W)	3.62
Wilbraham 3.7 SSW (MA-HD-20) (42.09N 72.47W)	4.61	Northborough 0.6 SSE (MA-WR-18) (42.30N 71.65W)	4.58
Brinfield 3.6 NW (MA-HD-26) (42.15N 72.25W)	4.70	Holden 2.0 ESE (MA-WR-25) (42.34N 71.81W)	4.26
West Springfield 1.6 SSW (MA-HD-29) (42.10N 72.66W)	4.69	West Boylston 1.5 S (MA-WR-27) (42.36N 71.78W)	4.76
Hampden 2.0 NW (MA-HD-30) (42.08N 72.45W)	4.61	Berlin 1.3 WSW (MA-WR-28) (42.38N 71.66W)	4.23
East Longmeadow 2.3 SSE (MA-HD-32) (42.06N 72.47W)	4.90	Shrewsbury 1.6 NNE (MA-WR-30) (42.32N 71.70W)	4.35
Agawam 1.1 SSW (MA-HD-33) (42.05N 72.62W)	5.13	Gardner 1.4 SSW (MA-WR-40) (42.56N 71.99W)	3.33
Springfield 3.0 E (MA-HD-34) (42.12N 72.48W)	4.66	Auburn 2.6 SW (MA-WR-41) (42.17N 71.87W)	5.08
Westhampton 1.8 SW (MA-HS-2) (42.28N 72.79W)	3.41	Leicester 2.4 ESE (MA-WR-43) (42.23N 71.86W)	4.71
Belchertown 0.8 SSW (MA-HS-41) (42.26N 72.41W)	4.44	Westerminster 0.6 WSW (MA-WR-44) (42.55N 71.91W)	3.68
Northampton 2.7 ESE (MA-HS-43) (42.32N 72.62W)	3.55	Barre 1.4 NNE (MA-WR-54) (42.44N 72.10W)	3.53
Easthampton 1.0 E (MA-HS-48) (42.27N 72.66W)	3.80	Harvard 2.1 S (MA-WR-55) (42.49N 71.58W)	3.66
Winchester 0.7 SE (MA-MD-7) (42.45N 71.14W)	4.49	Sterling 4.3 NW (MA-WR-56) (42.48N 71.81W)	4.33
Cambridge 0.9 NNW (MA-MD-11) (42.39N 71.13W)	4.69	Lunenberg 0.6 NE (MA-WR-58) (42.60N 71.72W)	3.65
Acton 1.3 SW (MA-MD-12) (42.47N 71.48W)	4.14	Rutland 3.1 SW (MA-WR-63) (42.33N 71.99W)	4.01
Belmont 0.2 ESE (MA-MD-18) (42.40N 71.16W)	4.35	Oxford 0.9 SSW (MA-WR-68) (42.10N 71.88W)	4.65
Westfield 2.8 SE (MA-MD-28) (42.11N 72.72W)	4.17	Northbridge 1.7 WNW (MA-WR-69) (42.16N 71.68W)	4.09

Location	Total Rainfall (in)	Location	Total Rainfall (in)
Townsend 2.6 S (MA-MD-36) (42.63N 71.70W)	3.50	Grafton 1.5W (MA-WR-70) (42.20N 71.71W)	4.40
Holliston 0.8 S (MA-MD-42) (42.19N 71.43W)	4.93	Warren 2.4 WSW (MA-WR-75) (42.20N 72.24W)	4.56
Medford 1.2 W (MA-MD-44) (42.42N 71.13W)	4.21	Worcester 1.6 SE (MA-WR-81) (42.25N 71.79W)	4.75
West Townsend 0.5 W (MA-MD-47) (42.68N 71.75W)	3.13	Upton 0.4 NE (MA-WR-90) (42.18N 71.60W)	4.30
Maynard 0.7 ESE (MA-MD-51) (42.42N 71.44W)	4.03	Grafton 0.9 NNE (MA-WR-91) (42.21N 71.68W)	4.97
Billerica 2.0 W (MA-MD-60) (42.55N 71.31W)	4.03	Douglas 1.9 NNE (MA-WR-100) (42.08N 71.72W)	4.90
Chelsmford 1.2 E (MA-MD-62) (42.60N 71.34W)	3.55	Uxbridge 4.4 SSW (MA-WR-103) (42.02N 71.63W)	4.38
New Hampshire			
NWS Cooperative Observer Program (COOP) Sites			
Nashua CWSU (42.73N 71.48W)	3.16		
Community Collaborative Rain, Hail and Snow Network (CoCoRaHS) Sites			
Brookline 2.1 SW (NH-HL-19) (42.71N 71.70W)	3.20	Mason 2.9 SE (NH-HL-68) (42.72N 71.73W)	3.00
Maine			
Community Collaborative Rain, Hail and Snow Network (CoCoRaHS) Sites			
Lubec 4.1 W (ME-WS-8) (44.86N 67.07W)	3.83	Eastport 1.4 ESE (ME-WS-31) (44.91N 66.99W)	3.46
Pembroke 5.4 SSE (ME-WS-10) (44.91N 67.13W)	3.12	Perry 3.8 NNW (ME-WS-34) (45.03N 67.10W)	3.98
Whiting 2.3 WSW (ME-WS-11) (44.78N 67.22W)	3.61	Biddeford 1.5 NNE (ME-YK-28) (43.49N 70.43W)	3.03
Canada			
New Brunswick			
Community Collaborative Rain, Hail and Snow Network (CoCoRaHS) Sites			
Oak Point 0.9 SSW (CAN-NB-5) (45.51N 66.10W)	3.00	Grande-Digue 5.1 N (CAN-NB-76) (46.34N 64.57W)	3.72
Dorchester 1.0 SSE (CAN-NB-16) (45.89N 64.51W)	4.66	Berwick 4.4 SW (CAN-NB-87) (45.76N 65.64W)	4.29
Maces Bay 7.3 SSW (CAN-NB-46) (45.06N 66.82W)	3.08	Hopewell Cape 1.8 SSE (CAN-NB-93) (45.83N 64.58W)	5.29

Location	Total Rainfall (in)	Location	Total Rainfall (in)
Harvey 1.9 SSE (CAN-NB-53) (45.71N 64.70W)	4.47	Saint-Ignace 2.6 NE (CAN-NB-96) (46.71N 65.06W)	3.14
Jolicure 2.8 NE (CAN-NB-57) (45.96N 64.19W)	4.82	Grand Harbour 1.1 S (CAN-NB-101) (44.68N 66.77W)	3.46
Sackville 2.1 N (CAN-NB-58) (45.91N 64.37W)	4.54	Pennfield Ridge 2.7 SSW (CAN-NB-104) (45.09N 66.71W)	3.31
Waterside 4.0 E (CAN-NB-60) (45.62N 64.78W)	4.26		
Nova Scotia			
Community Collaborative Rain, Hail and Snow Network (CoCoRaHS) Sites			
Middleton 7.8 NNW (CAN-NS-23) (45.00N 65.12W)	3.67	Sandy Cove 0.2 SW (CAN-NS-109) (44.49N 66.09W)	5.86
Centrelea 1.2 NNW (CAN-NS-83) (44.83N 65.33W)	3.02	Northport 0.1 NE (CAN-NS-159) (45.93N 63.87W)	4.48
Nappan 1.7 E (CAN-NS-86) (45.77N 64.22W)	3.32		
Prince Edward Island			
Community Collaborative Rain, Hail and Snow Network (CoCoRaHS) Sites			
Wellington 1.6 NNE (CAN-PE-3) (46.67N 63.99W)	4.48	Peakes 2.9 ENE (CAN-PE-28) (46.31N 62.75W)	3.35
Morell 1.4 NNW (CAN-PE-7) (46.43N 62.72W)	3.40	Glencoe 0.3 W (CAN-PE-43) (46.20N 62.82W)	3.17
New London 1.6 ENE (CAN-PE-10) (46.47N 63.49W)	5.78	Long Creek 0.3 NNW (CAN-PE-47) (46.17N 63.27W)	4.17
Bedeque 4.4 WNW (CAN-PE-13) (46.35N 63.78W)	3.91	Breadalbane 9.3 NNE (CAN-PE-48) (46.44N 63.47W)	4.25
North Rustico 1.4S (CAN-PE-14) (46.45N 63.31W)	4.87	Bedford Corner 3.9 WNW (CAN-PE-50) (46.35N 63.06W)	5.39
Charlottetown 6.5 NNW (CAN-PE-19) (46.29N 63.17W)	4.62	Ellerslie 6.3 NNE (CAN-PE-51) (46.66N 63.92W)	3.67
Bonshaw 6.6 NNE (CAN-PE-20) (46.25N 63.33W)	3.19	Foxley River 0.6W (CAN-PE-54) (46.69N 64.02W)	3.39
Border 0.9 SE (CAN-PE-23) (46.25N 63.69W)	4.28	Granville 2.9 WNW (CAN-PE-66) (46.69N 64.02W)	5.48
Grand Tracadie 2.3 SE (CAN-PE-26) (46.38N 63.04W)	5.50		

Table 5. Tornadoes documented during the lifetime of Ida, including the post-tropical and extratropical phases.

County/ Parish	Begin Location	End Location	EF Scale	Begin Date/Time	Length (miles)	Width (yards)	Deaths	Injuries	Damage
Louisiana									
St. Tammany	2 ESE Eden Isles	3 W Eden Isle	1	29/2333	4.93	175	0	0	
St. Tammany	1 SSE Eden Isles	Eden Isle	0	30/0156	0.88	100	0	0	
Mississippi									
Harrison/ Hancock	1 WSW Pass Christian	1 SW Diamond Head	1	29/1123	8.60	150	0	0	
Harrison	1 SSE Gulfport	Gulfport	0	29/2215	0.75	50	0	0	
Hancock	6 ESE Pearlington	5 NNW Pearlington	0	29/2359	10.68	75	0	0	
Hancock	1 ESE Waveland	2 NW Waveland	0	30/0211	3.13	200	0	0	
Hancock	1 NE Waveland	3 NNW Waveland	0	30/0215	2.93	200	0	0	
Harrison	2 WSW Pass Christian	3 E Bay St. Louis	0	30/0237	0.51	0	0	0	
Harrison	1 S Biloxi	1 S Biloxi	0	30/0818	0.17	150	0	0	
Harrison	3 S St. Martin	2 S St. Martin	0	30/0955	0.53	100	0	0	
Harrison	1 E Gulfport	Gulfport	0	30/1244	0.52	0	0	0	
Harrison	4 E Gulfport	4 WSW Biloxi	0	30/1249	1.04	200	0	0	
Harrison	4 WSW Biloxi	3 NW Biloxi	0	30/1250	3.49	125	0	0	
Harrison	3 WSW Biloxi	3 W Biloxi	0	30/1256	1.05	0	0	0	
Jackson	1 SSW Pascagoula	3 E Escatawpa	0	30/1437	10.30	50	0	0	
Alabama									
Mobile	2 S Saraland	2 E Axis	1	30/1720	9.96	175	0	3	
Clarke	1 NNW Choctaw Bluff	2 WSW Alma	1	30/1725	3.50	150	0	0	
Pike	2 SSW Antioch	1 NNW Antioch	0	30/1902	3.18	75	0	0	
Macon	5 ESE Lake Tuskegee	5 E Lake Tuskegee	0	30/2045	0.48	75	0	0	
Houston	1 WSW Peterman	Jones Crossroads	0	31/2059	0.91	20	0	0	
Dale	1 W Midland City	1 NNW Midland City	0	31/2314	0.65	125	0	0	

County/ Parish	Begin Location	End Location	EF Scale	Begin Date/Time	Length (miles)	Width (yards)	Deaths	Injuries	Damage
Geneva/ Houston	1 WSW Baily Crossroad	2 NNE Baily Crossroad	0	31/2333	2.29	25	0	0	
Virginia									
Montgomery	4.7 SE Radford	4.1 SE Radford	1	31/2234	1.70	75	0	0	
Montgomery	1 NW Merrmac	1 NW Merrimac	1	31/2259	0.2	75	0	0	
Maryland									
Anne Arundel	Owensville	1 N Annapolis	2	01/1801	11.5	200	0	0	
Baltimore	Fort Howard	Holly Beach	0	01/1848	6.9	75	0	0	
Dorchester	1.6 SW Hurclock	2.7 N Hurlock	0	01/2045	4.0	50	0	0	
Pennsylvania									
Chester	East Nottingham Twp.	Upper Oxford Twp.	2	01/2015	6.09	350	0	0	
Montgomery	Fort Washington	Horsham	2	01/2135	8.0	400	1	Few	
Bucks	Doylestown	Buckingham Twp.	1	01/2159	4.4	300	0	0	
Bucks	Upper Makefield Twp.	Upper Makefield Twp.	1	01/2230	1.7	250	0	0	
Burlington/ Bucks	2 SW Burlington	Bristol	1	01/2259	2.8	200	0	0	
New Jersey									
Gloucester	1 SE Harrisonville	1 SE Deptford	3	01/2210	12.6	400	0	2	
Mercer	2.7 SE Princeton	1 Princeton	0	01/2332	2.73	100	0	0	
Massachusetts									
Barnstable	Dennis	Dennis	0	02/0530	0.1	15	0	0	

Table 6. Number of hours in advance of formation of Ida associated with the first NHC Tropical Weather Outlook forecast in the indicated likelihood category. Note that the timings for the “Low” category do not include forecasts of a 0% chance of genesis.

	Hours Before Genesis	
	48-Hour Outlook	**120-Hour Outlook**
Low (<40%)	42	78
Medium (40%-60%)	24	66
High (>60%)	6	30

Table 7a. NHC official (OFCL) and climatology-persistence skill baseline (OCD5) track forecast errors (n mi) for Hurricane Ida, 26 August–1 September 2021. Mean errors for the previous 5-yr period are shown for comparison. Official errors that are smaller than the 5-yr means are shown in boldface type.

	Forecast Period (h)							
	12	24	36	48	60	72	96	120
OFCL	**14.5**	**20.4**	**26.4**	**35.8**	**44.7**	**56.3**	**102.9**	181.7
OCD5	32.2	70.5	122.6	180.1	223.5	238.1	270.3	305.4
Forecasts	22	20	18	16	14	12	8	4
OFCL (2016-20)	23.9	36.3	49.1	63.9	83.7	94.1	128.1	169.7
OCD5 (2016-20)	45.1	97.2	157.2	216.7	257.6	325.4	414.4	490.0

Table 7b. Homogeneous comparison of selected track forecast guidance models (in n mi) for Hurricane Ida, 26 August–1 September 2021. Errors smaller than the NHC official forecast are shown in boldface type. The number of official forecasts shown here will generally be smaller than that shown in Table 7a due to the homogeneity requirement.

Model ID	Forecast Period (h)							
	12	24	36	48	60	72	96	120
OFCL	13.8	18.2	24.8	35.8	43.8	55.1	102.6	193.8
OCD5	27.5	65.7	114.6	170.9	209.9	212.9	263.6	300.5
GFSI	13.9	23.3	28.5	38.3	**39.7**	**34.5**	**41.2**	**151.7**
HWFI	18.6	29.8	42.1	50.9	58.9	88.7	164.4	310.9
HMNI	15.2	26.8	38.3	58.0	71.5	91.7	155.0	208.6
UKXI	21.2	31.5	39.4	65.0	89.2	113.5	191.8	233.2
EMXI	17.1	31.3	41.9	52.5	66.1	80.1	133.1	**176.1**
NVGI	18.4	35.5	53.3	73.7	84.2	99.3	167.9	264.2
CMCI	21.3	31.8	44.4	43.5	55.8	68.3	**77.0**	**120.2**
CTCI	**12.8**	**17.8**	**23.7**	**33.0**	46.1	**45.7**	103.8	225.6
TVCA	**13.4**	18.6	26.5	38.6	48.2	66.9	121.9	220.1
HCCA	**13.6**	19.0	**24.2**	36.1	47.7	66.9	118.4	266.0
GFEX	13.8	21.2	26.9	37.9	**42.6**	**50.5**	**76.3**	**160.2**
AEMI	**13.2**	19.4	**23.6**	36.7	44.7	60.9	118.4	266.0
UEMI	18.3	34.7	53.7	79.3	110.4	150.8	277.4	415.3
TABS	42.7	92.2	137.2	181.1	205.4	232.5	248.6	272.8
TABM	25.7	48.9	63.8	87.7	97.0	95.4	106.3	**134.4**
TABD	29.4	32.9	42.6	52.4	65.1	80.2	**102.4**	**89.3**
Forecasts	16	16	15	13	11	9	5	3

Table 8a. NHC official (OFCL) and climatology-persistence skill baseline (OCD5) intensity forecast errors (kt) for Hurricane Ida, 26 August–1 September 2021. Mean errors for the previous 5-yr period are shown for comparison. Official errors that are smaller than the 5-yr means are shown in boldface type.

	Forecast Period (h)							
	12	24	36	48	60	72	96	120
OFCL	6.4	8.8	**4.7**	**9.4**	**11.4**	**10.8**	**11.9**	**5.0**
OCD5	10.5	14.1	15.4	19.4	25.6	22.9	11.2	18.5
Forecasts	22	20	18	16	14	12	8	4
OFCL (2016-20)	5.4	8.0	9.6	10.9	11.5	12.1	13.3	14.5
OCD5 (2016-20)	7.0	11.0	14.3	16.8	18.5	19.7	21.7	23.0

Table 8b. Homogeneous comparison of selected intensity forecast guidance models (in kt) for Hurricane Ida, 26 August–1 September 2021. Errors smaller than the NHC official forecast are shown in boldface type. The number of official forecasts shown here will generally be smaller than that shown in Table 8a due to the homogeneity requirement.

Model ID	Forecast Period (h)							
	12	24	36	48	60	72	96	120
OFCL	7.6	10.0	5.7	9.2	13.3	10.0	12.9	5.0
OCD5	11.9	15.5	16.8	18.1	26.2	22.4	**11.6**	18.5
HWFI	10.2	13.4	13.1	13.8	19.4	16.1	15.1	6.8
HMNI	10.9	16.2	14.9	17.2	20.5	20.4	**4.9**	**4.2**
DSHP	10.7	14.9	10.9	11.6	19.5	16.7	**6.9**	6.5
LGEM	9.6	15.2	11.4	14.1	22.2	18.7	**6.4**	6.2
ICON	9.6	14.8	11.9	13.1	20.1	17.3	**8.0**	6.0
IVCN	9.4	14.4	12.1	11.7	17.2	14.9	**6.9**	**4.0**
CTCI	10.1	13.2	14.0	11.5	**9.5**	10.4	**6.6**	**2.2**
GFSI	11.9	17.9	17.4	14.2	16.1	16.1	**4.0**	**3.8**
EMXI	12.2	19.2	20.4	23.3	33.4	25.7	**7.4**	**3.5**
HCCA	9.1	12.9	10.2	**8.6**	14.7	13.4	**8.7**	7.5
Forecasts	17	17	14	13	12	11	7	4

Table 9. Storm surge watch and warning summary for Hurricane Ida, 26 August–1 September 2021.

Date/Time (UTC)	Action	Location
27 / 0300	Storm Surge Watch issued	Sabina Pass to the Alabama/Florida border, including Vermilion Bay, Lake Borgne, Lake Pontchartrain, Lake Maurepas, and Mobile Bay
27 / 2100	Storm Surge Warning issued	East of Rockefeller Wildlife Refuge LA to the Mississippi/Alabama border, including Vermilion Bay, Lake Borgne, Lake Pontchartrain, and Lake Maurepas
28 / 1500	Storm Surge Watch discontinued	Sabine Pass to Rockefeller Wildlife Refuge LA
28 / 2100	Storm Surge Warning extended	Mississippi/Alabama border to the Alabama/Florida border, including Mobile Bay
29 / 1500	Storm Surge Warning discontinued	West of Intracoastal City to Rockefeller Wildlife Refuge LA
29 / 2100	Storm Surge Warning discontinued	West of Morgan City to Intracoastal City LA, including Vermilion Bay
30 / 0900	Storm Surge Warning discontinued	West of Grand Isle to Morgan City LA
30 / 1500	Storm Surge Warning discontinued	West of the mouth of the Pearl River, including Lake Pontchartrain, Lake Maurepas, and Lake Borgne
30 / 2100	Storm Surge Warning discontinued	All

Table 10. Comparisons of initial peak inundation forecast ranges, final peak inundation forecast ranges, and estimated peak inundation ranges at select locations across southeastern Louisiana, Mississippi, and Alabama during Hurricane Ida, 26 August–1 September 2021

Location	Initial Peak Inundation Forecast	Final Peak Inundation Forecast	Estimated Peak Inundation
Plaquemines Parish (East Bank)	7 to 11 ft	8 to 12 ft	9 to 14 ft
Plaquemines Parish (West Bank)	7 to 11 ft	12 to 16 ft	6 to 12 ft
Lafourche Parish	7 to 11 ft	12 to 16 ft	6 to 12 ft
St. Bernard Parish	7 to 11 ft	8 to 12 ft	6 to 11 ft
Terrebonne Parish	7 to 11 ft	8 to 12 ft	3 to 6 ft
Around Lake Pontchartrain	3 to 5 ft	5 to 8 ft	6 to 11 ft
Mississippi	7 to 11 ft (West) 4 to 7 ft (East)	8 to 12 ft (West) 6 to 9 ft (Central) 4 to 7 ft (East)	4 to 7 ft
Alabama	3 to 5 ft	3 to 5 ft	2 to 4 ft

Table 11. Coastal wind watch and warning summary for Hurricane Ida, 26 August–1 September 2021.

Date/Time (UTC)	Action	Location
26 / 1500	Tropical Storm Warning issued	Cuban provinces of Isle of Youth, Pinar del Rio, Artemisa, La Habana, Mayabeque, and Matanzas
26 / 1500	Tropical Storm Warning issued	Cayman Islands
27 / 0300	Hurricane Watch issued	Louisiana and Mississippi coasts from Cameron, Louisiana to the Mississippi/ Alabama border, including Lake Pontchartrain, Lake Maurepas, and metropolitan New Orleans
27 / 0300	Tropical Storm Watch issued	Coast of Alabama
27 / 1200	Tropical Storm Warning discontinued	Grand Cayman Island
27 / 1500	Hurricane Warning issued	Cuban provinces of Isle of Youth, Pinar del Rio, and Artemisa
27 / 1800	Tropical Storm Warning discontinued	Little Cayman and Cayman Brac
27 / 2100	Hurricane Warning issued	Louisiana coast from Intracoastal City to the mouth of the Pearl River, including Lake Pontchartrain, Lake Maurepas, and metropolitan New Orleans
27 / 2100	Tropical Storm Warning issued	Mississippi coast and the Louisiana coast west of Intracoastal City to Cameron
28 / 0900	Hurricane and Tropical Storm Warnings discontinued	All Cuban provinces
28 / 1500	Tropical Storm Warning issued	Alabama coast
28 / 1500	Hurricane Watch discontinued	Mississippi coast and the Louisiana coast west of Intracoastal City
29 / 2100	Hurricane Warning changed to Tropical Storm Warning	Louisiana coast west of Morgan City to Intracoastal City
29 / 2100	Tropical Storm Warning discontinued	Louisiana coast west of Intracoastal City
30 / 0900	Hurricane Warning changed to Tropical Storm Warning	Louisiana coast from Grand Isle to the mouth of the Pearl River, including Lake Pontchartrain, Lake Maurepas, and metropolitan New Orleans
30 / 0900	Hurricane and Tropical Storm Warnings discontinued	Louisiana coast west of Grand Isle
30 / 1500	All warnings discontinued	Louisiana coast including Lake Pontchartrain, Lake Maurepas, and metropolitan New Orleans
30 / 2100	All remaining coastal watches and warnings discontinued	

FIGURES

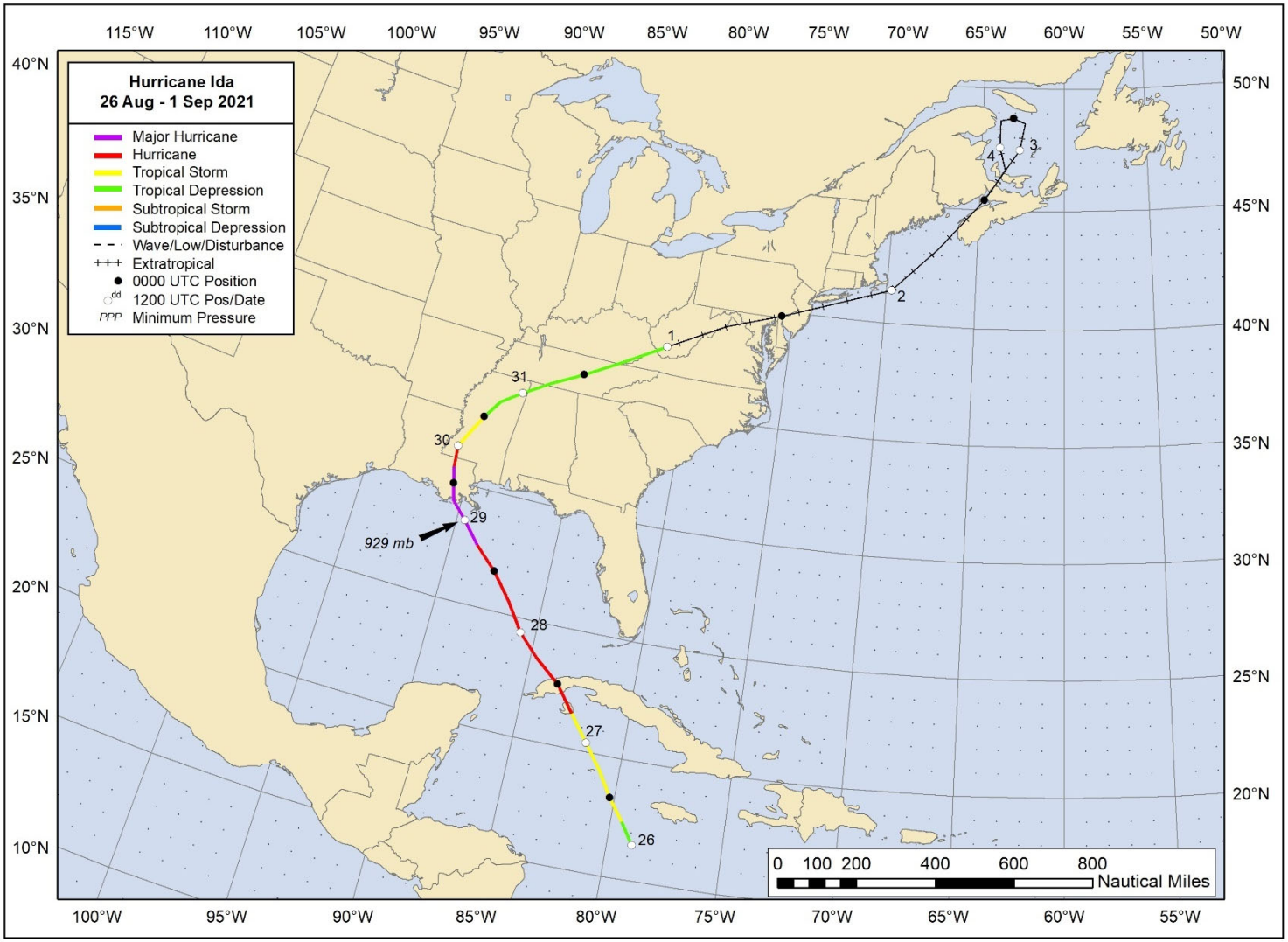

Figure 1. Best track positions for Hurricane Ida, 26 August–1 September 2021. Tracks over the United States and during the extratropical stage are partially based on analyses from the NOAA Weather Prediction Center and the NOAA Ocean Prediction Center.

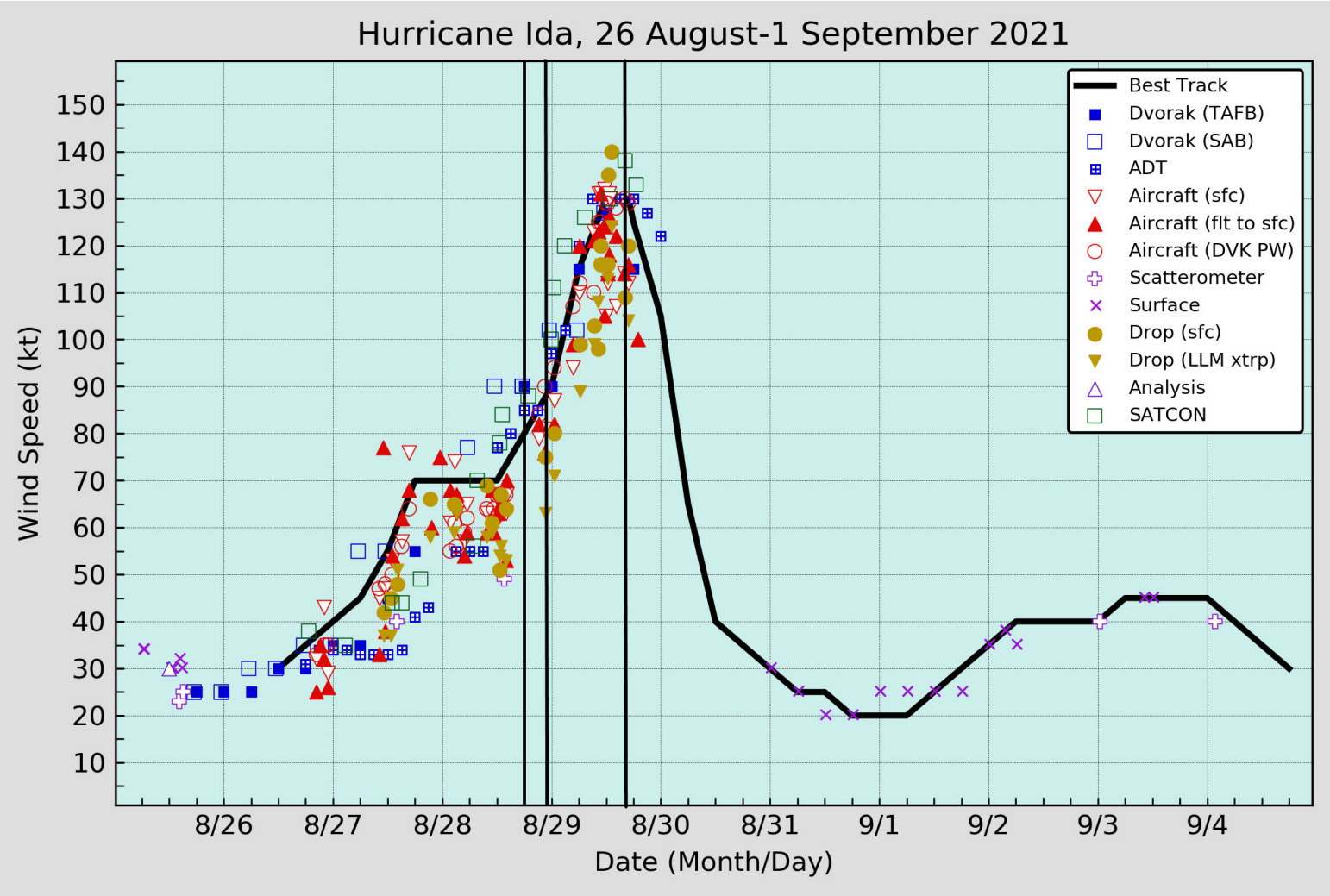

Figure 2. Selected wind observations and best track maximum sustained surface wind speed curve for Hurricane Ida, 26 August–1 September 2021. Aircraft observations have been adjusted for elevation using 90%, 80%, and 80% adjustment factors for observations from 700 mb, 850 mb, and 1500 ft, respectively. Dropwindsonde observations include actual 10 m winds (sfc), as well as surface estimates derived from the mean wind over the lowest 150 m of the wind sounding (LLM). Advanced Dvorak Technique estimates represent the Current Intensity at the nominal observation time. SATCON intensity estimates are from the Cooperative Institute for Meteorological Satellite Studies. Dashed vertical lines correspond to 0000 UTC, and solid vertical lines correspond to landfalls.

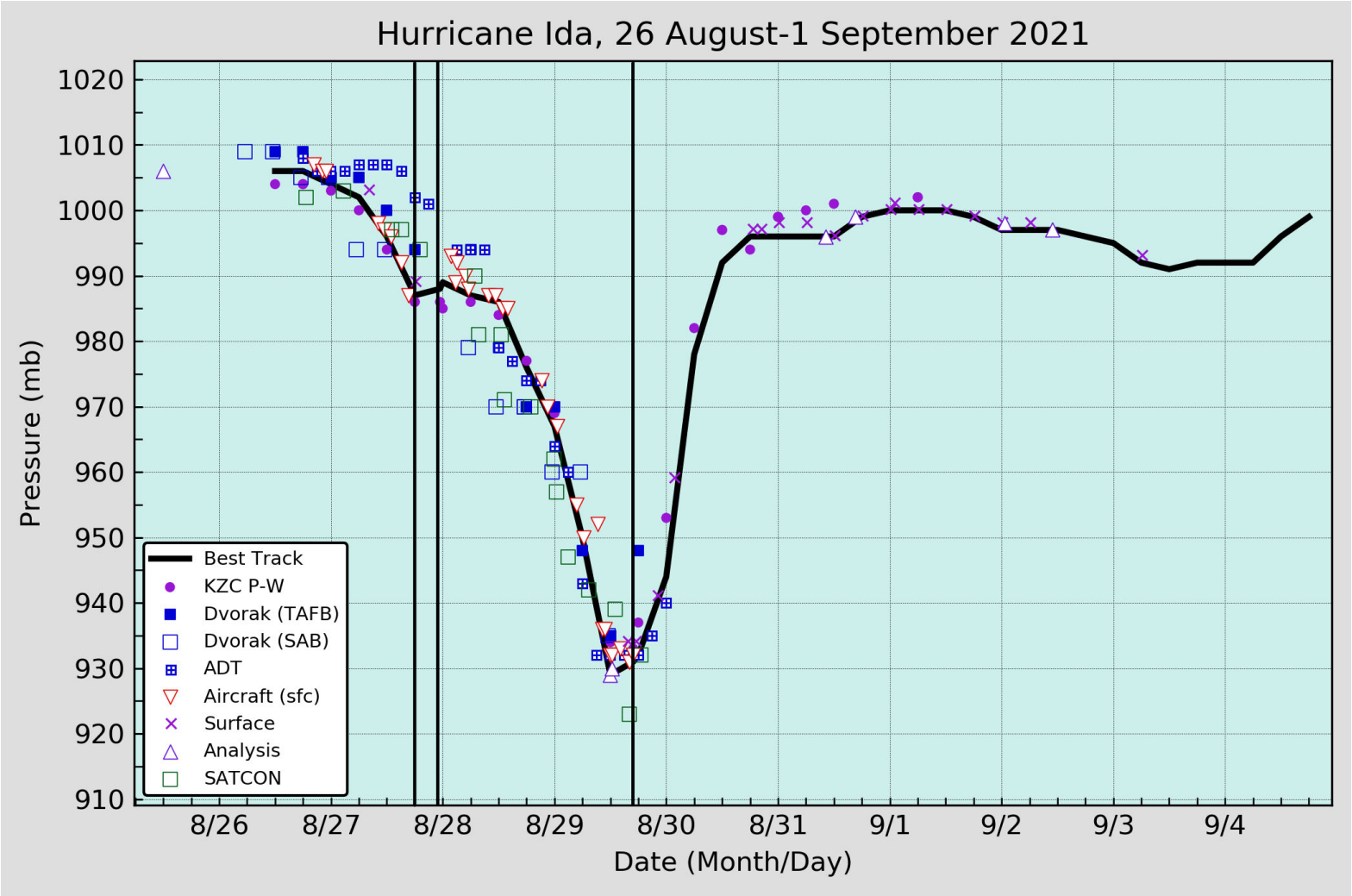

Figure 3. Selected pressure observations and best track minimum central pressure curve for Hurricane Ida, 26 August–1 September 2021. Advanced Dvorak Technique estimates represent the Current Intensity at the nominal observation time. SATCON intensity estimates are from the Cooperative Institute for Meteorological Satellite Studies. KZC P-W refers to pressure estimates derived using the Knaff-Zehr-Courtney pressure-wind relationship. Dashed vertical lines correspond to 0000 UTC, and solid vertical lines correspond to landfalls.

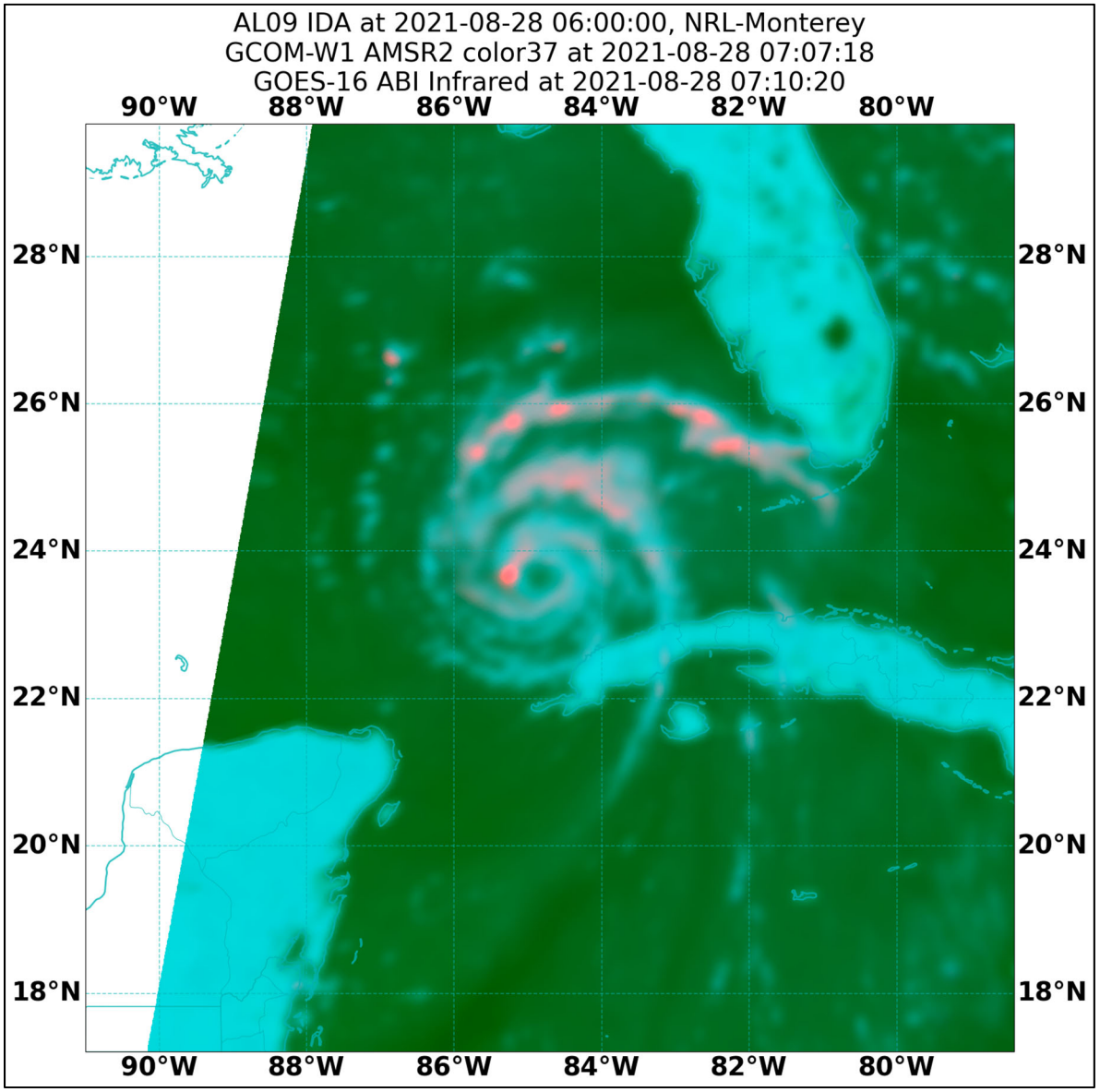

Figure 4. 37 GHz color composite image of Hurricane Ida at 0707 UTC 28 August from the Advanced Microwave Scanning Radiometer-2 imager on the JAXA/NASA GCOM-2 satellite. Image courtesy of NRL Monterey, CA.

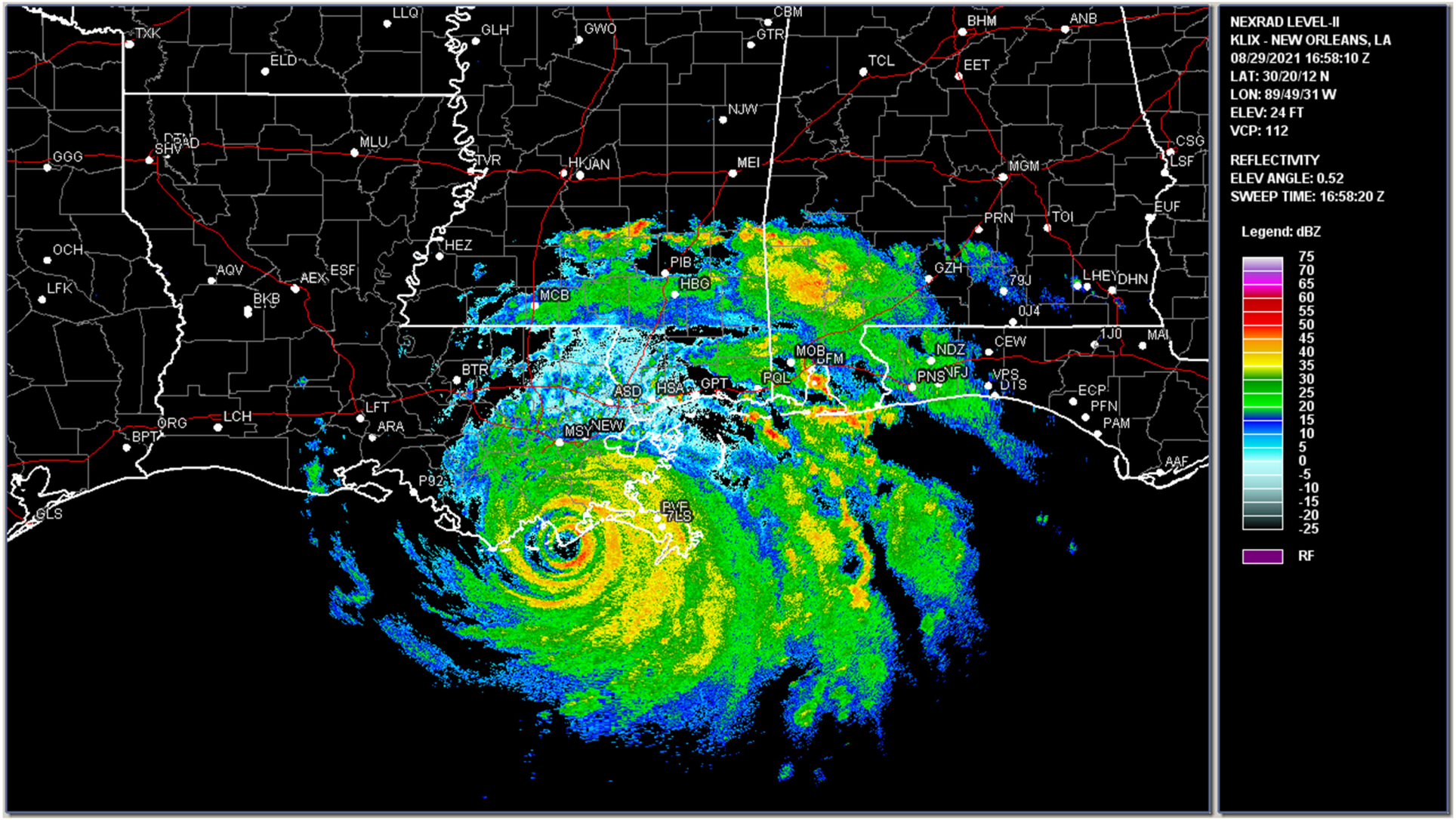

Figure 5. NWS Slidell WSR-88D radar reflectivity image of the eye of Ida making landfall at Port Fourchon, Louisiana, at 1658 UTC 29 August 2021. Image courtesy of NWS WFO Lake Charles, Louisiana.

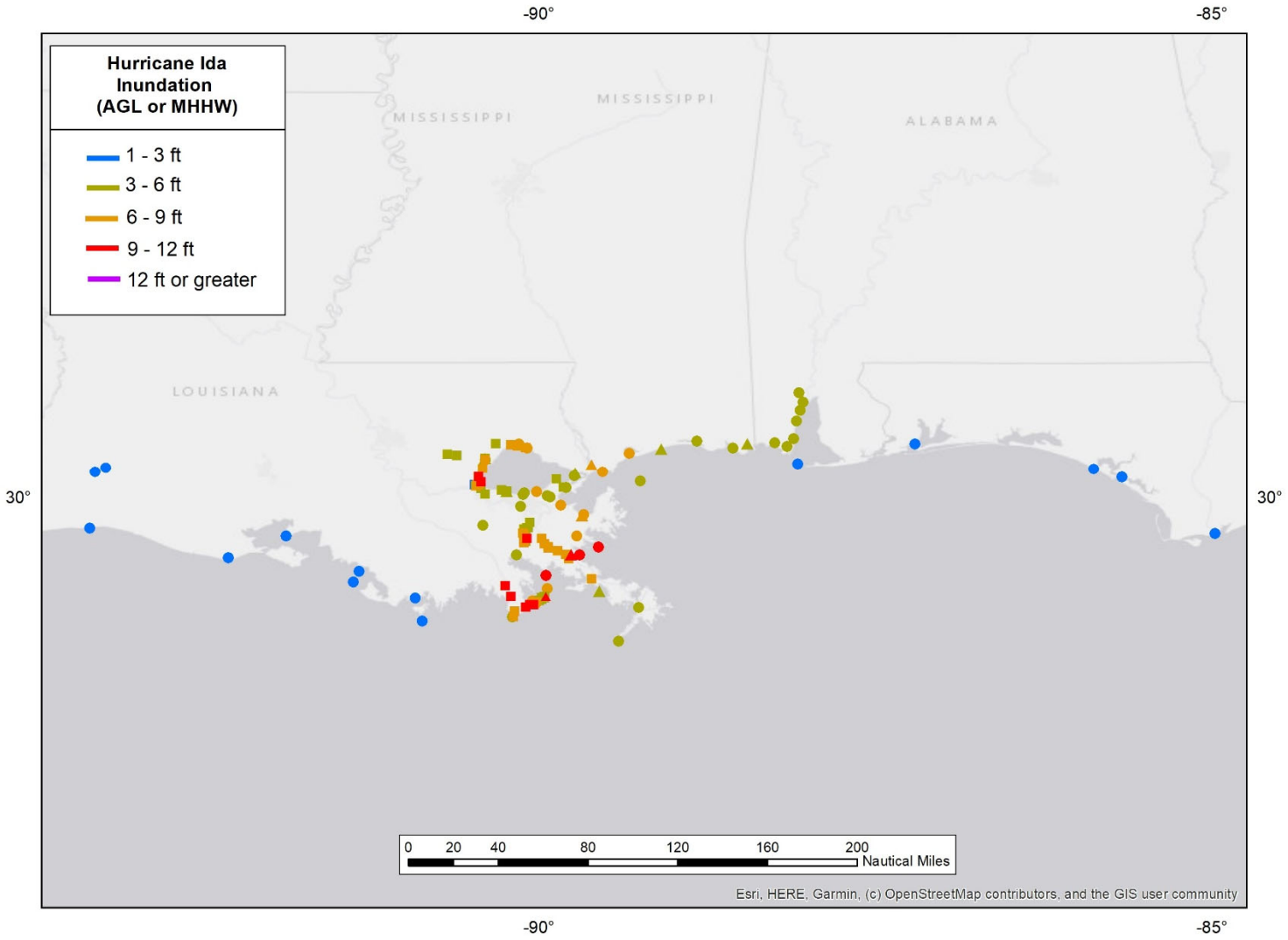

Figure 6a. Maximum water levels measured from tide and stream gauges (circles), USGS water level sensors (triangles), and surveyed high water marks (squares) from Hurricane Ida, 26 August–1 September 2021. Depending on the data type, water levels are referenced as feet above ground level (AGL), or Mean Higher High Water (MHHW) / Mean Sea Level (MSL), which are used as a proxy for inundation (above ground level) on normally dry ground along the immediate coastline.

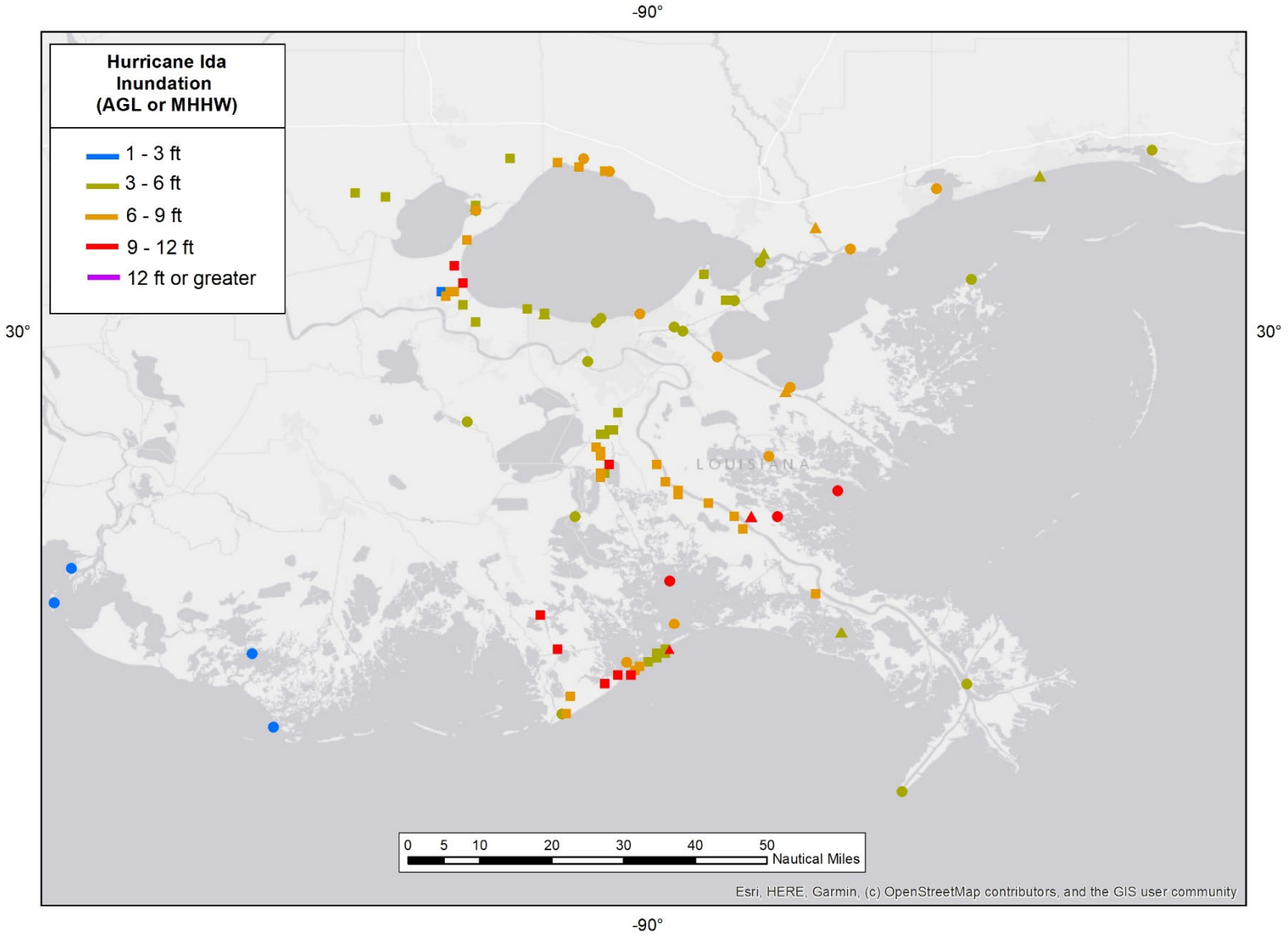

Figure 6b. Same as Figure 7a but zoomed in where the highest storm surge inundation from Hurricane Ida occurred over southeastern Louisiana.

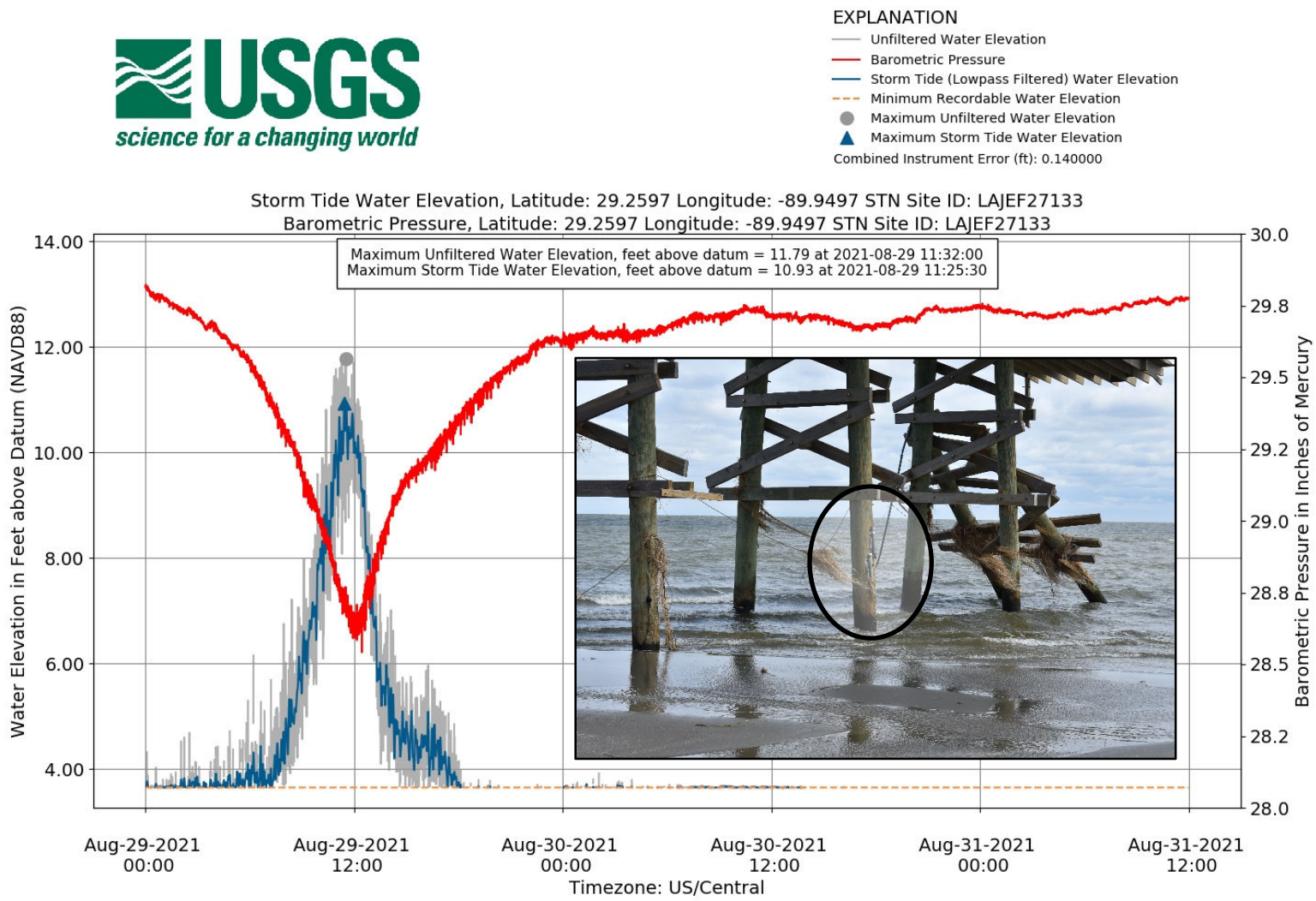

Figure 7. Unfiltered water level (gray), wave-filtered water level (blue), and barometric pressure (red) measured during Hurricane Ida from a USGS sensor in Grand Isle, Louisiana (left). The picture shows the sensor attached to a pier after the storm, outlined by a transparent white oval (right). This sensor measured a peak wave-filtered water level of 10.93 ft NAVD88 (10.1 ft MHHW). Image courtesy of the USGS.

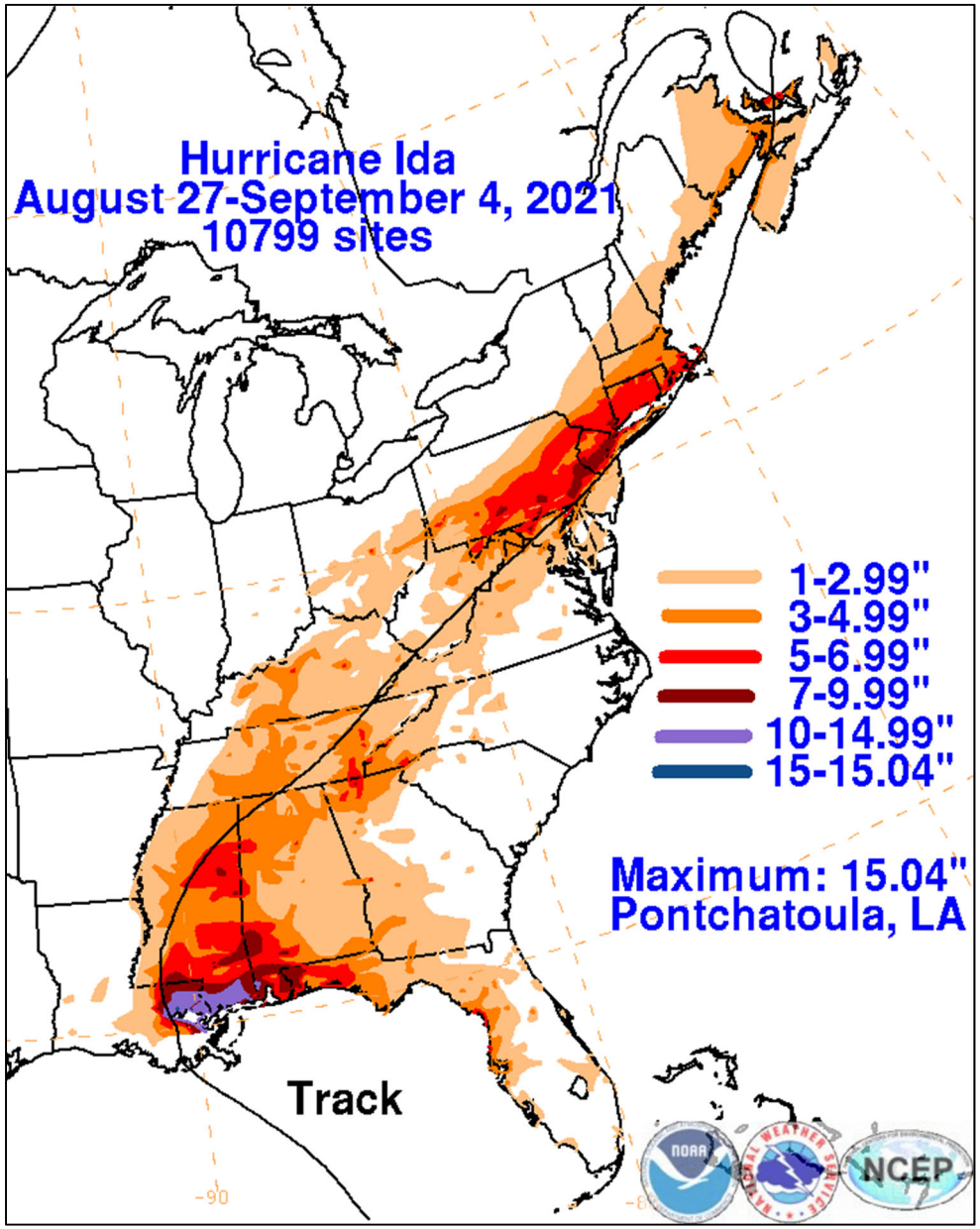

Figure 8. Analysis of storm total rainfall (inches) for Hurricane Ida courtesy of David Roth of the NOAA Weather Prediction Center.

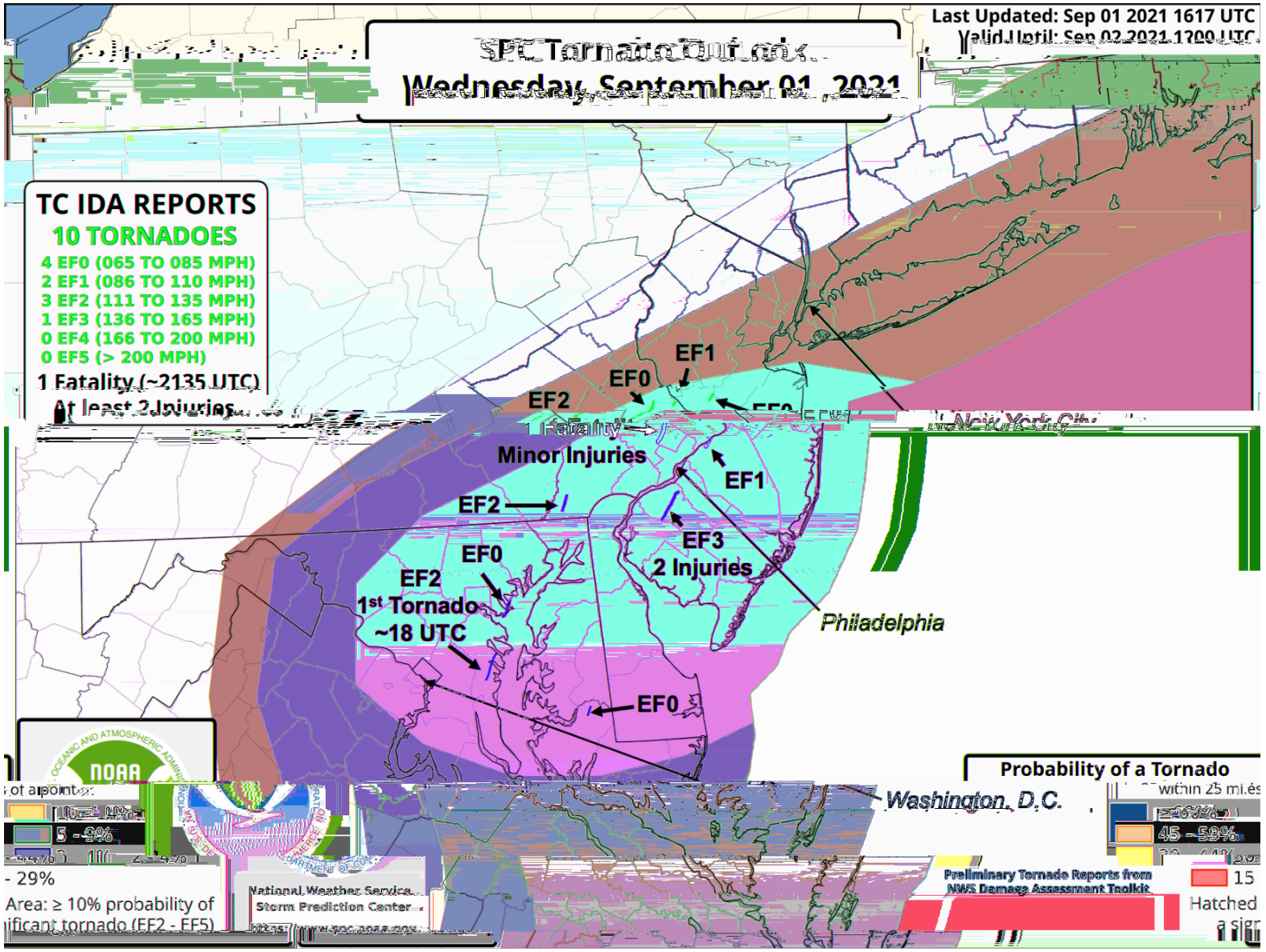

Figure 9. Tornado reports and the forecast probabilities of tornado occurrence on 1 September 2021 as the remnants of Ida moved through the northeastern United States. Image courtesy of the Storm Prediction Center.

Figure 10. Gloucester County, New Jersey, tornado on 1 September 2021. Image courtesy of Anna Weis, @NashWX, and the New Jersey Weather Network.

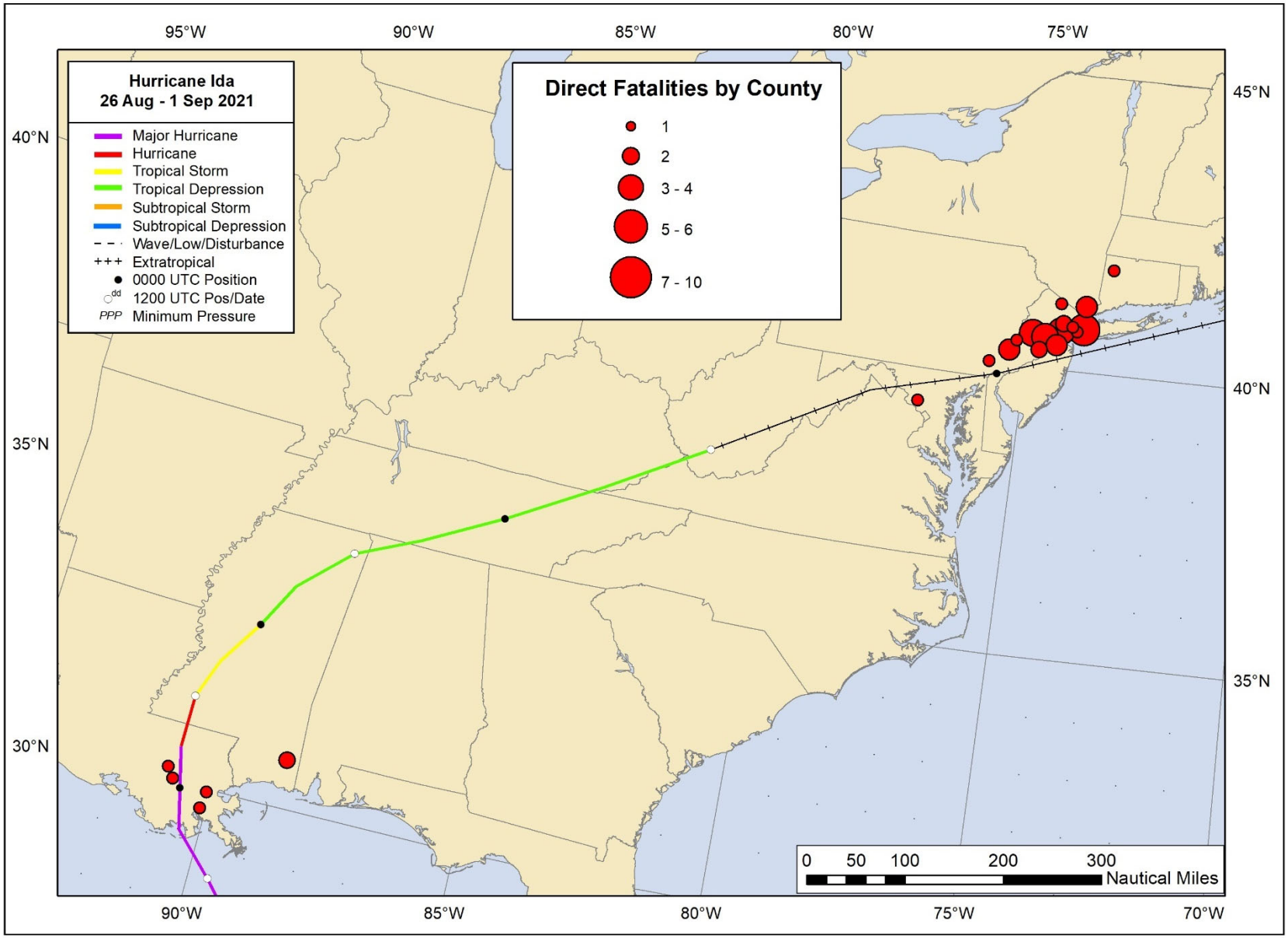

Figure 11. Locations of deaths directly caused by Hurricane Ida, 26 August–1 September 2021.

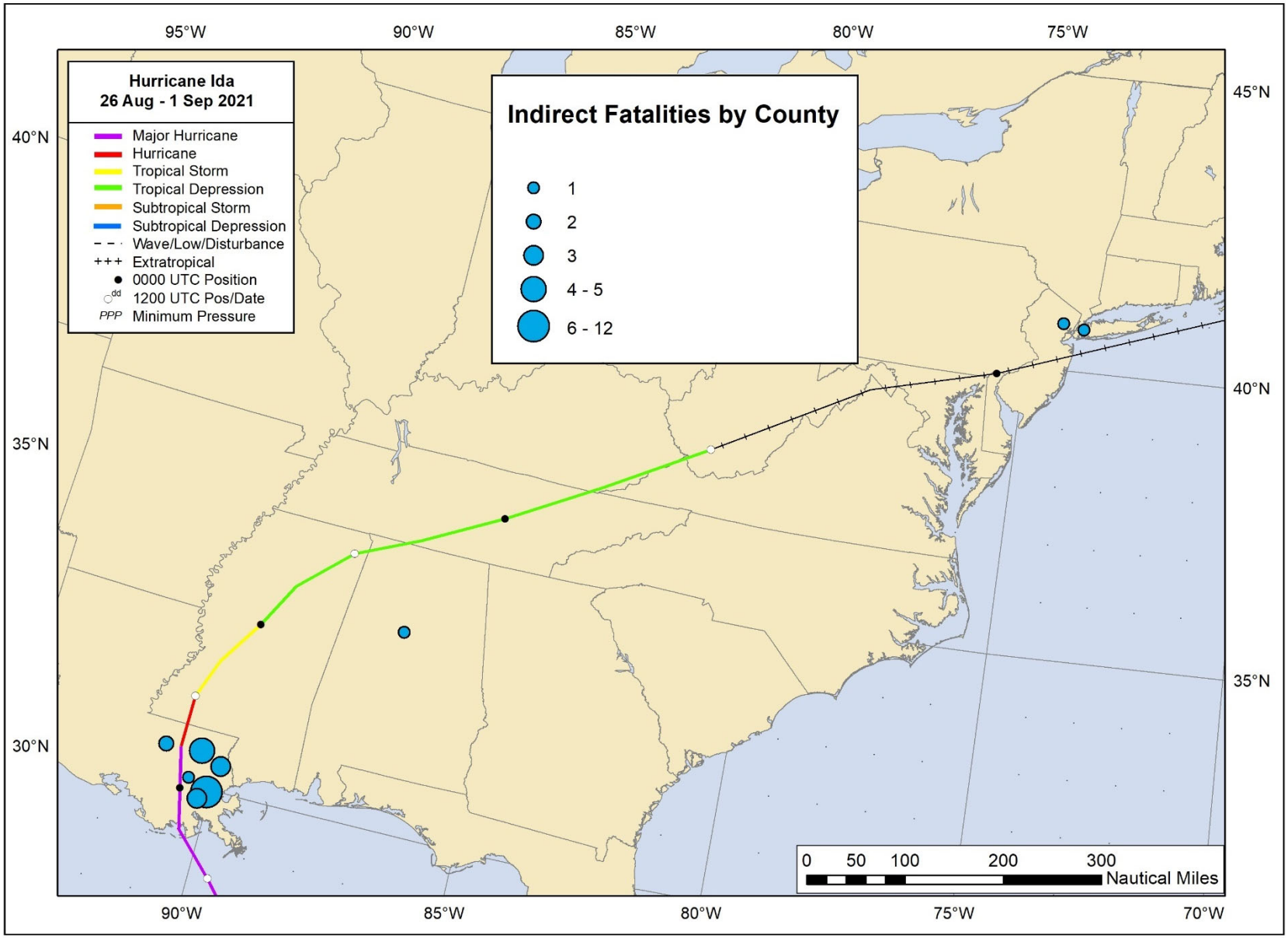

Figure 12. Locations of deaths indirectly caused by Hurricane Ida, 26 August–1 September 2021.

Figure 13. Before (top) and after (bottom) imagery of a part of Grand Isle, Louisiana, showing the damage caused by Hurricane Ida. Imagery courtesy of the NOAA Remote Sensing Division at https://storms.ngs.noaa.gov/storms/ida/index.html#9/29.2029/-90.1932

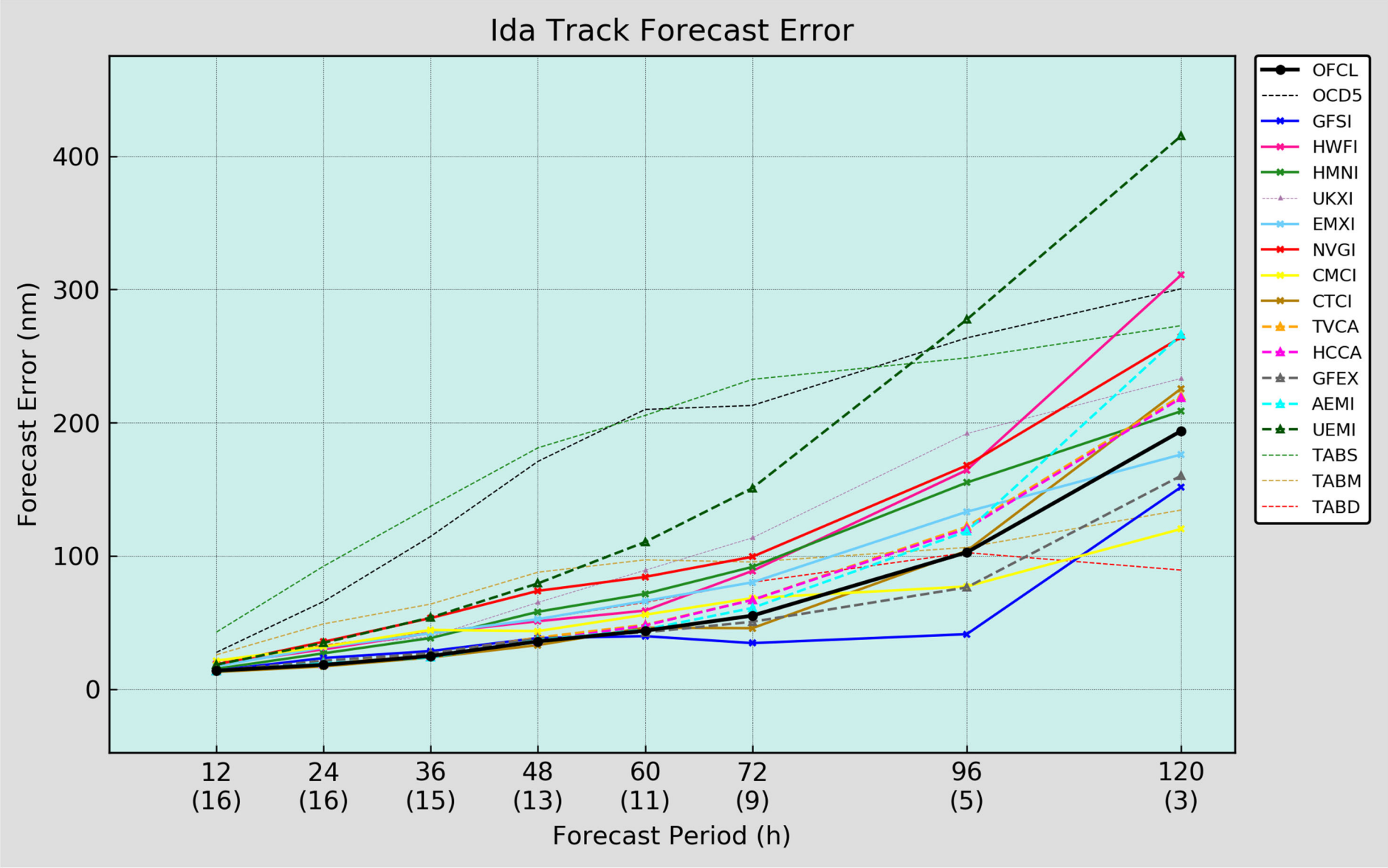

Figure 14. For Hurricane Ida, 26 August–1 September 2021, homogeneous comparison of track forecast errors for the official forecasts and the track guidance models. The number of cases is in parentheses below the forecast times.

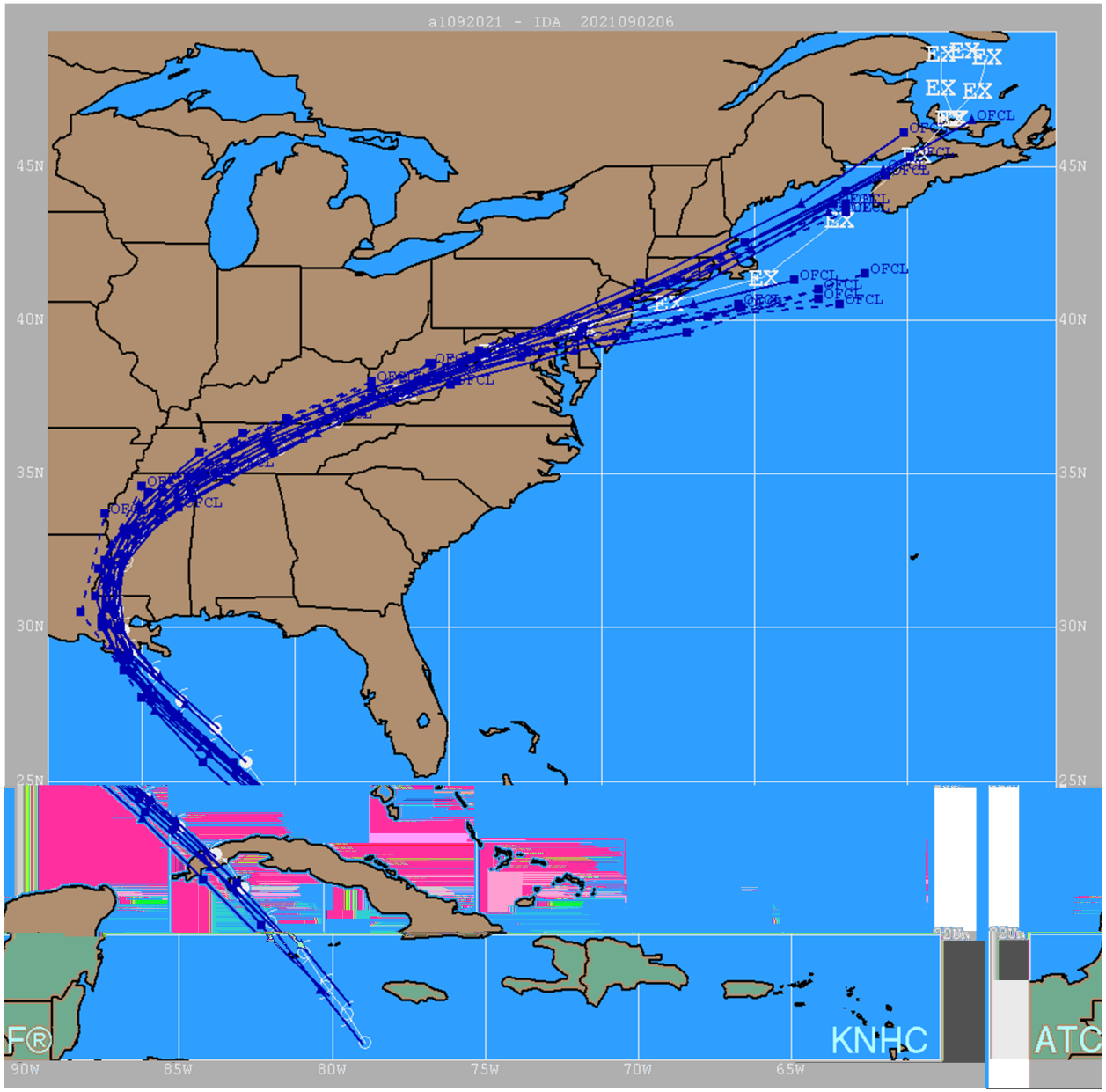

Figure 15. Selected official track forecasts (dashed lines, with 0, 12, 24, 36, 48, 60, 72, 96, and 120 h positions indicated) for Hurricane Ida, 26 August–1 September 2021. The best track is given by the white line with positions given at 6 h intervals.

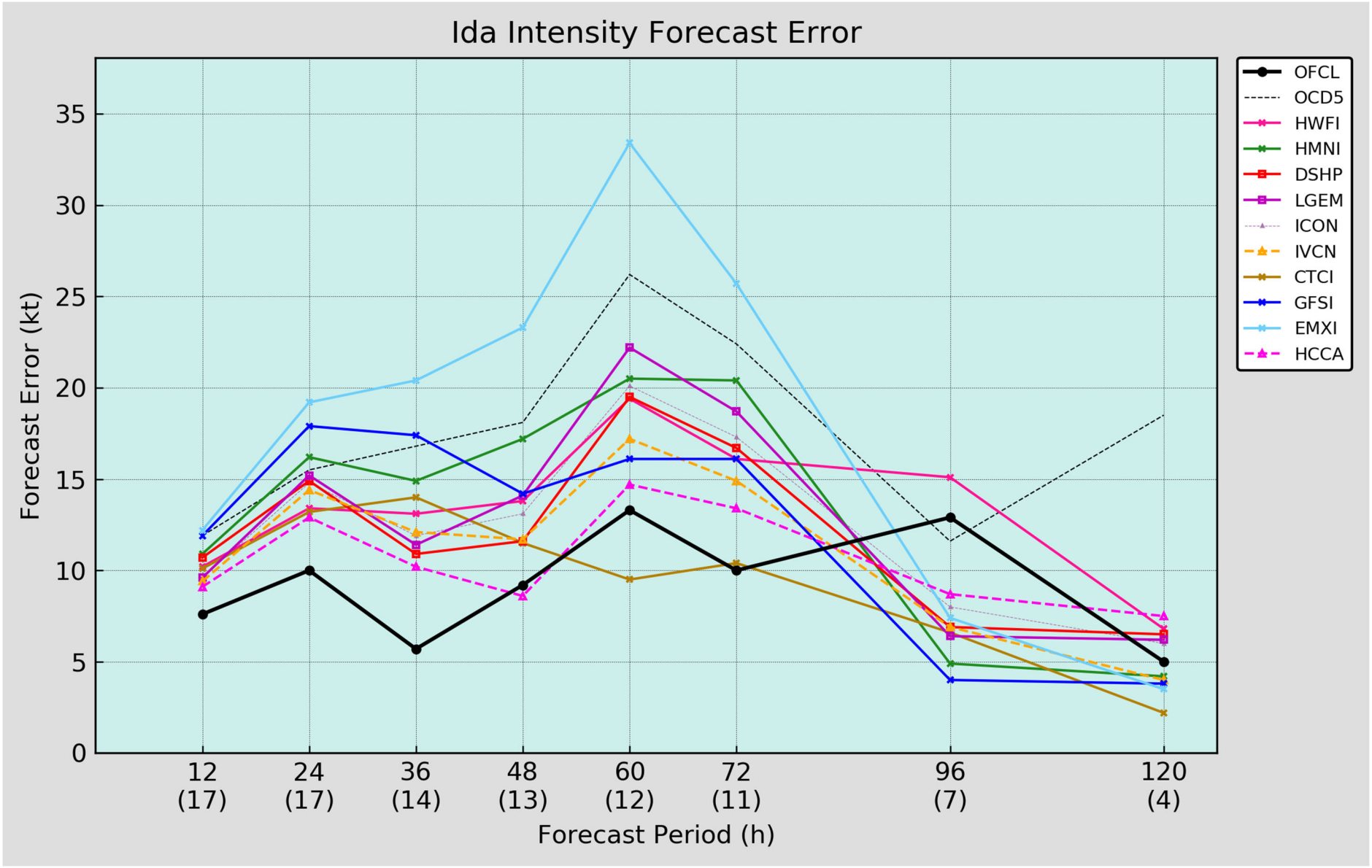

Figure 16. For Hurricane Ida, 26 August–1 September 2021, homogeneous comparison of intensity forecast errors for the official forecasts and the intensity guidance models. The number of cases is in parentheses below the forecast times.

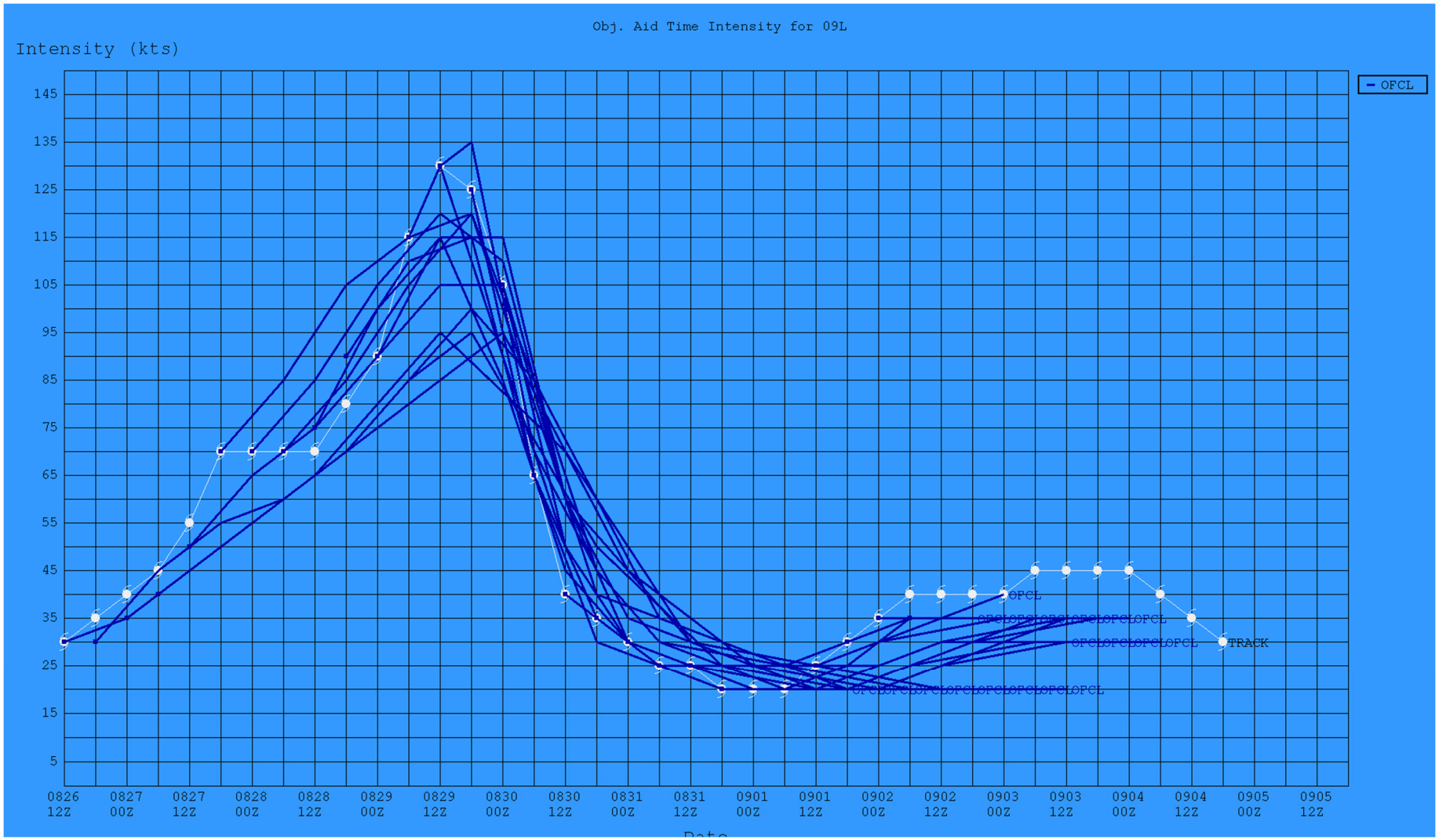

Figure 17. Selected NHC official intensity forecasts (kt, blue lines) for Hurricane Ida, 26 August–1 September 2021. The best track intensity (kt) is given by the white line with the symbols at 6 h intervals.

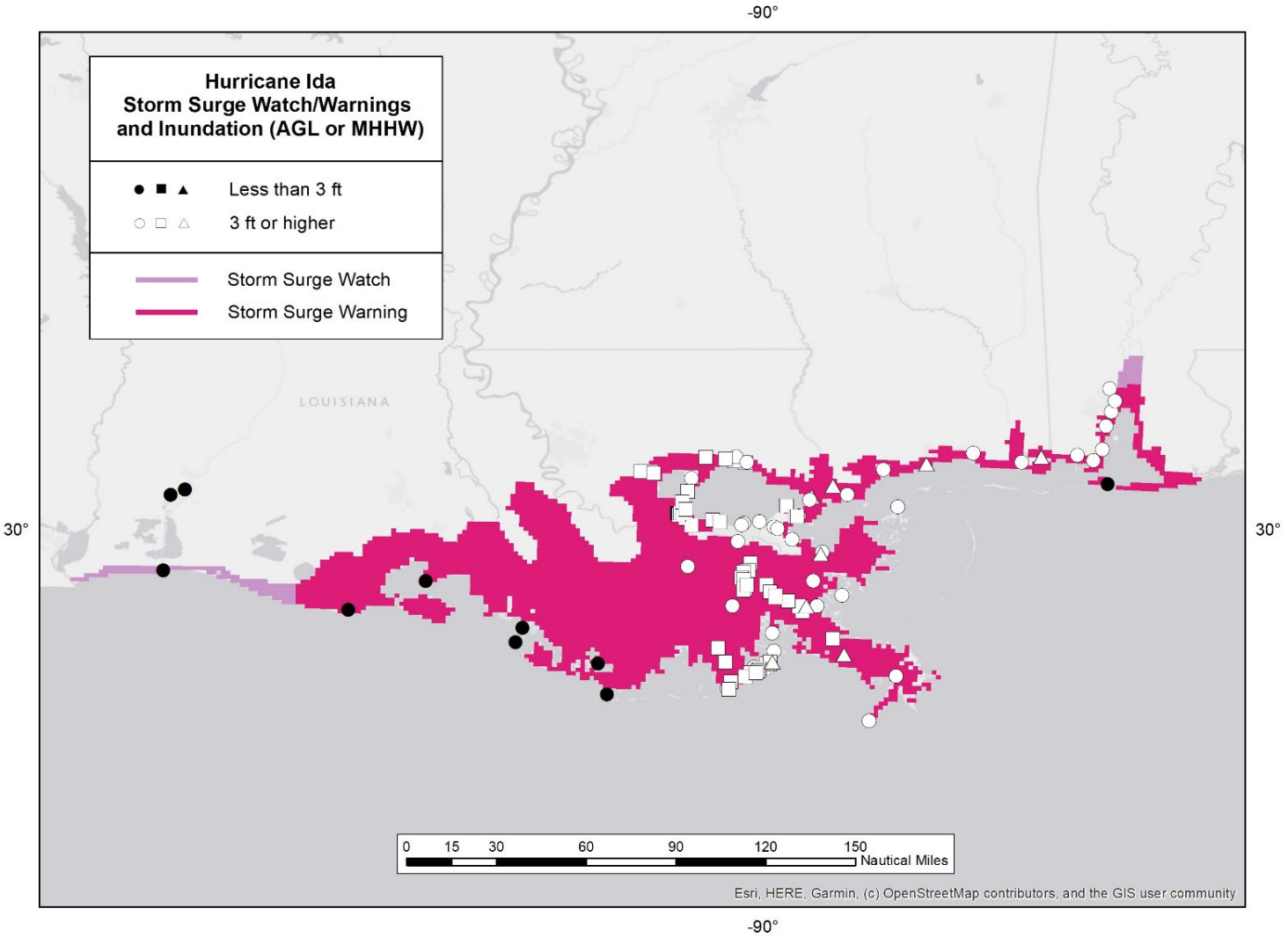

Figure 18. Maximum water levels measured during Hurricane Ida from tide gauges (circles), USGS water level sensors (triangles) and surveyed high water marks (squares), as well as areas covered by storm surge watches (lavender) and warnings (magenta). Water levels are referenced as feet above ground level (AGL) or Mean Higher High Water (MHHW), which is used as a proxy for inundation (above ground level) on normally dry ground along the immediate coastline. Black markers denote water levels less than 3 ft above ground level, and white markers denote water levels 3 ft or higher above ground level.

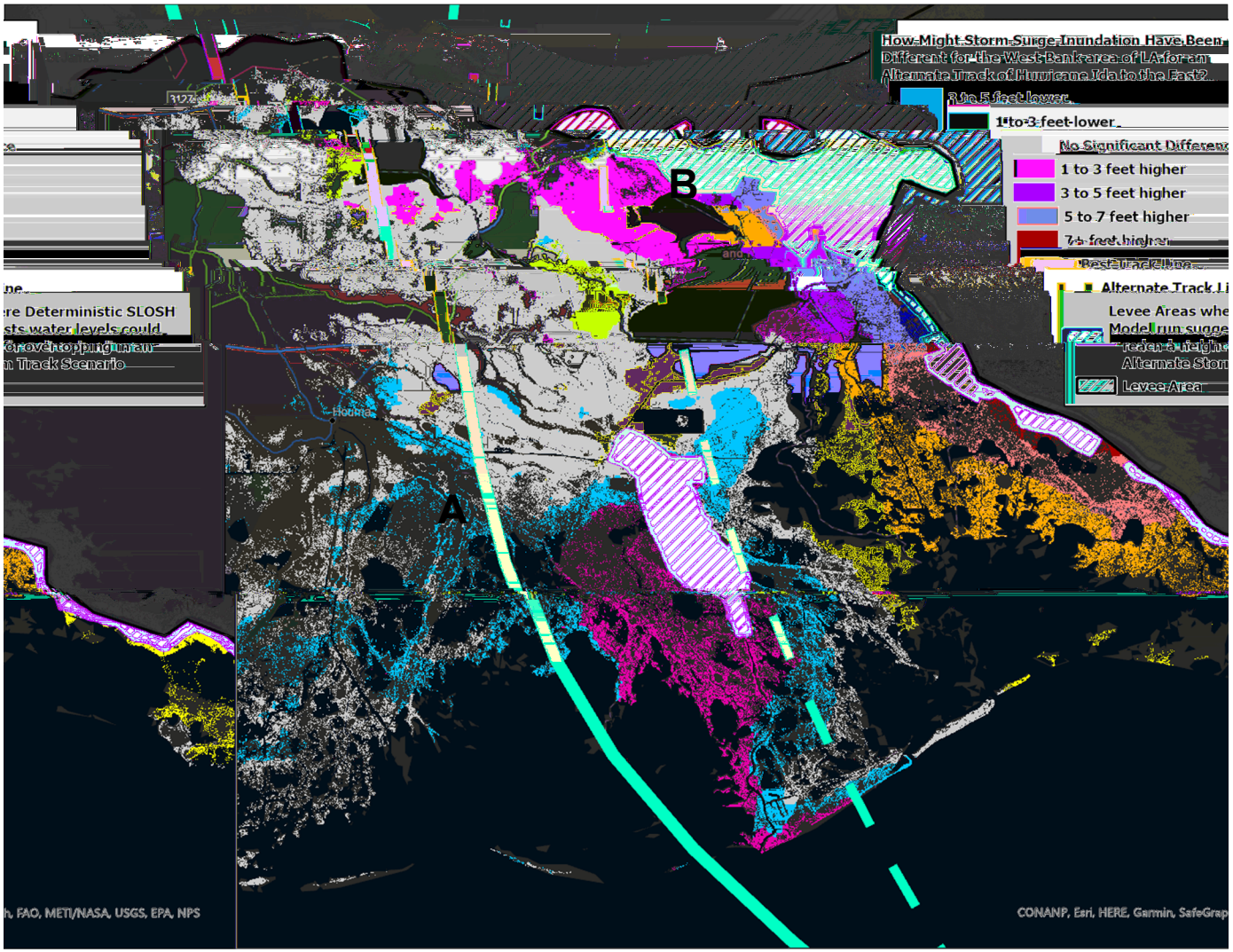

Figure 19. Difference in storm surge inundation produced in southeastern Louisiana to the west of the Mississippi River if Ida had moved onshore 15 n mi farther east than its actual track. Warm colors depict higher water levels, and cool colors depict lower water levels than what actually occurred. Purple hatched areas depict leveed areas where storm surge overtopping would have occurred with Ida's shifted track. **A** is the Larose to Golden Meadow Hurricane Protection System, and **B** is the West Bank Hurricane and Storm Damage Risk Reduction System (HSDRSS).