The Crystal C survey is located in the Central East Breaks/Alaminos Canyon areas of the Gulf of Mexico, acquired in 2009 and 2010. Broadband reprocessing completed in 2016.

This deepwater area of the Gulf of Mexico is notoriously difficult to image due to a combination of thick Oligocene shale and complex salt geometries.

PGS addressed the subsalt imaging challenges in the Crystal area with state-of-the-art processing, including PGS hyperTomo® for velocity model building and anisotropic PSDM with an RTM algorithm.
**SURVEY SUMMARY**

- **Type:** 3D
- **Geometry:** WAZ
- **Size:** 12870.8 sq. km
- **Acquisition year:** 2009
- **Completion of processing:** Reprocessed data available 2016
- **Reprocessed:** Yes
- **Shooting direction:** NE / SW
- **Vessels:** Ramform Valiant, Ramform Viking, Ocean Explorer, Harrier Explorer

**ACQUISITION PARAMETERS**

- **Number of streamers:** 10 x 2
- **Streamer length:** 7050 m
- **Streamer separation:** 120 m
- **Shot interval:** 37.5 x 4 m
- **Record length:** 14000 ms
- **Source depth:** 9 m
- **Sample rate:** 2 ms
- **Bin dimensions (Acquisition):** 6.25 x 60 m
- **Bin dimensions (Processing):** 30 x 30 m
- **Fold:** 184

**PROCESSING AND DELIVERABLES**

- **Processing:** 3D surface related multiple elimination (SRME), High resolution radon demultiple, Kirchhoff prestack depth migration (PSDM), Reverse time migration (RTM), Beam depth migration

- **Depth products:** Final RTM PSDM stack, PSDM gathers, Final Kirchhoff PSDM angle stacks, TTI BEAM, Reverse Time Migration, Velocity model, Horizons

- **Time products:** Demultiple Gathers

- **Additional products:** Demultiple Gathers