CRITICAL ACCESS

INFORMATION IN A DISASTER

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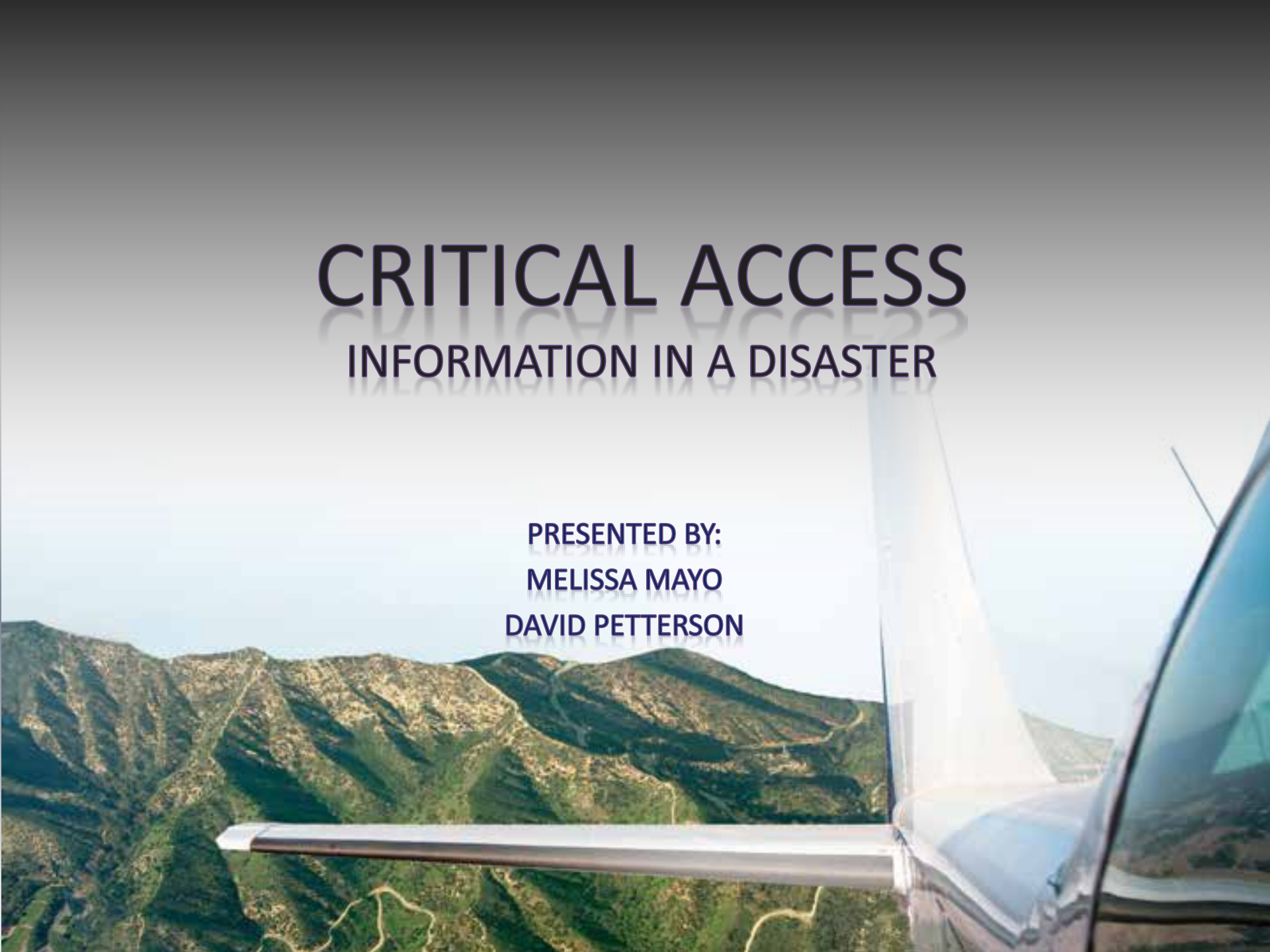


Overview

Presenters

Scenario

Communication

Technology & Application

What's Next

About Alabama Power

- Alabama Power provides the valuable combination of competitive prices, reliable electricity supply and unparalleled service to 1.4 million homes, businesses and industries in the southern two-thirds of Alabama. It is one of four U.S. utilities operated by Southern Company and is one of the nation's largest producers of electricity.
- Alabama power is the second largest subsidiary of Southern Company, serving homes, businesses and industries in Alabama.
- 44,500 square miles of service territory
- Generation mix of Coal, Nuclear, Oil and Gas, and Hydro
  - 12,222 megawatt capacity
- Over 10,000 miles of Transmission Lines
  - More than 120,000 poles and towers

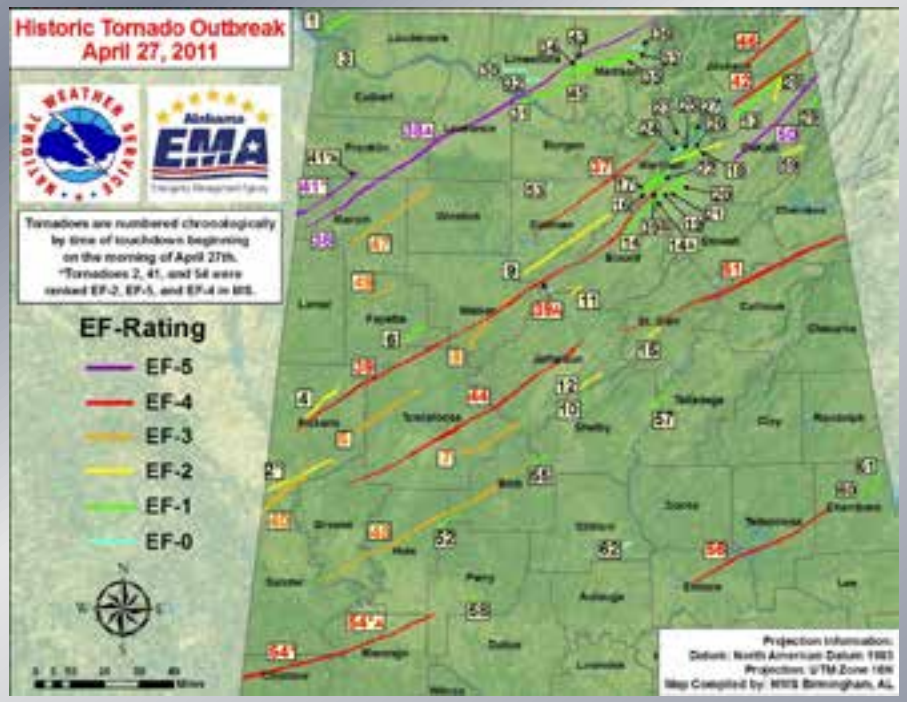
About Pictometry

- A Leader in Innovative Imaging & 3D Modelling Solutions since 1999
- US based company operating in US & Canada and Internationally
- Hosts one of the worlds largest secure repositories for image based content
- Manages a fleet of over 86 aircraft with unique capture capability
- Working with many large Utilities across both US & Canada

History of responding in a time of need!

Tornadoes of 2011

April 27, 2011: Alabama was impacted by 60+ tornadoes, impacting 2/3 of state



Source: NWS BHM http://www.srh.noaa.gov/bmx/?n=event_04272011

Pictometry:

- Flew > 3,000 miles of corridors
- Debris and threat assessment
- Objective record of the event
- Record of as-built state and assets added as part of recovery
- Implemented Critical Access in 2012

Pictometry Response

Lessons Learned

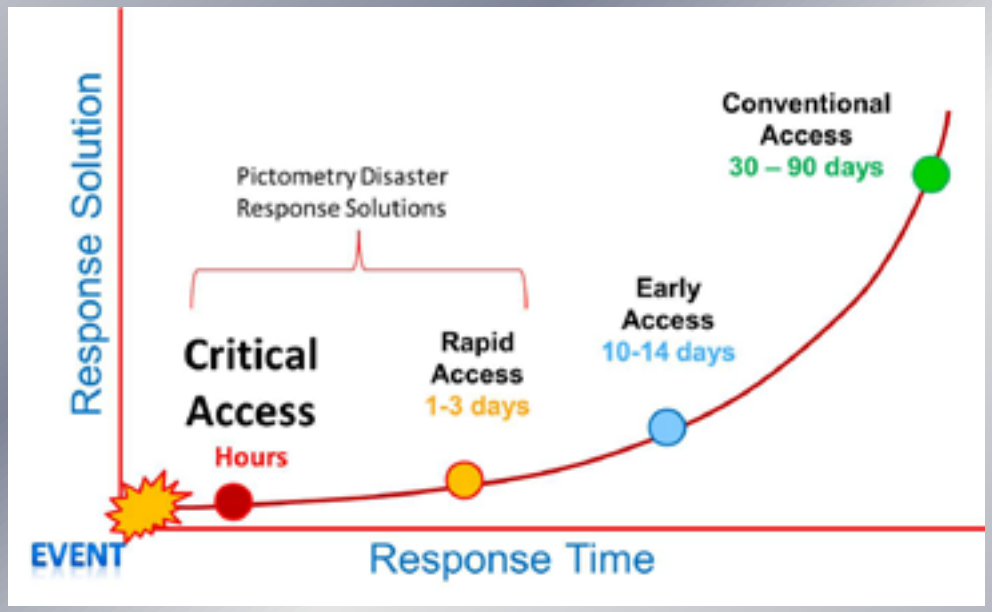
Imagery Collected from the Damaged areas was incredibly useful

Access to this information immediately would have sped up recovery efforts!

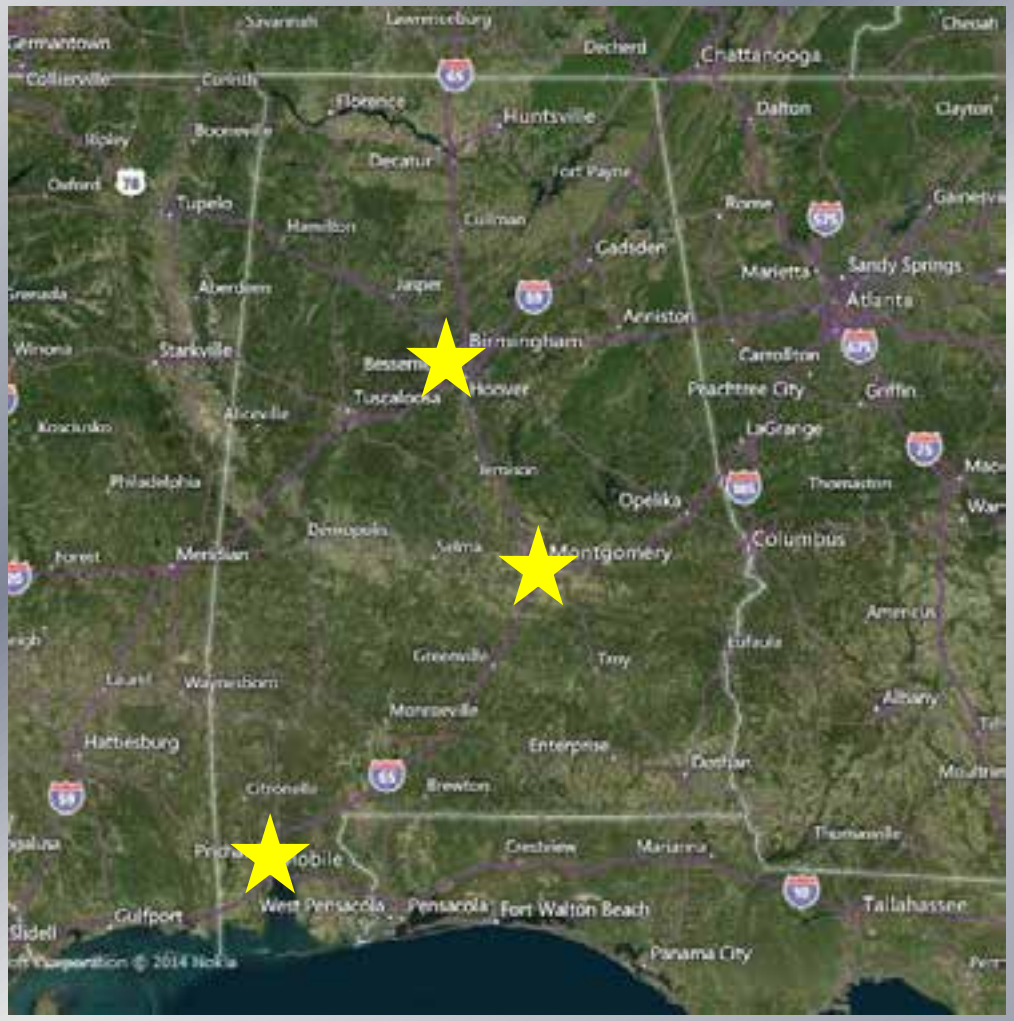
Development of a near real time solution – Critical Access

Critical Access

Wow Factor vs Value Factor



Critical Access : Pre-Planning



All Transmission lines are “pre-planned” and labelled in such a way that Pictometry Flight Operations and APC can communicate

★

Units are placed in strategic regions with access to secure intranet service and near a local airport

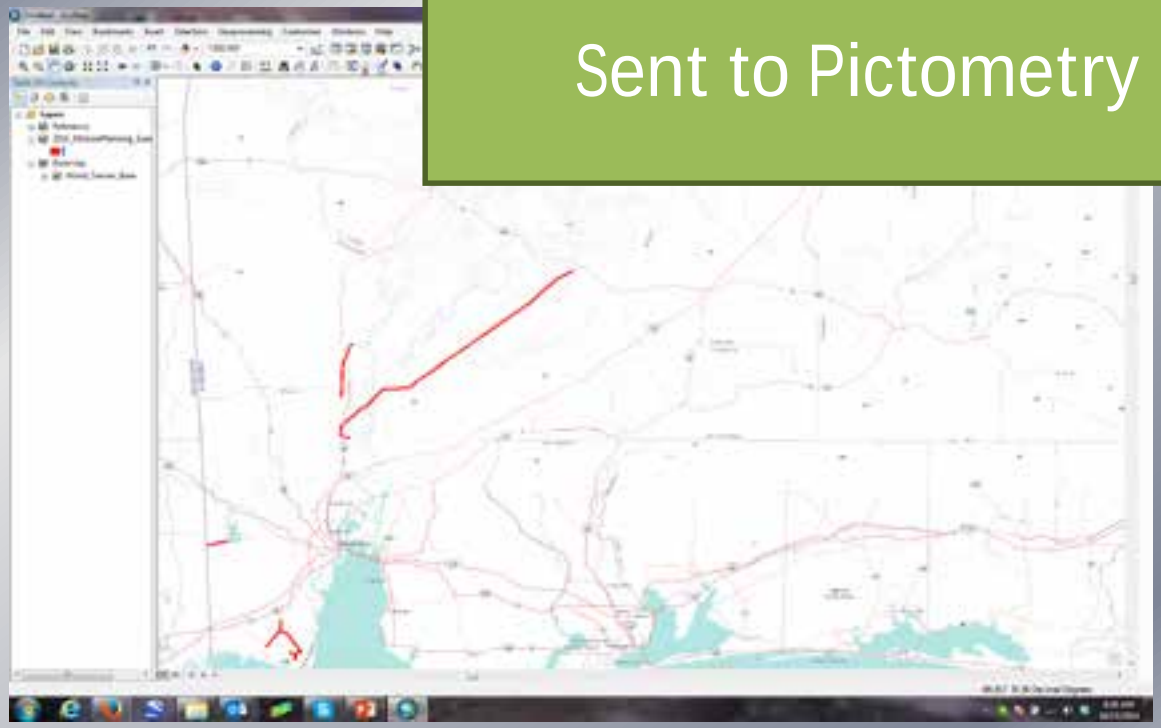
When it hits!

Storm responses are triggered, initial damage assessment teams are sent out and lines are reviewed.

Storm center creates a priority list of lines that need review.

Coordination & Prioritization

Priority	Line	Name
1	7	Edison- Tesla
2	16	Morgan- Westinghouse
3	581	AC- DC
4	337	Faraday- Field
5	349	Watt- Joule



Sent to Pictometry

Coordination & Prioritization

Plane 1.

Line No.	Priority	Ferry Time	Capture Time	Ferry to next	Return to Base
7	1	15	180	50	100
358	6	50	25	5	45
385	7	15	60		

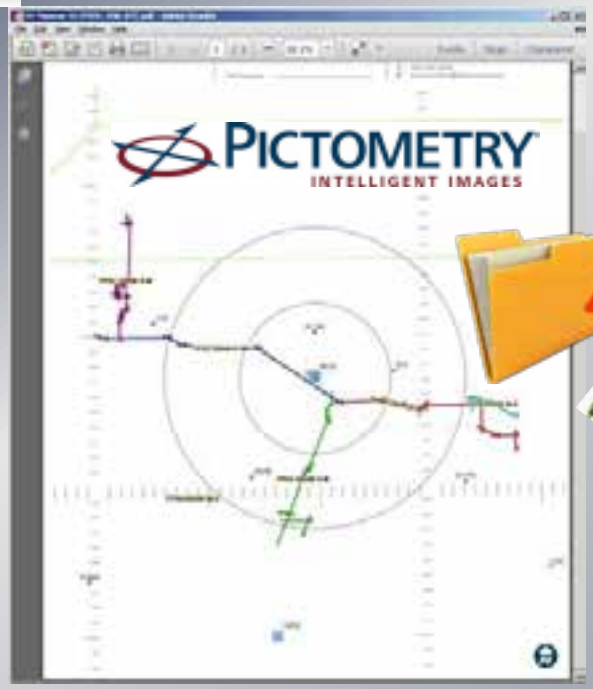
Notes:
Re-order could save 45mins

Sent to Alabama

Plane 2.

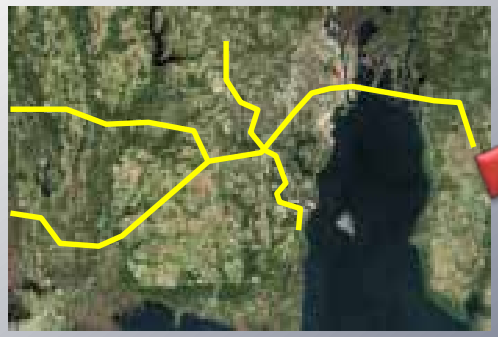
Line No.	Priority	Ferry Time	Capt… Time	…ext	to Base
16	2	20	90	10	60
423	3	10	40	15	45
337	4	15	15	20	75
339	8	20	40	25	30
165	10	25	50	15	15

APC Team is in constant communication with Pictometry Flight Operations to update or change priority as required



Flight Plans are packaged up based on assignment

Flight Plans are uploaded in real-time to the planes



Pictometry coordinates sortie between Pilot & Utility

Plane flies predefined sortie

Damage Extents - Imaged, Located & Recorded

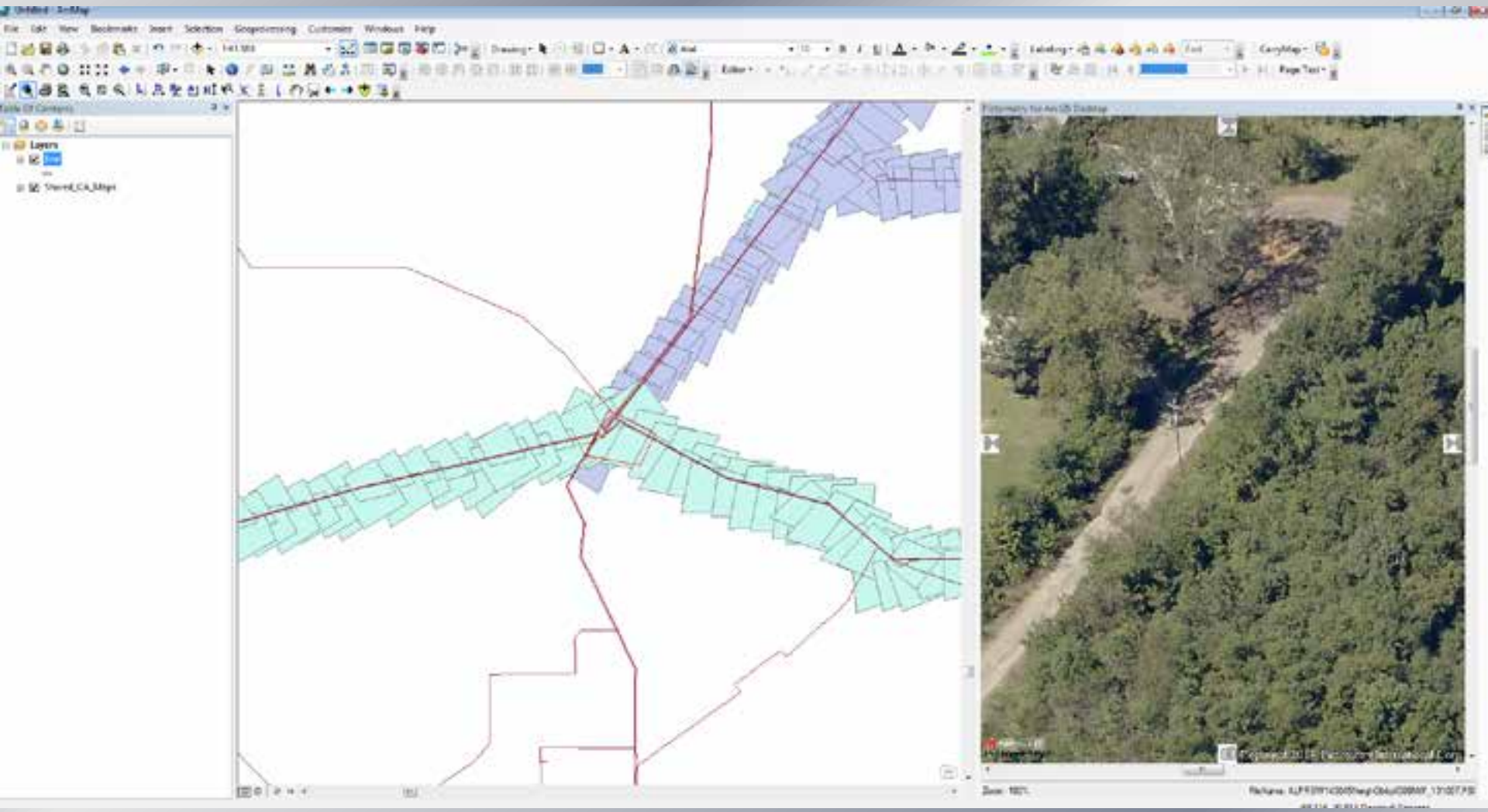
Drives are swapped out and taken to the Ground Receiving Unit

Ground Receiving Unit / Remote Location (Near Airport & Network Line)

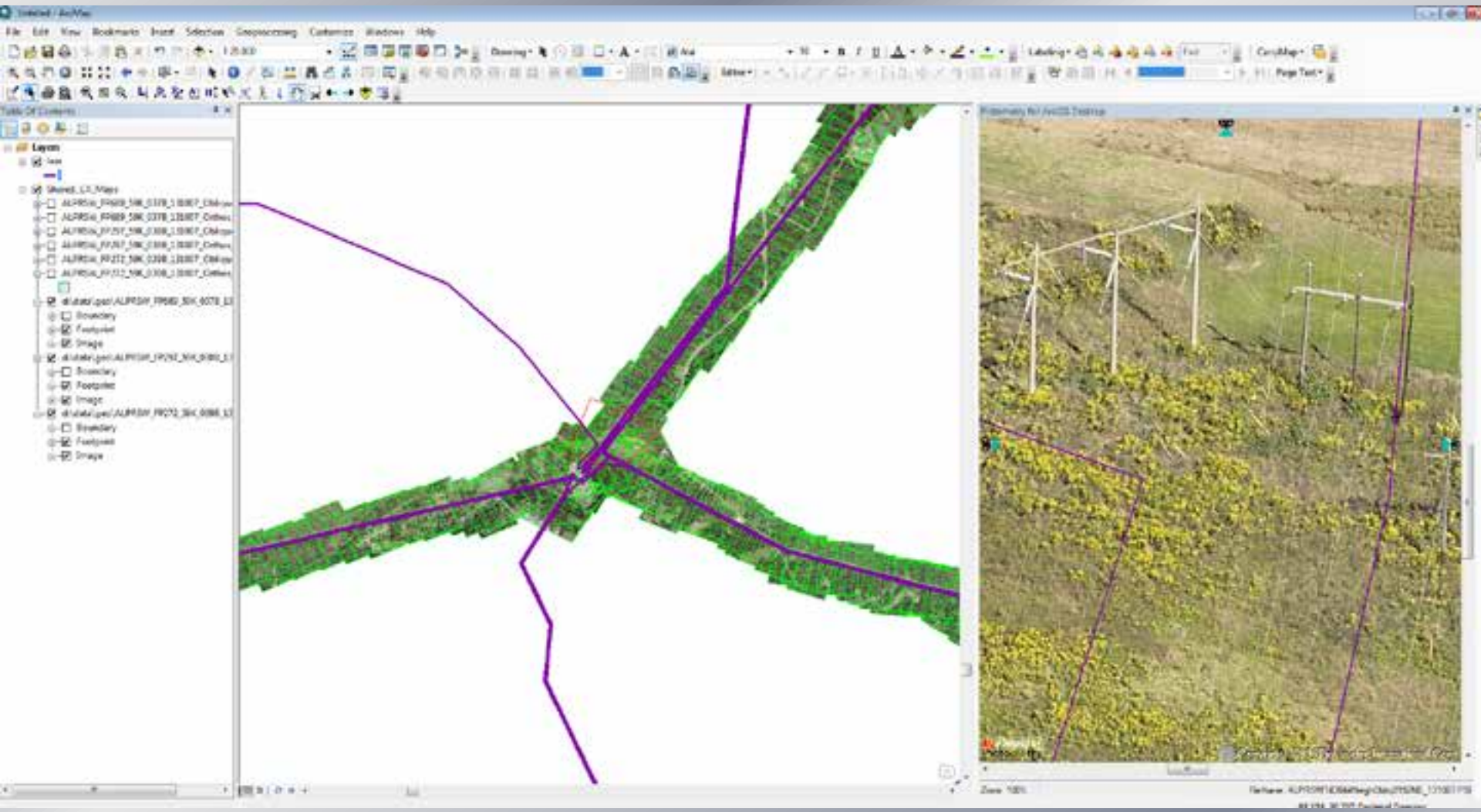
Storm Center
Imagery available to analysts to assess damage and coordinate field crews

Ground Response Unit (GRU)

Web Access for Organization



Web Access for Organization



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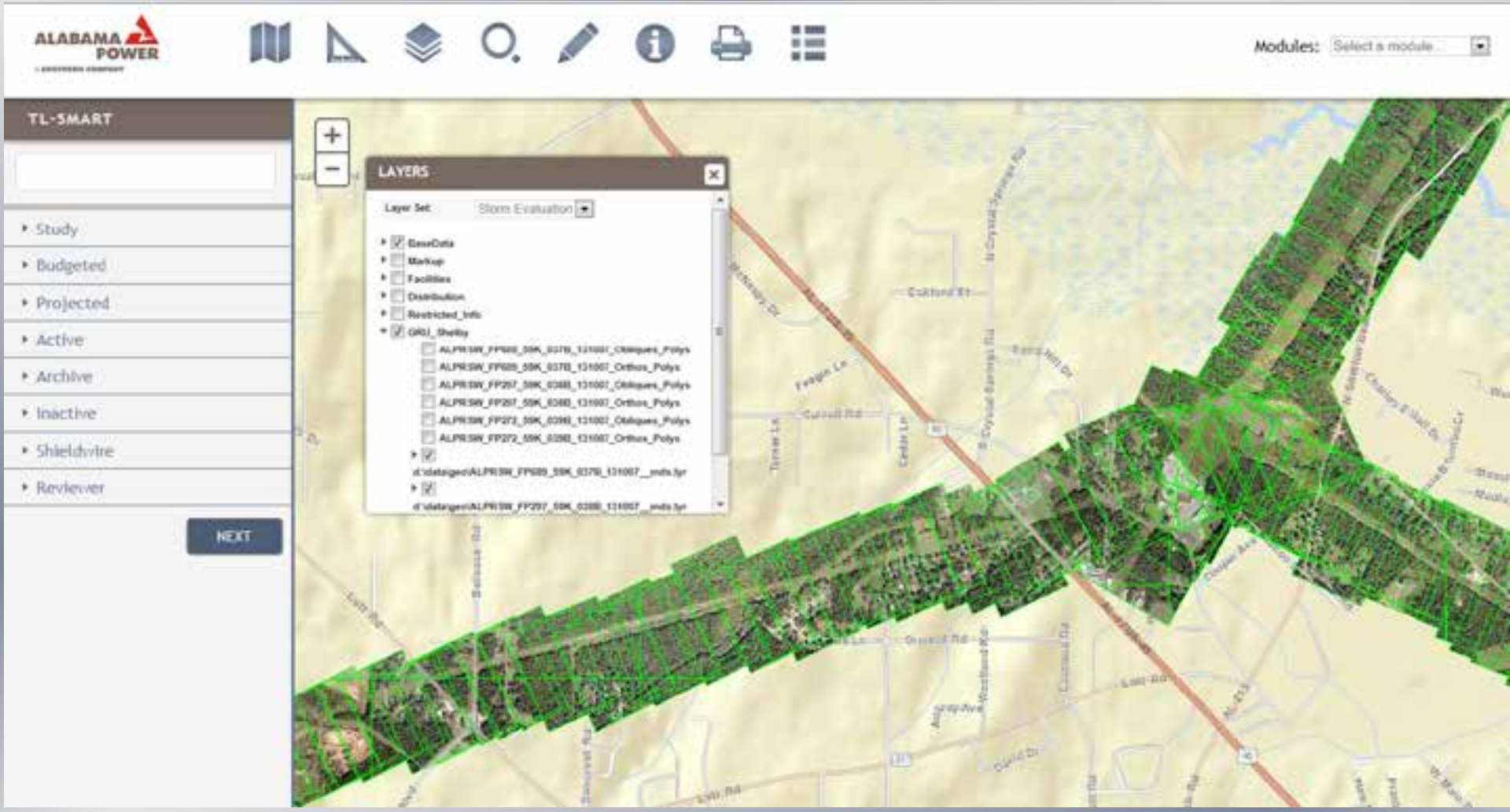
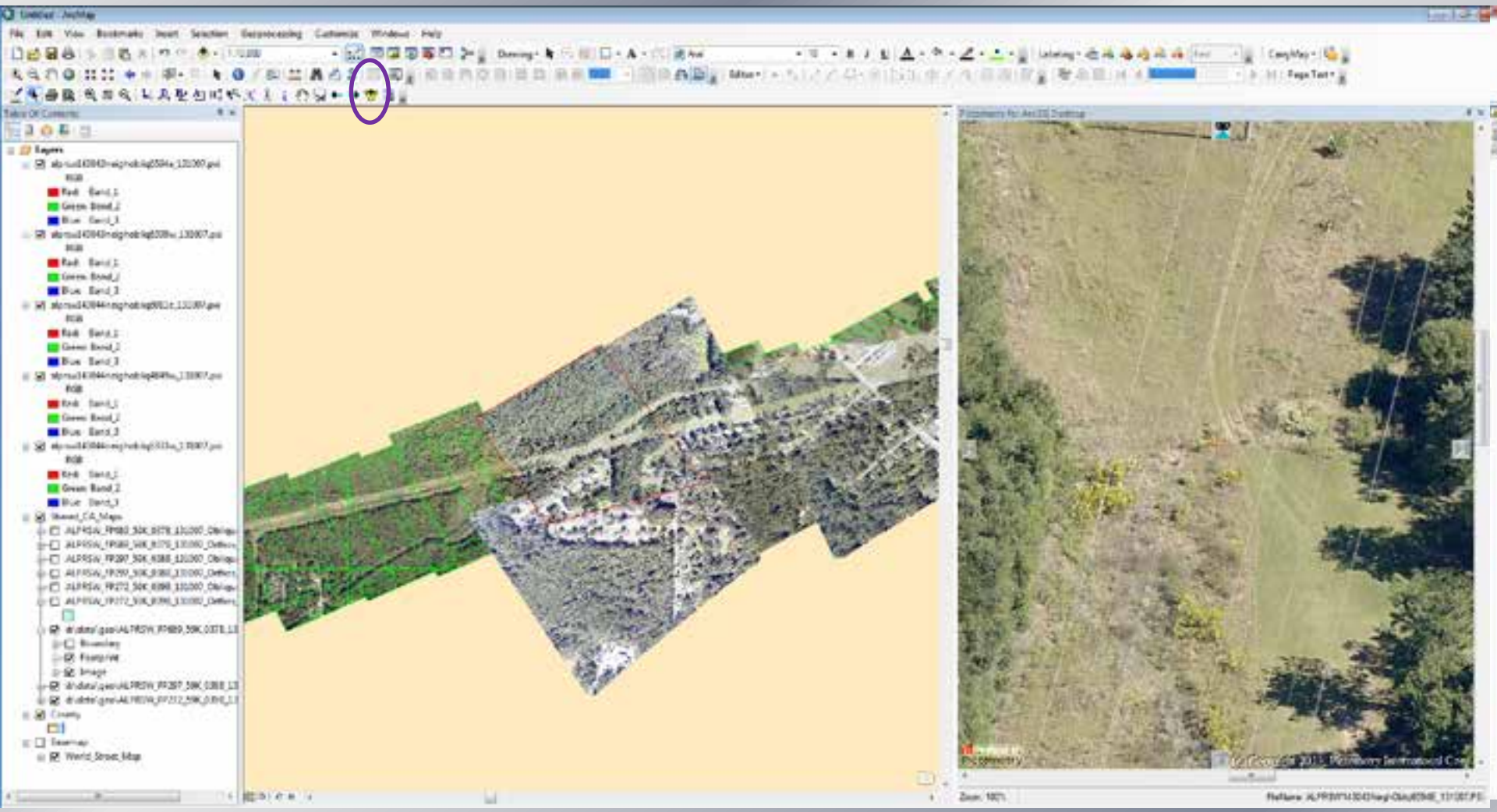


New Feature: Add Mosaic Image to Map



Successfully Deployed

- Currently have 4 units that will be used in conjunction with existing incident response teams

- Will be used in parallel with existing response operations to supplement post storm activities.

Groups who can use it:

- Design
- Maintenance
- Vegetation
- Construction
- Encroachment
- Environmental
- Many more!

Continued Learning

- KISS – Continual improvements to make the system plug & play within in a complex environment
- Improve real-time imagery access via the Esri Server
- Improving communications between Emergency Personnel and Pictometry flight operations to ensure the collections are being prioritized correctly

Questions?