

**IMPACTS FOR D7 (through next 5 days)**

**Winds – Moderate**

**Storm Surge – None**

**Rainfall/Flash Flooding – Low**

**Tornadoes – None**

**Waves - Extreme**

# HURRICANE LEE BRIEFING

8:00 AM EDT

Thursday, September 7, 2023

Prepared by:

**Andrew Hagen**

*Tropical Analysis and Forecast Branch  
NWS National Hurricane Center*

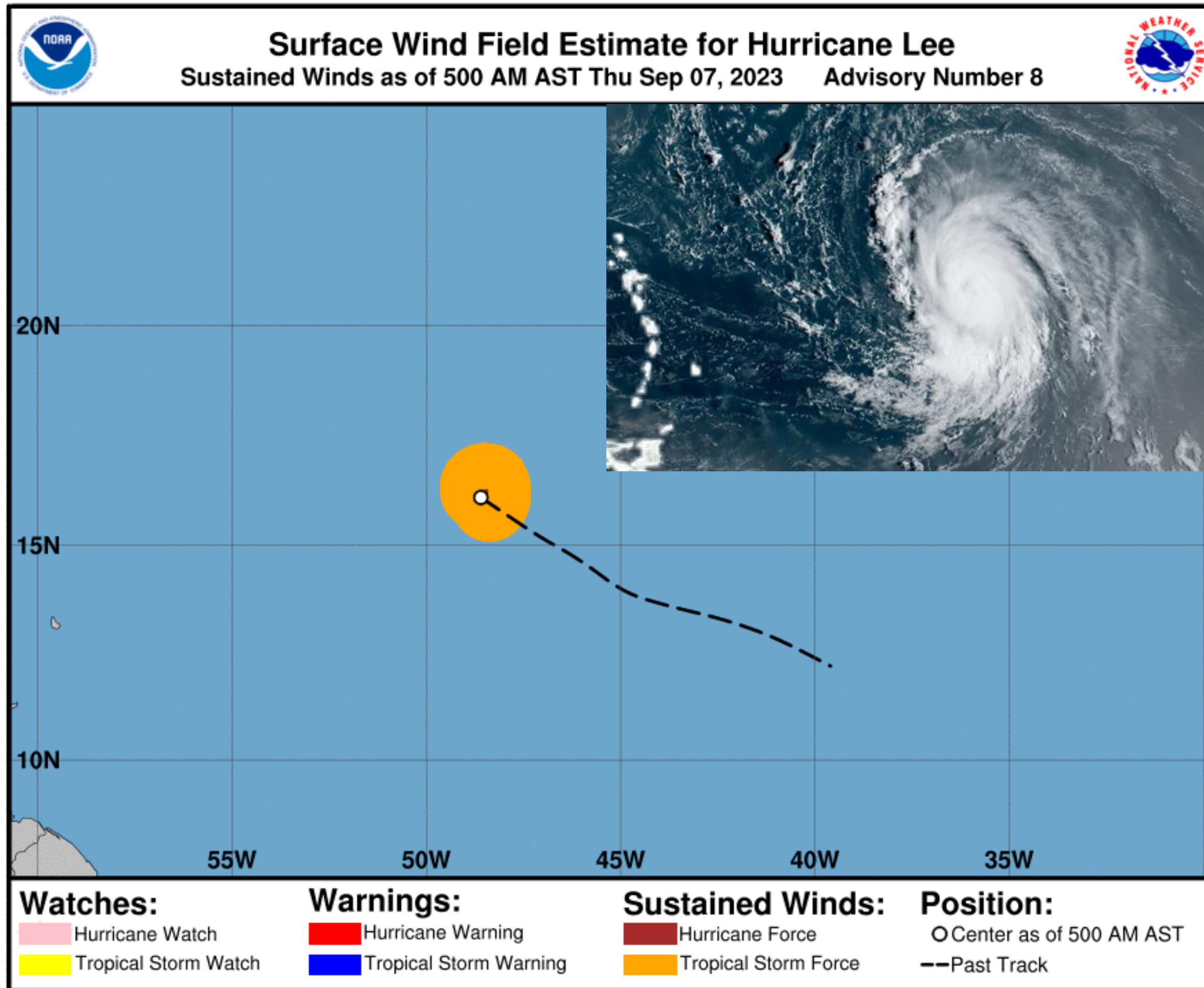


# Situation Overview

Hurricane Lee



Tropical Analysis and Forecast Branch  
NWS National Hurricane Center



**...LEE FORECAST TO RAPIDLY STRENGTHEN...**

**...LARGE SWELLS LIKELY TO REACH LESSER ANTILLES, VIRGIN ISLANDS AND PUERTO RICO THROUGH THE WEEKEND...**

Summary of 500 AM EDT...0900 UTC...Info

Location... 16.1N 48.6W

About 840 nm...E of northern Leeward Islands

Maximum Sustained Winds...70 kt

Present Movement... WNW or 300 degrees at 11 kt

Minimum Central Pressure... 989 mb...29.21 in.

Peak Seas: 30 ft

Size: 64 KT..... 15NE 0SE 0SW 0NW.

50 KT..... 40NE 30SE 20SW 30NW.

34 KT..... 80NE 70SE 50SW 70NW.

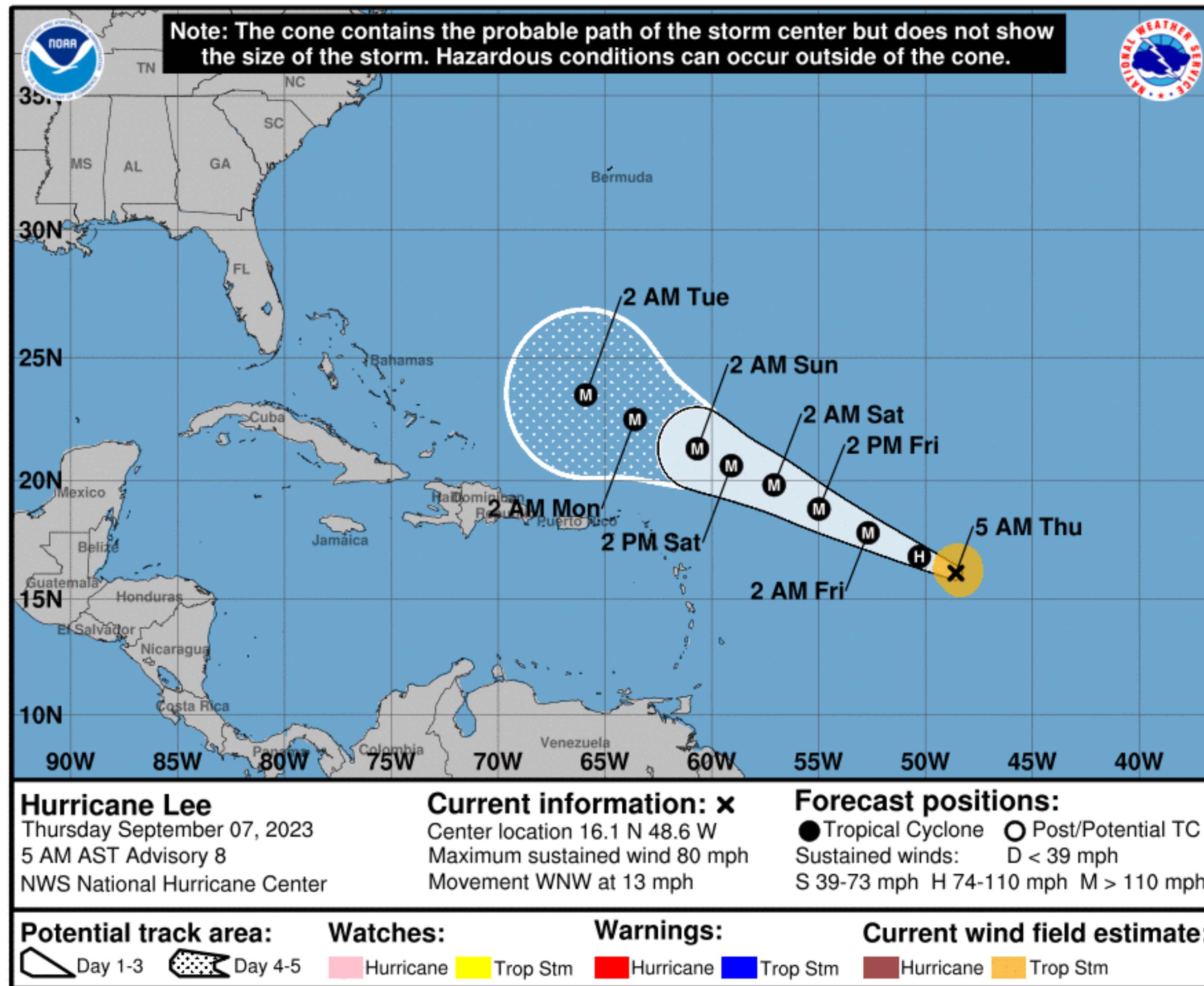
12 FT SEAS...180NE 120SE 90SW 120NW.

# Forecast Information

## Hurricane Lee



Tropical Analysis and Forecast Branch  
NWS National Hurricane Center



- Lee is forecast to strengthen to a major hurricane by early Fri and continue at major hurricane strength through 5 days.
- The core of Lee will pass north of the Leeward Islands, Virgin Islands and Puerto Rico, as the hurricane continues moving WNW at about the same speed.
- Current center forecast positions through the next 5 days (if applicable) illustrated by dots
- White swath of potential track error added to each side of the forecast track through day 3
- Hatched swath of potential track error added to each side of the forecast track days 4-5

\*\* Swaths are calculated using average track errors and actual track may be well inside, or possibly outside the potential track areas indicated.

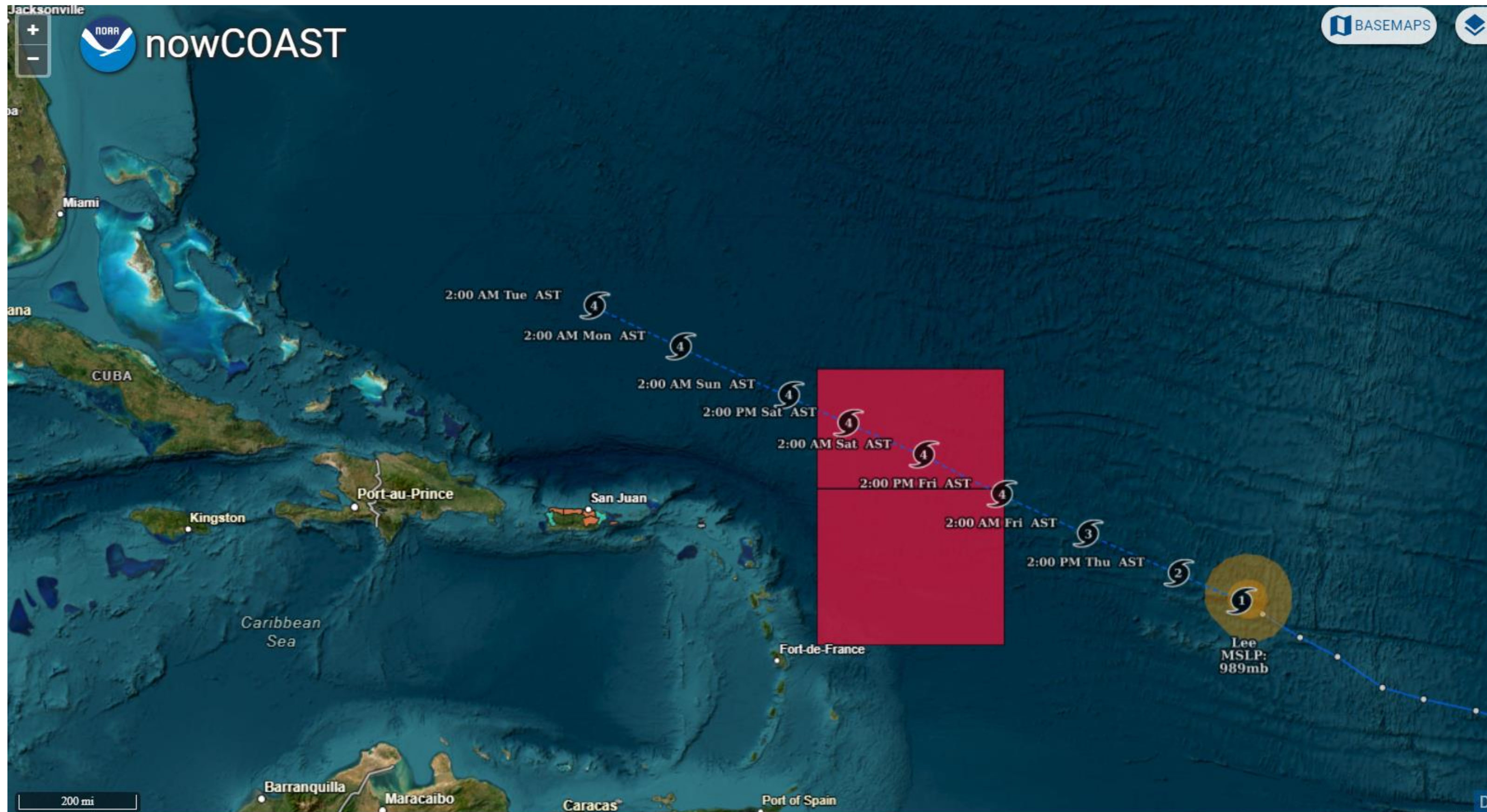
**NOTE:** Do not focus on the exact track. Impacts can occur well outside the area enclosed by the cone.

# Hazards Map

Hurricane Lee



Tropical Analysis and Forecast Branch  
NWS National Hurricane Center



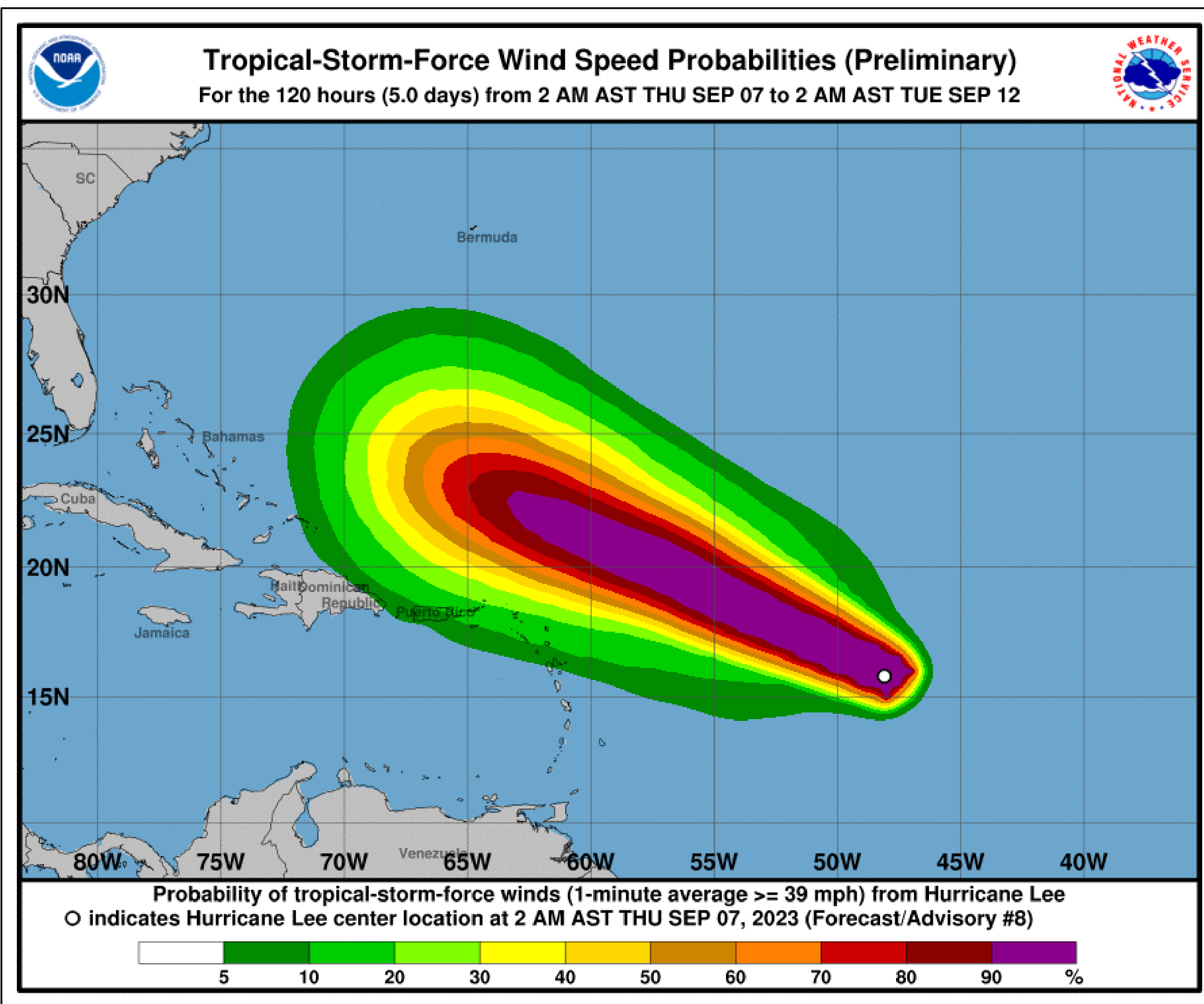
 Hurricane Warning

# T.S. Wind Speed Probabilities

Hurricane Lee



Tropical Analysis and Forecast Branch  
NWS National Hurricane Center



- Ponce, PR – 10% (-5%)
- Aguadilla, PR – 10% (-5%)
- San Juan, PR – 10% (-5%)
- Vieques, PR – 15% (-5%)
- St Thomas – 15% (-10%)
- St John – 15% (-10%)
- St Croix – 10% (-10%)
- St Maarten – 20% (-10%)

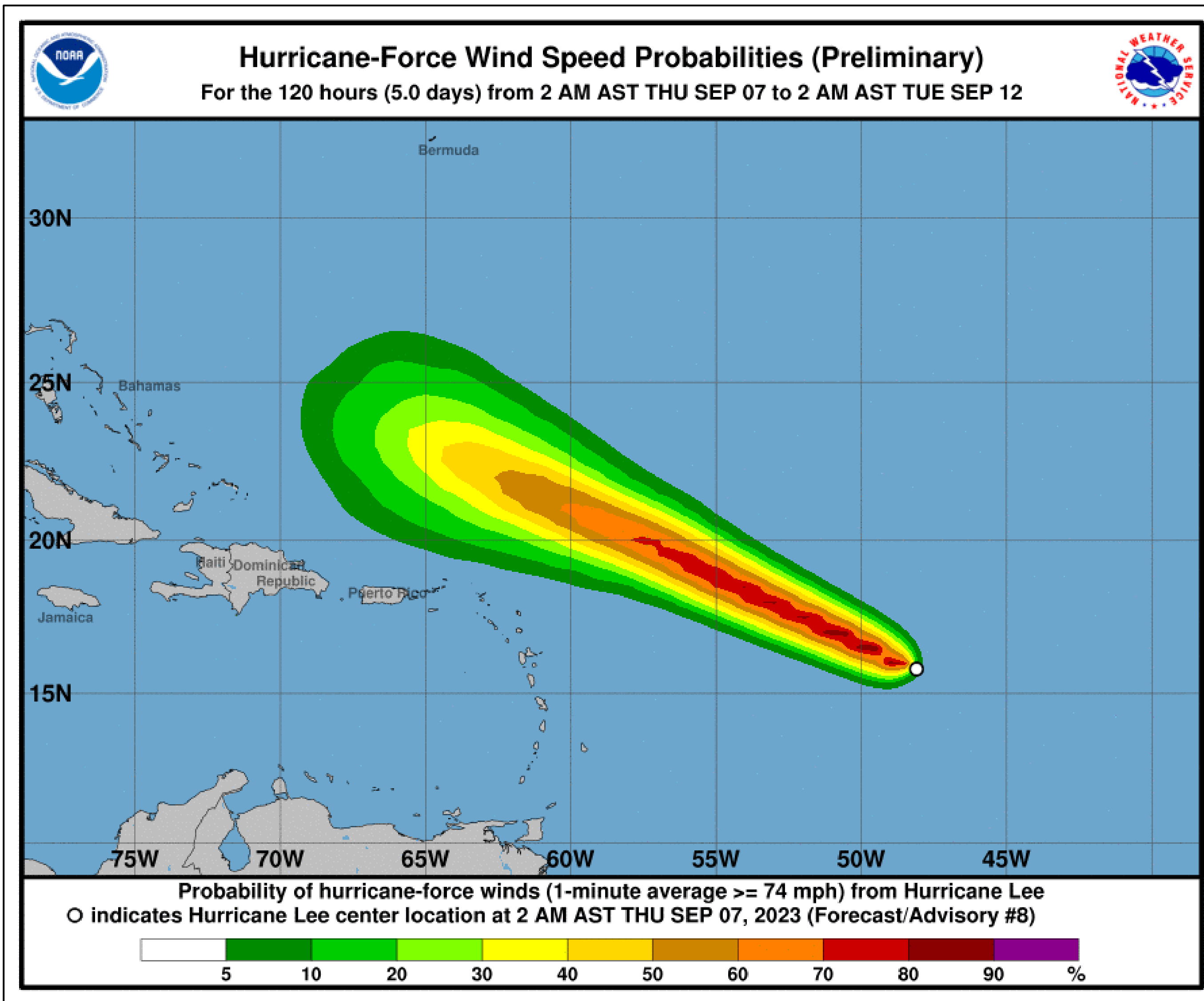
- Probabilities of sustained tropical storm force winds (34 kt to 63 kt) over the next 5 days, based off this cyclone's wind radii and track.
- Clear or dark green are the lowest chances of 0-30%.
- Yellow to orange is 31-70%
- Red through purple are the highest probabilities of 71%-100%
- See the color bar below the image for more details.

# Hurricane Wind Speed Probabilities



Tropical Analysis and Forecast Branch  
NWS National Hurricane Center

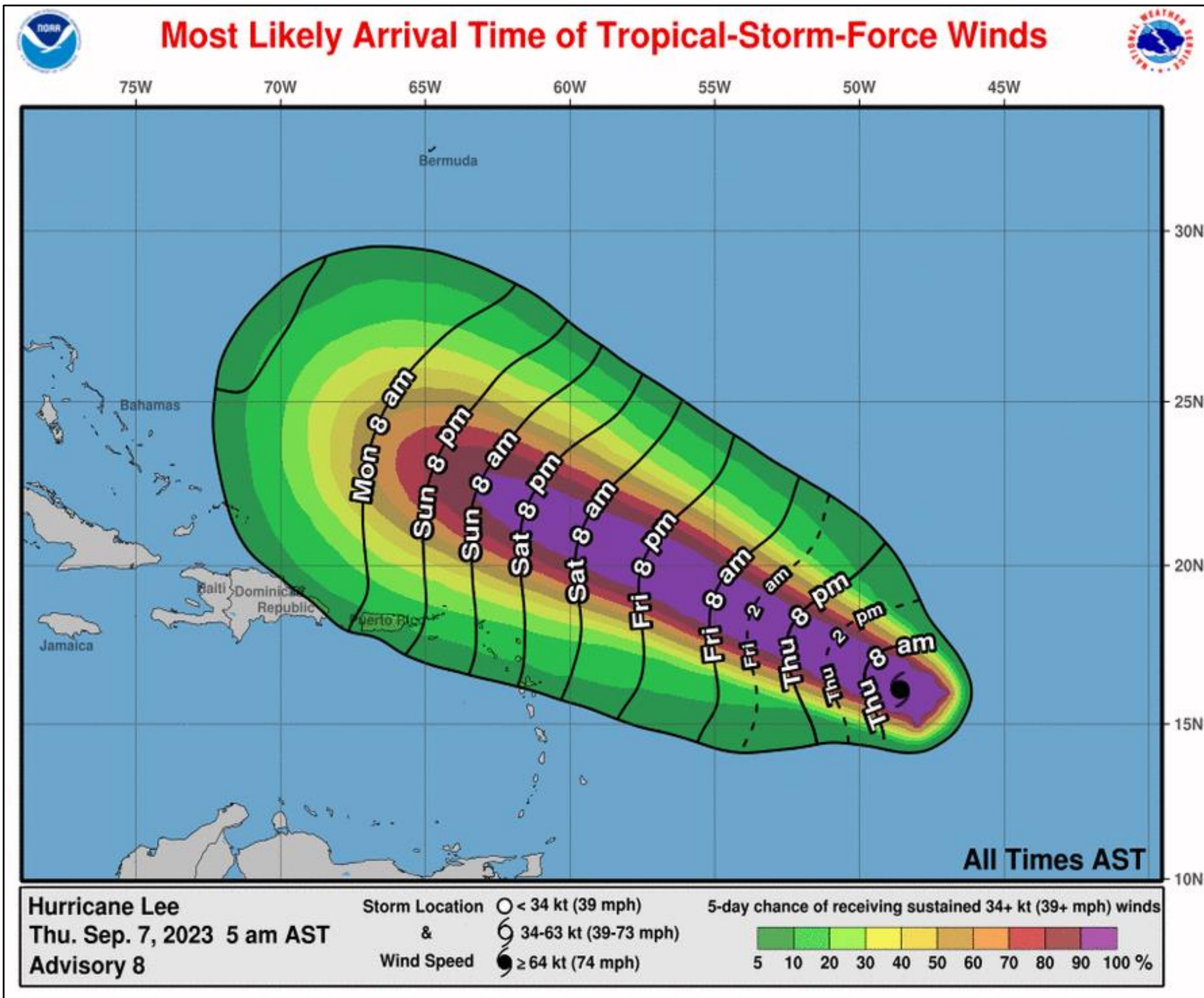
## Hurricane Lee



- San Juan – 0% (-5%)
  - Vieques – 0% (-5%)
  - St Thomas – 0% (-5%)
  - St John – 0% (-5%)
  - St Croix – 0% (-5%)
- Probabilities of sustained hurricane force winds (64 kt +) over the next 5 days, based off this cyclone's wind radii and track.
  - Clear or dark green are the lowest chances of 0-30%.
  - Yellow to orange is 31-70%
  - Red through purple are the highest probabilities of 71%-100%
  - See the color bar below the image for more details.



## Hurricane Lee



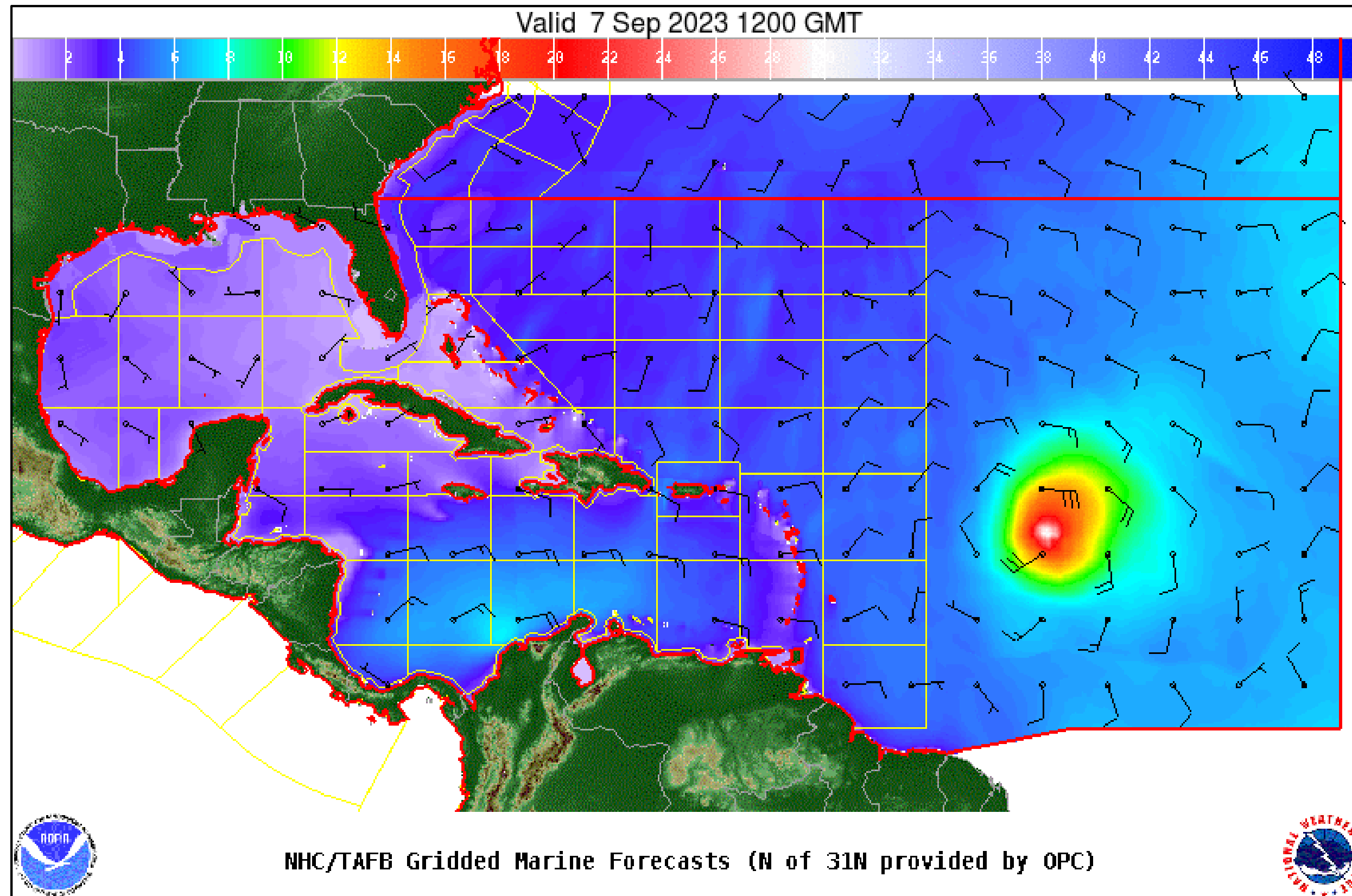
- Leeward Islands – Sat afternoon
- USVI – Sun afternoon
- Puerto Rico – Sun Evening
  
- The most likely time of arrival of Tropical Storm Force Winds (34kt to 63 kt) for this cyclone based off the current track and wind radii.
  
- Clear or dark green are the lowest chances of 0-30%.
  
- Yellow to orange is 31-70%
  
- Red through purple are the highest probabilities of 71%-100%
  
- See the color bar below the image for more details.

# Wind And Waves

Hurricane Lee



Tropical Analysis and Forecast Branch  
NWS National Hurricane Center



## Current Conditions

8 am EDT Thursday, Sep 7

Peak Winds: 70 kt

Peak Seas: 30 ft

- Wave heights are in feet



Significant Wave Height (ft)

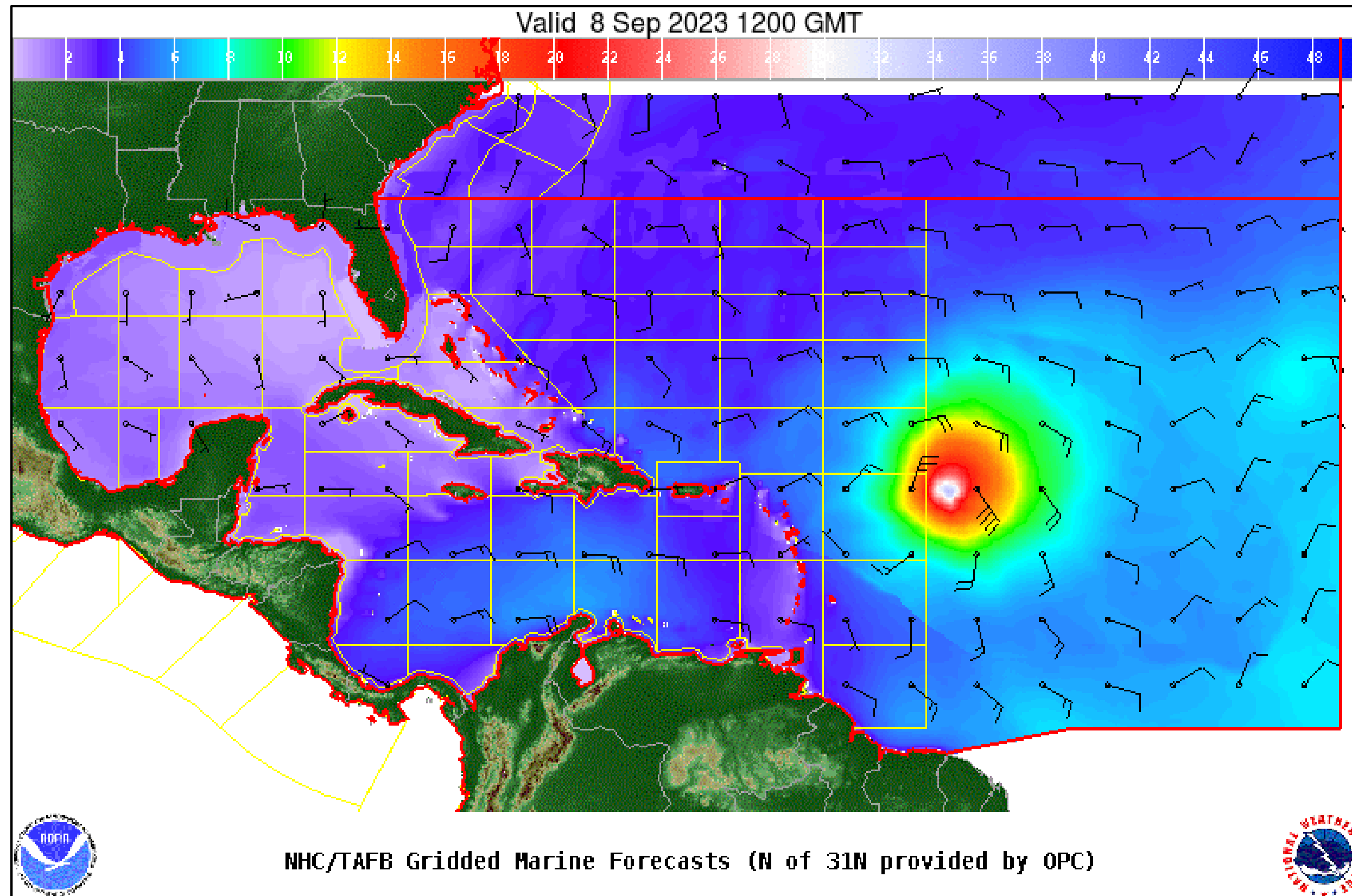


# Wind And Waves

## Hurricane Lee



Tropical Analysis and Forecast Branch  
NWS National Hurricane Center



### 24 Hour Forecast

8 am EDT Friday, Sep 8

Peak Winds: 105 kt

Peak Seas: 35 ft

- Wave heights are in feet



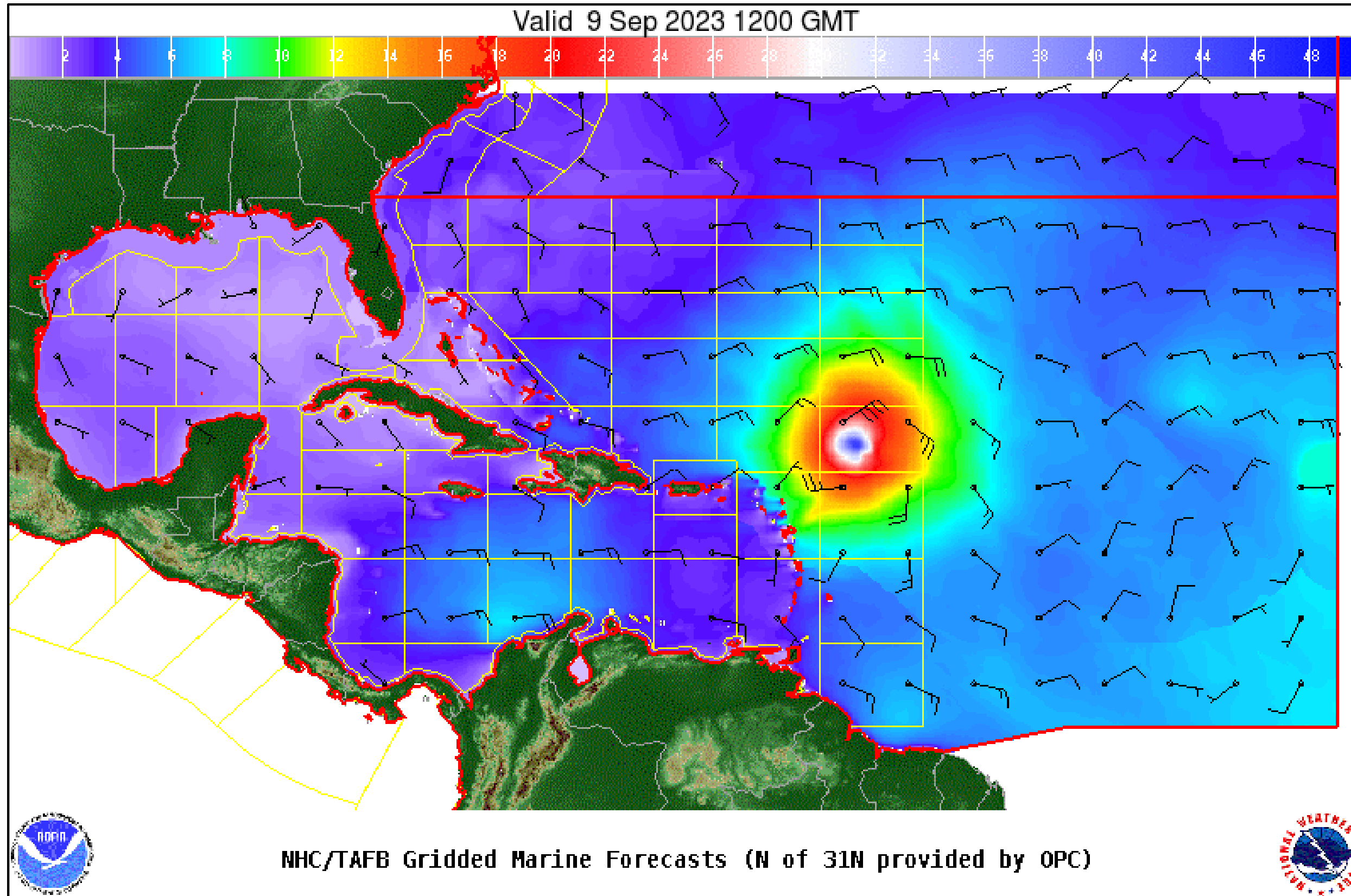
Significant Wave Height (ft)

# Wind And Waves

## Hurricane Lee



Tropical Analysis and Forecast Branch  
NWS National Hurricane Center



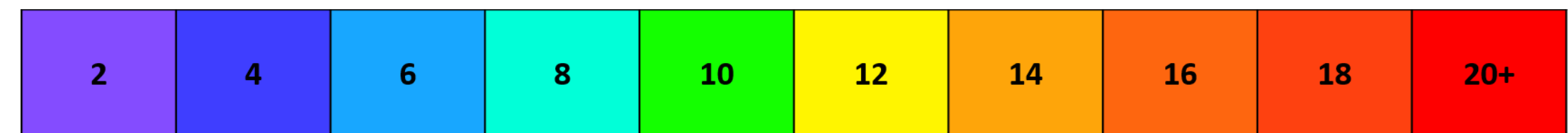
48 Hour Forecast

8 am EDT Saturday, Sep 9

Peak Winds: 130 kt

Peak Seas: 40 ft

- Wave heights are in feet



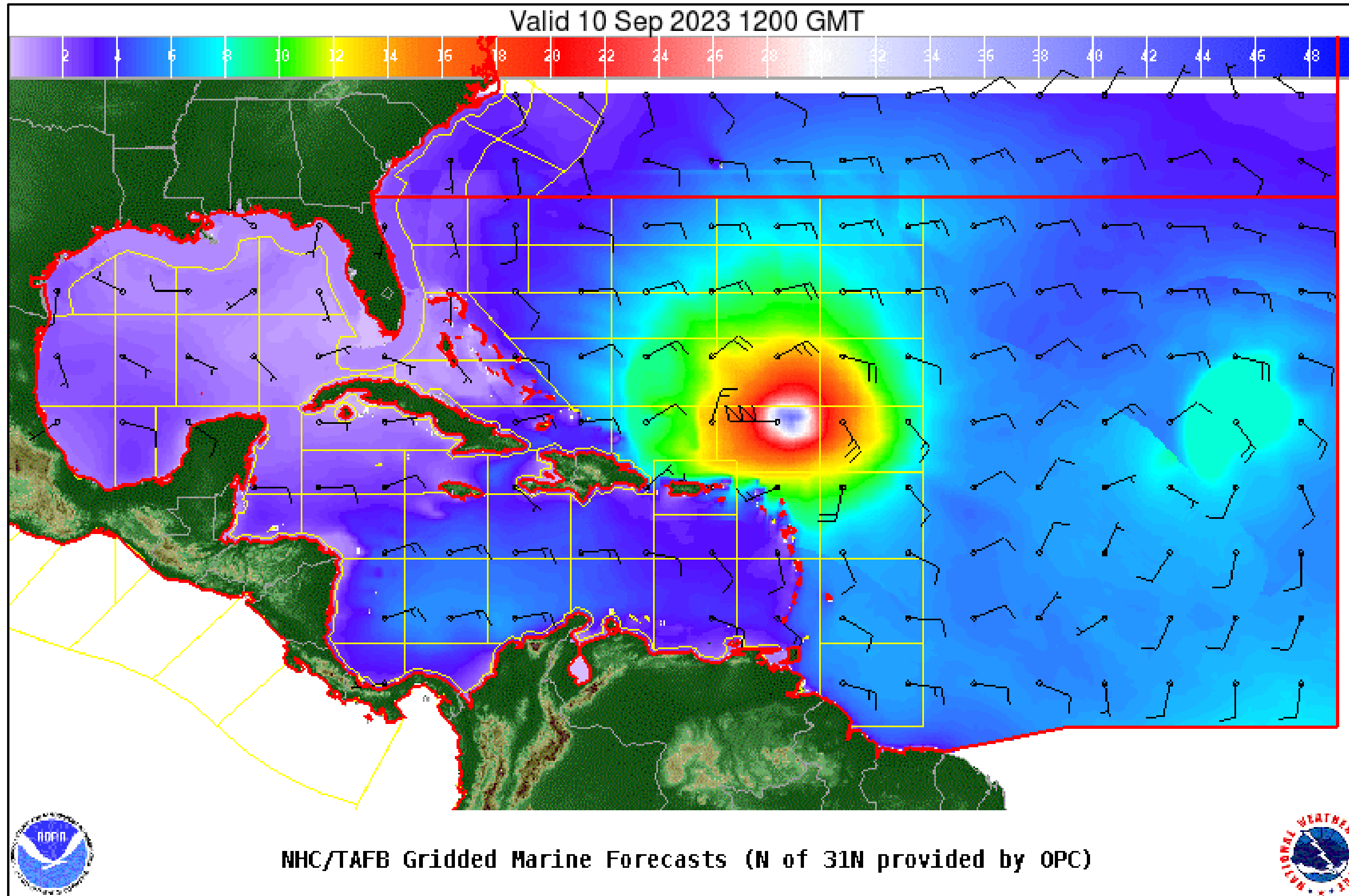
Significant Wave Height (ft)

# Wind And Waves

## Hurricane Lee



Tropical Analysis and Forecast Branch  
NWS National Hurricane Center



### 72 Hour Forecast

8 am EDT Sunday, Sep 10

Peak Winds: 135 kt

Peak Seas: 45 ft

- Wave heights are in feet



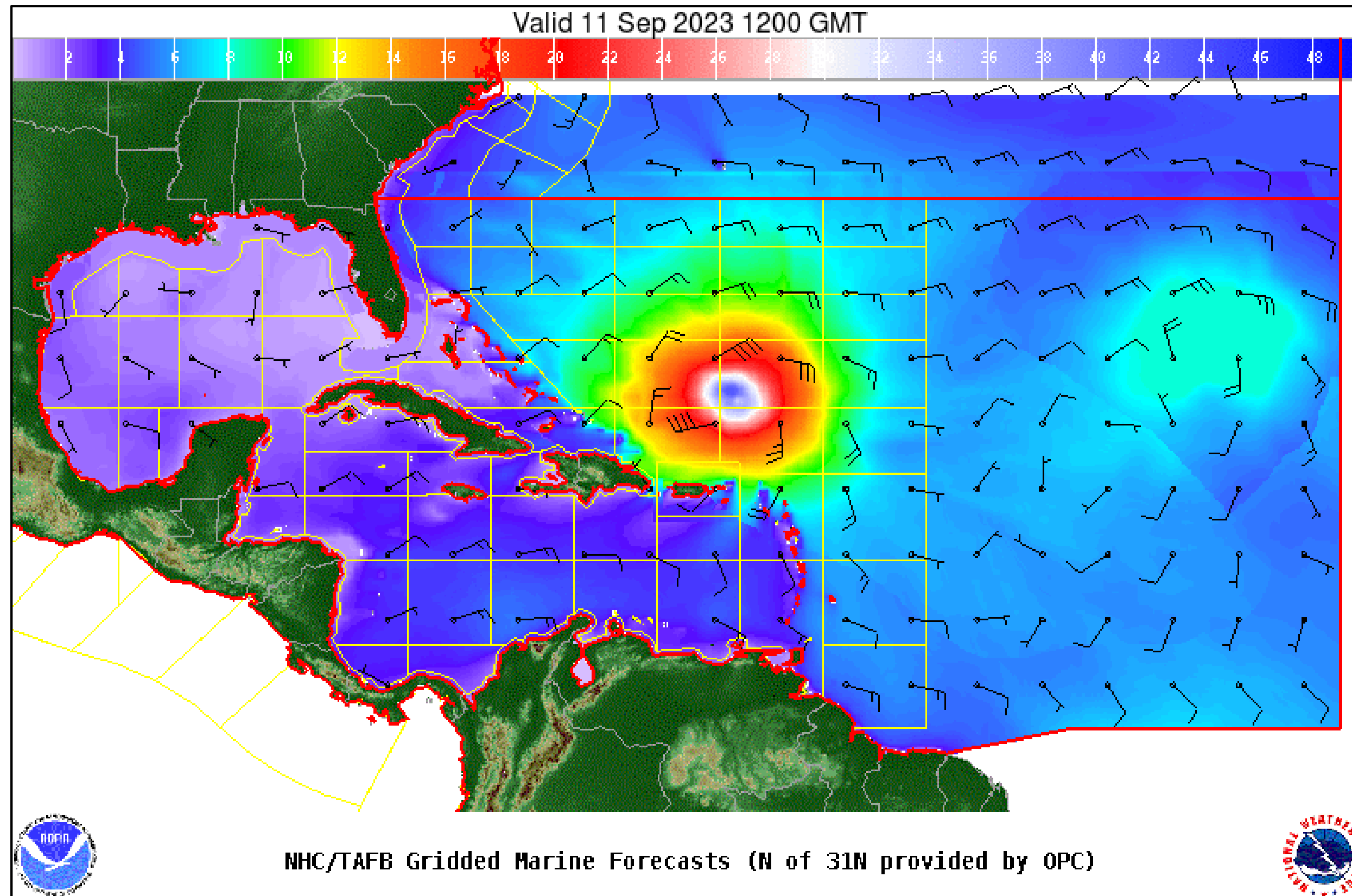
Significant Wave Height (ft)

# Wind And Waves

## Hurricane Lee



Tropical Analysis and Forecast Branch  
NWS National Hurricane Center



96 Hour Forecast

8 am EDT Monday, Sep 11

Peak Winds: 125 kt

Peak Seas: 40 ft

- Wave heights are in feet



Significant Wave Height (ft)

# Expected Storm Total Rainfall

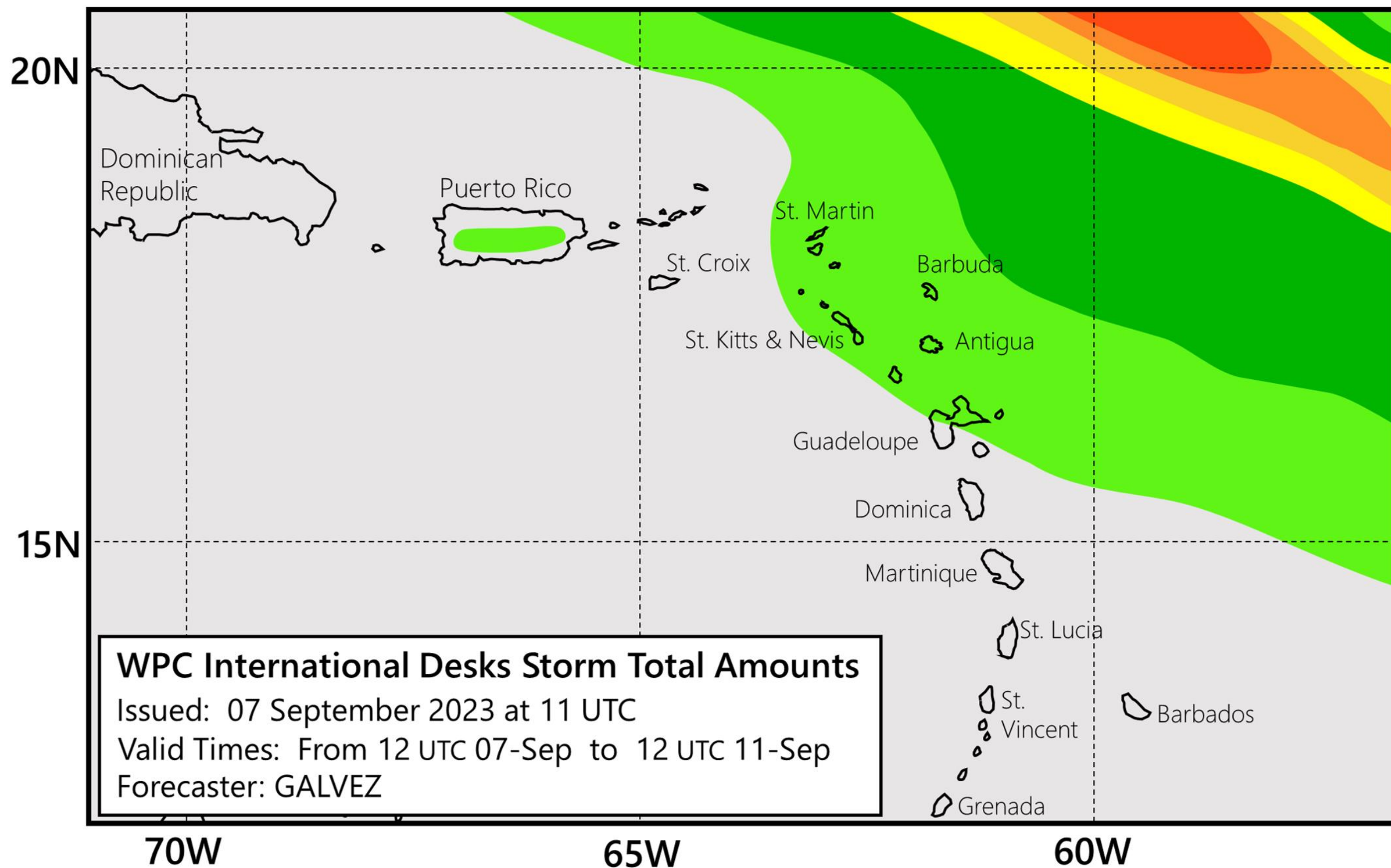
Hurricane Lee

Images from NWS Weather Prediction Center



Tropical Analysis and Forecast Branch  
NWS National Hurricane Center

## Hurricane Lee Total Rainfall



Rainfall	
inches	mm
30+	750+
20-30	500-750
16-20	400-500
12-16	300-400
8-12	200-300
6-8	150-200
4-6	100-150
2-4	50-100
1-2	25-50

Lower Confidence

**NOTE**  
This forecast is for planning purposes. A detailed official forecast will be issued by the respective National Hydro Meteorological Service.


Rainfall valid through Monday morning

# Key Messages

## Hurricane Lee




Tropical Analysis and Forecast Branch  
NWS National Hurricane Center



### Key Messages for Hurricane Lee

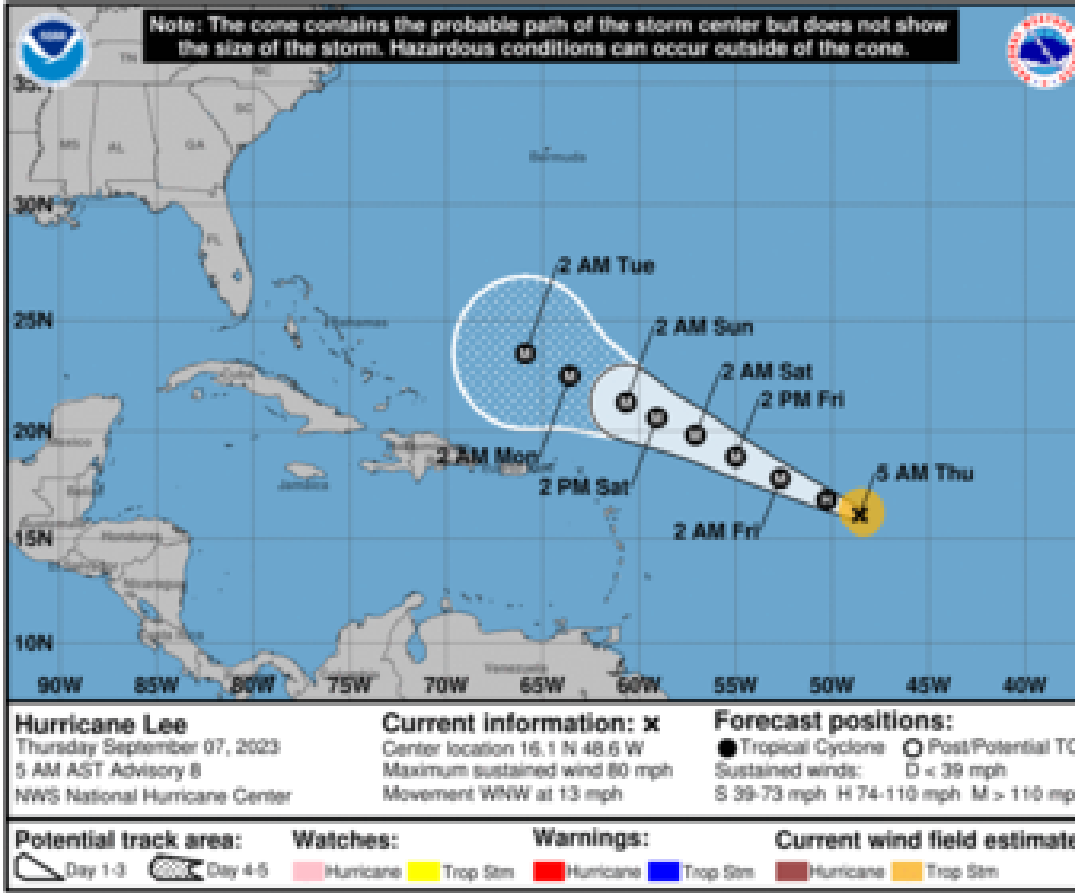
Advisory 8: 5:00 AM AST Thu Sep 07, 2023



1. Lee is forecast to become a major hurricane by early Friday, with its core moving north of the northern Leeward Islands, the Virgin Islands, and Puerto Rico this weekend into early next week. There is the potential for tropical storm conditions to occur on some of these islands over the weekend, and interests there should monitor future updates to Lee's forecast.

2. Swells generated by Lee are expected to reach portions of the Lesser Antilles on Friday, and the British and U.S. Virgin Islands, Puerto Rico, Hispaniola, the Bahamas, and Bermuda this weekend. These swells are likely to cause life-threatening surf and rip current conditions.

For more information go to [hurricanes.gov](https://hurricanes.gov)



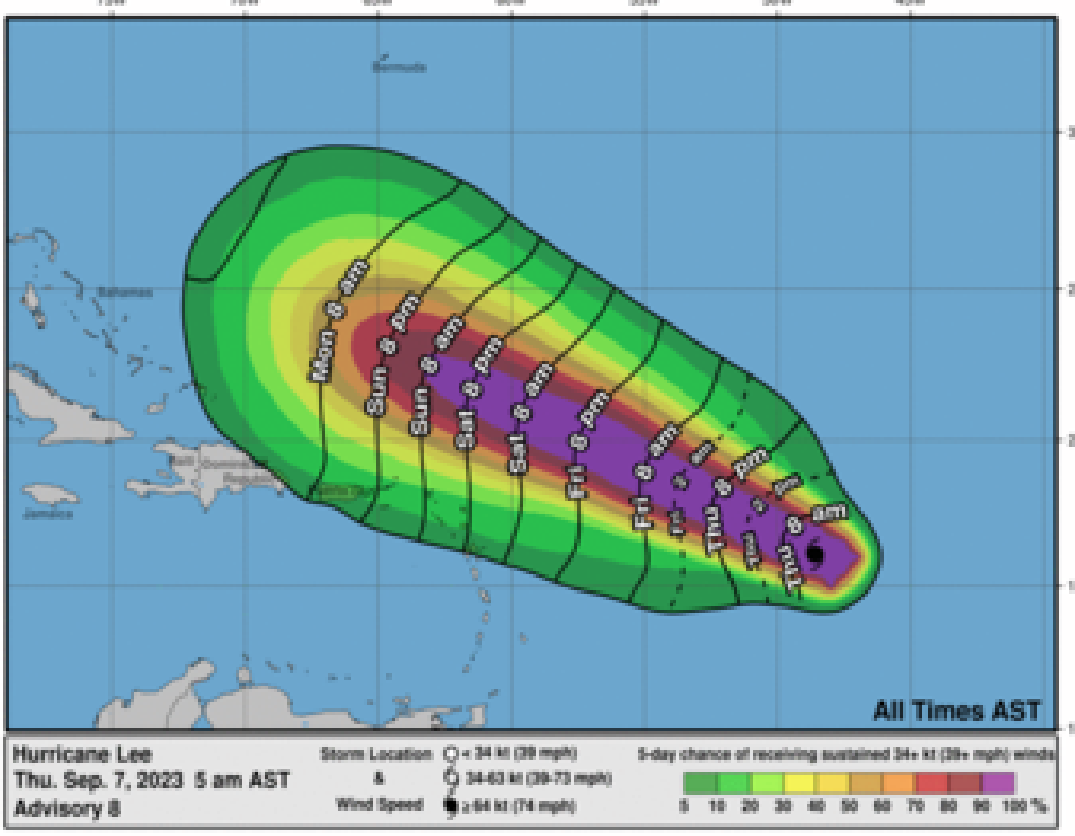
**Hurricane Lee**  
Thursday September 07, 2023  
5 AM AST Advisory 8  
NWS National Hurricane Center

**Current information: x**  
Center location 16.1 N 48.6 W  
Maximum sustained wind 80 mph  
Movement WNW at 13 mph

**Forecast positions:**  
● Tropical Cyclone ○ Post-Potential TC  
Sustained winds: ○ < 39 mph  
S 39-73 mph H 74-110 mph M > 110 mph

**Potential track area:** Day 1-3 Day 4-5  
**Watches:** Hurricane Trop Stm  
**Warnings:** Hurricane Trop Stm  
**Current wind field estimate:** Hurricane Trop Stm

**Most Likely Arrival Time of Tropical-Storm-Force Winds**



**Hurricane Lee**  
Thu, Sep. 7, 2023 5 am AST  
Advisory 8

Storm Location ○ = 34 kt (39 mph)  
○ = 34-43 kt (39-73 mph)  
○ = 44 kt (74 mph)

5-day chance of receiving sustained 34+ kt (39+ mph) winds  
5 10 20 30 40 50 60 70 80 90 100 %

## Marine Key Messages:

- 1) Very large waves within 240 nm N semicircle and 150 nm S semicircle of Lee's Path
- 2) See Key Message #2 (left) for info about large swells



# HURRICANE LEE BRIEFING

You can contact the Tropical Analysis and Forecast Branch at  
305-229-4424

*The Next Briefing Will Be:  
Friday 8:15 AM EDT*

*You can always find get the latest graphics and information for this storm at [www.hurricanes.gov](http://www.hurricanes.gov)*



NHC\_TAFB

[www.nhc.noaa.gov](http://www.nhc.noaa.gov)