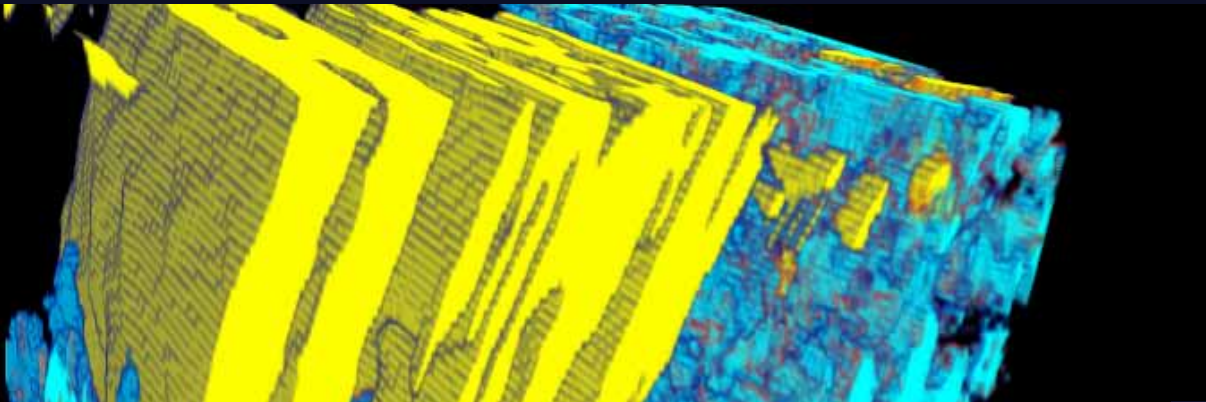


Customer Spotlight

FFA Sea 3D powered by Open Inventor®

Drawing a new standard for data driven analysis tools

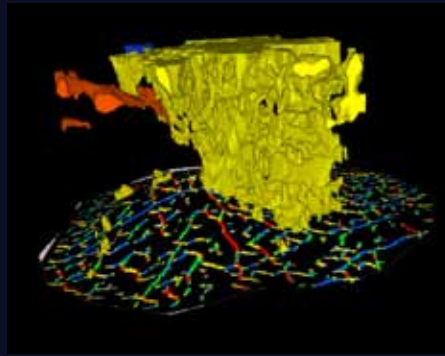
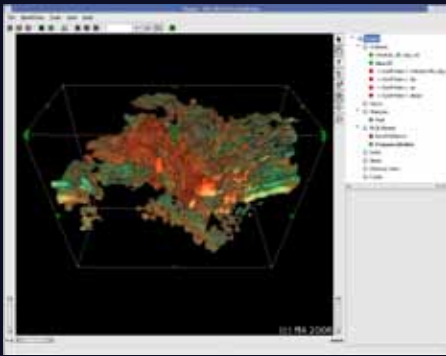


ffa is a world leading provider of software and services to the seismic interpretation segment of the global oil and gas market. ffa's image processing and analysis software enables geoscientists to enhance, identify and extract geological objects from 3D seismic datasets repeatably and objectively.

ffa seismic data processing workflows are both user guided and data driven, meaning that the extracted geological objects are highly detailed 3D representations of subsurface structure, at seismic resolution that provide insight and increase understanding of complex 3D geological systems. Results from ffa workflows are proven to provide significant gains in productivity and to reduce risk at all stages of the E&P cycle.

Drawing a new standard for data driven analysis tools

By Stephen Purves, Technical Director at ffa



RGB blend of a complex geobody representing gas migration pathways through a dataset. Changes in color clearly indicate the 3D variation in subsurface frequency properties throughout the geobody when opacity rendered.

A complex gas chimney geobody has been extracted along with its surrounding fault network.

ffa selected Open Inventor® by Mercury as the core 3D visualization component for its product line. Open Inventor® is an object-oriented, cross-platform 3D graphics toolkit for the development of industrial-strength interactive applications.

About the new release SEA 3D Pro 2008 for GeoProbe®

SEA 3D Pro 2008 is the latest version of ffa's popular seismic image analysis plug-in for GeoProbe®. SEA 3D Pro 2008 maintains the seamless integration with GeoProbe experienced previously, but now provides access to a much wider range of data processing modules in a user friendly environment that supports batch processing of user defined workflows.

This expanded range of modules incorporates ffa's noise cancellation, fault imaging and seismic attribute generation capabilities including CarbApp, a new workflow specifically developed for highlighting geological features within complex carbonate environments.

SEA 3D Pro users can optionally enter an expanded data processing environment, which provides access to advanced interactive workflows, including ffa's industry leading Frequency Decomposition and RGB blending functionality, built around a flexible visualization environment implemented using Mercury Open Inventor® and VolumeViz LDM 3D Graphics Software Development Kits.

Leveraging the GPU for computation via Open Inventor®'s current shader-based capabilities has allowed us to create a very powerful, highly interactive workflow for Seismic Facies Analysis. The level of interaction achieved approaches real time, and provides geoscientists with the ability to analyze seismic facies and fine tune a classification result across a whole dataset rapidly, rather than having to generate multiple classified volumes on disk. This level of interaction and responsiveness represents a new standard for the type of flexible, user guided but data driven analysis tools that we provide, and we will be taking this further in the future. To achieve this, we will be moving our suite of sophisticated seismic image analysis algorithms to the NVIDIA® CUDA™ API and bringing this together with CUDA-enabled Mercury Open Inventor® and VolumeViz SDKs to provide the next generation of data driven seismic interpretation tool.

Images: ffa

About Open Inventor®

Open Inventor® by Mercury provides the power and functionality of OpenGL® at an object-oriented level. Its extensible architecture, its large set of advanced components, including seamless integration between visualization and GPU computation, provide developers with a high-level platform for rapid development of the most demanding 3D graphics applications.

About ffa

Foster Findlay Associates Limited ("ffa") is a world leader in the development and commercialisation of 3D seismic image processing technology for the oil and gas industry.



www.ffa.co.uk



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