

Pelotas Basin - Uruguay - 2012 - 2013

## Uruguay 3D GeoStreamer

15,600sqkm GeoStreamer survey offshore Uruguay covering a large portion of the Pelotas basin.

The Uruguayan offshore basins were formed during the break-up of Gondwana and later opening of the Atlantic Ocean during the Late Jurassic to Early Cretaceous period. The breakup between Africa and South America formed a rift system in the Jurassic but evolved into a passive continental margin.

Opening of the Atlantic Ocean contains four major tectonic segments each bounded by major fracture zones perpendicular to the axis of rifting. Offshore Uruguay is located within the southern Austral segment bounded to the South by the Falkland fracture zone, to the North by the Rio Grande zone.

GeoStreamer delivers broadband data even under harsh operating conditions due to the deep tow configuration. The PGS GeoStreamer dataset is well positioned to provide further insights into this underexplored region which has significant prospectively potential.

**SURVEY SUMMARY**

Type: 3D  
Geostreamer: Yes  
Geometry: Standard  
Size: 15600 sq. km  
Acquisition year: 2012 - 2013  
Completion of processing: 2015  
Water depth: 100 - 2600 m  
Shooting direction: Phase A 127.4 /  
307.4, Phase B 37.4 / 217.4  
Vessel: Ramform Vanguard  
In partnership with: ANCAP

**ACQUISITION PARAMETERS**

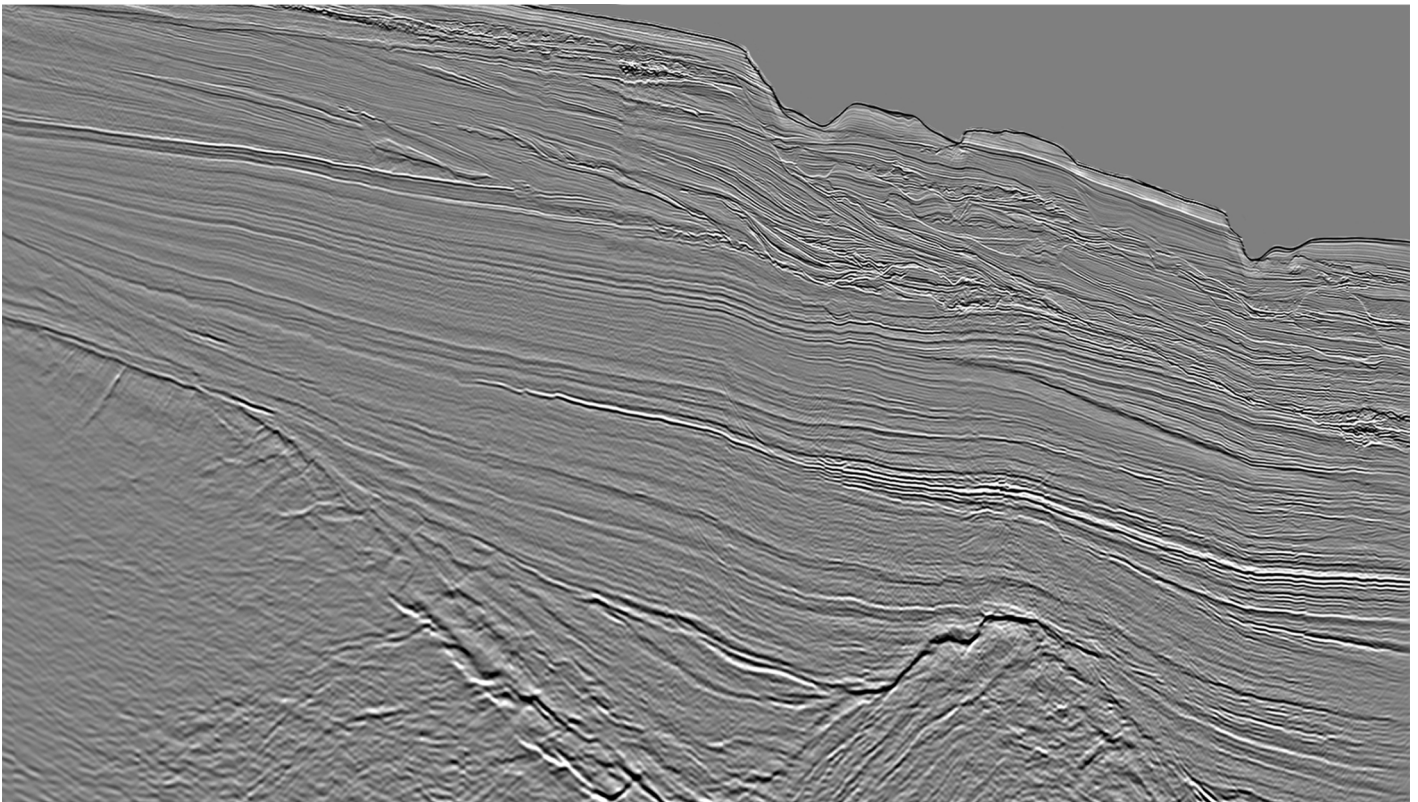
Number of streamers: 12  
Streamer length: 7050 m  
Streamer separation: 100 m  
Shot interval: 25 m  
Record length: 10000 ms  
Source depth: 8 m  
Sample rate: 2 ms  
Bin dimensions (Acquisition): 6.25 x 25 m  
Bin dimensions (Processing): 12.5 x 12.5 m  
Fold: 70

**PROCESSING AND DELIVERABLES**

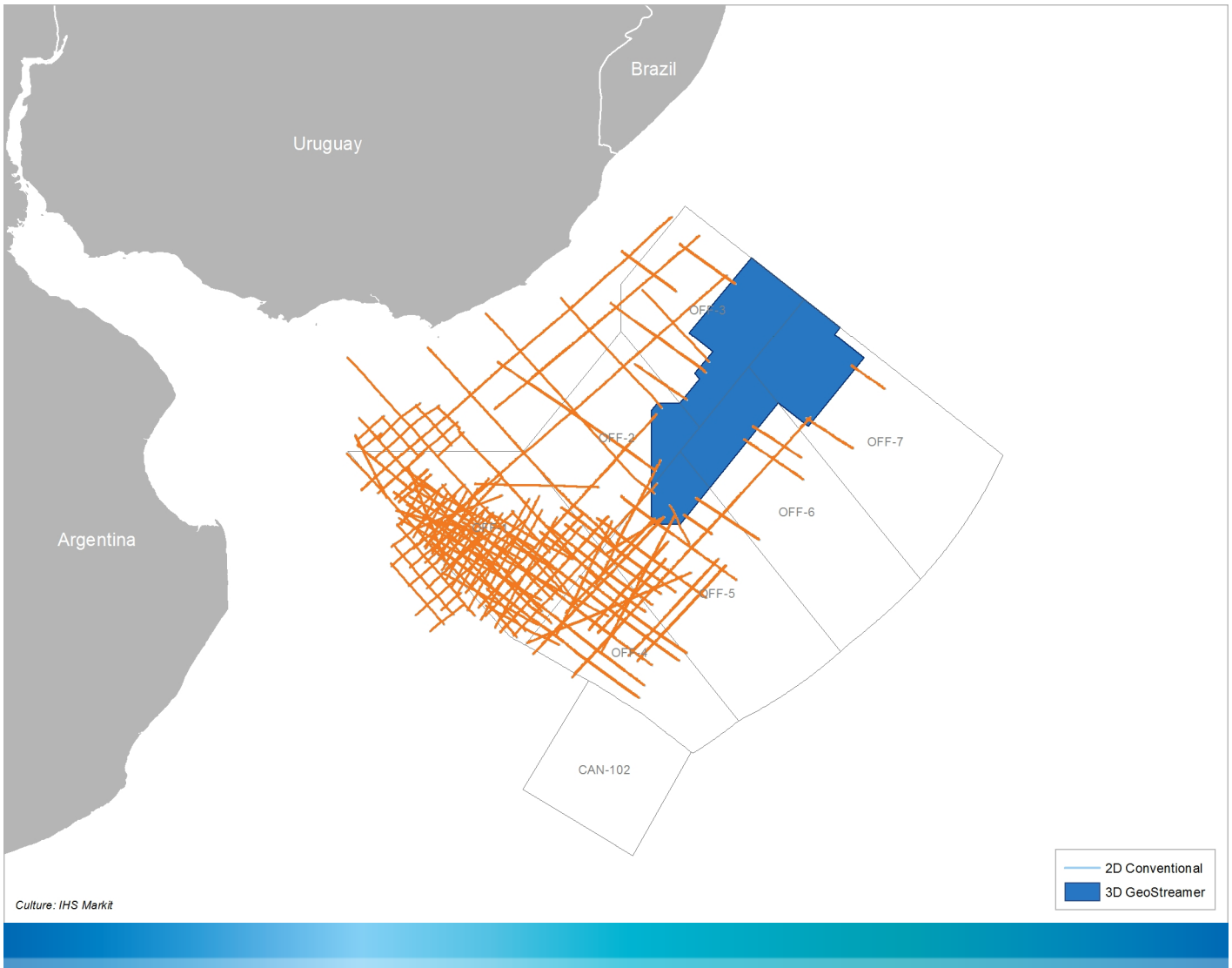
**Processing:** P-UP generation, 3D surface related multiple elimination (SRME), Kirchhoff prestack time migration (PSTM)

**Time products:** Final Kirchhoff PSTM Stack, Angle stack near, Angle stack mid, Angle stack far, PSTM gathers, Stacking velocity, Migration velocity

**Additional products:** Demultiple Gathers



Jurassic - Early Cretaceous syn-rift deposits overlain by Cretaceous - Tertiary post-rift turbidite systems.



Punta del Este Basin - Uruguay - 2011 and previous

## URU21-REPRO 2D

### Rejuvenated 2D data revealing new mini-basins offshore Uruguay

The MC2D-URU21\_REPRO 2D survey is the result of an agreement between PGS and ANCAP. The survey reveals variable structural framework between the Pelotas and Punta del Este basins and the associated differential sedimentation during the Cretaceous and Cenozoic.

In partnership with:



Data quality improvements can be seen throughout the full section. This allows a better understanding of the petroleum system, including the identification and distribution of source rocks, reservoirs, and seal/trap systems.

Modern signal processing and imaging workflows were used to reveal a structural framework that was not previously visible.

**SURVEY SUMMARY**

**Type:** 2D  
**Geometry:** Standard  
**Size:** 11639 km  
**Acquisition year:** 2011 and previous  
**Completion of processing:** 2022  
**Reprocessed:** Yes  
**In partnership with:** ANCAP

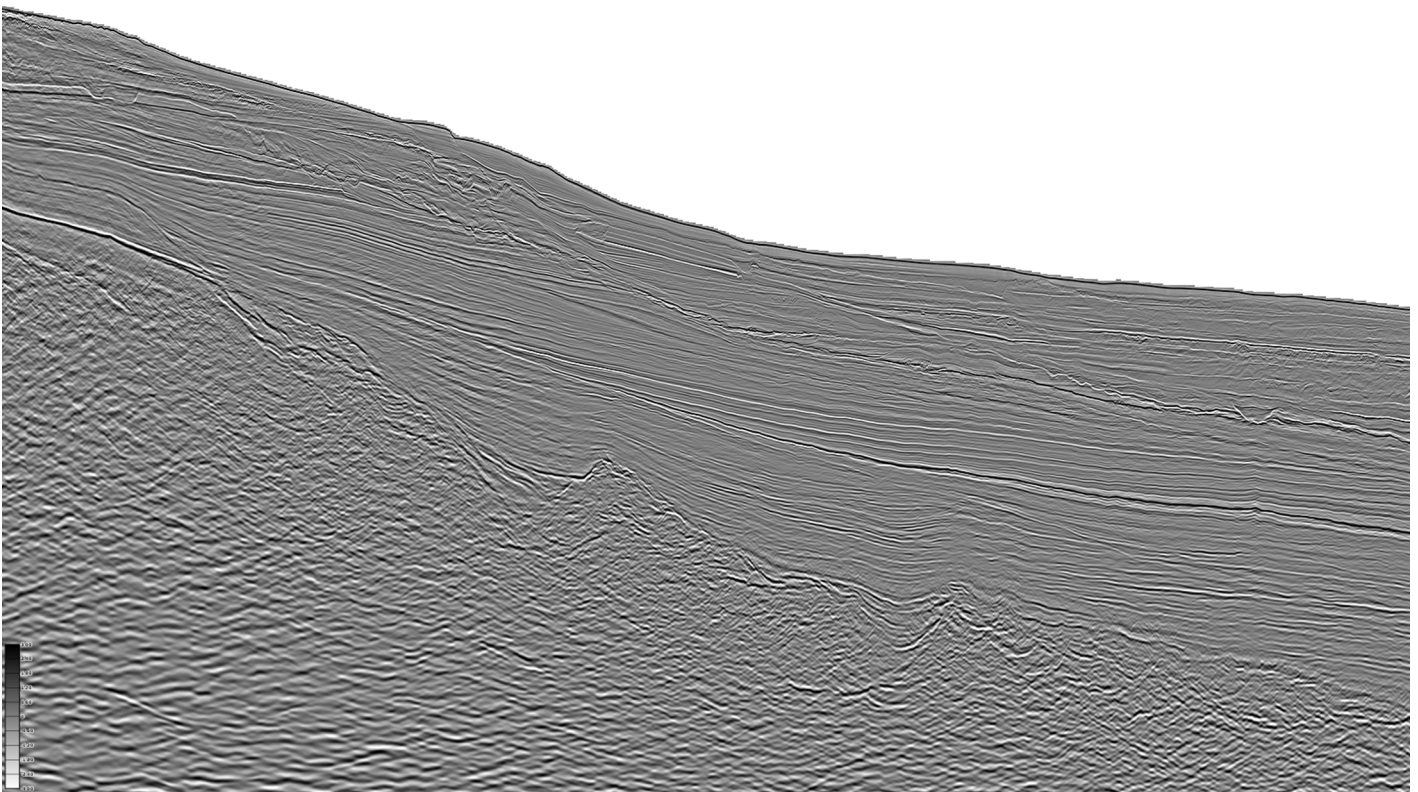
**ACQUISITION PARAMETERS**

**Streamer length:** 2400 / 8100 m  
**Streamer separation:** 100 m  
**Shot interval:** 25 / 37.5 / 50 / 100 m  
**Record length:** 4000 / 6000 / 8000 / 10000 ms  
**Fold:** 12 / 24 / 48 / 108 / 162

**PROCESSING AND DELIVERABLES**

**Depth products:** Final Kirchhoff PSDM stack, PSDM angle stack near, PSDM angle stack mid, PSDM angle stack far, PSDM angle stack u-far, PSDM gathers, Anisotropy and velocity models, Velocity model

**Time products:** Final Kirchhoff PSTM Stack, Angle stack near, Angle stack mid, Angle stack far, Angle stack u-far, PSTM gathers, Stacking velocity, Migration velocity



Seismic line after reprocessing, MC2D-URU21