Weather Forecast Office
Tropical Products & Services

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The appropriate hurricane center (NHC or CPHC) determines the *coastal* tropical storm and/or hurricane watches and warnings (W/Ws).

Local NWS Weather Forecast Offices (WFOs) determine *inland* tropical wind W/Ws as well as W/Ws for most other associated hazards (flooding for example).

Inland offices that do not issue tropical products will issue High Wind headlines in an NPW product in lieu of tropical storm or hurricane W/Ws if conditions warrant.
Communicating the Local Tropical Threat

Pre-Watch Phase

- Briefings, Emails, Social Media, Chat, Weather Stories, Forecast Discussion

Watch / Warning

- HTI and GHWO
  Hurricane Threats and Impacts
  Graphical Hazardous Weather Outlook

- HLS and TCV
  Hurricane Local Statement
  Watches and Warnings

- EWW
  Extreme Wind Warning
### Weather Forecast Office (WFO) Tropical Products

<table>
<thead>
<tr>
<th>Product</th>
<th>Purpose</th>
<th>Timeframe</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TCV</strong></td>
<td>Official Watch/Warning Product for Dissemination</td>
<td>Starts when watches or warnings are issued</td>
</tr>
<tr>
<td>Tropical Cyclone Local Watch / Warning Product</td>
<td>Detailed zone-based product with threats and impacts for all hazards (wind, surge, flooding rain, tornadoes)</td>
<td>NHC TCP must be issued before office TCV can be created (Atlantic and East Pacific)</td>
</tr>
<tr>
<td><strong>HLS</strong></td>
<td>Overview of the storm and a summary of potential impacts and preparedness information for land areas only.</td>
<td>Starts when watches or warnings are issued</td>
</tr>
<tr>
<td>Hurricane Local Statement</td>
<td></td>
<td>WFO TCV must be sent before HLS can be created</td>
</tr>
<tr>
<td><strong>HTI</strong></td>
<td>KML, grid, and graphical depiction of wind, surge, flooding, and tornado threats</td>
<td>Required when TCV is issued. May be sent up to 72 hours prior to onset of tropical storm force winds.</td>
</tr>
<tr>
<td>Hurricane Threats and Impacts</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>EWW</strong></td>
<td>Short duration warning to advise public and partners of onset of major hurricane-force winds.</td>
<td>Only issued for when sustained winds of 115 mph or greater are occurring or expected to occur within an hour.</td>
</tr>
</tbody>
</table>

1 HLS will contain any Watches/Warnings for American Samoa and Guam. Those offices do not issue a TCV product
1 Segment for each NWS Forecast Zone. Has coding to activate NOAA Weather Radio, Emergency Alert System (EAS), and Wireless Emergency Alerts (WEA).

Each Segment has Sections for Each Hazard: Wind, Surge, Flooding, and Tornadoes. Each section has the “deterministic” forecast, conditions to prepare for, and local impacts.

**NWS Zone**

**VTEC**

**Headlines**

**Deterministic Forecast**

**Prepare for This**

**Impacts**

**Wind Hazard**

**Flooding Rain Hazard**

**Tornadoes**
Overview of Storm from the local perspective

Sections Include:
- New information
- Storm Information
- Situation Overview
- Potential Impacts
- Preparedness Actions (not shown in example)

Impacts ordered by Threat

Potential Impacts
- Flooding Rain:
  Potential impacts from the flooding rain are still unfolding across the portions of the Panhandle, Florida Big Bend, southeastern Alabama and southwestern Georgia. Remain well guarded against life-threatening flood waters having possible devastating impacts. If realized, these impacts include:
  - Extreme rainfall flooding may prompt numerous evacuations and rescues.
  - Rivers and tributaries may overwhelmingly over-flow their banks in many places with deep moving water. Small streams, creeks, and ditches may become raging rivers. Flood control systems and barriers may become stressed.
  - Flood waters can enter numerous structures within multiple communities, some structures becoming uninhabitable or washed away. Numerous places where flood waters may cover escape routes, streets and parking lots become rivers of raging water with underpasses submerged. Driving conditions become very dangerous. Numerous road and bridge closures with some weakened or washed out.

Potential impacts from the flooding rain are still unfolding across portions of the Big Bend and southeast Alabama. Remain well guarded against life-threatening flood waters having possible limited to extensive Impacts.

- Wind:
  Potential impacts from the main wind event could begin overnight for portions of the Panhandle and southeast Alabama. Remain well sheltered from dangerous wind having possible significant impacts. If realized, these impacts include:
  - Some damage to roofing and siding materials, along with damage to porches, awnings, carports, and sheds. A few buildings experiencing window, door, and garage door failures. Mobile homes damaged, especially if unanchored. Unsecured lightweight objects become dangerous projectiles.
  - Several large trees snapped or uprooted, but with greater numbers in places where trees are shallow rooted. Several fences and roadway signs blown over.
  - Some roads impassable from large debris, and more within urban or heavily wooded places. A few bridges, canyons, and access routes impassable.
  - Scattered power and communications outages, but more prevalent in areas with above ground lines.

Potential impacts from the main wind event could begin overnight across the western Big Bend of Florida and extreme southeast Georgia. Remain well sheltered from hazardous wind having possible limited impacts.

New Information

Storm Information

Situation Overview
• Reserved for events which truly pose a very significant threat of casualties

• With a category 3 or higher hurricane, issued for imminent onset of, or continuance of, winds greater than 115 mph.

• Extreme tropical cyclone winds expected to occur within an hour.

• Valid for three hours or less.

• Will alert via Wireless Emergency Alerts
• A great access point for local office products and resources.
• Available from the navigation menu on the Local Office (WFO) main page
• Linked from hurricanes.gov when a particular WFO is issuing tropical products
• Consistent look and feel across all tropical offices to make it easier for you to find information.
• If a “Local Briefing” is available, it will be linked on the “Outlook” tab with yellow highlighted text
• “Active Storms” and “Local Products” tabs only available when Advisories are being issued

https://www.weather.gov/srh/tropical?office=wfo
Where wfo = the 3 letter identifier for the WFO
HTI – Hurricane Threats & Impacts

Depicts what you should prepare for – not the deterministic forecast!

Available on the “Threats and Impacts” tab on the NWS Local Office Tropical Web Page
Graphical Hazardous Weather Outlook (GHWO)

Experimental Graphical Hazardous Weather Outlook

Flooding Rain Threat

La Belle
Immokalee
Naples
Fort Lauderdale
Everglades City
Miami
Homestead
Flamingo

Risk Level: Definitions
- Little to no potential for flooding rain.
- Potential for localized flooding rain.
- Potential for moderate flooding rain.
- Potential for major flooding rain.
- Potential for extreme flooding rain.

WFO = the 3 letter identifier for the WFO

https://www.weather.gov/erh/ghwo?wfo=WFO

Experimental Graphical Hazardous Weather Outlook

Excessive Rainfall Risk for Fri/Fri Night

La Belle
Immokalee
Naples
Fort Lauderdale
Everglades City
Miami
Homestead
Flamingo

Risk Level: Definitions
- None: No Excessive Rainfall Risk.
- Limited: Limited Excessive Rainfall Risk. Flooding of water in streets, urban, and poorly drained areas possible.
- Elevated: Elevated Excessive Rainfall Risk. Considerable flooding of streets, urban, and poorly drained areas, potentially impacting structures.
- Significant: Significant Excessive Rainfall Risk. Life-threatening flash-flooding, possible entrapping structures and flooding of many streets and neighborhoods.

WFO = the 3 letter identifier for the WFO
Point & Click Forecast on weather.gov
Post Tropical Cyclone Reports

2022 and earlier: LONG Text Product

2023 and beyond: SHORT Text Product to let users know when new data is available

Simple Website housing readable PDF summaries and downloadable CSV data

Readable summaries AND parsable data

Hard to parse
Not intuitively readable

Local Observations And Impacts From Past Tropical Cyclones

This page provides links to observational data from our local area for tropical cyclone events since 2021.

NOTE: Post-labeled observations are unlikely to sample the most extreme conditions.

2021

- Hurricane Ida
  - Observational data summary
  - Impact report
- Downloadable observational data (CSV format)
  - Wind and Pressure
  - Rainfall
  - Other Levels
  - Storm surge

Post Tropical Cyclone Report...Hurricane Ida
National Weather Service New Orleans LA
1014 PM CDT Fri Sep 10 2021

A readable summary of observations and impacts within the IFO New Orleans County Warning Area for Hurricane Ida can be found here: https://www.weather.gov/media/lix/TropicalEventSummary/2021_Ida.pdf

Comma-Separated Value (CSV) and additional Portable Document Format (PDF) files that include more thorough listings of observations and impact information can be found here: https://www.weather.gov/lix/TropicalEventSummary

NOTE: The data provided are preliminary. They are subject to updates and corrections as appropriate.

$3

Forecaster
Post Tropical Cyclone Reports

Human-Readable Files (PDFs)

**Summary**
- Top 10 lists
- “Quick View” for extremes and other common questions

**Impact Narratives**
- Similar to current PSH narratives
- Fatalities/injuries/evacuations and impacts for each county/parish/island/etc

**Tornado Summaries**
- Survey summary PNS
- More data than currently included in the PSH!

Machine-Readable Files (CSVs)

**Wind and Pressure**
- Peak wind speeds and gusts
- Minimum pressures

**Rainfall**
- Storm total rainfall
- Standardized to 12z-12z

**Water Level**
- Peak Water Levels
- Tide gages, some river gages, and high water marks

**Tornado**
- Limited data for offices that don’t produce PNSs
Post Tropical Cyclone Reports

Parish and County Impacts Associated with Hurricane Ida (2021)

Observations in Comma-Separated Values (CSV) Format

Summary PDF

**POST TROPICAL CYCLONE REPORT**

<table>
<thead>
<tr>
<th>Storm Name</th>
<th>Hurricane Ida</th>
</tr>
</thead>
</table>

| NWS Office | New Orleans/Baton Rouge, LA |

| Begin/End Date | 8/28/2021 - 8/31/2021 |

| Fatalities | 6 - Direct | 25 - Indirect |

| Tornadoes | 17 |

Event Summary

Hurricane Ida made landfall in southeast Louisiana as a category 4 hurricane and brought devastating impacts near the center of its path. Storm surge flooding overtopped numerous local levees, with some waves overtopping the Larose to Golden Meadow levee as well. Ida maintained its intensity well inland from the coast, producing widespread significant wind damage to much of the area.

Note: It is unlikely that the point-based observations provided in this report captured the peak values for the event.

**Highest 10 Land Winds (mph)**

<table>
<thead>
<tr>
<th>Station</th>
<th>Type</th>
<th>Sustained</th>
<th>Gust</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dulac</td>
<td>WWFlow</td>
<td>87</td>
<td>120</td>
</tr>
<tr>
<td>Laplace</td>
<td>PWS</td>
<td>86</td>
<td></td>
</tr>
<tr>
<td>Galliano</td>
<td>FCMR</td>
<td>81</td>
<td>106</td>
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<tr>
<td>1 NW Killona</td>
<td>TTU Sticknet</td>
<td>70</td>
<td>96</td>
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<tr>
<td>Bourg</td>
<td>PWS</td>
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<td></td>
</tr>
<tr>
<td>1 N Live Oak</td>
<td>TTU Sticknet</td>
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<td>86</td>
</tr>
<tr>
<td>Mandeville</td>
<td>WWFlow</td>
<td>63</td>
<td>96</td>
</tr>
<tr>
<td>Weggaman</td>
<td>WWFlow</td>
<td>63</td>
<td>80</td>
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<tr>
<td>4 J S Vacherie</td>
<td>TTU Sticknet</td>
<td>61</td>
<td>77</td>
</tr>
<tr>
<td>2 E Receland</td>
<td>TTU Sticknet</td>
<td>60</td>
<td>83</td>
</tr>
</tbody>
</table>

*Anemometer heights < 20 m*
Thank you from the National Weather Service Weather Forecast Offices!

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