



Cody Dunne

Northeastern University

DESIGN RULES OF THUMB

Feel free to interrupt with
questions!

CHECKING IN

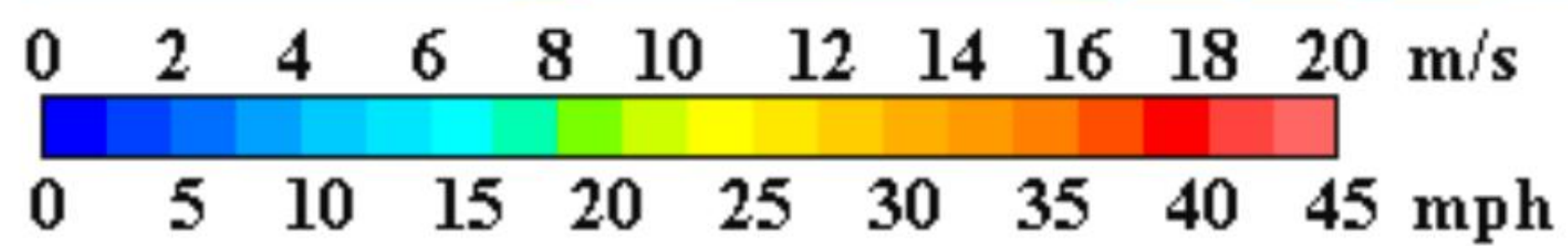
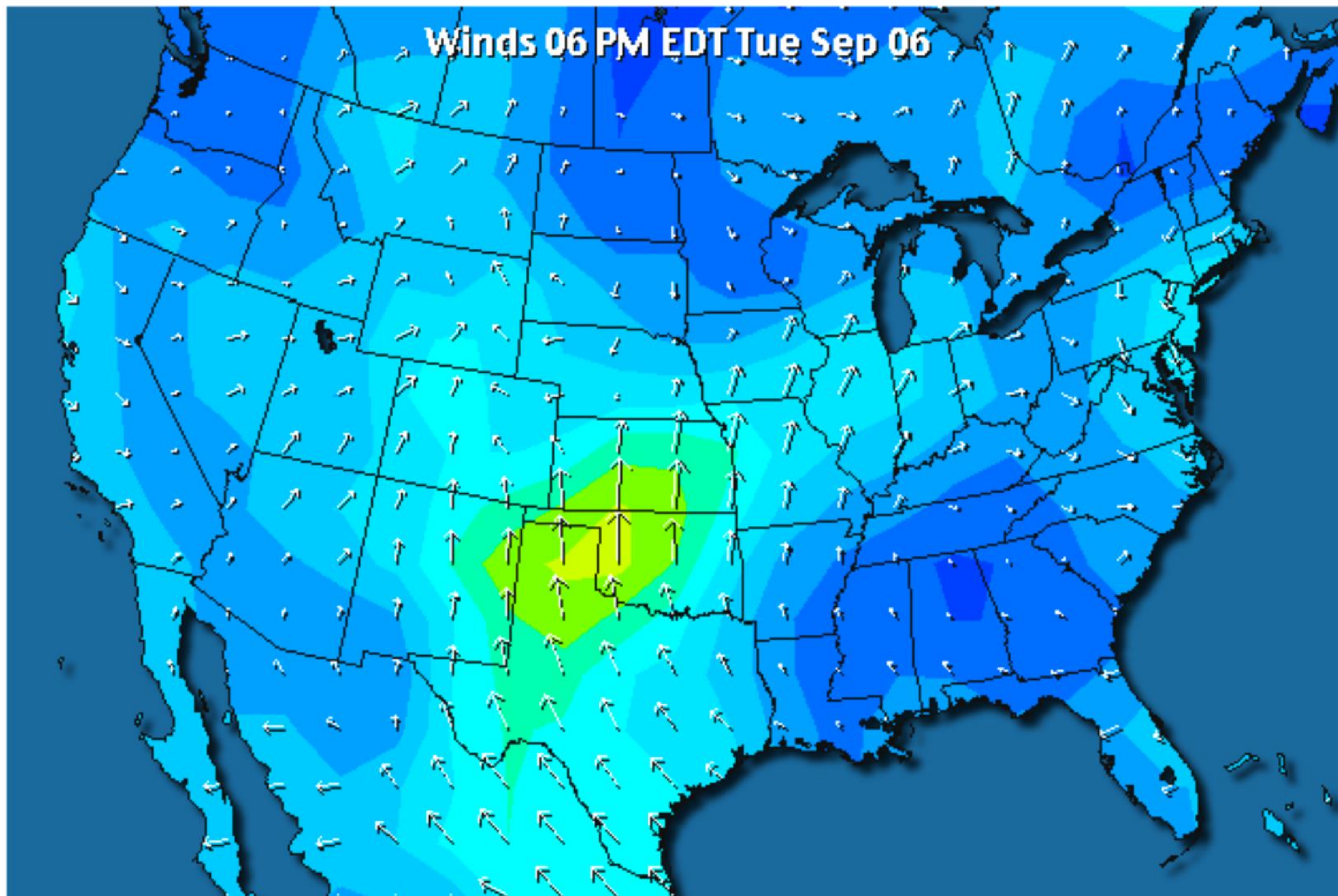
READING QUIZ

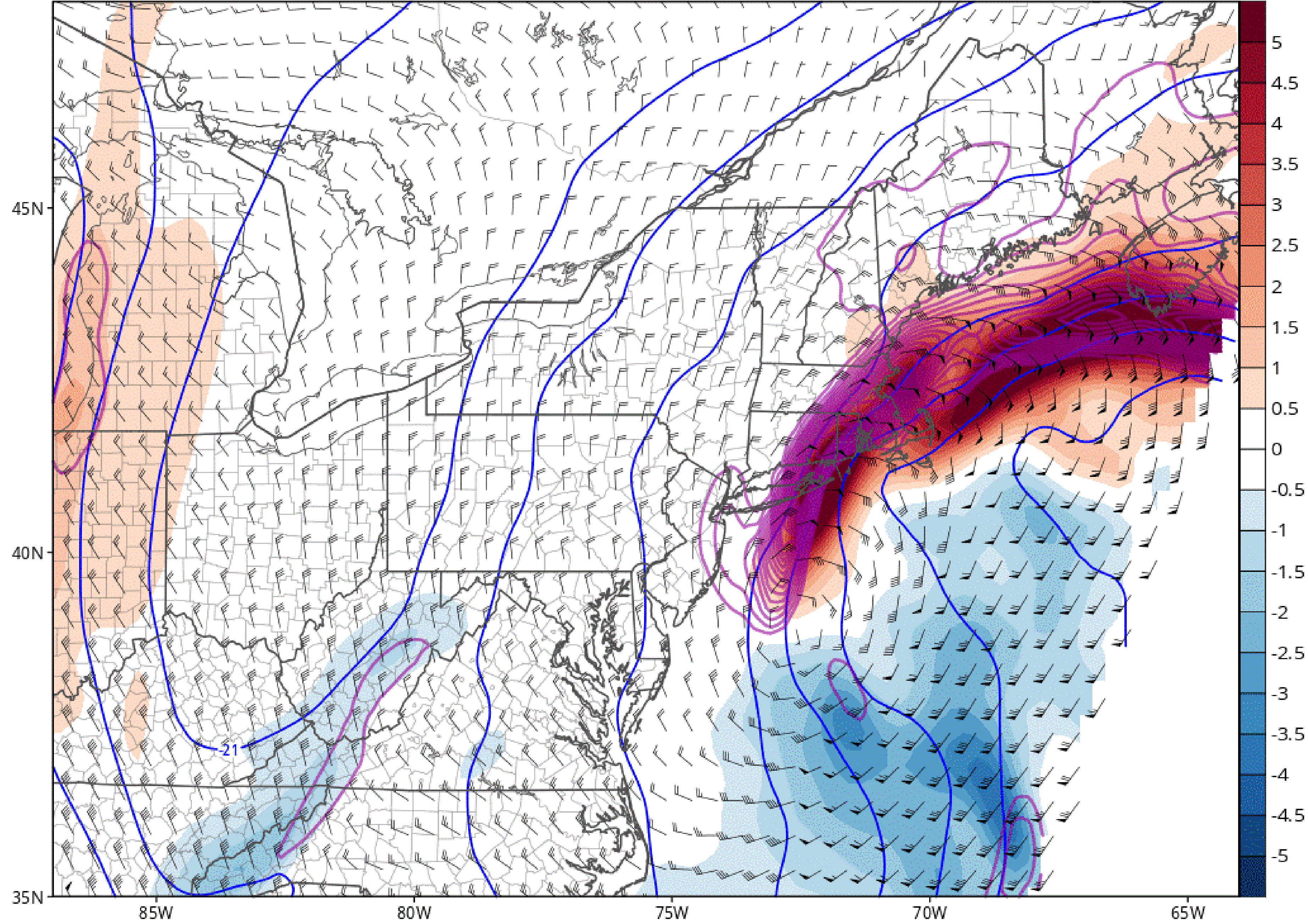
6 min

Hall of Fame or Hall of Shame



Prof. Krzysztof Gajos





wind map

past patterns

<previous next>

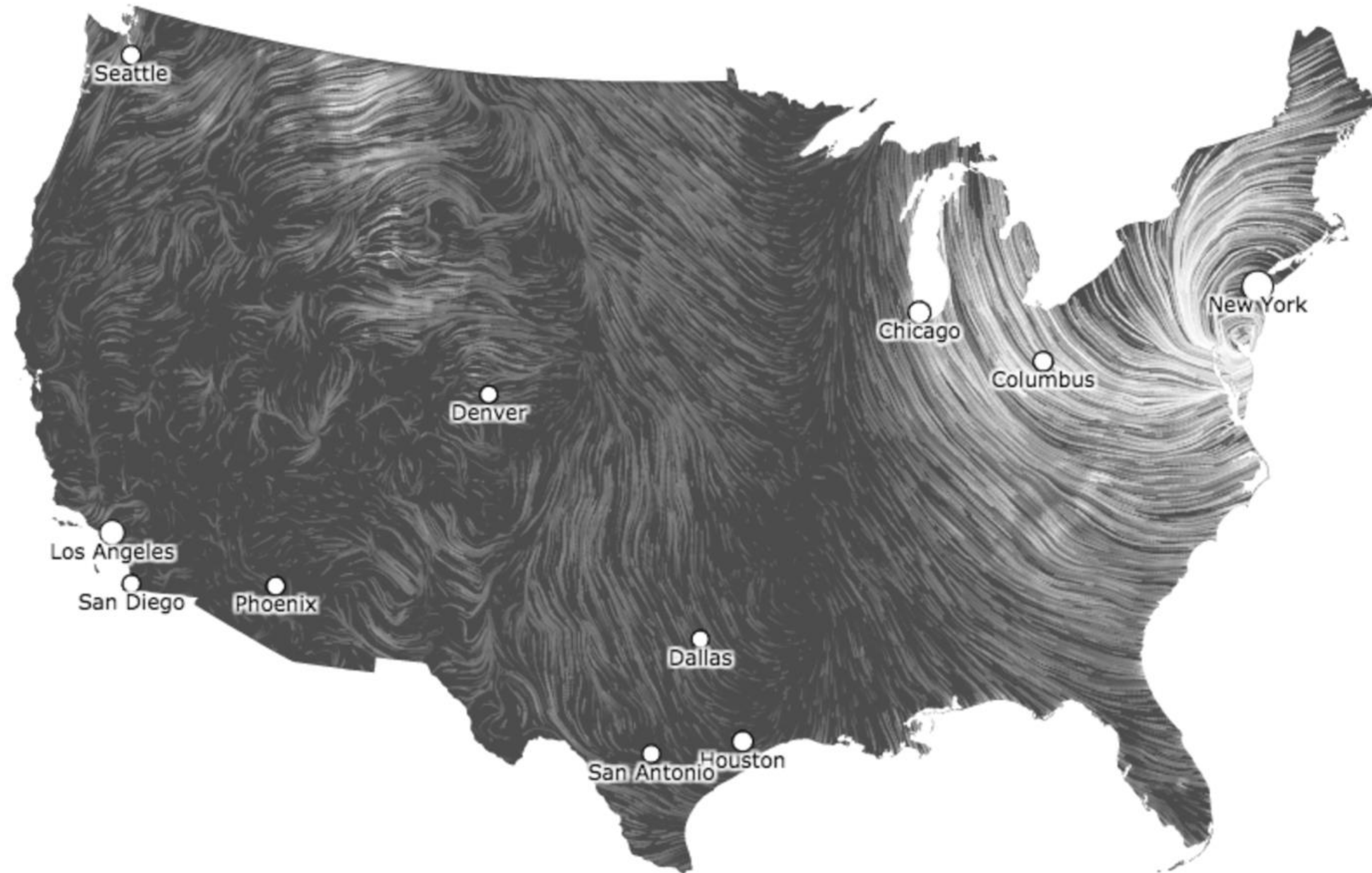
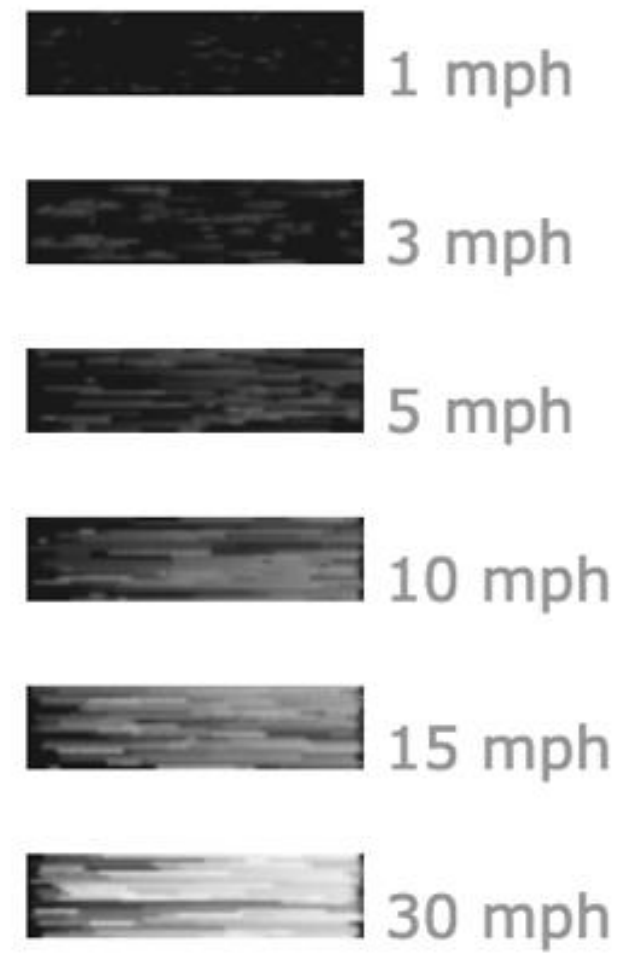
October 29, 2012

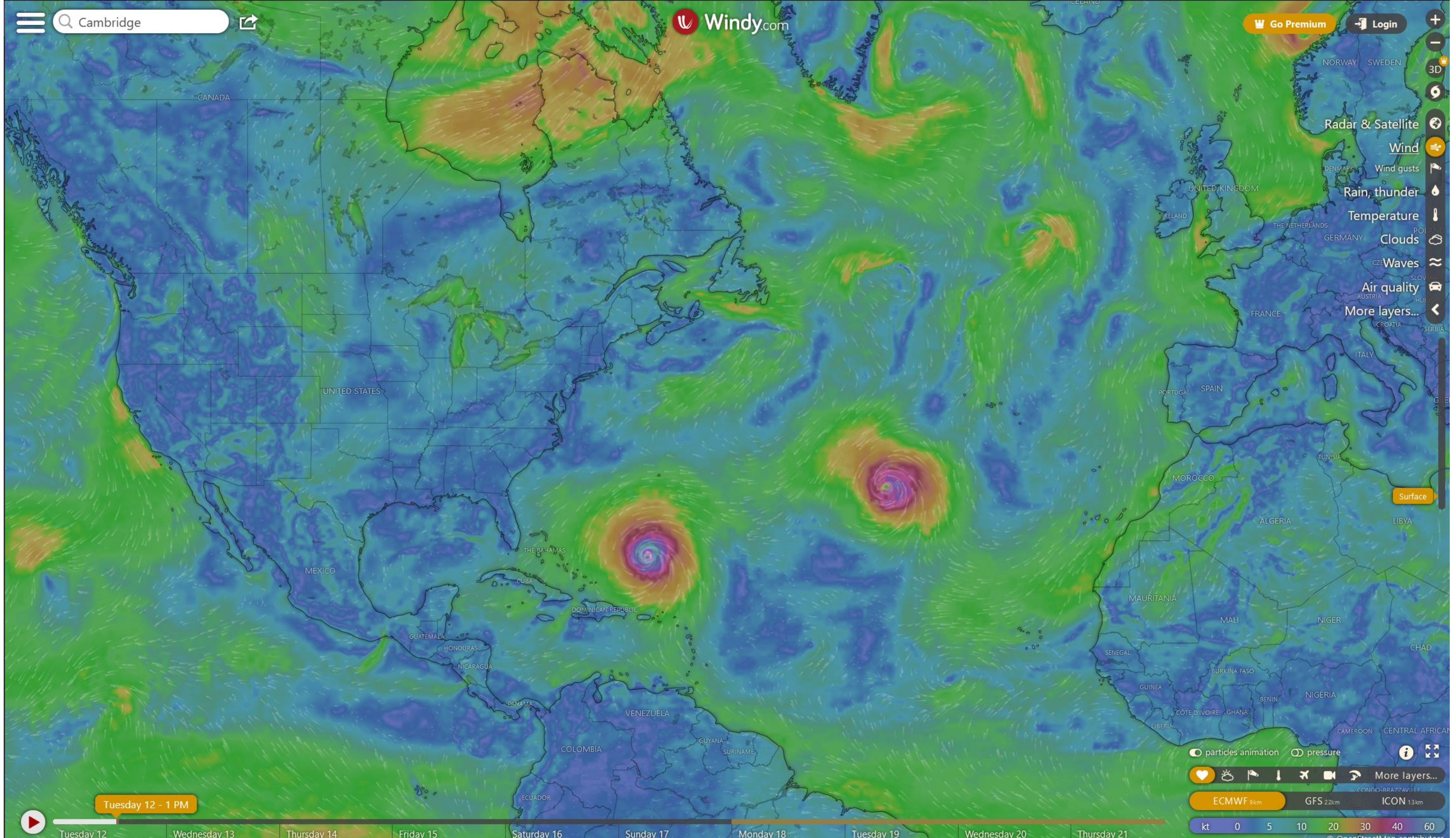
8:59 pm EST

(time of forecast download)

top speed: **45.1 mph**

average: **9.4 mph**



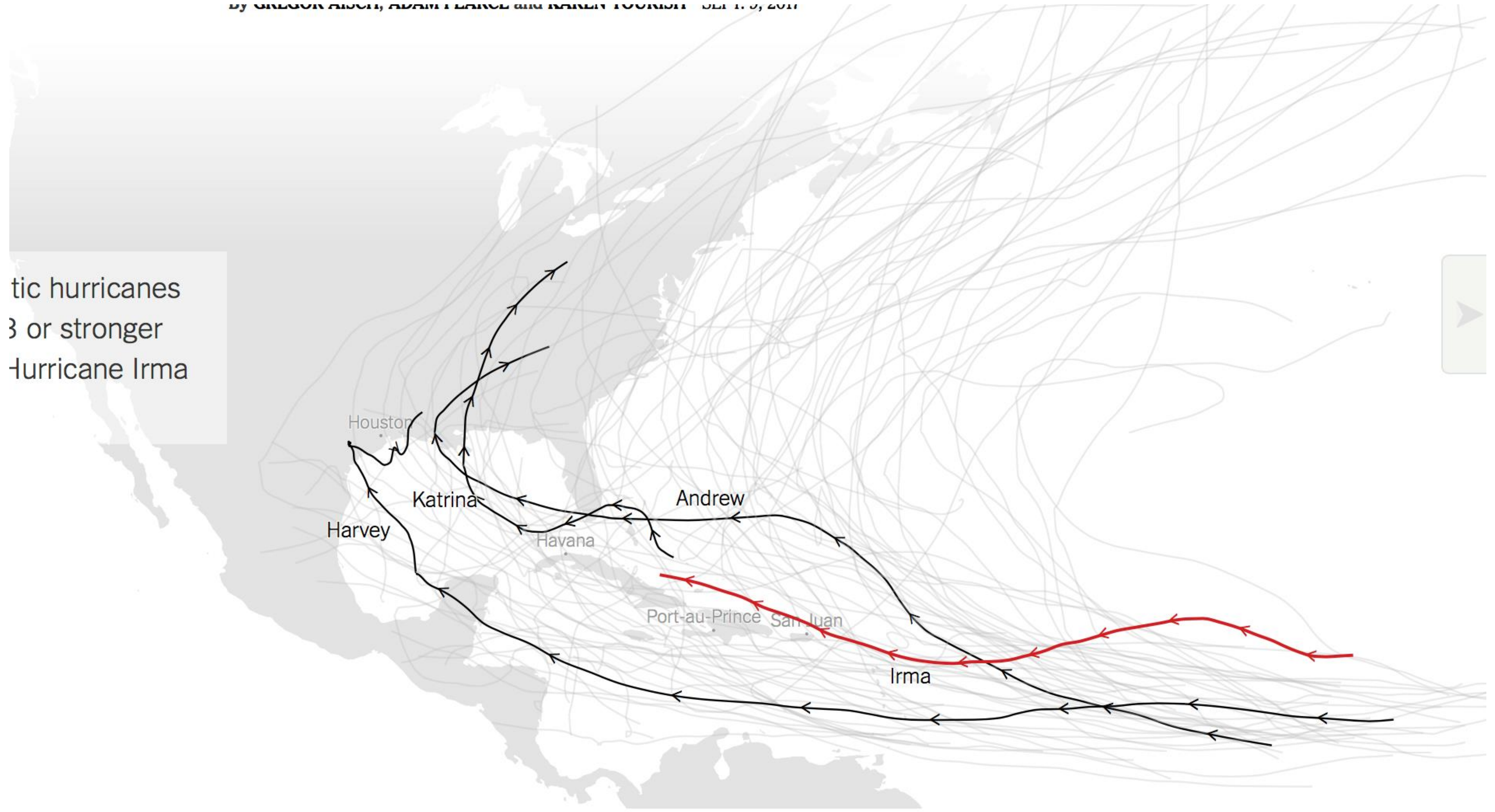


Hurricane Intensity Scale (Wind Damage)

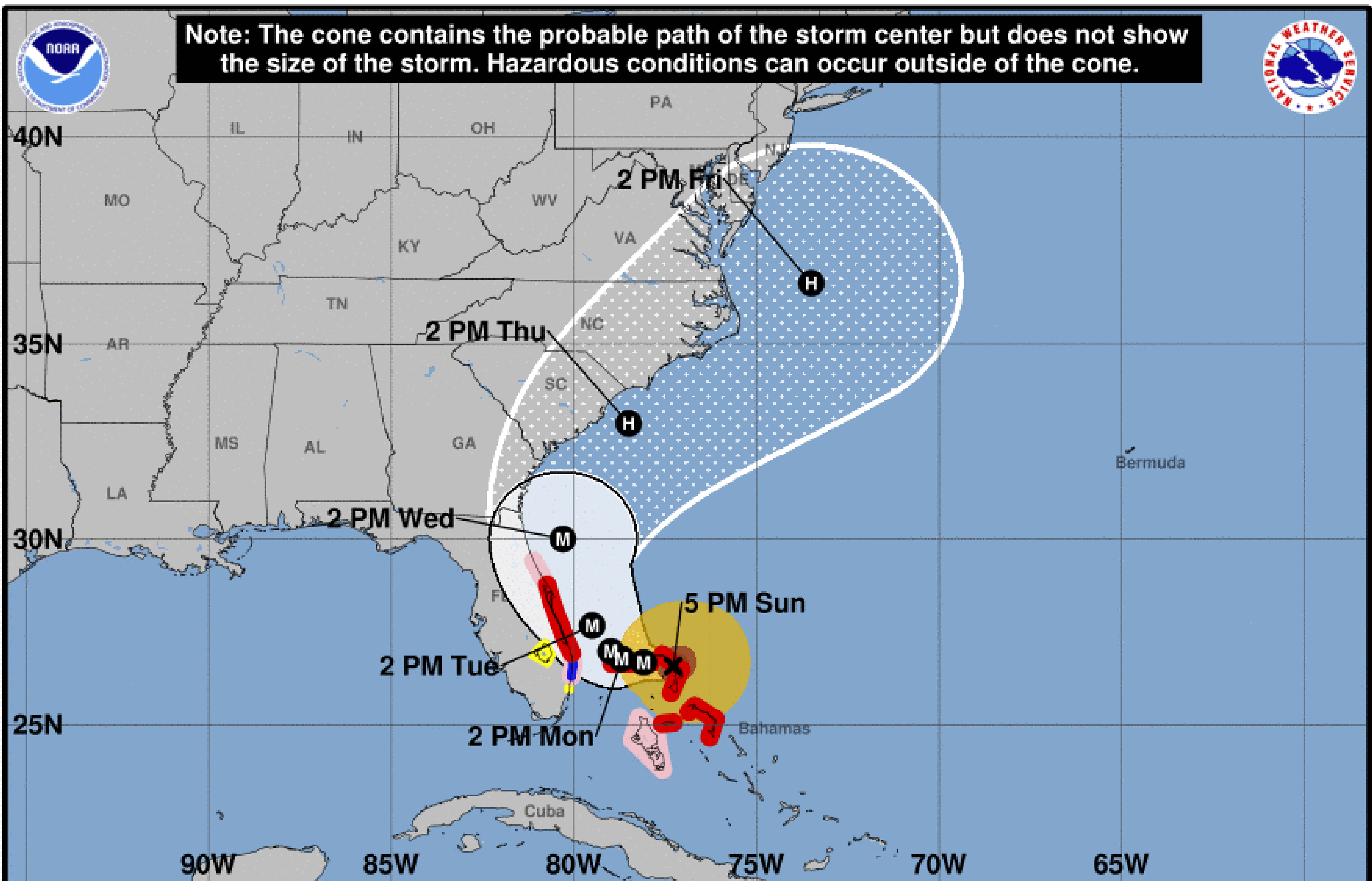


Category	Wind speed
Category 1	75 - 95 mph 33-42 ms^{-1}
Category 2	96 - 110 mph 43-49 ms^{-1}
Category 3	111 - 130 mph 50-58 ms^{-1}
Category 4	131 - 154 mph 59-69 ms^{-1}
Category 5	155 + mph 70+ ms^{-1}

Atlantic hurricanes
3 or stronger
Hurricane Irma



matched the



Note: The cone contains the probable path of the storm center but does not show the size of the storm. Hazardous conditions can occur outside of the cone.

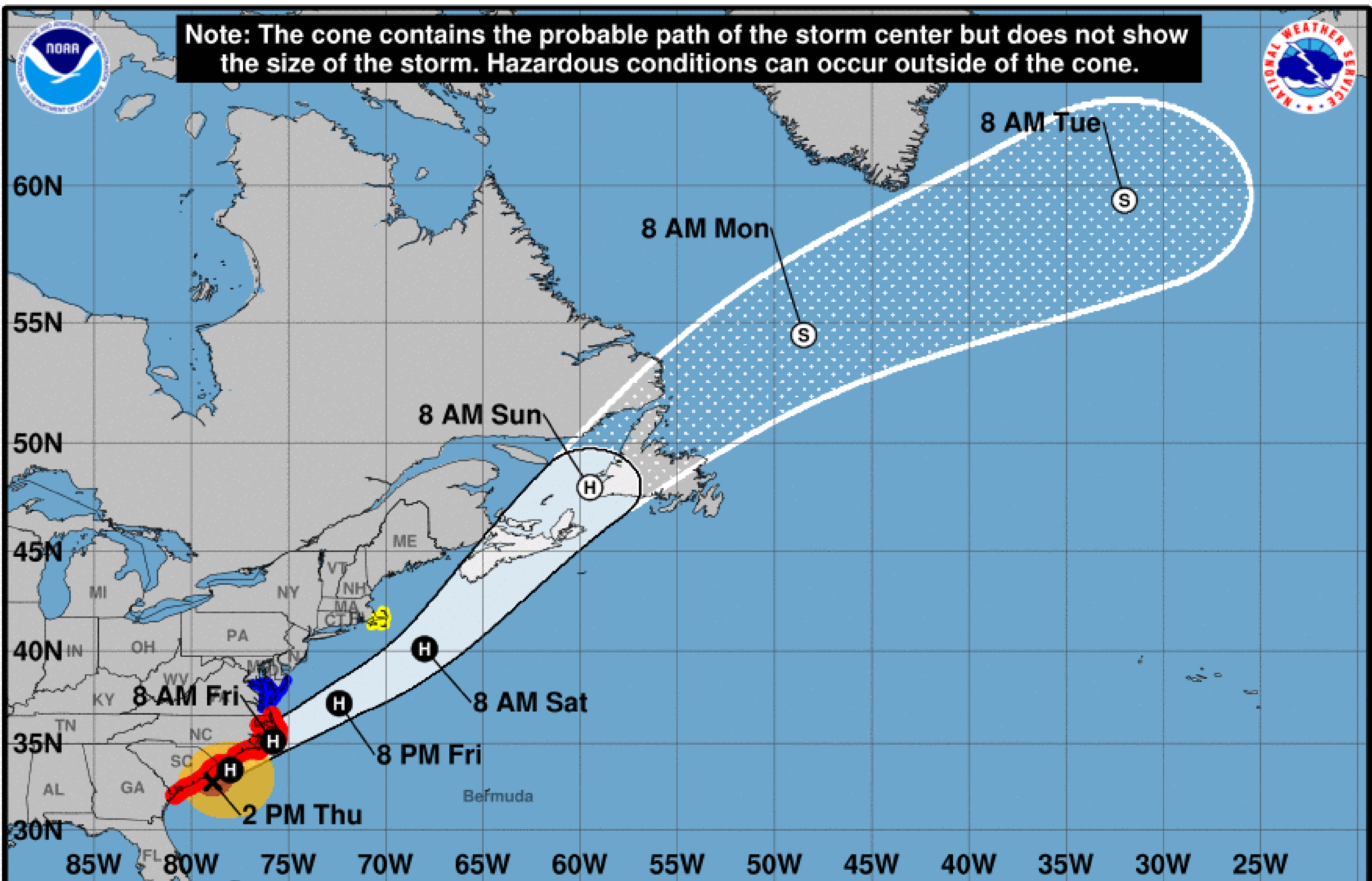
Hurricane Dorian
 Sunday September 01, 2019
 5 PM EDT Advisory 34
 NWS National Hurricane Center

Current information: x
 Center location 26.6 N 77.3 W
 Maximum sustained wind 185 mph
 Movement W at 5 mph

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

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

https://www.nhc.noaa.gov/refresh/graphics_at5+shtml/155815.shtml?cone#contents



Hurricane Dorian
 Thursday September 05, 2019
 2 PM EDT Intermediate Advisory 49A
 NWS National Hurricane Center

Current information: x
 Center location 32.8 N 78.9 W
 Maximum sustained wind 110 mph
 Movement NNE at 8 mph

Forecast positions:
 ● Tropical Cyclone ○ Post/Potential TC
 Sustained winds: D < 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

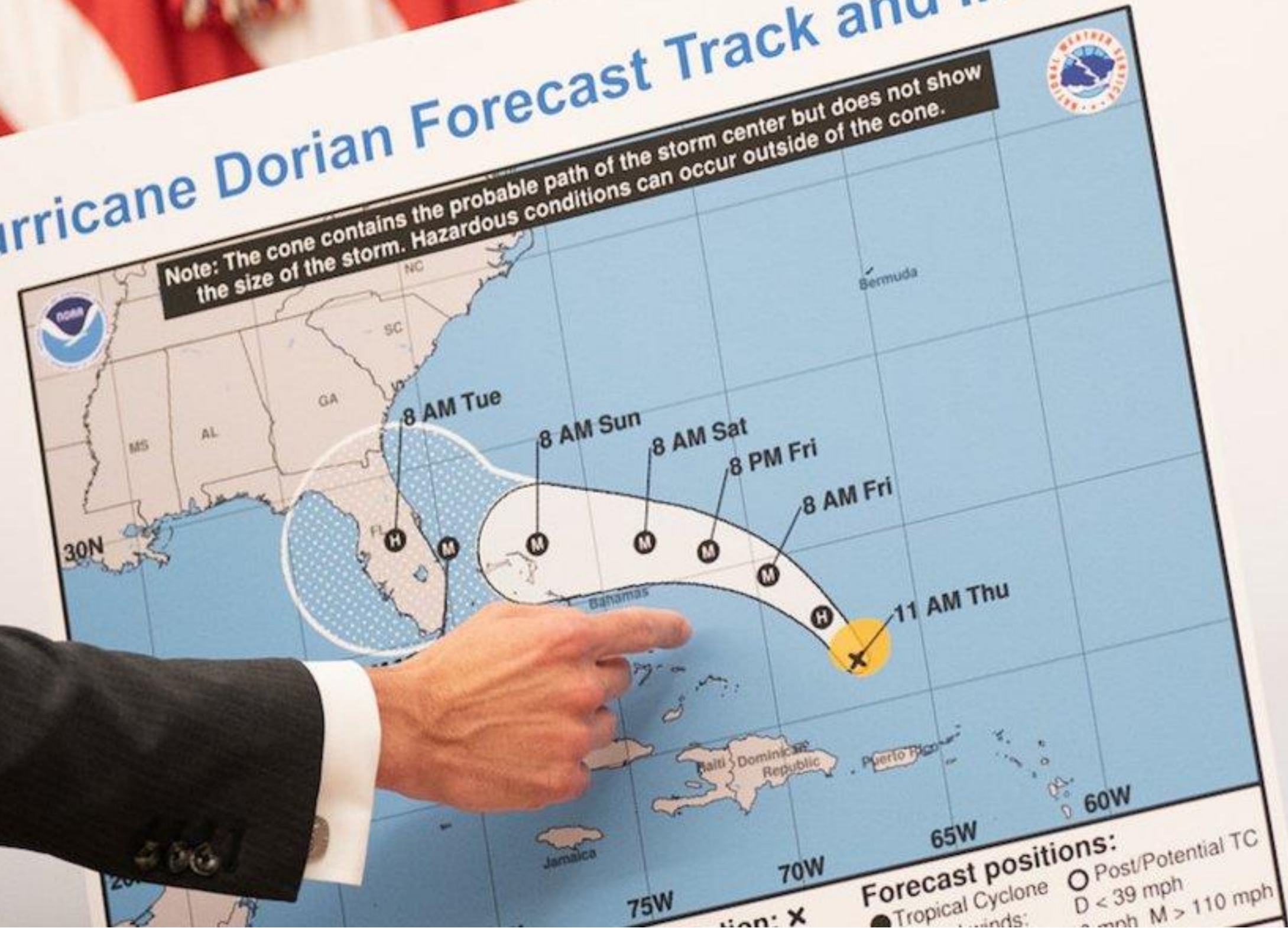
Warnings:
 Hurricane Trop Stm

Current wind extent:
 Hurricane Trop Stm



Hurricane Dorian Forecast Track and Intensity

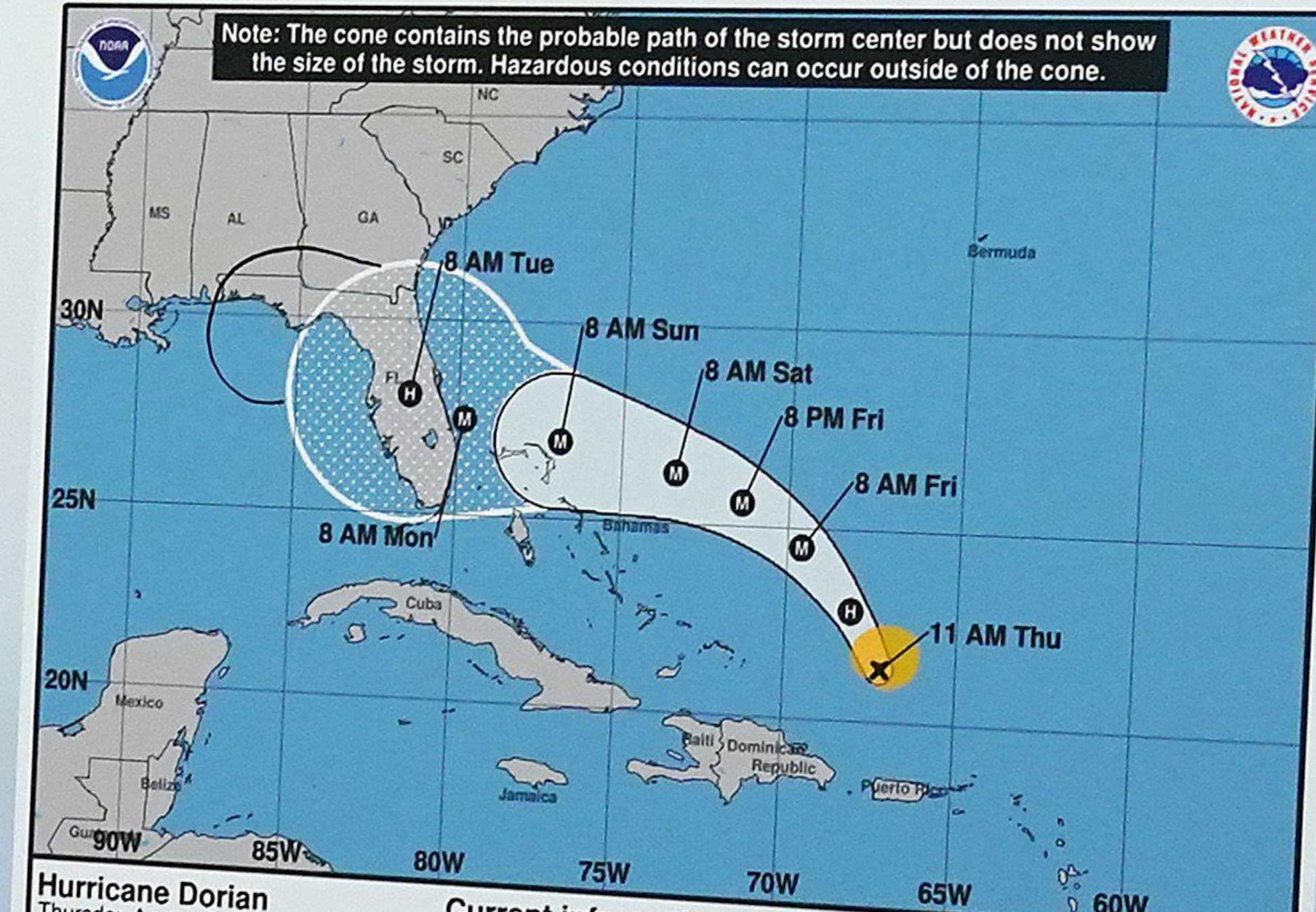
Note: The cone contains the probable path of the storm center but does not show the size of the storm. Hazardous conditions can occur outside of the cone.



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for F



Hurricane Dorian Forecast Track and Intensity



Hurricane Dorian
 Thursday August 29, 2019
 11 AM AST Advisory 21
 NWS National Hurricane Center

Current information: x
 Center location 21.4 N 67.2 W
 Maximum sustained wind 85 mph
 Movement NW at 13 mph

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

Potential track area:
 Day 1-3 (solid line) Day 4-5 (dotted line)

Watches:

Warnings:

Current wind extent:
 Hurricane (red) Trop Stm (yellow)

Opinion

Those Hurricane Maps Don't Mean What You Think They Mean

We use hurricane forecasts to warn people. Why do we misinterpret them so often?

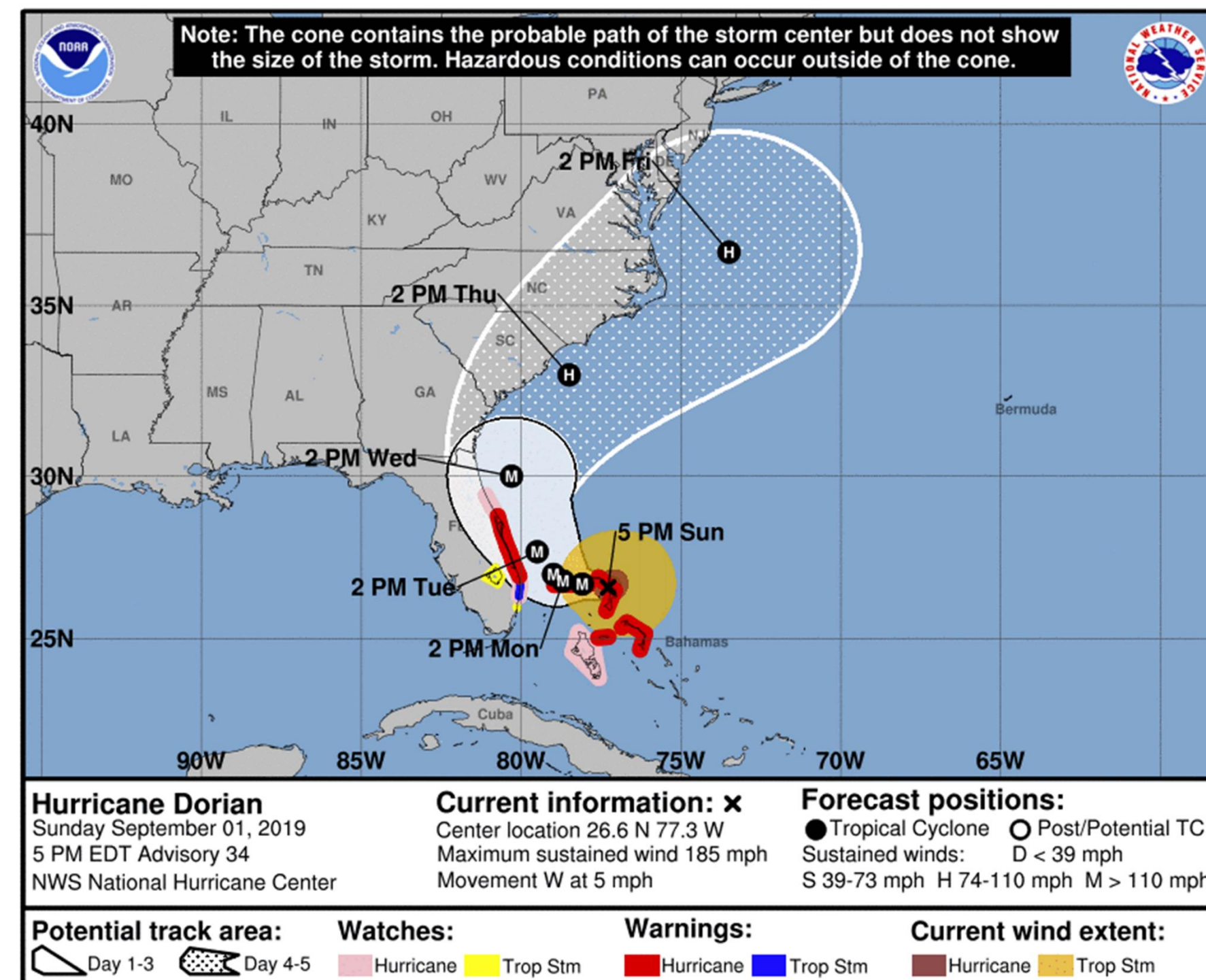
By Alberto Cairo

With Tala Schlossberg

In-Class Redesign — Hurricane Funnels

41 min

<https://neu-ds-4200-f23.github.io/in-class/hurricane-funnels/>



https://www.nhc.noaa.gov/refresh/graphics_at5+shtml/155815.shtml?cone#contents

For Next Time

neu-ds-4200-f23.github.io/schedule/

Look at the upcoming assignments and deadlines

- Textbook, Readings, & Reading Quizzes—Variable days
- In-Class Activities—If due, they are due 11:59pm the same day as class
- MIDTERM EXAM Oct 20

Everyday Required Supplies:

- 5+ colors of pen or marker
- White paper
- Laptop and charger

Use Slack for general questions, email codydunne-and-tas@ccs.neu.edu for questions specific to you.

Week 2: Design & Marks	
Tue, Sep 12 <i>Design rules of thumb</i> Required Readings: <ol style="list-style-type: none">1 VAD Chapter 1—What is Vis, and Why Do It?2 VAD Chapter 6—Rules of Thumb	Fri, Sep 15 <i>Marks and channels</i> Required Readings: <ol style="list-style-type: none">1 VAD Chapter 5—Marks and Channels2 A Tour through the Visualization Zoo by Heer, Bostock, and Ogievetsky (2012) <hr/> A1—Getting started Due at 11:59pm
Week 3: Data, Tasks, Tables, and Gestalt	
Tue, Sep 19 <i>Data types and tasks</i> Required Readings: <ol style="list-style-type: none">1 VAD Chapter 2—What: Data Abstraction2 VAD Chapter 3—Why: Task Abstraction	Fri, Sep 22 <i>Arrange tables</i> Required Readings: <ol style="list-style-type: none">1 VAD Chapter 7—Arrange Tables2 Gestalt Principles (Part 1) by Bang Wong (2010)3 Gestalt Principles (Part 2) by Bang Wong (2010)