

Tuna 2012 Bangkok

Satellite Oceanography and Monitoring for the Fishing Community



Presentation by:

Chris Wilson

Marine Services

Who we are...

Imagery Collection satellite and aerial platforms

- GeoEye-1
- IKONOS
- GeoEye-2 (2013)
- Aerial (MJ Harden)

Production Services

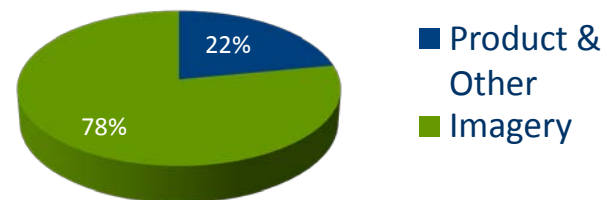
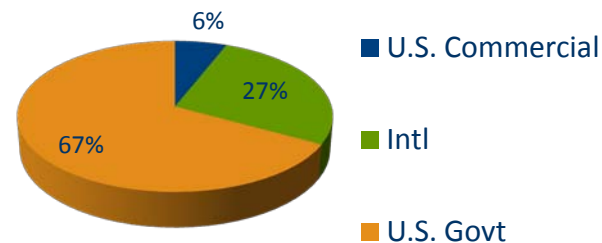
- Herndon, Virginia - HQ
- Thornton, Colorado
- St. Louis, Missouri
- Mission, Kansas

Information Services

- Imagery Dissemination
- Monitoring Services
- Content Services
- Web Services

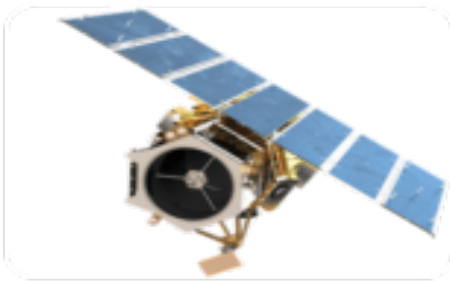
- Employees: 740+
- Publicly traded: NASDAQ: GEOY
- Worldwide Business Partner & Agent Network

2010 Market Segments



2011 Revenue \$356.4M

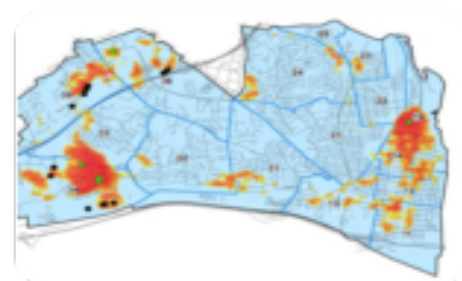
**Our Vision is to be the world's best source
for location information and insight**



**Earth
Imagery**

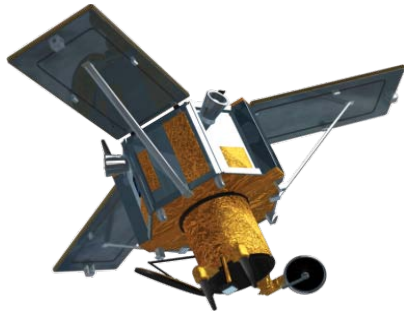


**Geospatial
Expertise**



**Enabling
Technology**

GeoEye Constellation



IKONOS

1999

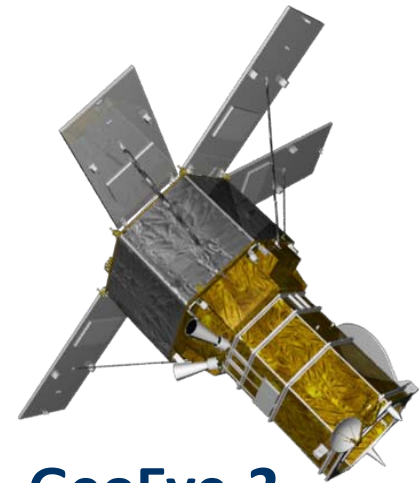
.82m



GeoEye-1

2008

.41 m



GeoEye-2

2013

.33 m



MJ Harden Digital Mapping
Camera & LiDAR sensors

2 inch

Over 400 miles high in orbit traveling 17,000 mph

Industry leading resolution and positional accuracy

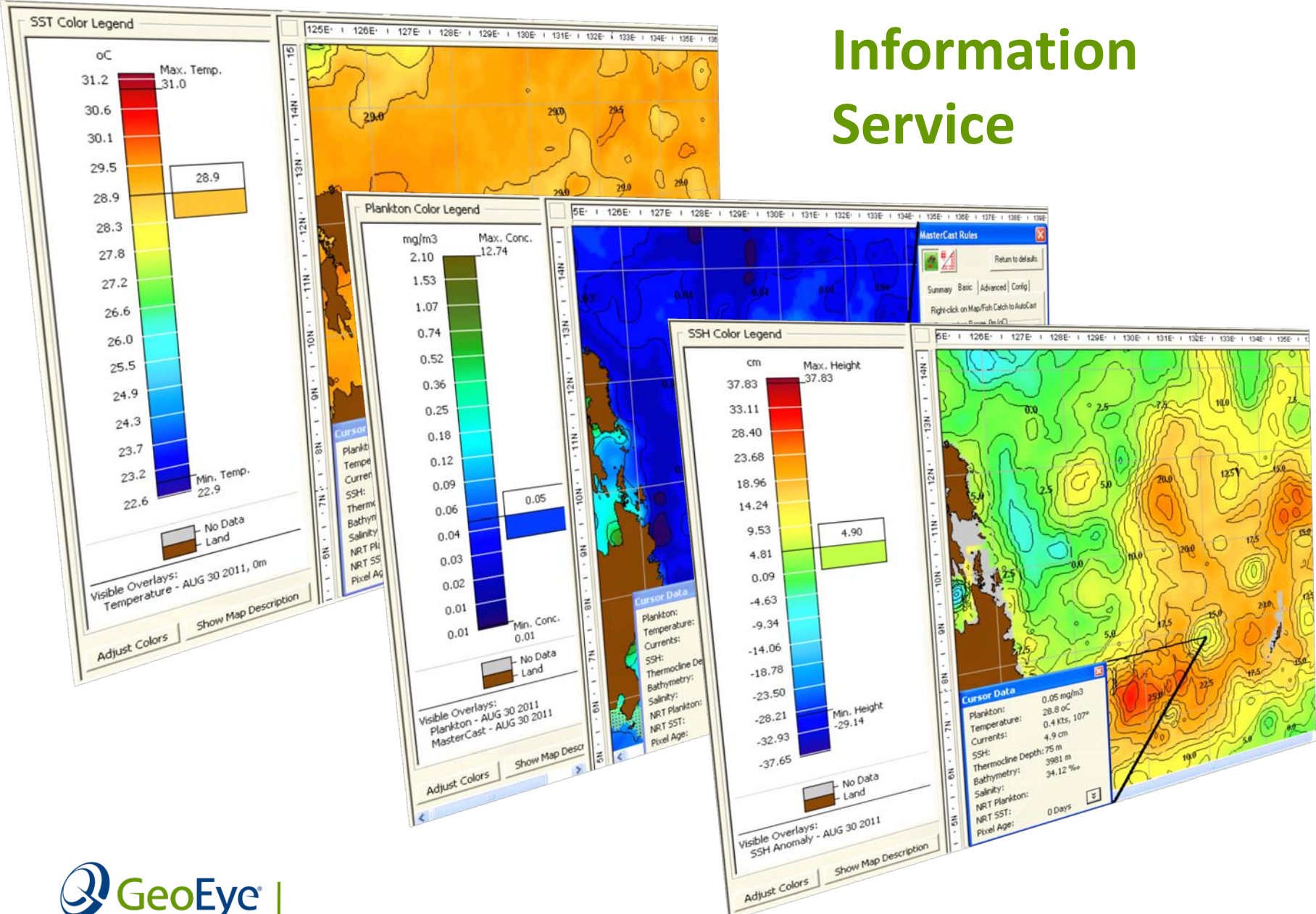
Over 0.5 billion km² images in our archive

Collection capacity of 7.5 million km² per month

Marine Services

- **SeaStar Fisheries Information Service**
- **Tracking Solutions**
- **Other Support and Research related Projects**

SeaStar Fisheries Information Service



- **The SeaStar Service provides a wide assortment of oceanographic maps and weather information to help understand the fishing environment.**
- **GeoEye's Oceanographers produce 'fish finding maps' (FFMs) by collecting and processing data from several satellite systems.**
- **The FFMs help users to identify productive fishing grounds-- saving search time and fuel expenses.**

OrbMap Software - Advantages

- Designed for commercial pelagic fishermen, OrbMap software is easy to use, yet flexible.
- MasterCast – quickly helps to locate preferred ocean conditions.
- Allows Captains to quickly integrate and compare many different satellite data sources to make smart fishing decisions.
- The Service is most effective when the Captain's knowledge is combined with satellite-observed ocean environmental information on board the vessel.

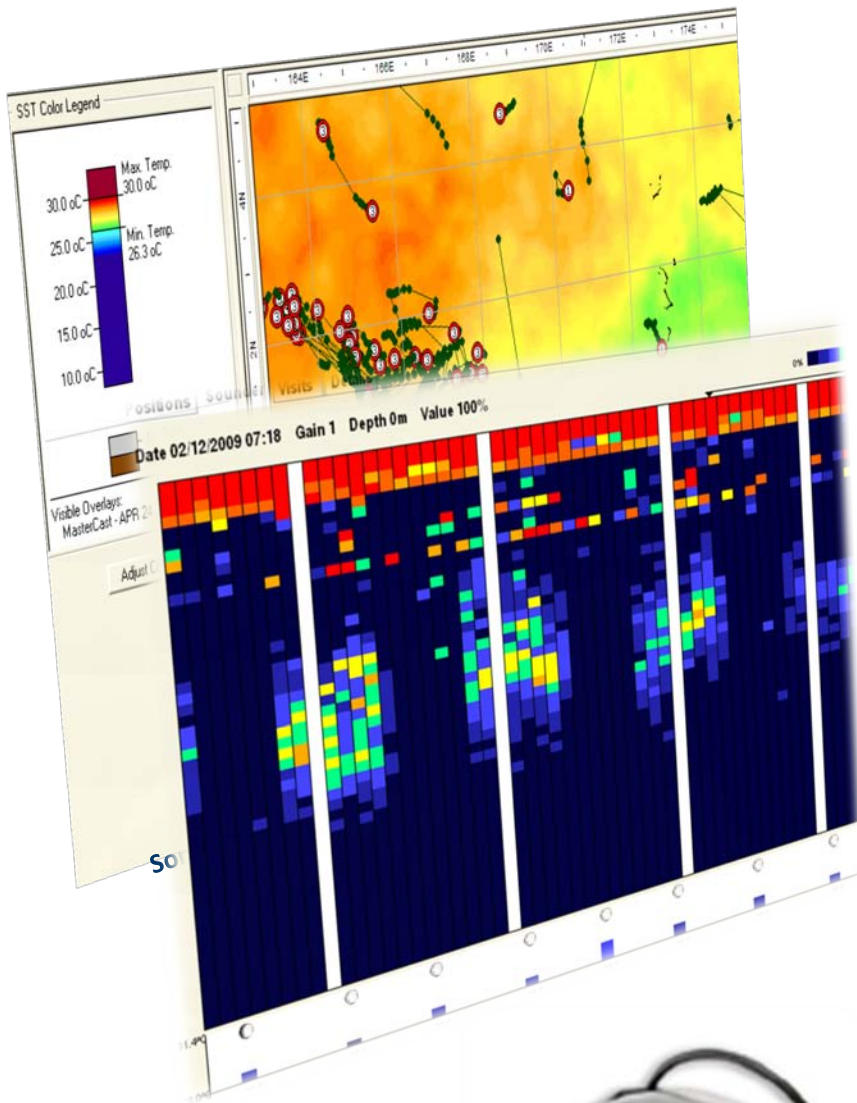


OBY-200 Buoy

Advantages:

- Track your Fishing Gear with accurate GPS
- Fully compatible with OrbMap
- Inmarsat IsatM2M satellite network
- Two-way communications
- Sea surface temperature sensor
- High-intensity beacon for nighttime recovery
- Virtually awake and ready to respond to commands
- Fully compatible with Marine Satellite Receiver (MSR)





- Equipped with 50KHz/500W echo sounder.
- Stealth design
- High Accuracy GPS Position
- Iridium Satellite Network
- SST Sensor
- Two-way communication
- Solar-cell charged batteries with alkaline battery backup
- Fully-integrated with OrbMap
- 30 minute Listening Windows
- High Intensity Recovery Beacon



M3i Sonar Buoy

GeoEye partners with industry experts, Inmarsat and Honeywell Global Tracking, to bring you simple and inexpensive vessel position reports automatically.



- Provides accurate GPS Vessel Position Reports
- Two way communicating device, receives automatic positions and allows polling for real-time position Reports
- Inexpensive and easy to install yourself
- View maps in OrbMap or in Google Earth!

Vessel tracks in Google Earth





Advantages:

- Intuitive, web-based tracking software.
- 2-way messaging and unit configuration.
- Global coverage over Inmarsat Satellites.
- Small and lightweight device.
- Emergency panic button.
- Display, keypad and Man Machine Interface (MMI).
- USB interface for charging and PC connection (NMEA data).
- Self contained unit with integral battery pack.
- Efficient power management, and long battery life
- Carried in wearable pouch, backpack pocket or in-vehicle cradle.



ALERTS: 1 WARNINGS: 0 ALL: 13

Fleet: (All Fleets) Unit: (All Units) Alert: (All Conditions)

LIVE VIEW From: 12-Aug-11 10:29:26 To: 27-Aug-11 17:26:05

Map style: Satellite Auto-zoom Show labels MEASURE



(SAID:370)
17-Aug-10 17:26:05
2°34'12"N 167°08'03"E
58NGH3729784202
Message: Activity, Additional Info: 11
STATUS: OK OPTIONS NEAR

MAILBOX SUMMARY DETAILS

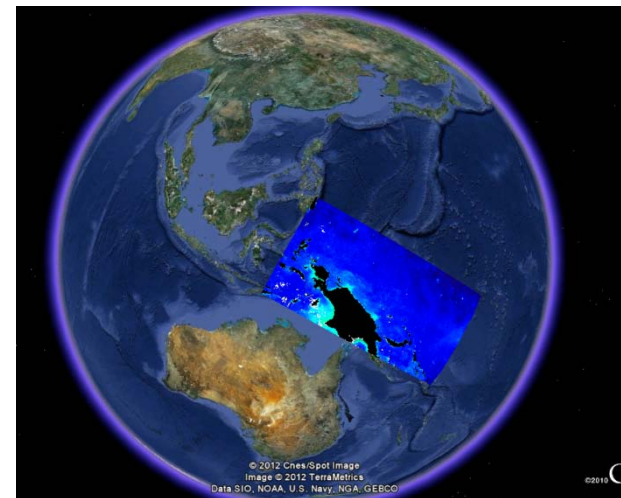
Message Types All messages Incoming & Outgoing

LOCATE	OPTIONS	(SAID:370456)	WCFFC	27-Aug-11 17:26:05	ok	ok	Message Activity Additional Info 11
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- Web-based asset management tool
- Provides detailed mapping
- Allows remote configuring and managing of the tracking devices.

Ongoing Industry Support and Research Projects

- International Seafood Sustainability Foundation (ISSF) and the University of Hawaii
- Sponsorship to the 62nd Tuna Conference
- NOAA's Turtle Watch program
- University of Massachusetts (Amherst) and NOAA



Summary

- GeoEye provides satellite imagery and solutions for a number of applications, including fishing.

The SeaStar Service provides valuable information to commercial fishing companies and other organizations that want to monitor the fishing grounds.

GeoEye offers solutions for tracking and monitoring of vessels, buoys and personal around the world.

We offer to participate in research projects that support the understanding of our oceans that we trust will benefit the health and longevity of the fishing industry.

Thank you

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