

Hurricane Season 2018



*Kennard "Chip" Kasper
Meteorologist-in-Charge*



Florida Keys
WEATHER FORECAST OFFICE



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June 19, 2018

Mission



Protect
LIFE
and
Property

*(Save Lives
and Livelihoods)*



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June 19, 2018

NOAA/Florida Keys National Weather Service



We are **NOT** a “9-to-5 agency”.

We operate 24/7/365 serving Florida Keys communities.

We are available to **YOU** as a trusted, reliable, and professional partner.



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The “Weather Enterprise”

TV
INTERNET
CELL PHONE RADIO NWR
PRIVATE WEATHER COMPANIES

**NATIONAL CENTERS FOR
ENVIRONMENTAL PREDICTION**
MODEL SIMULATIONS/SPACE WEATHER
CLIMATE & SEASONAL OUTLOOKS
AVIATION & MARINE FORECASTS
STORM & TORNADO PREDICTION
HURRICANE TRACKS

**NATIONAL
WEATHER
SERVICE**

**Weather Forecast Offices Local
Forecasts & Warnings**

River Forecast Centers

**River Forecasts,
Hydropower, Flood
warnings**

Irrigation, River Navigation

Observations

**Radar Network, Satellites, Weather Balloons, Ground-level observations
at airports, Aircraft, Lightning Network, Data Buoys, Stream Gauge
Network, 11,000 Volunteer daily-data collectors, Thousands of Volunteer
storm spotters**



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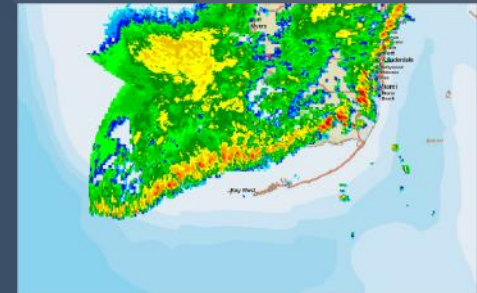
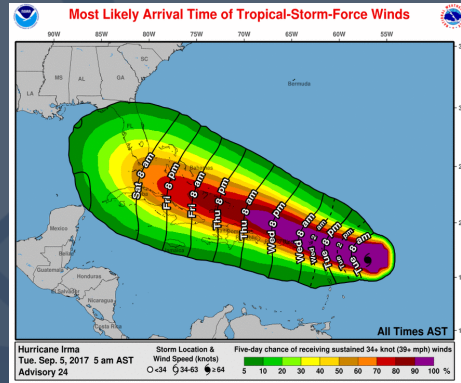
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Building a Weather-Ready Nation



- Build a Weather-Ready Nation, where Society is *prepared for and responds to Weather-Dependent Events.*



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Partnerships & Teamwork



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Partnerships & Teamwork

National Hurricane Center



- Hurricane Specialists
- Prediction
- Track, Intensity, Structure
- Watches and Warnings

Weather Forecast Office



- Local Forecasters
- Impacts
- Location, Timing, Trends
- Decision Support Services



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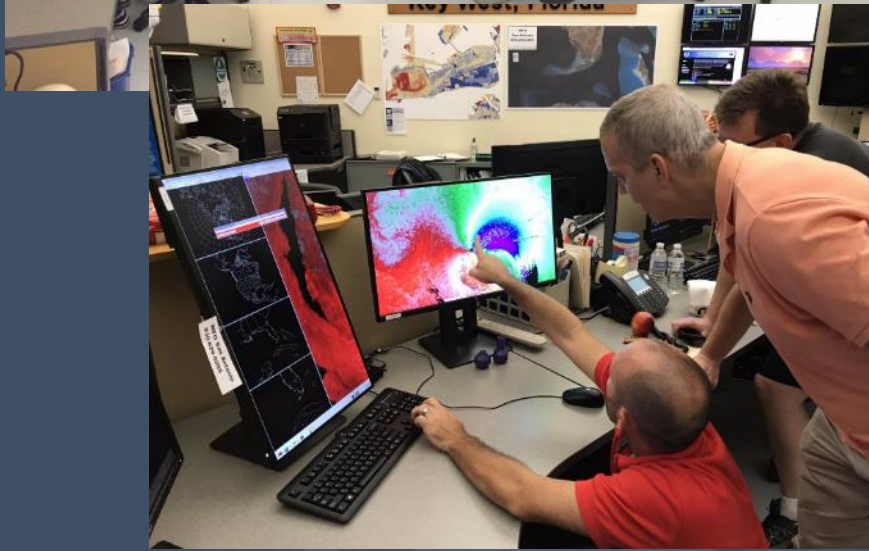
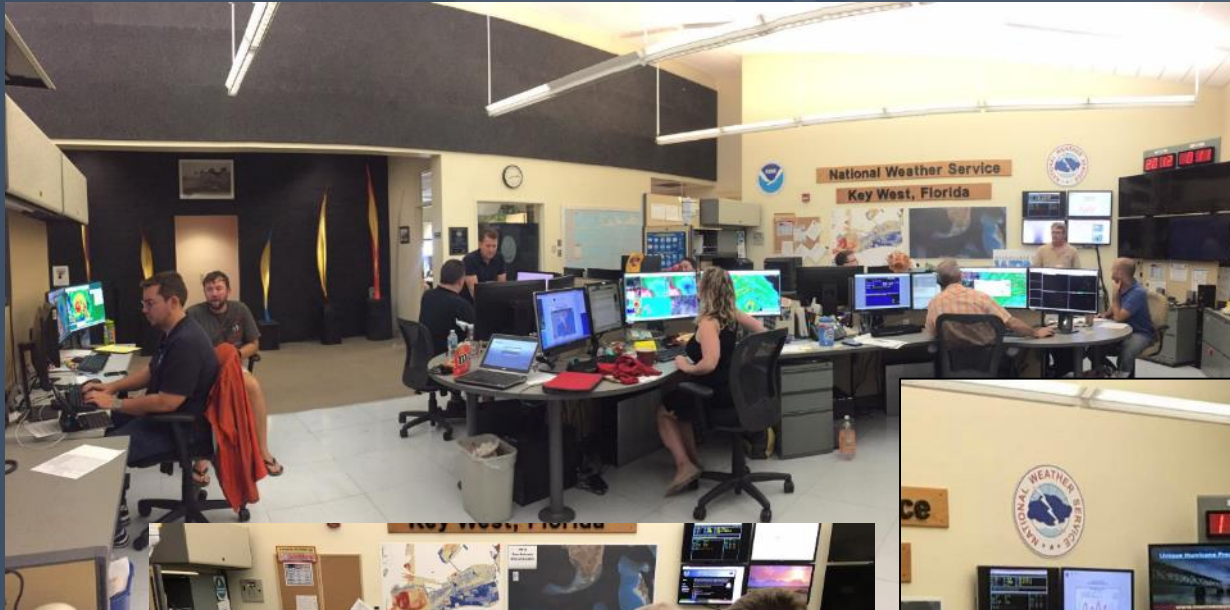
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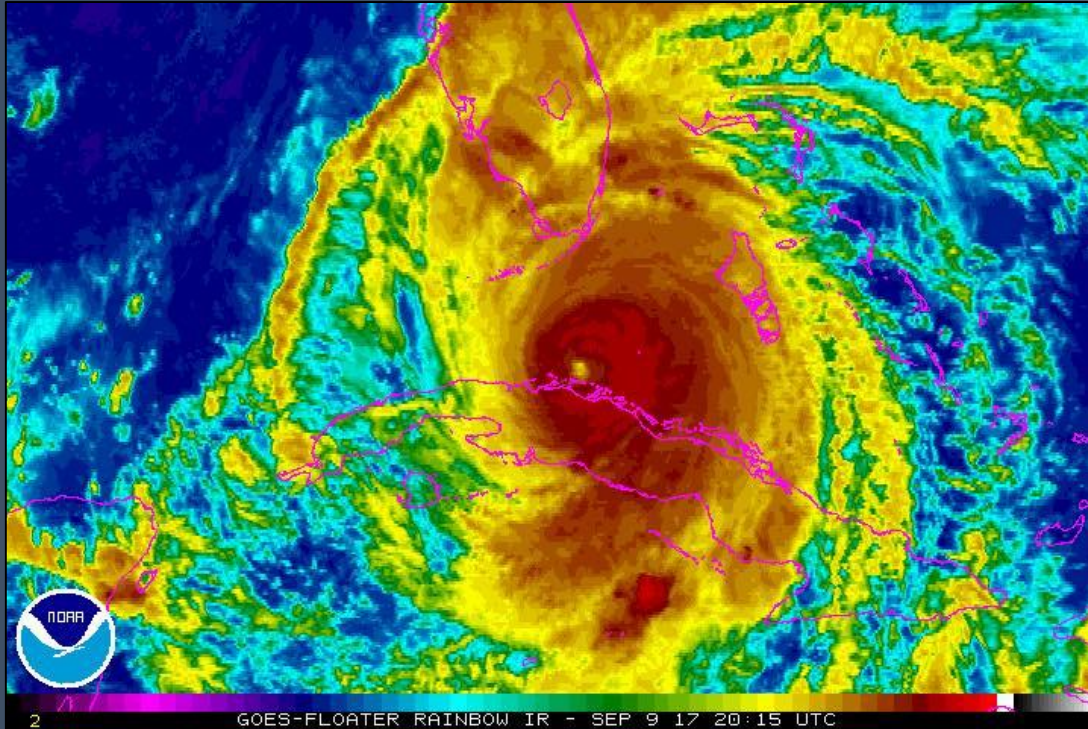
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Hurricane Irma



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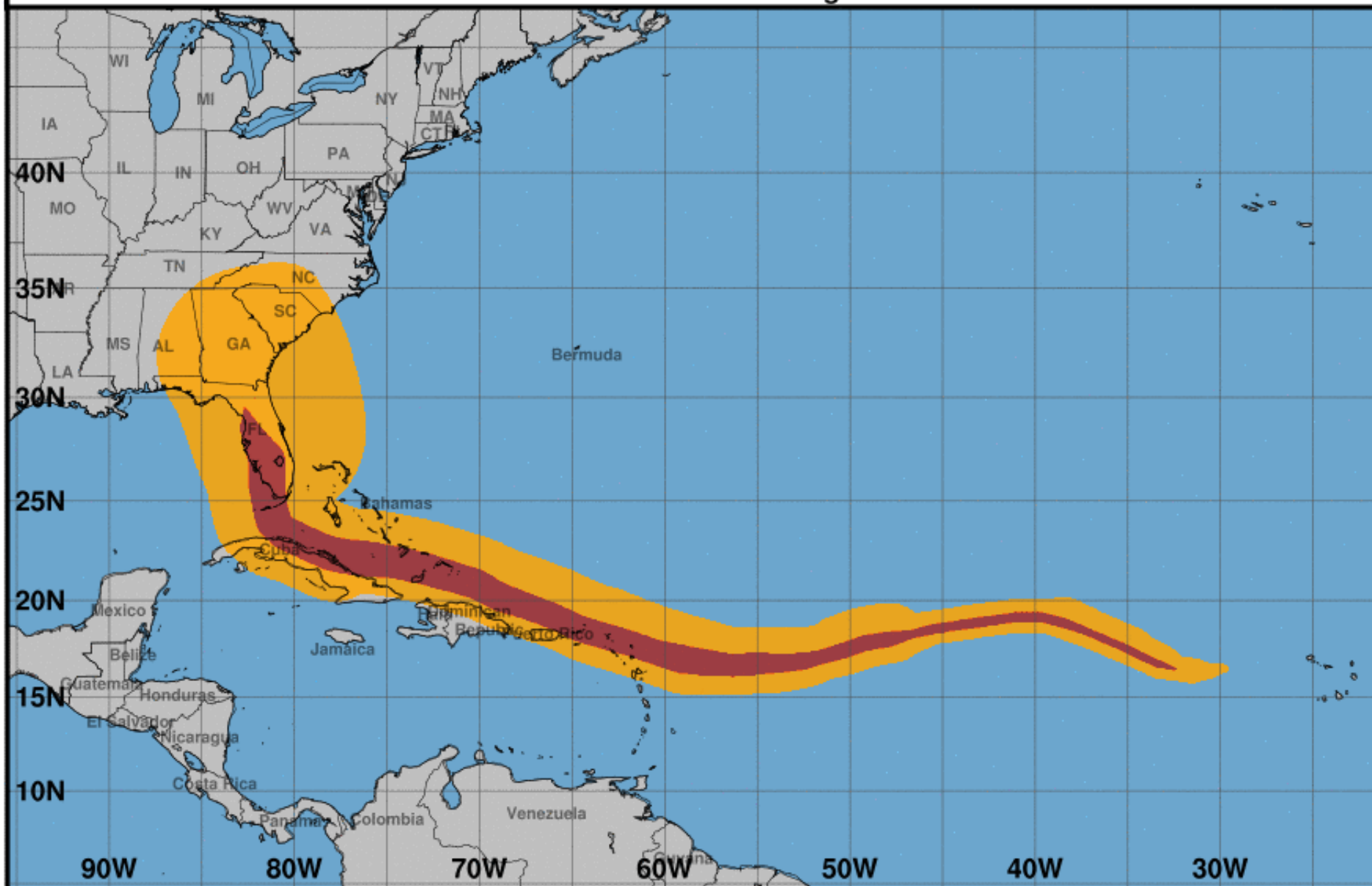


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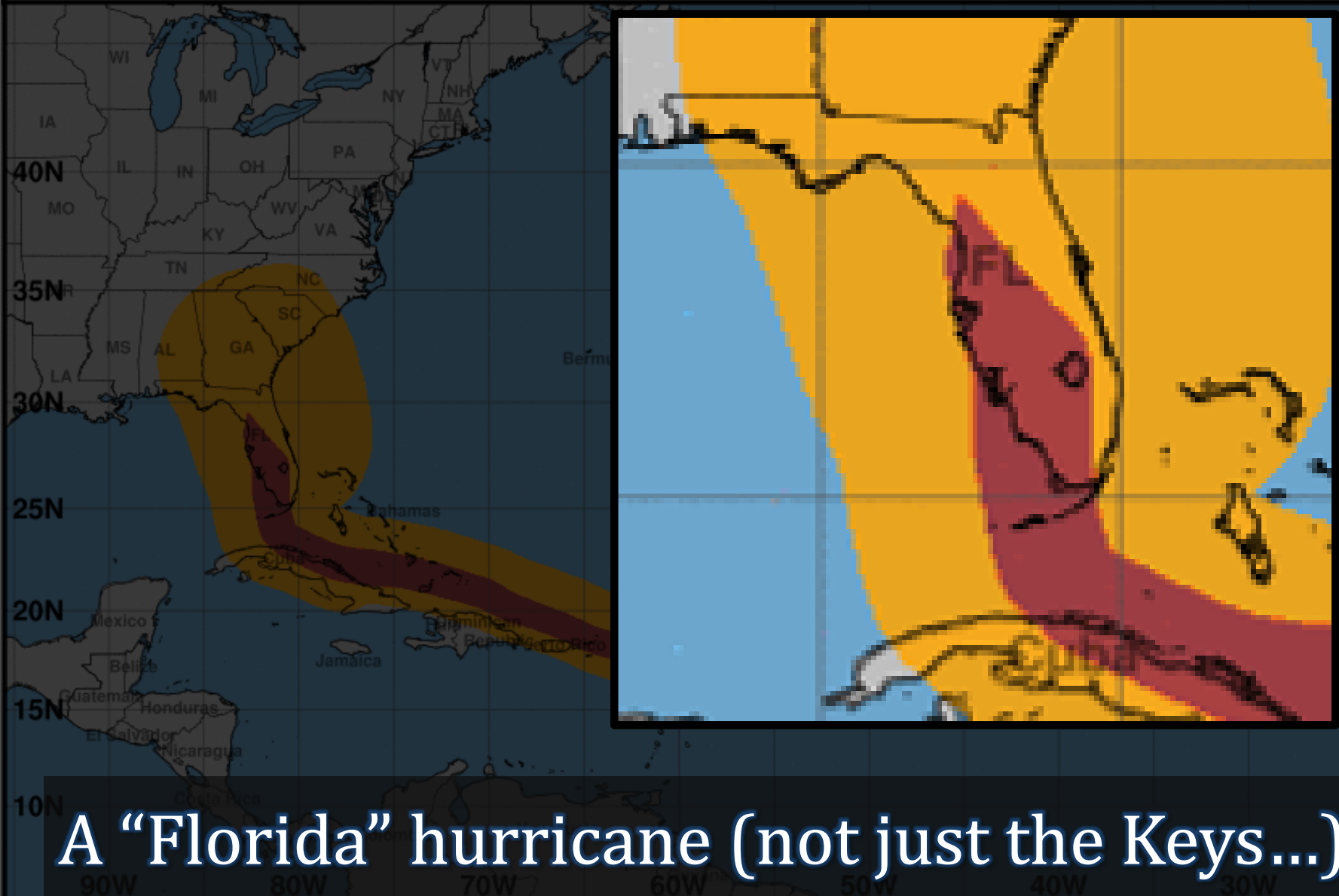
National Weather Service - National Hurricane Center
Tropical Storm  and Hurricane  Force Wind Swaths of Irma
From Advisories 1 Through 52





National Weather Service - National Hurricane Center

Tropical Storm and Hurricane Force Wind Swaths of Irma
From Advisories 1 Through 52



A "Florida" hurricane (not just the Keys...)

Hurricane Irma: A Florida Hurricane



Big Pine Key



Marathon



Upper Matecumbe Key



Miami Beach



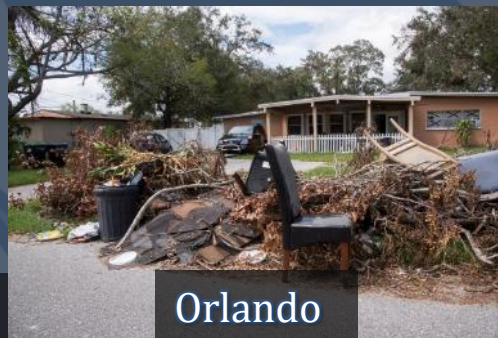
Fort Myers



Sebring



Boca Raton



Orlando



Jacksonville



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Hurricane Hazards

- Storm Surge Flooding
- Extreme Wind
- Tornadoes (and Waterspouts)
- Excessive Rainfall
- Powerful Waves, Surf, and Currents



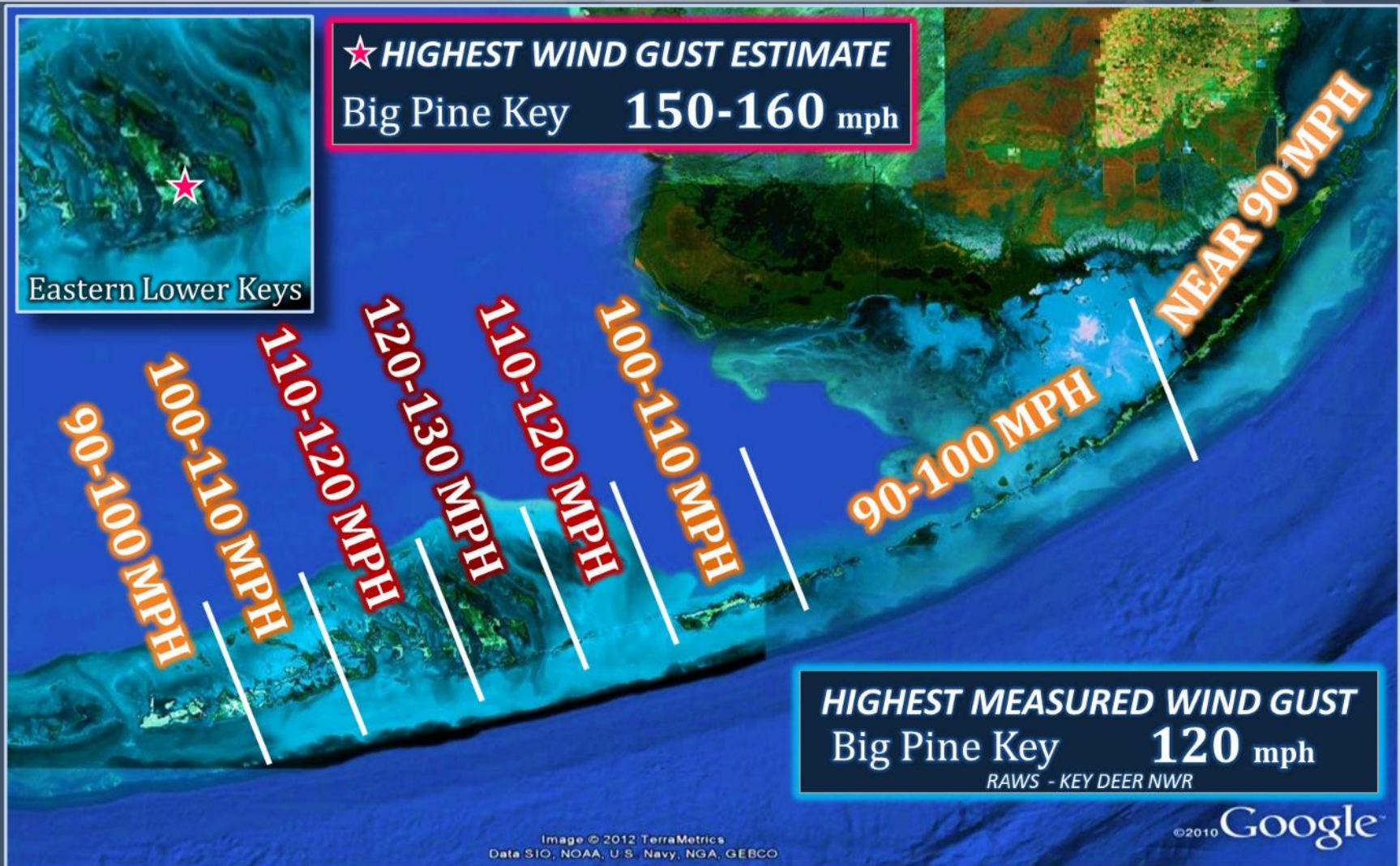
HURRICANE IRMA PEAK WIND GUSTS

ESTIMATED BASED ON DAMAGE ASSESSMENTS

9/10/2017

PRELIMINARY REPORTS -- SUBJECT TO CORRECTIONS

PRELIMINARY REPORTS -- SUBJECT TO CORRECTIONS



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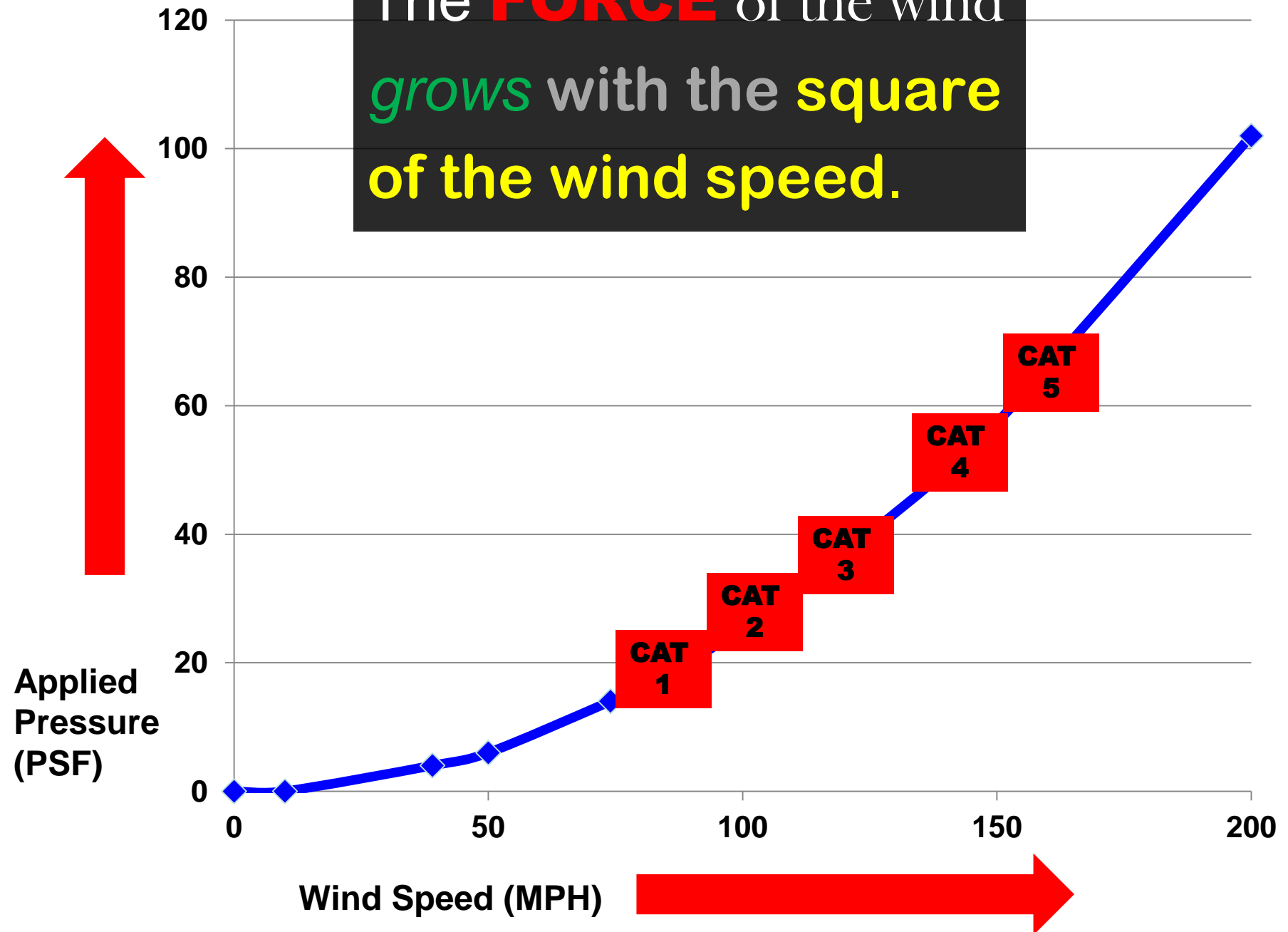
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October 1, 2017

Category	Sustained Winds	Types of Damage Due to Hurricane Winds
1	74-95 mph (64-82 kt)	Very dangerous winds will produce some damage: Well-constructed frame homes could have damage to roof, shingles, vinyl siding and gutters. Large branches of trees will snap and shallowly rooted trees may be toppled. Extensive damage to power lines and poles likely will result in power outages that could last a few to several days.
2	96-110 mph (83-95 kt)	Extremely dangerous winds will cause extensive damage: Well-constructed frame homes could sustain major roof and siding damage. Many shallowly rooted trees will be snapped or uprooted and block numerous roads. Near-total power loss is expected with outages that could last from several days to weeks.
3 (major)	111-129 mph (96-112 kt)	Devastating damage will occur: Well-built framed homes may incur major damage or removal of roof decking and gable ends. Many trees will be snapped or uprooted, blocking numerous roads. Electricity and water will be unavailable for several days to weeks after the storm passes.
4 (major)	130-156 mph (113-136 kt)	Catastrophic damage will occur: Well-built framed homes can sustain severe damage with loss of most of the roof structure and/or some exterior walls. Most trees will be snapped or uprooted and power poles downed. Fallen trees and power poles will isolate residential areas. Power outages will last weeks to possibly months. Most of the area will be uninhabitable for weeks or months.
5 (major)	157 mph or higher (137 kt or higher)	Catastrophic damage will occur: A high percentage of framed homes will be destroyed, with total roof failure and wall collapse. Fallen trees and power poles will isolate residential areas. Power outages will last for weeks to possibly months. Most of the area will be uninhabitable for weeks or months.

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The **FORCE** of the wind
grows with the **square**
of the wind speed.

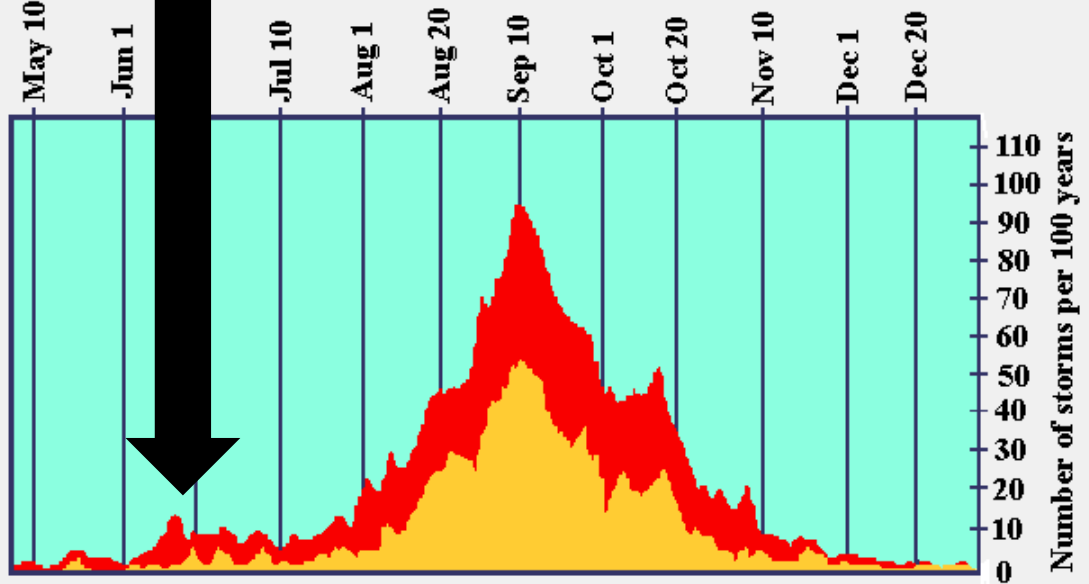


Hurricane Season 2018

Day 19...

HURRICANE SEASON

June 1 - November 30



Yellow: Hurricanes
Red: Hurricanes and Tropical Storms

Atlantic Hurricane Frequencies



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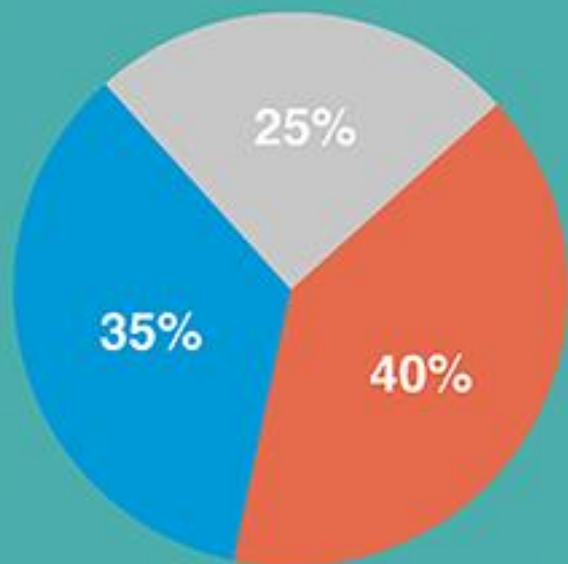


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June 19, 2018



2018 Atlantic Hurricane Season Outlook



■ Above-normal ■ Near-normal ■ Below-normal season

Season probability

Named storms
10-16

Hurricanes
5-9

Major hurricanes
1-4

Be prepared: Visit hurricanes.gov and follow @NWS and @NHC_Atlantic on Twitter.

May 24, 2018



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Seasonal Predictions

- *Numbers, NOT landfalls.*
- No hazards or impacts.
- Limited skill.



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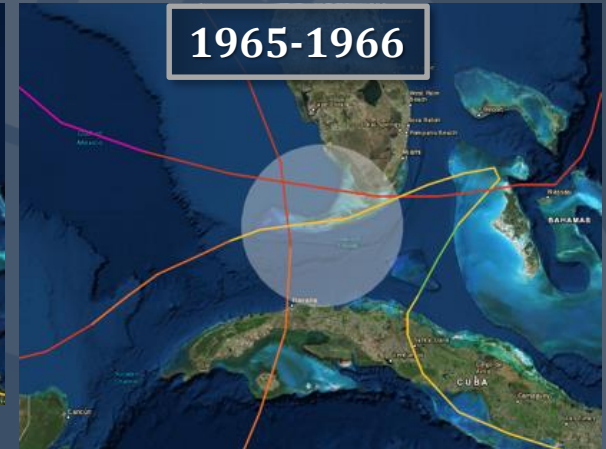
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Hurricane Impacts in Consecutive Years



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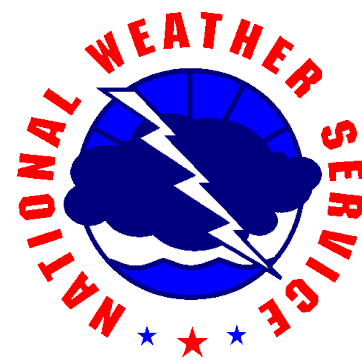


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WEATHER INFO



Call 305-295-1316



CH: 2, 4, 5



NWSKeyWest

<http://weather.gov/key>
<http://hurricanes.gov>

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