



# WeatherSTEM

The Calm Before, During and After the Storm

# EDWARD MANSOURI



- BS Meteorology, BS Engineering Penn State
- MS Meteorology, Florida State
- Developed primary teaching and learning software Florida Virtual School's used since 2003
- Creator of WeatherSTEM

# What Is WeatherSTEM?

- Real time data via web, mobile, social media
- Weather Monitoring Equipment
- Educate the Public
- Inform your Community

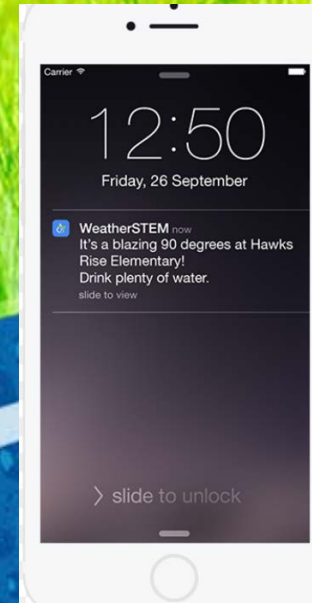
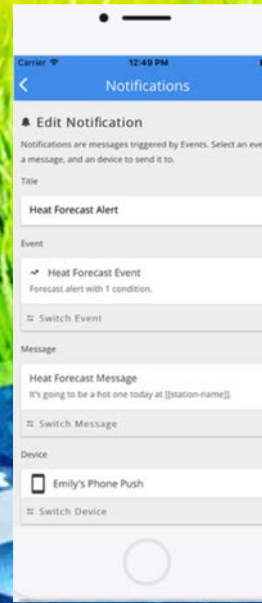
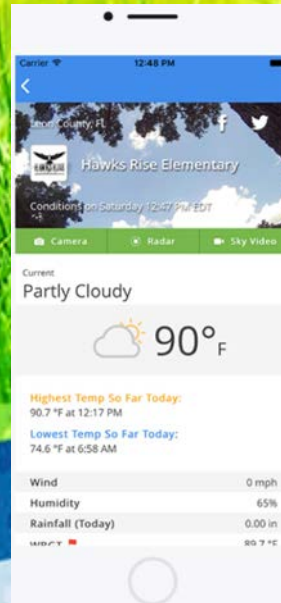


# Worlds Most Connected Weather Stations

Dedicated phone Number for Community Use

Automatic post to FB, Twitter with hazardous condition updates

Text Alerts



# IN FLORIDA

200+ sites in all 67 counties

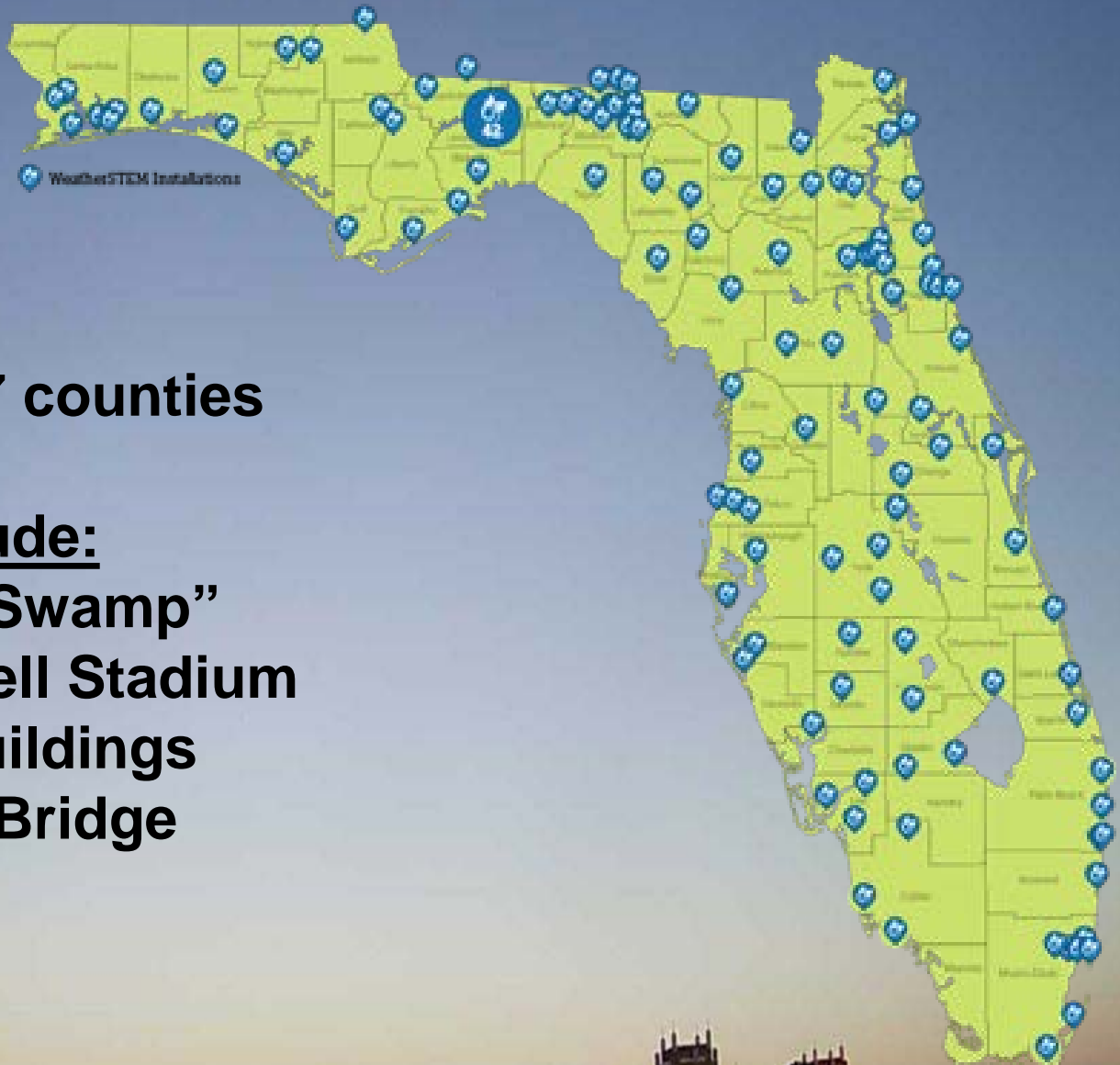
Notable sites include:

U of Florida “The Swamp”

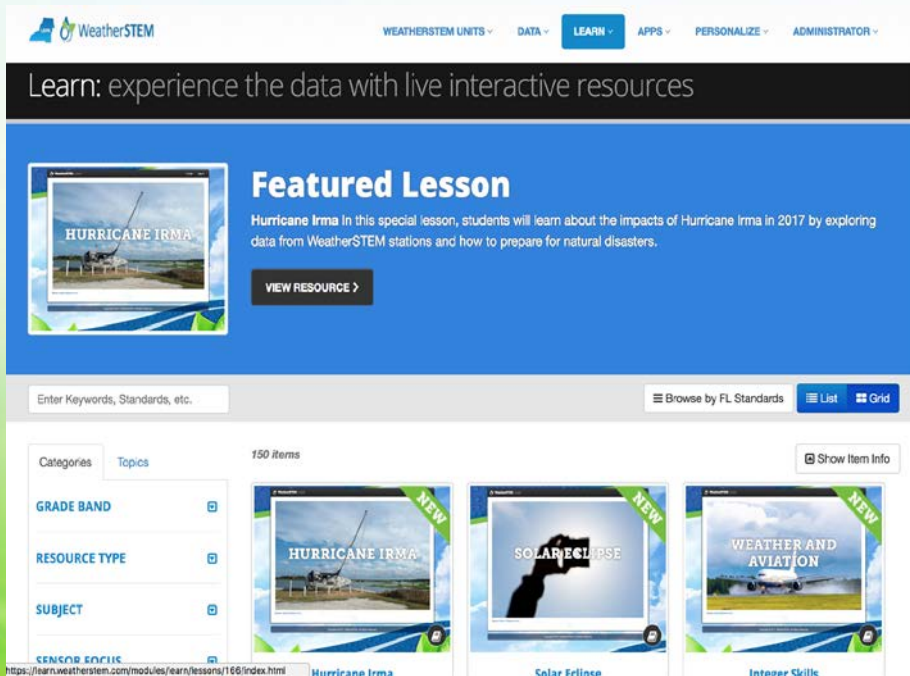
FSU Doak Campbell Stadium

15 County EOC buildings

St. George Island Bridge



# “An Educated Public is a Safer Public”



The screenshot displays the WeatherSTEM website interface. At the top, the logo "WeatherSTEM" is on the left, and navigation links for "WEATHERSTEM UNITS", "DATA", "LEARN", "APPS", "PERSONALIZE", and "ADMINISTRATOR" are on the right. Below the navigation is a dark banner with the text "Learn: experience the data with live interactive resources". The main content area features a "Featured Lesson" section with a thumbnail for "HURRICANE IRMA" and a "VIEW RESOURCE" button. Below this is a search bar with the placeholder "Enter Keywords, Standards, etc." and a "Browse by FL Standards" button. A sidebar on the left lists "Categories" and "Topics" with filters for "GRADE BAND", "RESOURCE TYPE", "SUBJECT", and "SENSOR FOCUS". The main content area shows a grid of three lesson thumbnails: "HURRICANE IRMA", "SOLAR ECLIPSE", and "WEATHER AND AVIATION", each with a "NEW" badge. The URL "https://learn.weatherstem.com/modules/learn/lessons/166/index.html" is visible at the bottom left.

**Hundreds of educational modules aligned to Florida’s Next Generation Sunshine State Standards**

# Hurricane Irma Resources

**Weather STEM** @WeatherSTEM · Sep 5

Keep up with Hurricane Irma on all our WeatherSTEM unit websites as well as the WeatherSTEM mobile app

University of Florida: conditions at 1:14 PM

Key Details

8

HURRICANE IRMA

Category: Category 5

Region: Atlantic

Lat/Lon: 16.8°N, 58.4°W

Moving: W at 13 mph

Wind Speed: 180 mph

Gusts up to: 220 mph

Pressure: 27.48 inHg

Data updated at: 11:00 AM EDT Tue Sep 5

**Weather STEM** @WeatherSTEM · Sep 9

We worked with @cuttlesoft to bring Irma info custom to your precise location in the WeatherSTEM mobile app for iOS and Android

Hurricane Irma Tracking

Want detailed information for your location? Follow along here! Find detail storm information for your current location or by zip code.

There's a new menu item for Hurricane Irma Tracking.

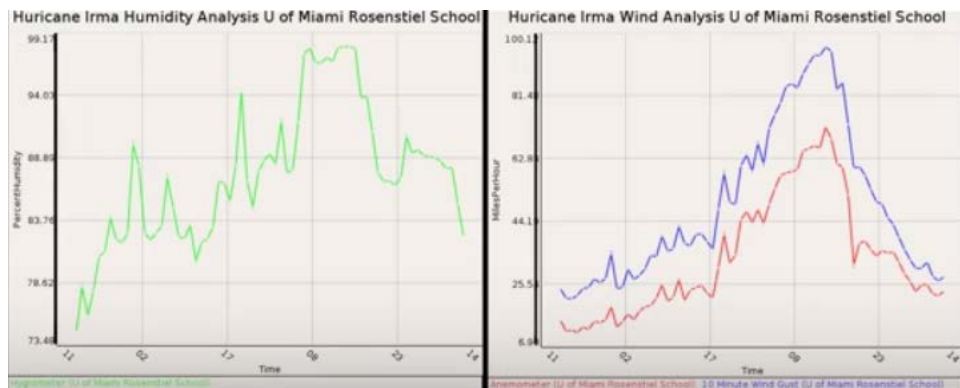
Other WeatherSTEM Hurricane Irma resources:

WeatherSTEM's Irma Tracker

irma@weatherstem.com

(Put your zip code in as the subject)

Close View Now



**Marshall Shepherd** ✓  
@DrShepherd2013

Follow

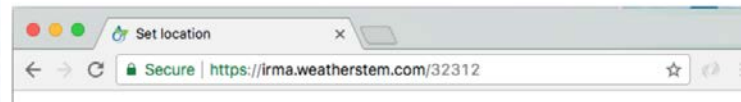
Many @WeatherSTEM sites in FL, new app to predict max forecast gusts at each of them, check this out.

[irma.weatherstem.com/irma\\_max\\_speed...](http://irma.weatherstem.com/irma_max_speed...)

4:09 AM - 9 Sep 2017



Irma information widget - Go to <http://irma.weatherstem.com> and enter your zip code (or go to <http://irma.weatherstem.com/XXXXX> - where XXXXX is your 5-digit zip code) for real-time Irma updates and alerts relative to your location.



**Hurricane Irma Info for Tallahassee, FL**

As of 11:00 PM on Tuesday, Hurricane Irma was 1716.61 East Southeast of Tallahassee, FL. Its peak winds were 185 mph with gusts to 225 mph which makes it a Category 5 Hurricane. The storm was moving West at 14 mph.



345411824479.1073741828.1536450396567314/1964075587138124/?type=3

**Weather STEM** @WeatherSTEM · Sep 8  
Hurricane Irma widget updated with max wind forecast and Weather Channel dial finder [irma.weatherstem.com](http://irma.weatherstem.com) @weatherchannel @WXGeeksTWC

**Hurricane Irma Info for HIALEAH, FL**

As of 5:00 PM on Friday, Hurricane Irma was 353.16 miles Southeast of HIALEAH, FL. Its peak winds were 155 mph with gusts to 190 mph and the lowest pressure was 925 mb which makes it a Category 4 Hurricane. The storm was moving West at 11 mph. The peak sustained winds expected in HIALEAH, FL are 111 mph forecast to occur at 7:00 AM on Sunday.

This is the expected path the hurricane will take over the next 5 days:

Hurricane Irma	Storm Category
11 PM EDT Tue Sep 05 2017	Tropical Depression
Position 17.4 N 61.1 W	Tropical Storm
Maximum Winds 185 mph. Gusts 225 mph	Category 1
Movement WNW at 14 mph	Category 2
Minimum Pressure 916 mb (27.04 inches)	Category 3
	Category 4
	Category 5

Circle shows possible storm center locations.

**Alerts**

- Flood Watch from 5:38PM EDT FRI until 8PM EDT MON
- Tropical Weather Statement until 1:30AM EDT SAT
- Hurricane Warning is in effect
- Storm Surge Warning is in effect

**More info**

- WeatherSTEM Hurricane Lesson
- Hurricane Irma info on Weather Underground
- WeatherSTEM Irma Info Page
- National Hurricane Center

Weather Channel Finder for Zip Code 33018

Comcast Dade Co./ North Miami Channel 027

DISH Miami Channel 214

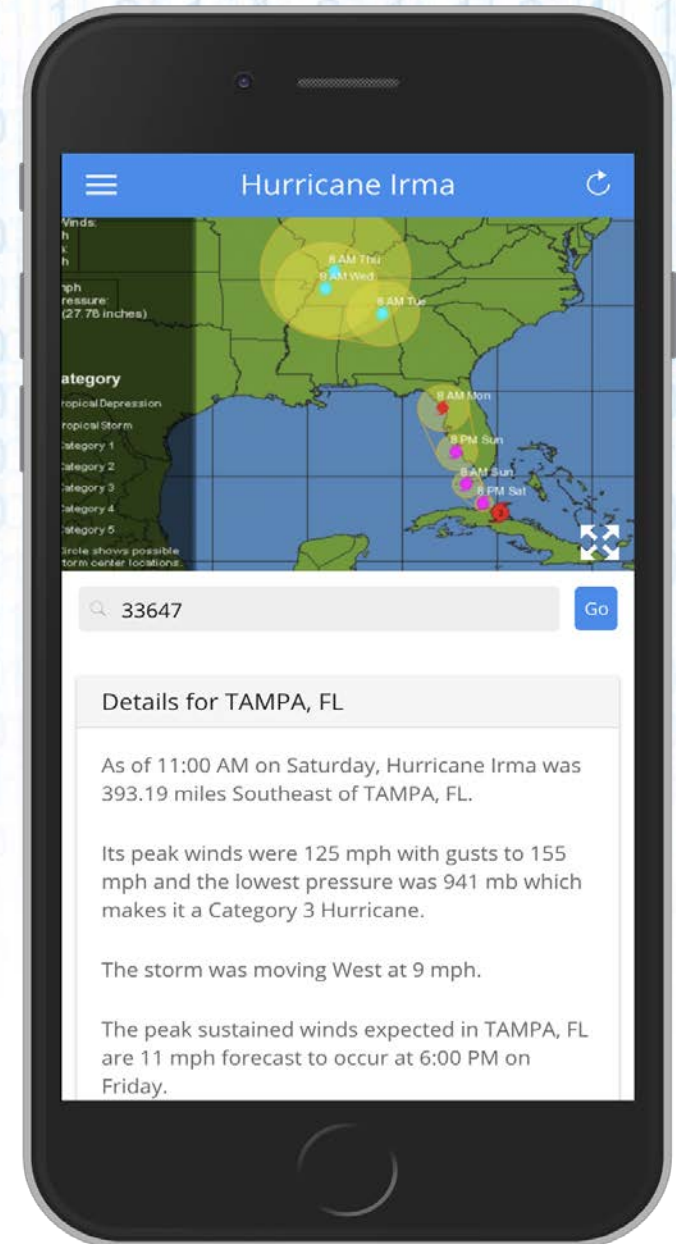
AT&T U-verse TV Channel 226

DIRECTV Miami Channel 362



# Preparing for Irma

- Innovative Communication for the Masses
- Location-Aware Text/E-Mail Alerts
- Dedicated phone number for each County in Florida gave live updates
- Location-Aware forecast
- All Communications offered Irma's proximity as well as info from the latest advisory



# In The Midst of Irma

**“Ed,  
I just wanted to tell you what a  
invaluuable tool WeatherSTEM was  
for UCF during Hurricane Irma. We  
used it to determine when Police  
had to seek shelter and for 11  
weather reports we generated for  
our hurricane ListServ.”**

*Joe Thalheimer*

*UCF Emergency Management*

# After the Storm: A Lesson



Source: FEMA.gov

- Data from our FL sites
- Lesson shows how hurricane impacted state

This lesson will explore the hazards associated with *Hurricane* Irma and the impacts the *storm* had in Florida and other locations in the Southeastern United States.

# Join WeatherSTEM!

## The full WeatherSTEM Package:

- Custom painted weather station
- At least one “Cloud Camera”
- Hydrologic probes (soil, etc)
- Installation/configuration
- Custom web, mobile, social media
- Professional Development

Packages start at \$5,000



# WeatherSTEM<sup>®</sup>

For more information, contact  
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