



# SEA 3D for GeoFrame GeoViz

The advanced seismic volume interpretation tool  
*Available on Sun, SGI and Linux platforms*

**StratApp**  
*Swift, Accurate and Objective  
Stratigraphic Results*

SEA 3D™ for GeoFrame® GeoViz® from ffa offers a unique, flexible and powerful combination of interactive tools for rapid volume interpretation. Designed with the user in mind, it can be applied at every stage of the interpretation cycle from exploration to development.

SEA 3D processes volumes currently loaded in GeoFrame GeoViz and produces seismic volumes immediately visible in 3D. It allows an objective and repeatable interpretation for rapid insight into the structure and geology as well as a detailed understanding of the reservoir.

With a user-friendly interface, parameters can easily be modified and the results used for different scenarios or risk assessment.

When saved back into the GeoFrame database the volumes can also become an input for the 3D reservoir model.

*ffa is a world-leading originator and provider of high quality 3D image processing and analysis software to the Oil and Gas industry. ffa also provides advanced volume processing and interpretation consultancy services to customers around the world.*

**SEA 3D is based on proven technology developed in collaboration with many O&G majors**

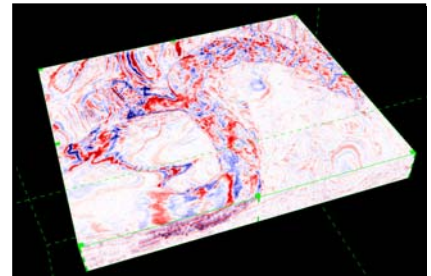
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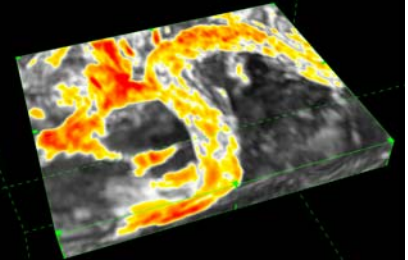
### SeisMine Noise Filter

Applies a structurally orientated noise filter to the reflectivity data to enhance a complex channel system



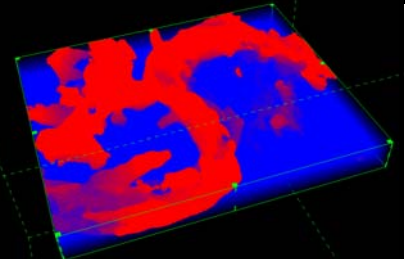
### Texture

Computes an attribute volume highlighting the high amplitude and chaotic areas



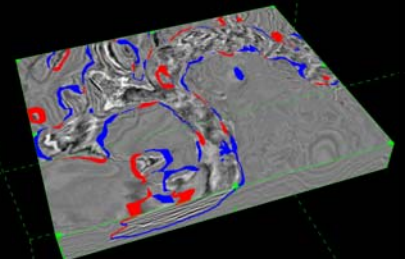
### BodyLabel

Extracts and labels the channel system. This seismic volume can be used as an input for 3D facies modelling



### Surfaceln

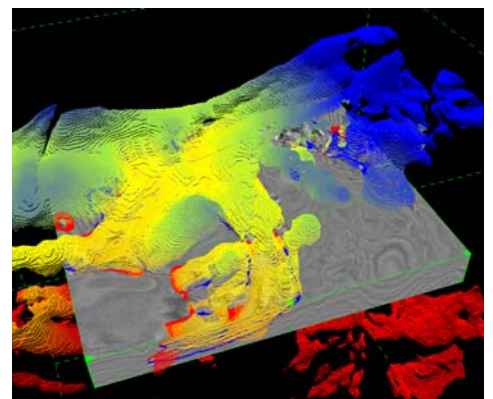
Embeds the upper and lower surfaces of the body into the reflectivity data



**WORKFLOW ACHIEVABLE IN JUST 2 DAYS**

### ASAP in GeoViz

Auto-tracks an horizon on the upper surface of the detected body in a couple of minutes



Images supplied by and used with permission of Schlumberger ©

# SEA 3D v2.2

Multi-threaded for enhanced performance  
Available with the following enhancements

*\*Multithreaded functionality*

## StructApp

### **\*DipAzimuth**

*Improved simpler interface  
New algorithm*

### **DACombine**

## FaultApp

*FaultSmooth has been removed  
Functionality now in SeisMine, SONoise*

### **FaultAttribute**

*Improved interface and 2 new attributes*

### **\*FaultEnhance**

*New module, improves fault continuity*

### **\*FaultImage**

### **\*FaultIn**

## StratApp

### **\*Texture**

*Improved, simpler interface  
Allows choice of output volume*

### **BodyLabel**

*Unchanged*

### **\*Surface**

*Split into two new filters for ease of use*

### **Thickness**

*Unchanged*

### **\*Edge**

### **\*Channel**

## SeisMine

### **\*Border**

*New tool to remove processing edge effects*

### **\*Noise Filter**

*Min and Max new options*

### **SO Noise Filter**

*Structurally oriented noise cancellation filters*

### **BodyLabelling**

*Unchanged*

### **\*CookieCutter**

## SeisMath and SeisMath+

### **\*Attributes**

### **StdDeviation**

*Unchanged*

### **Terrace**

*Improved, simpler interface*

### **\*VoxelMath**

### **\*Parser**

## FaultApp

*Structural insight in days not months!*

### **DAY1 SeisMine SO Noise Filter**

Applies a structurally orientated noise filter to the reflectivity cube

### **DAY2 FaultAttribute**

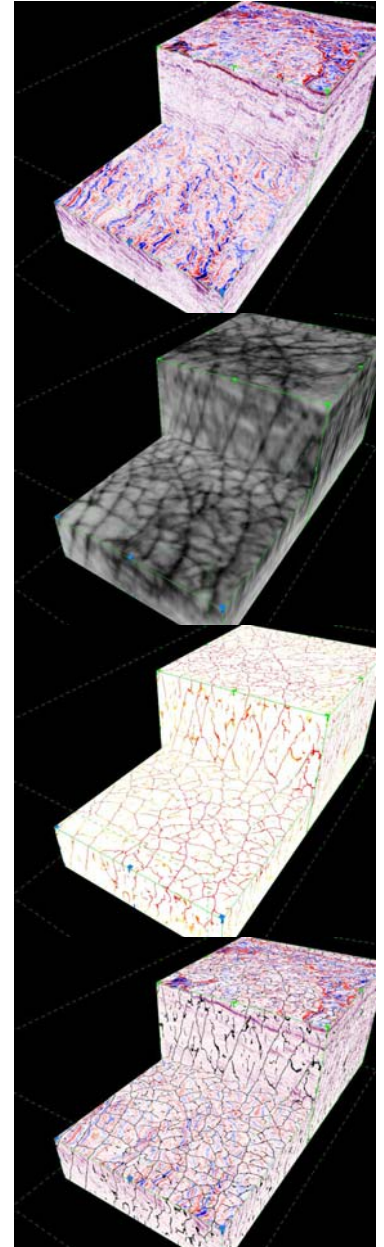
Highlights the probability of faulting with good continuity in the XY and Z directions

### **DAY3 FaultImage**

Detects the greatest fault probability from the FaultAttribute volume

### **DAY3 FaultIn**

Embeds the FaultImage results within the reflectivity volume



FaultApp provided a more accurate and complete set of results in a few days (black and white) than the original 12 week manual interpretation (in multiple colours)

Data courtesy of Hydro

