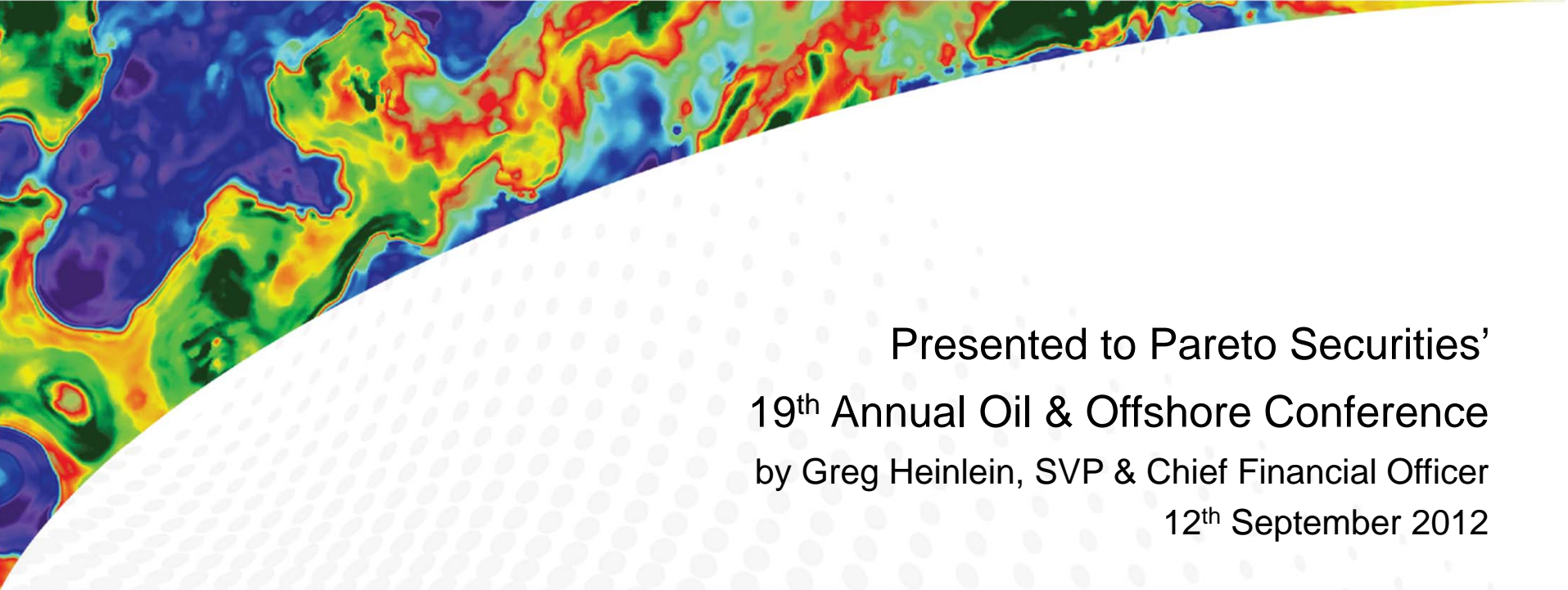




→ Charged to innovate. Driven to solve.™

ION Geophysical Corporation

A colorful geophysical map, likely a seismic or magnetic anomaly map, showing various geological features. The map uses a color scale from blue (low values) to red and yellow (high values). It is positioned on the left side of the slide, partially obscured by a white curved line that separates it from the text area.

Presented to Pareto Securities'
19th Annual Oil & Offshore Conference
by Greg Heinlein, SVP & Chief Financial Officer
12th September 2012

Forward-looking Statements

This presentation may contain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. These forward-looking statements include statements as to expectations, beliefs and future financial performance, such as statements relating to the Company's business prospects, future sales and market growth and other statements that are not of historical fact.

Investors are cautioned that all forward-looking statements are based on management's current expectations and include known and unknown risks, uncertainties and other factors, many of which the Company is unable to predict or control, that may cause the Company's actual results or performance to differ materially from any future results or performance expressed or implied. These risks and uncertainties include risks of audit adjustments and other modifications to the Company's financial statements not currently foreseen; risks associated with the timing and development of the Company's products and services and market acceptance of the Company's new and revised product offerings; risks associated with economic downturns and volatile credit environments; risks regarding international political and economic events and turmoil; risks associated with the performance of the Company's INOVA joint venture; risks associated with the Company's level of indebtedness, including compliance with debt covenants; risks associated with competitors' product offerings and pricing pressures resulting therefrom; risks that sources of capital may not prove adequate; risks related to collection of receivables; risks associated with pending and future litigation; and risks related to technological and marketplace changes affecting the Company's product line. Additional risk factors, which could affect actual results, are disclosed by the Company from time to time in its filings with the Securities and Exchange Commission, including its Annual Reports on Form 10-K and its Quarterly Reports on Form 10-Q.



Today's Discussion

- Company Overview
- ION Strategy
- Market Observations
- Q2 2012 Performance by Segment
- Summary

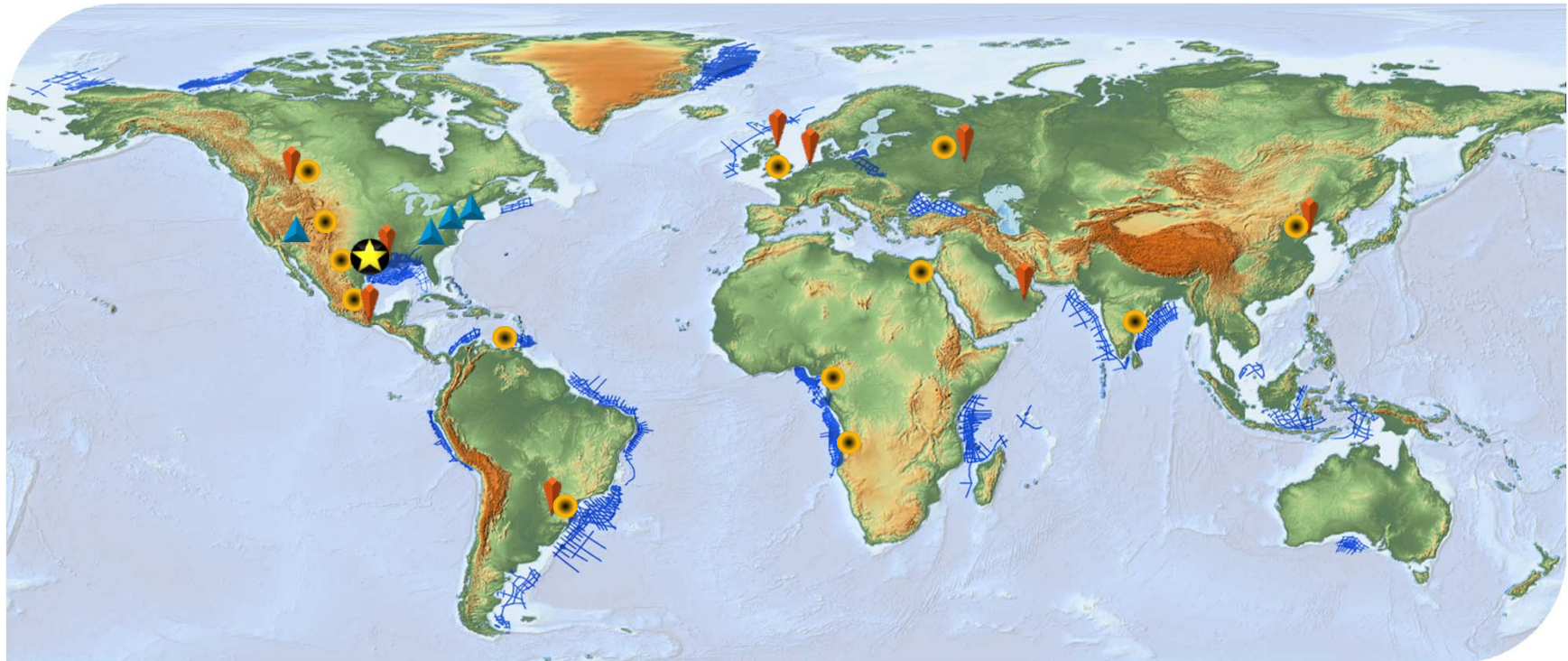


Company Overview

ION at a Glance

- **Technology company**, driven to develop and apply proven, innovative technologies and services to help our clients find and produce hydrocarbons as safely and efficiently as possible
- Founded in **1968** as Input/Output – renamed ION in 2007
- Headquartered in **Houston, Texas**
- Listed on the NYSE (Ticker: **IO**) since 1994
- **~1,100 employees** operating from over **20 locations** worldwide
- FY 2011 revenues - \$455 million
- R. Brian Hanson - President & Chief Executive Officer
- Robert P. Peebler - Executive Chairman (ION's CEO 2003 – 2011)
- Greg Heinlein - Senior Vice President, Chief Financial Officer

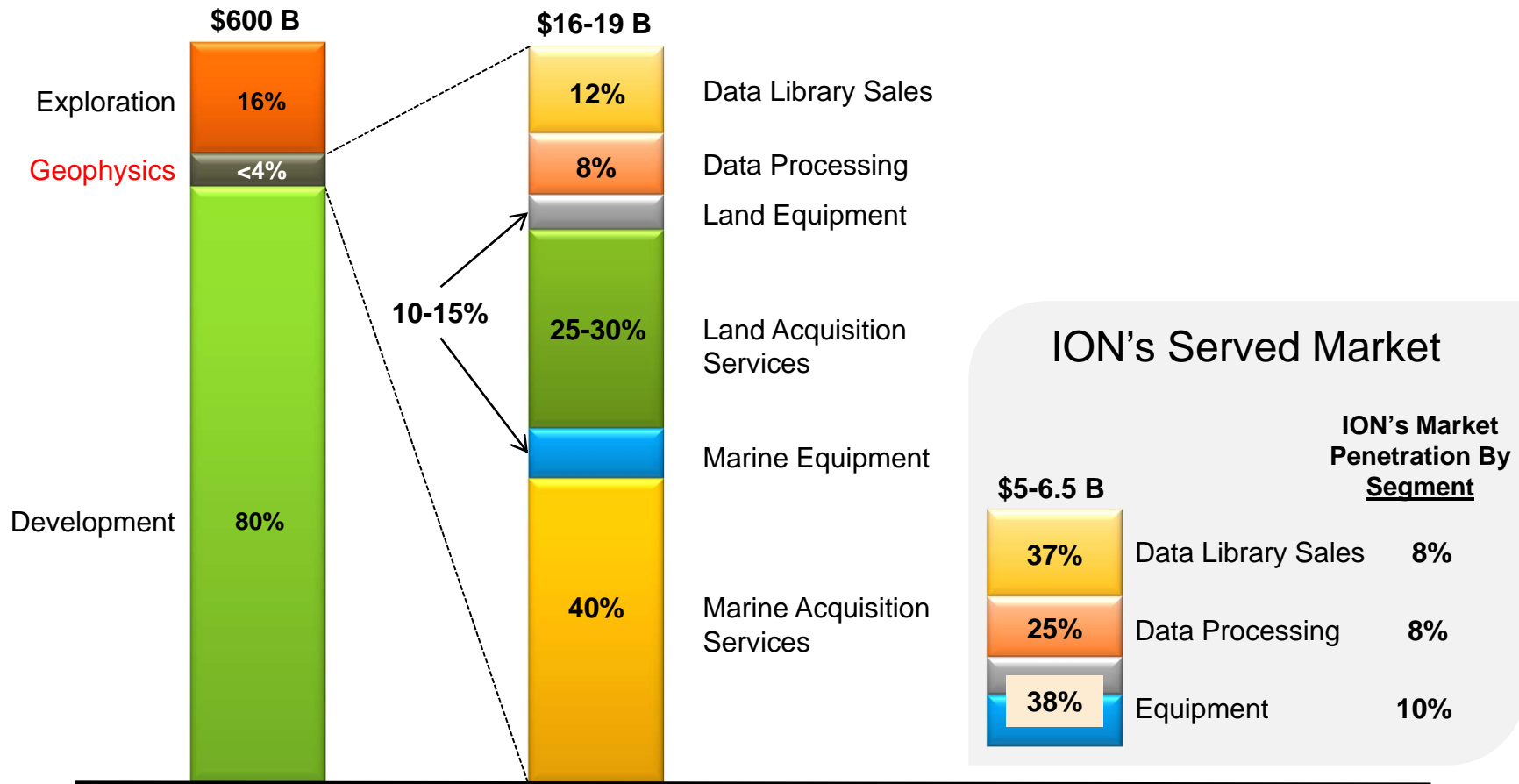
Global Footprint



- ★ Headquarters
- Data Processing Centers
- 📌 Sales and Service Centers
- ▲ ResSCAN Programs
- ▨ BasinSPAN Programs

Seismic vs. E&P vs. ION's Served Market

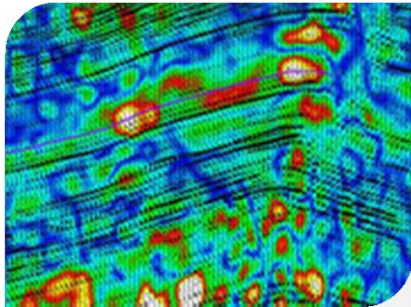
A \$16-19 Billion Annual (Revenue) Industry, A \$5-6.5 Billion Annual Market





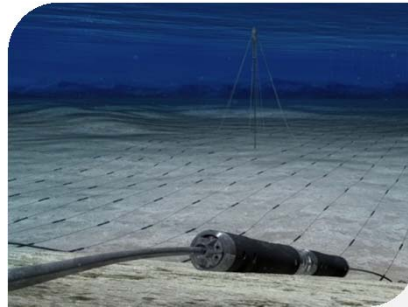
ION Strategy

ION Strategy



Technology company

Bring the whole of ION to bear to solve the toughest E&P challenges



History of Innovation

Cableless acquisition technology, digital sensors, streamer steering, command and control systems, reverse time migration, full-wave imaging



‘Asset light’

Focus our capital on our people and technology development

Planning

Acquisition

Processing

Interpretation

Participate in each stage of the geophysical cycle

Adding the greatest value through our services and technologies

ION Strategy

Bringing the Whole of ION to Solve Industry Problems

Planning

Acquisition

Processing

Interpretation



CHALLENGING ENVIRONMENTS: ARCTIC EXPLORATION



- **Full-scope Project Management** – Survey planning and design, acquisition, and data processing and interpretation
- Arctic Operational Expertise and Equipment Handling



- Concept Systems Orca®
- DigiSTREAMER™, DigiFIN®, DigiBIRD®



- Data Processing and Interpretation
- Arctic-focused Noise Removal



UNCONVENTIONAL RESERVOIRS: SHALE



- **Full-scope Project Management** – Survey planning and design, acquisition, and data processing and interpretation, reservoir characterization



- Connex™ Command & Control
- FireFly® and VectorSeis®
- Used where applicable



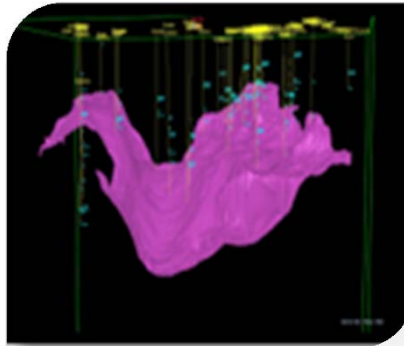
- Data Processing and Interpretation

Areas of Expertise



Challenging Environments

*Arctic, Shallow/
Obstructed Water,
Transition Zone
and Desert*



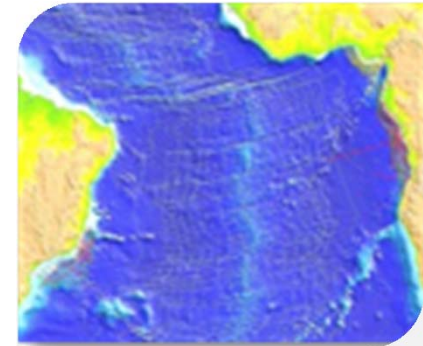
Complex Geologies

*Subsalt, Sub
Basalt, Thrust Belt
and Carbonates*



Unconventional Reservoirs

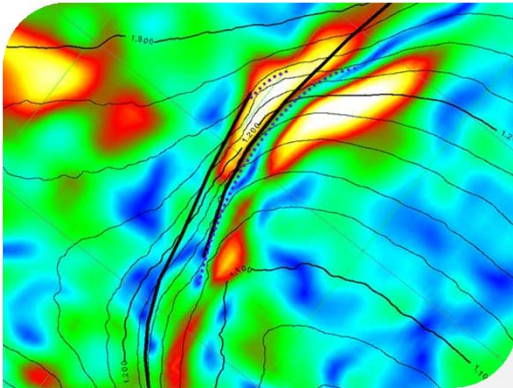
*Shales, Tight Gas,
and Oil Sands*



Basin Exploration

*BasinSPAN Data
Library*

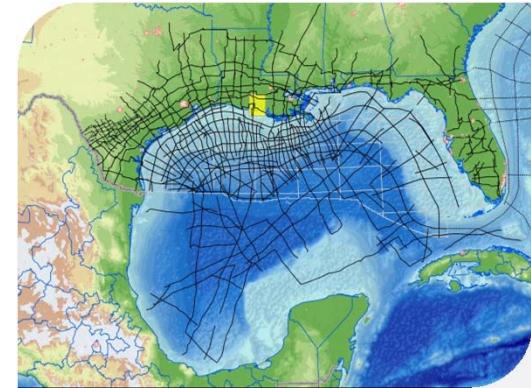
Our Offerings



Seismic Data Processing & Reservoir Imaging Services



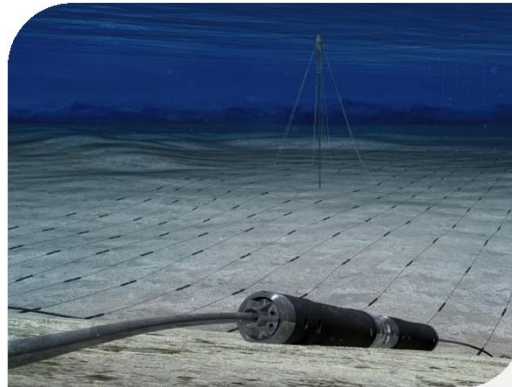
Integrated Geophysical Programs



Seismic Data Libraries



Survey Design Software & Services



Marine Seismic Equipment



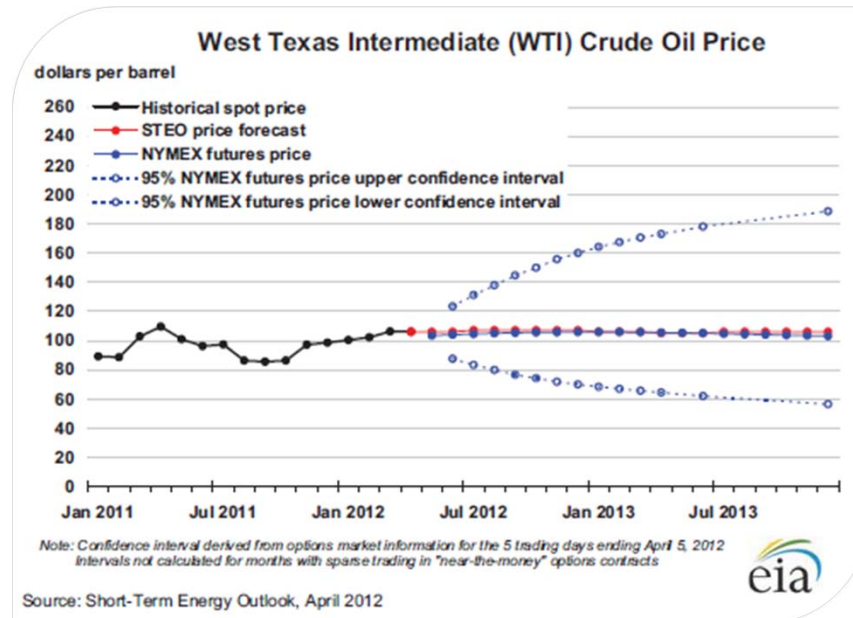
Land Seismic Equipment



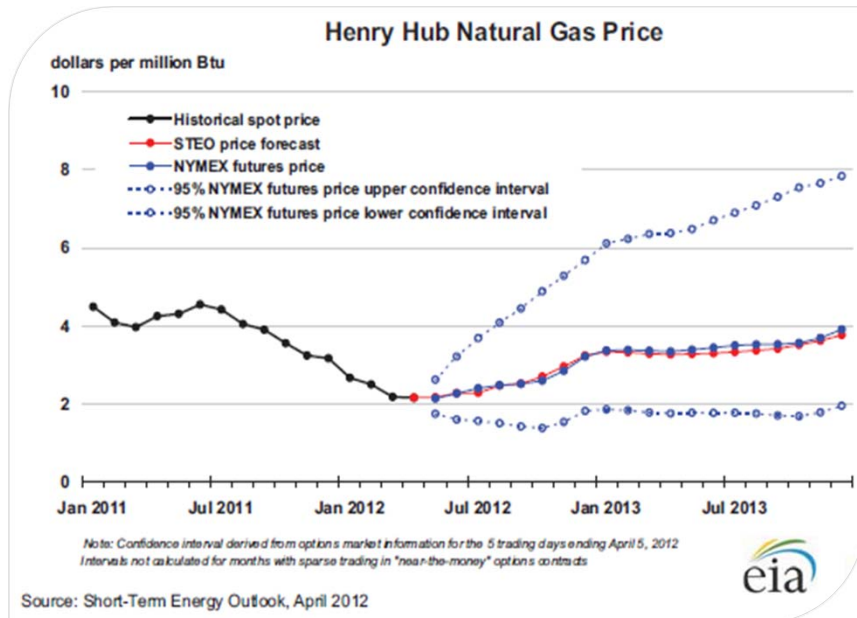
Market Observations

Global Market Outlook

Oil and Natural Gas Prices



- Expect oil prices to remain in the \$80 - \$100 range, supporting continued frontier exploration in challenging environments, including deepwater and Arctic.
- Expect natural decline of large global oil reserves.



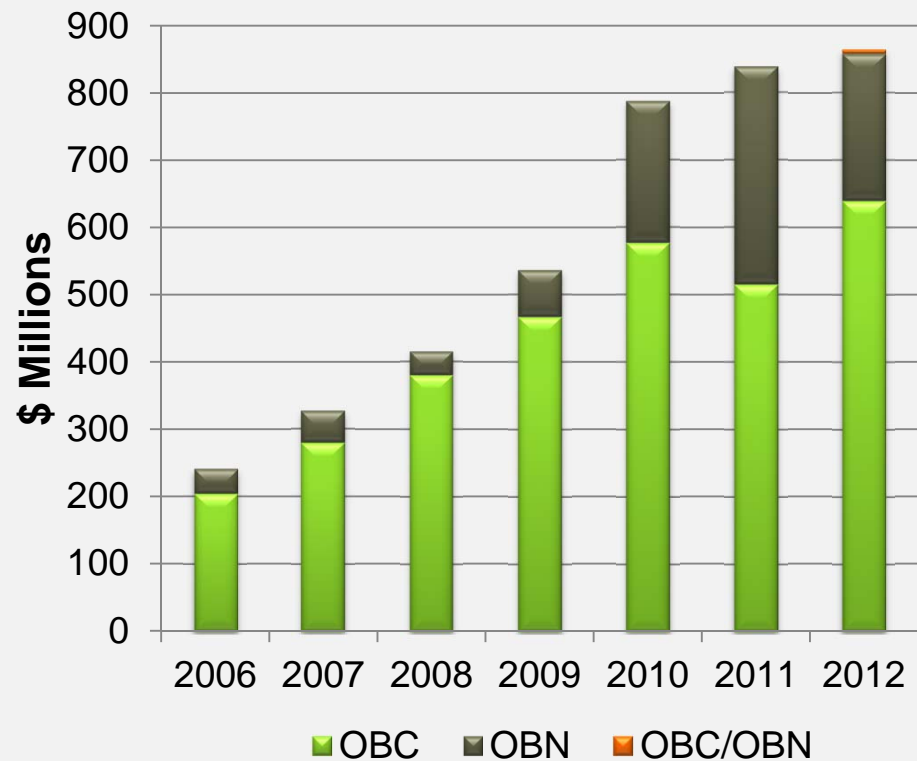
- Expect depressed natural gas prices to cause shift to liquids in North America.
- Creating increased pressure on shale operators to locate, complete and produce shale gas more efficiently.

Market Observations

Marine Seismic

- Towed Streamer market tightening
- Good growth in Seabed market
- Launched Calypso™ seabed acquisition system in Q2 at EAGE
- Growing demand for ION's Acquisition Optimization Services

Seabed Acquisition Services Expenditure

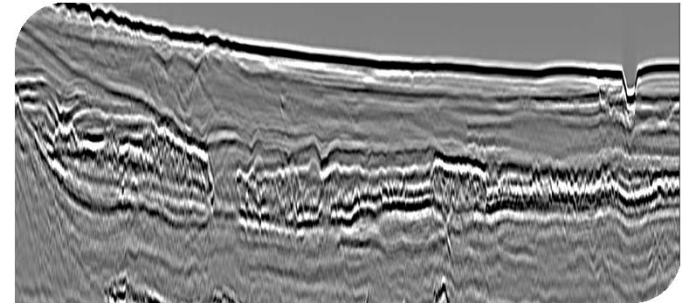


Continued Growth

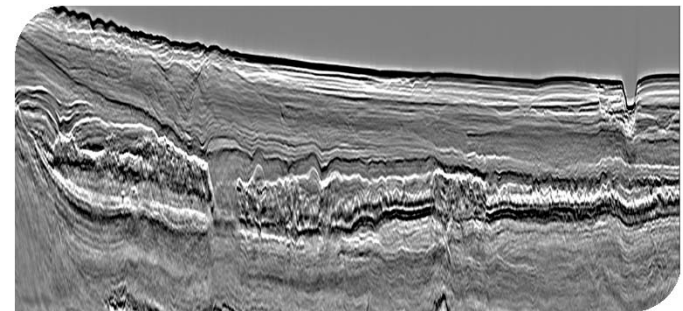
Market Observations

Data Processing

- Fifth sequential quarterly improvement in ION DP revenues
- International demand up – Europe, Africa, Middle East
- Continued rebalancing of our portfolio beyond Gulf of Mexico
- Ended Q2 with record data processing backlog
- Introduced new broadband processing technology, WiBand™, with 20+ projects underway



Conventional Image



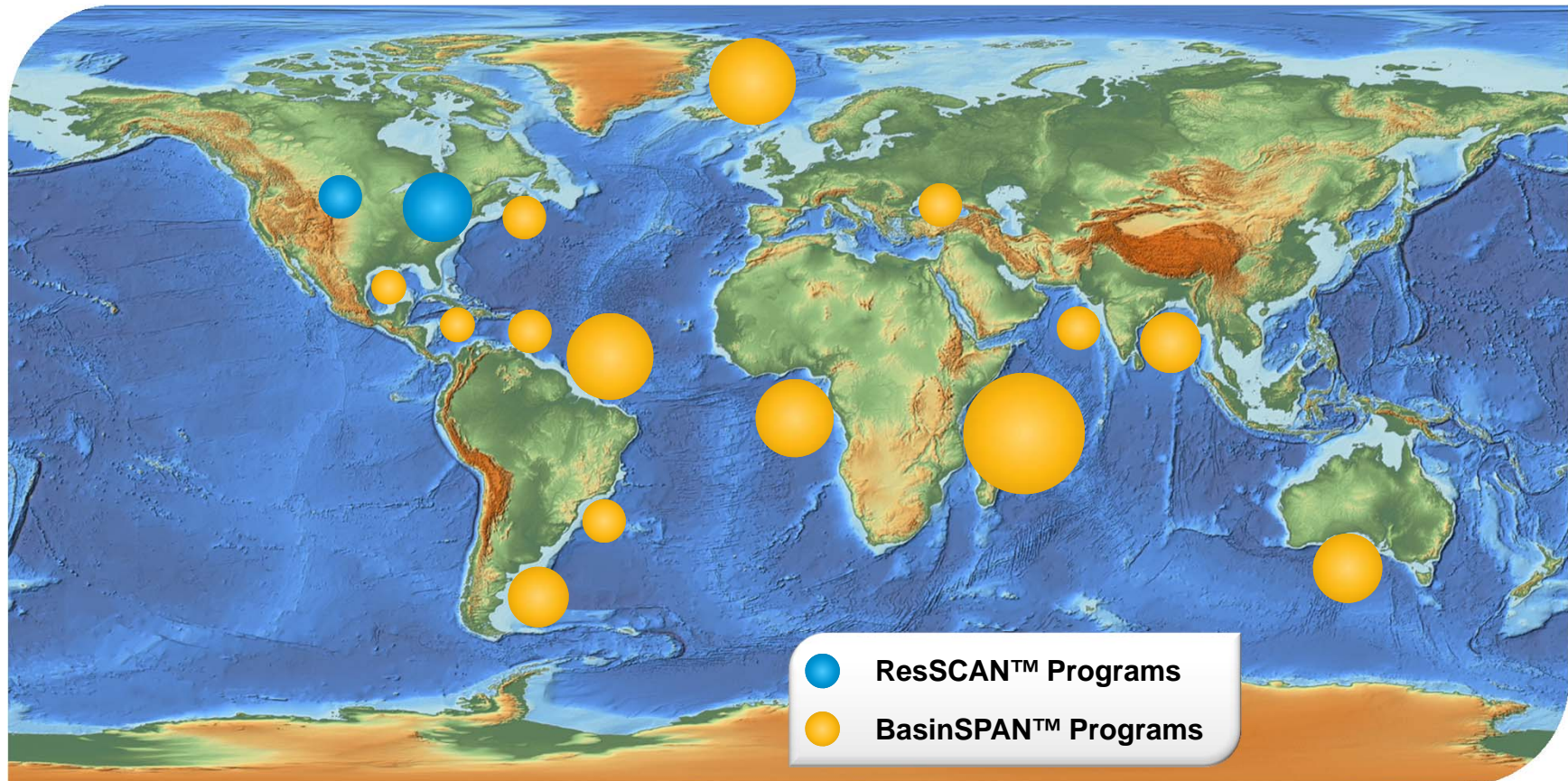
WiBand Image



WiBand Projects

Market Observations

GeoVentures



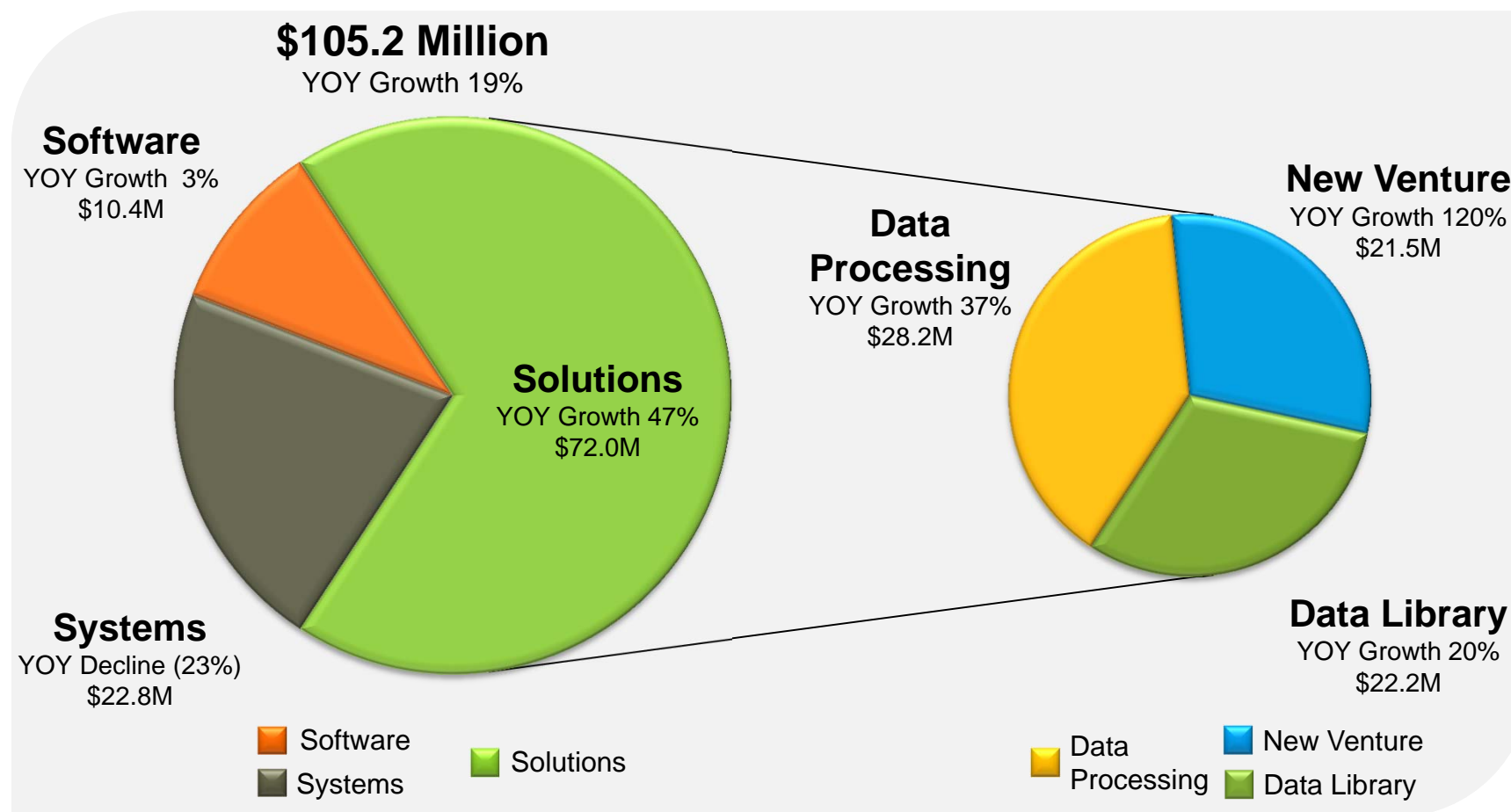
Continued rise in international exploration – Africa, Latin America, Australia and the Arctic.
Solid performance -- revenues, operating profits, margins.
Ended Q2 with record backlog.



Q2 2012 Performance by Segment

Revenue Distribution by Segment

Q2 2012



Note: Systems includes Marine Imaging Systems and Sensors

Software includes Concept Systems

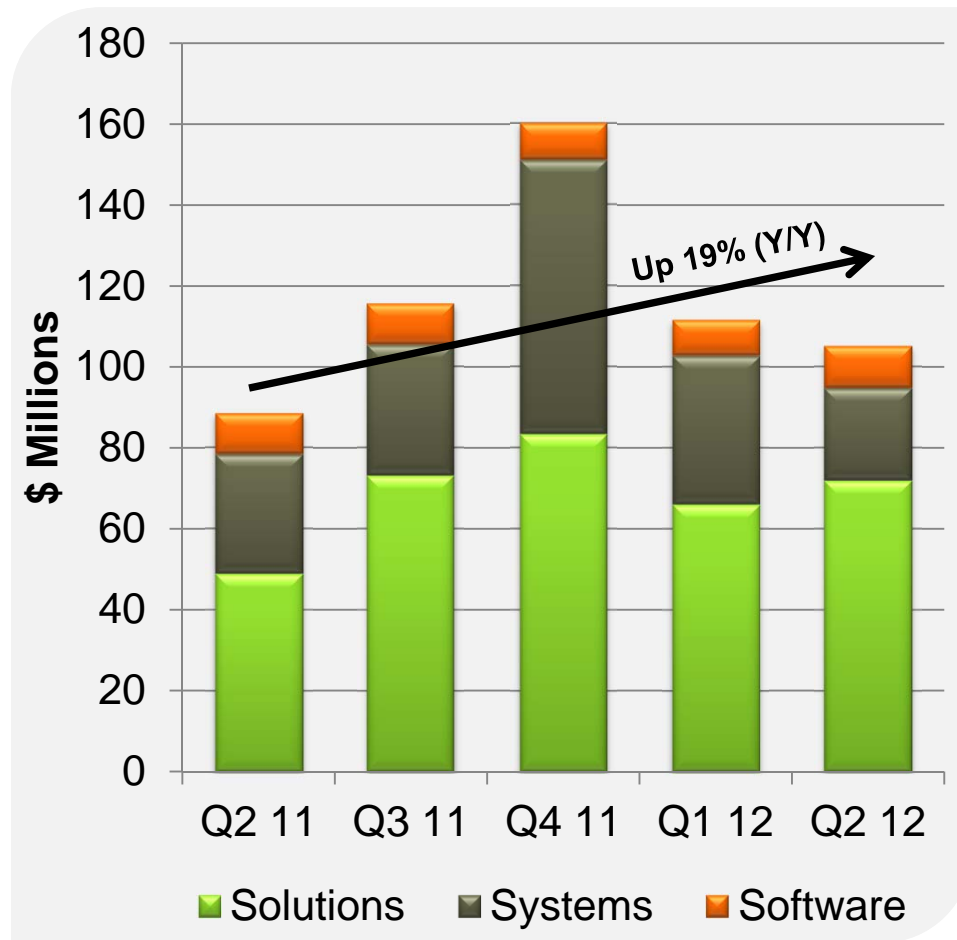
Data Processing includes GXT Imaging Solutions (and Reservoir Solutions)

New Ventures represent new GeoVentures programs that are being acquired (analogous to "Acquisition Services" at ION)

Data Libraries represent the ongoing sale of licenses to previously acquired seismic data programs

Financial Overview

Revenues by Segment



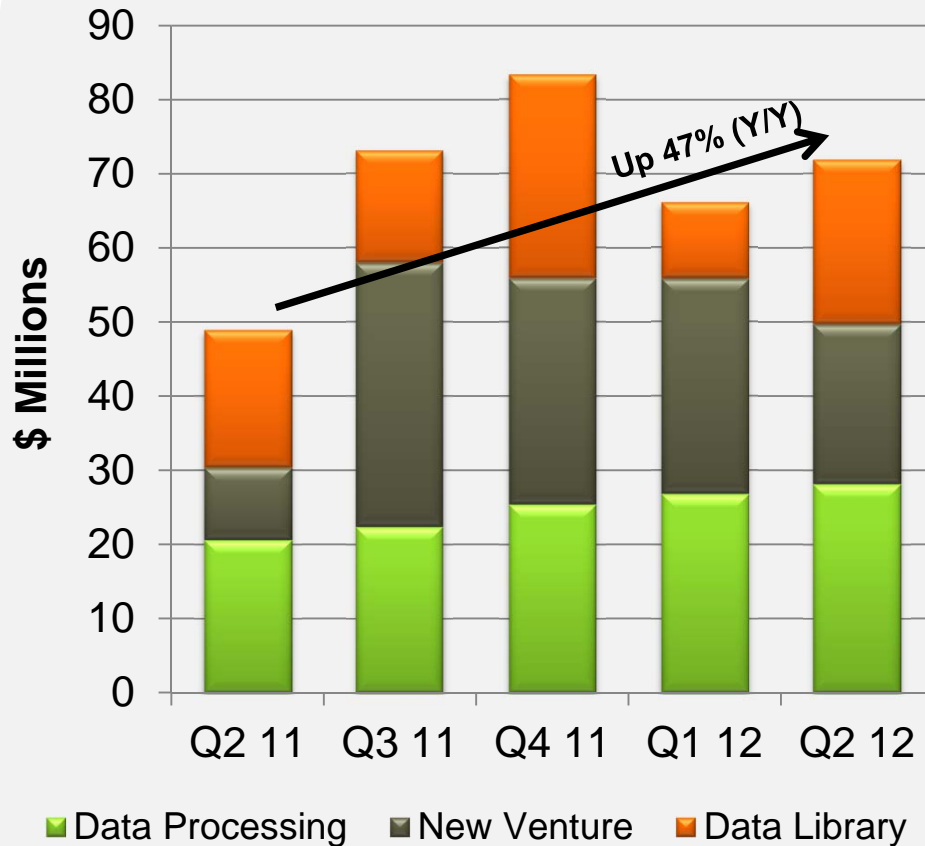
- Solutions revenues of \$72 million, **up 47% Y/Y**
- Software revenues of \$10 million, **up 6%** in local currency Y/Y
- Systems revenues of \$23 million, **down 23% Y/Y**

Q2 revenue growth led by strong growth in Solutions segment

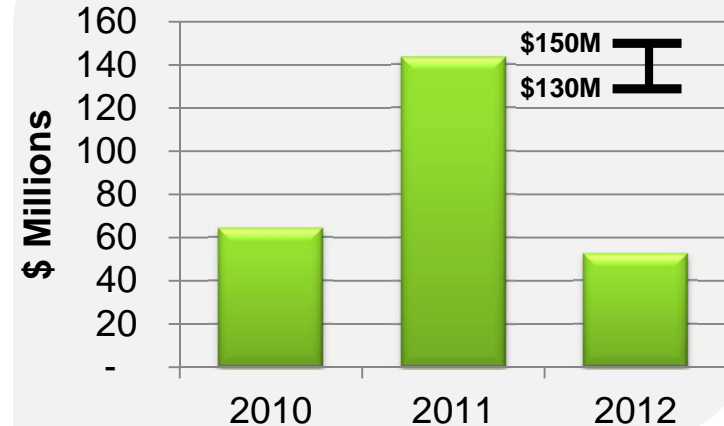
Solutions Segment

Financial Overview

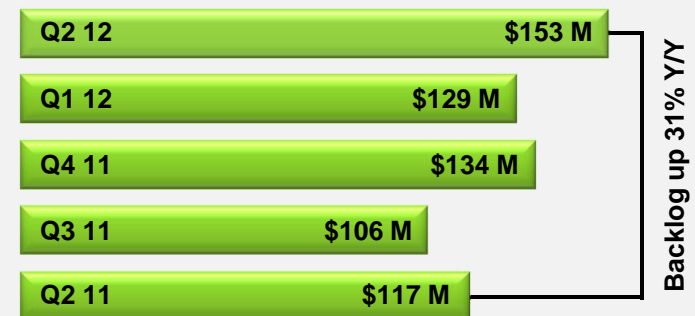
Revenue by Type



Multi-client Investments



Solutions Backlog

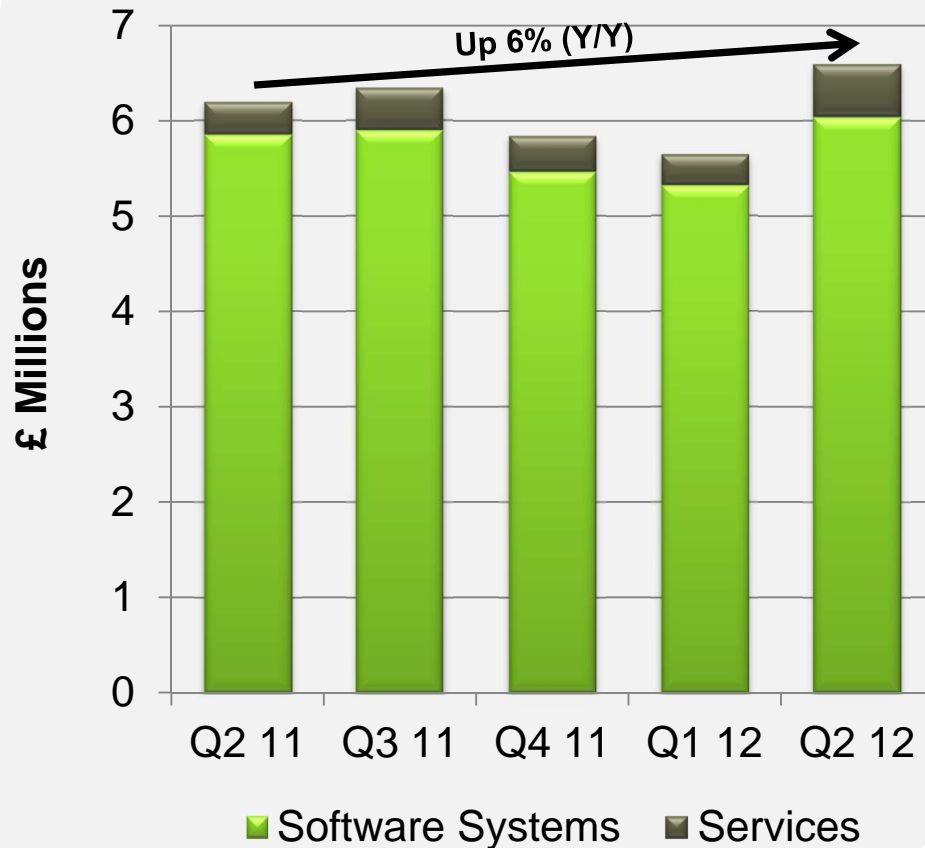


Data Processing and New Ventures activity strong.
Backlog growing well.

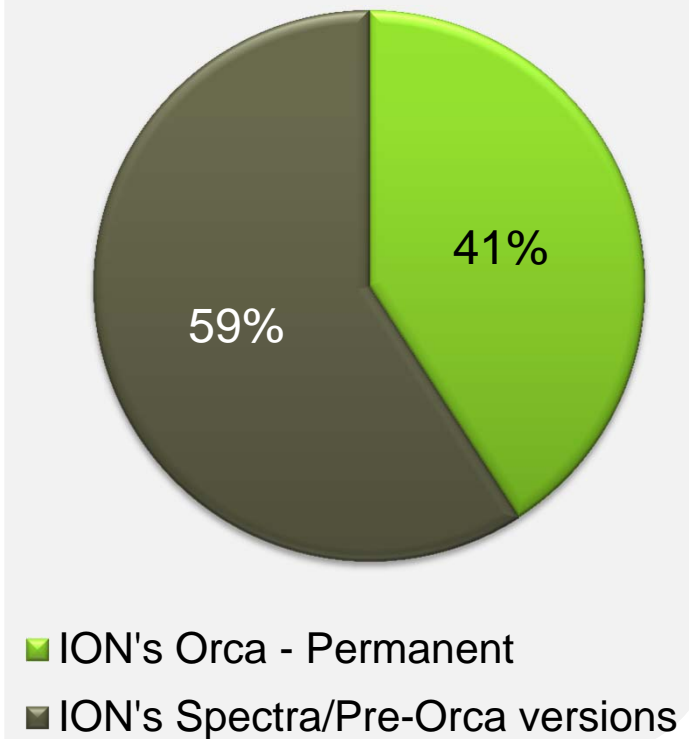
Software Segment

Financial Overview

Revenue by Type (GBP)



% of Seismic Vessels with Orca®

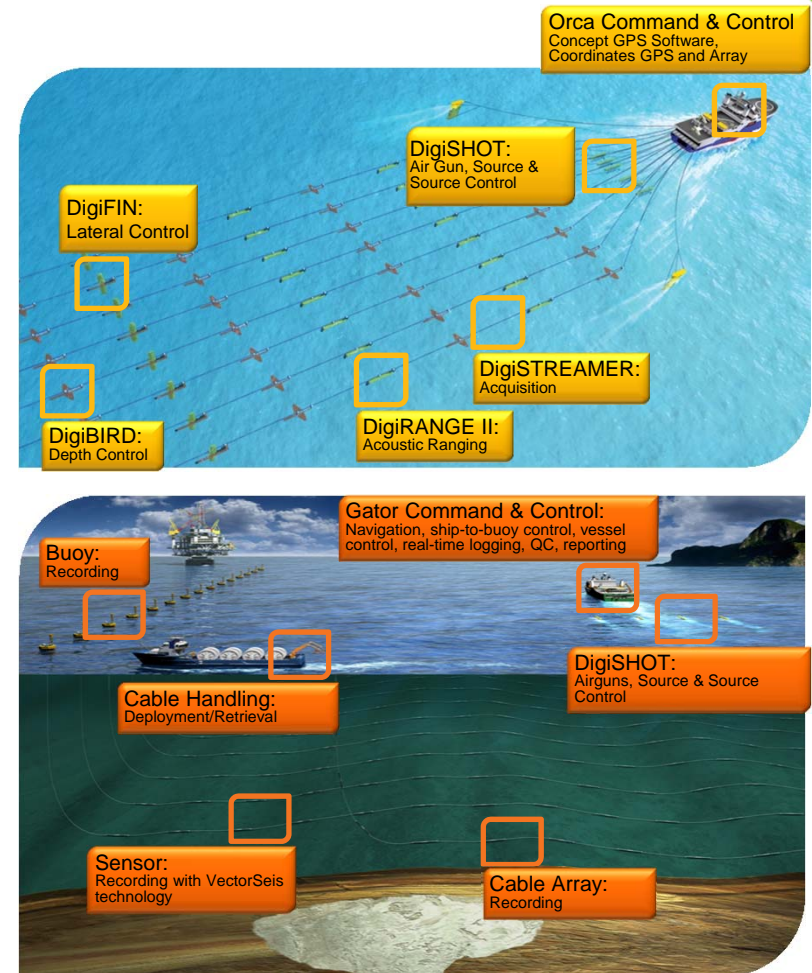
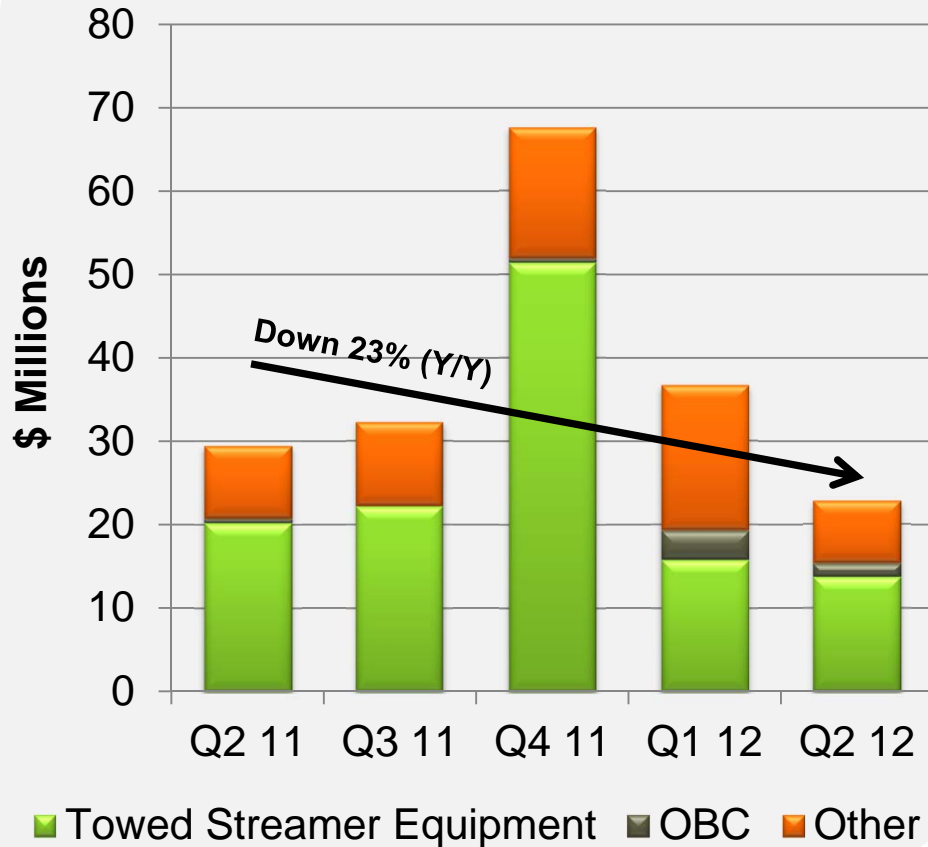


Continued steady growth in Q2. Added two Orca vessels.
Growing demand for on-board services.

Systems Segment

Financial Overview

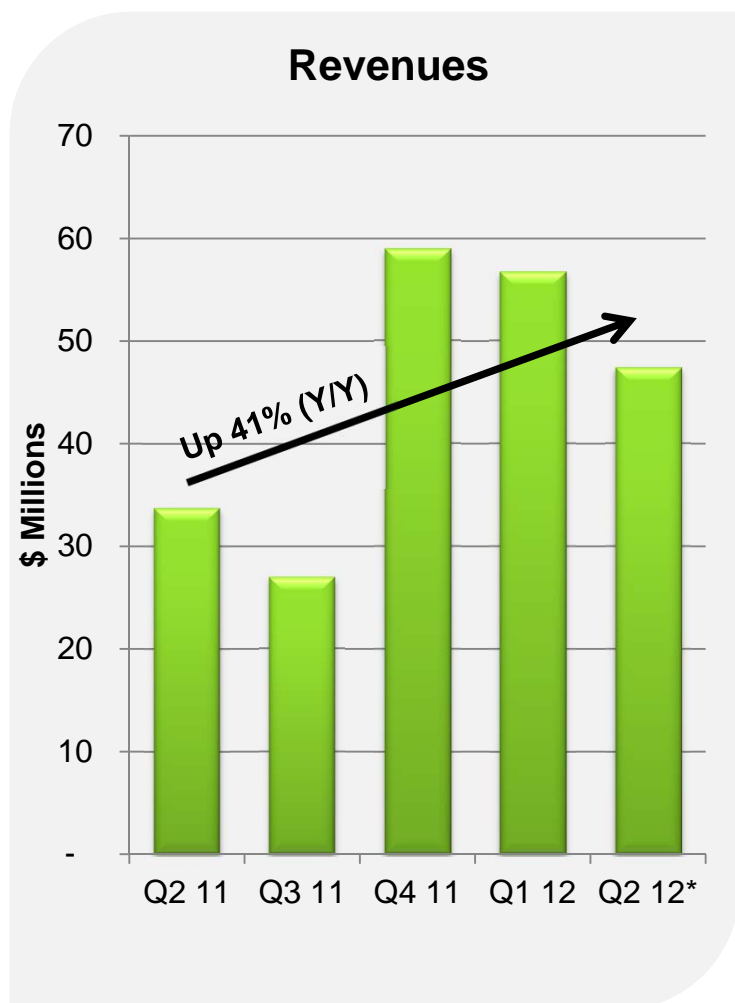
Revenue by Type



Q2 soft as expected – timing of revenue recognition.
 Good reception for Calypso™ at EAGE.

INOVA Geophysical

Financial Overview



Q1 2012

- Revenues of \$56.8 million with operating income of \$8.9 million**
- Delivered 15,000 channels of G3i™
- Delivered first 3 UniVib™ units
- Significant number of Vibrator sales

Q2 2012

- Estimated revenues of \$45 to \$49 million with an operating loss of (\$3) to (\$4) million**
- Delivered an additional 9,000 channels of G3i
- First sale of new wireless Hawk™ system

* Forecast

24 **ION to share in 49% of these results. 2012 estimates are unaudited.






Summary

Continued Momentum in Q2

- Industry remains robust
- International activity particularly strong
- Strong first half 2012 for ION
- Expect solid Y/Y growth throughout 2012
- Continue to anticipate 2012 multi-client investment in \$130 - \$150 range
- Remain positive on outlook to achieve Y/Y quarterly improvement for balance of 2012



Q & A



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