

The Port of Morgan City and Central Louisiana

2023 Hurricane Season Preparedness and Partnership Meeting

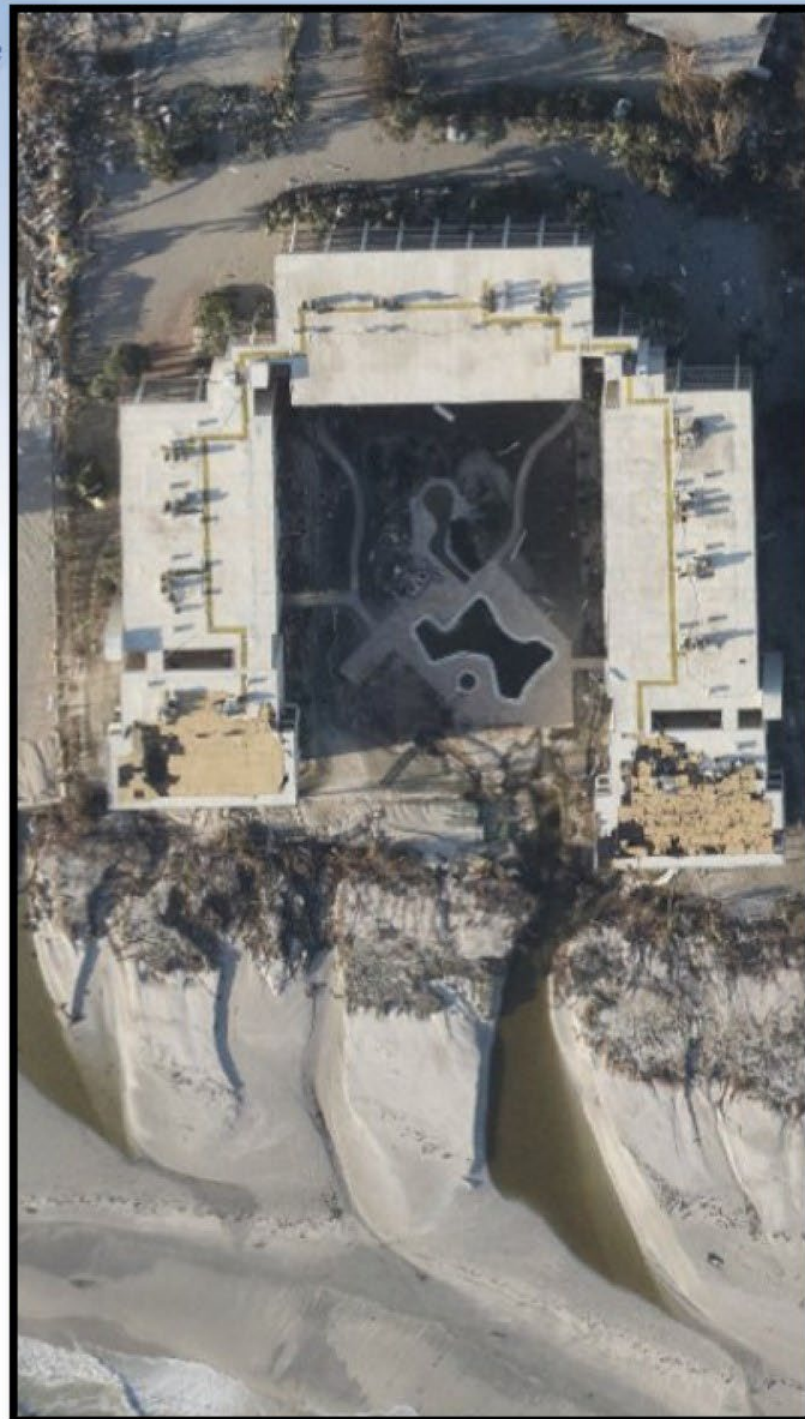




- NOAA's Emergency Response – Navigation Response,
- Post Storm Imagery Acquisition
- Coastal Inundation Dashboard Resources

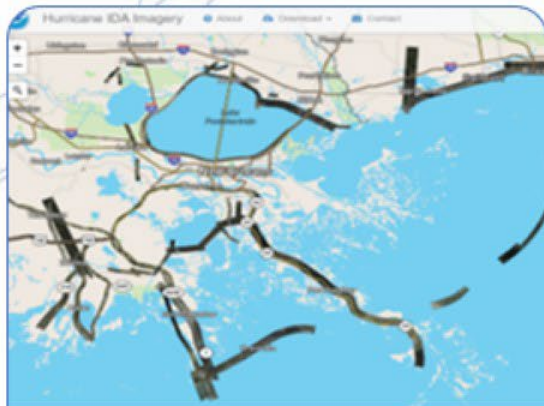
Outline

- NGS RSD Programs
- Emergency Response Evolution
- Upgraded Camera Benefits
- Acquisition Factors
- Image Availability
- Summary



National Response Framework Emergency Support Functions

- Pre-Scripted Mission Assignments (PSMA) with FEMA to Support ESF #5 Information and Planning



Transportation

ESF
#1



Search and
Rescue

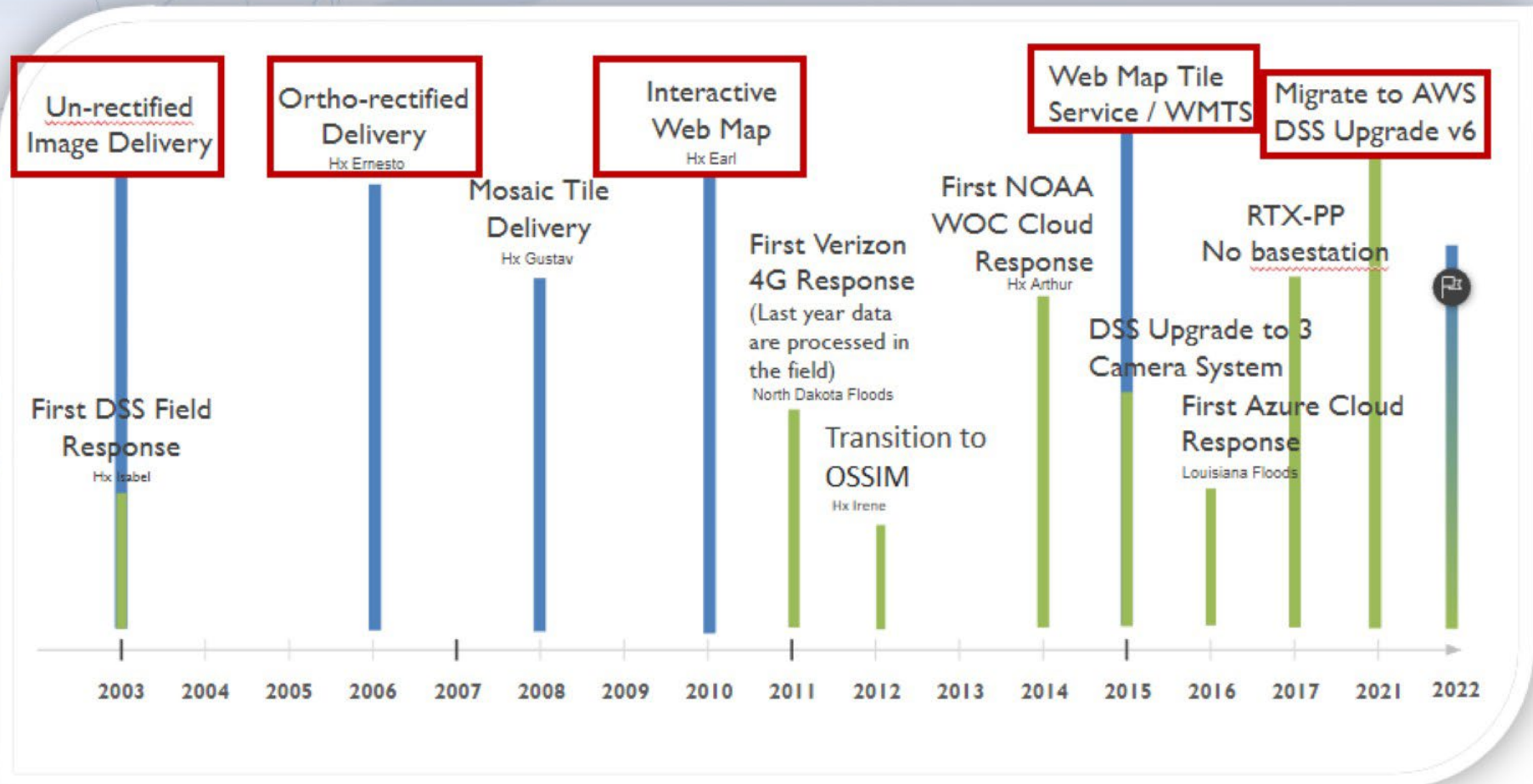
ESF
#9



Oil and Hazardous
Materials
Response

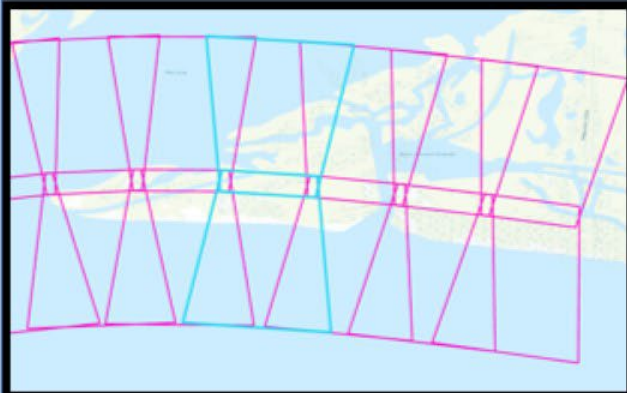
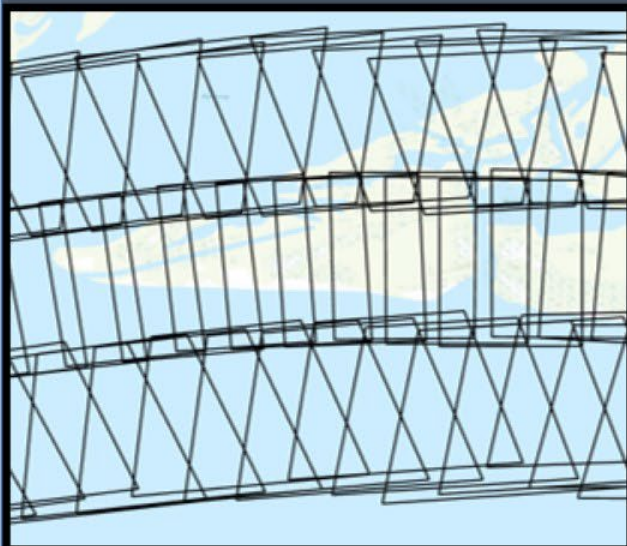
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#10

Emergency Response Timeline



LeadAir DSS V6 Benefits

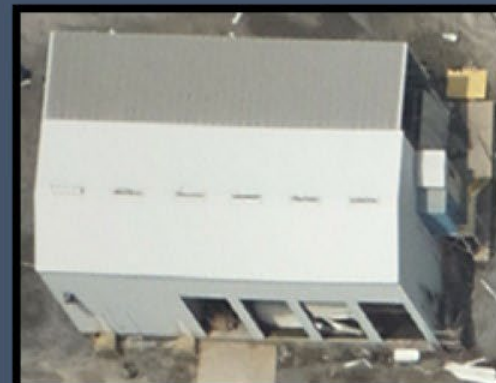
Fewer Images



Better Resolution



Multiple Mapping Modes



Aircraft



Typical Mission Parameters

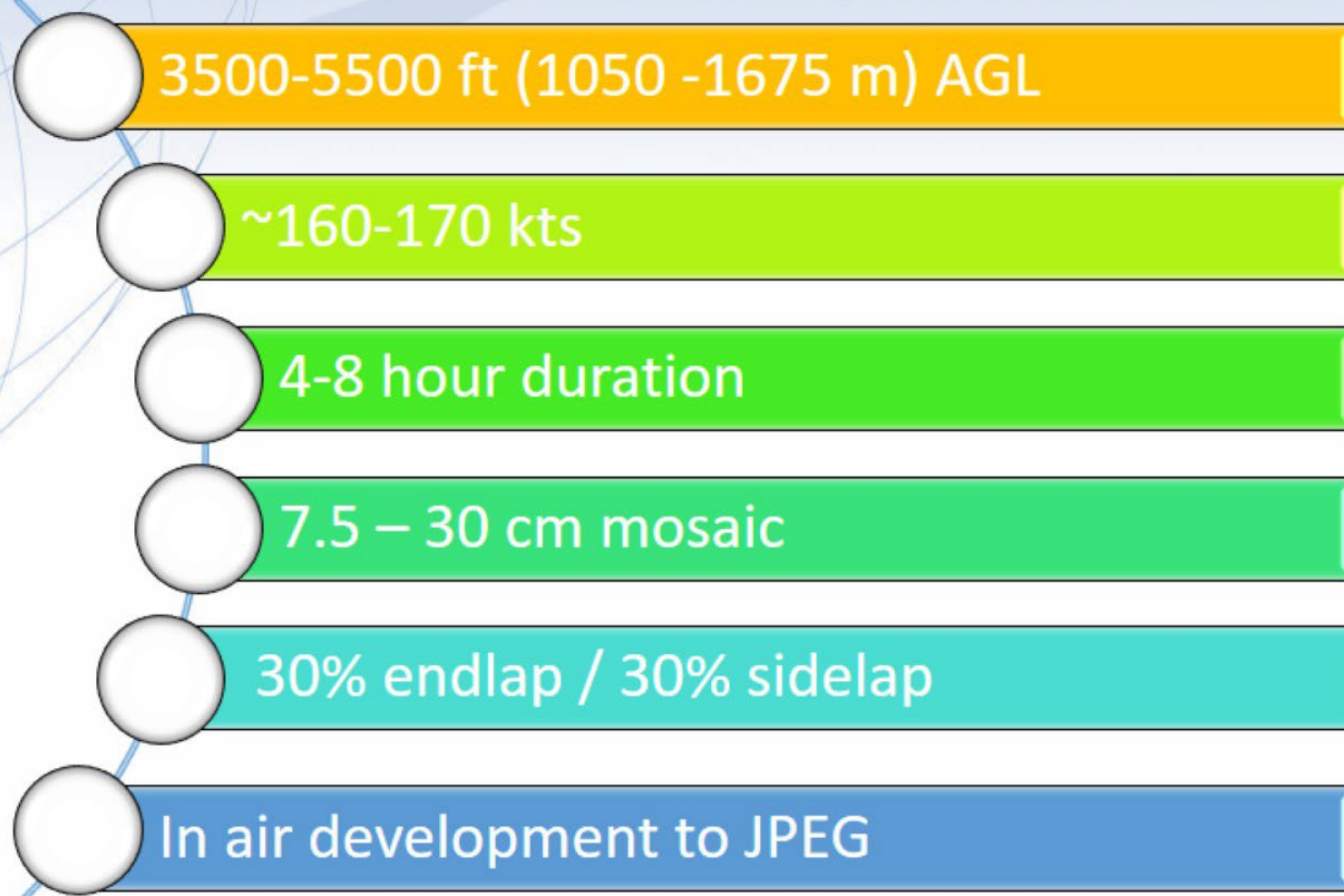
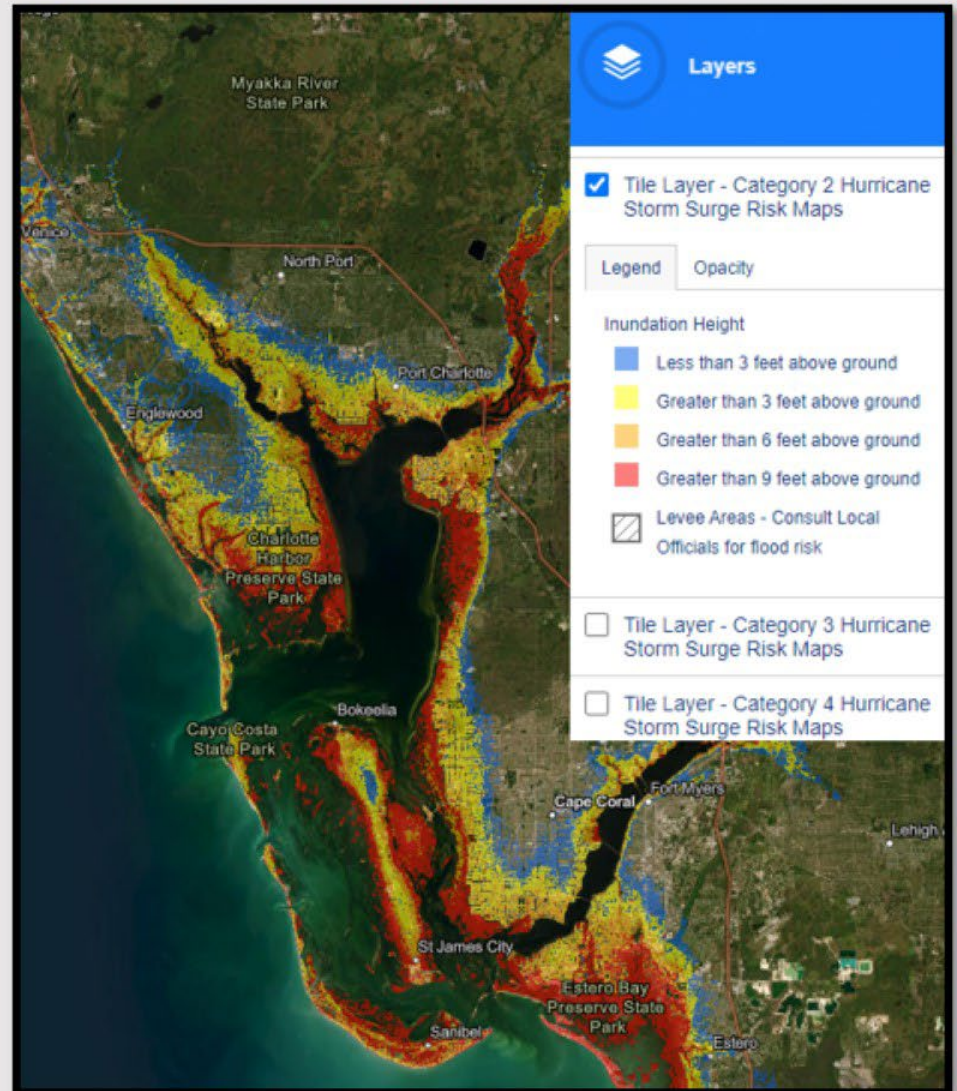
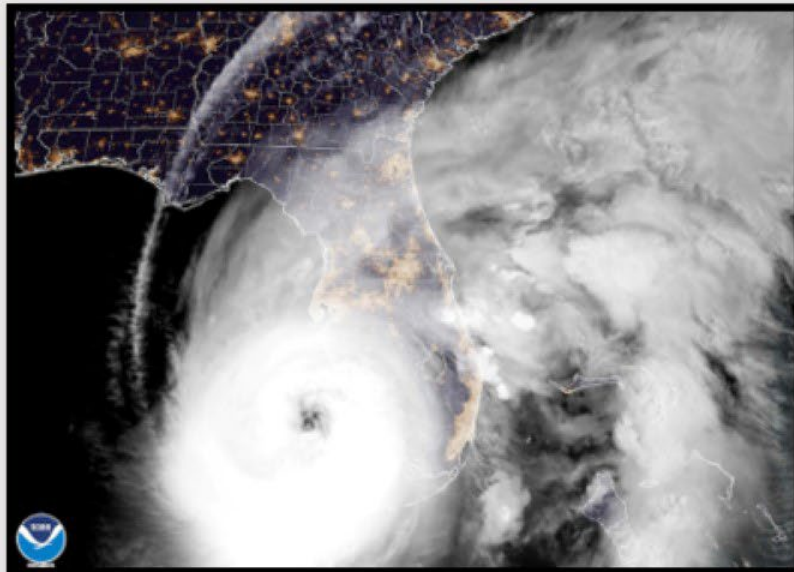
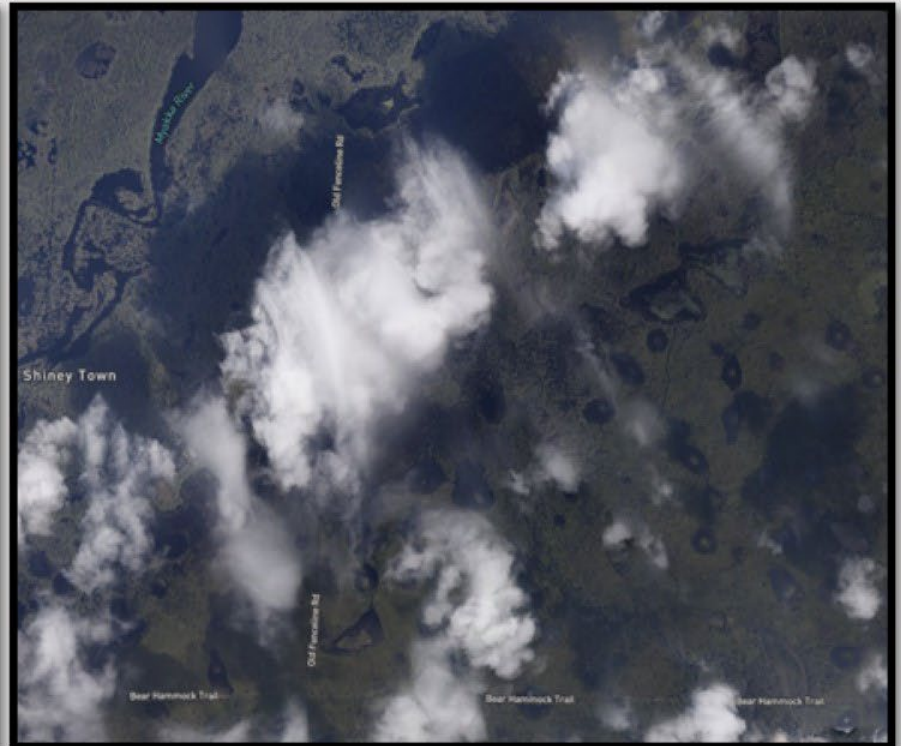
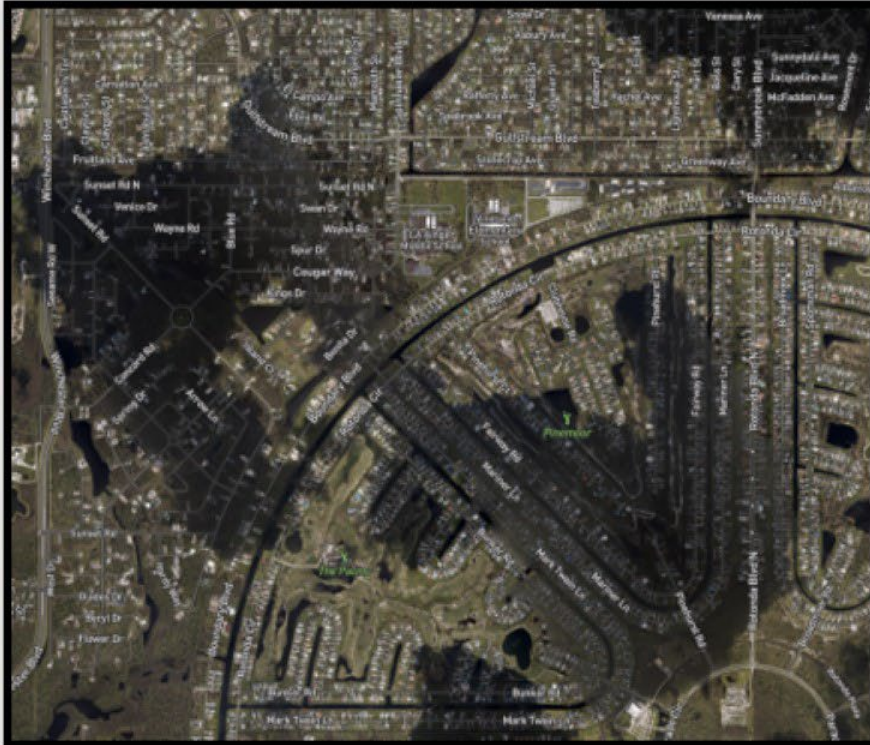


Image Acquisition Factors

- FEMA provided AOIs
- Storm Surge Risk Maps
- Weather
- Airspace Restrictions



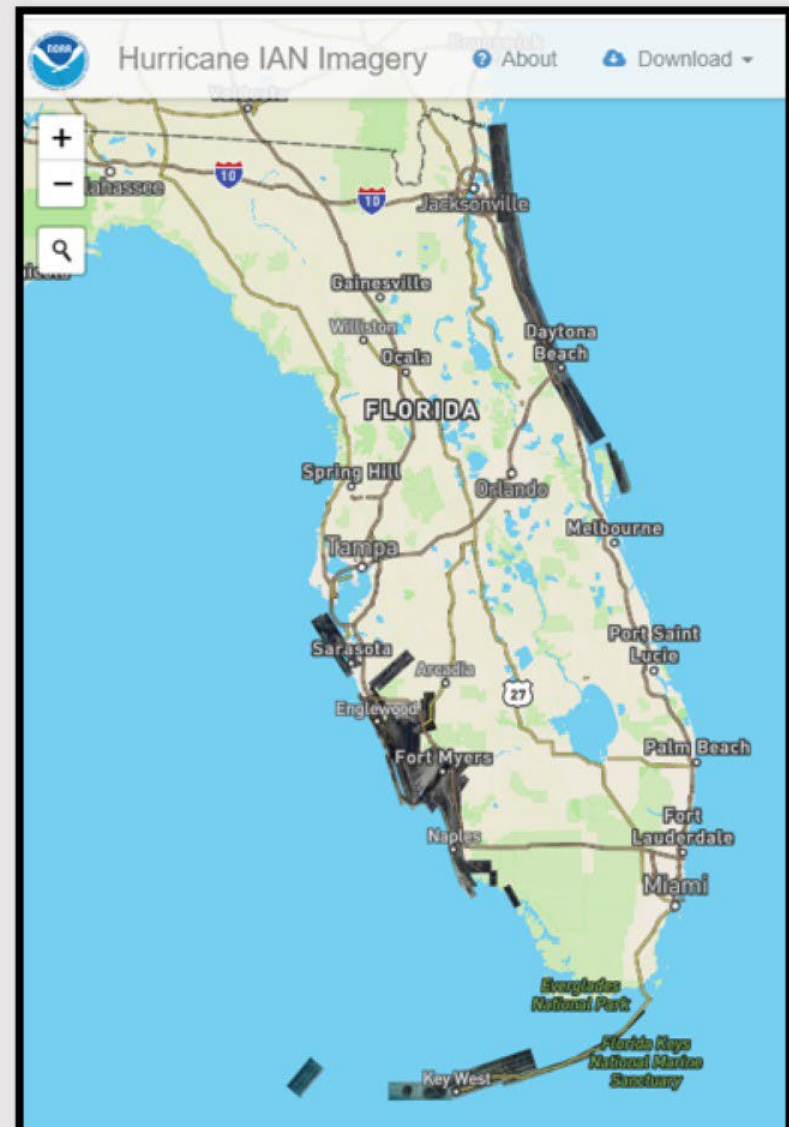
Weather



Response Imagery Deliverables

Distribution

- ~1.25 x 1.25 km tiles in JPEG compressed GeoTIFF
- Bulk image download by flight
- Metadata
- Web Map Tile Service (WMTS)
- Digital Coast
- **AWS Accessible (Frame Index, Tile Index, Raw, Orthorectified)**

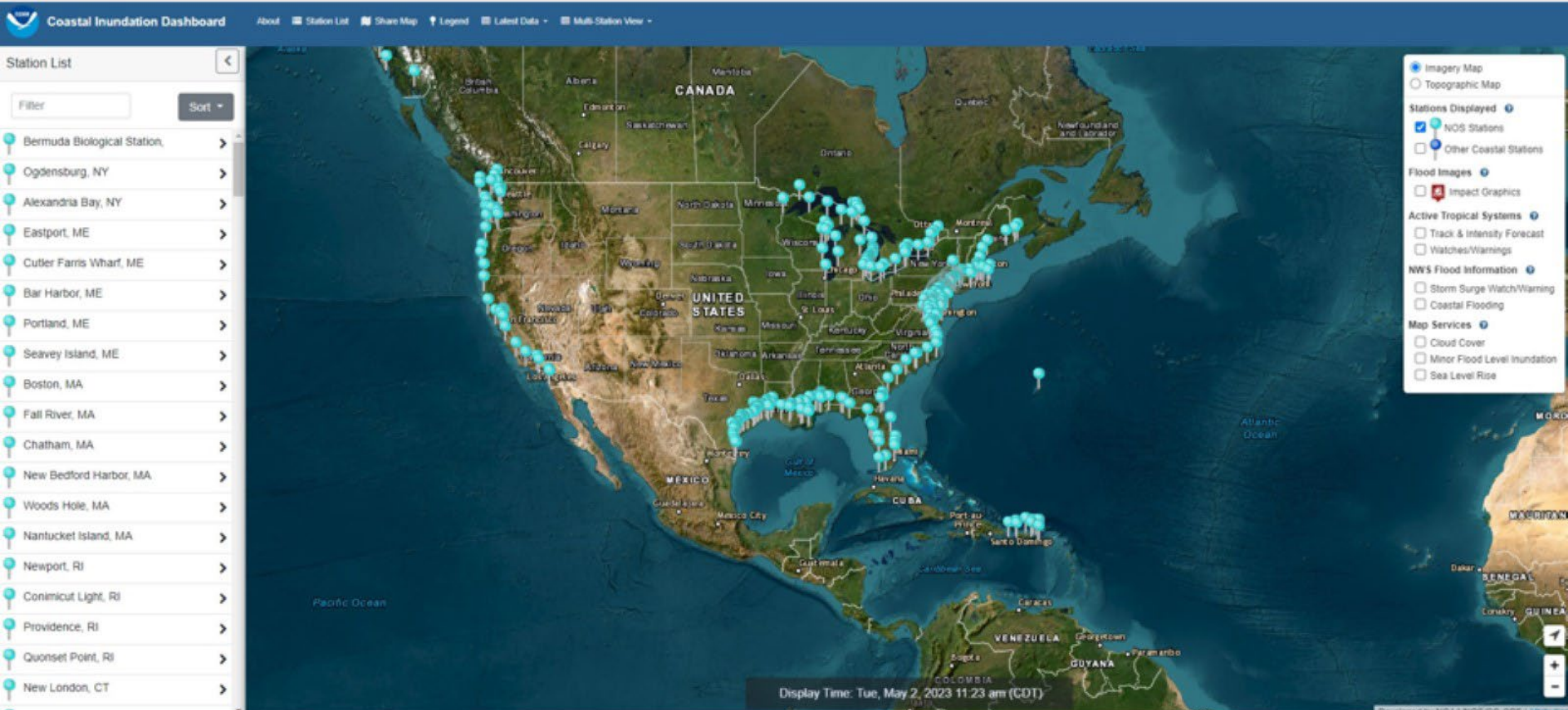


Summary

- 13,172 images were acquired after Hurricane Ian covering 16,322 square KM over the course of five days after Hurricane Ian made landfall.
- Data is disseminated to federal, state, and local government agencies to support National Response Emergency Framework Support Functions, as well as the general public to facilitate support efforts
- RAW and GIS ready imagery is available from the ER Viewer, AWS, Digital Coast and WMTS.
- Goal: processed and available 4-6 hours after landing
- Technical Questions: ngs.hurricane1@noaa.gov
- POC Mike Aslaksen mike.aslaksen@noaa.gov 301-801-9024

NOAA Coastal Inundation Dashboard, Responding to Coastal Storm Events and Storm Surge Monitoring

<https://tidesandcurrents.noaa.gov/inundationdb/>



Tropical Storm Elsa QuickLook

Summary of Coastal Observations

Station List

Filter Sort

- Bermuda Biological Station, >
- Bermuda, St. Georges Island, Bermuda >
- Eastport, ME >
- Cutler Farms Wharf, ME >
- Bar Harbor, ME >
- Portland, ME >
- Wells, ME >
- Seavey Island, ME >
- Boston, MA >
- Fall River, MA >
- Chatham, Lydia Cove, MA >
- Woods Hole, MA >
- Nantucket Island, MA >
- Newport, RI >
- Conimicut Light, RI >
- Providence, RI >
- Quonset Point, RI >

- Major Hurricane
- Hurricane
- Tropical Storm
- Tropical Depression
- Post/Potential Tropical Cyclone
- Extent Tropical Storm Winds
- Extent Hurricane Winds
- Forecast Track Uncertainty
- Tropical Storm Watch
- Hurricane Watch
- Tropical Storm Warning
- Hurricane Warning
- Storm Surge Watch
- Storm Surge Warning
- Coastal Flood Advisory

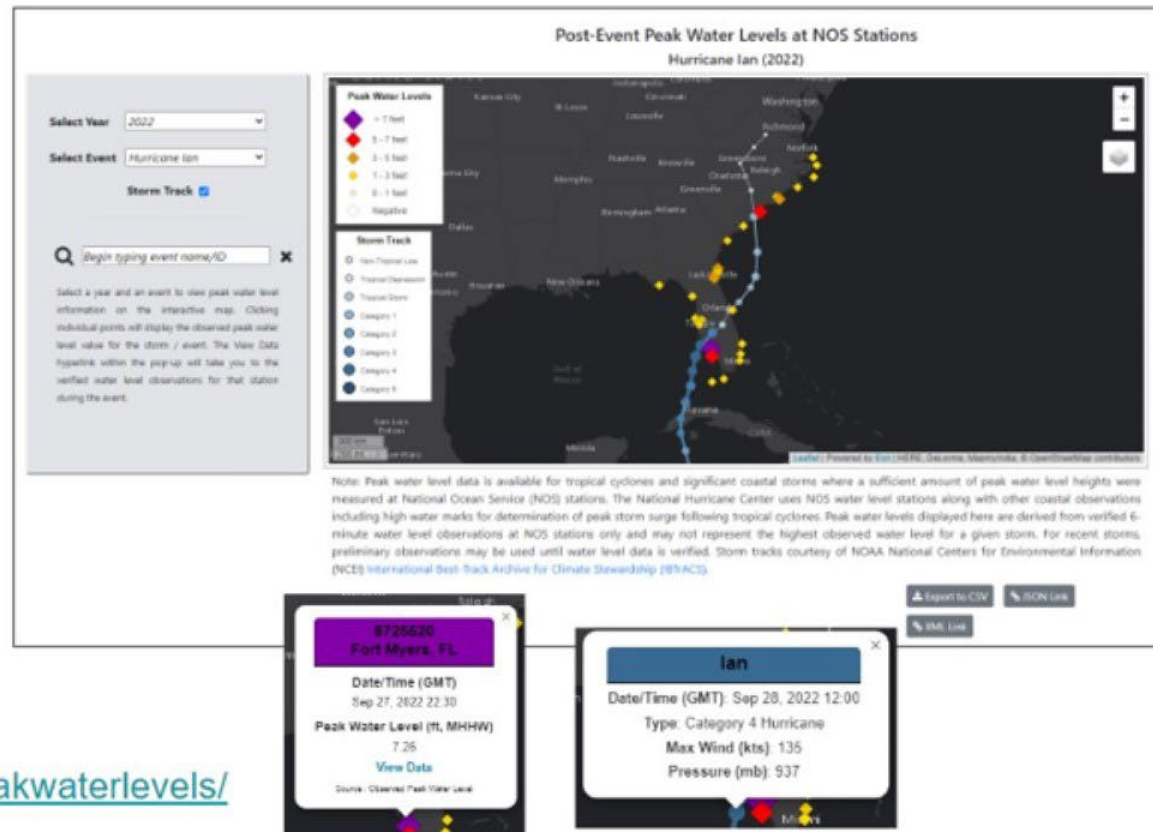


Peak Water Levels Records- Storm Events Since 2004

<https://tidesandcurrents.noaa.gov/peakwaterlevels/>

CO-OPS Post-Storm Peak Water Level Map

- Peak water levels at NOS stations for tropical cyclones dating back to 2004
 - Data relative to Mean Higher High Water (MHHW)
- Preliminary data available within days following a storm
 - Verified observations the following month
- Links to download data in CSV along with buttons to access data through CO-OPS API
- Planned future enhancement
 - Include observations relative to NAVD88 and MSL datums



<https://tidesandcurrents.noaa.gov/peakwaterlevels/>

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Sector Corpus Christi
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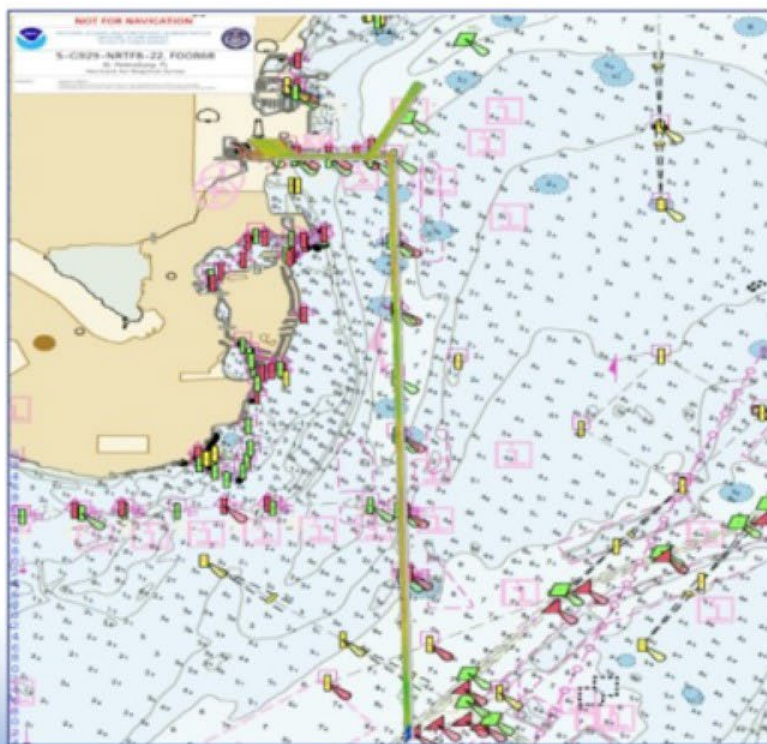
NOAA Navigation Manager AORs
By USCG Sector
2022 Hurricane Season

Puerto Rico Inset

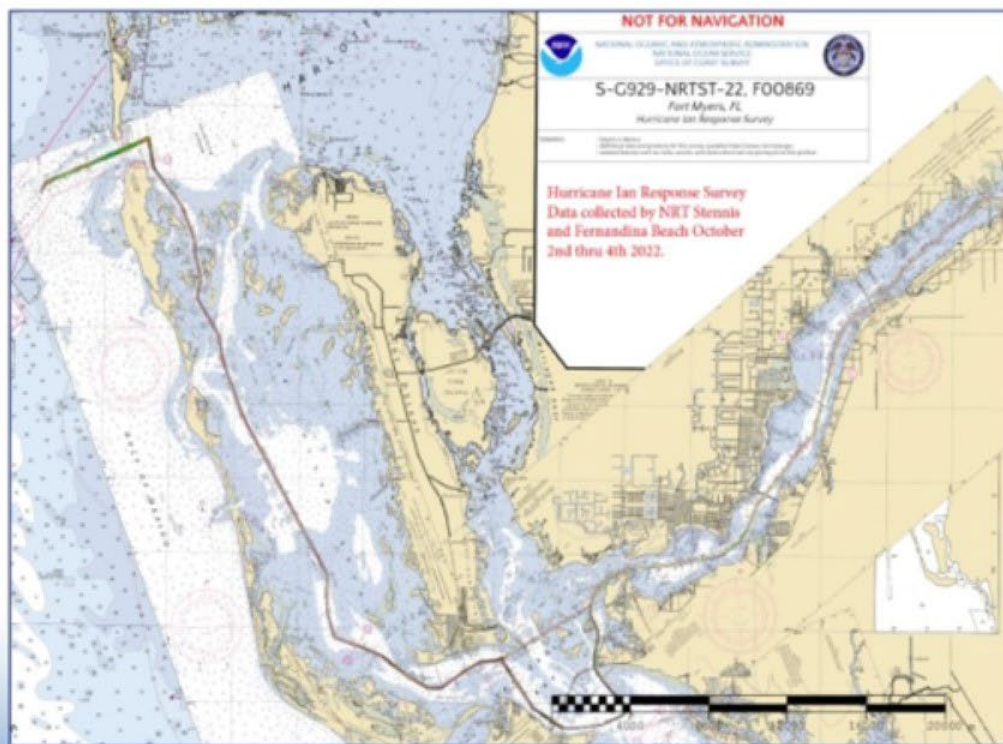
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St. Petersburg, Florida



Fort Myers, Florida





Navigation Services Division

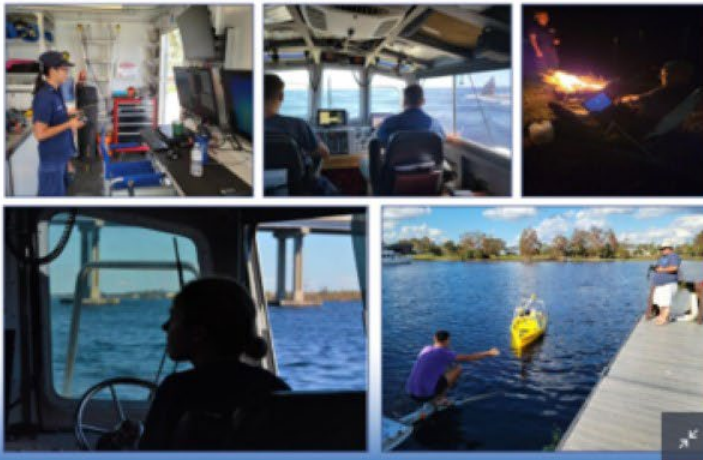
Response personnel

NRT-Fernandina Beach

- James Kirkpatrick (Lead)
- Michael Coughlin
- Doug Wood (PS, HSD Ops)
- LTJG Carly Robbins (BH2)
- LTJG Jane Saunders (BH2)
- Dr. Nicolas Alvarado

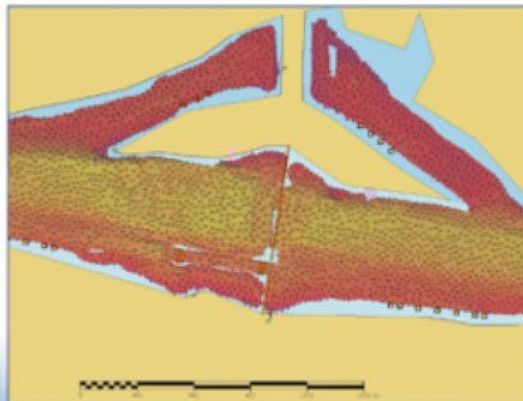
NRT-Stennis

- LTJG Collin Mcmillan (Lead)
- Alex Ligon
- Dan Jacobs
- Josh Bergeron

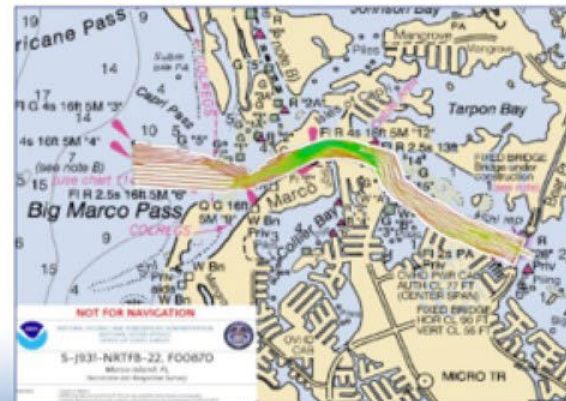


Navigation Services Division

Franklin Lock and Dam



Marco Island, Florida



HURRICANE IDA RESPONSE

These figures represent the number of miles surveyed and obstructions found by NOAA's Office of Coast Survey, Navigation Response Teams and Hydrographic Surveys Division, following the landfall of Hurricane Ida along the Louisiana coast on August 29, 2021.

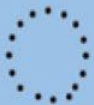
Bayou Lafourche and Port Fourchon

Houma Navigation Canal

LINEAR NAUTICAL MILES
SURVEYED

96

137



OBSTRUCTIONS
REPORTED

167

30



Offshore Channel Response/Surveying

