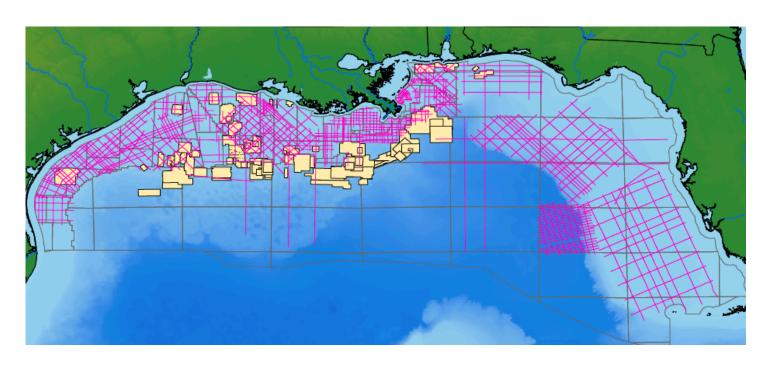


SuperCache Shelf - 3D and 2D

In 2011-2012, Dynamic Data Services acquired 10,000-miles of ultra-long offset, deep-penetrating SuperCache 2D data and put together industry's first seismic-driven overview of the crustal architecture of Northern Gulf of Mexico. In 2015-2016, Dynamic added over 20,000 square miles of vintage 3D and over 22,400 miles of vintage 2D seismic data across the shelf of the northern Gulf of Mexico. These data have been reviewed for quality and depth as well as for ties to key, deep wells and to SuperCache and have been depth-converted. Interpretation of these datasets has been ongoing since 2016 with integration to wells and other ancillary data.

The integration of the shelf vintage data with the modern SuperCache survey facilitates a unique way to understand how the offshore US basin works on a mega-scale and it is allowing us to work on new play concepts on the shelf that could be candidates for future exploration. Dynamic has started putting together a portfolio of opportunities for deeper plays on the shelf that have been previously overlooked.



SC vintage 2D (22,456 miles) shown in magenta lines and SC vintage 3D (20,000 sq.miles shown as yellow polygons

Objectives of SuperCache Shelf

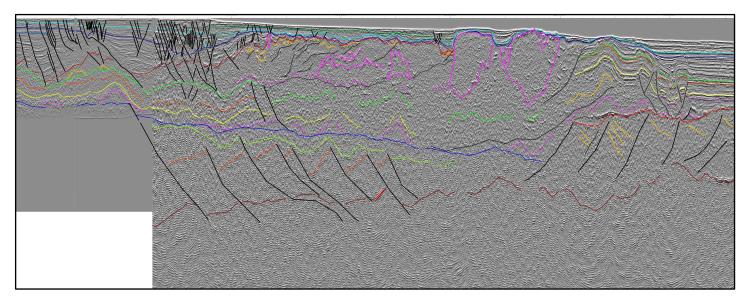
- Provide a single continuous velocity model for the shelf and deep-water and regional depth interpretations
- Establish the relationship between post-salt tectonics processes and the underlying crustal architecture extended from deep-water
- Create a series of regional transects from the inner shelf to oceanic crust integrating reflection and refraction seismic, gravity and geodynamic modeling
- Produce regional isopachs of the main pre-Upper_Miocene sequences and reservoir fairways
- Identify and re-evaluate less prolific, lightly-leased areas of the basin for new play potential

Highlights and Important Features

- Development of play concepts and petroleum system models specifically addressing today's price environment
- Velocity model tied to key > 5km deep shelf and deep-water wells and consistent across the entire US GoM
- Paleoscan interpreted 3D seismic highlighting plays and prospects for shelf exploration
- Geodynamic and refraction modeling on key profiles
- SuperCache Shelf 2D data is available as individual packages in East (~8,900 miles), Central (~8,800 miles) and West
 (~4,700 miles)

Deliverables

- Time-to-depth converted stacks and velocity models (segy)
- Comprehensive workstation interpretation and Powerpoint summary includes:
 - Horizons (includes Moho, Oceanic and basement, Louann, major sequence boundaries)
 - Faults (includes transform faults, basement, step-ups)
 - Geological Polygons (includes types of crust, deep and canopy salt)
 - Grid (includes gravity and magnetic, Moho and basement, top and base deep salt)
- Regional transects from the shelf to deep-water shelf data with SuperCache PSDM data and velocity model
- Regional geodynamic transects



Line from SuperCache Shelf merged with SuperCache Plus showing the large scale basin geometry in Western GOM

