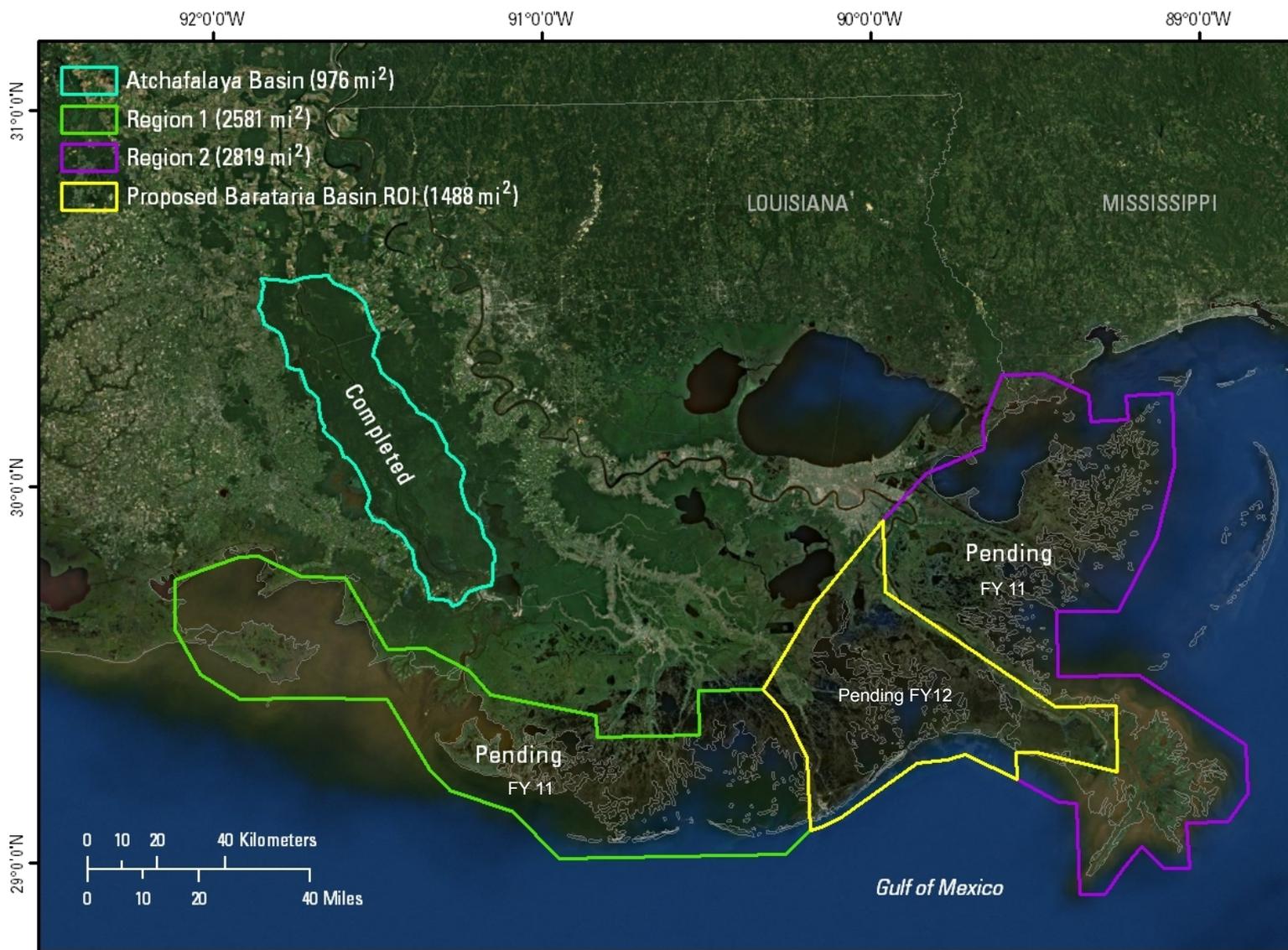
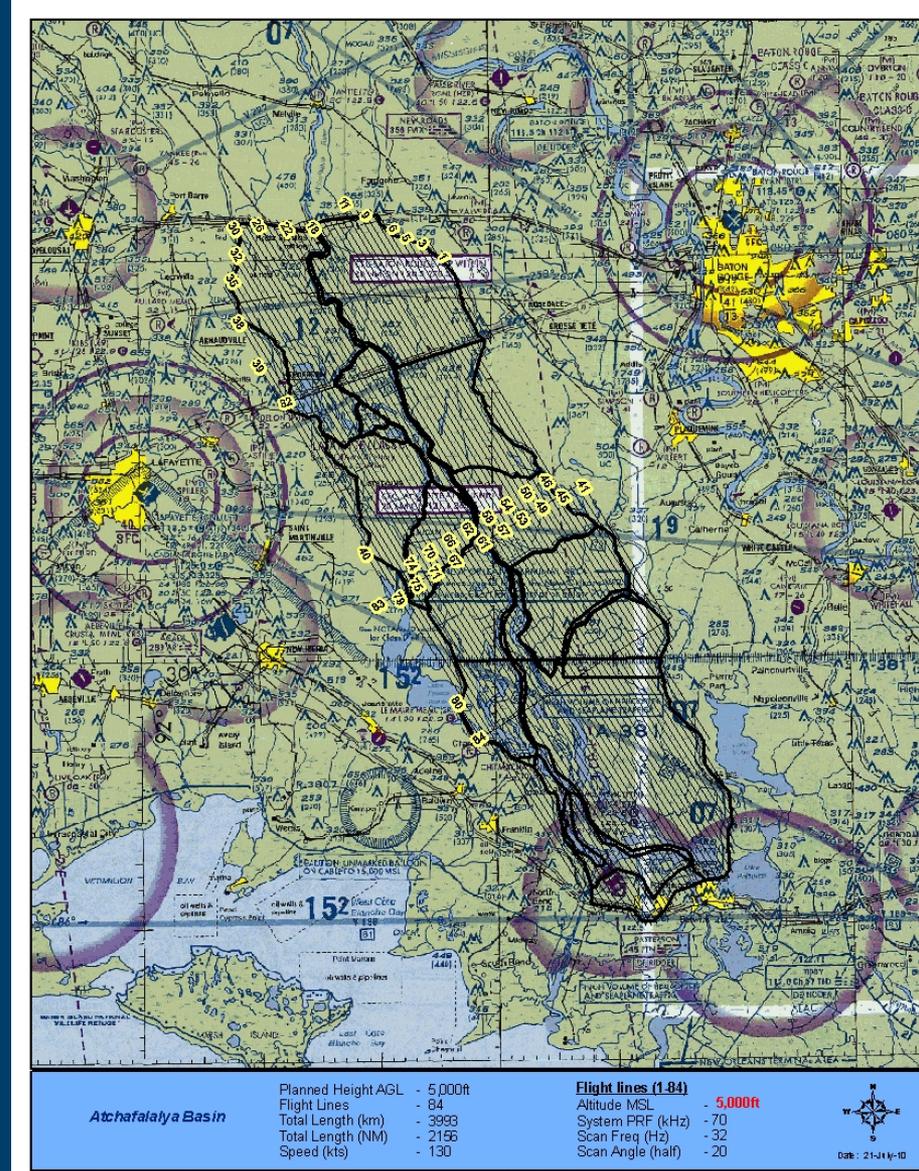
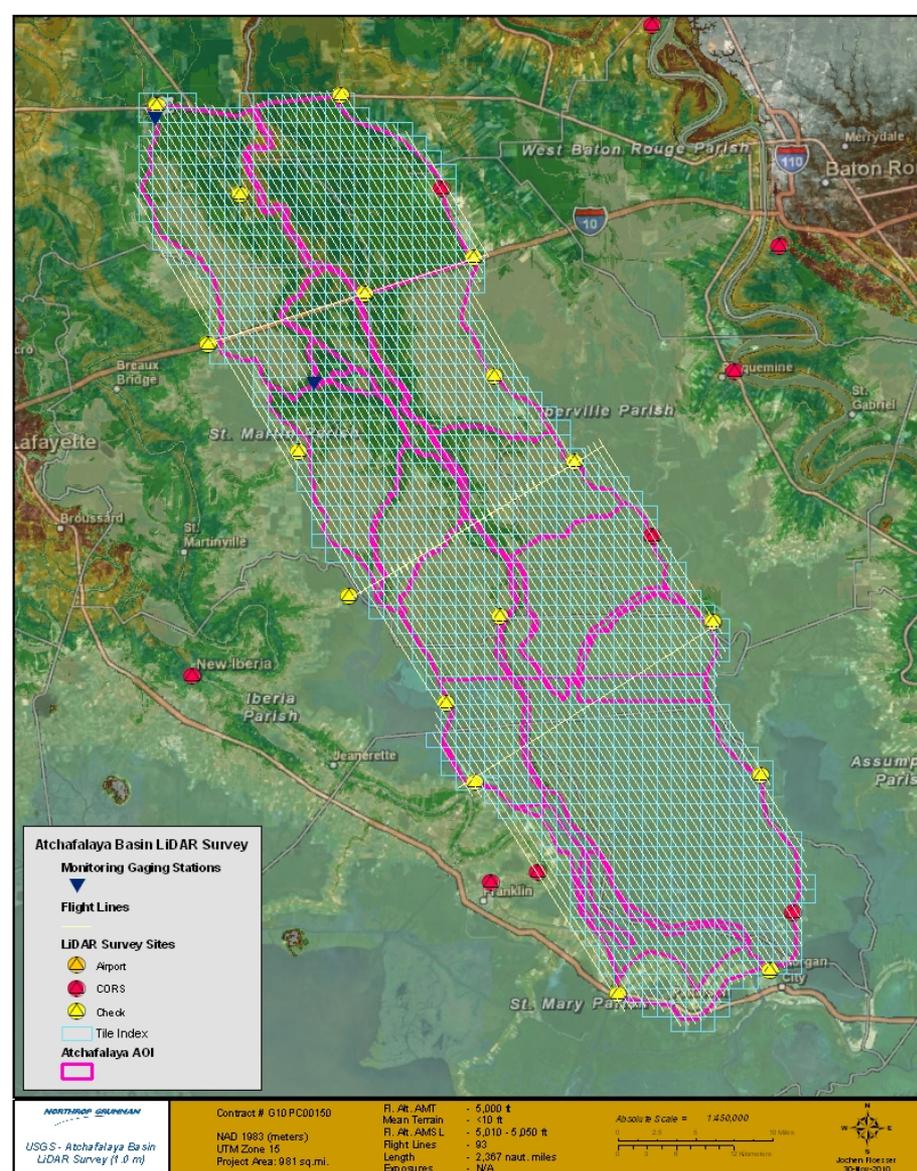


# Commercial lidar acquisition in LA – Partnership between USGS National Geospatial Program and the Coastal and Marine Geology Northern Gulf of Mexico Project



# Atchafalaya commercial lidar survey

## Nov-Dec 2010

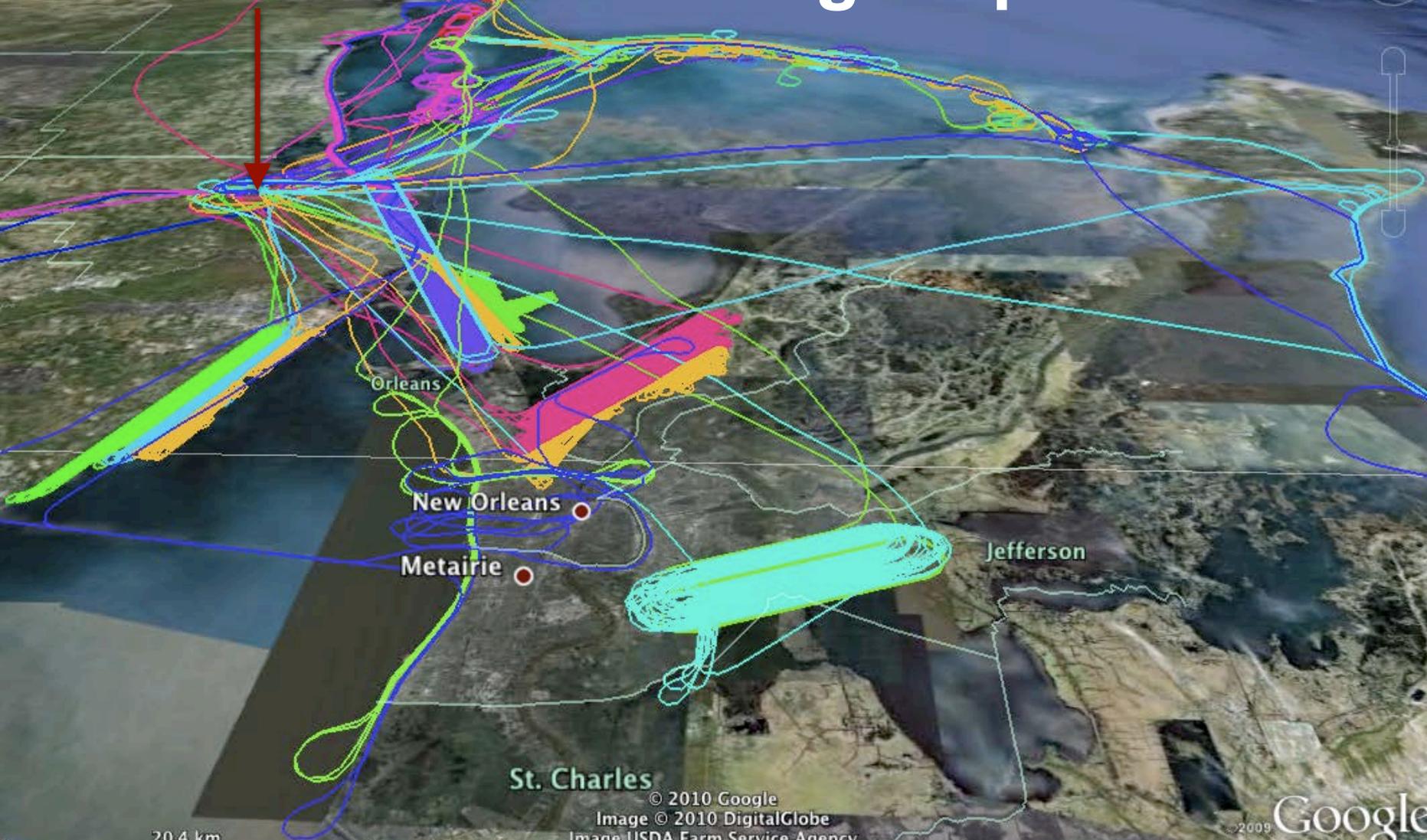


# EAARL Surveys in Louisiana

## Topo-bathymetric LIDAR

# EAARL surveys in the NGOM region post-Katrina

EAARL HUB  
Stennis Airport, MS



St. Charles

© 2010 Google

Image © 2010 DigitalGlobe

Image USDA Farm Service Agency  
Data SIO, NOAA, U.S. Navy, NGA, GEBCO

2009 Google

20.4 km

15 R 757389.91 m E 3270343.40 m N elev 0 m

Eye alt 62.02 km

# LA Barrier Islands

## Surveys:

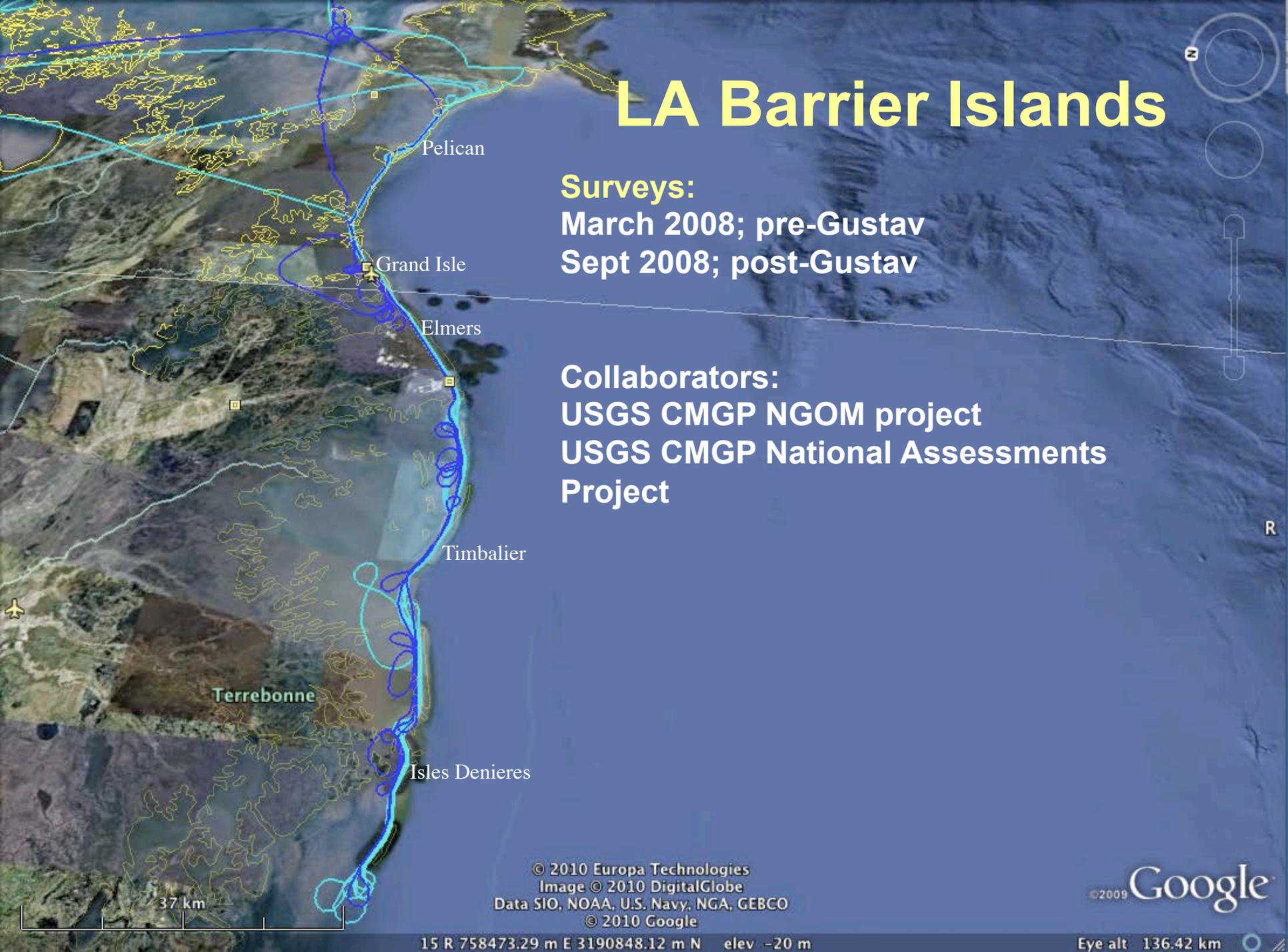
March 2008; pre-Gustav

Sept 2008; post-Gustav

## Collaborators:

USGS CMGP NGOM project

USGS CMGP National Assessments Project



37 km

© 2010 Europa Technologies  
Image © 2010 DigitalGlobe  
Data SIO, NOAA, U.S. Navy, NGA, GEBCO  
© 2010 Google

©2009 Google

15 R 758473.29 m E 3190848.12 m N elev -20 m

Eye alt 136.42 km

# Chandeleur Islands

## Surveys:

Sept	2005 (Katrina)
Sept	2006
June	2007
June	2008
Sept	2008 (Gustav)
Mar	2010
Sept	2010
Feb	2011
May	2011 (Planned)

## Collaborators:

USGS CMGP National Assessments  
Project

LA State DNR

USGS CMGP NGOM project

12.3 km

© 2010 Google  
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Data SIO, NOAA, U.S. Navy, NGA, GEBCO  
Image © 2010 TerraMetrics

16 R 339155.63 m E 3307122.30 m N elev -18 m

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Eve alt 45.59 km

## Decision Support for Coastal Science and Management

[DSP Home](#)   [Technology](#)   [Mapping](#)   [Data](#)   [Publications](#)   [Outreach](#)   [Collaborators](#)   [Contact](#)   [Acronyms](#)

### Decision Support for Coastal Science and Management

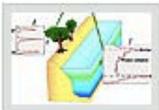
The Decision Support for Coastal Science and Management project, sponsored by the USGS [Coastal and Marine Geology Program](#) (CMGP) is supporting the creation of new capabilities for the synoptic remote sensing of coastal-marine and terrestrial environments based on aircraft and satellite sensors. These coastal remote-sensing, mapping, and point-monitoring tools constitute a unique integrated package of instrumentation and software that may be deployed in support of appropriately timed and scaled zoning decisions by management authorities in order to conserve and sensibly exploit nearshore coastal and marine ecosystems.

Read: [Project Overview & Objectives](#)

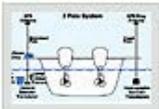
#### Technology



**EAARL Sensor** - The Experimental Advanced Airborne Research Lidar (EAARL) is an airborne lidar system that provides unique capabilities to survey coral reefs, nearshore benthic habitats, coastal vegetation, and sandy beaches. [Read more...](#)



**ALPS Software** - The Airborne Lidar Processing System (ALPS) software, developed in an open-source programming environment on a Linux platform, enables the exploration and processing of data acquired by the EAARL system in an interactive or batch mode. [Read more...](#)

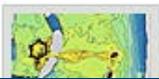


**ATRIS Sensor** - The Along Track Reef Imaging System (ATRIS) is a boat-mounted instrument that acquires continuous, georeferenced, digital-still images of shallow-marine substrates. [Read more...](#)



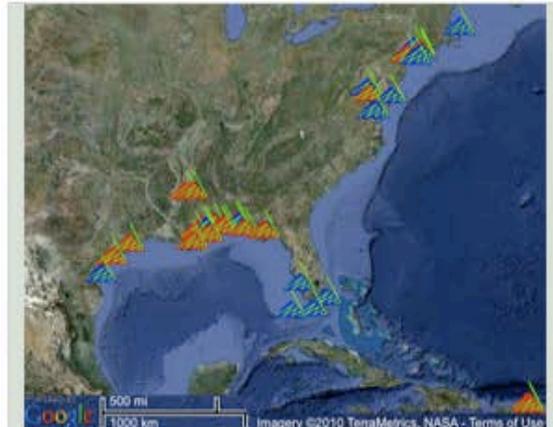
**ADAPT software** - The ATRIS Data Analysis and Processing Tool (ADAPT) is a custom software package designed to complement the ATRIS system. ADAPT's graphical user interface (GUI) provides easy access to the imagery and associated data collected on an ATRIS mission. [Read more...](#)

#### Mapping



**Lidar Topography Mapping** in NPS Parks - Lidar data acquired by the USGS in collaboration with NPS are being used to inventory and monitor marine benthic

#### Data Products



View in [Google Maps](#)

View by [region](#)

View by [year of collection](#)

#### Meetings & Workshops

ALPS Training Workshop, Silver Springs, MD,  
October 26-30, 2009

NE Lidar Workshop, Woods Hole, MA, May 5-7,  
2009

[\(view all\)](#)

#### Recent Publications



Decision Support for Coastal Science and Management

## Collaborators

### U.S. Geological Survey (USGS)



Coastal and Marine Geology Program (CMGP)



Florida Integrated Science Center (FISC)



Northern Gulf of Mexico Ecosystem Change and Hazard Susceptibility Project (NGOM)

### National Aeronautics and Space Administration (NASA)



Goddard Space Flight Center - Wallops Flight Facility

### National Parks Service (NPS)



Northeast Coastal and Barrier Network (NCBN)



Gulf Coast Network (GULN)



South Florida & Caribbean Network (SFCN)

### National Oceanic and Atmospheric Administration (NOAA)



NOAA - National Geodetic Survey - Remote Sensing Division