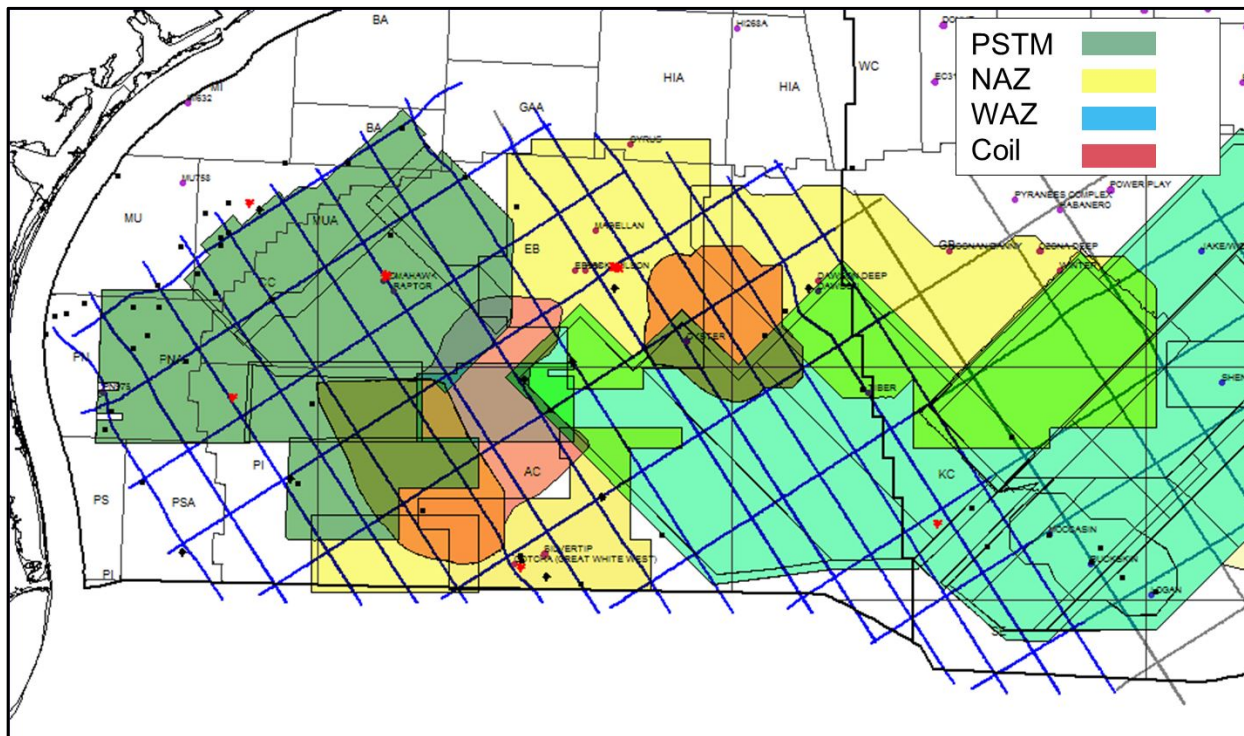




## SuperCache Plus

This unique project combines the benefits of 3D seismic (accurate 3D salt geometry imaging/shallow velocity resolution) with the benefits of the SuperCache 2D (long offset for undershooting salt/deep imaging to 40km/mega-regional scope). The result is an integrated dataset that provides the interpreter with an accurate and consistent view from a detailed prospect level to a regional and crustal level - all in the same workspace. Dynamic Data Services worked with WesternGeco in combining all 3D survey velocities with 2D SuperCache data to build a combined iterative velocity model, which was then used to re-image the SuperCache 2D dataset.

SuperCache Plus data revealed substantial crustal thinning in the Western Gulf of Mexico which has significant impact on heat flow and maturation. The dataset challenges existing regional views of the architecture of the Gulf of Mexico and impacts play analysis. Until now, regional 2D datasets have typically used very different imaging velocities and salt geometries compared to those of 3D data. This project resolves those inconsistencies and provides a new approach to integrating 2D and 3D data.



*Showing 3,590 miles of SuperCache 2D in the West integrated with WG 3Ds*

### Objectives of SuperCache Plus

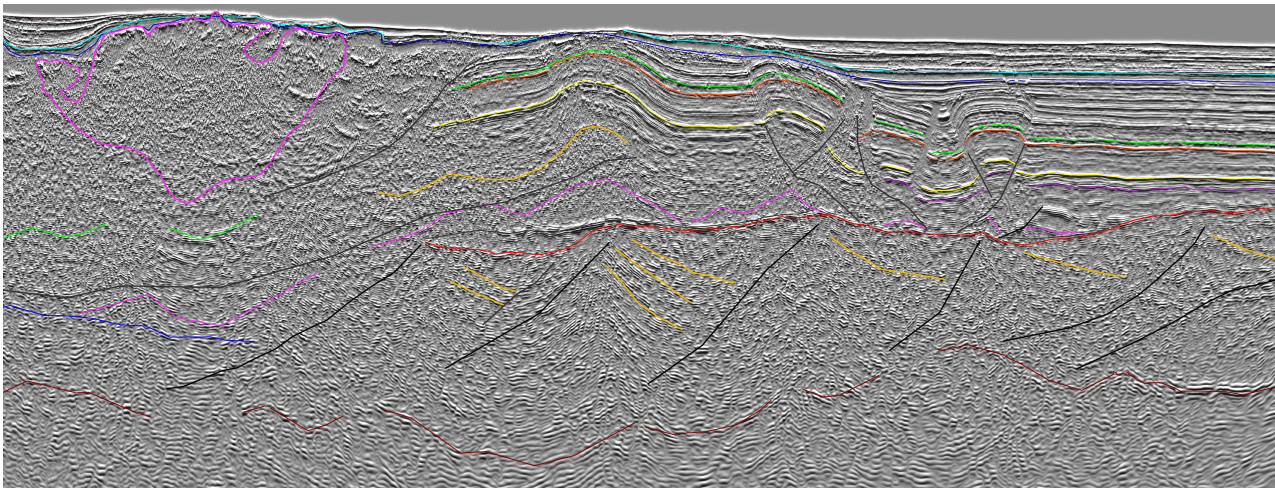
- Improved image and velocity model that ties contiguous or non-contiguous 3Ds
- Combine the benefits of high-resolution shallow 3D imaging with regional 2D long offset deep imaging
- Provide a regional view of the Western Gulf of Mexico that ties in seamlessly to the available 3D data
- Improve understanding of pre-salt and crustal features, placing them in a basin-wide context
- Establish map continuity of the crustal architecture
- Provide an integrated framework in the core of the proven play areas and extending to new play areas

## Key Components

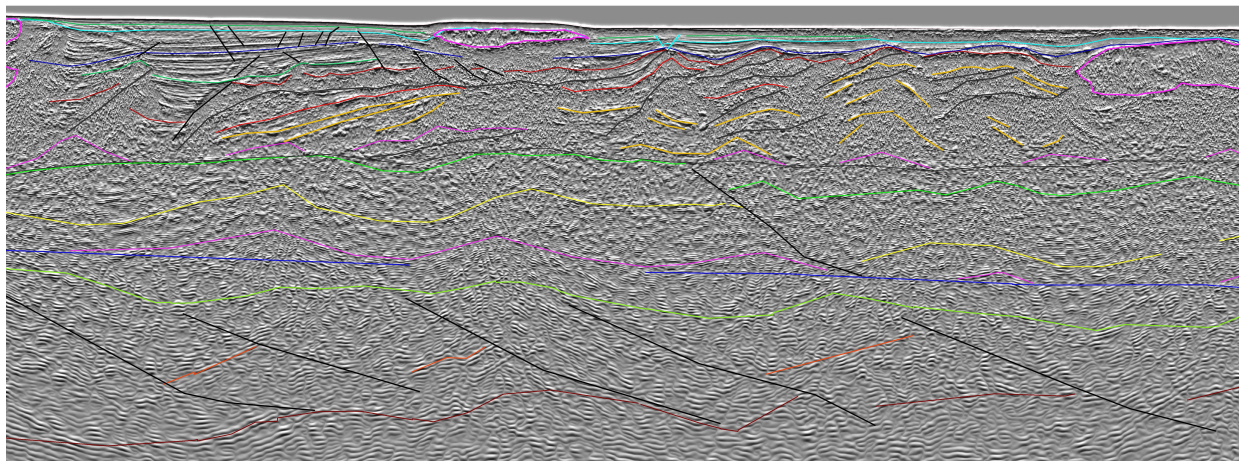
- 3,590 miles of SuperCache 2D long offset (15km) large source (9100 cu in) data
- Salt geometries and velocity models extracted from 76,000 km<sup>2</sup> of 3D Data
- Combining the above data into an integrated PSDM re-imaging of 3,590 miles of SuperCache data
- Shipboard gravity and magnetic data acquired
- Integrated geologic and geophysical interpretation

## Deliverables:

- Kirchhoff PSDM Stack (segy)
- RTM PSDM Stack (segy)
- PSDM Velocity Model (segy)
- Kirchhoff PSDM Gathers (segy)
- Interpretation (faults and horizons)
- Reports (processing and interpretation).



*SuperCache Plus reveals the crustal architecture underneath the Perdido fold belt*



*SuperCache Plus around the Port Isabel faults to reveal underlying crustal architecture*

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