



1–3 March 2016
Business Design Centre, London UK

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AAPG
Europe Region

Featuring



Exploration Update and Opportunities offshore Uruguay

Booth # 22

Pablo Gristo Savornin
Wednesday 2nd March, 2016
London, UK



URUGUAY

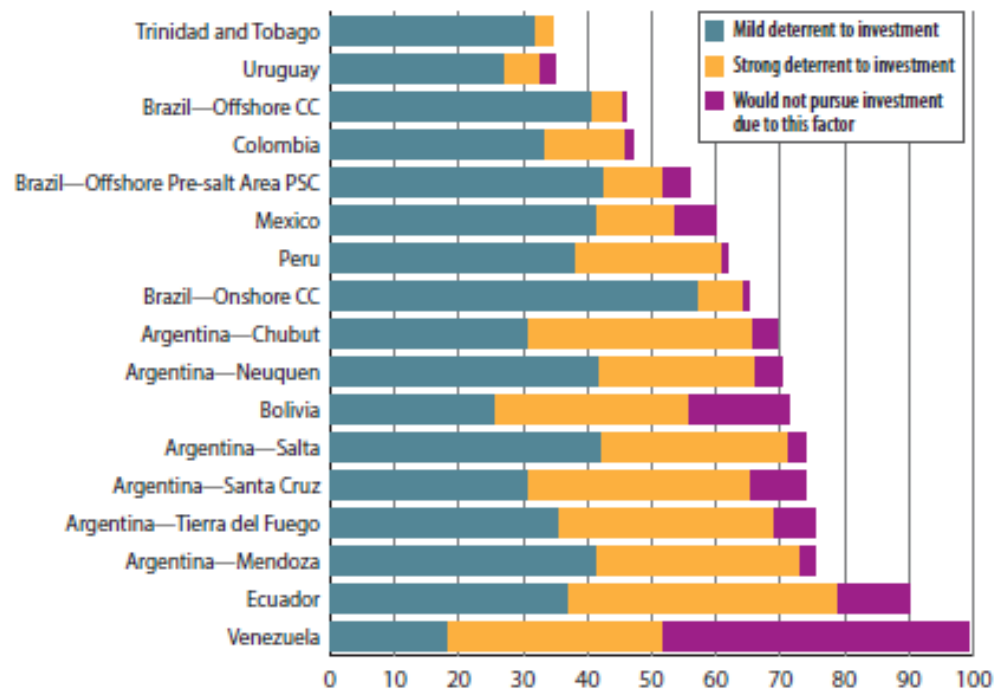
A PLACE TO INVEST, WORK AND LIVE

Uruguay is the second best place for exploration investment in Latin America and the Caribbean, according to the Global Petroleum Survey 2015

<u>Ranking</u>	<u>Uruguay in Latin America</u>
Democracy Index (Economist Intelligence Unit, 2014)	#1
Global Peace Index (Institute for Economics & Peace, 2014)	#1
Low corruption (Transparency International, 2014)	#1
Prosperity Index (Legatum Institute, 2014)	#1
Rule of Law Index (World Justice Project, 2014)	#1
Press Freedom (Reporters without borders, 2014)	#2
Worldwide Governance Indicators (World Bank, 2014)	#2
Economic Freedom (Heritage Foundation, 2015)	#3

Source: Uruguay XXI

Figure 12: Policy Perception Index—Latin America and the Caribbean

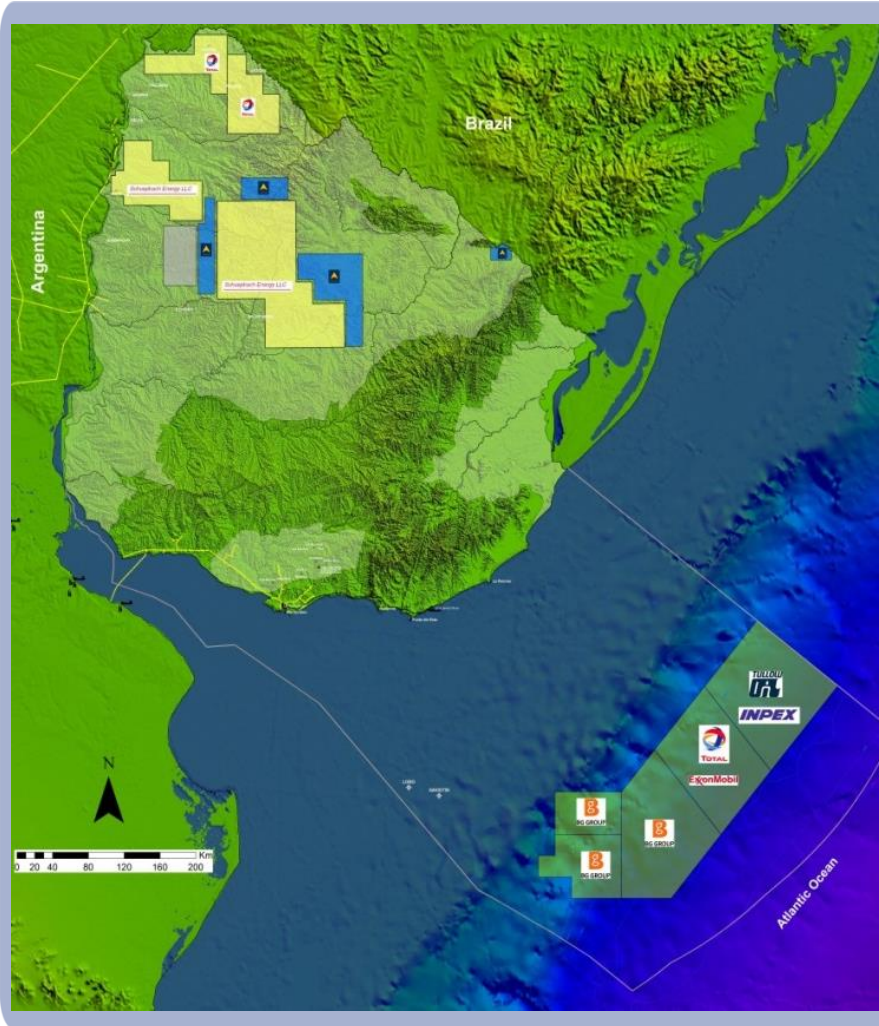


Global Petroleum Survey 2015

Fraser Institute

<https://www.fraserinstitute.org/studies/global-petroleum-survey-2015>

Contracts in place



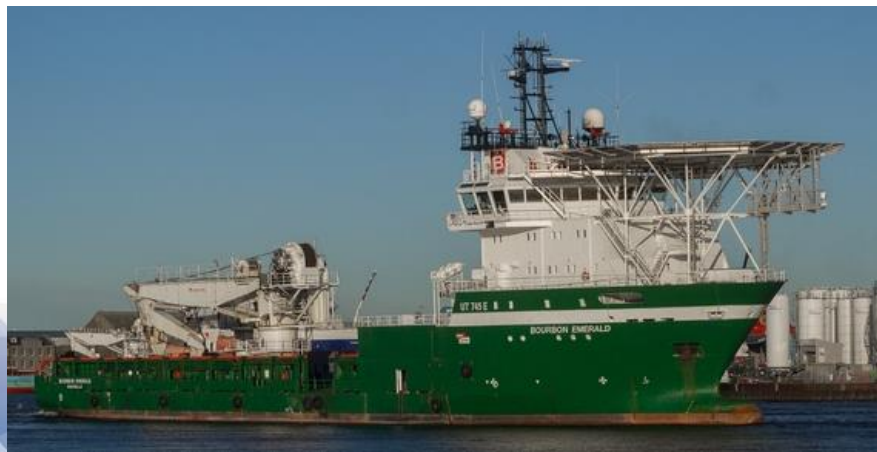
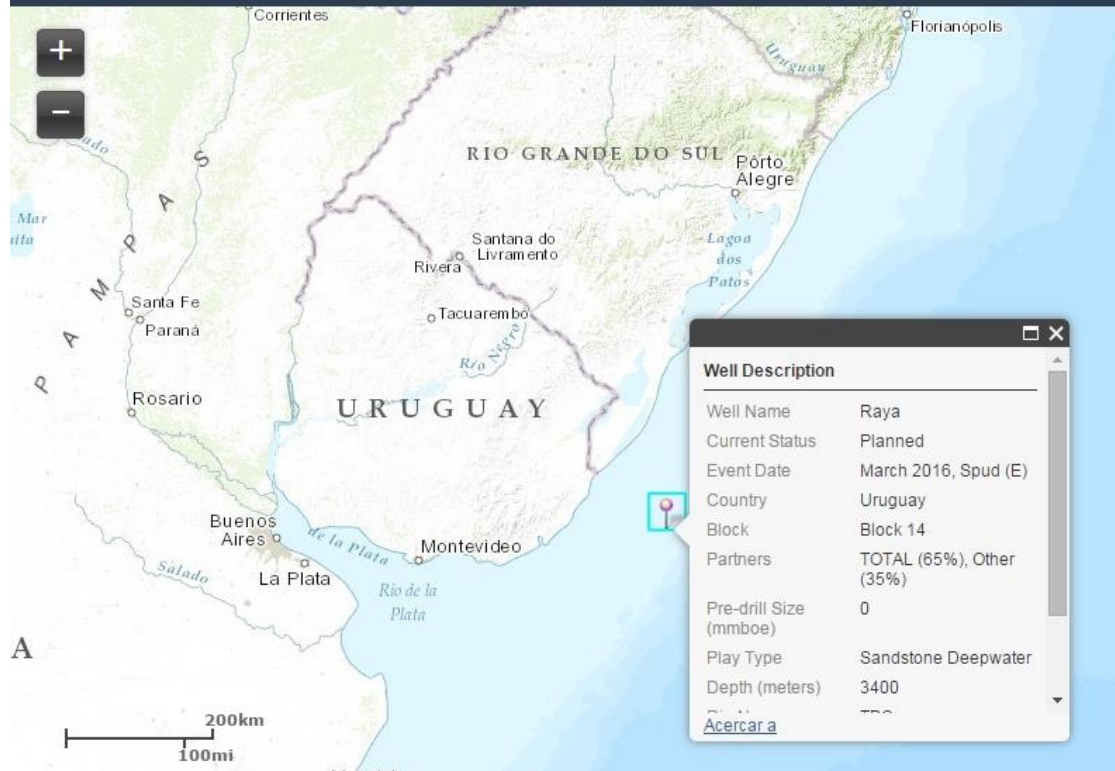
Exploration update: offshore

- Almost all working commitment has been completed:
 - 39.000Km² of 3D seismic
 - 13.500Km² of 3D EM
 - 3.000Km of 2D seismic
 - 250 seabed samples
- Maturation from play to prospect (Pre-Rift, Cretaceous and Tertiary).
- New multi-client products in place.
- BP has relinquished 3 areas and YPF 1 area.
- Farm-in activity:
 - Exxon-Mobil (35%) and Statoil (15%) in Block 14.
 - Inpex (30%) and Statoil (35%, in process) in Block 15.
- 1 ½ years extension of exploration period of all contracts in force offshore, due to downturn in upstream industry.
- Planning Uruguay Round 3.

Raya-1: World record well to be spud in March 2016 (3411 m WD)

Selected 2016 high-impact wells to watch





Ship Info

My Fleet

My Places



MAERSK VENTURER

Drilling Ship



TRACK

MORE INFO

UPLOAD PHOTO

FEB 20, 2016 15:21 UTC

Sailing to / ETA
RAYA-URAGUAY / Mar 10, 09:00

Course	Speed	Current draught
N/A	8.6 kn	14 m
Gross Tonnage	Built	IMO number
60683 t	2014	9633563

Last received ship position

FEB 20, 2016 15:21 UTC

Download **VT Explorer**
and track **85,000+** ships.

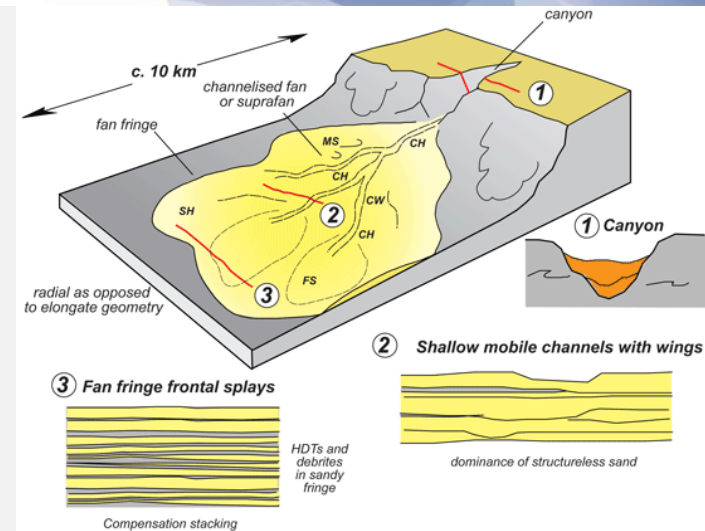
MAERSK VENTURER
FEB 20, 2016 15:21 UTC

<https://www.vesselfinder.com/>

Update: 20 Feb 2016

Uruguay

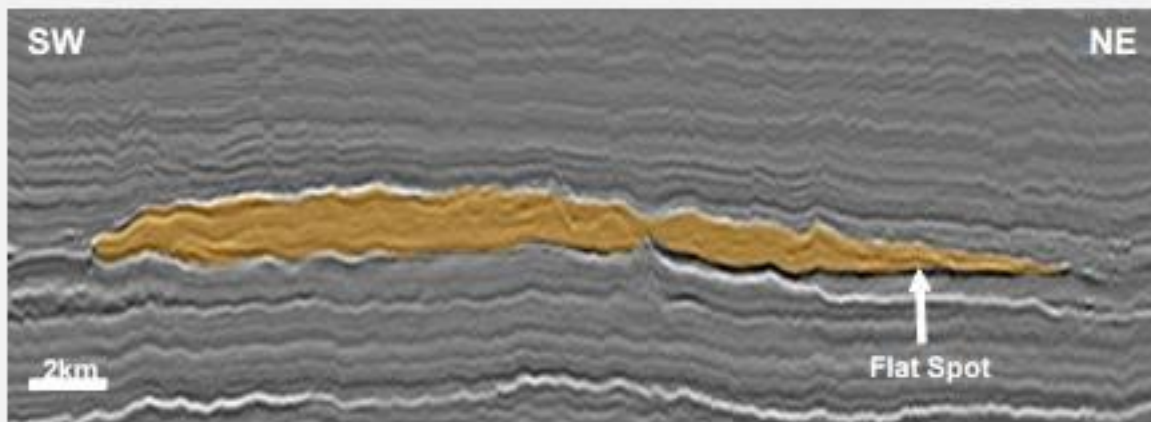
Raya-1



Submarine Fans

One of the most extended plays within Uruguayan offshore (identified in the 3 basins, within different stratigraphic positions from late Cretaceous to Oligocene), and an emerging proven play for the south Atlantic and equatorial margin.

Raya seismic section



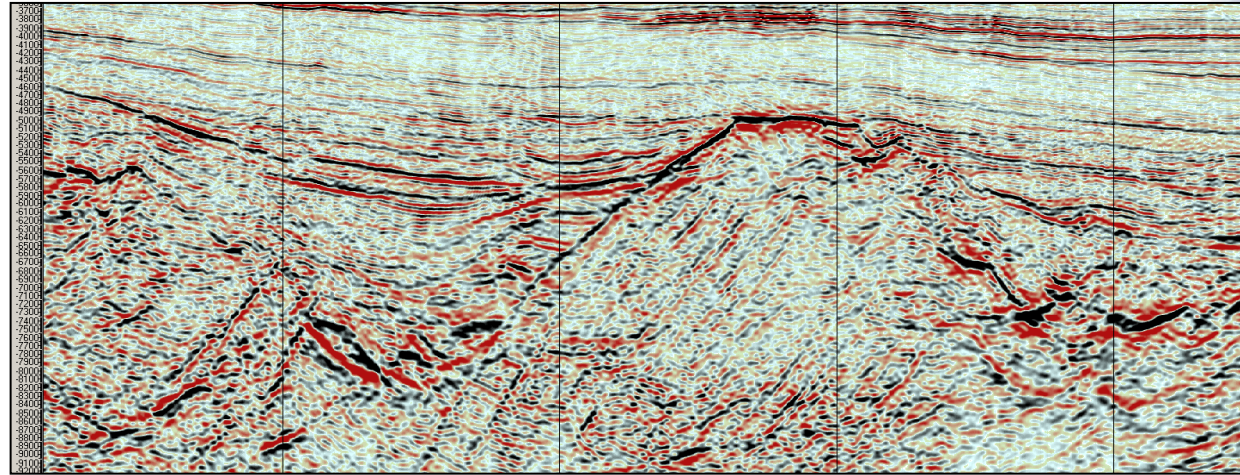
* DHI: direct hydrocarbon indication

Petroleum Systems

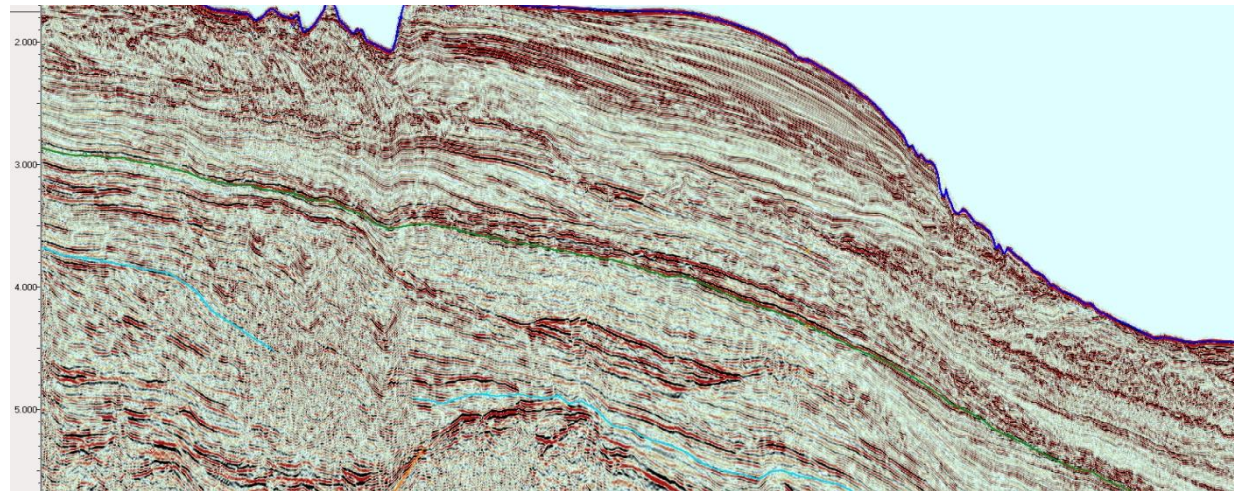
The following petroleum systems, based on offset and regional data, and analogous South Atlantic and continental basins:

- Pre-Rift.
- Syn-Rift.
- SDRs.
- Post-Rift: Aptian.
- Post-Rift: Turonian.
- Post-Rift: Paleocene.

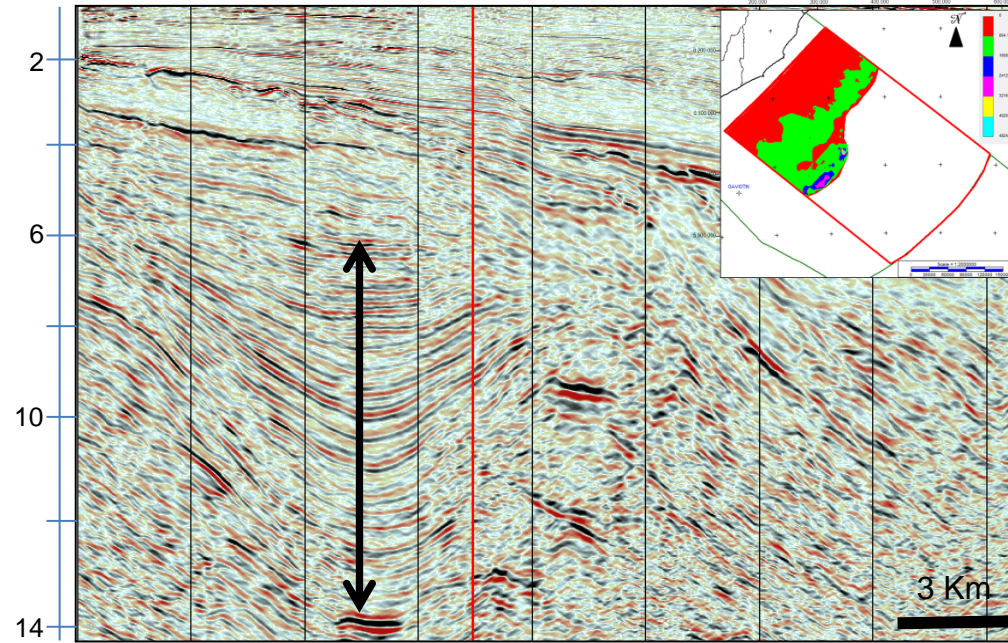
Some of them has been evaluated from **play to prospect**, after geophysical and geological data acquisition, and are ready to be drilled.



Syn-Rift: lacustrine shales feeding carbonate deposits on top of the horst



Turonian: Paleocene turbidite sourced by up-Cretaceous marine shales

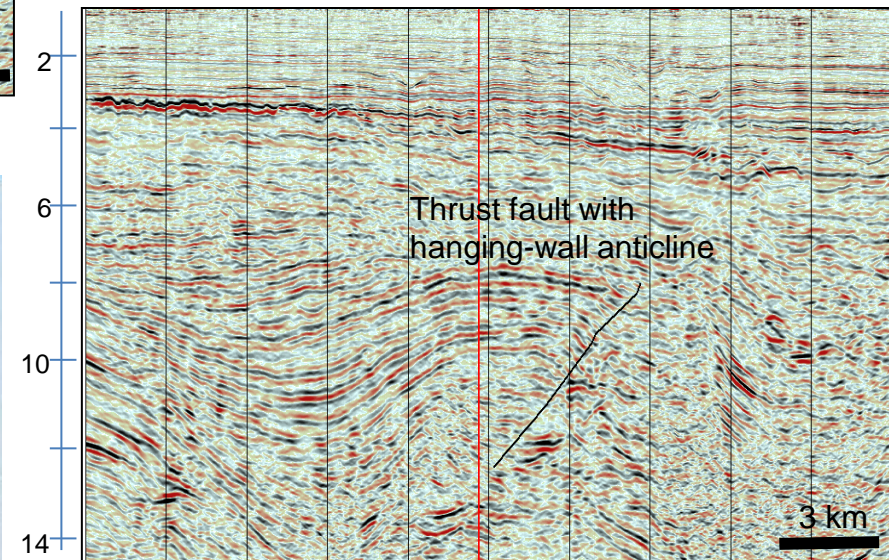


The level of deformation of the Paleozoic Pre-Rift is not identified in the Syn & Post-Rift seq.

Outcrop of Cordobés Fm.



Evidence of compressive events at the Paleozoic, Uruguay onshore outcrops.

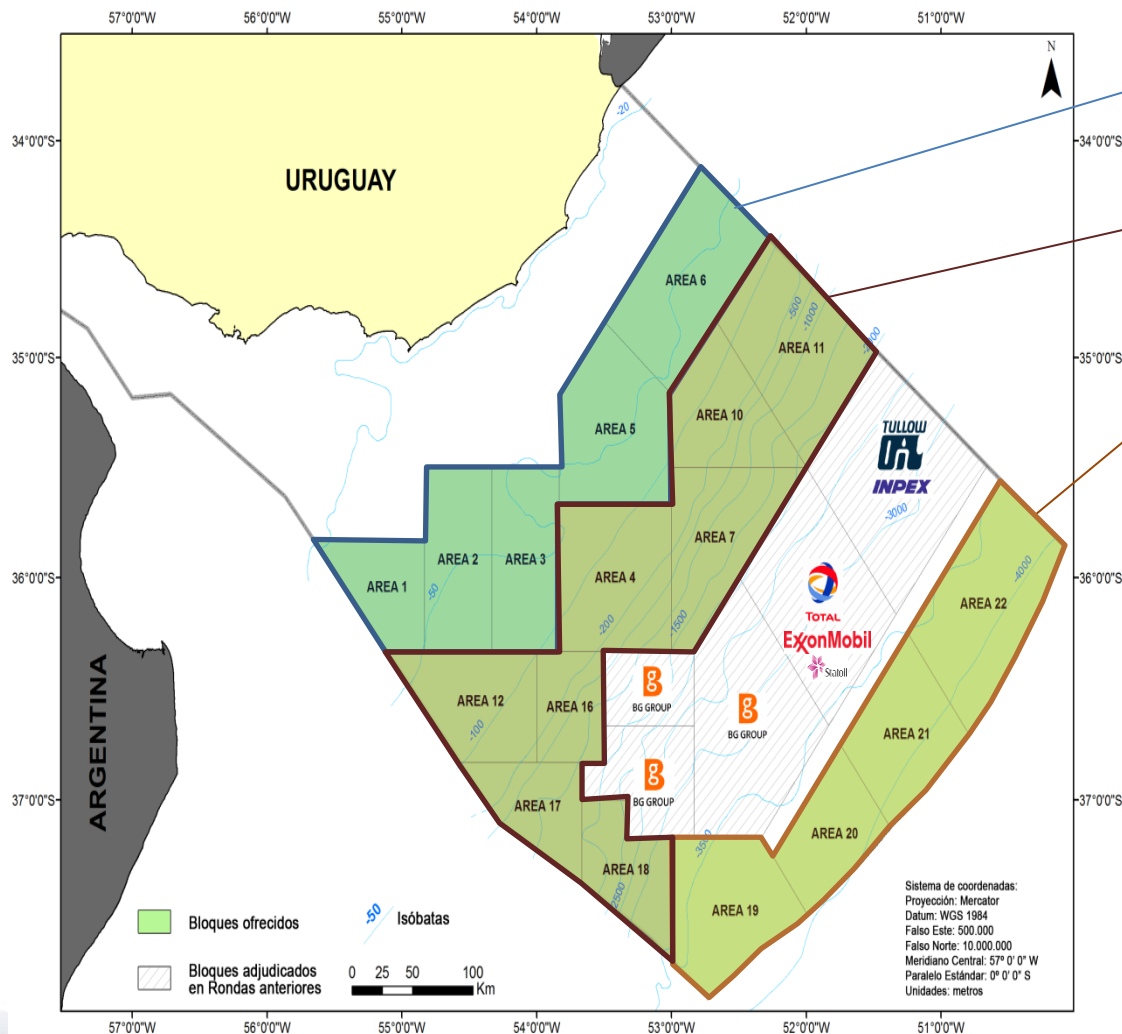


Km

Core of Mangrullo Fm.

Uruguay Round 3

Map of blocks



Areas Type I: Shallow waters, up to 100m
Lower qualification requirements for oil companies

Areas Type II: Deep waters, ranging from 100m up to 3500m

Areas Type III: Ultra-deep waters
Longer exploration periods
Higher cost recovery limits: 70% and 90% instead of 60% and 80% as for Areas Type I and II

17 blocks
From 2.500 to 6.500Km²
Avg. Size: 4.380Km²

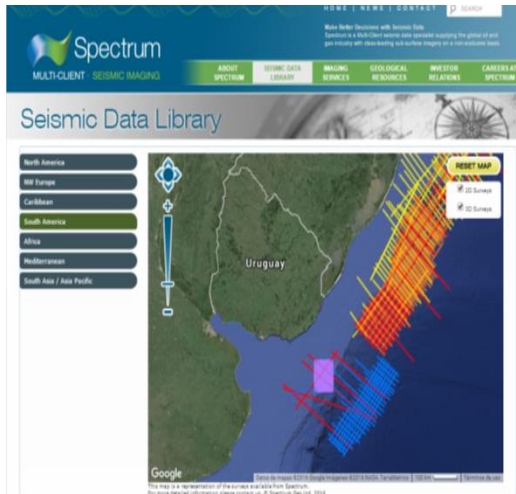
Map of Blocks is still a Draft until bidding round terms and contract model are officially approved by the Executive Branch.

Uruguay Round 3

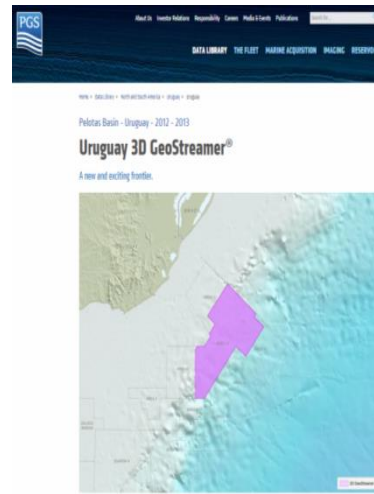
Main features of terms and contracts

- Definitive bidding round terms and contract model available since the official announcement
- Very similar to those applied in Uruguay Round II: PSC, biddable items: profit oil sharing, ANCAP's association and committed exploratory program
- Qualification of Oil Companies regarding legal, financial and technical documentation
- Licensing multi-client or ANCAP's data is not mandatory but will count as working units
- Some blocks can be awarded by just licensing existing data

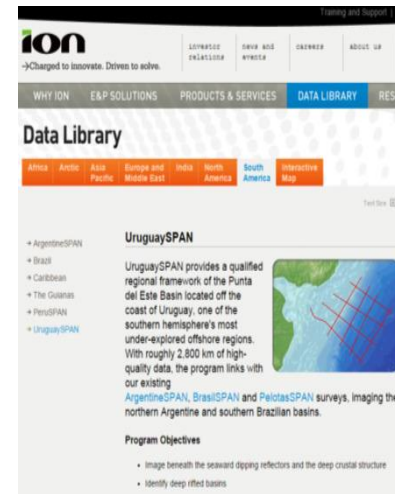
Data available through multi-client agreements



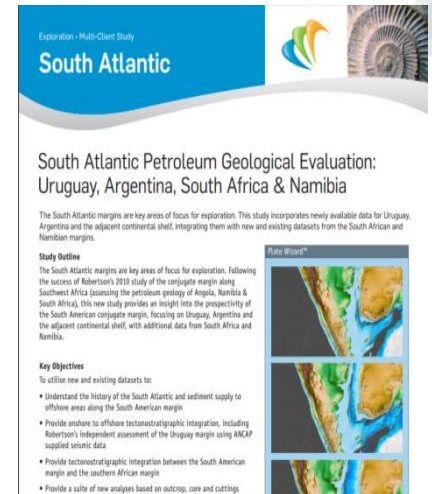
Spectrum: 10400Km of 2D seismic



PGS: 15700Km2 of 3D seismic



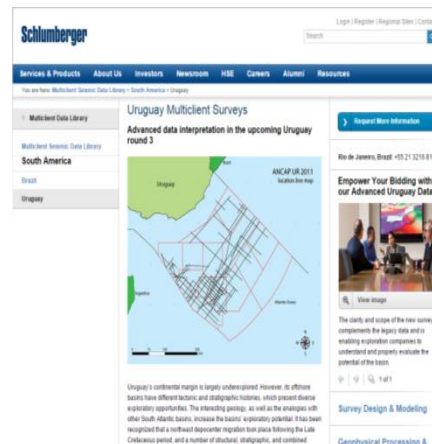
ION: 2800Km of 2D seismic



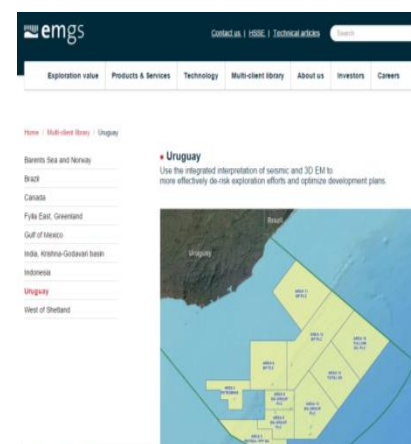
Robertson: 2 geological reports



FIT: Fluid Inclusions Study of Lobo and Gaviotin wells



Schlumberberger: Advanced Interpretation Data Package



EMGS: 3D CSEM (not acquired yet)

Other MC agreements, paperwork in progress:

- Robertson: geochemical database
- TGS: 2D seismic
- TGS: well logs
- ION: reprocessing of 10,000Km of 2D seismic
- ION: 3D seismic

Website

www.rondauruguay.gub.uy or
<http://exploracionyproduccion.ancap.com.uy/>



- Geological information about Uruguayan offshore and onshore basins
- Available E&P database
- Bidding round terms
- Map of offered areas
- Contract Model
- FAQs
- Contact information
- Videos and presentations

