

ReModel — 3-D Model for Geological Analysis and Data Management



ReModel is used to display reservoirs in 3D by importing geological data from pre-built geological models and/or reservoir simulation results. ReModel provides geologists and engineers with the ability to spatially analyze oil and gas reservoirs in a visual 3D environment and allows geological models to be more fully correlated to production analysis.

Main Functions

Data Import from Various Sources

- Support ASCII code input from popular geological models and reservoir simulators
- Support corner-point and block-center data format

3-D Grid Display

- High-precision display of geological information - spatial distribution of sand bodies, formation attributes, facies belt and flow unit, etc.
- Display Capabilities include: - rotate, zoom, shift 3-D model with dot view, wireframe or combined view, etc.
- Display by layer, block fault, attribute and/or level
- Animated display of reservoir cross-section along I, J, K (X,Y,Z)- direction or in time series order.

Flexible Model Editing

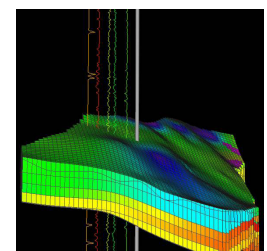
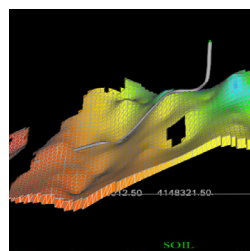
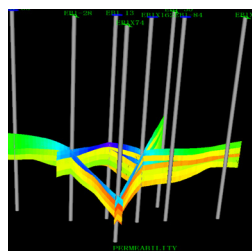
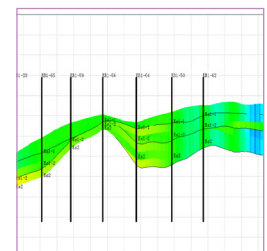
- Versatile and easy to use editing capabilities - single well or multi-well reservoir cross-sections, etc. allowing engineers to quickly visualize and to better understand between-well geological relationships and reservoir attributes distribution.
- Any zone of interest can be sliced in the 3-D reservoir geological model and its associated reserves can also be determined. Results can be exported to any reservoir simulator for further analysis.

Advanced 2-D Map Display

- 2-D map display by different layers or by various attributes
- Output could be in various types of image formats (BMP, JPG and Gif, etc.)

Statistical Analysis and Reserve Estimation Capabilities

- Generate statistics reports to better understand subsurface properties distribution
- Reserves estimation for the entire reservoir or regions of the pool





ReModel — 3-D Model for Geological Analysis and Data Management

Single Well Information Display

- Information display on single well or multi-well cross-section
- Instant display of well related information - location, trajectory, logs and subzone, etc.

Filtering

- Filtering makes it easy to illustrate reservoir attribute variation at different intervals and spatial distribution of sand bodies

Upscaling

- Scale used by the geological model can be easily modified and resulting upscaled model can be exported to reservoir simulators.

Contour Mapping

- Multiple contour mapping functions, including 3-D model surface tracking and mapping, 2-D and 3-D reservoir model based contour, well scatter based 2-D contour and joint attributes contour with color and iso-line representing different attribute.

2-D Reservoir Cross-Section

- Simple 2-D cross-sections can be easily generated from a 3-D cross-section. The 2-D cross-section can include single- and multiple wells.

Main Features

- 3-D model display by multi-modes
Display 3D model by dot, wireframe, solid or any combinations of three modes.
- Convenient 3-D model operations
Provide flexible, quick and convenient operations such as rotation, zoom or shift as well as cross-section
Reservoir cross-sections can be performed for single or multiplewells; and image can also be saved.
- Easy and quick data access and transformation. ReModel supports seamless database connection, data uploading and downloading andmanagement of model and well dataset.
- Display geological and reservoir characteristics, , static well data and dynamic production data to understand current production behavior and to identify potential production issues.

PEOffice® is a PC/network-based software platform for integrating oil and gas reservoir management, production analysis and design. PEOffice® provides systematic computations and comprehensive analysis for reservoir model management, reservoir performance analysis, production problem diagnosis, optimized design of production parameters and analysis of oil/gas gathering and transportation system. PEOffice is widely utilized by petroleum engineers onsite and in the back office to resolve production problems and to manage oil and gas field development.



Houston

11111 Richmond Avenue, Suite 142 Houston, TX 77082 USA
Phone 1-713-787-6622 Fax 1-713-787-6623
Email optus@optpt.com

Beijing

C2001, SP Tower, Tsinghua Science Park, Beijing 100084, China
Phone 86-10-8215 0090 Fax 86-10- 82150277
Email optcn@optpt.com