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*Technologies
Conference*

The Importance of Imagery – Disasters Happen

Joe Oddi – Dir. Partner Strategies – EagleView Technologies

Kathrine Cargo – GIS Analyst - Orleans Parish Communications District

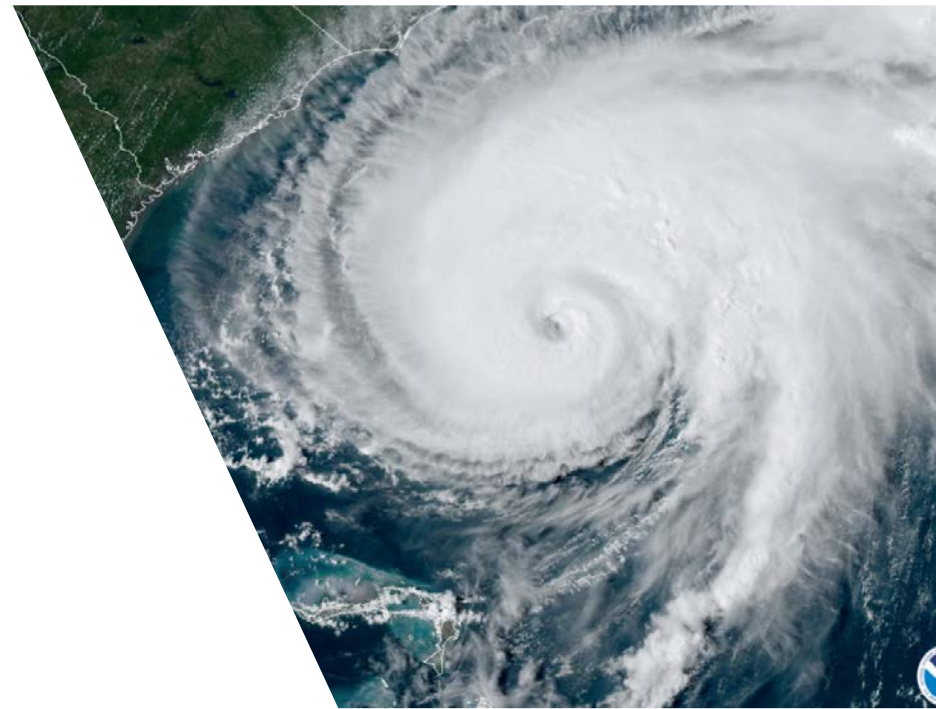
Agenda

Joe Oddi – Capturing Post-disaster Imagery

Kathrine Cargo – Real world applications of post disaster imagery

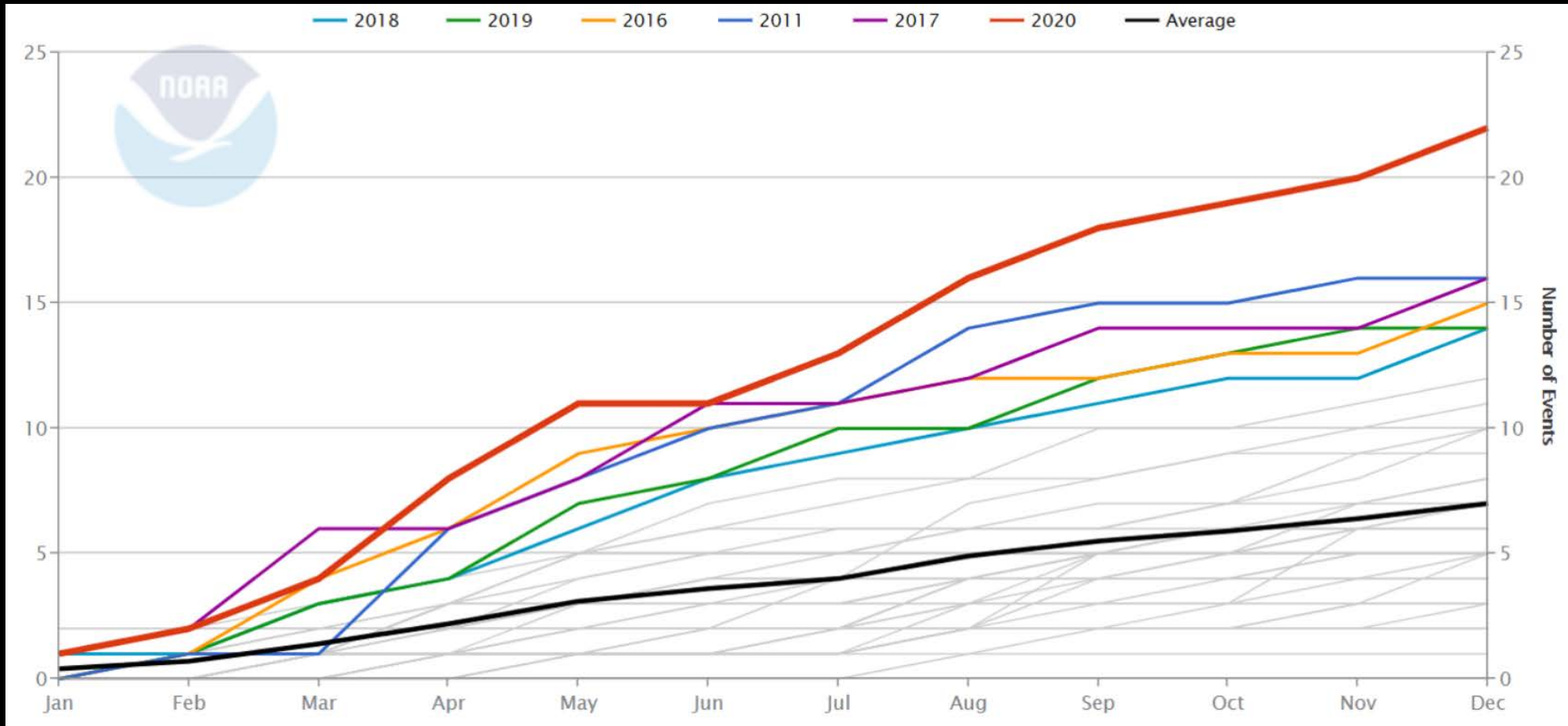
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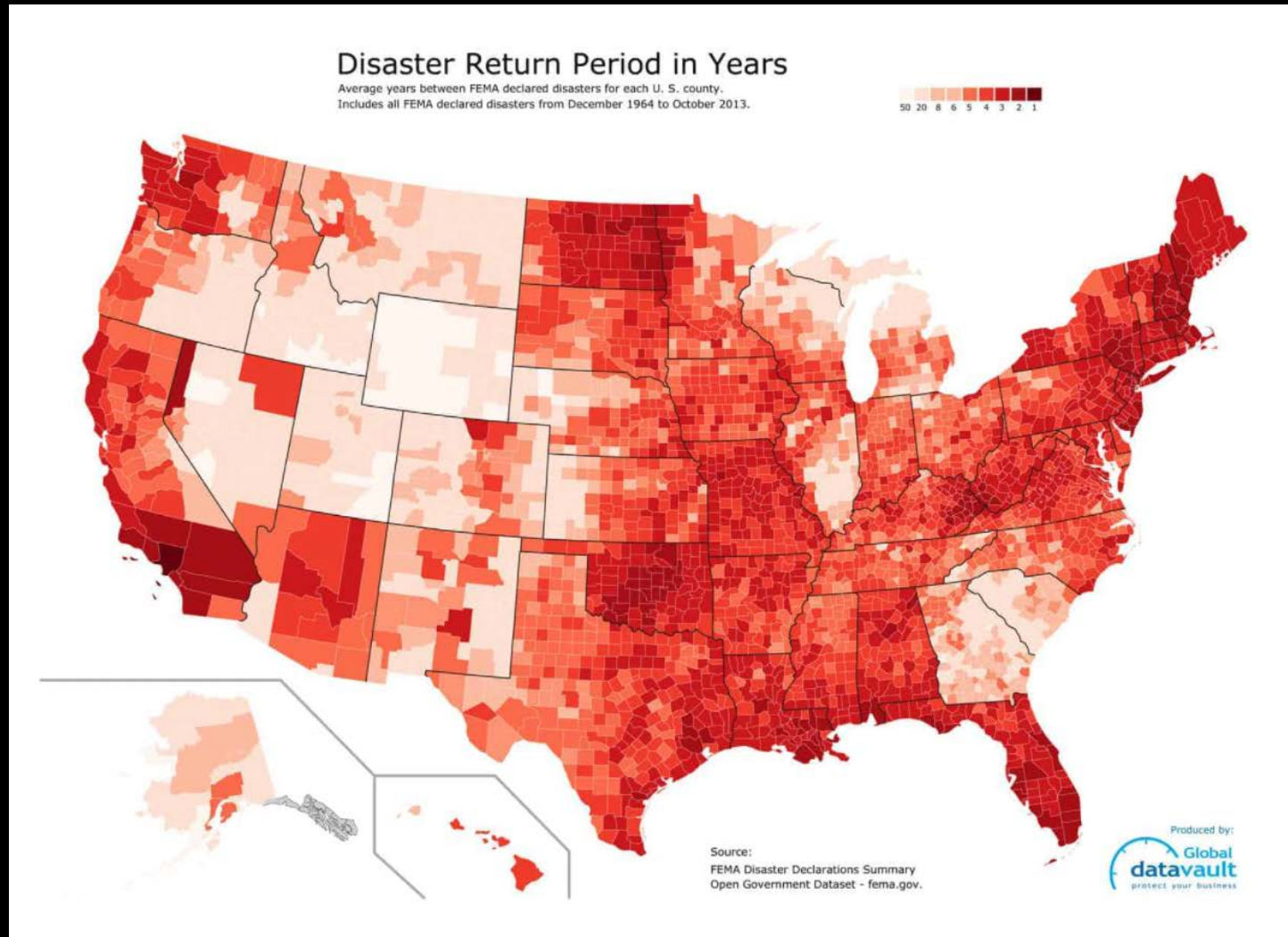
Billion-Dollar Disaster Event Count, 1980-2020



Source: Climate.gov (NOAA) - <https://www.climate.gov/media/11907>



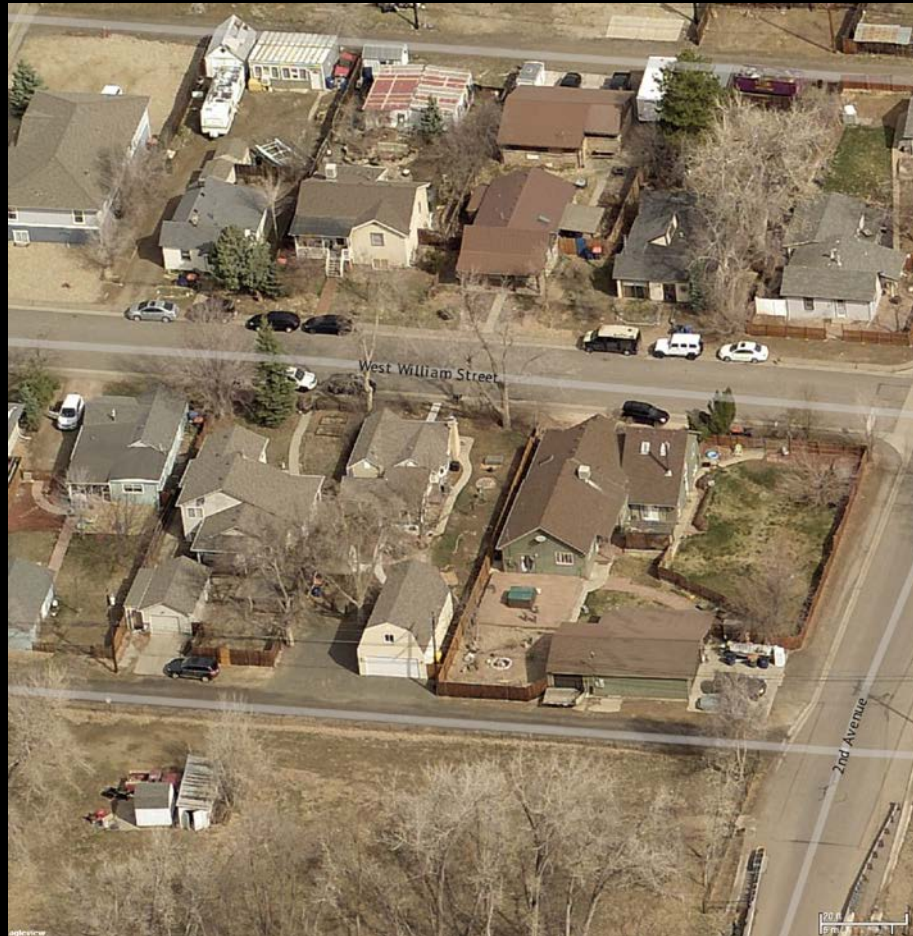
Return Period in Years for FEMA Declared Disasters



Source: FEMA - <https://www.globaldatavault.com/blog/fema-disaster-map/>

Imagery is Critical for Disaster Response & Recovery

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Before



After

Superior, CO
Dec '21



Use Cases

- Rescue Efforts
- Safety Assessment
- Response Planning
- Damage Assessment
 - Valuation
 - Asset Management
 - Insurance Claims
- Investigation
- Reporting to Federal Agencies for Aid (FEMA)



An Invaluable Tool for Government Offices

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- Public Safety (Police, Fire, EMS, OEM, Sheriff)
- Tax Assessment
- Building/Code Enforcement
- GIS
- Public Works
- Health Department
- Parks & Recreation



Disaster Response Program (DRP)

- For existing customers, EV will fly post-disaster up to 200 sq. mi. at no cost if the storm meets the following criteria:
 - Hurricane (Cat 2 or higher)
 - Tornado (EF4 or higher)
 - Earthquake (6.0 Richter Scale rating or higher)
 - Tsunami
 - Terrorist Event

Disaster Response Program

- Events that do not meet this criteria can be purchased at a discounted rate.* This includes:
 - Storms that do not meet the thresholds mentioned previously
 - Floods
 - Wildfires
 - Mudslides
 - Volcanic Activity

*This also goes for additional areas beyond the free 200 sq. mi. that require post-storm capture.

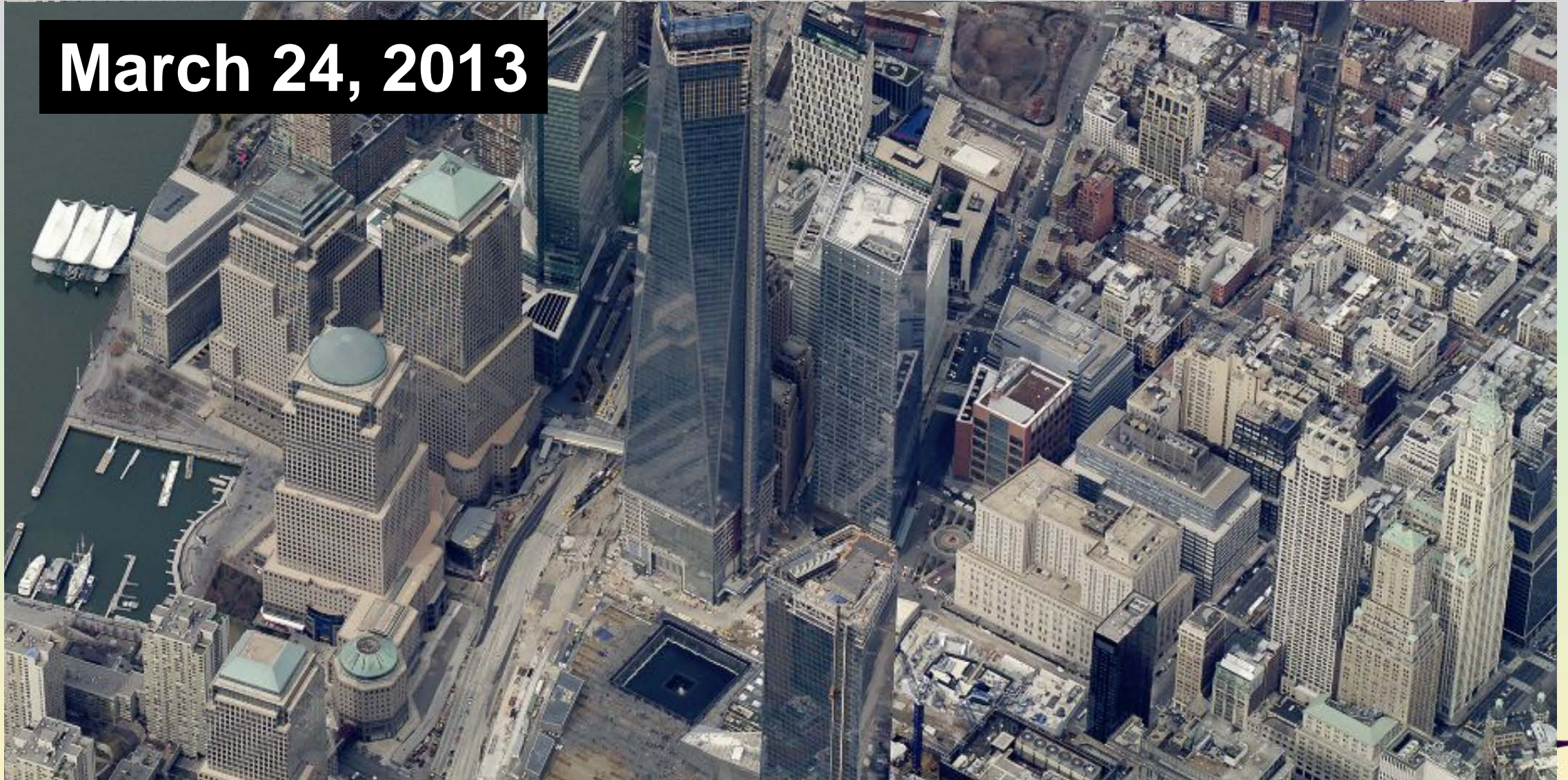
Challenges

- Mobilizing flight operations quickly
 - Safety of pilots/crew
- Lingering environmental factors (wind, smoke, cloud cover)
- Presidential Visits (No Fly Zone)
- Coordination with FAA/Clearance to fly
- Communication with customers who lost power/phone/internet
- Logistics of shipping hard drives back to HQ
- Quick processing of imagery/availability to customer

NYC – Post 9/11 – Historical Library

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March 24, 2013



Post-Disaster: Floods in Boulder County, CO 2013

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Experience

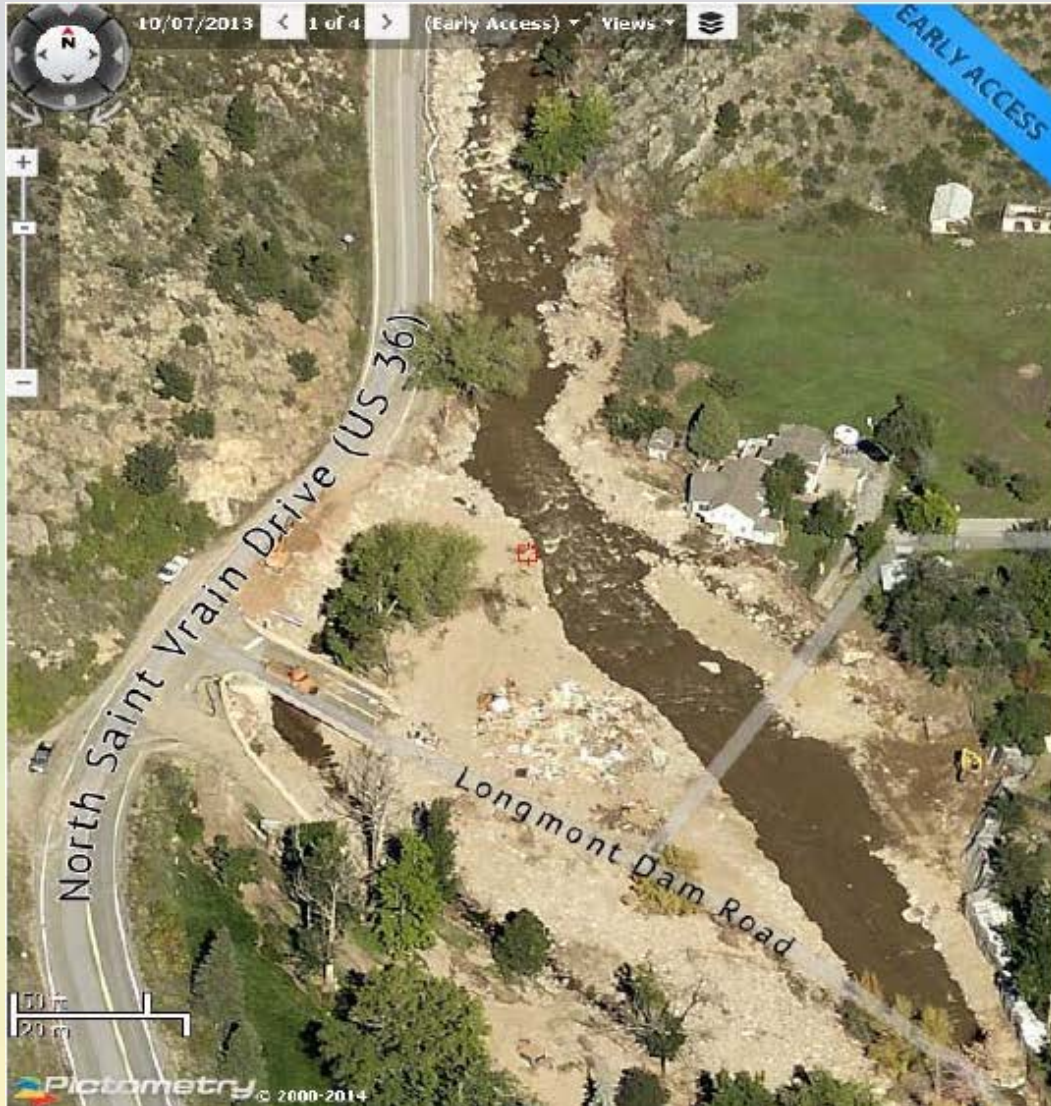


© 2013 Pictometry



Post-Disaster: Floods in Boulder County, CO 2013

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TRAAC

Post-Disaster: Fires in Ft. McMurray, AB 2016

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ictometry, Canada

50 ft
10 m

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Post-Disaster: Hurricane Michael – Mexico Beach, FL 2018

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agview



Post-Disaster: Tornadoes in Mayfield, KY 2021

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GULF SHORE POST-HURRICANE CAPTURES SINCE 2017

- HARVEY - Aug 25, 2017 – Cat 4 – San Jose Island, TX
- NATE - Oct 8, 2017 – Cat 1 – Biloxi, MS
- MICHAEL - Oct 10, 2018 – Cat 5 – Mexico Beach, FL
- LAURA - Aug 27, 2020 – Cat 4 – Cameron, LA
- SALLY - Sept 16, 2020 – Cat 2 – Gulf Shores, AL
- DELTA - Oct 9, 2020 – Cat 2 – Creole, LA
- ZETA - Oct 28, 2020 – Cat 2 – Cocodrie, LA
- IDA - Aug 29, 2021 – Cat 4 – Lafourche, LA →



What is the Value of After-Disaster Imagery to Local Communities?

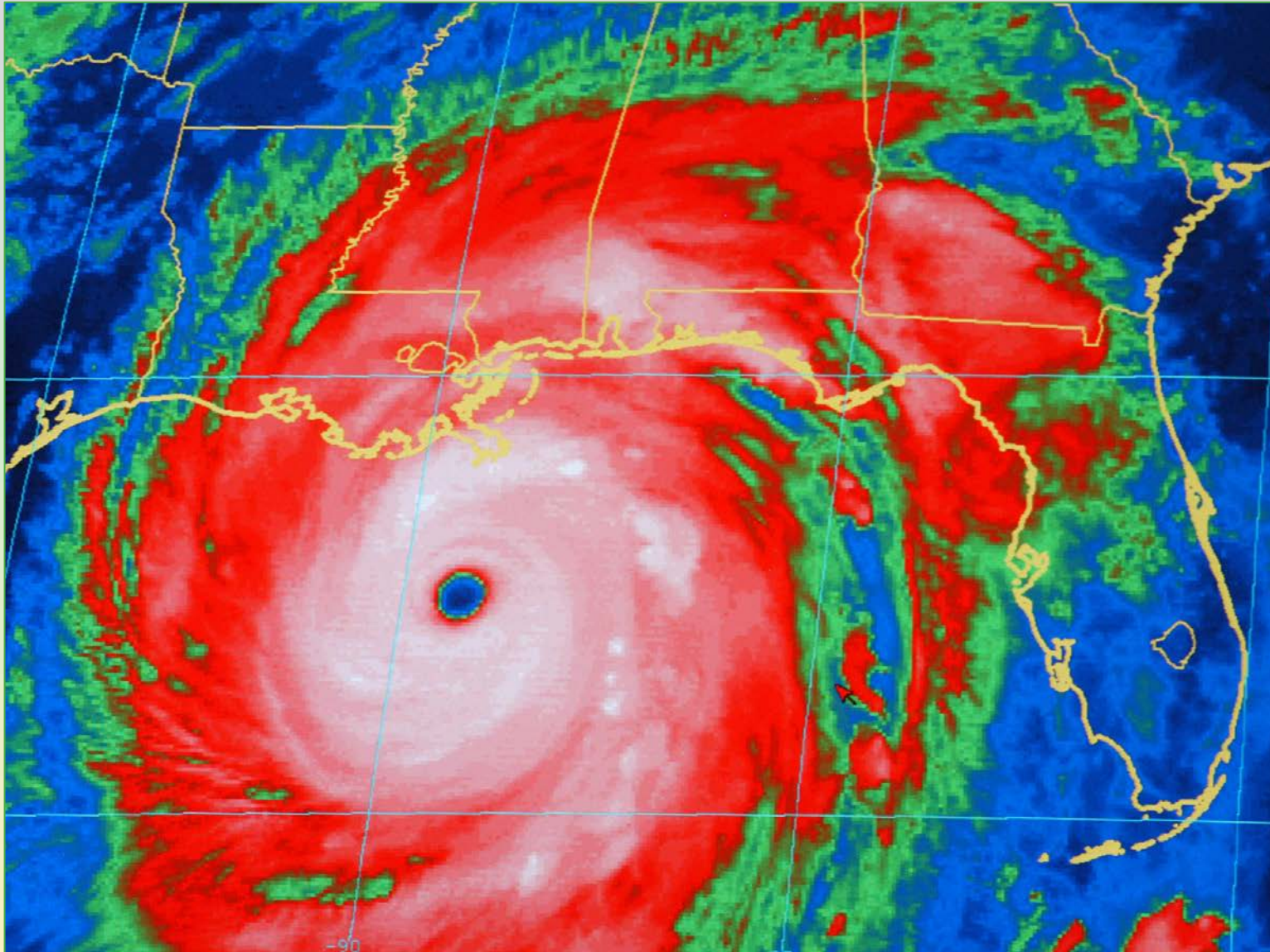
- The timeliness and relevance of the imagery
- The improved situational awareness for elected officials
- The ability to better prioritize a variety of responses, from emergency rescue to distribution of recovery aid
- Community information for residents

After-Disaster Imagery for Louisiana Storms

- August 29, 2005 – Cat 5 Hurricane (Katrina) - New Orleans, LA
- Aug 27, 2020 – Cat 4 Hurricane (Laura) – Calcasieu Parish, LA
- Aug 29, 2021 – Cat 4 Hurricane (Ida) – New Orleans, LA

August 28, 2005

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Hurricane Katrina New Orleans Before (2004) and After (2005)

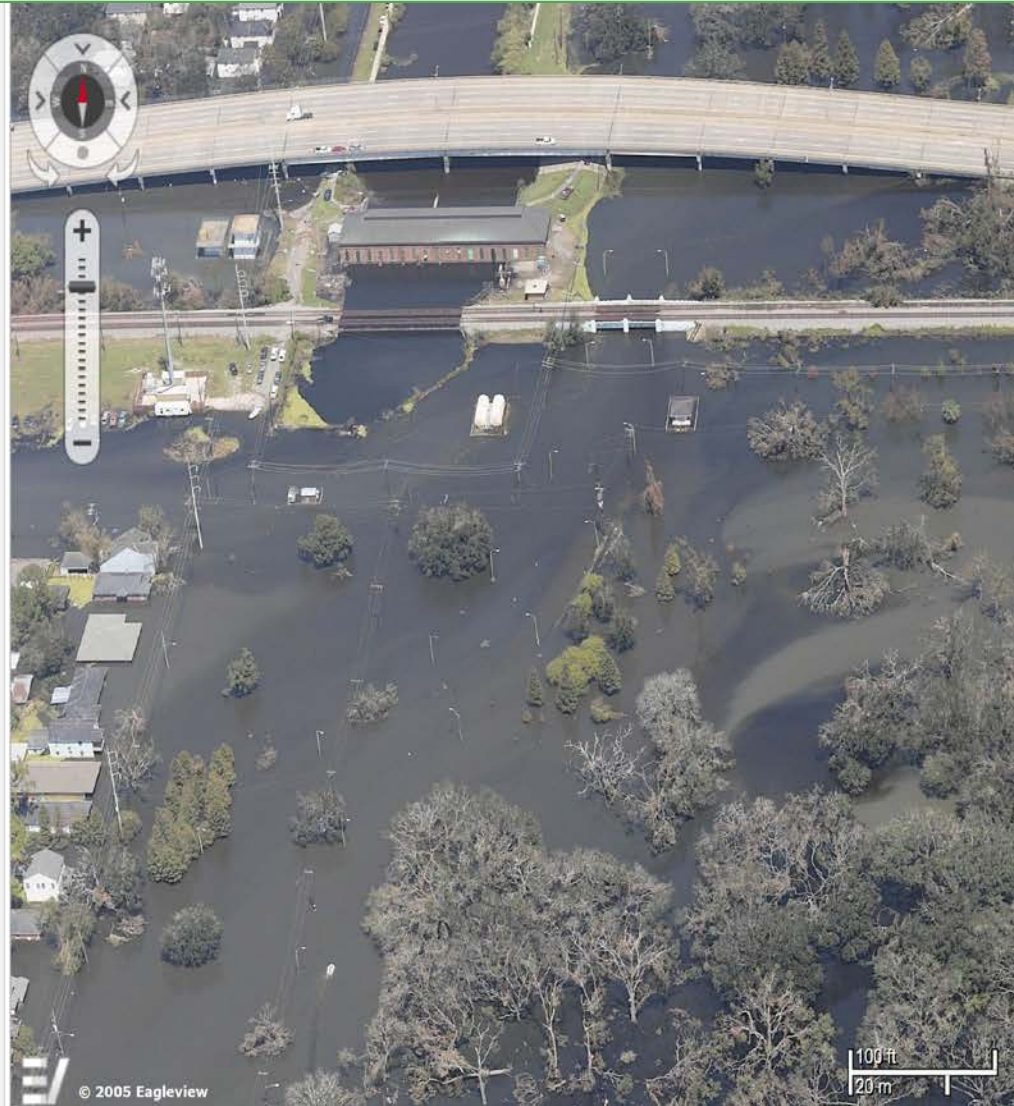
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Workspaces ▾



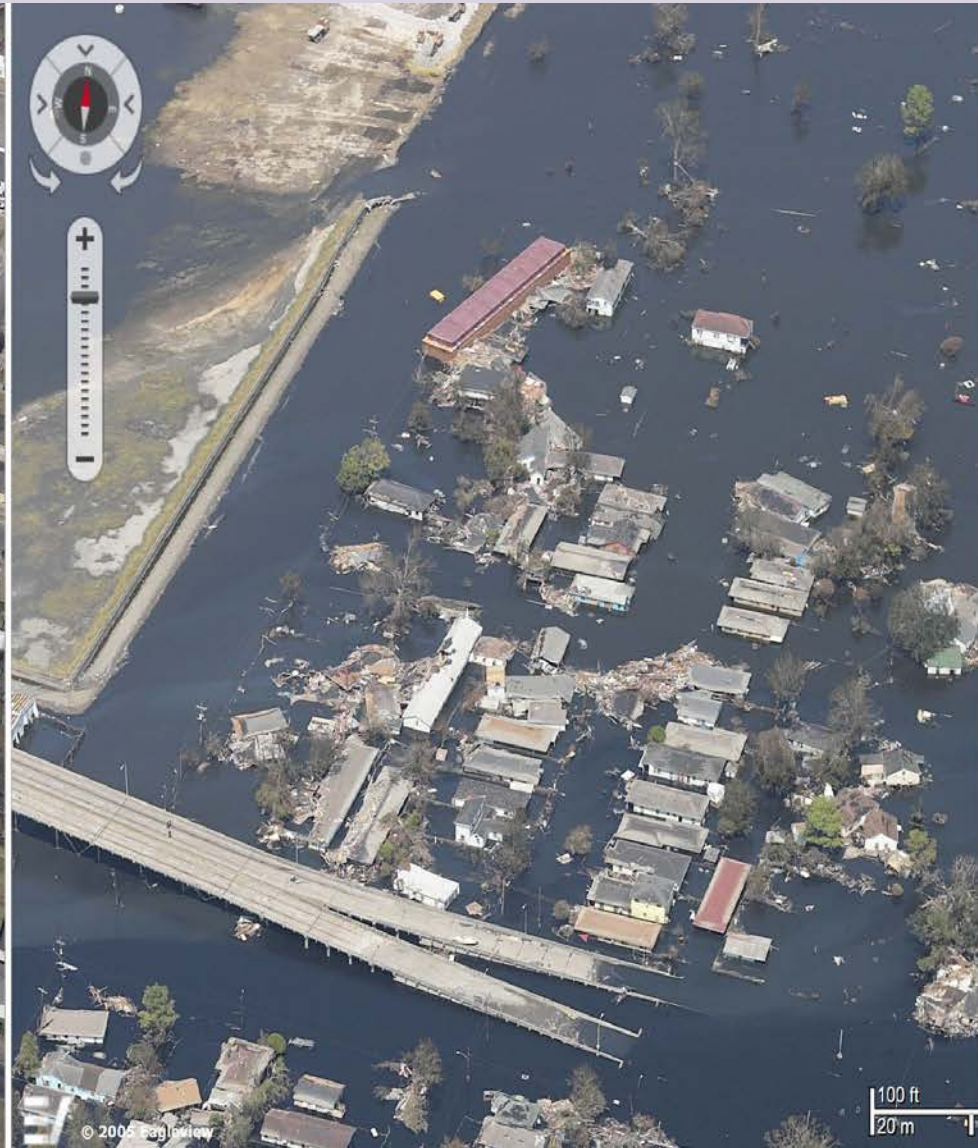
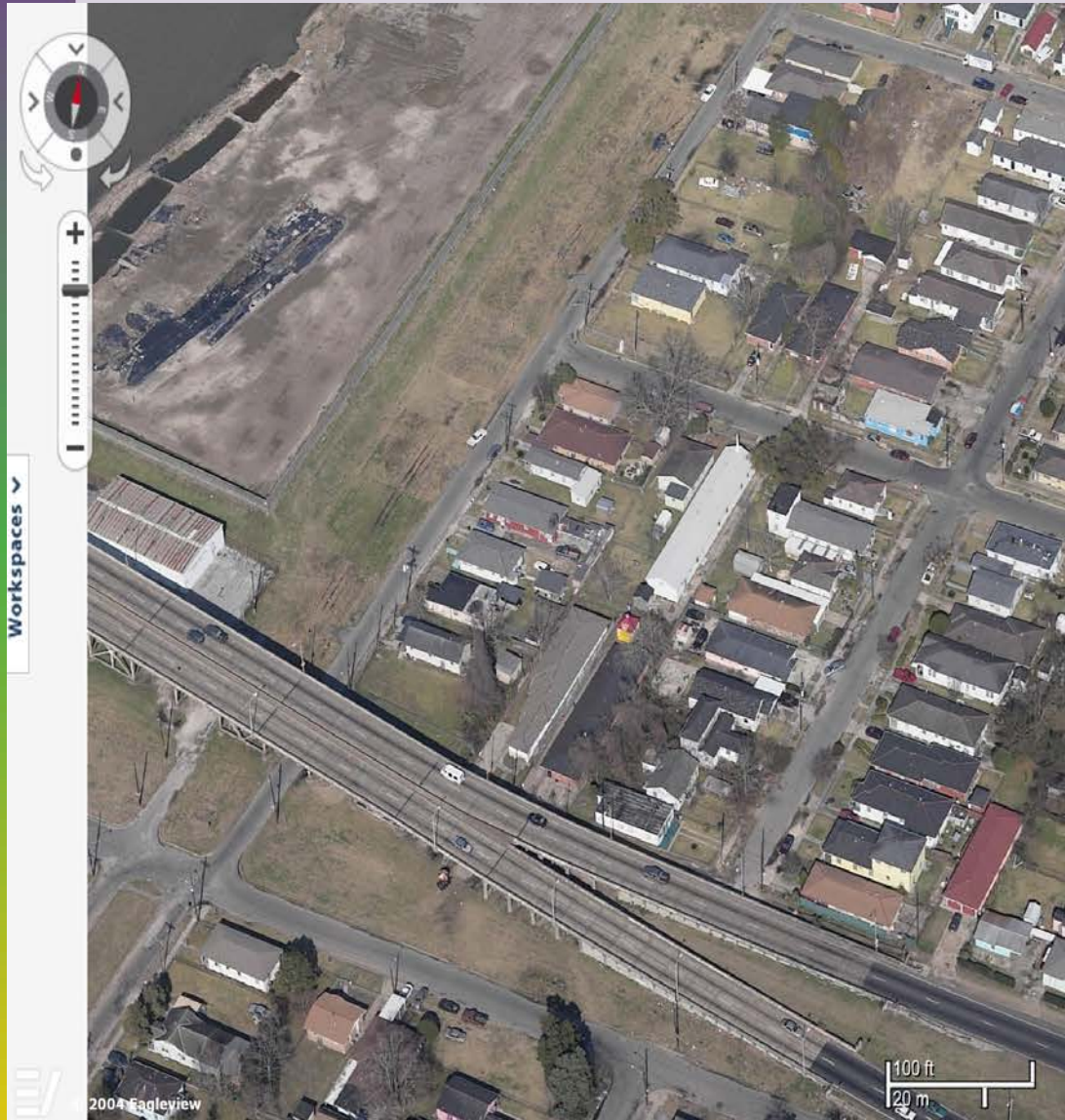
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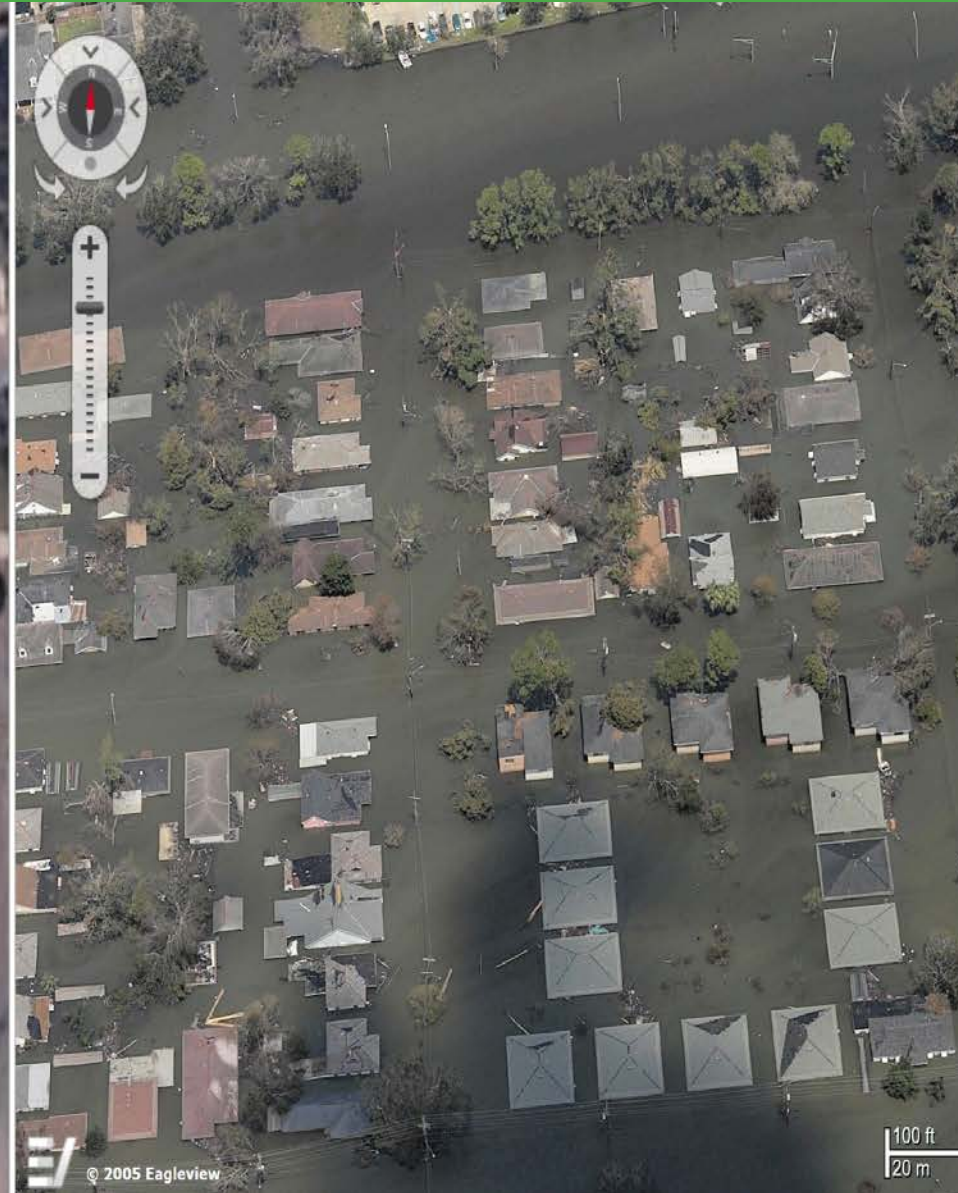
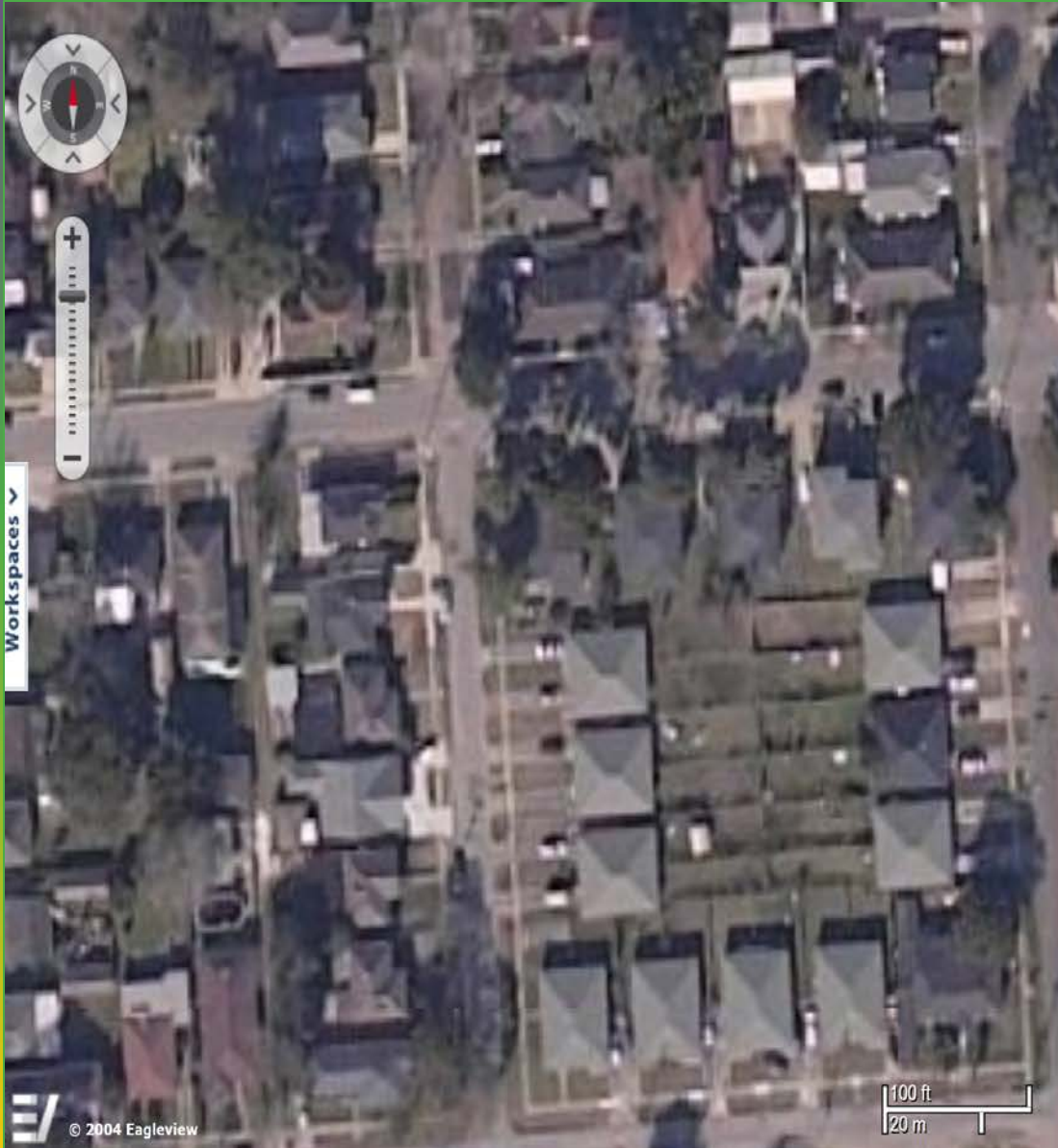


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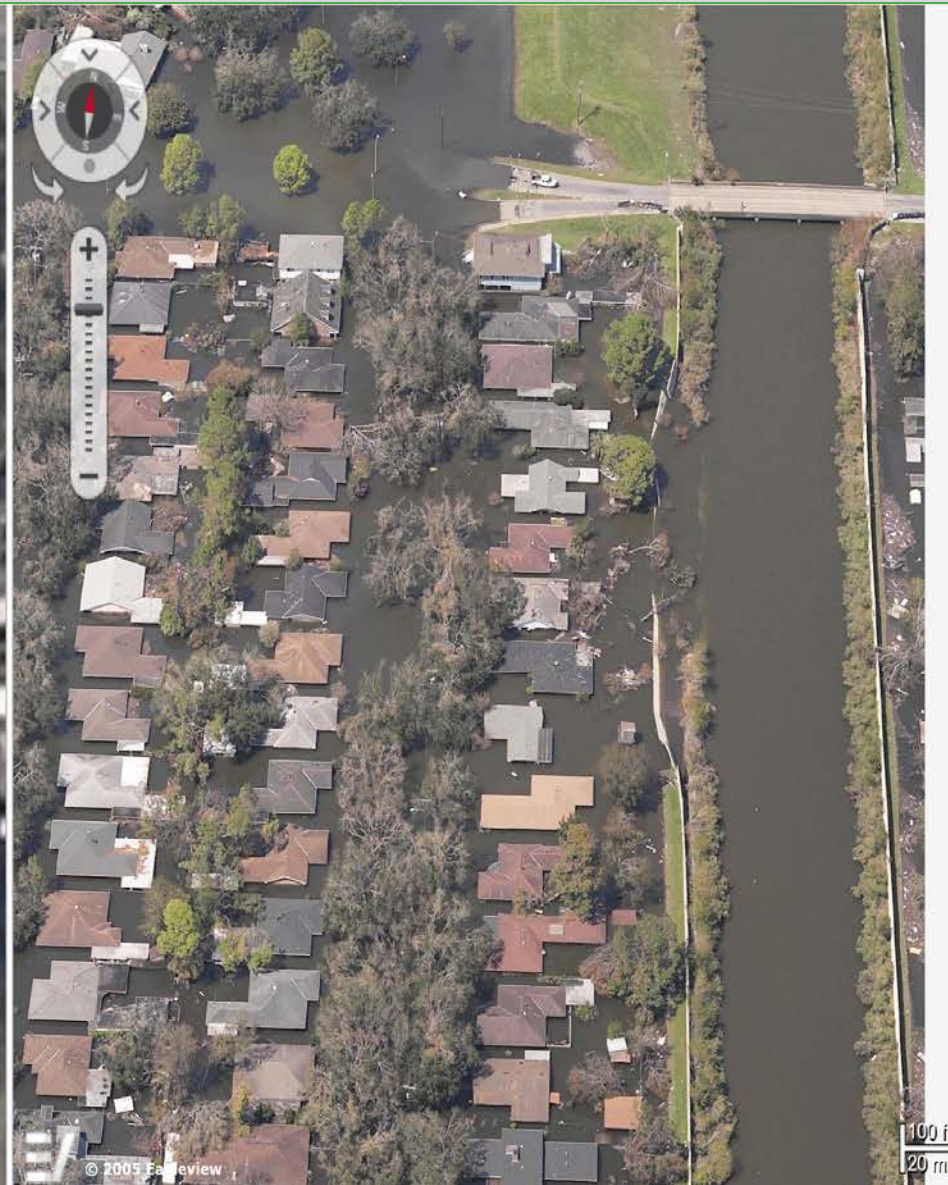
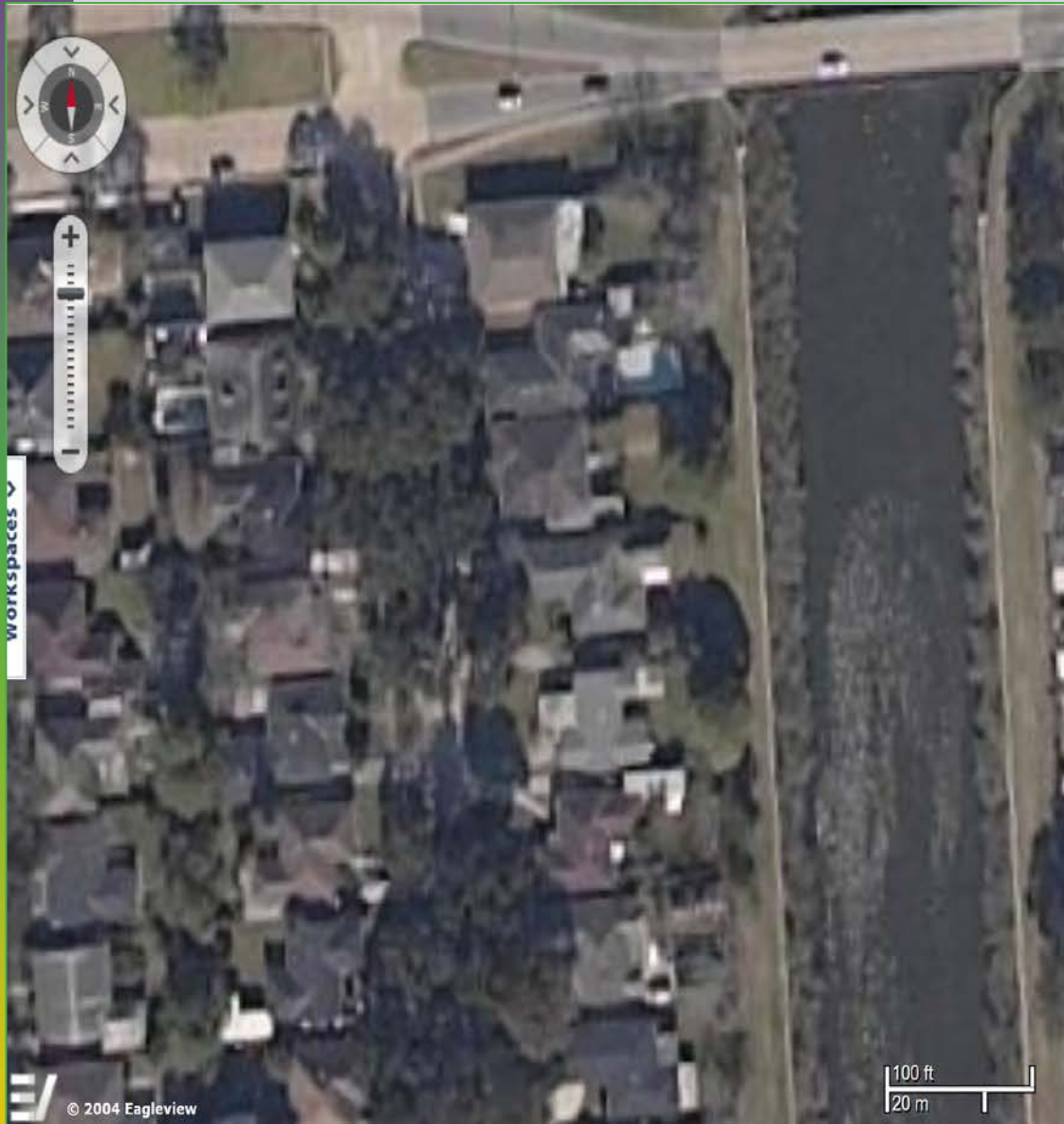


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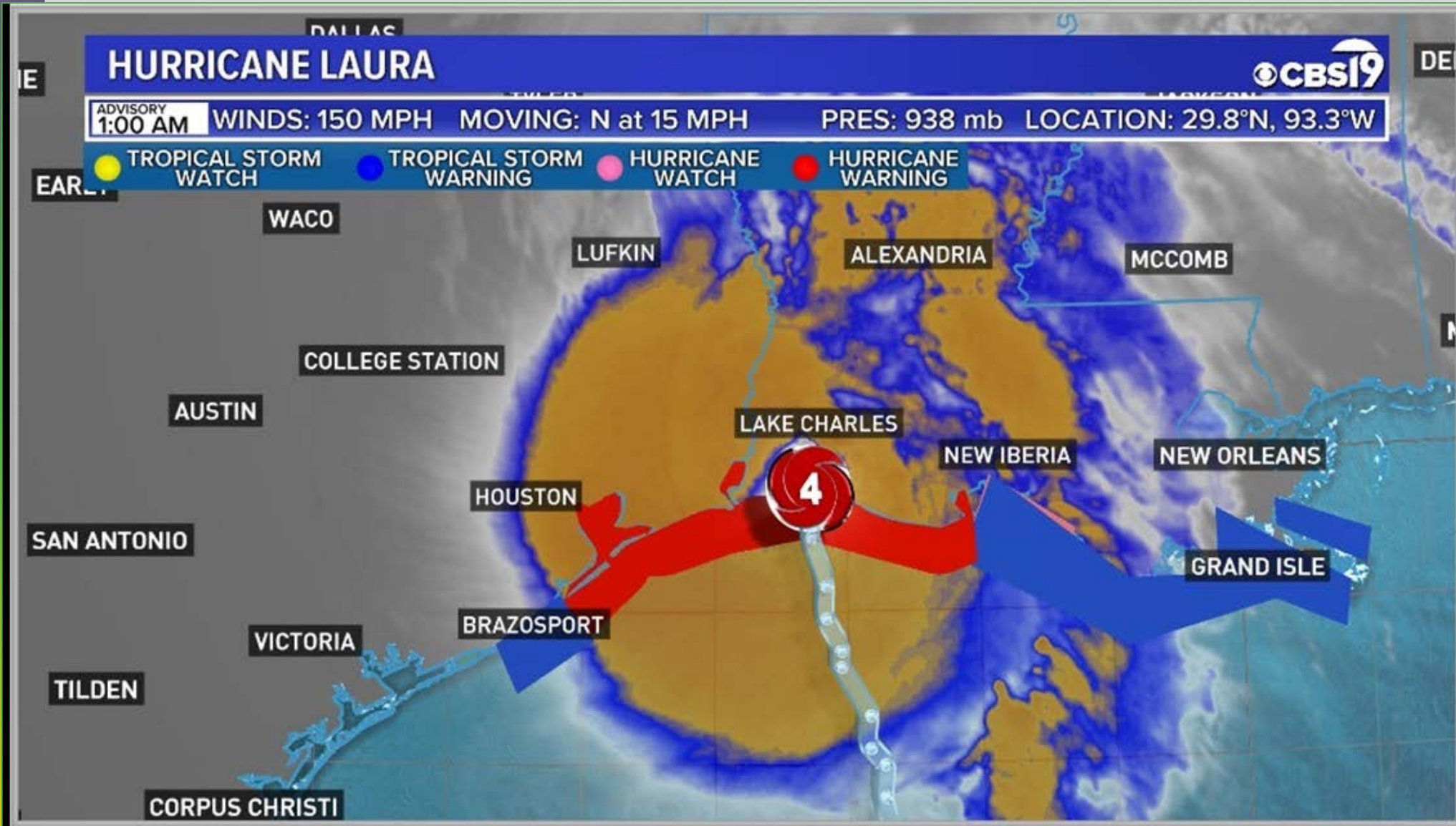
August 27, 2020

LAURA - A STORM FOR THE AGES

Made landfall at 1 AM CT near Cameron, LA
(20 miles east of Texas) 150 MPH winds (CAT 4)

2nd strongest storm to hit Louisiana (1856)
3rd lowest pressure ever recorded in Louisiana

134 MPH wind gust at the Lake Charles Airport
Will impact East Texas throughout the day.



Calcasieu Parish Uses of After-Disaster Imagery

- Debris cleanup in drainage laterals
- Initially used to determine road blockages
- Used by FEMA to perform structure damage surveys

Hurricane Laura Calcasieu Parish, LA Before (2020) and After (2020)

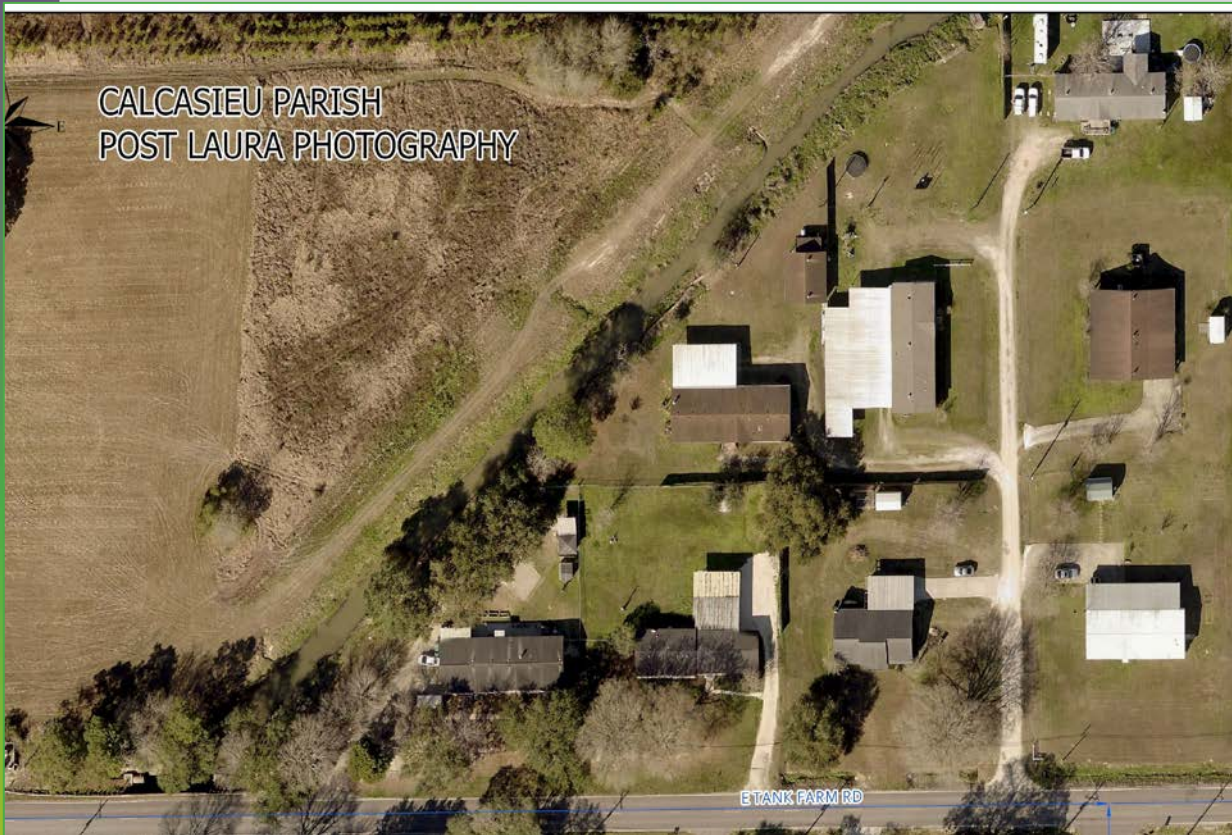
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The post Laura flight took place between the dates of August 31, 2020, and October 7, 2020



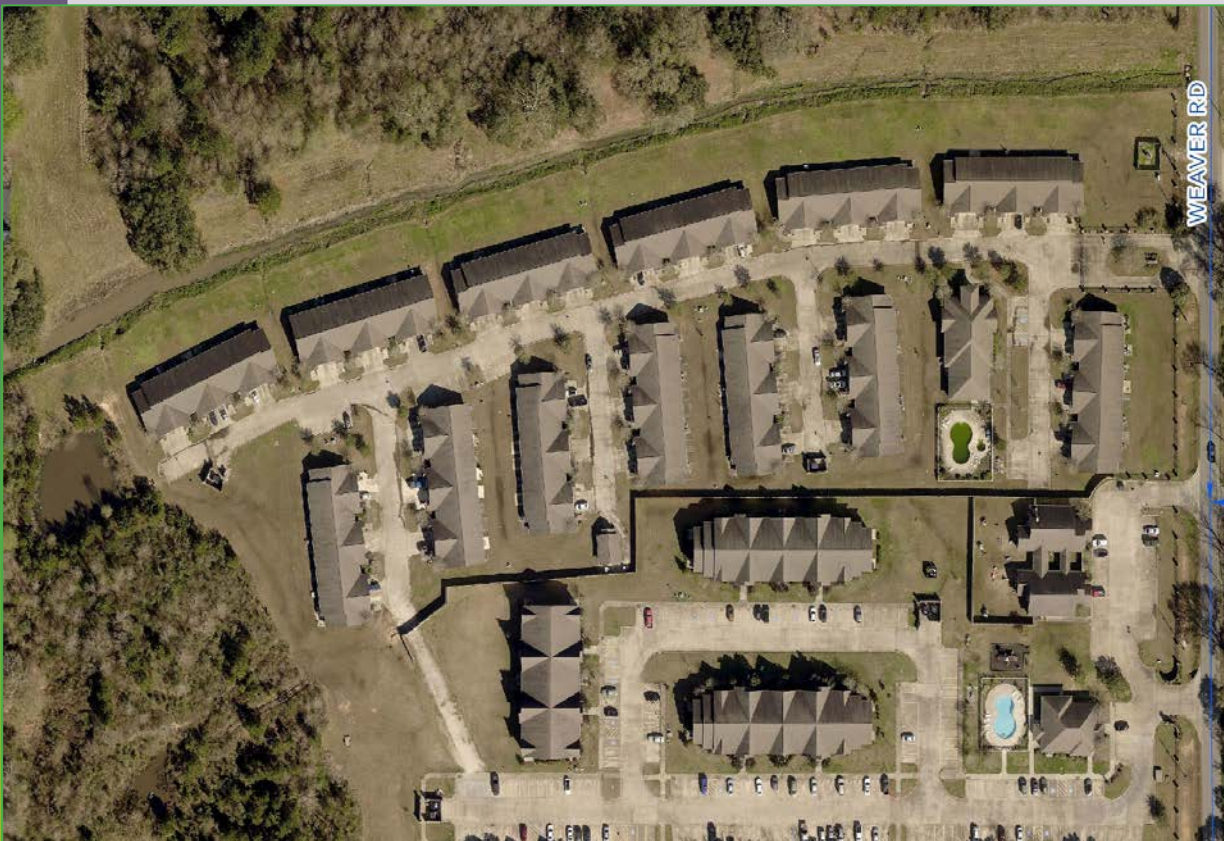
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Hurricane Laura Calcasieu Parish, LA Before (2020) and After (2020)

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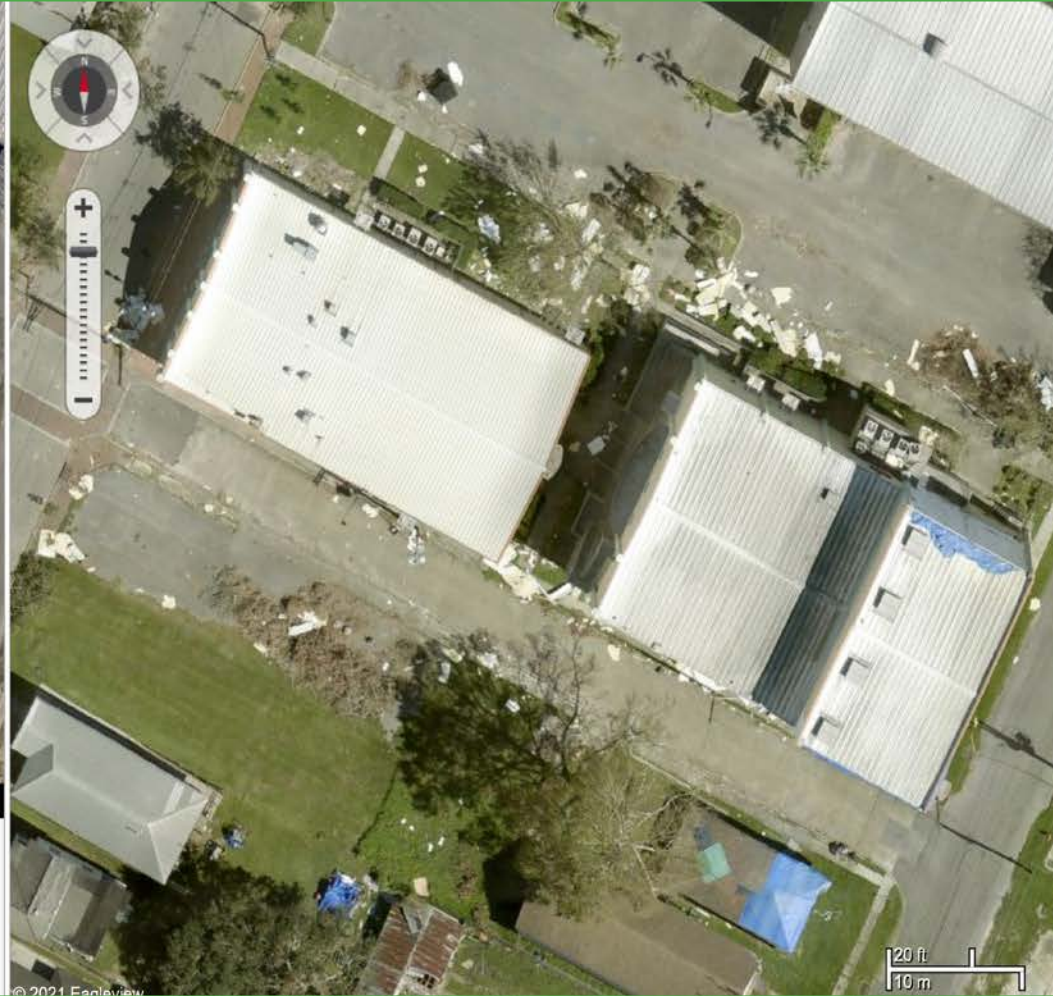
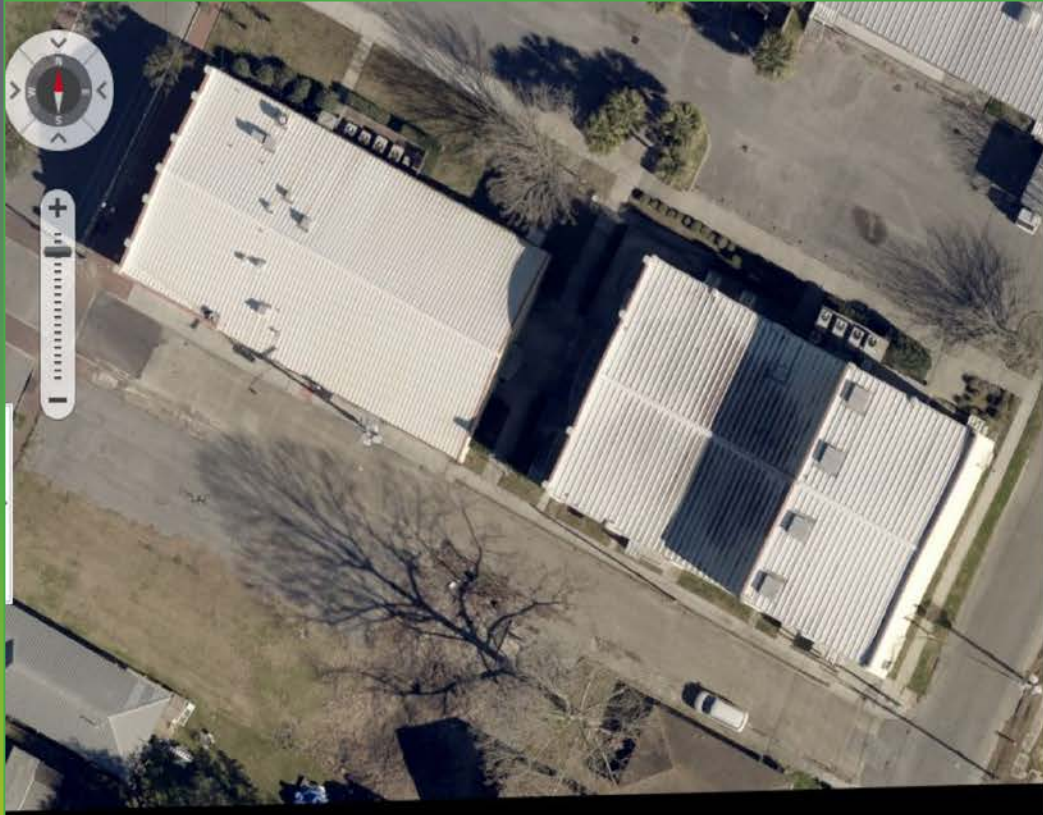


August 29, 2021



Hurricane Ida New Orleans Before (2021) and After (2021)

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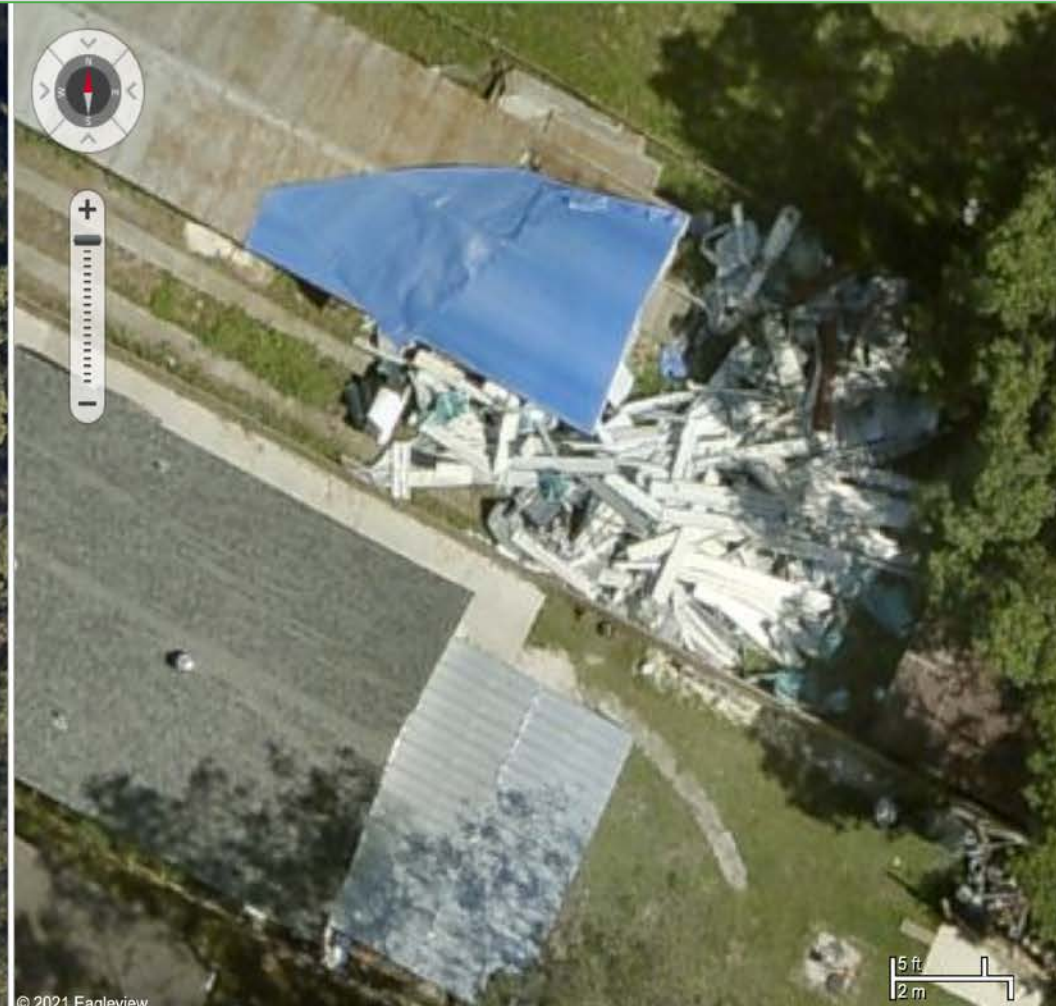
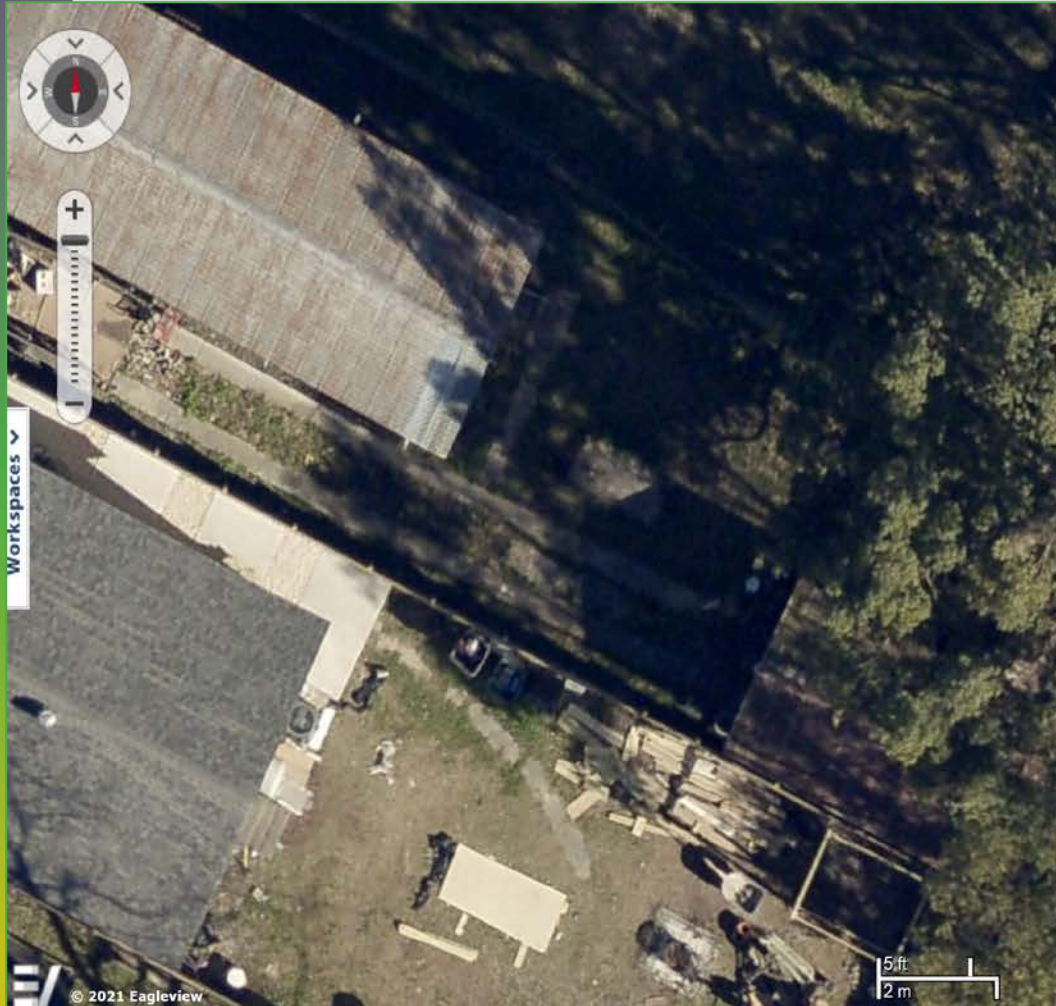
20 ft
10 m

20 ft
10 m

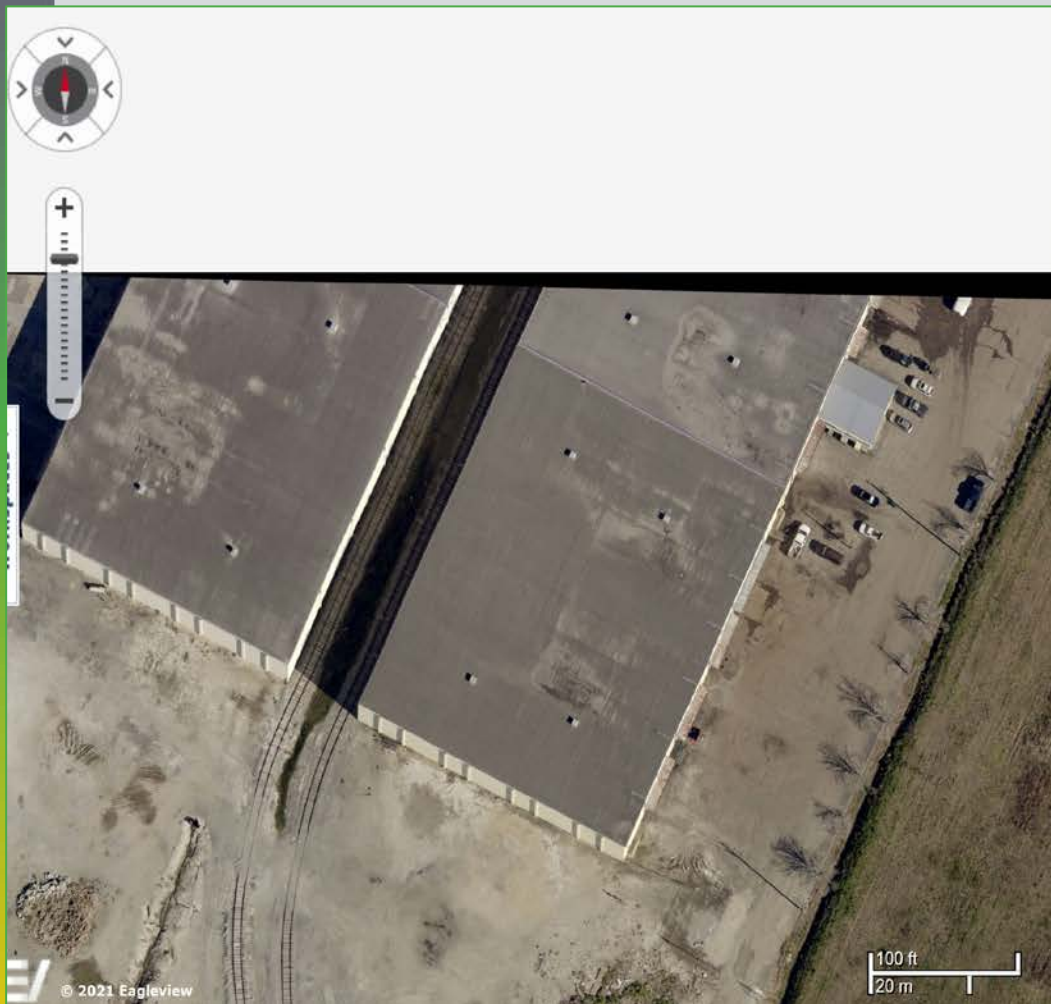


Hurricane Ida New Orleans Before (2021) and After (2021)

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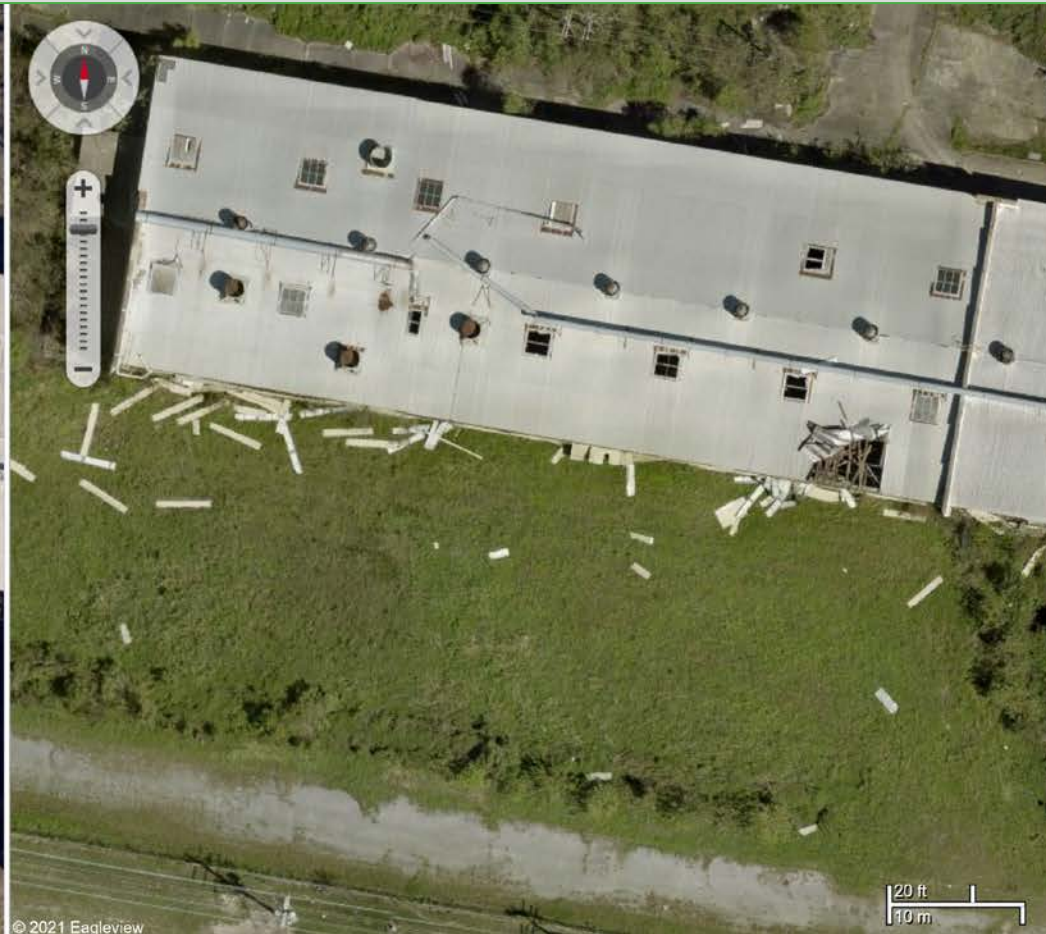
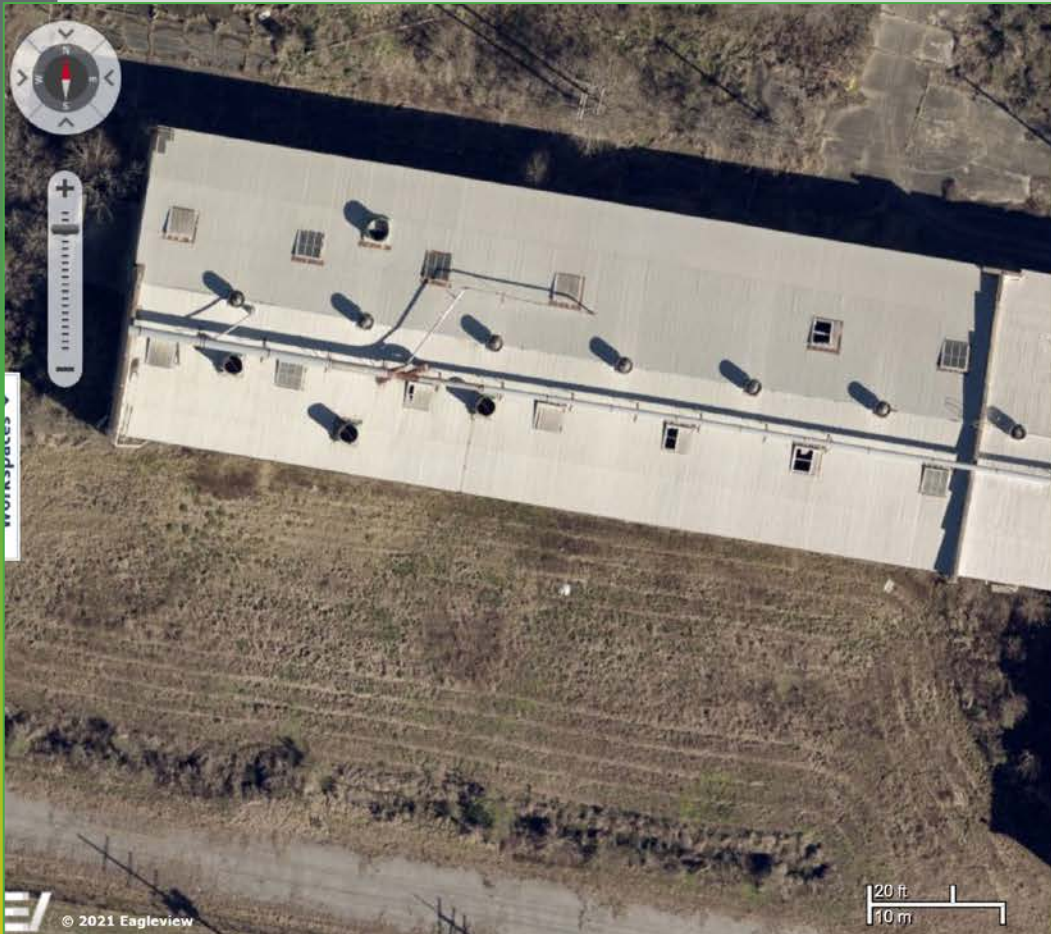


Hurricane Ida New Orleans Before (2021) and After (2021)



Hurricane Ida New Orleans Before (2021) and After (2021)

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2022

August 28-31 ★ Boston, Massachusetts

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Conference
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QUESTIONS???

THANK YOU!