

Improve Your Prospects with ffA Software & Services

“screen large amounts of 3D seismic data quickly, dynamically and effectively”

ffA's unique 3D Seismic Analysis Software and Services are designed to investigate and extract geological features from 3D seismic data, objectively and more thoroughly than with conventional techniques. The tools assist geoscientists and engineers to make better decisions with higher confidence, in less time.

ffA Software: User-Friendly and Comprehensive 3D Seismic Analysis Tools on Your Desktop

SVI Pro is ffA's flagship standalone Windows application.

SEA 3D Pro is a Linux application with the option for direct integration with GeoProbe.™

Both applications have a flexible licensing system with access to Core functionality and optional modules which include:

- High performance processing and visualisation of 8, 16 and 32 bit data
- Unlimited volume size with disk to disk processing
- GPU accelerated processing and advanced visualisation
- Access to ffA's unique volumetric Frequency Decomposition, Interactive 3D Facies Classification, colour blending and multi attribute rendering techniques
- Batch Processing facility to improve workflow efficiency

ffA Services: Your 3D Seismic Analysis Partner

Choosing to work with ffA Services experts will save you time and give you confidence that your seismic has been fully investigated. By accessing ffA's full range of image processing and analysis functionality our experts will work with you to tailor make workflows based on the characteristics of your data and your interpretation objectives. The ffA Services team has the skills and experience to turn out quality results from 3D data everytime.

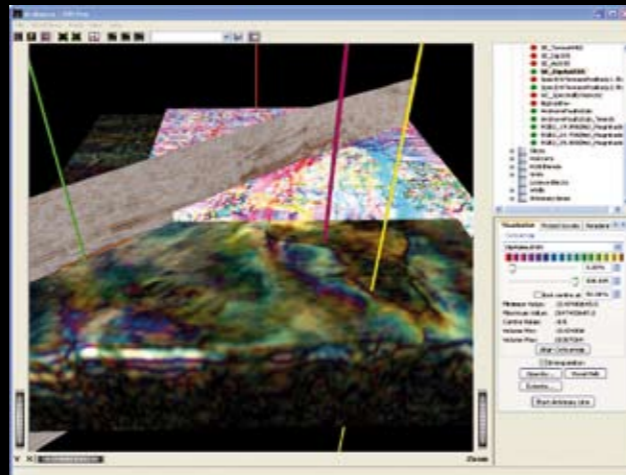
ffA provide specialist onsite seismic analysis consultancy and training.

ffA R&D Collaborations: Rapid and Client Focused Development of New Technology

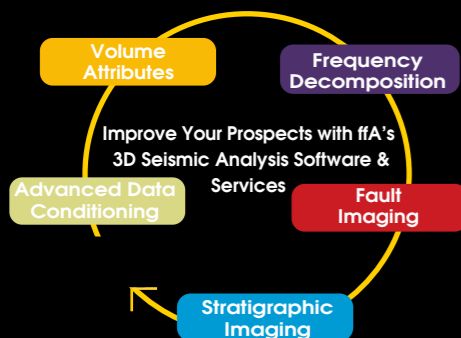
In parallel with an internal development program, ffA has a continuous and proven track record of R&D collaborations with oil and gas operators to provide the most powerful 3D seismic analysis tool on the market.

“We see SVI Pro as a vital link in our workflows and will contribute to many aspects of our value chain. The cooperation with ffA will allow us to remain at the forefront of emerging technology and to screen large amounts of 3D seismic data quickly, dynamically and effectively”.

Paul Spencer, Chief Geologist, Genesis Petroleum



ffA Software has been proven all around the world in a vast range of geological settings, both onshore and offshore



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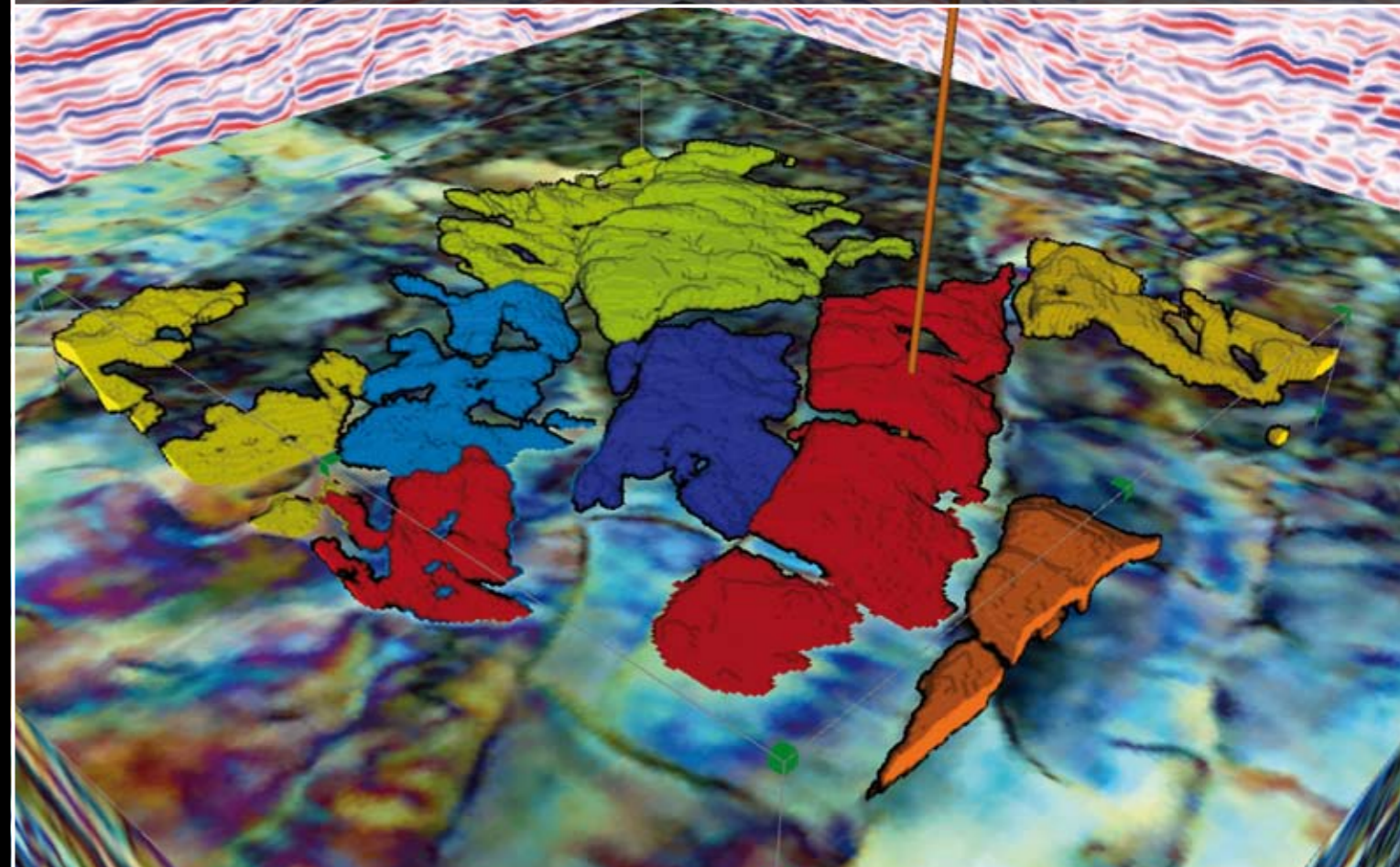
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Innovation • Vision • Performance

Improve Your E&P Success with ffA's Unique 3D Seismic Analysis Software & Services



Advanced Data
Conditioning

Volume
Attributes

Frequency
Decomposition

Fault
Imaging

Stratigraphic
Imaging

ffA's seismic analysis Software and Services produce objective and accurate 3D images of oil and gas reservoirs with unprecedented speed and clarity.

Delivering the Next Generation 3D Seismic Analysis Tools to Your Desktop Today...

Gain a Rapid, Accurate and Objective 3D Image of the Subsurface

Understanding and managing subsurface risk is fundamental to the success of drilling, well planning and reservoir engineering. The technological challenge is to transform large volumes of 3D seismic data into information, efficiently and reliably to increase the probability of success.

ffA responds to this challenge by providing tools for effectively extracting geological information from 3D seismic data. The results are generated quicker and more accurately than with conventional techniques and are delivered in the form of seismic cubes which can support all stages of the exploration and production cycle including seismic interpretation, prospect generation, target definition and well planning.

Structural and Stratigraphic Attributes

Understand Your Geological Settings without Interpretation

ffA's extensive volumetric attributes suite identify even subtle character changes within the data. Attributes include Trace, Wavelet, Texture, Orientation and Curvature attributes and highlight structural and stratigraphic features at both regional and local scale.

Advanced Data Conditioning

Improve Your Seismic Image Quality, Avoid an Expensive Re-Processing Exercise

Noise Cancellation

Interpret, Avoid guess work

Access the most sophisticated Noise Cancellation Algorithms available in the marketplace to:

- Enhance your Seismic Image
- Bring more accuracy to your manual interpretation
- Stabilise your auto-tracker
- Compute better quality attributes

Spectral Whitening

Increase the Resolution, Not the Noise

The Spectral Whitening workflow combines volumetric frequency analysis techniques with advanced 3D adaptive noise cancellation. The workflow improves event continuity and produces a detailed seismic image for:

- Enhanced imaging of large and small scale faults
- Improved attribute extraction and analysis
- A more accurate event thickness estimation

Results

A detailed structural and stratigraphic workflow over 500 km² of 3D seismic can be achieved in 2 weeks, giving you more time to explore multiple interpretation scenarios.

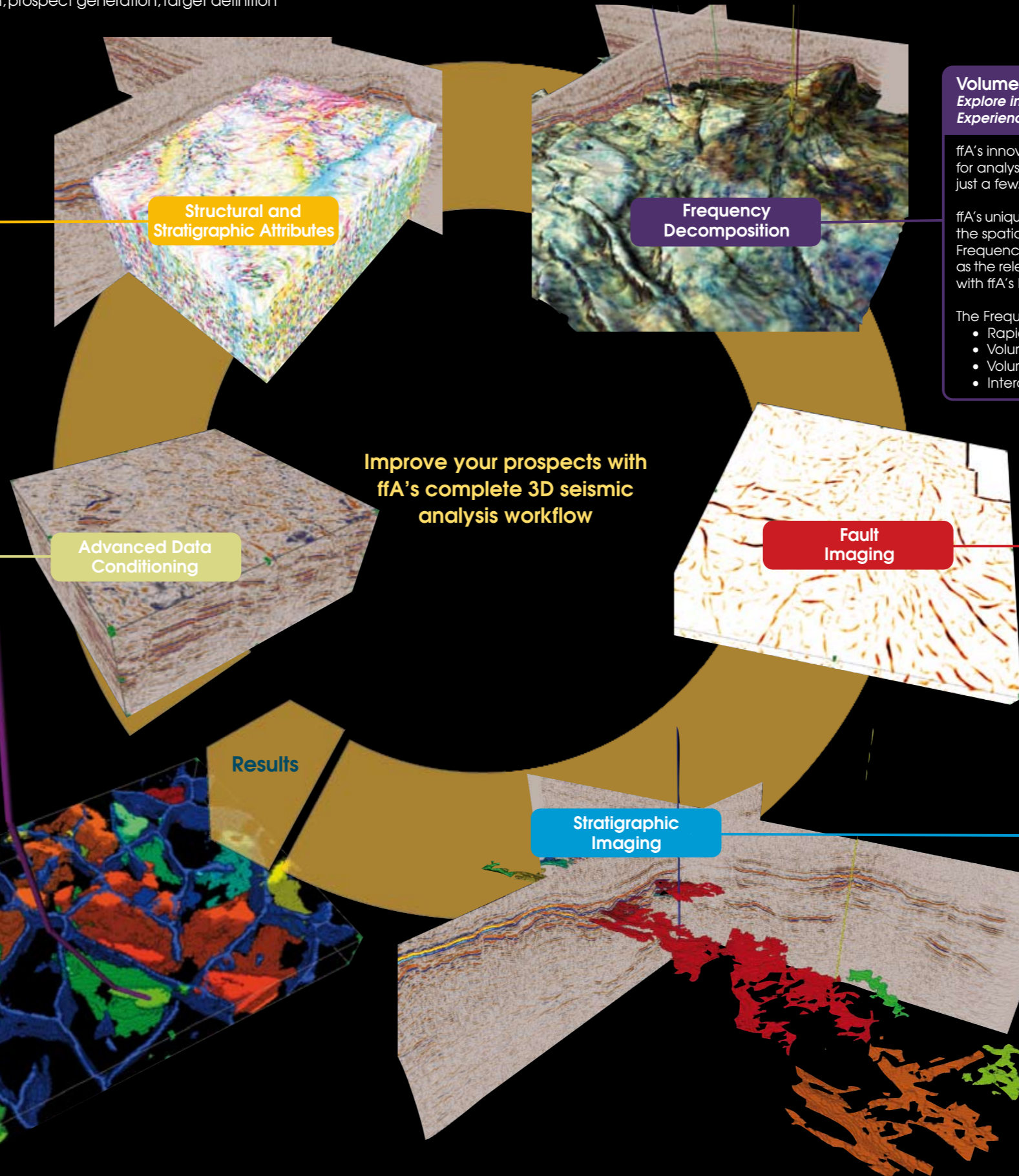
The final volumes are then incorporated into your existing G&G workflows to achieve significant gains in productivity and reduce risks at all stages of the E&P cycle, including:

- Seismic Interpretation
- Prospect generation & evaluation
- 3D Modelling
- Estimation of reserves
- Well planning & target selection

Access Powerful and Flexible 3D Workflows

The ffA Workflows provides geoscientists and engineers with an objective and repeatable semi-automated method to highlight, enhance and extract geological features imaged within 3D seismic data. The volumes generated contain the information required for a comprehensive understanding of the subsurface, without pre-interpretation.

The ffA workflows are based on highly flexible modules and can be adapted depending on the interpreter's objectives, the geology and the quality of the seismic.



Volumetric Frequency Decomposition

Explore in the Frequency Domain with Clarity You Have Never Experienced Before

ffA's innovative frequency analysis techniques have been applied and proven for analysing subtle fractures, thin beds, channels and fluid content to name just a few.

ffA's unique RGB blending techniques provide a new approach for investigating the spatial variation of multiple frequency groups by blending up to three Frequency volumes at high resolution. The workflow goes beyond visualisation as the relevant geological features are extracted directly from the RGB volume with ffA's RGB multi-attribute 3D Geobody delineation technology.

The Frequency Decomposition workflow incorporates:

- Rapid slice / horizon based workflow parameterisation
- Volumetric magnitude and phase frequency response computation
- Volumetric multi-attribute RGB visualisation
- Interactive multi-attribute RGB GeoBody delineation

Fault Imaging

Access the Most Comprehensive Fault Imaging Toolset in the Market Place

With ffA's Fault Imaging workflow you can start interpreting with an accurately defined fault network. The workflow is designed to be optimised for various fault expressions independently of data quality.

The resulting volumes are ideal for:

- Manual Fault Picking
- Automated Fault Surface Generation
- Horizon auto-tracking
- De-risking of well-planning

Stratigraphic Imaging

Choose The Right Tool For Your Stratigraphic Environment

ffA's stratigraphic imaging workflows provide tools to highlight, extract and analyse even the most complex 3D geo-object. The results will improve your interpretation, your 3D model building and your well-planning decisions.

The workflow contains many ways to analyse in detail the signatures which define the geological objects, including computation of single trace and 3D multi-trace attributes, spatial frequency analysis and more statistical orientation vector analysis.

Multiple approaches are available to extract the geo-objects, including:

- Interactive Facies Classification
- Single Attribute threshold extraction
- Single and Multi Attribute mathematical extraction
- Multi Attribute RGB blend extraction
- 2D and 3D Attribute crossplot extraction
- Direct Hydrocarbon Indicator