

# Marketing Your Science

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From a person who likes talking about  
stuff...

**Jill Trepanier, Associate Professor, Geographer and  
Hurricane Climatologist  
Louisiana State University  
South Central CASC 2022**





*Is a scientist a  
salesperson?*

*Let's explore...shall we?*

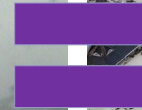


# A LITTLE ABOUT MY SCIENCE

✧ Estimate extreme weather behavior (especially hurricanes) in various places and in various climate conditions

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How the world of statistics meets maps



# THIS, TOO

✧ Bring climate science to Environmental Science classrooms

**LSU**  
**Coastal Roots**

School-Aged Citizen Scientists Become Amateur Climatologists

**Sea Grant**  
**LOUISIANA**



47% learning gains in tree-ring science! ---this is the one where climate change is represented







# Reasons why we market our science

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Interactive time!!

Oh, yes...it's like school...raise your hand and tell the group why we might need to market our science.



# Reasons why we market our science

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1. To provide a solution to a known problem
2. To better protect someone or something
3. To help someone better understand
4. To get money (let's be real) to solve problems and pay ourselves
5. To teach someone



# Making your Science Marketable

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AKA: "How to sell your science?"



*Sell your Sci*

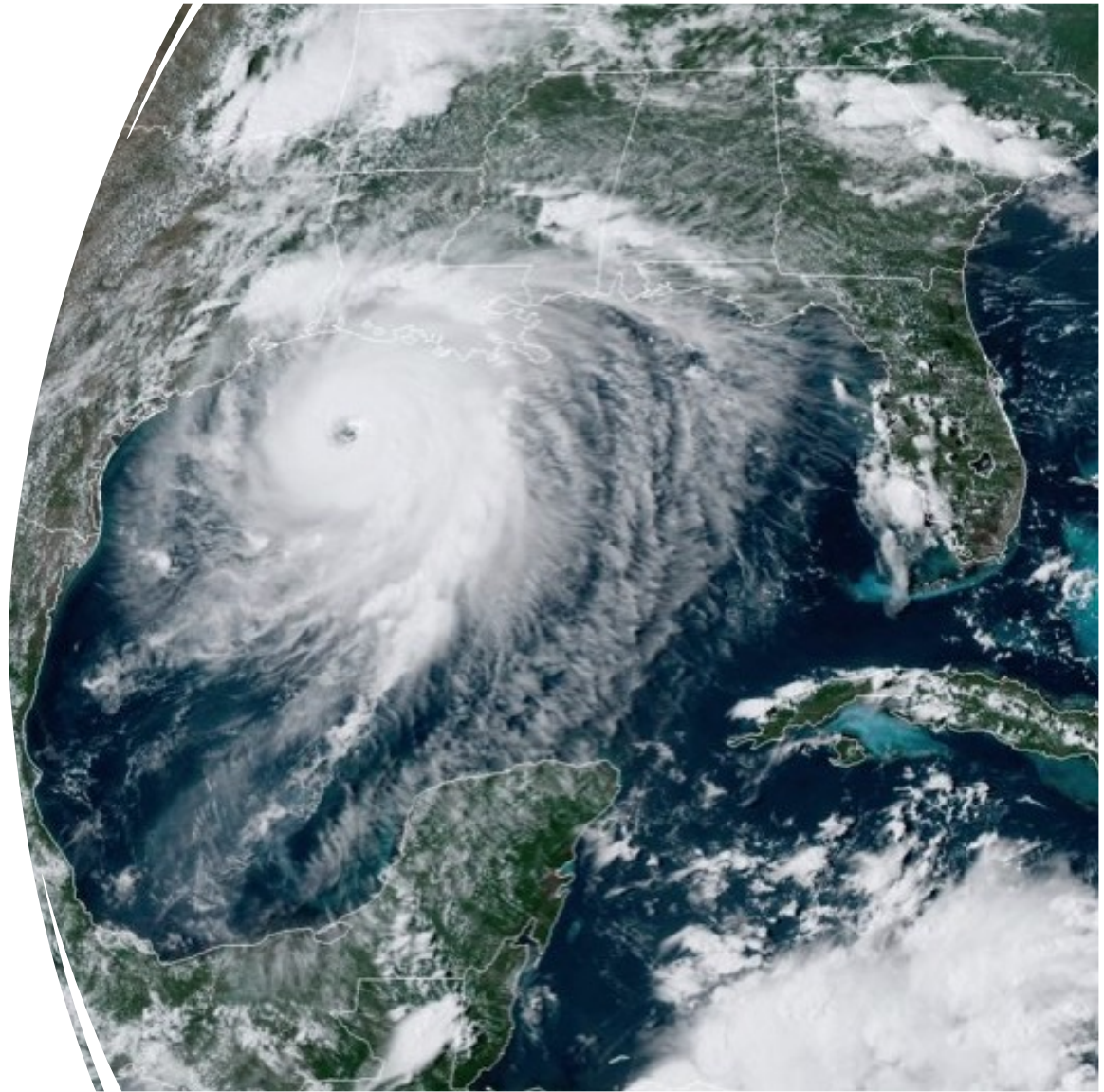




# Selling my Science - disclaimer

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All together now...what is  
showing in this picture?



# OK, so how do I do it? My process begins with...

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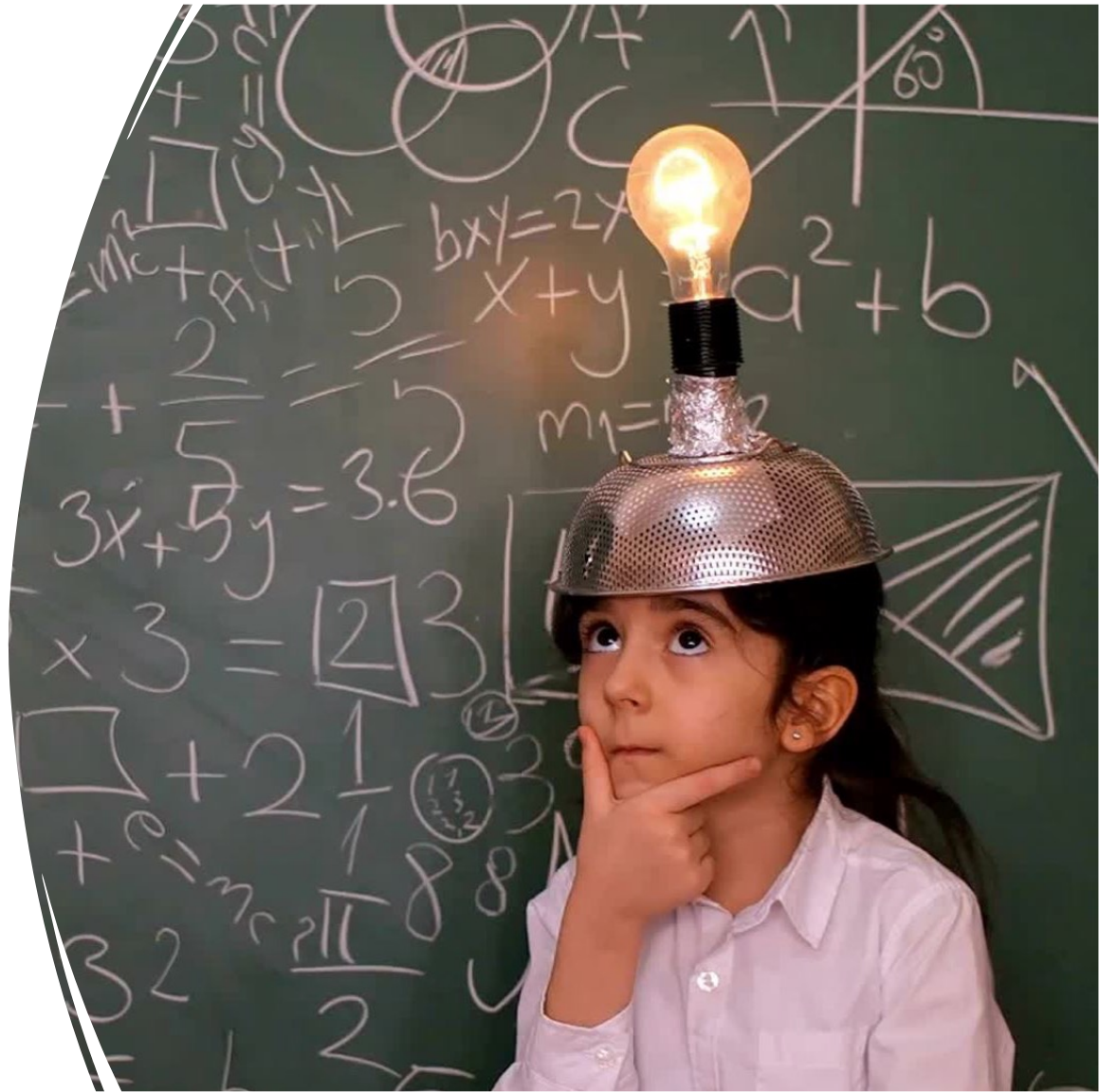
1. WANTING to talk to people...this is not easy for some

- Let your students (or those who ask you questions) lead the way



2. Recognizing there is more than one path to get to the same result.

They can't all be straight lines (are they ever?!)





# Why students?

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- Because they think they don't like science (not those of us in this room), so I'm actively competing against their desire to NOT LEARN. It's a tough crowd.
- Plus, you really begin to understand and accept that not all people learn the same way. But all people CAN learn.
- I find if a person understands, they will come to a similar conclusion for what is needed and, thus, be more likely to "buy your science"

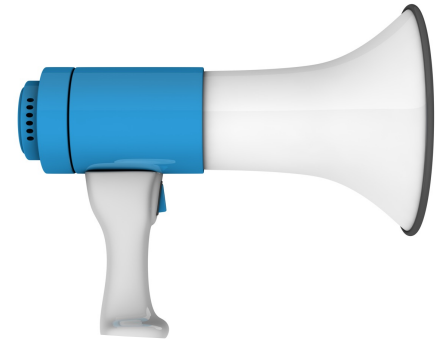


# Transferring that idea to a stakeholder

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SOLUTIONS FIRST; and a "how can I help you" mentality goes a long way

- With a student, it's about that grade... (how can I help you get that A?)
- With a resource or policy manager who is hearing bad news from you (let's face it, most of what we talk about isn't happiness and rainbows) about something they must adapt to or funnel resources toward and they don't want to (or don't believe you, or don't agree with you, or want to use the money elsewhere)...it's about solving their problem and making it known how it will make their life better in some way.





# Additional Places to Market

Opinion Education Articles and Radio/TV

The New York Times

Opinion

## Imagine if We Listened to Scientists Before the Hurricane

When community members know more about how to protect their homes and businesses, they become more resilient to disaster.

By Jill C. Trepanier

Dr. Trepanier is a climate scientist



## Hurricanes 100 years later — it isn't all about the number

BY JILL TREPANIER, OPINION CONTRIBUTOR — 10/12/20 12:30 PM EDT

THE VIEWS EXPRESSED BY CONTRIBUTORS ARE THEIR OWN AND NOT THE VIEW OF THE HILL

293 COMMENTS

Make sure you are on organizations' lists of "experts"

# Practice your "Elevator pitch"

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Final Level of Graduate School - but it shouldn't stop there! Each different community needs a different version of your elevator pitch - (that is, say what you study in 30 seconds or less).

- Classroom: I study where and why bad weather happens, especially hurricanes. I also like to think about how bad weather will change in a world where ice caps and glaciers are melting or when they are growing.
- Stakeholder: I provide localized risk of extreme weather. I can use a variety of different visualization techniques, such as mapping tools or statistical tools to help you understand what you can expect and where you can expect it, so you can spend your money wisely.
- Academic: I use quantitative approaches to better understanding how climate change will impact tropical cyclone development. I can use the techniques on any extreme weather event, but my particular focus is on tropical systems in the North Atlantic.



# Do THIS...not THAT

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1. DON'T tell someone how many problems they have. They probably already know. You'll do nothing but force defensive behavior.
  1. DO tell someone the ideas you have to solve their problems. And converse with them...discuss...they probably have great ideas that can add to your solution.



# Do THIS...not THAT

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2. DON'T talk extremely quickly \*unless you are trying to confuse them\* (which you shouldn't be)
  1. DO pace yourself and attempt to be as clear as possible. They don't need to know ALL of the details - that's what makes you the expert. They just need to know the main points that matter for them.



# Do THIS...not THAT

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3. DON'T tell someone they are flat-out wrong - also forces defensive behavior. And when someone is wrong, it typically comes from a misunderstanding in the science...be a teacher and try to help put the pieces together correctly for them without making them feel foolish.

1. DO encourage someone when they are trying to understand something, and lead with compassion and kindness\*. Even if they are mixed-up in their understanding, a little encouragement can go a long way toward wanting to learn (the right stuff) from you so they can make better decisions. Remember, to market your science properly, you need to actually WANT to talk to people. It can't be faked, and it can't be forced. They'll see right through you and stop caring (wouldn't you?).

\*Problems do not need to be sugar-coated, but there are ways to help someone see what is needed without being abrasive or aggressive\*

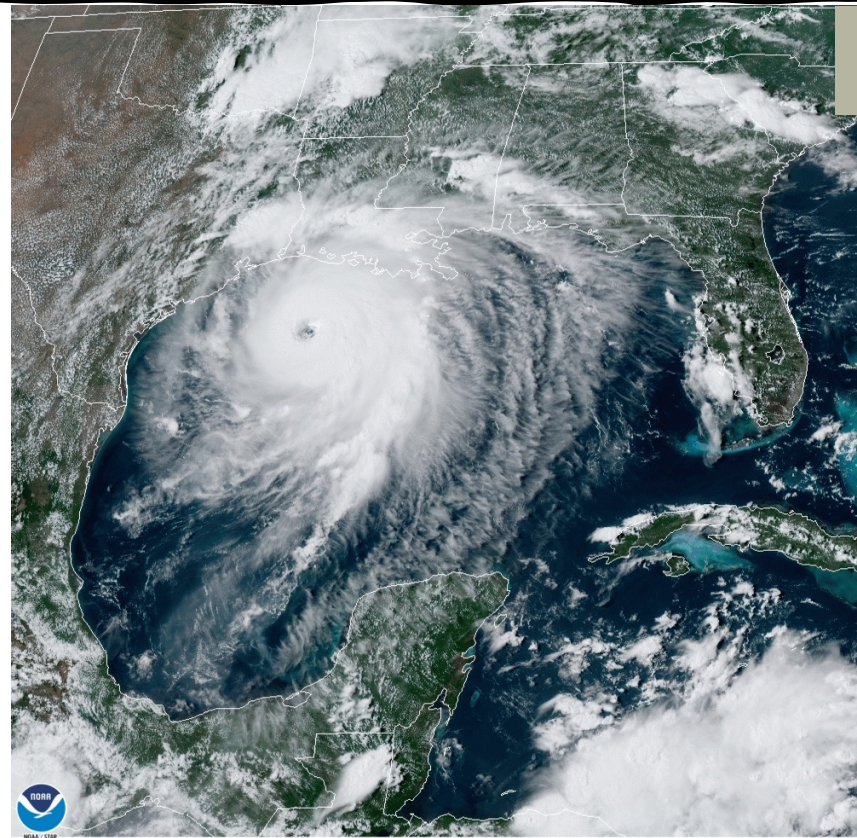
# Thank you for listening

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I hope this helps you in some way. Let's open it up for some Q&A.

Email: [jtrepa3@lsu.edu](mailto:jtrepa3@lsu.edu)

Hurricane Laura  
2020



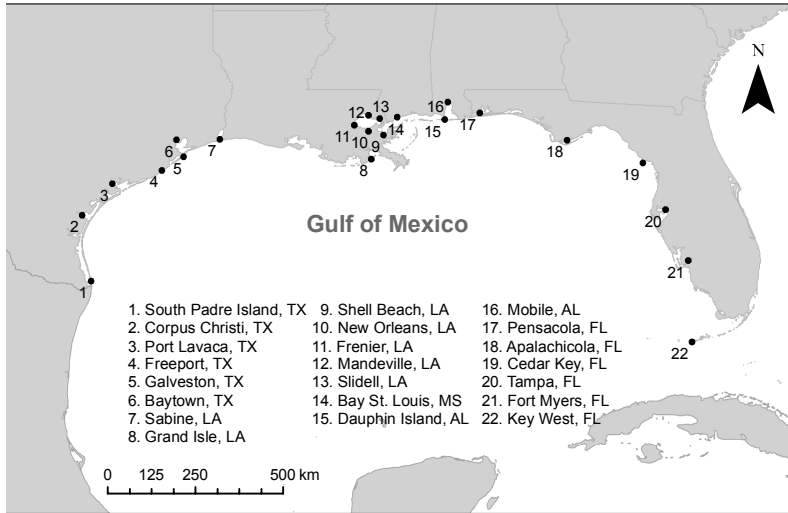
26 Aug 2020 20:16Z NOAA/NESDIS/STAR GOES-East GEOCOLOR



# More Stuff...Should you want it

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- Examples of where statistics and mapping meet



## RESEARCH AT LSU - HURRICANES

The Combined Risk of Extreme Tropical Cyclone  
Winds and Storm Surges along the U.S. Gulf of Mexico  
Coast



31.4  
years



28.8  
years



19.5  
years



63  
years



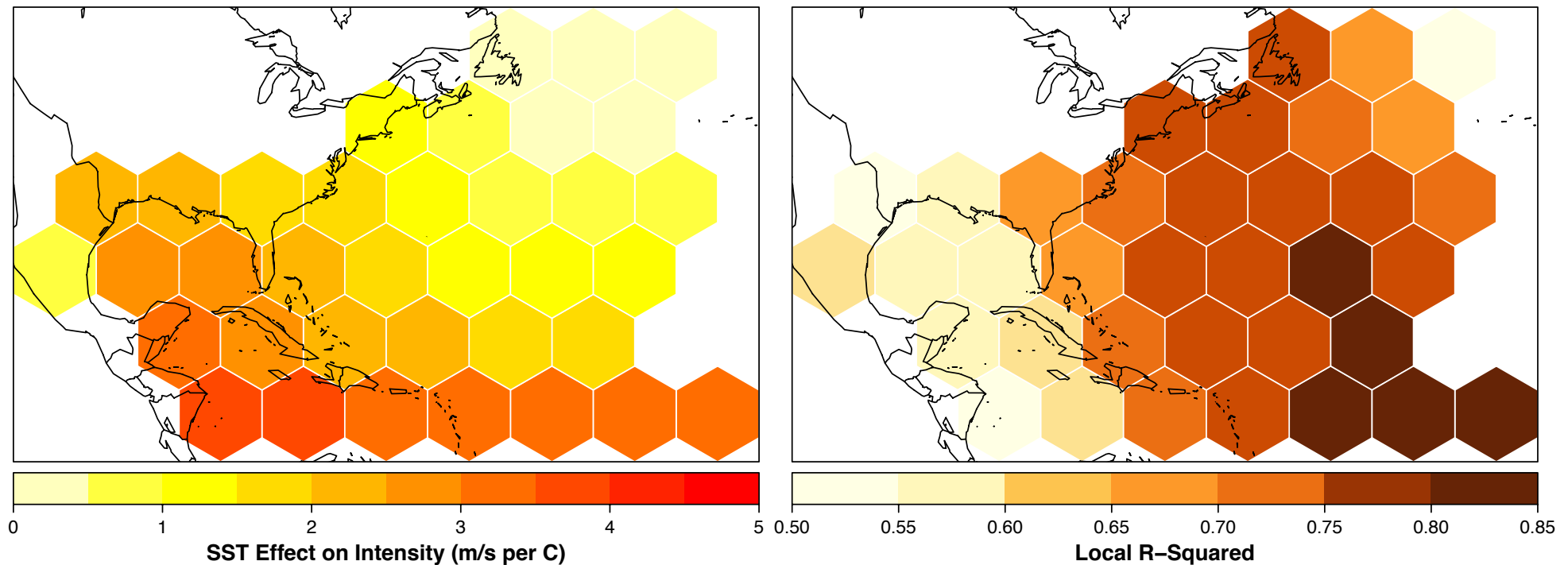
38.7  
years

>50 ms<sup>-1</sup> and 3 meter surge



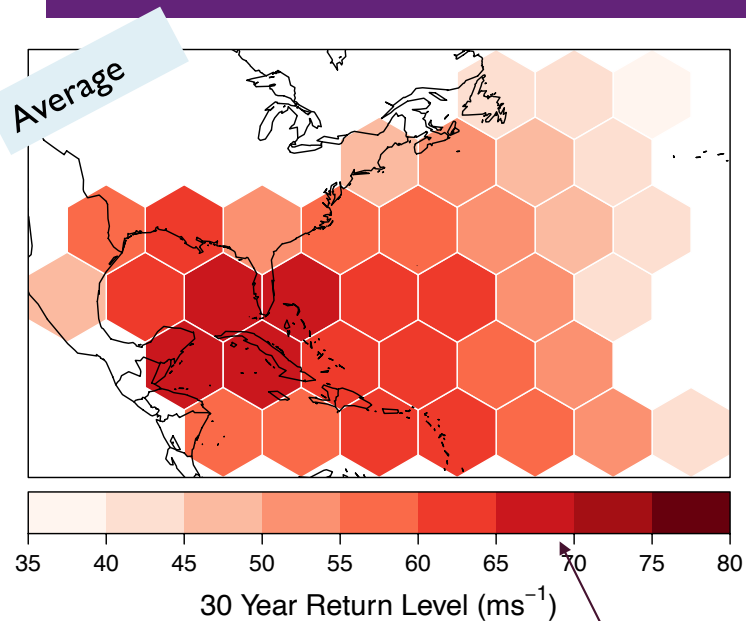
# RESEARCH AT LSU - FINDING RELATIONSHIP WITH SST AND INTENSITY

- Model the observational maximum values per hexagon with average SST values, controlling for count

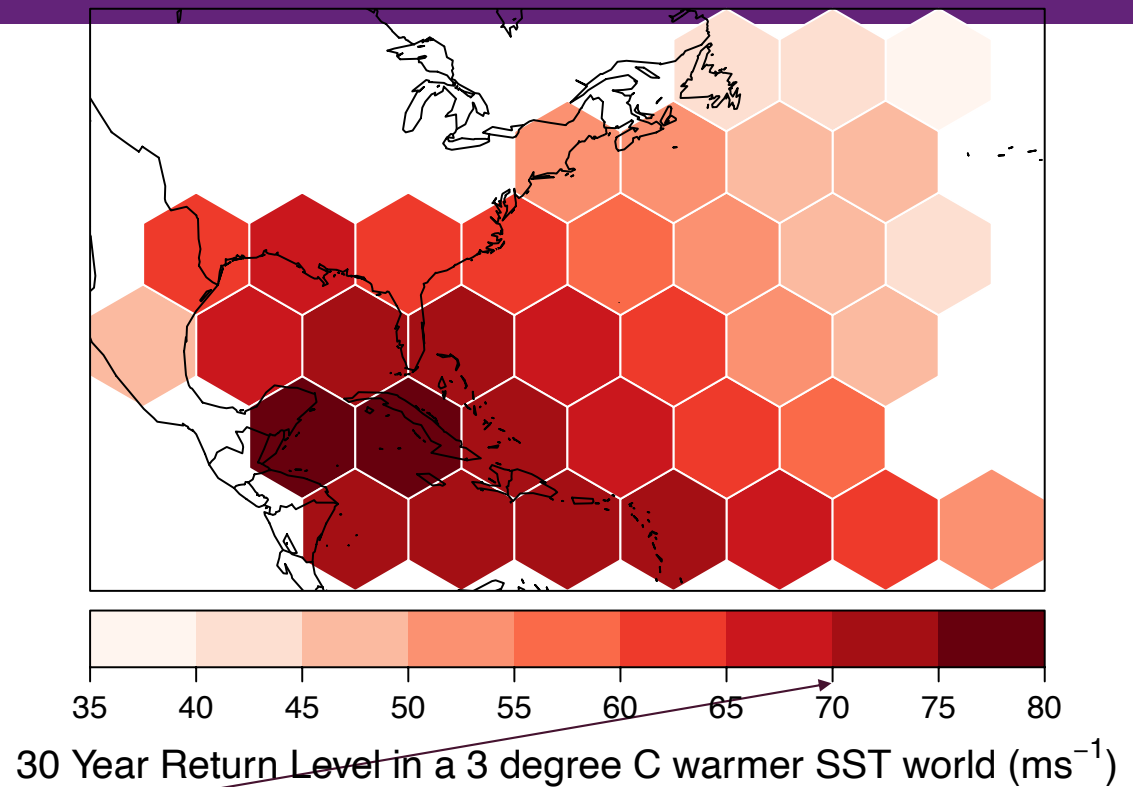




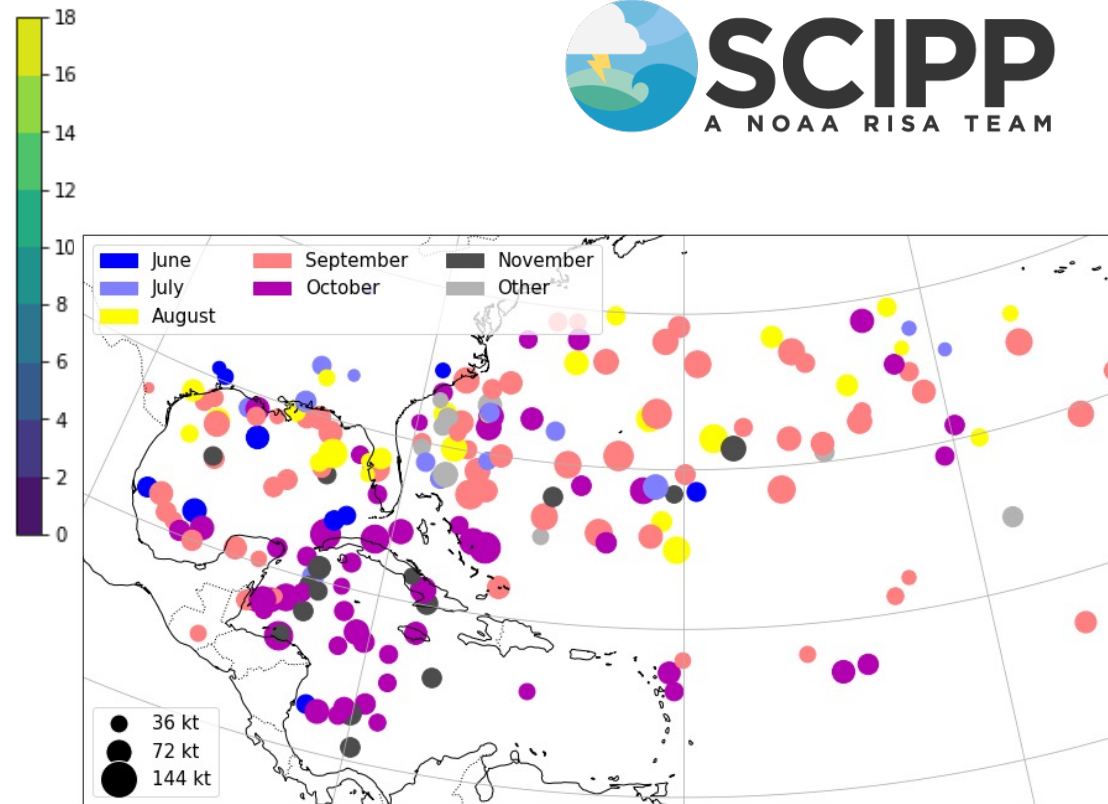
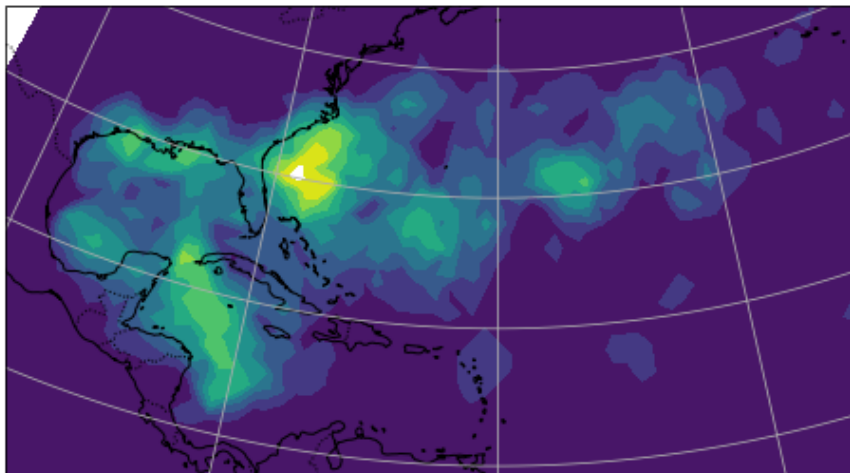
## RESEARCH AT LSU - RETURN LEVELS IN 3-DEGREE WARMER SST



Cat 5!



# RESEARCH AT LSU – STALLING HURRICANES



## RESEARCH AT LSU – OUTREACH EFFORTS

*The New York Times*

Opinion

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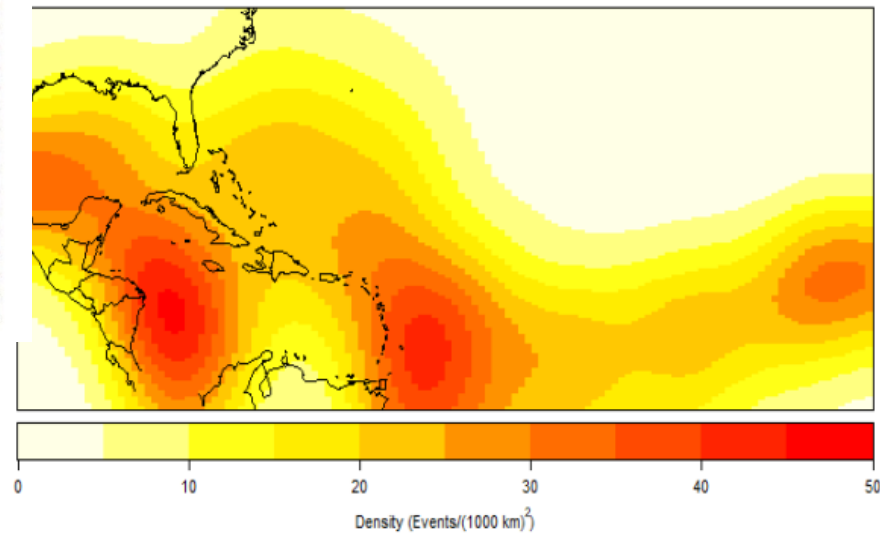
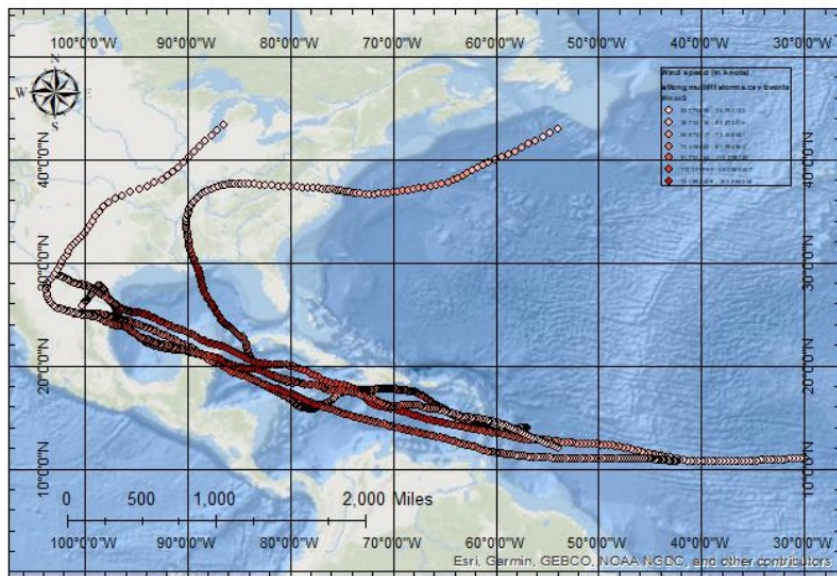
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# GRADUATE RESEARCH AT LSU – RAPID INTENSIFICATION



# GRADUATE RESEARCH AT LSU – GAMMA RAY BURSTS IN LIGHTNING (COMPLETED)



Thunderstorms Producing Sferic-Geolocated Gamma-Ray Flashes Detected by TETRA-II  
Event BR-160427

