



Frascati

Nov 16th-17th, 2010

1st CoastColour User Consultation Meeting
Gulf of Mexico Monitoring in Support of
Oil Spill Efforts

CoastWatch Caribbean and Gulf of Mexico Regional Node

Joaquin Angel Triñanes, Kent Hughes and

Paul Digiacomo





CoastWatch Program. Ocean Observations and Products

Introduction

RS Products

MERIS

Web Interface

▶ NOAA's CoastWatch Program makes environmental satellite data products and in-situ data available to Federal, state and local marine scientists, coastal resource managers, and the public. Managed by NOAA National Environmental Satellite Data and Information Service (NOAA/NESDIS), the CoastWatch Program routinely processes satellite data in near real-time, which means that products are just a few hours old.

▶ Regional Node: Caribbean and Gulf Of Mexico (NOAA/AOML, Miami).



Alaska



Central Pacific



West Coast | Great Lakes | East Coast
Caribbean/Gulf of Mexico





CoastWatch Program. Ocean Observations and Products

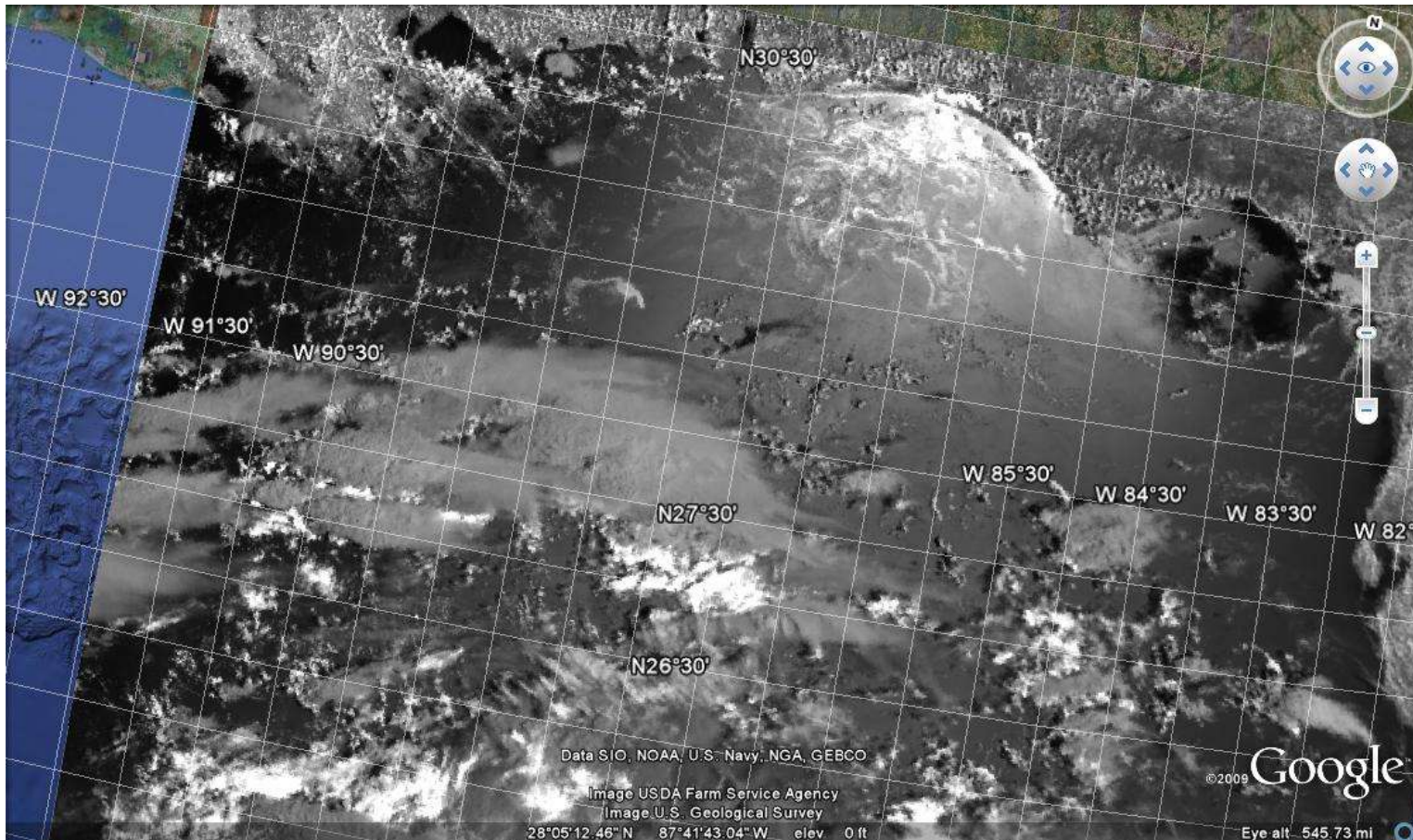
Introduction

RS Products



MERIS

Web Interface



AVHRR 2010-06-26 15:41 ALBEDO



Frascati
Nov 16th, 2010

1st CoastColour User Consultation Meeting



CoastWatch Program. Ocean Observations and Products

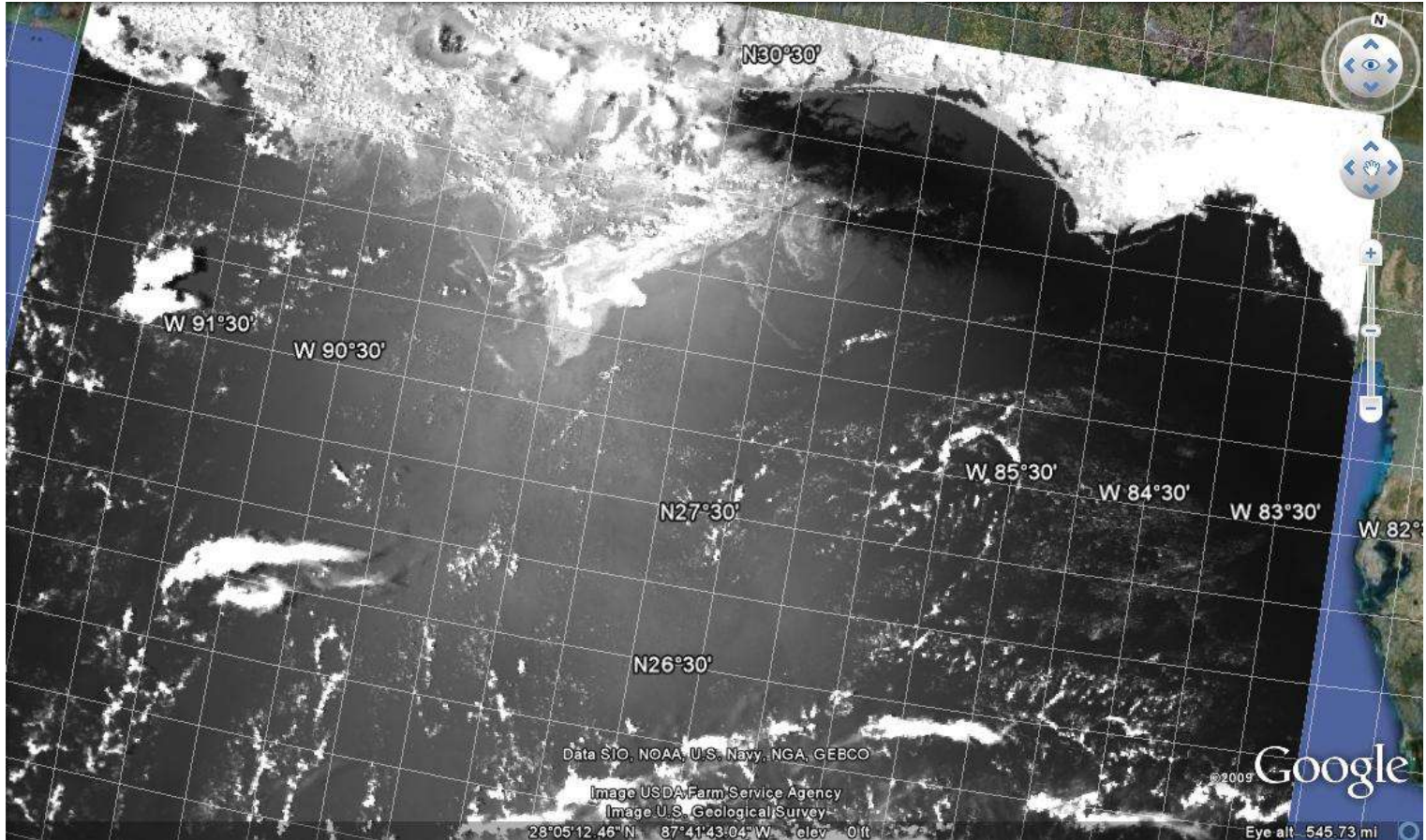
Introduction

RS Products



MERIS

Web Interface



AVHRR 2010-06-26 18:57 ALBEDO



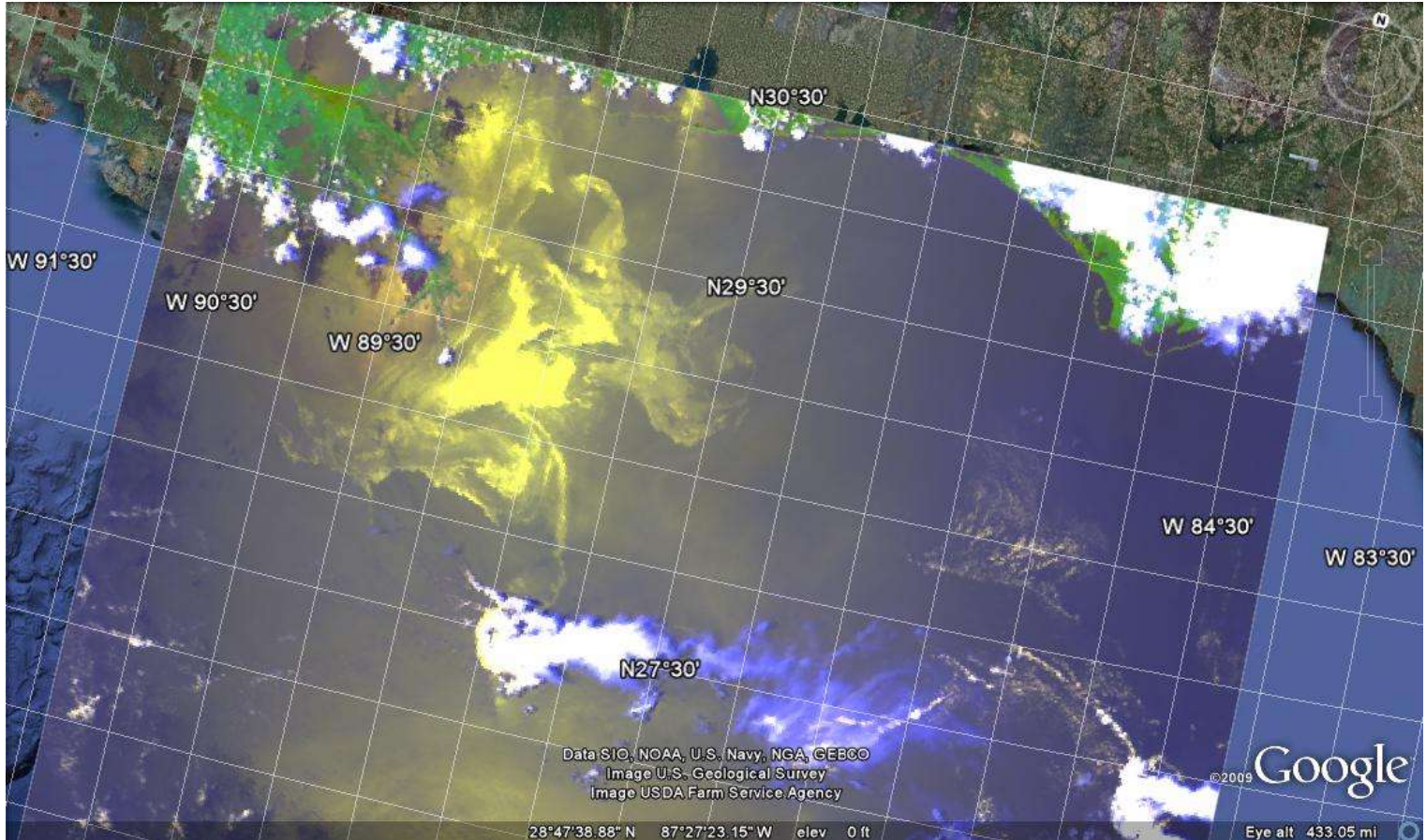
CoastWatch Program. Ocean Observations and Products

Introduction

RS Products

MERIS

Web Interface



AVHRR 2010-05-28 18:55 PSEUDOCOLOR



CoastWatch Program. Ocean Observations and Products

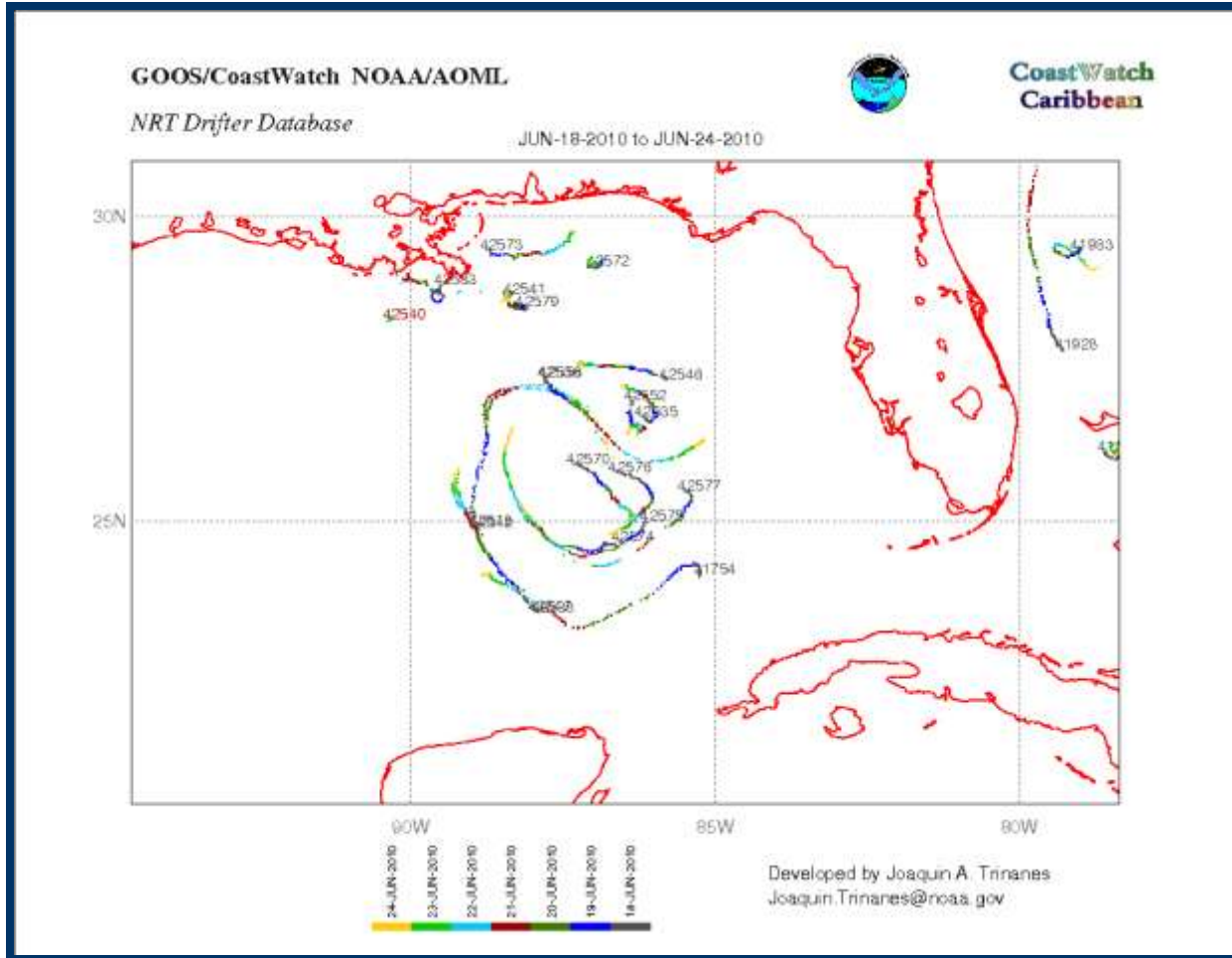
Introduction

RS Products



MERIS

Web Interface



Drifters (NOAA/AOML)





CoastWatch Program. Ocean Observations and Products

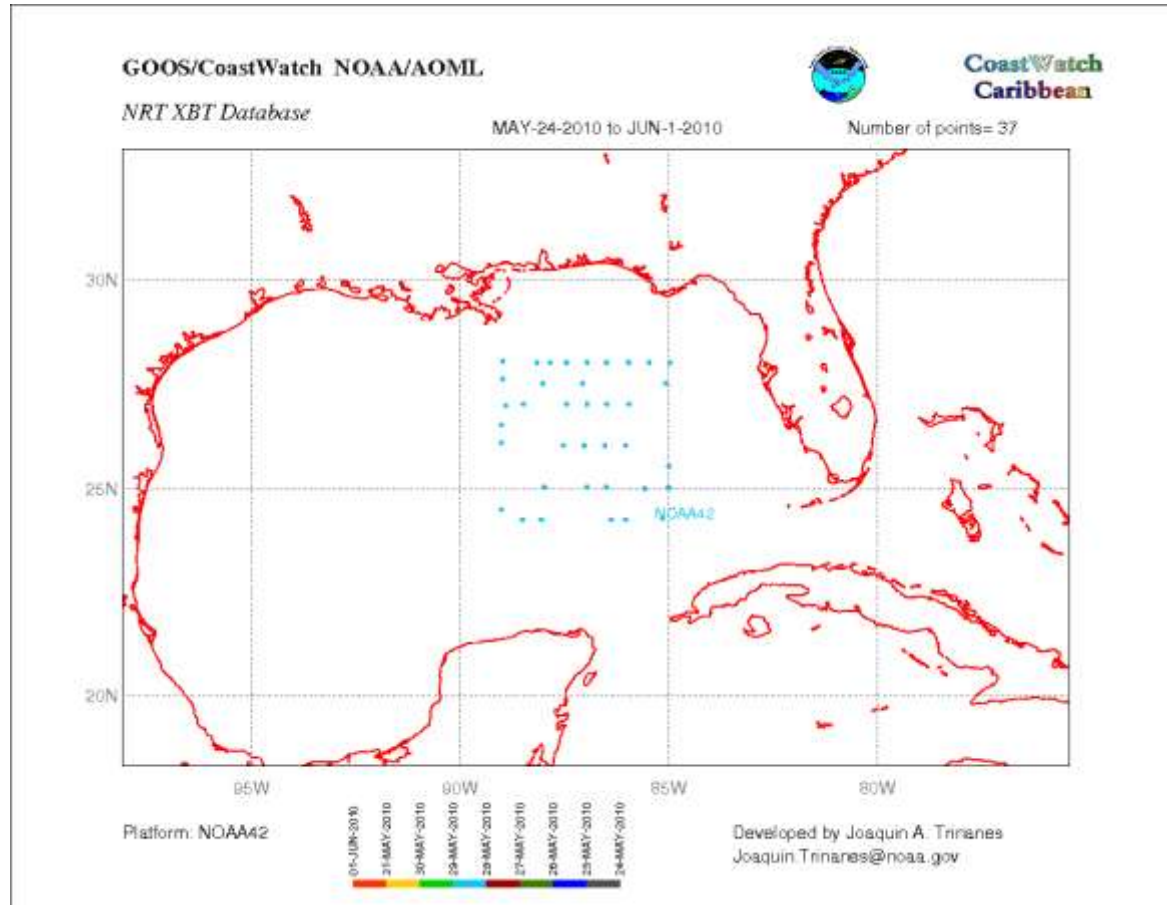
Introduction

RS Products



MERIS

Web Interface



AXBTs (NOAA/AOML)





CoastWatch Program. Ocean Observations and Products

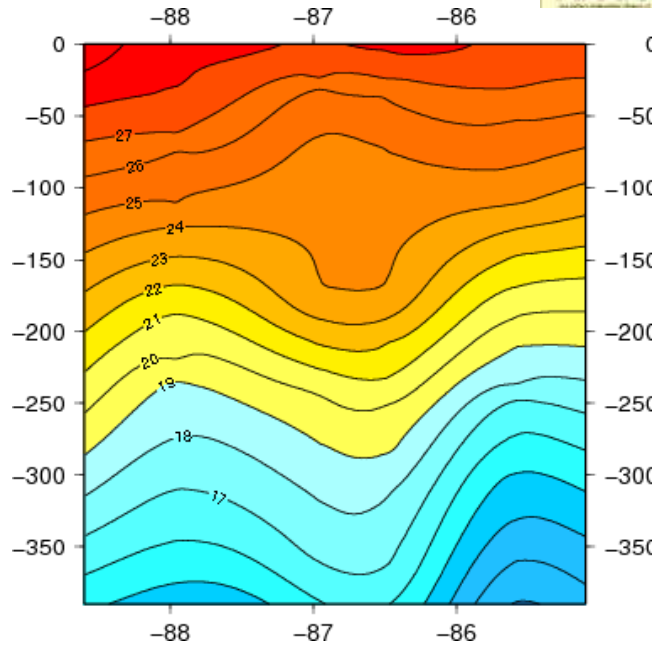
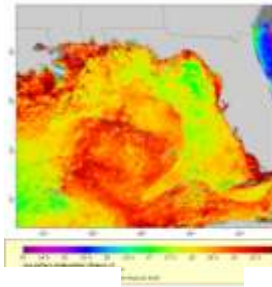
Introduction

RS Products

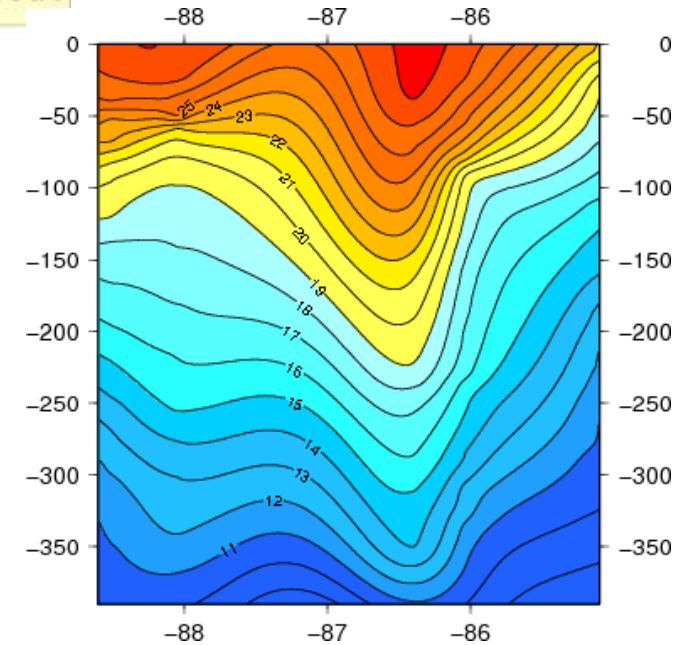


MERIS

Web Interface



25N



24.25N

AXBTs (NOAA/AOML)





CoastWatch Program. Ocean Observations and Products

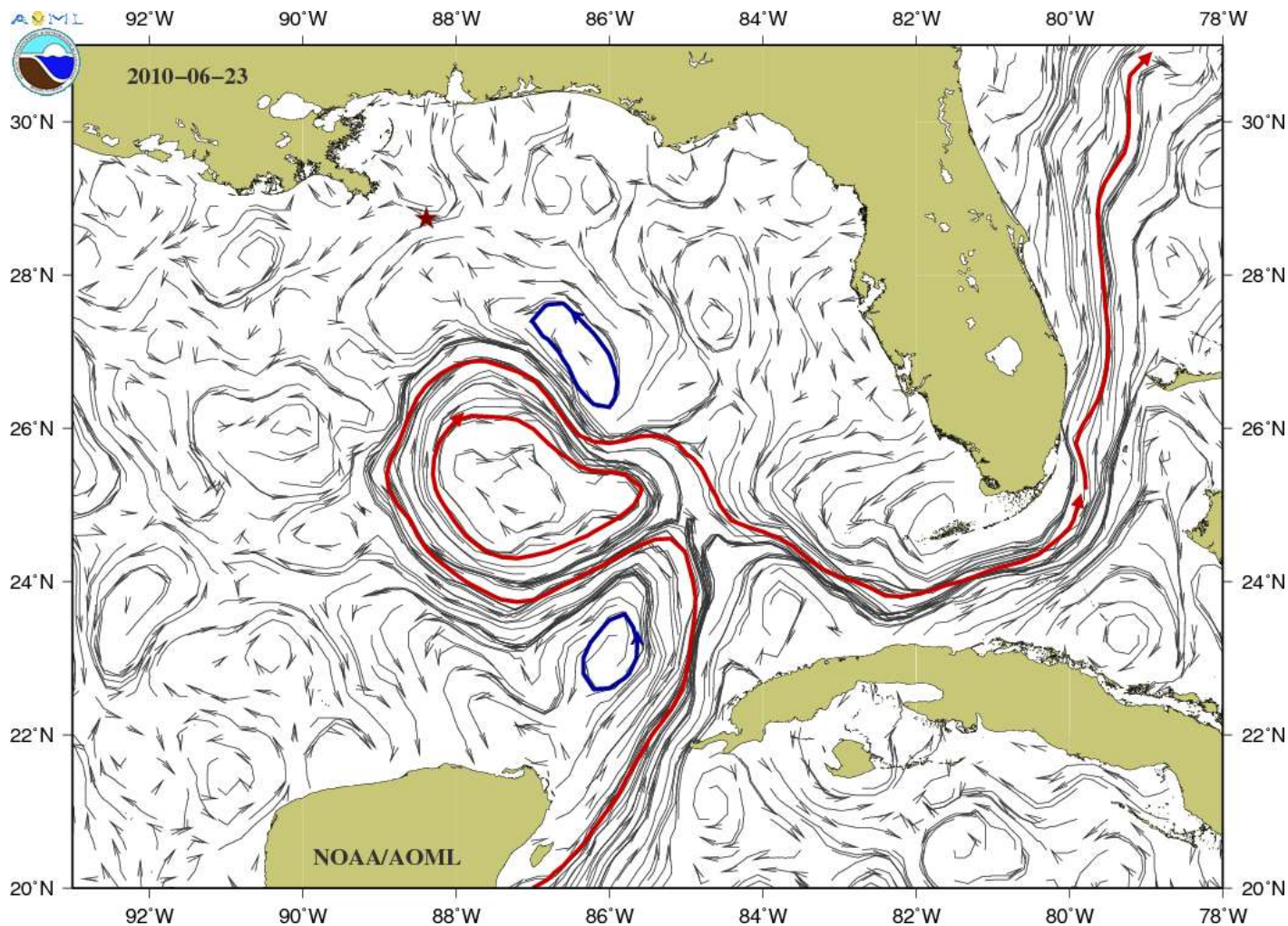
Introduction

RS Products



MERIS

Web Interface



LC status (NOAA/AOML Daily Report)





CoastWatch Program. Ocean Observations and Products

Introduction

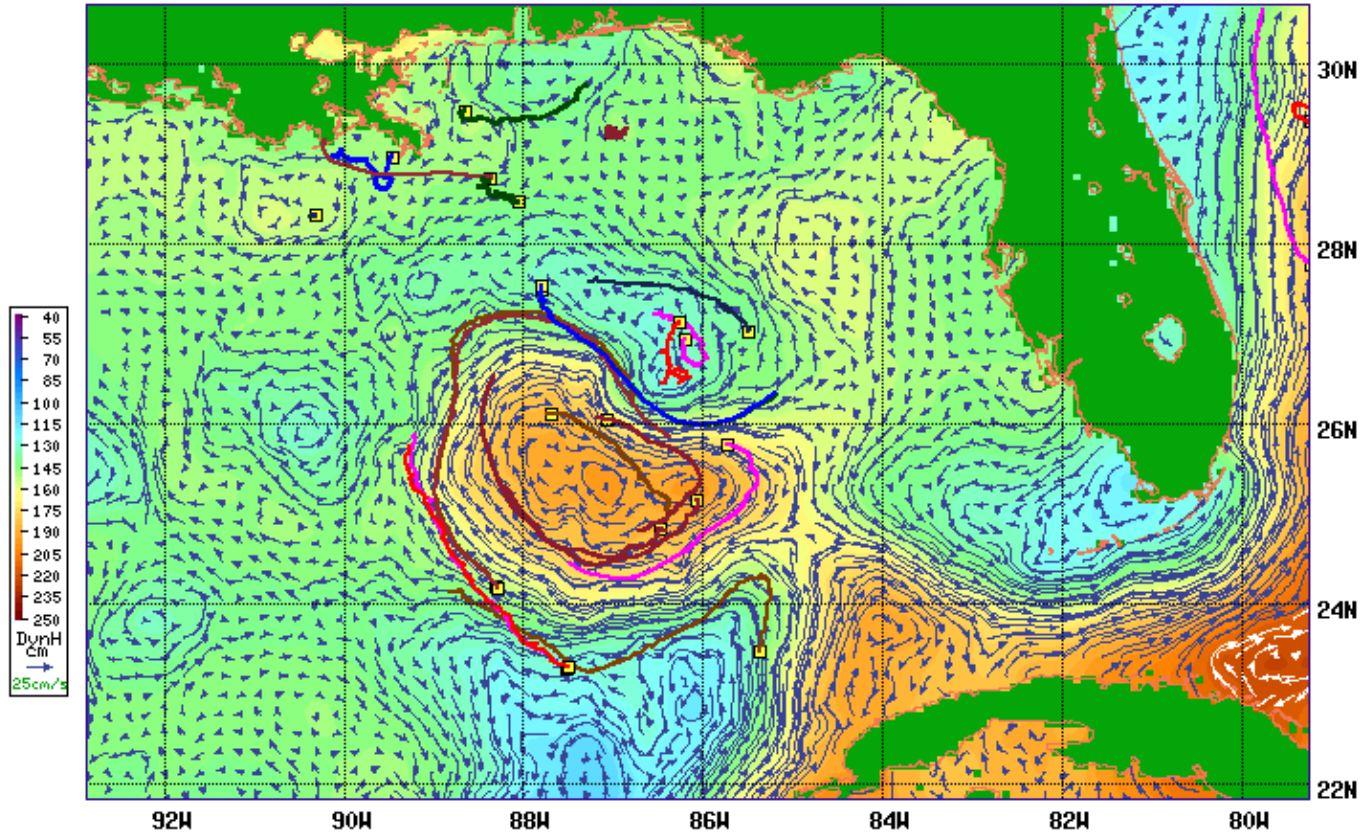
RS Products

MERIS

Web Interface

JUN-24-2010

CoastWatch NOAA/AOML
Altimeter/GTS Interface



Currents+Drifters

Frascati
Nov 16th, 2010

1st CoastColour User Consultation Meeting





CoastWatch Program. Ocean Observations and Products

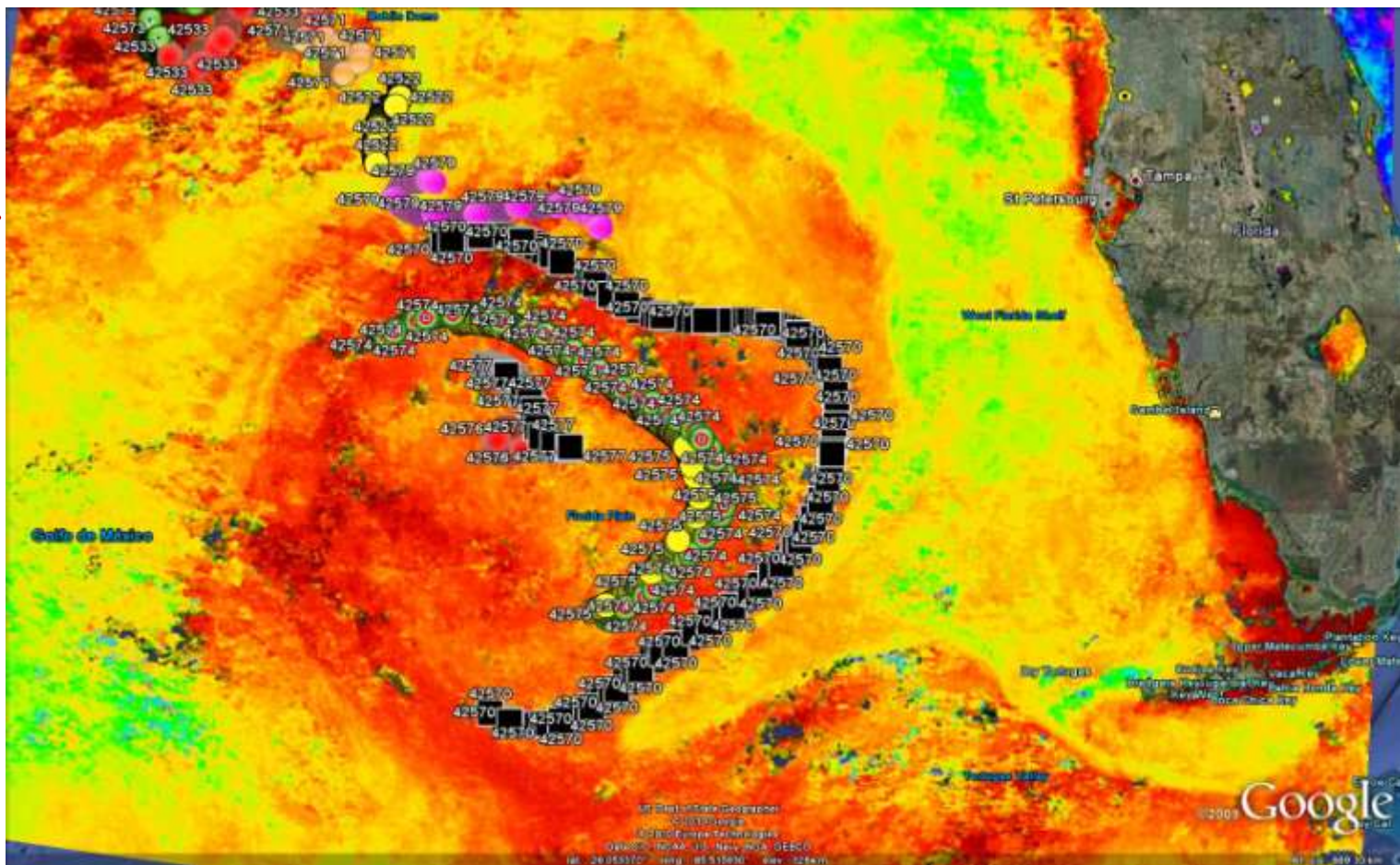
Introduction

RS Products



MERIS

Web Interface



SST+Drifters





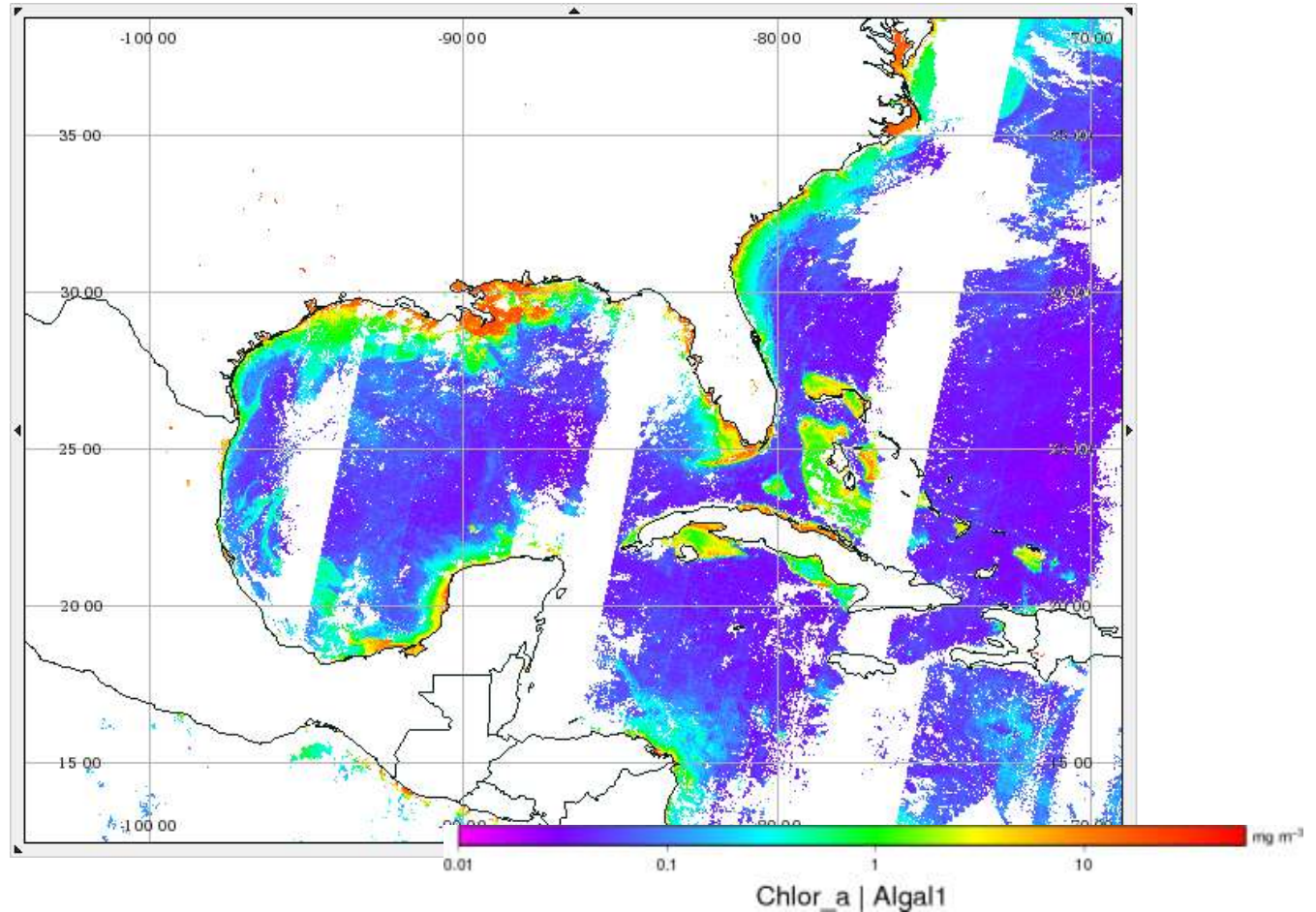
- ▶ MERIS FRS/RR
- ▶ L1B and L2 Products

Introduction

RS Products

MERIS

Web Interface





CoastWatch Program. Ocean Observations and Products

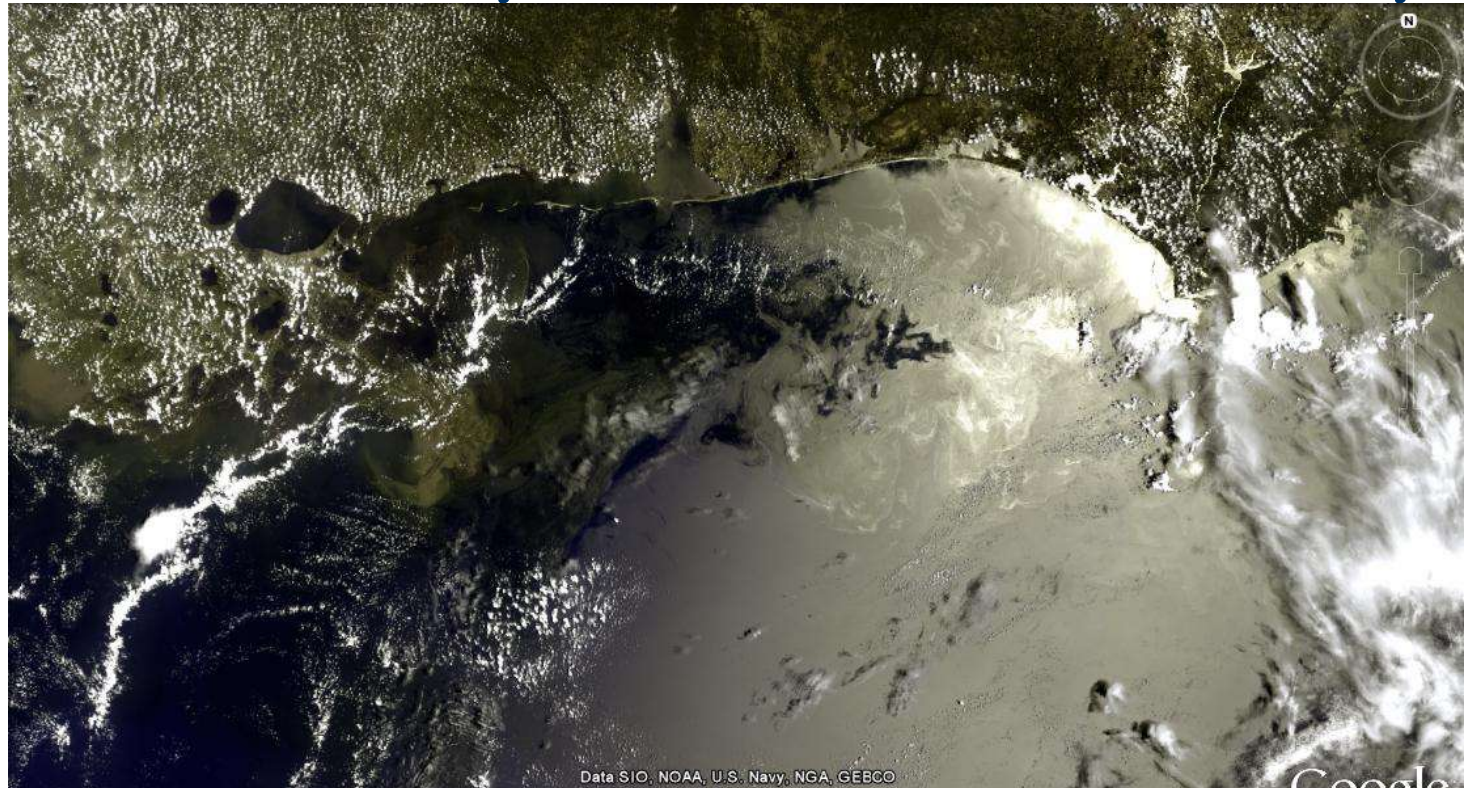
Introduction

Rs Products

MERIS

Web Interface

- ▶ WE WANT SUNGLINT!!
- ▶ Local Processing Time ~15 minutes
- ▶ Products used by NOAA/NESDIS/Satellite Analysis



MERIS 2010-05-25 16:11

©2009 Google
Service/Agency
1.66° W elev 0 ft
Eye alt 410.42 mi





CoastWatch Program. Ocean Observations and Products

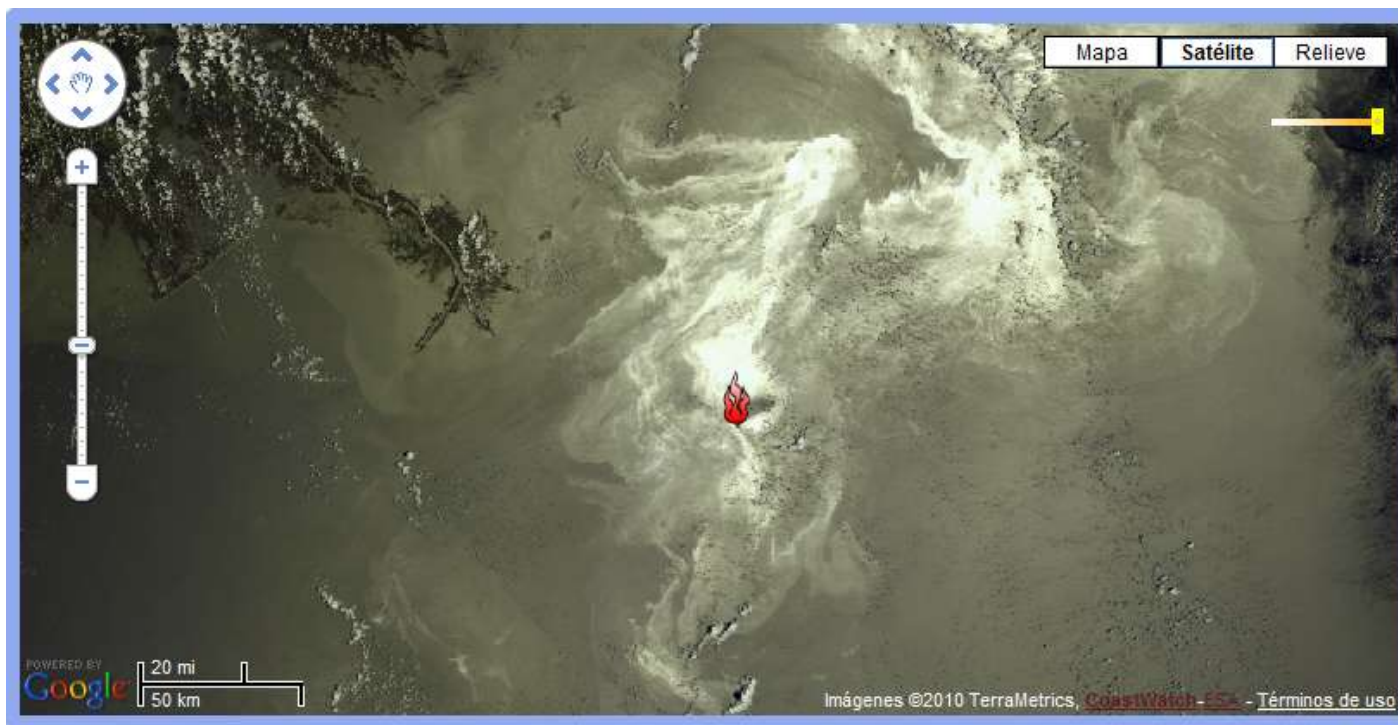
Introduction

Rs Products

MERIS

Web Interface

- ▶ WE WANT SUNGLINT!!
- ▶ Local Processing Time ~15 minutes
- ▶ Products used by NOAA/NESDIS/Satellite Analysis Branch





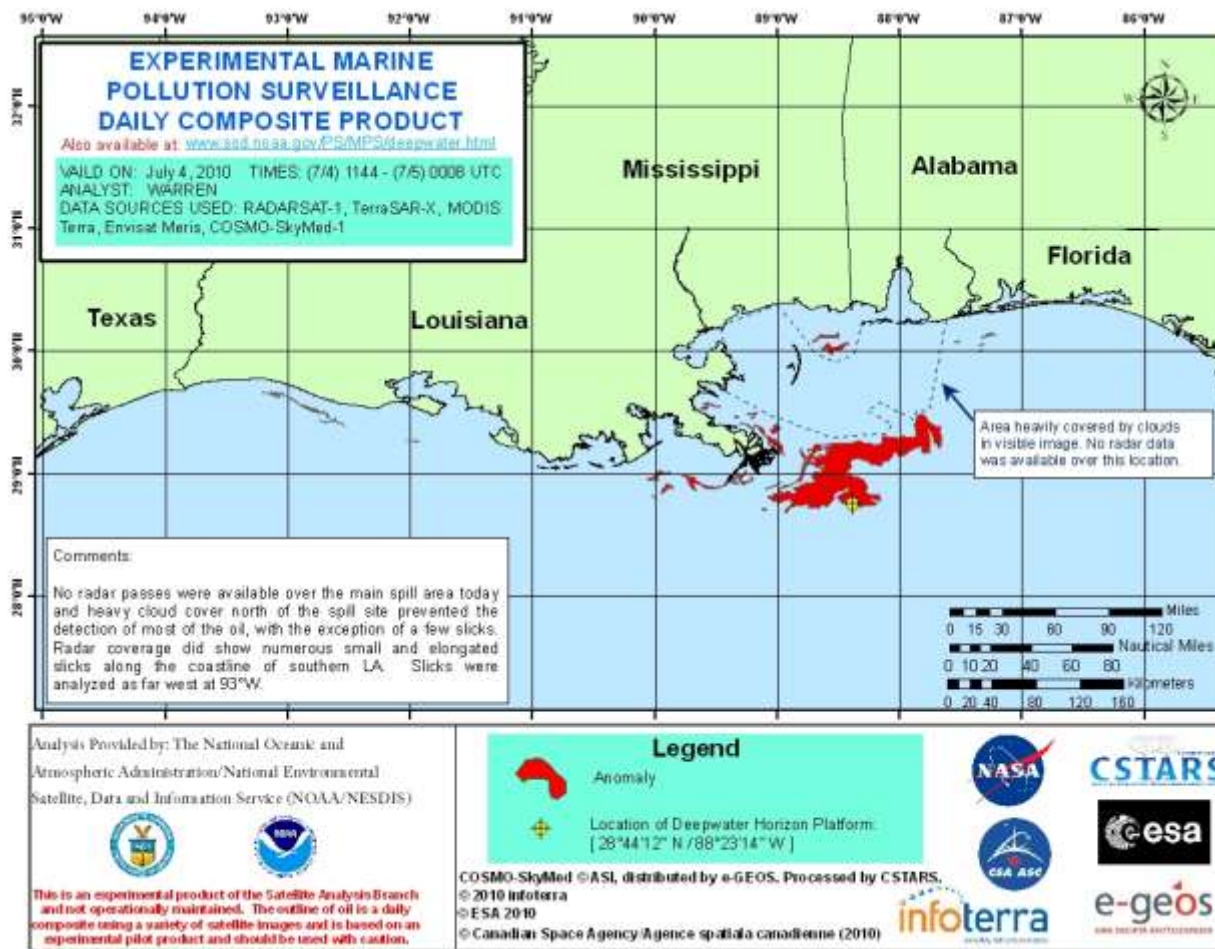
► NESDIS Experimental Daily Composite Product

Introduction

Rs Products

MERIS

Web Interface





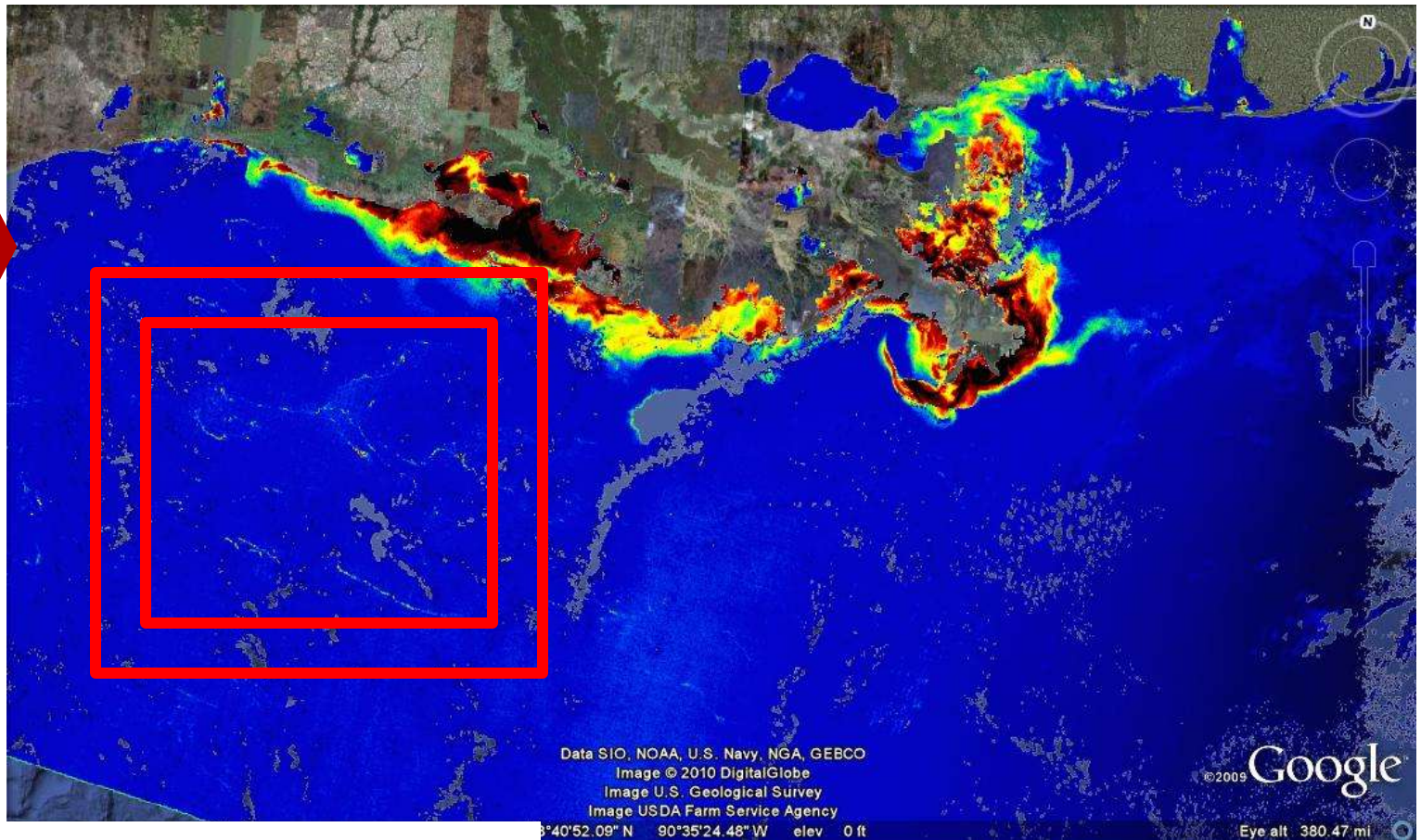
Value Added Products: MCI

Introduction

RS Products

MERIS

Web Interface



MERIS 2010-06-25





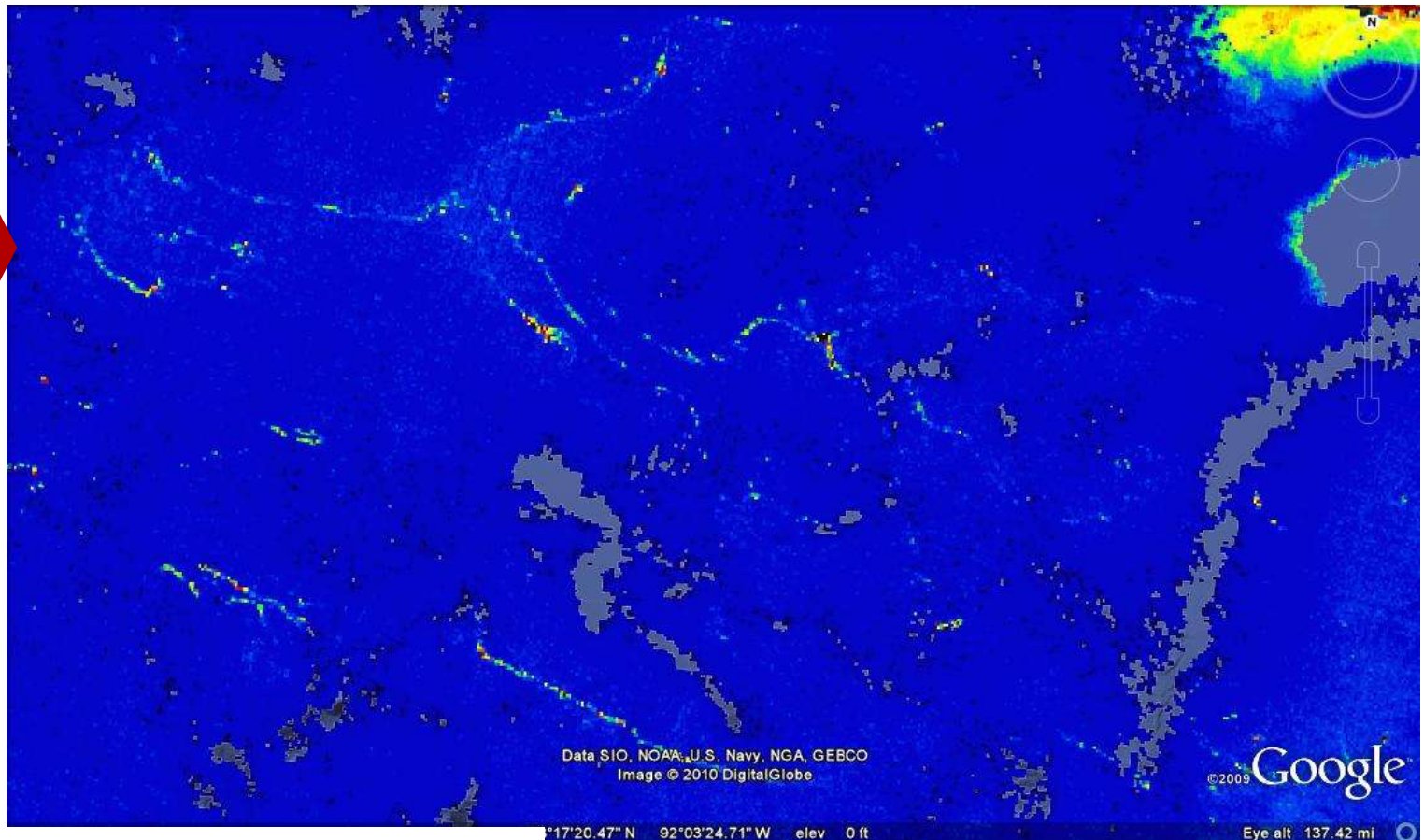
► MCI

Introduction

RS Products

MERIS

Web Interface



MERIS 2010-06-25



Cyanobacteria (R. Stumpf NOAA/NOS) Landsat "true color". Lake Eire

Introduction

RS Products

MERIS

Web Interface





CoastWatch Program. Ocean Observations and Products

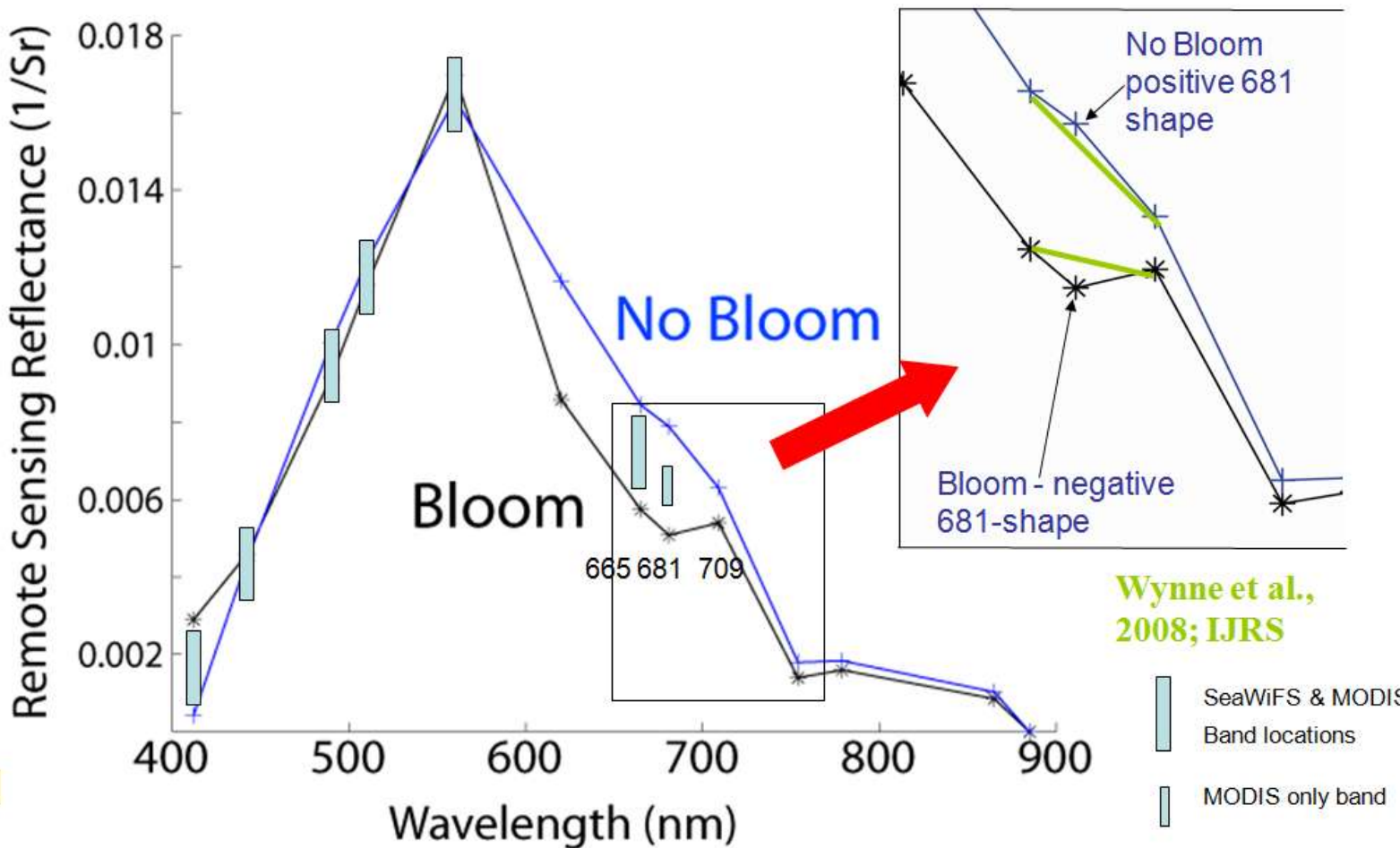
Objective: Operational Forecast Warning System

Introduction

RS Products

MERIS

Web Interface



Wynne et al., 2008; IJRS

- SeaWiFS & MODIS Band locations
- MODIS only band





CoastWatch Program. Ocean Observations and Products

▶ Google Maps Interface

<http://cwcgom.aoml.noaa.gov/cgom/GMAPS/indexos.html>

The screenshot shows the 'Caribbean and Gulf of Mexico Operational Data' web interface. It features a navigation bar with logos for NOAA, AOML, and CoastWatch, and a search bar. Below the navigation bar, there are links for 'Products' such as Sea Surface Temperature, Global Winds, and Altimetry Products. The main content area displays a satellite image of the Gulf of Mexico with a red marker indicating an oil spill. The interface includes a map control panel on the left and a sidebar on the right with sections for 'VISIBLE SATELLITE DATA' (listing MERIS, MODIS/AQUA, MODIS/TERRA, and AVHRR) and 'AUXILIARY PRODUCTS' (listing GOES FRONTS). A 'MERIS list' section shows a list of dates and times, with '2010-06-25_1611' highlighted. The bottom of the interface contains a 'Data&Products' section with links to NOAA NESDIS oil spill analyses, THREDDS, ERDDAP, and WebGIS.

Data&Products: [NOAA NESDIS oil spill analyses](#) [THREDDS](#) [ERDDAP](#) [WebGIS](#)
MODIS Imagery obtained from [NASA/GSFC, MODIS Rapid Response](#)
MERIS imagery obtained from the [European Space Agency\(ESA\)](#)

Latest Image: MERIS
2010-06-28 16:16
[Google Earth KML](#)
[OpenLayers](#)

Compatible with Google Earth and OpenLayers

Easy to integrate with Web-Services (WMS, WCS)

Introduction

RS Products

MERIS

Web Interface





Thank you

Contact:

Joaquin.trinanes@noaa.gov