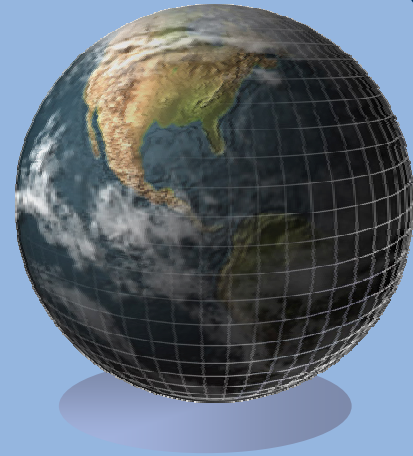


Katrina's Fury: An Assessment of Environmental Data Fusion for Rapid Large Scale Hurricane Damage Assessment Using Moderate Resolution Imagery

Richard P. Watson, Theresa R. Watson,
Enrique L. Montano, and Crystal M. Krause

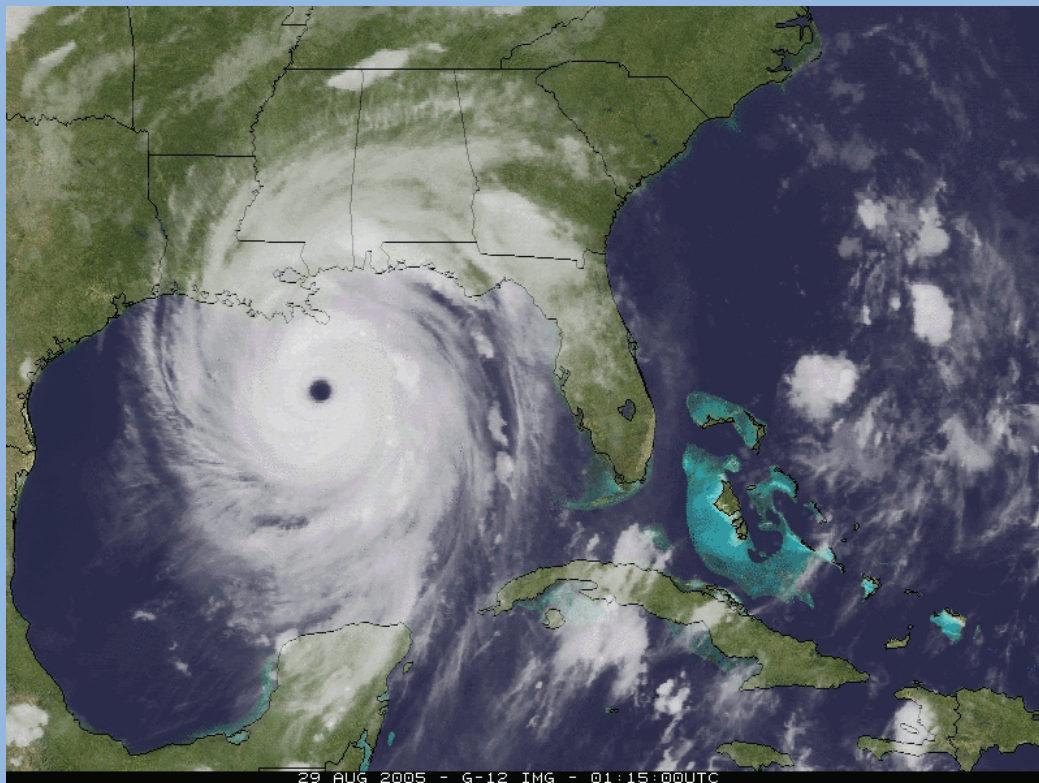
CREATE:

Center for Rapid Environmental Assessment and
Terrain Evaluation
University of New Mexico



**3rd International Workshop for Post Disaster Response
September 12 - 13, 2005
Chiba University - Chiba, Japan**

Katrina: August 29, 2005

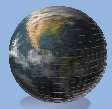


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Facing Disasters - Key Questions

- What happened?
 - Sets the stage
- When did it happen?
 - Defines immediacy of need for response
- What kind of damage?
 - Multi-scale issue defining the nature of damage which defines the type of required response
- What is the extent of the damage?
 - Defines the scale of the response
- Where is the damage?
 - Identifies locations requiring response

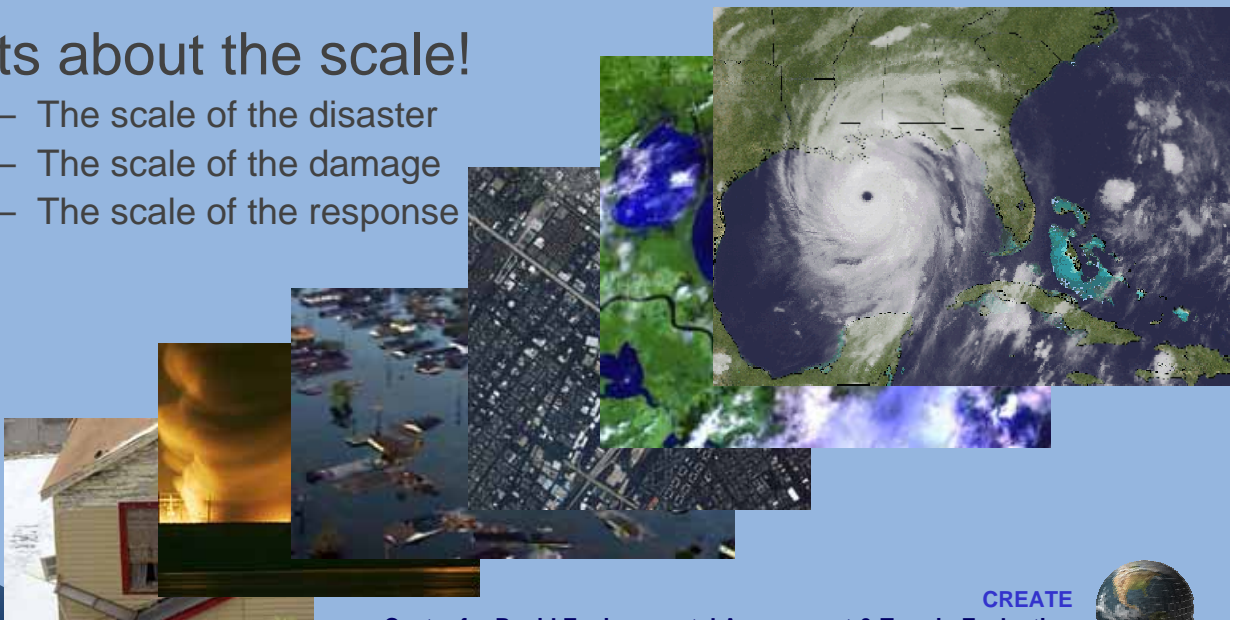


How Can Remote Sensing Help Address These Fundamental Questions?

- It's about what happened
and

- Its about the scale!

- The scale of the disaster
- The scale of the damage
- The scale of the response

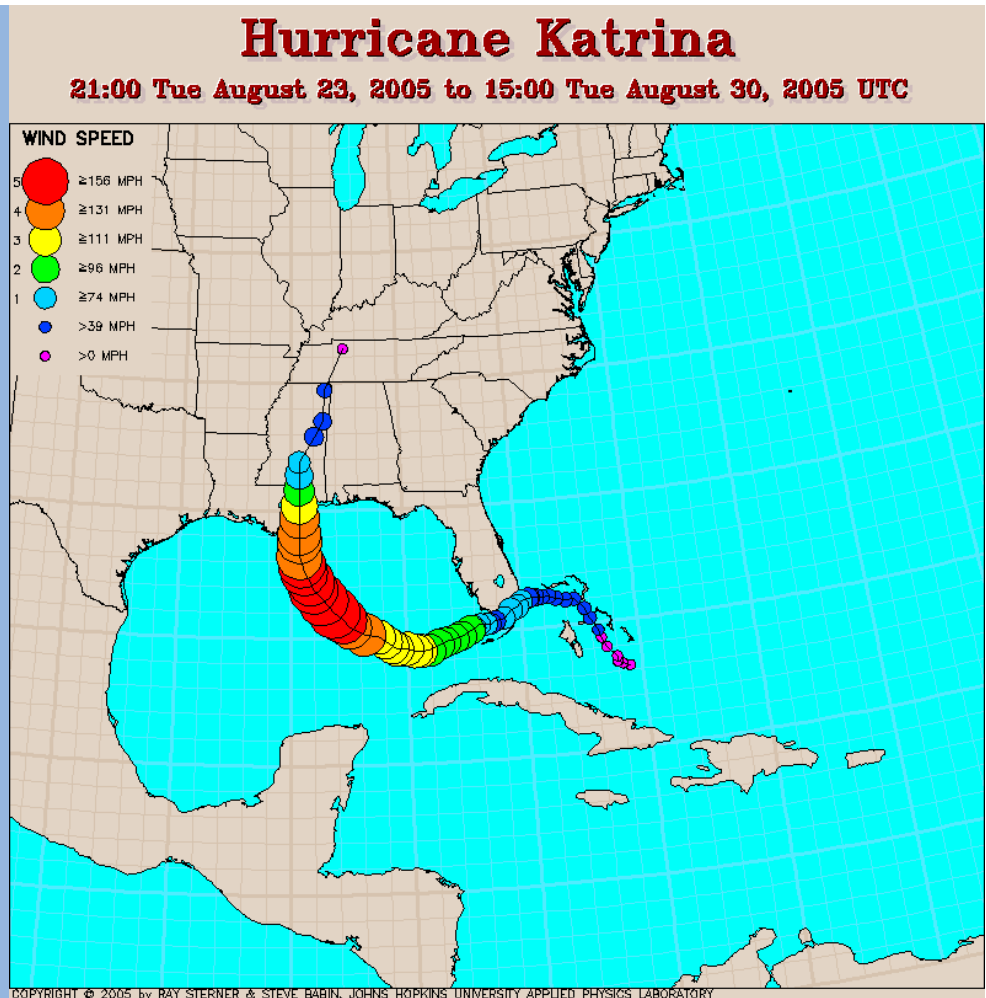


What Happen?

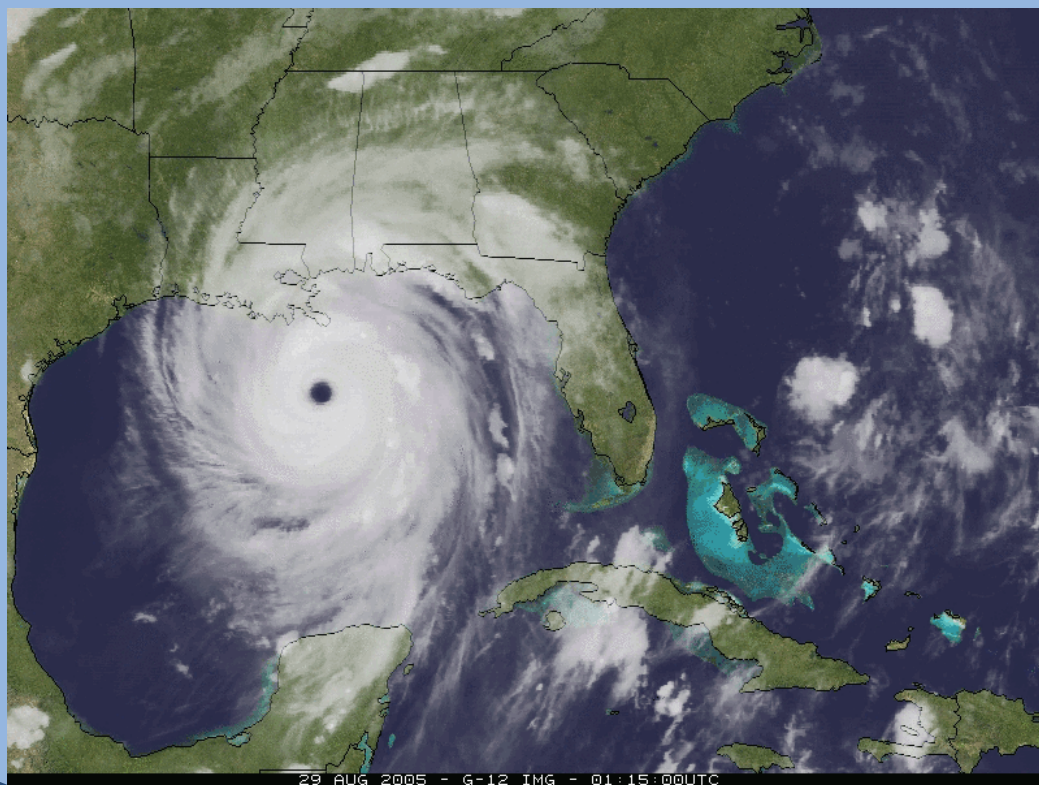
R/S Data:

Windspeeds &
Location
Aircraft
Met Satellites

Johns Hopkins University
Applied Physics Lab



The Character & Scope of the Disaster

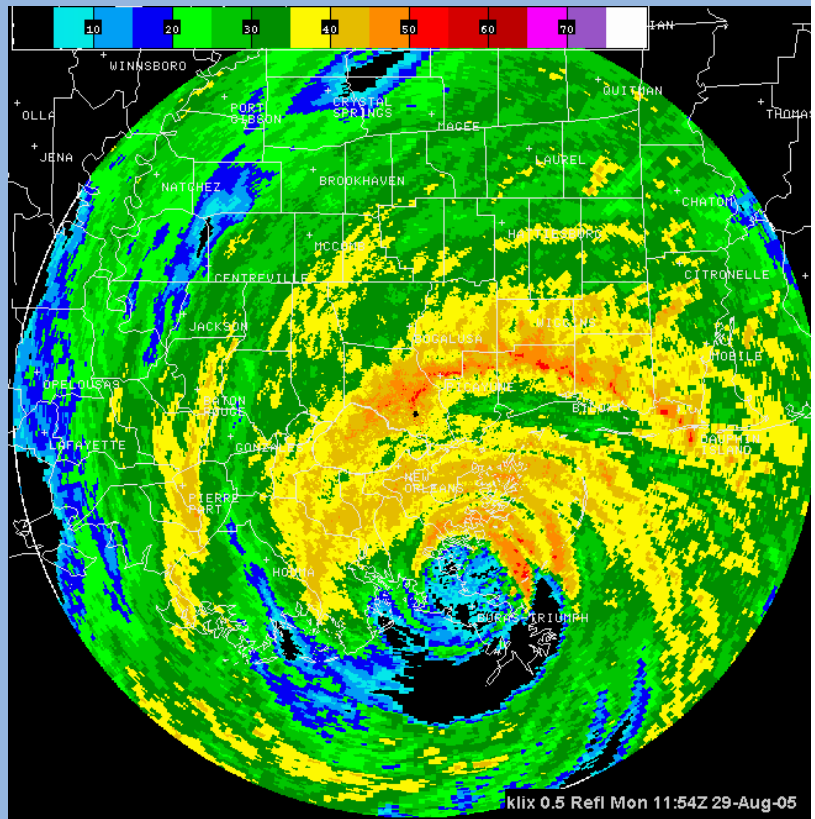


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NEXRAD

Katrina:
8/29/05
07:54 -
08:59 CDT



NEXRAD Animation - Mobile, AL - KMOB

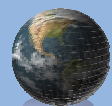
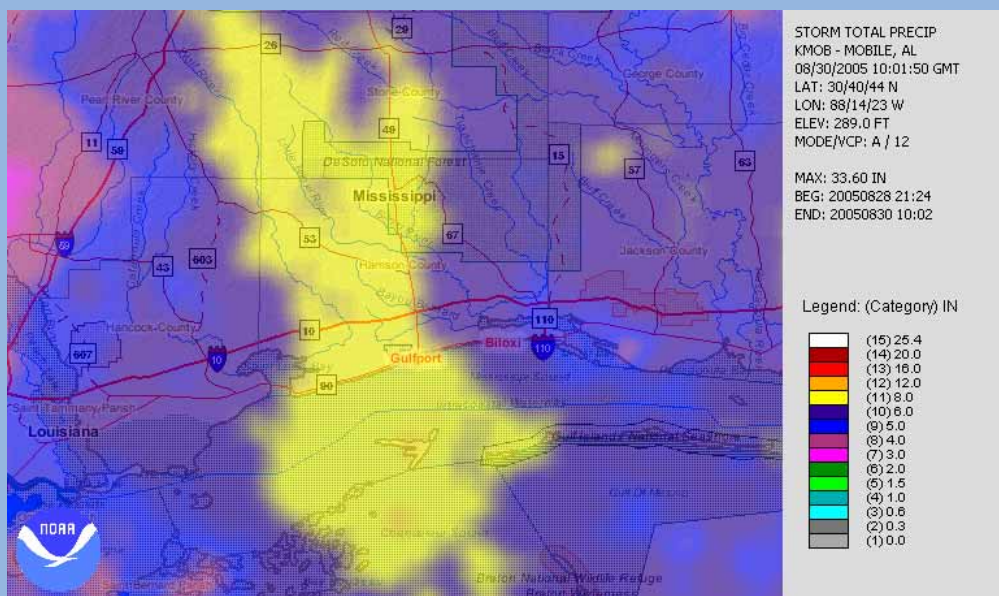
QuickTime™ and a
Video decompressor
are needed to see this picture.

NEXRAD Animation - New Orleans, LA - KLIX

Last data transmitted at 13:54 GMT (8:54 CDT)

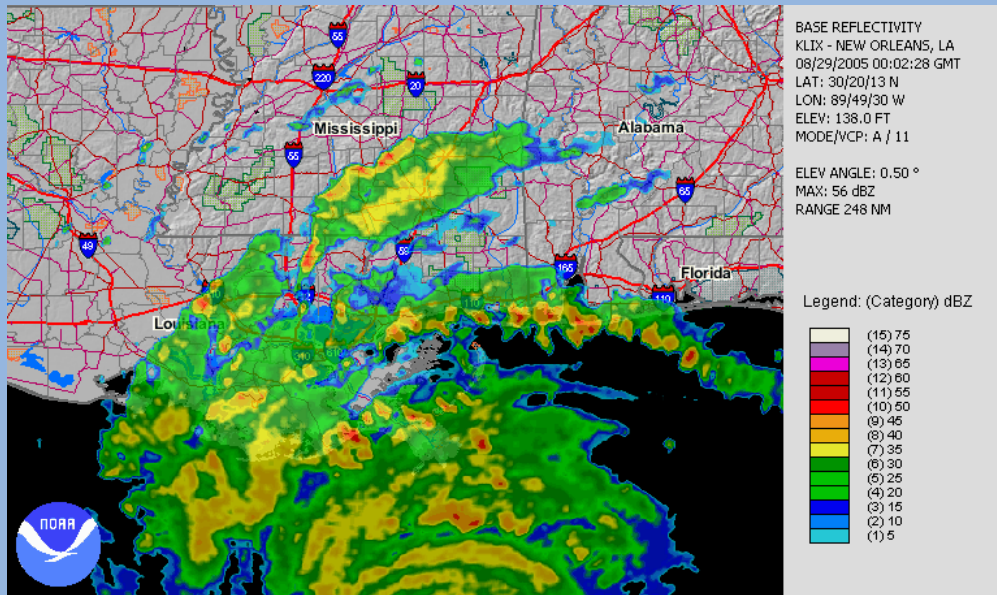
QuickTime™ and a
Video decompressor
are needed to see this picture.

Katrina - Storm Total Precipitation



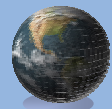
NEXRAD - KLIX Base Reflectivity

Aug 28- 29,2005 - 19:00 to 8:54 CDT



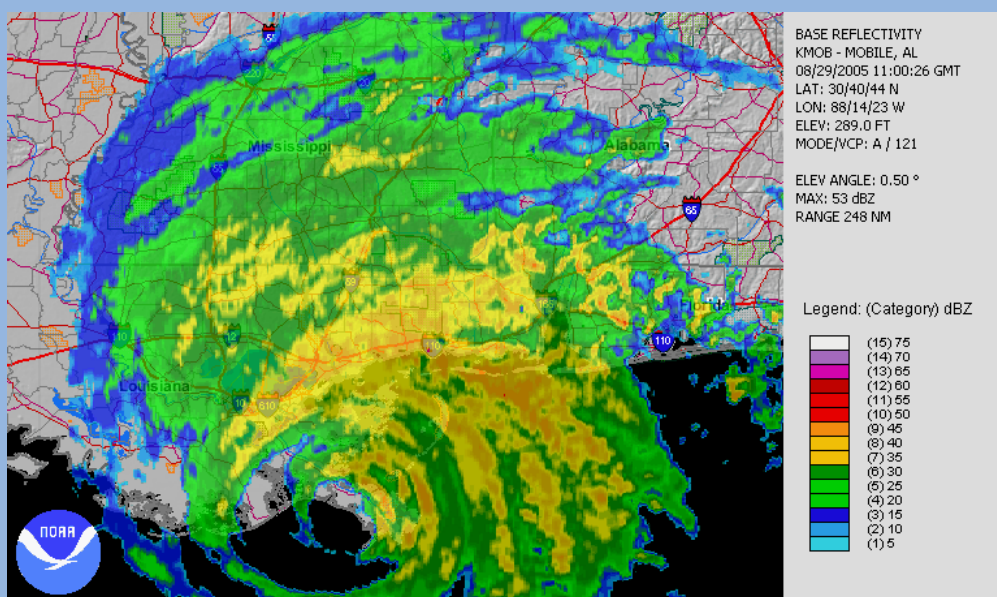
Center for Rapid Environmental Assessment & Terrain Evaluation

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NEXRAD - KMOB Base Reflectivity

8/29/2005 - 06:00 to 12:45 CDT



Center for Rapid Environmental Assessment & Terrain Evaluation

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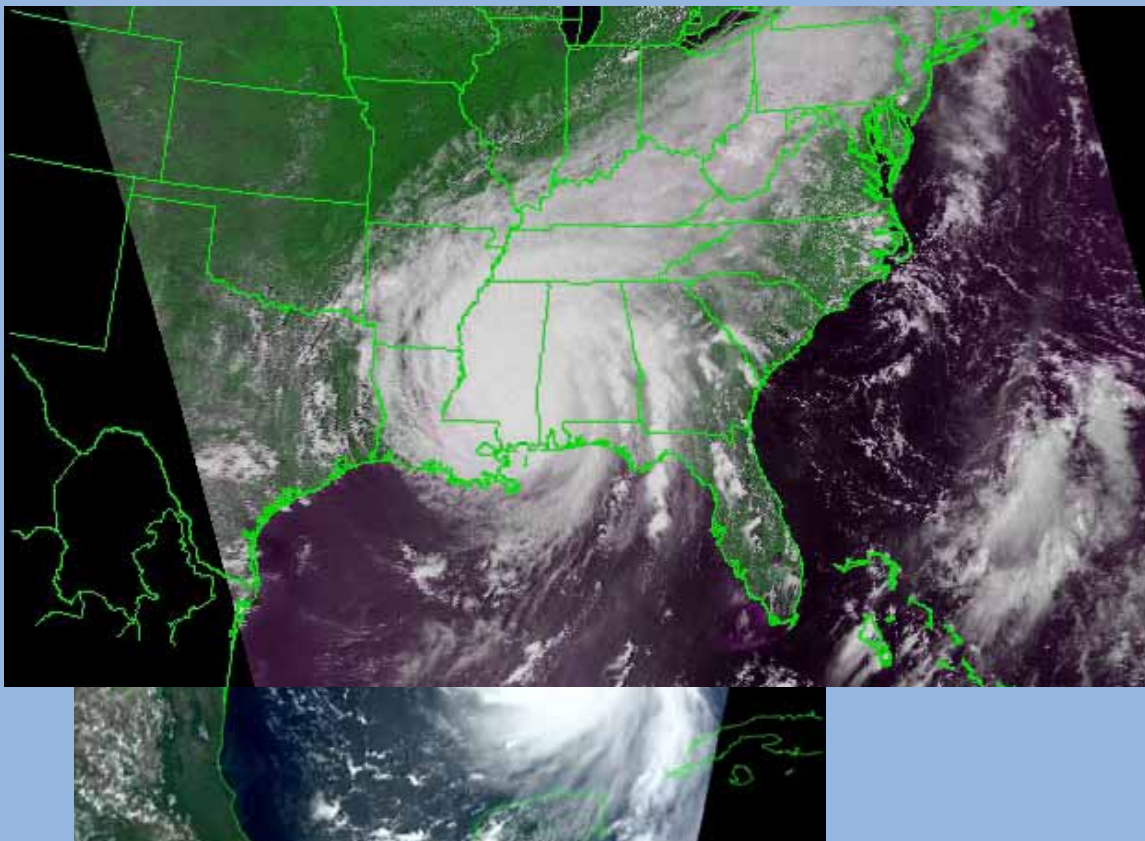
The Format Issue of NEXRAD Data

- GRIB - Radial Data not compatible with most GIS systems
- NOAA JAVA NEXRAD Data Viewer
 - Reformats data for import to GIS

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AVHRR



MODIS



August 29th

August 27th

August 26th

Thank You

