

## Repsol sees light with Kaleidoscope

By *Jonathan Davis*

**Spain's Repsol YPF has teamed up with Spanish computer scientists and US imaging company 3DGeo to explore new seismic imaging technologies.**

Repsol said its Kaleidoscope Project partnership aimed to bring a new seismic imaging technique, Reverse Time Migration (RTM), into large-scale, routine deployment in the upstream sector.

It added RTM could help speed up and streamline exploration, and was well suited to mapping the very deep and highly complex structures below the Gulf of Mexico.

The company said the development of RTM imaging had so far been limited by the massive amounts of computing power the technique needs. It said the project aimed to overcome this by running RMT models and algorithms developed by Houston seismic research company 3DGeo on high-powered computer at the Barcelona Supercomputing Centre.

Repsol is also part of the Stanford Exploration Project (SEP), an industry-funded academic consortium working to develop improved 2D and 3D seismic systems.

"This collaboration will deliver a robust, first-to-market seismic imaging solution for Repsol- PF, well ahead of the competition," said Biondo Biondi, co-founder and chief technical advisor of 3DGeo, and an associate professor at Stanford University.

Repsol said the Kaleidoscope project aimed to reduce exploration risks in the Gulf of Mexico, where new reservoirs are being sought a depths of 40,000 feet or more, often below thick salt layers which inhibit many traditional seismic techniques.

"The Kaleidoscope project will allow us to maximise the value of our present assets and position the company as a key player in the deep and ultra-deep water exploration in the Gulf of Mexico," said Ramon Hernan, Repsol YPF's North American regional director.

*23:00 GMT, 15 November 2006 | last updated: 07:36 GMT, 21 November 2006*

**[back to story](#)**