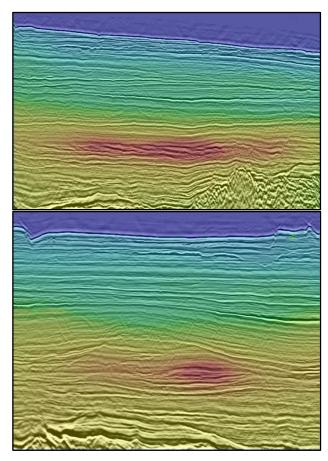


Uruguay 3D CSEM Multi-Client



Offshore Uruguay is frontier basin(s) with a significant hydrocarbon volume considered as undiscovered. Several stratigraphic prospects have been mapped in 3D seismic data. However, without proven discoveries the high-risk setting invites the integration of additional data in the exploration workflow. Controlled Source Electromagnetic (CSEM) provides information on the distribution of subsurface resistivity, de-risk fluid and charge, and in combination with seismic data significantly improves drilling decisions and increases the chance of commercial discoveries. Several worldwide case examples prove the impact of the CSEM data on the reduction of the risks associated to exploration failures.



Co-rendering of vertical resistivity & seismic amplitude. Dip and strike sections of the observed feature.

Exploratory program – Work units

The Open Uruguay Round grants one work unit (WU) on every 5,000 USD spent on the licensing of existing CSEM data in the offshore Uruguay, and 0.3 WU/ receiver reprocessed & re-interpreted. New acquisitions with processing & inversion products grant 3 WU/ receiver.*



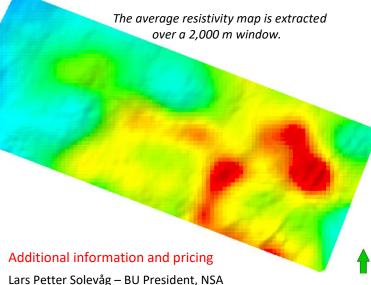
*https://exploracionyproduccion.anca p.com.uy/innovaportal/file/8317/1/op en-uruguay-round-26 07 2019.pdf

3D CSEM Resistivity Highlights

EMGS acquired a CSEM and MT proprietary survey in the Uruguayan deep-water setting in 2014. The data was reprocessed and inverted with the latest next generation Gauss-Newton inversion scheme.

The result of the unconstrained 3D inversion reveals an increase of vertical resistivity magnitude in the deeper subsurface. Within the Cretaceous sediments, some of the resistive features coincide with interpreted channelized deposits.

An average resistivity map extracted from the deep subsurface (see small subset of the survey area below) displays trends of elevated vertical resistivity with channel-like geometry.



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