



# GeoSyn™

Powerful, easy to use analysis software correlating digital log data to seismic

Incorporate your wellbore geology with your seismic data in a convenient, easy-to-use software interface, GeoSyn.

Our GeoSyn 1D and 2D modeling increases the understanding of key formation, their resolution, phase and fluid response which is a critical step in the reservoir modeling workflow.

This type of pre-modeling has proven invaluable when it comes to anticipating the complex challenges associated with drilling in new environments or increasing production in an existing field.

**Cost effective and easy-to-use, GeoSyn is a synthetic generation, AVO analysis and 2D modeling package designed for geoscientists. Quickly go from data access and viewing, to analysis, to seamlessly exporting synthetics and 2D models into your geophysical interpretation workstation of choice.** GeoSyn enables you to test multiple scenarios for best results.

## GeoSyn 1D & AVO

Create synthetics to view digital log data in conjunction with your seismic. Use AVO functionality to perform in-depth analysis.

### Data Access

Easily import proprietary LAS logs or IHS Markit Digital Logs from our North American log database.

### Data Display

Create multiple templates to easily display numerous data elements (directory paths, logs, traces) in your synthetic display. Clip any data element to create a montage.

### Data Management

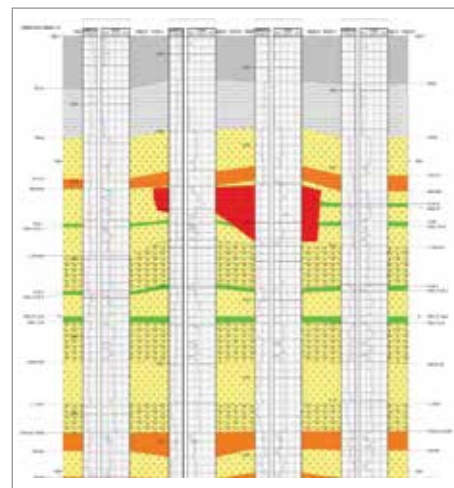
Use the Directory Browser to manage GeoSyn and LAS format files; includes main and subdirectories for better organization. Sort files by UWI and further filter by extension or geographic coordinates.

### Export Data

Export numerous data types including tops, directional surveys, logs, and synthetic models into ASCII text, LAS and SEG Y format.

### Link to AccuMap® Tops Database

When creating a new synthetic or launching an existing one, GeoSyn automatically downloads the latest system tops and user downloads from your local AccuMap database.



## GeoSyn 1D & AVO continued:

### Seismic

Import and display single-trace and multi-trace seismic data into the SEGY Viewer. Tie seismic to your synthetics using cross correlation and stretch and squeeze functionality.

### Modeling (traces)

Create zero-offset, multi-offset, or derived models. Also create blocked log models to eliminate potential tuning effects.

## AVO to improve the tie between geology and geophysics

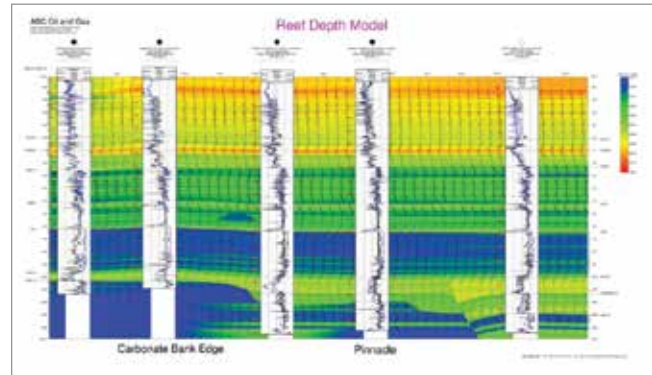
Import SEGY files for forward and reverse AVO modeling, taking the characteristics of coif stack data and applying them directly to your synthetic data. Cross-plotting functionality enables users to use data from logs, seismic, and models, including AVO attributes in the synthetic for the X and Y axes.

### Key Functionality

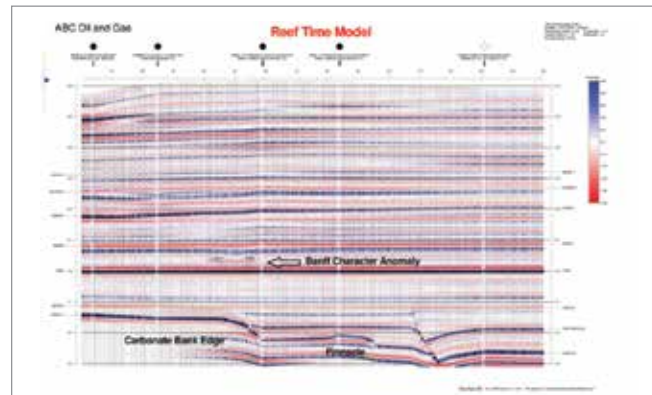
- Perform Gassmann's fluid substitution
- Generate theoretical wavelets
- Extract statistical wavelets from 2D or 3D line segments
- Generate synthetics with or without check shot corrections
- Automatic gain control on synthetics
- Use the comprehensive log calculator for predefined and user-defined complex equations and curve-to-curve math

## GeoSyn 2D: Get a Time vs. Depth Perspective

GeoSyn 2D enables geoscientists to get a complete depth and time perspective. Build your structural and stratigraphic model using IHS Markit Digital Logs or your own LAS files, fill in features like faults and reefs and plot and modify inter-well curve zones and log readings to develop a likely geological scenario. View the scenario in the pseudo-seismic time model.



- Flatten on any horizon
- Specify stretch/squeeze top or bottom removal interpolation for any part of the model
- Full log edit functionality
- Advanced automatic correlation option



Quickly and iteratively turn cross-section depth models into pseudo-seismic sections ready for export to your workstation (SEGY format to aid with interpretation).

For more information [www.ihsmarkit.com](http://www.ihsmarkit.com)

### CUSTOMER CARE AMERICAS

T +1 800 447 2273  
+1 303 858-6187 (Outside US/Canada)

### CUSTOMER CARE EUROPE, MIDDLE EAST, AFRICA

T +44 1344 328 300

### CUSTOMER CARE ASIA PACIFIC

T +604 291 3600

E [CustomerCare@ihsmarkit.com](mailto:CustomerCare@ihsmarkit.com)

## About IHS Markit

IHS Markit (Nasdaq: INFO) is a world leader in critical information, analytics and solutions for the major industries and markets that drive economies worldwide. The company delivers next-generation information, analytics and solutions to customers in business, finance and government, improving their operational efficiency and providing deep insights that lead to well-informed, confident decisions. IHS Markit has more than 50,000 key business and government customers, including 85 percent of the Fortune Global 500 and the world's leading financial institutions. Headquartered in London, IHS Markit is committed to sustainable, profitable growth.