

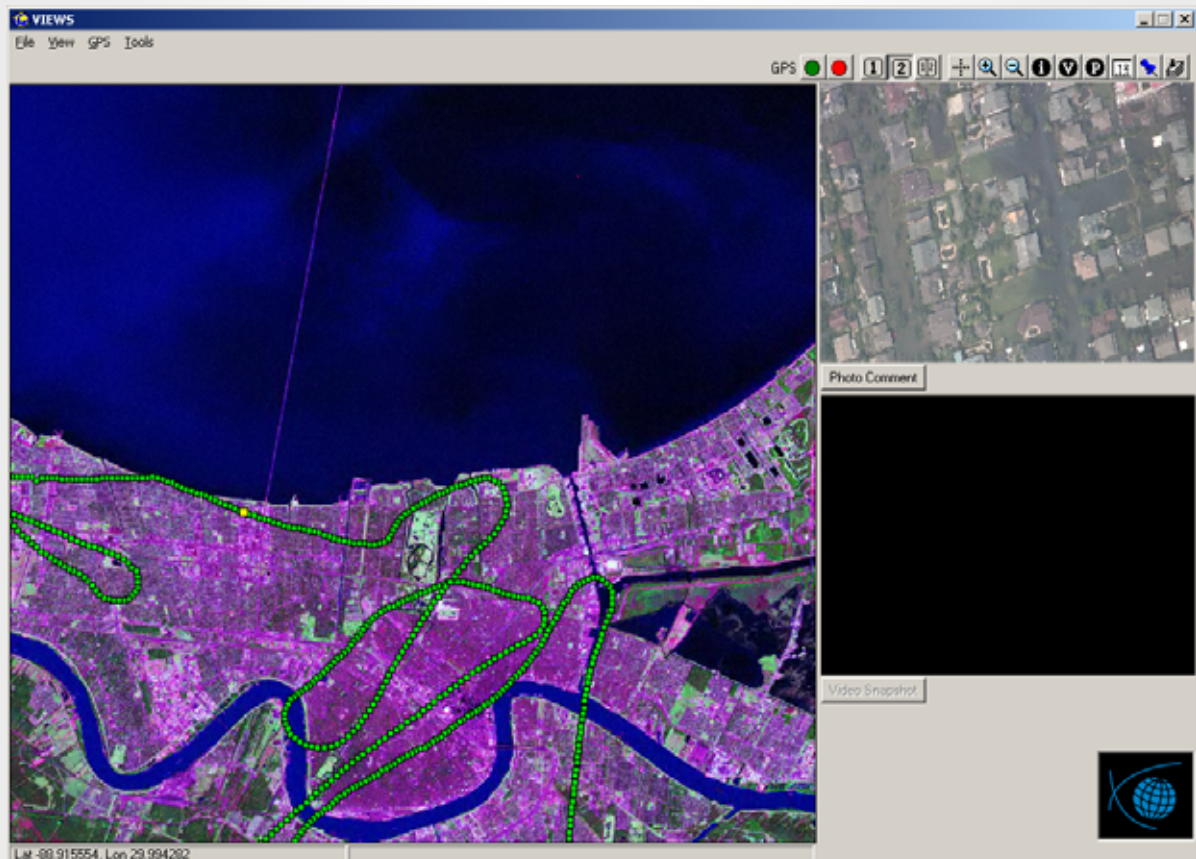
VIEWS Reconnaissance Following Hurricane Katrina

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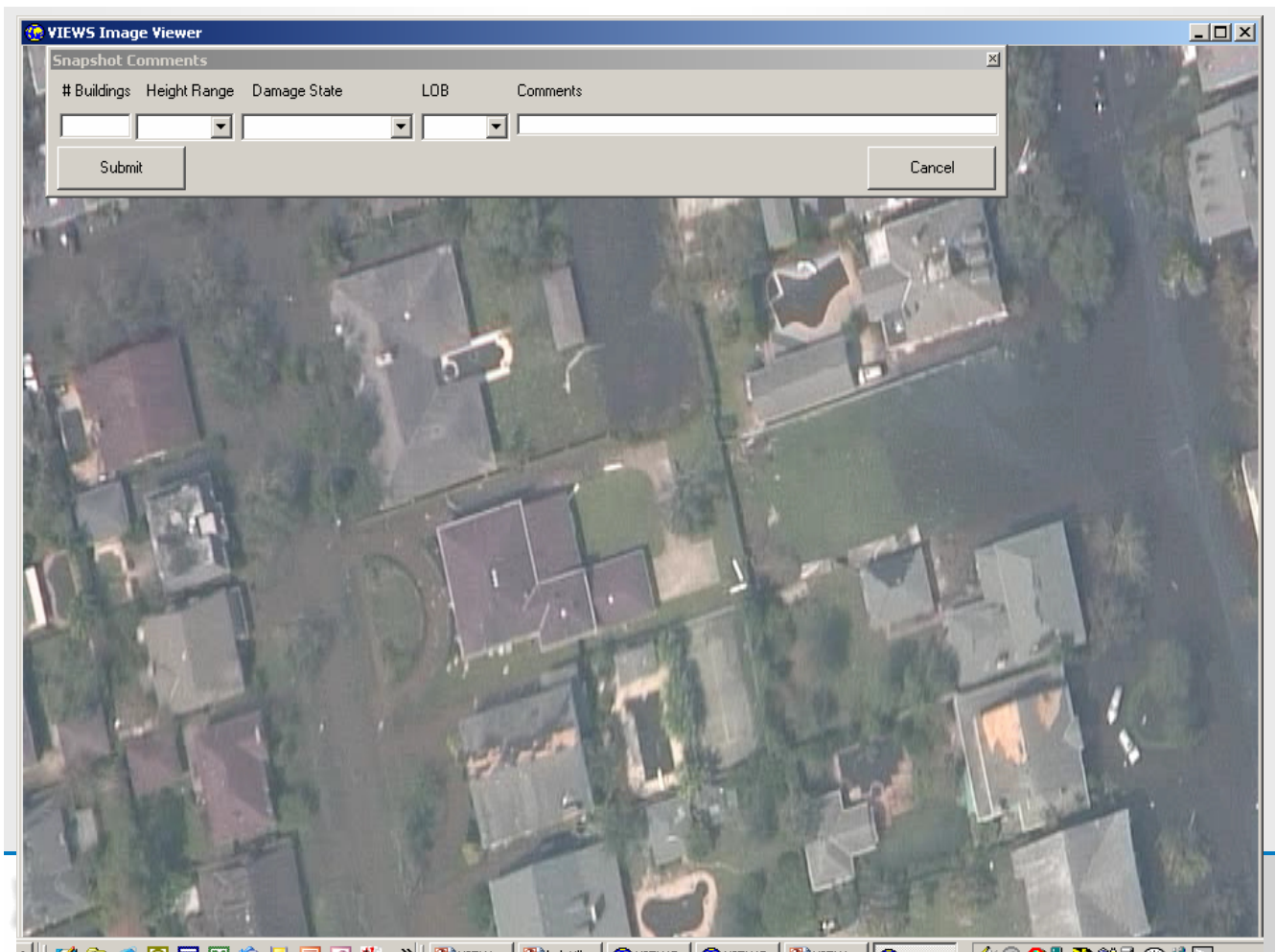
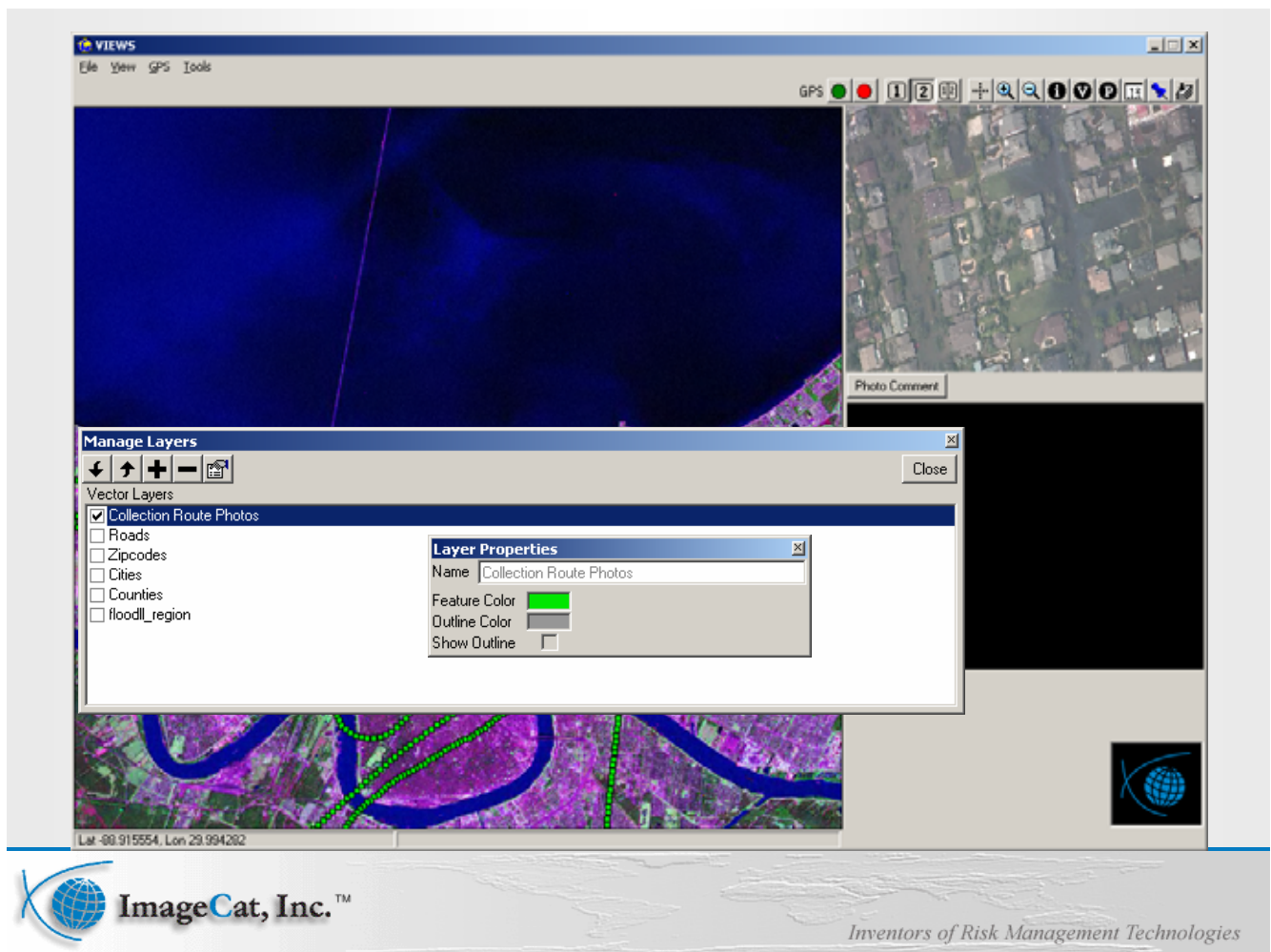
ImageCat, Inc.



Inventors of Risk Management Technologies



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Multi-hazard

- Earthquakes
 - Izmit, Turkey (inspiration)
 - Bam, Iran (first deployment)
 - Niigata, Japan
 - Parkfield, U.S
- Tsunami
 - Sumatra Earthquake and Boxing Day Tsunami (twice)
- Hurricanes
 - Ivan
 - Charley
 - Dennis
 - Katrina (twice)

Rapid Development for Katrina: Integration of HD Video

- Advantages:
 - No interlacing issues
 - Resolution much higher (HD:1920 x 1080; DV:720 x 480)
- Challenges:
 - Required use of specialized software, as CODECs were not yet available
 - Unable to playback video in Microsoft Visual Basic environment
 - Uncertainties w.r.t. optimum hardware configuration
 - Large amount of hard disk space required (13 gigs an hour)
- Satisfactory results:
 - Client happy with video stills uploaded nightly (every 5 seconds)
 - Images crisp
- Mobility in effected region proved to be much more challenging than technical issues

August 20-26, 2005

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Sunday 21 Aug	
Monday 22 Aug	
Tuesday 23 Aug	
Wednesday 24 Aug	
Thursday 25 Aug	
Friday 26 Aug	

August 20-26, 2005

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Friday 26 Aug	Ground control radar in New Orleans back up Still no weather radar - cloudy conditions Bush in and out of New Orleans. No fly zone for 30-mile radius. Pack-up, go home one day early

Concluding Remarks

- Pre-planning is critical, but must be flexible in the field.
- HD provides much better resolution and stills- expands applicability
- Currently Shubharoop is deploying VIEWS by ground

VIEWS Software

- Portable GPS-linked data collection system
 - Photographs
 - Video footage / stills
 - Audio
 - Damage observations
 - Additional attributes
- Visualized with GIS and remote sensing data
 - Modeled damage predictions
 - Damage detection
 - Streets, cities and zipcodes
 - Satellite or aerial background maps

VIEWS Software

- Robust GIS application
 - Layer control
 - XML configuration file (AML,*.wor,*.apr,*.map)
 - Highly customizable for specific clients
- Flexible deployment
 - Land (Driving, on Foot)
 - Sea (boat)
 - Air (airplane, helicopter)