DDS is pleased to invite you to our Webinar series on the Greater GOM Basin featuring the latest studies and analyses conducted by our team. Four Webinars will be presented starting September 30, 2021. To learn more please scroll below for abstracts and a date & time for each webinar.

To register, please click on the mountains below:

You can register for one or all four webinars at the same time. Please feel free to forward the invitation to your friends and colleagues who might be interested in this event. A link to the webinar will be provided once you have registered for the event. All Webinars will be held from 9:00AM to 10:00AM CST. This event is free and individual registration is required

DYNAMIC DATA SERVICES

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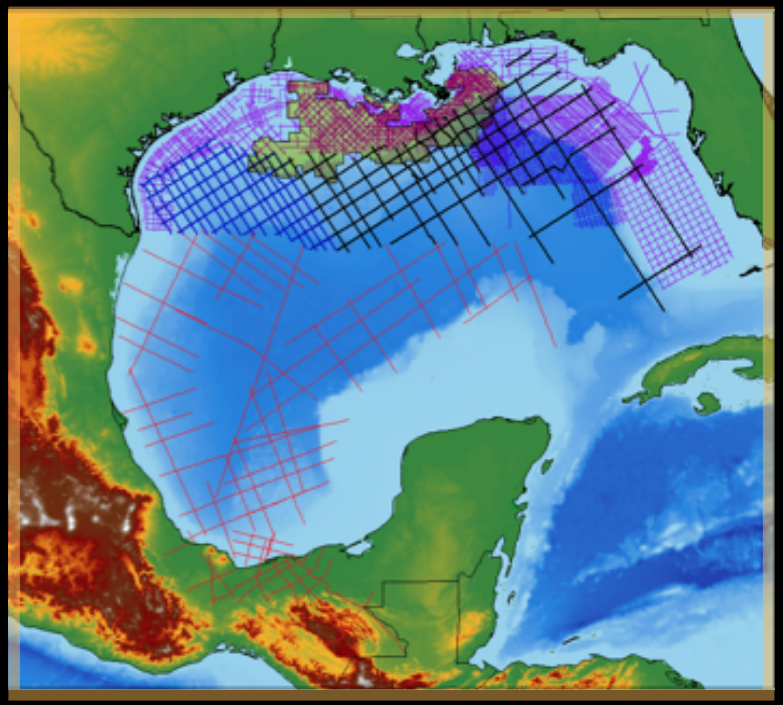
Overview of the GOM Library - Summary of Crustal Architecture and Exploration Potential of GOM

Webinar 1: Sept 30, 2021 9:00AM to 10:00AM

DDS's latest additions of Vintage 3D data for the US GOM significantly expands our basin-wide GOM coverage to 60,000 miles of 2D data and 35,000 square miles of 3D. The data have been sourced from hundreds of original surveys, All data have been carefully merged, balanced and depth converted. We will review the depthing process which uses a common basin-wide velocity model based on 300+ wells, SuperCache PSDM velocities and 3D PSDM velocities were used where available.

The foundation of DDS's data library is 10,000 miles of proprietary, ultra-long-offset, deep penetration 2D PSDM data (SuperCache, 2012) in the US GoM, acquired predominantly in deep water. Acquisition and processing parameters will be reviewed. Example data will be discussed to demonstrate that 1) the Moho is evident through much of the data set, demonstrating the full crustal signature, 2) the oceanic crustal architecture and limit of the oceanic crust is clear and diagnostic, 3) rifted continental crust is evident in a variety of different thinning configurations around the basin.

Indicative examples of the various data types from around the basin will be reviewed as well as our summary crustal architecture for the basin. We will also summarize key areas of basin analysis uncertainty; and areas and themes where the data can contribute to client workflows in existing plays or highlight new exploration potential.



SuperCache 2D (proprietary)

- 10,000 miles Long offset deep-imaging PSDM (2012)
- 3,750 miles subset reimaged with 3D derived velocity

US Shelf 2D (Vintage)

- 50,000 miles, merged and balanced time and depth
- 250 wells incorporated in regional US velocity model
- 100 wells for geothermal gradient

US Shelf 3D (Vintage)

- 35,251 sq. miles, merged and balanced time and depth

Mexico 2D (Vintage)

- 15,000km offshore and 2,500 km onshore
- Merged and balanced time and depth

Structural similarities and differences between the Northern Gulf of Mexico and the Sureste Basin

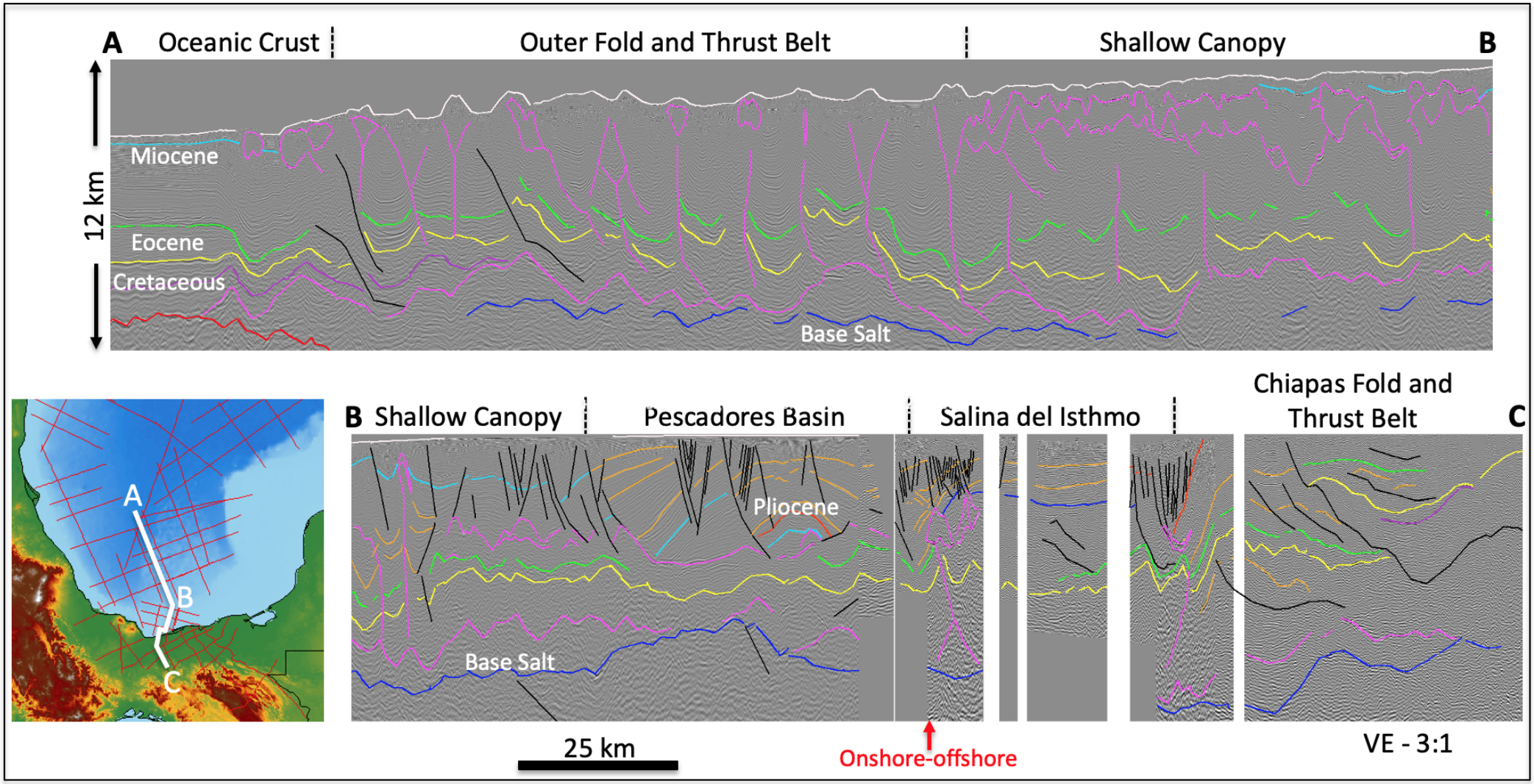
Webinar 2: Oct 14, 2021 9:00AM to 10:00AM

The Northern Gulf of Mexico (GoM) is commonly used as an analog to understand salt tectonics in the Sureste Basin, Mexico. A combination of gravitational-related deformation and differential sedimentary loading underpins salt tectonics in the Northern GoM through the Mesozoic and Tertiary. However, unlike its northern counterpart, the Sureste Basin is adjacent to an active convergent margin. This proximity results in a significant impact on deformation within the basin during the Late Tertiary. This webinar will discuss the structural similarities and differences between these areas of the Gulf of Mexico (GoM).

Plate tectonic models of the GoM classify both the Northern GoM and the Sureste Basin as conjugate margins related to the Mesozoic GoM opening. Because of this, both areas are commonly defined as passive margins. Moreover, both the Northern GoM and Sureste Basin have shallow water normal-fault systems and contractional structures in deep water as illuminated by the Dynamic Data Service's seismic profiles. The spatial relationship of these fault systems has led many interpreters to consider deformation within the Sureste Basin to be purely gravity-related and not due to regional tectonics.

The presence of an active fold and thrust belt in the Chiapas area to the south of the Sureste Basin is the most significant difference between this basin and the northern GoM. The Chiapas fold belt formed by the northeastward move of the Chiapas Massif from the Late Miocene to the present. The Massif terminates against a northeast striking tear fault in the Salinas del Itsmo onshore area. This tear fault zone seems to continue towards the Pescadores and Macuspana basins, which are Plio-Pleistocene transtensional features related to a possible anti-clockwise rotation of the salt and overburden in the Sureste Basin. Dynamic Data Service's seismic data and published cross-sections in the basin seem to illuminate more shortening to the eastern side of it than the western side. This rotation may be the result of Chiapas shortening being accommodated in the Sureste Basin.

In conclusion, the Chiapanecan orogenesis influences salt tectonics in the Sureste Basin during the Late Tertiary. In contrast, gravity-related deformation and differential loading drive salt tectonics in the Northern GoM through the Tertiary and Mesozoic. The difference in tectonic drivers between the North and the South suggests that the Sureste Basin deepwater fold belt may accommodate more shortening than the northern GoM deepwater fold belt. The Chiapas shortening may impact source rock distribution, maturity, and restored Gross Depositional Environment maps for the Mesozoic and early Cenozoic in the Sureste Basin.



Sureste Basin - merged onshore and offshore 2D data

Mesozoic Tectono-stratigraphy of the Eastern Margin of the GoM Basin

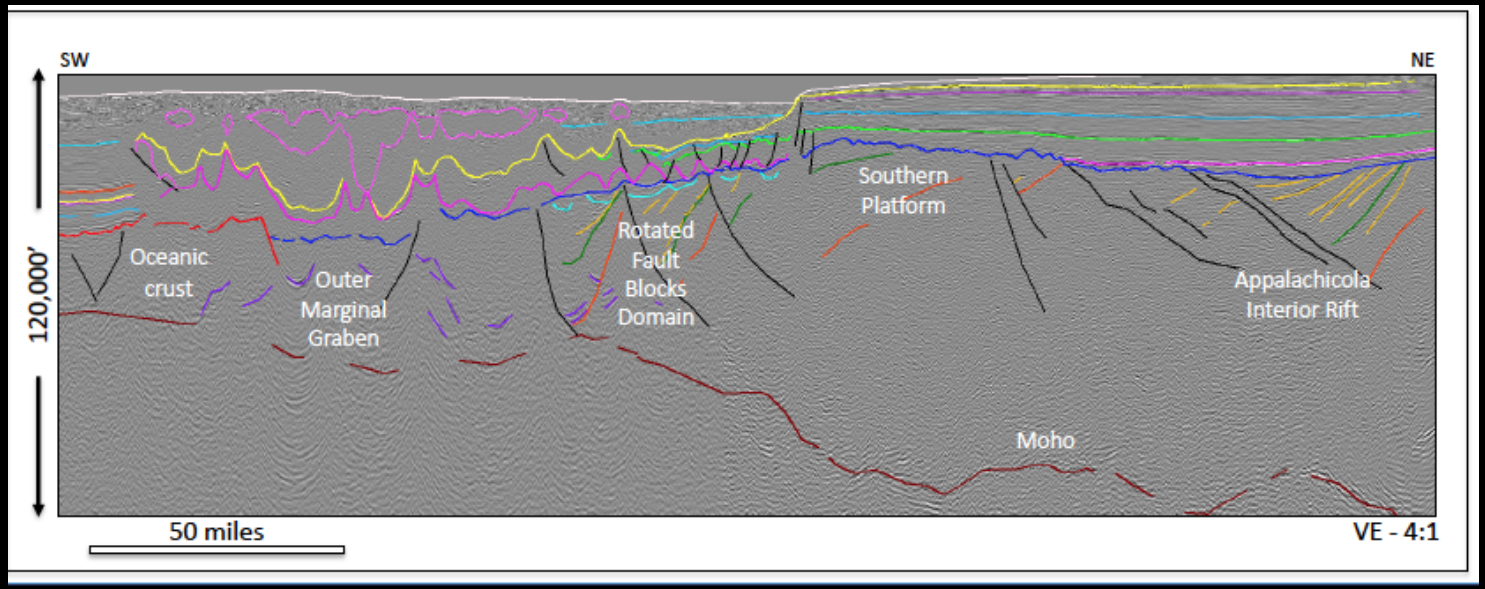
Webinar 3: oct 28, 2021 9:00AM to 10:00AM

DDS's proprietary, ultra-long-offset, deep penetration 2D PSDM data (SuperCache, 2012) provides a unique image of the crustal architecture and rift margin processes from Mississippi Canyon southeast to the Cuban/Mexican border. Deep, high quality, vintage Pemex data from the northern margin of the Yucatan highlight both similar and contrasting signatures. Both of these data sets have line separations commonly greater than 30 miles and are conspicuous in that the geologic signatures vary significantly from line to line. To address this issue in 2020 DDS added an additional 20,000 miles of vintage 2D in deep and shallow water off Florida, largely in areas without industry 3D to allow detailed correlation of domains and faults between the regional lines. These interpretations were integrated with an earlier vintage 3D interpretation in the northeast Mississippi Canyon, Viosca Knoll and Main Pass area.

Conclusions from this recent work will be reviewed and will include:

1) The distribution of salt in the marginal graben in the outer domain of highly attenuated crust and its implications for timing of salt distribution and continental breakup,
2) Distribution and origin of the seaward-dipping reflectors in inner domain of highly attenuated crust
3) Signature and origin of pre-salt extension in the lightly attenuated crust of the Florida Platform,
4) Variations in well derived geothermal gradients across the Florida platform may be indicative of a basement terrain boundary
5) distribution of the Upper Jurassic-Cretaceous linked extensional – compressional systems beyond the well documented area of the existing deep-water Norphlet play

SuperCache - Proprietary 2D data, crustal architecture of the eastern US margin

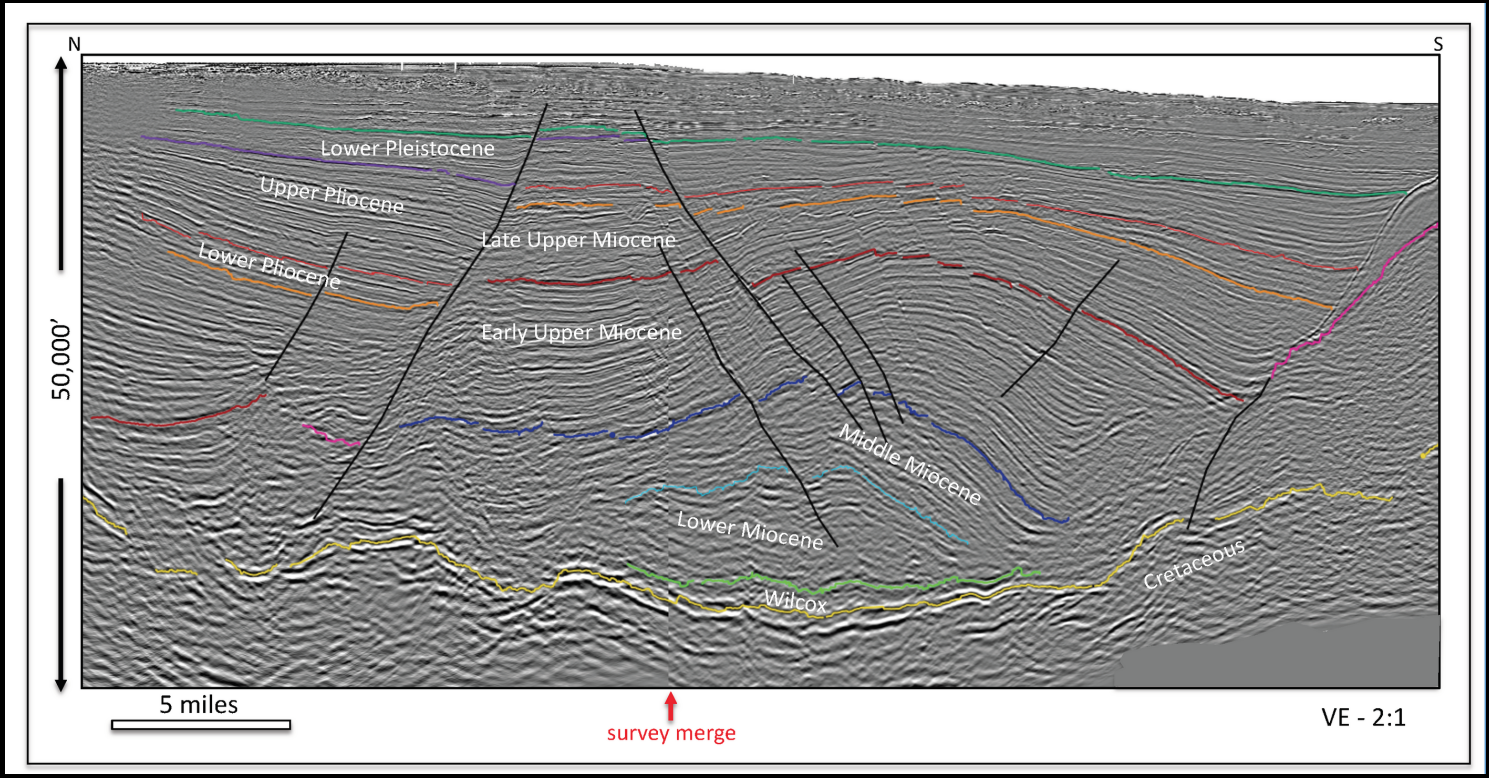


Miocene and Cretaceous Middle Slope Sediment Transport Fairways from 3D Mapping of the Central Louisiana Upper Slope and Outer Shelf

Webinar 4: Nov 11, 2021 9:00AM to 10:00AM

DDS has compiled a contiguous swath of 28,000 square miles of vintage 3D from West Cameron to Main Pass and will complete the initial interpretation of these data late in 2021, but significant early results will be reviewed here. In the northeast Mississippi Canyon, Viosca Knoll and Main Pass area the following surfaces have been mapped: base Louann salt, top Tithonian, top Aptian, Intra-Albian, Cenomanian and top Cretaceous. Middle Slope transport fairways have been traced updip from the expansion rollovers of northeast Mississippi Canyon, through half turtles to incised valleys of the shelf margin in Viosca Knoll. The top Wilcox or equivalent has been mapped across the whole area and tied into the "deep shelf" wells drilled in the 2000s; this surface is the main control on hydrocarbon charge focus to the overlying, largely untested, lower and middle Miocene play. Large turtles and half turtles in this interval provide attractive exploration targets on the present day outer shelf and describe the major transport pathways through the paleo middle slope. The base of the allochthonous salt sheets across the area and provides another way of delimiting the major Miocene transport paths from the shelf margins to deep water.

Vintage 3D data central Louisiana, two merged surveys: Middle and Lower Miocene sediment fairways



Speakers

Rob Pascoe

Rob has 40 of experience in the Oil and Gas Industry. Currently he is the Managing Director of the Dynamic Group where he is responsible for all Geoscience Research in the company and also heads the Exploration division of the company. Prior to his role in Dynamic, Rob was senior Vice President of BHP Billiton for the Western Hemisphere (with GOM as the primary asset in the portfolio). He was also VP Global New Ventures for BHP Billiton and Chief Geologist for Conoco prior to that. He was a member of BHP's Global Exploration Leadership Team responsible for over 1 billion BOEM discoveries, predominantly in the GOM.
At Dynamic, Rob's primary focus in Gulf of Mexico is building a portfolio of opportunities for Exploration that is viable in low-cost environment.
Rob is a graduate of University College and Imperial College, London.

Enrique Novoa

Dr. Enrique Novoa has 25 years of experience in the oil and gas industry. He has worked in different tectonic settings: from fold-and-thrust belts (Venezuela, Southern California, Mexico, and Argentina) to passive margins (The Barents Sea, Norwegian Sea, and North East Canada). Dr. Novoa's research specializations include salt tectonics in both the U.S. and Mexico sides of the Gulf of Mexico, Norwegian Sea, North-East Canada, and the Barents Sea.
He has worked closely with basin modelers who utilize structurally restored geometries in their models. He has also experience maturing prospects, developing Common-Risk-Segment maps, and estimating Yet-To-Find volumes.
Dr. Novoa has worked for PDVSA-Intevep, Midland Valley Exploration, and Equinor.
He holds a Ph.D. in structural geology from Princeton University.

Peter Nuttall

Peter has over 40 years of experience in seismic service industry with major contractors such as Schlumberger (Western), ION Geophysical and Dynamic Group where he is currently working. At Dynamic, Peter is responsible for the geophysical technical direction of the Company. Prior to Dynamic, he was Geophysical Director for the Geoventures division at ION Geophysical, Houston, specializing in processing, imaging and data integration of all of ION's multi-client seismic data surveys. He was also the Processing Manager for WesternGeco (Schlumberger) in Americas. Peter has extensive international experience including the Gulf of Mexico, Africa, Middle East, North and South America, Canada, South East Asia and Australia.

For more information, Please contact info@dyngp.com

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