

2016 HURRICANE SEASON

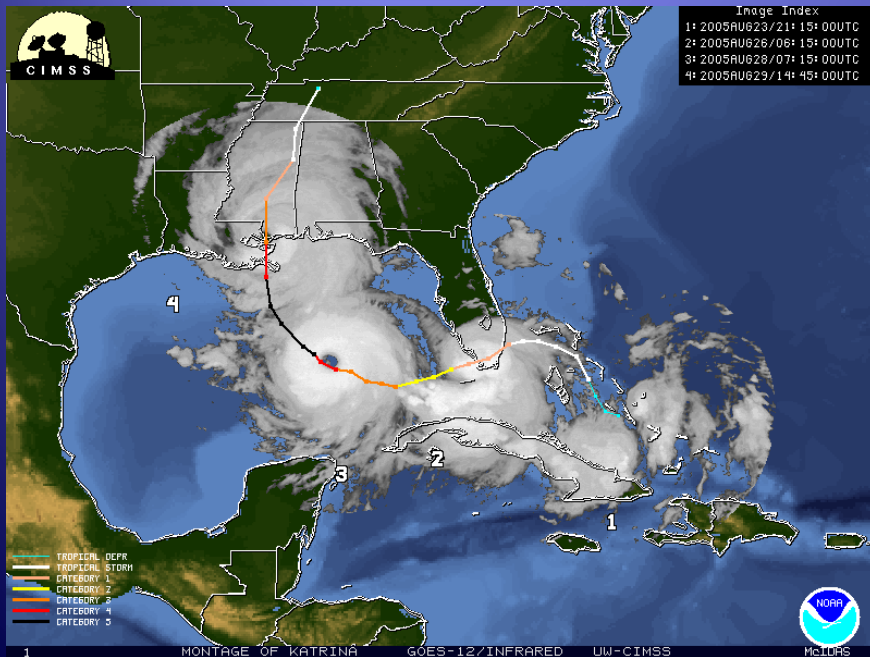


Frank Revitte

National Weather Service

New Orleans/Baton Rouge Area

www.srh.noaa.gov/lix



NATIONAL HURRICANE CENTER ATLANTIC • CARIBBEAN • GULF OF MEXICO • HURRICANE TRACK CHART

NUMBER	TYPE	NAME	DATE
1	T	ARLENE	8 Jun.-13 Jun.
2	T	BRET	28 Jun.-30 Jun.
3	H	CINDY	3 Jul.-7 Jul.
4	H	DENNIS	4 Jul.-13 Jul.
5	H	EMILY	11 Jul.-21 Jul.
6	T	FRANKLIN	21 Jul.-29 Jul.
7	T	GERT	23 Jul.-25 Jul.
8	T	HARVEY	2 Aug.-8 Aug.
9	H	IRENE	4 Aug.-18 Aug.
10	T	JOSE	22 Aug.-23 Aug.
11	H	KATRINA	23 Aug.-30 Aug.
12	T	LEE	28 Aug.-2 Sep.
13	H	MARIA	1 Sep.-10 Sep.

— Hurricane (H)
— Tropical Storm (T)
— Tropical Dep.
+ Extratropical
- - - Wave/Low
— Subtropical Depression
— Subtropical Storm (ST)

● Position at 0000 UTC
 ○ Position/date at 1200 UTC
 [5] Tropical Cyclone Number

NUMBER	TYPE	NAME	DATE
14	H	NATE	5 Sep.-10 Sep.
15	H	OPHELIA	6 Sep.-17 Sep.
16	H	PHILIPPE	17 Sep.-23 Sep.
17	H	RITA	18 Sep.-26 Sep.
18	H	STAN	1 Oct.-5 Oct.
19	ST	UNNAMED	4 Oct.-5 Oct.
20	T	TAMMY	5 Oct.-6 Oct.
21	H	VINCE	8 Oct.-11 Oct.
22	H	WILMA	15 Oct.-25 Oct.
23	T	ALPHA	22 Oct.-24 Oct.
24	H	BETA	26 Oct.-31 Oct.
25	T	GAMMA	14 Nov.-21 Nov.
26	T	DELTA	22 Nov.-28 Nov.
27	H	EPSILON	29 Nov.-8 Dec.
28	T	ZETA	30 Dec.-6 Jan. 2006

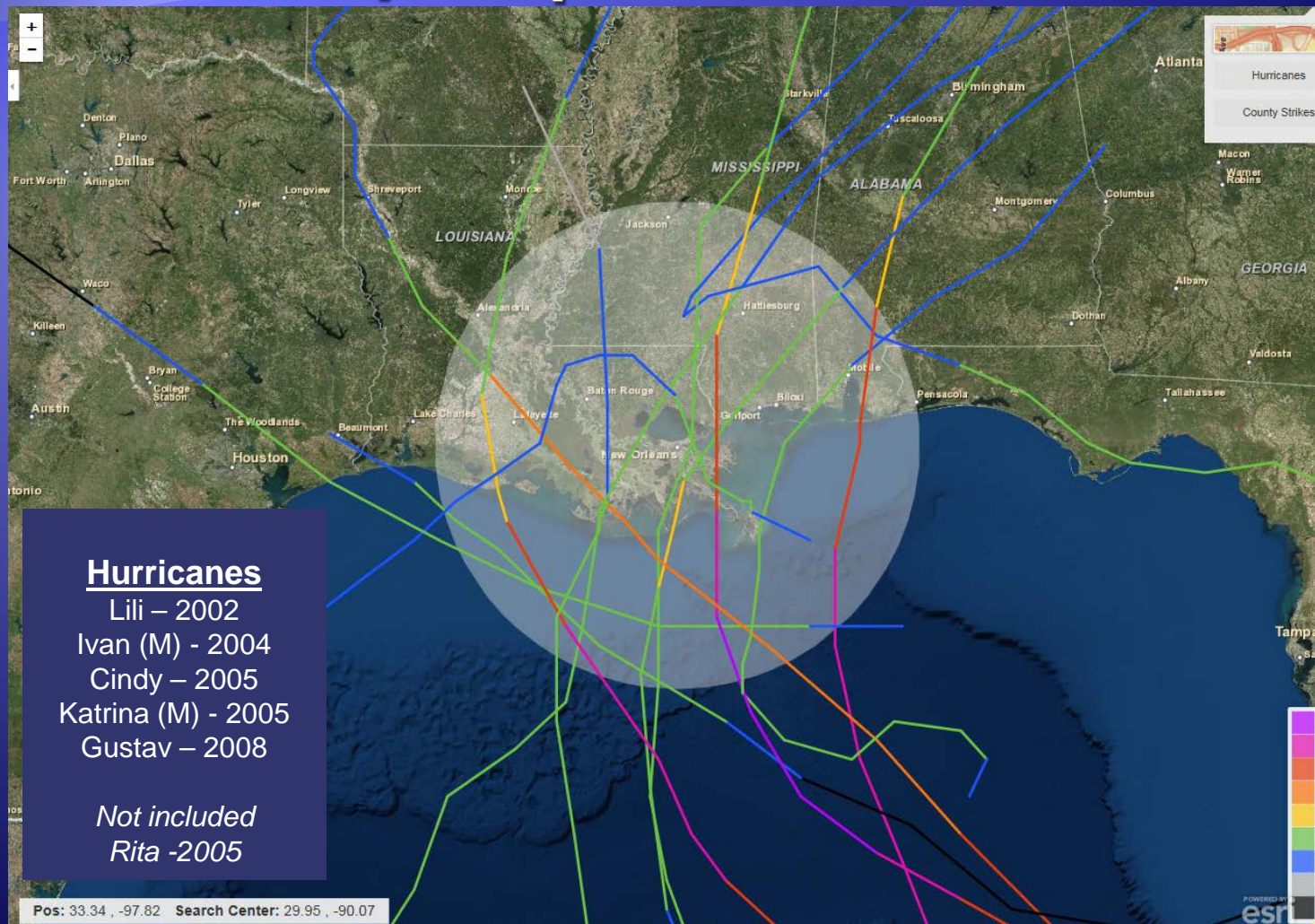
Lambert Conformal Conic
true at 20° and 40° North



Tropical Activity 2002-2008

7 years – 5 Hurricane (2 Major)

7 Tropical Storms

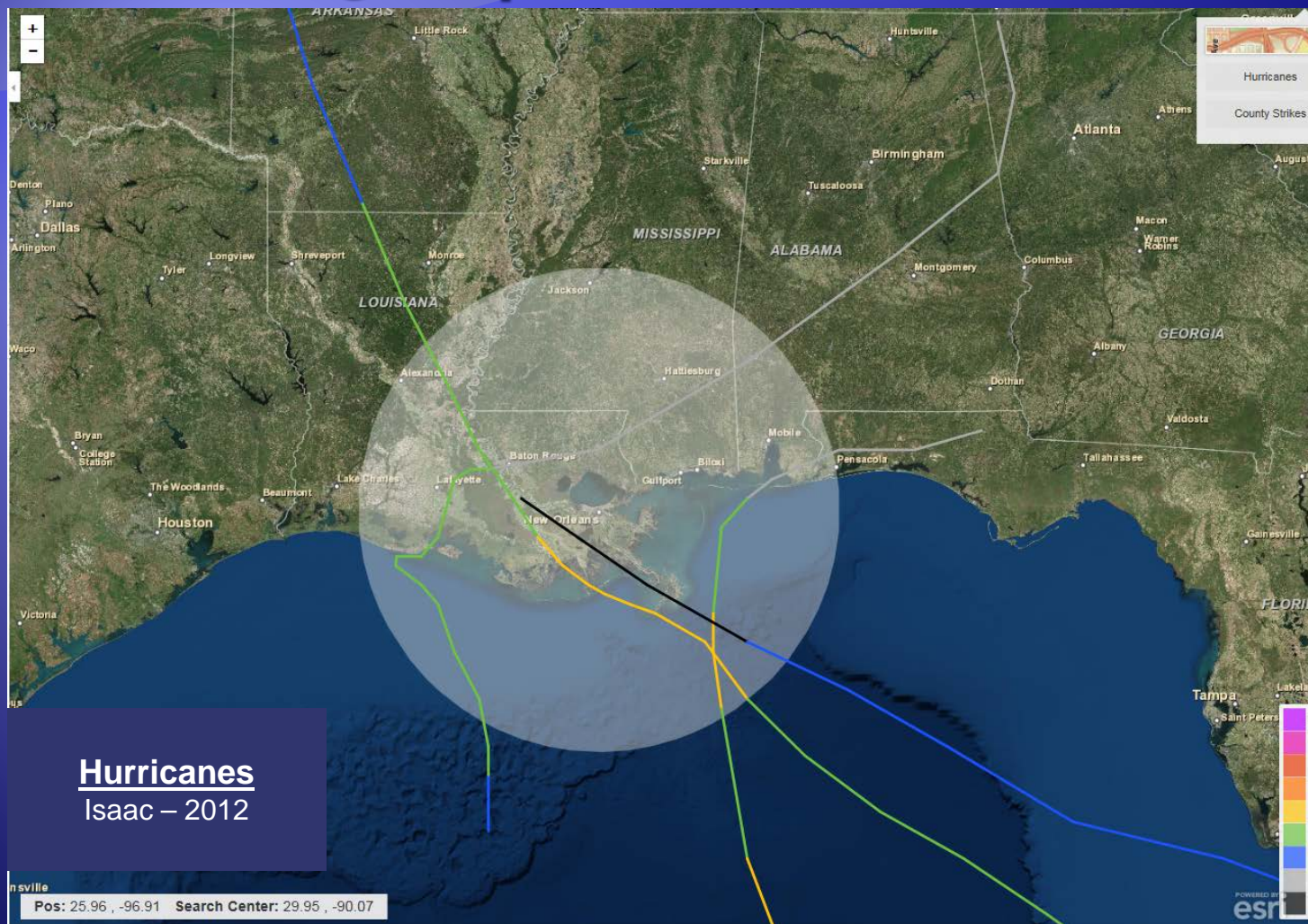




Tropical Activity 2009-2015

7 years – 1 Hurricane (No Major)

3 Tropical Storms

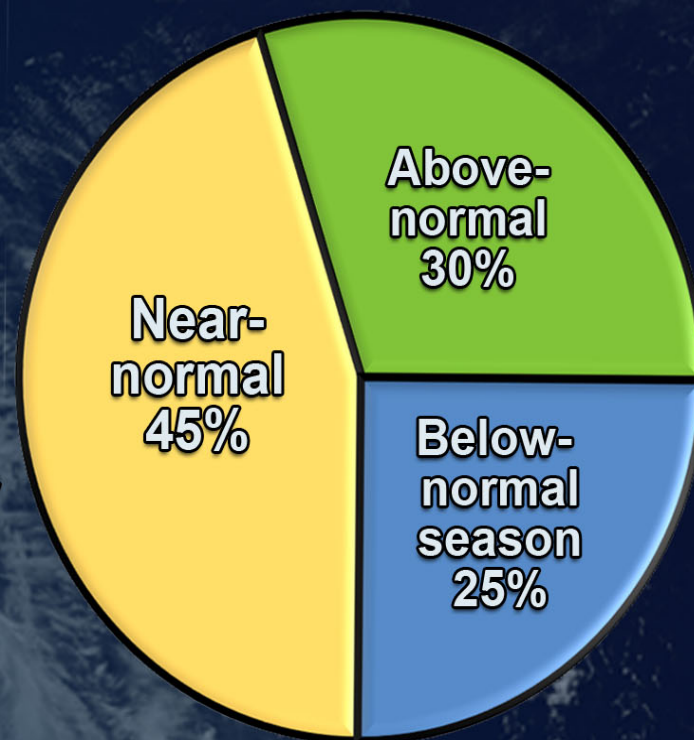




2016 Atlantic Hurricane Season Outlook

Named storms: 10 - 16
Hurricanes: 4 - 8
Major hurricanes: 1 - 4

Outlook
probability



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



2016 Seasonal Outlook

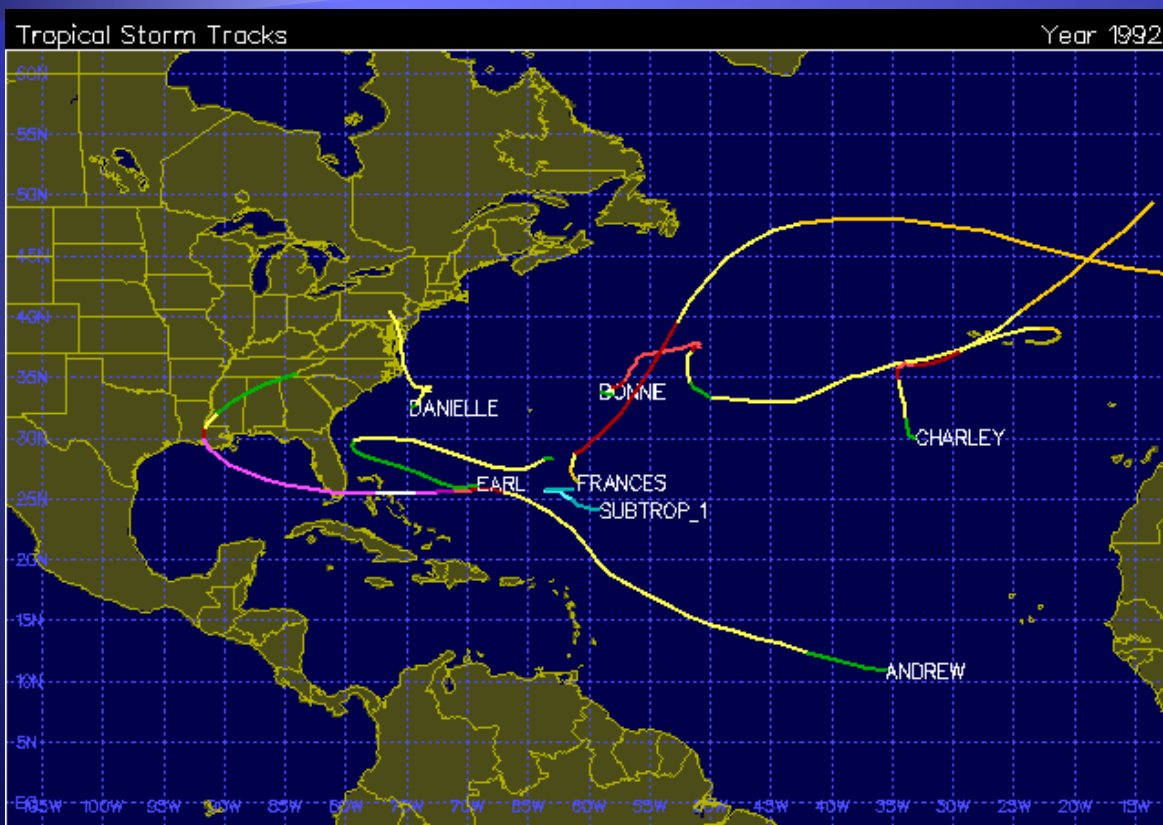
- *El Nino Circulation* diminishing – positive for active season
- Atlantic water cooler than normal – negative for active season

	Average	Colo. State Released April 14	NOAA (May 27 th)
Named Storms	12	12	10-16
Hurricanes	6	5	4-8
Major Hurricanes	2	2	1-4
Accumulated Cyclone Energy (ACE)	92	90	65-140%

CAUTION It only takes one storm to make a “bad” season

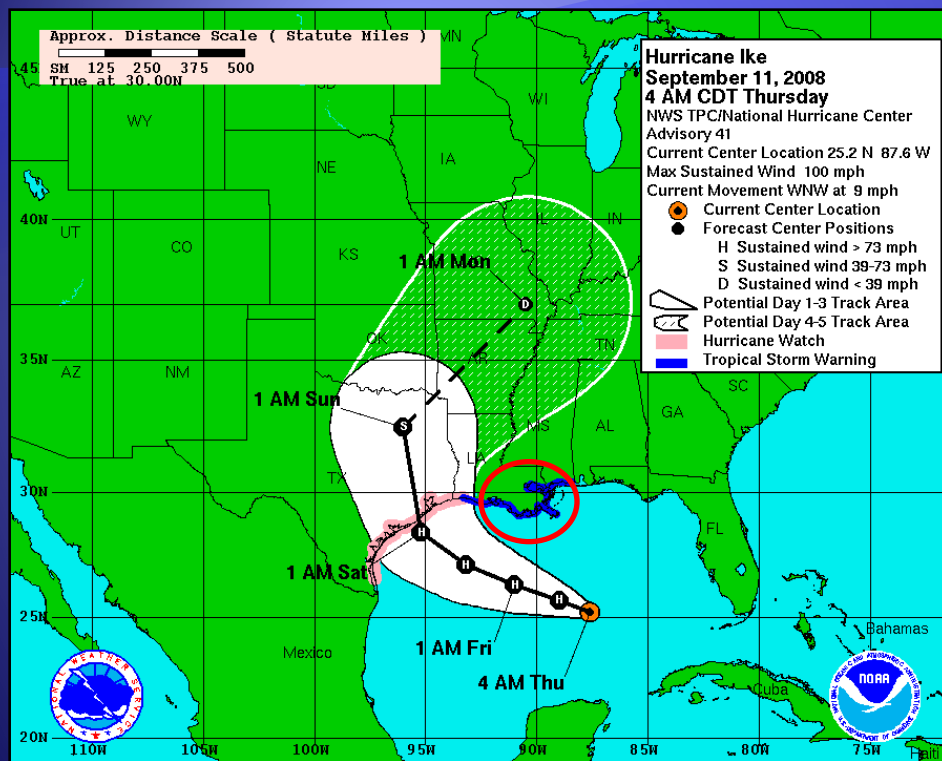


1992: Inactive Season High Impact for FL/LA



- Neutral El Niño
- Well below normal activity
- 7 Named Storms
- 3 Tropical Storms
- 4 Hurricanes
- Andrew caused significant impacts across FL and LA

Forecast Cone



- The cone is NOT a forecast of the impact area – it only describes where the center of the storm will likely be located.
- Impacts can extend well beyond the cone, especially for large storms.
- At left, Hurricane Ike remained well south of the LA coast, and southeast LA was never in the cone, but storm surge from Ike exceeded that of Gustav in some places.



Lead Time is Great, But...

Hurricane Camille (1969)

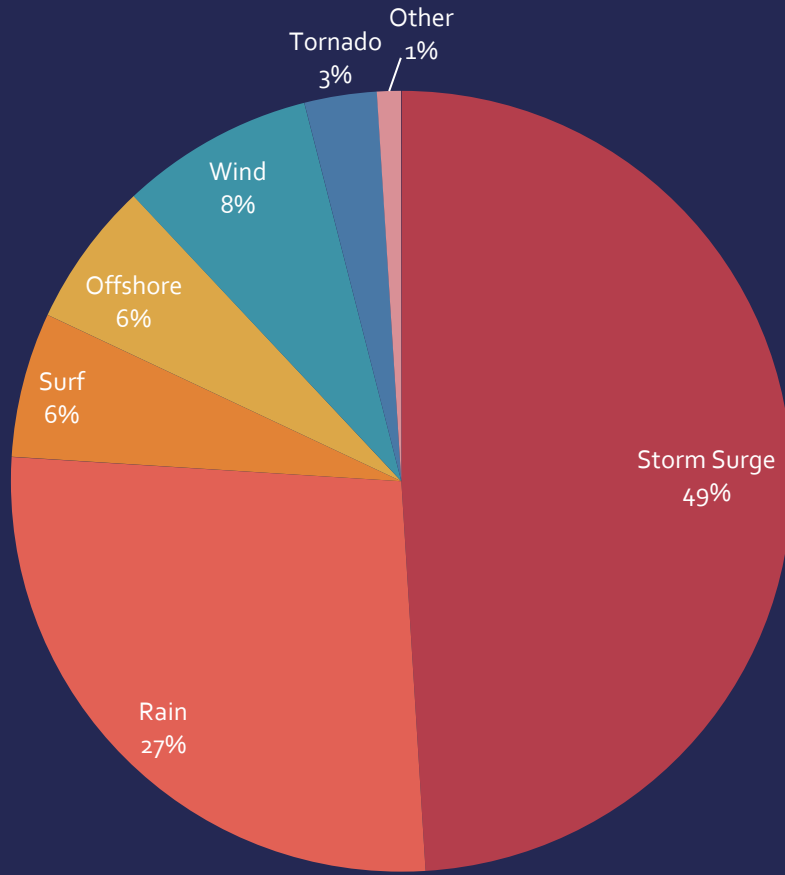
Landfall 9PM Aug 17 in SE
LA/MS as cat 5 with
estimated gusts of 150-170
mph

Classified as a TS near
Grand Cayman at 2PM Aug
14th; about 80 hrs prior to
landfall





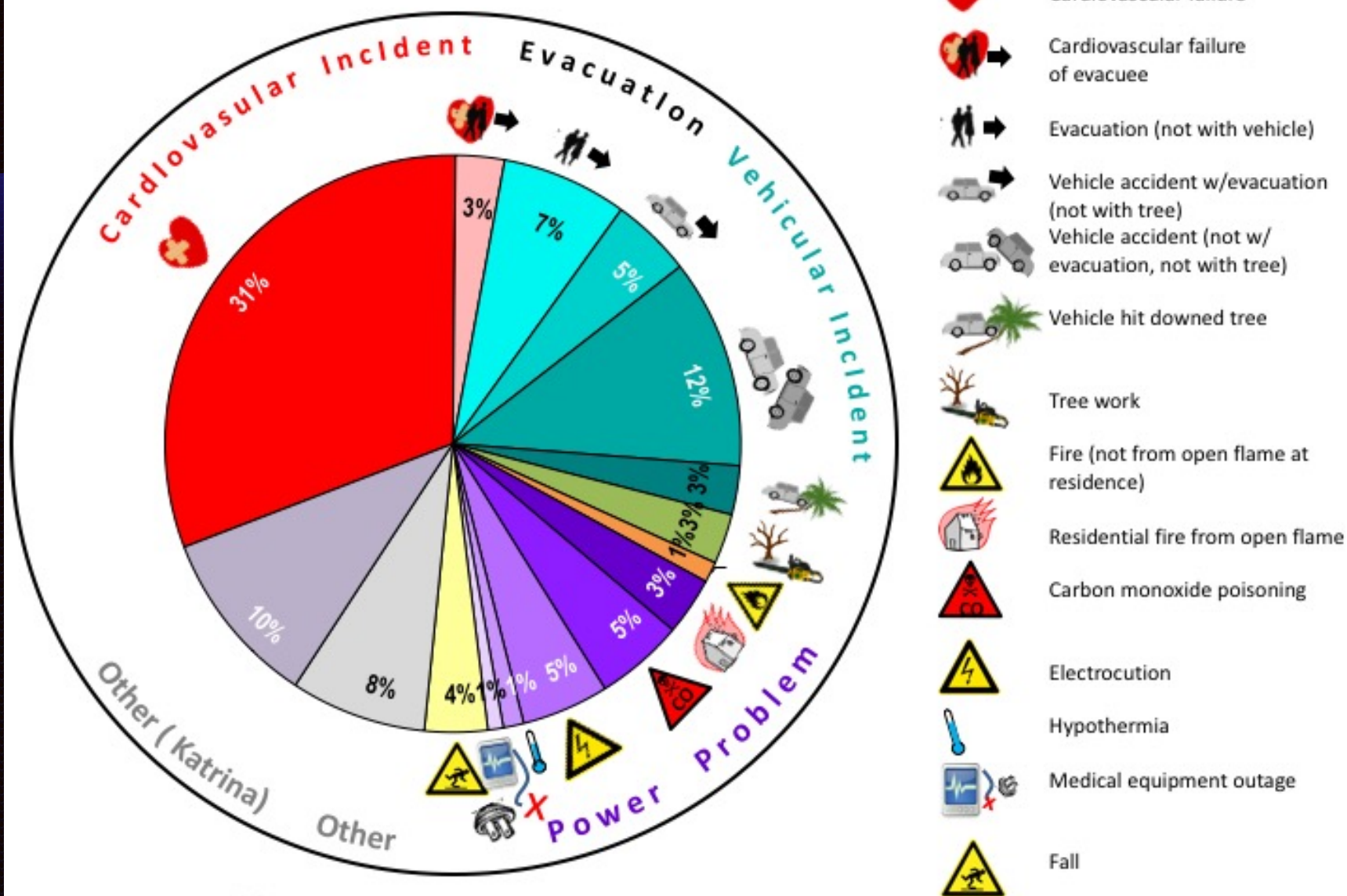
US Direct Tropical Cyclone Fatalities



TS/Hurricane Fatalities 1963-2012

- Over half of the storm surge fatalities occurred in Louisiana or Mississippi
- Even excluding Katrina, nearly one quarter of storm surge fatalities occurred in Louisiana or Mississippi

U.S. Atlantic Tropical Cyclone Indirect Deaths, 1963-2012





Hazards and Impacts

- ◆ *Wind*
- ◆ *Rainfall*
- ◆ *Storm Surge*

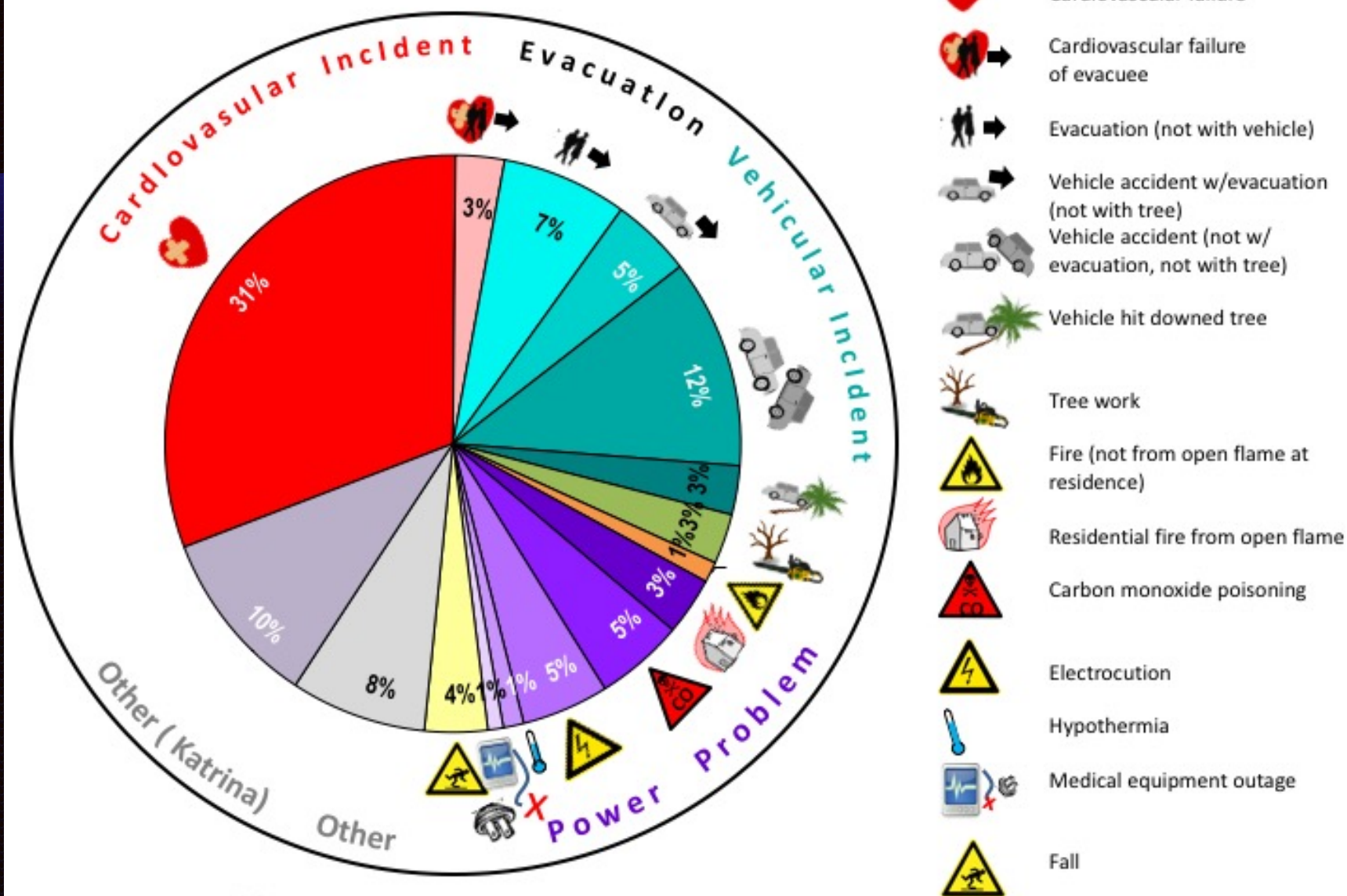


Damaging Winds - Gustav



- *Wind Gusts – Baton Rouge*
- 1965 Betsy – 92mph
- 1992 Andrew – 70 mph
- 2008 Gustav - 91 mph

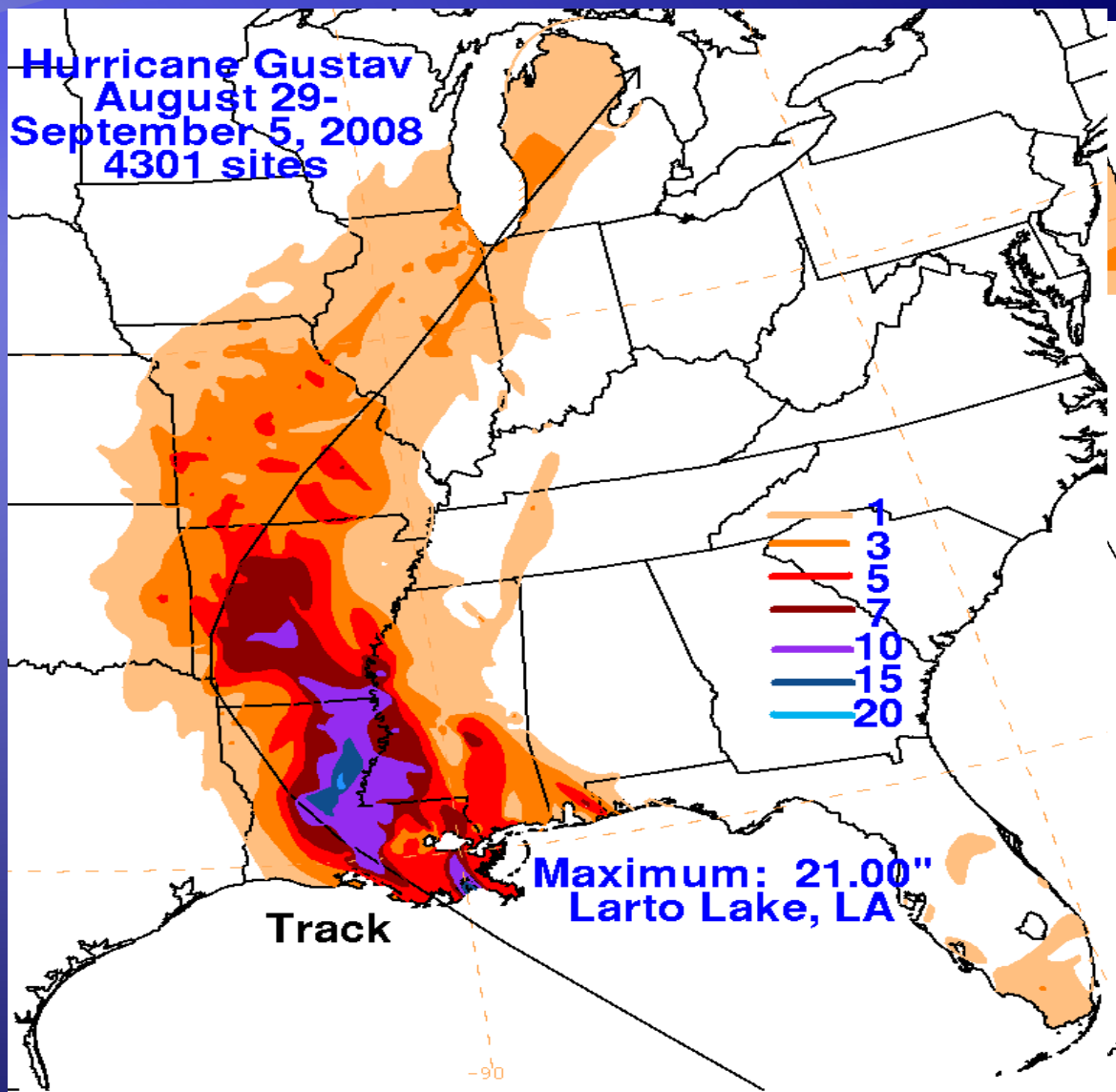
U.S. Atlantic Tropical Cyclone Indirect Deaths, 1963-2012





Historical Heavy Rain Events

1. TD 1962 23.14
2. TS Allison 1989 25.67
3. TS Frances 1998 22.39
4. TS Allison 2001 25 +
With 40 + in Texas
5. Hurricane Gustav 2008 21.00

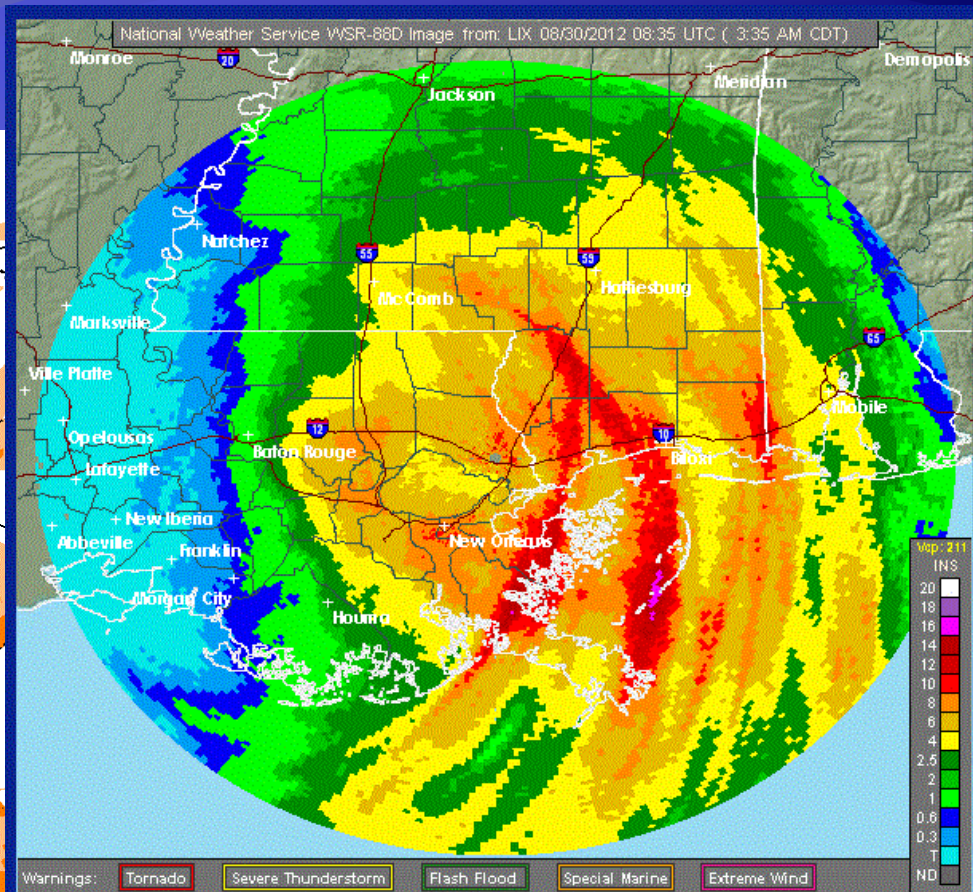
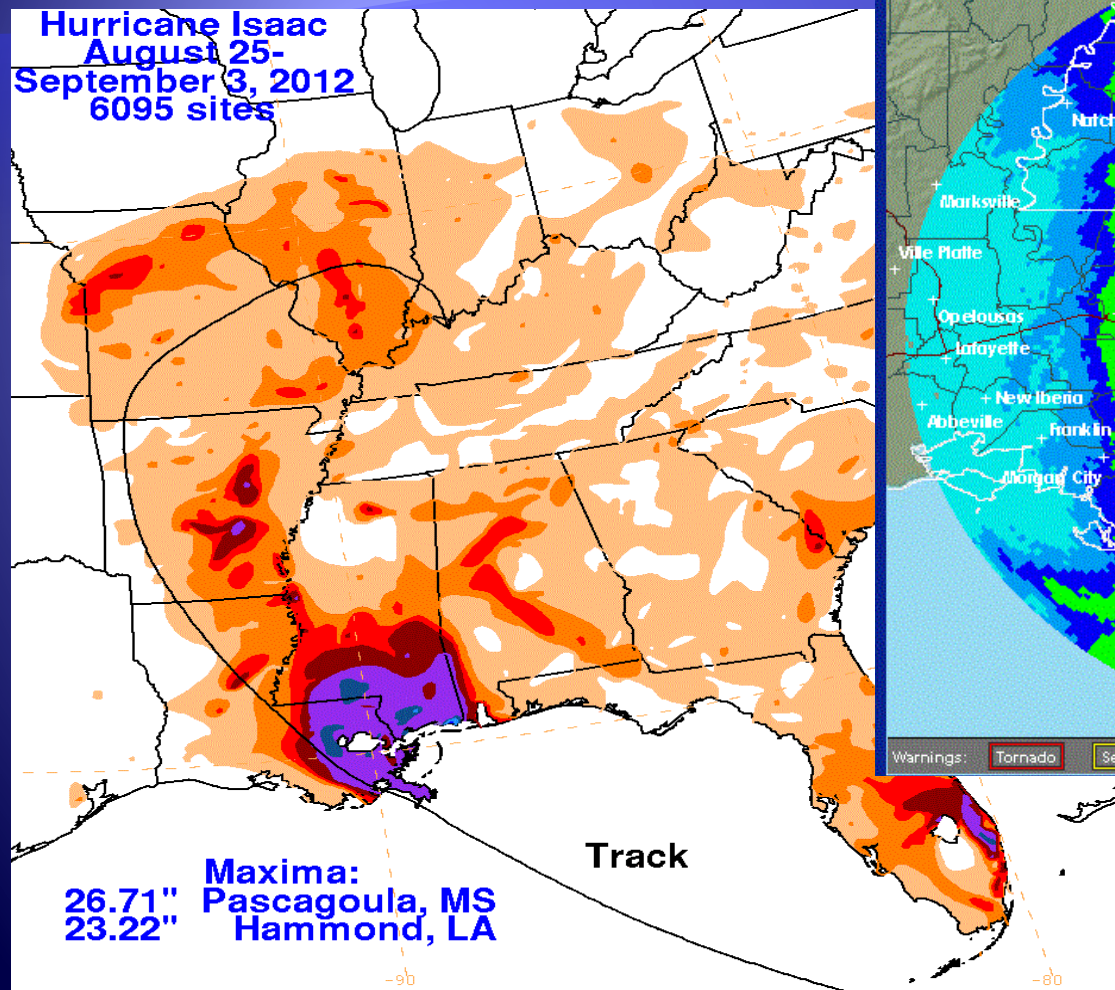




Rainfall Accumulation



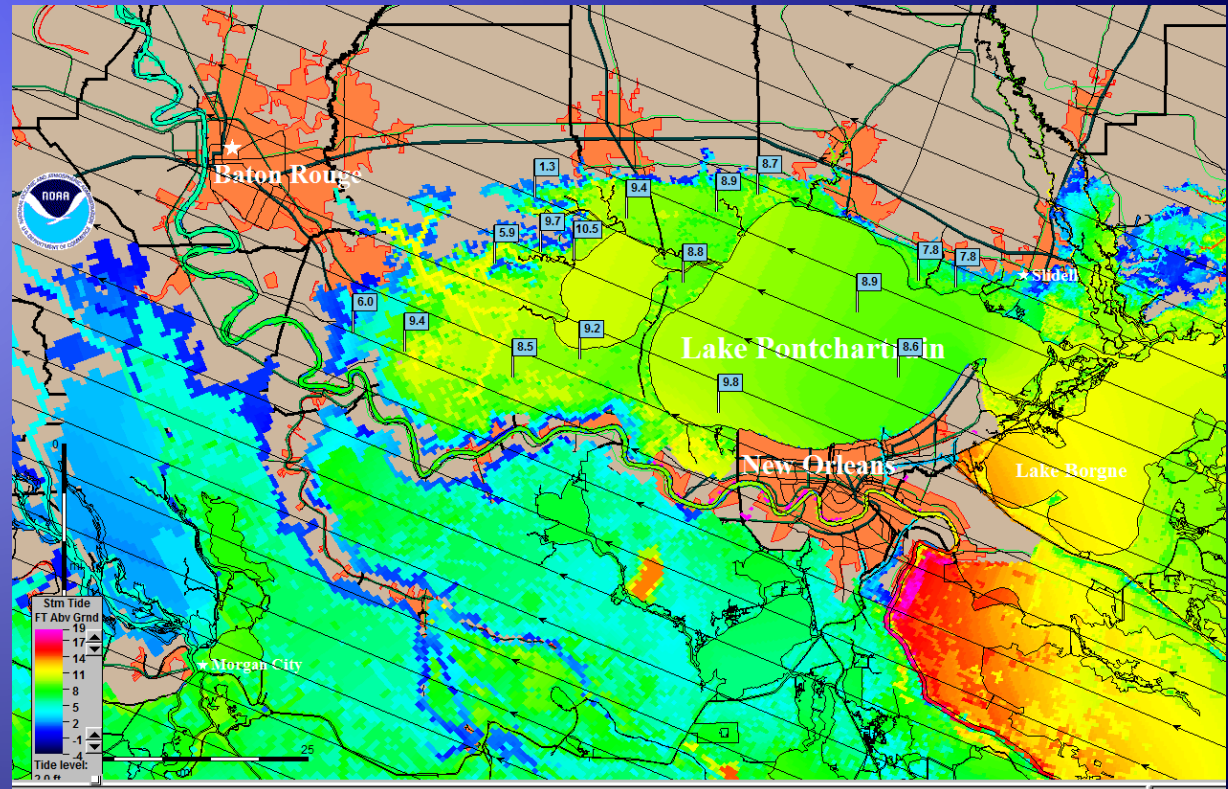
Hurricane Isaac
August 25-
September 3, 2012
6095 sites



SLOSH Display Program - MEOWs

(Maximum Envelope of Water)

- Shows maximum inundation, but from a selection of storms having common direction of motion, speed, and category. Size of storm is varied
- Water level can be viewed above datum (NAVD88) or above terrain (AGL)
- Available year round for planning purposes

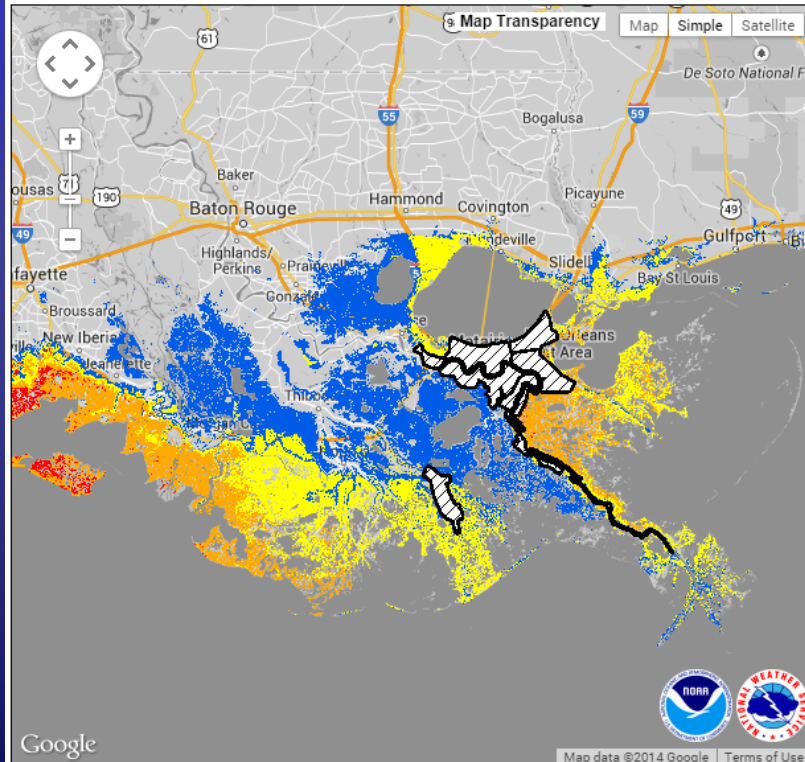


MEOW – Category 2, WNW 5 mph, High Tide
Water levels noted feet above terrain (AGL)

Experimental Potential Storm Surge Flooding Map (Inundation)

Experimental Potential Storm Surge Flooding Map (Inundation)

NHC Experimental Potential Storm Surge Flooding Map
Hurricane TEST (2014) Advisory 1



Potential Storm Surge Flooding*

- Up to 3 feet above ground
- Greater than 3 feet above ground
- Greater than 6 feet above ground
- Greater than 9 feet above ground
- Levee protected area
Consult local officials for flood risk

*Displayed flooding values indicate the water depth that has about a 1-in-10 (10%) chance of being exceeded.

The potential storm surge hazard is not depicted within certain levee-protected areas, such as the Hurricane and Storm Damage Risk Reduction System in Louisiana. A diagonal hatch pattern is used to display these areas on the map. These areas are highly complex, and local officials are best equipped to forecast and monitor the threat of storm surge flooding inside these areas. Customers are asked to consult local officials for flood risk inside these leveed areas.

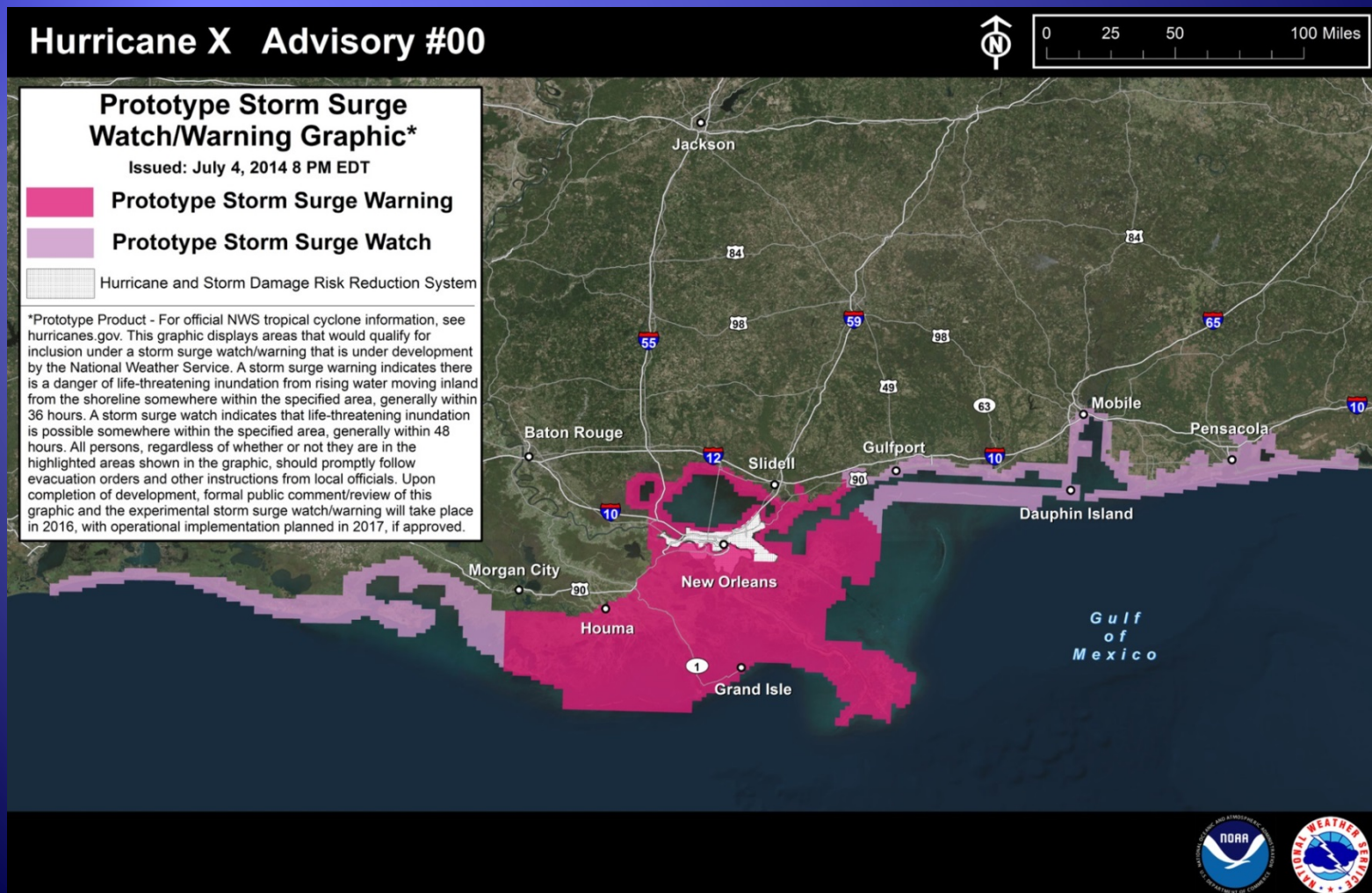
- Based on Probabilistic Storm Surge
- Accounts for errors in forecast track, intensity and size.
- **“Reasonable” worst case scenario**
- Available when **Watches/**
- **Warnings** are in effect.
- Will be available approximately 80 minutes after each advisory
- New map generated for each advisory – some subtle changes possible
- Colors match those on the storm surge risk web site
- Risk Reduction System included
 - Inside of system: areas is hatched with no info provided.

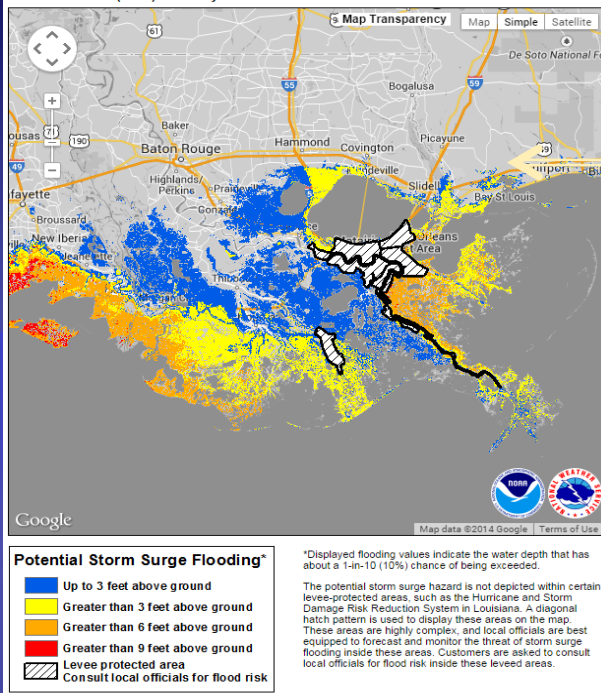


Prototype Storm Surge Watch/Warning Graphic



- Collaborative process between NHC and local NWS Office using various objective analysis and local knowledge to highlight life threatening storm surge.





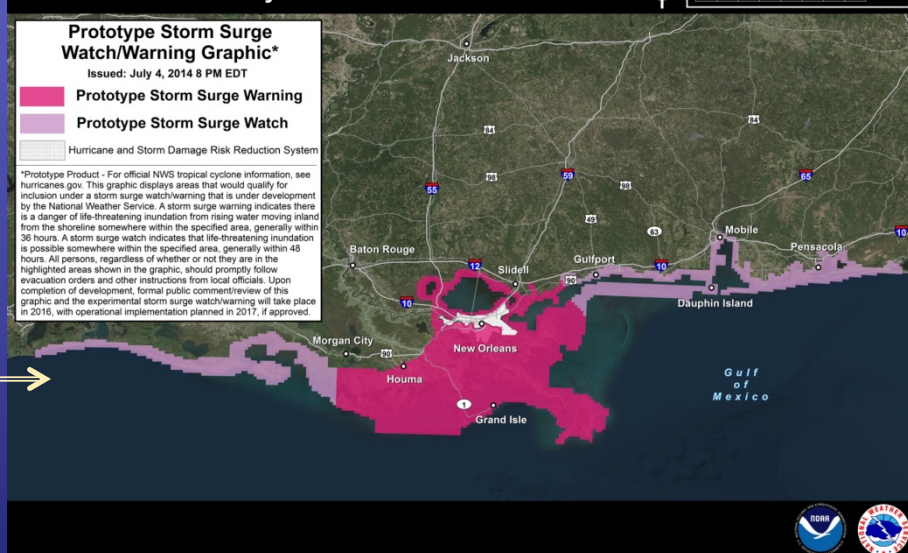
• Potential Storm Surge Flooding Map

- Runs after each Advisory
- Objective Scheme(no human intervention)
- Flooding may change slightly between each advisory – depending on changes to track, intensity and size of hurricane
- Available during Watch/Warning Phase

• Prototype Storm Surge Watch Warning Graphic

- Depicts potential for “life threatening” storm surge
- Uses both objective information and local knowledge.
- Collaborative process between NHC and Local NWS Offices/

Hurricane X Advisory #00





Strong Social Media Presence



- Website: www.weather.gov/neworleans
- Twitter: @NWSNewOrleans, @NWSLakeCharles, @NWSShreveport, @NWSJacksonMS
- Facebook: US National Weather Service New Orleans Louisiana

26 05N-89 00W Forecast Valid: 11am EDT Sep 2, 2004-6pm EDT Sep 8, 2004

Forecast at a Glance

Today	Tonight	Labor Day	Friday Night	Saturday	Saturday Night	Sunday	Sunday Night	Monday
Chance Tstms	Chance Tstms	Trop Storm Conditions Expected	Hurricane Conditions Expected	Hurricane Conditions Possible	Hurricane Conditions Possible	Trop Storm Conditions Possible	Chance Tstms	Chance Tstms
HI 85°F	Lo 75°F	HI 85°F	Lo 75°F	HI 85°F	Lo 75°F	HI 85°F	Lo 75°F	HI 85°F

Detailed 7-day Forecast

Today: Scattered showers and thunderstorms. Partly cloudy, with a high near 85. Windy, with a north wind around 23 mph, with gusts as high as 32 mph. Chance of precipitation is 50%.

Tonight: Scattered showers and thunderstorms. Partly cloudy, with a low around 75. Windy, with a north wind around 23 mph, with gusts as high as 32 mph. Chance of precipitation is 50%.

Labor Day: Tropical storm conditions expected, with hurricane conditions possible. Scattered showers and thunderstorms. Partly cloudy, with a high near 85. North wind 25 to 30 mph, with gusts as high as 41 mph. Chance of precipitation is 50%.

Friday Night: Hurricane conditions expected. Scattered showers and thunderstorms. Partly cloudy, with a low around 75. North wind 45 to 55 mph increasing to between 40 and 60 mph. Winds could gust as high as 80 mph. Chance of precipitation is 50%.

Saturday: Hurricane conditions possible. Scattered showers and thunderstorms. Partly cloudy, with a high near 85. Chance of precipitation is 50%.

Saturday Night: Hurricane conditions possible. Scattered showers and thunderstorms. Partly cloudy, with a low around 75. Chance of precipitation is 50%.

Sunday: Tropical storm conditions possible. Scattered showers and thunderstorms. Partly cloudy, with a high near 85. Chance of precipitation is 50%.

Sunday Night: Scattered showers and thunderstorms. Partly cloudy, with a low around 75. Windy, with a north wind around 23 mph, with gusts as high as 32 mph. Chance of precipitation is 50%.

Current Conditions

West Palm Beach, Palm Beach International Airport
Lat 26.68 Lon -80.12 Elev
Not a Current Observation

Humidity	Wind Speed	Barometer	Dewpoint	Visibility
NULL	NULL	NULL	NULL	NULL

Radar and Satellite Images

Click Map for Forecast

Is your email address active? We've tried to send emails to but they are not getting delivered. Please update your email settings or try sending a message again to your current address.

NWSNewOrleans

@NWSNewOrleans
This is an experimental service to explore Twitter use to extend the reach of NWS information. Visit <http://go.noaa.gov/tw> for details and to provide comments.
New Orleans, Louisiana - <http://www.srh.noaa.gov/nr>

697 TWEETS 109 FOLLOWING 1,899 FOLLOWERS

Tweets

NWSNewOrleans @NWSNewOrleans 21h
EFO tornado confirmed near St Gabriel from yesterdays storm. [#lax](#) Expand

NWSLMRFC @NWSLMRFC 22h
Cairo and Cape Girardeau to crest tomorrow. Flood wave to move downstream over weekend. Latest forecast here: [ow/kyqztlq](#) [#MSlood](#) Retweeted by NWSNewOrleans Expand

NWSNewOrleans @NWSNewOrleans 25 Apr
Here is a little more detailed information on the tornadoes on the southshore. This info may be updated later. [#lax](#) [resched weather.gov/pnp?id=2013](#) Expand

Who to follow

Pierre Thomas @Pierre_Th...
Followed by FOX 8 New Orleans

Harold Brooks @hbrooks87
Follow

Nat Hurricane Cr @NHC_P...
Followed by NWSNewOrleans

US National Weather Service New Orleans Louisiana

7,353 Likes 13 Friends

Business Services • Broadcasting & Media Production • Games
This page is an experimental service provided by NWS to explore the use of Facebook to extend the reach of NWS information. Facebook posts do not always reflect the most about - suggest an edit

Expect another nice and warm day across the area. No rain is expected today. Rain chances do increase over the weekend especially Sunday as a disturbance moves through the region and a frontal boundary stalls across the area. This will be