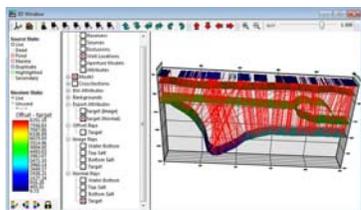


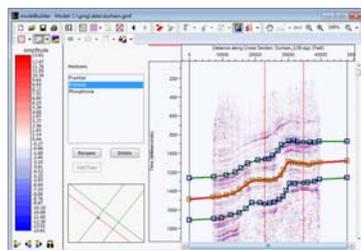


MESA® 12

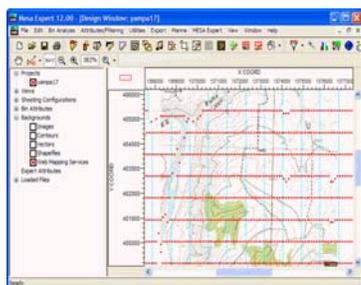
ACQUISITION SURVEY DESIGN & 3D MODELING



Simplified workflow



Building models from seismic data



Web Mapping service

MESA is the world's leading software package for designing seismic acquisition surveys. Since MESA was first released in 1993, we have worked continuously to add functionality, improve performance, and enhance the user's experience. MESA delivers decision-making functionality that can make even the most complex acquisition program a success. MESA's chief functionality includes:

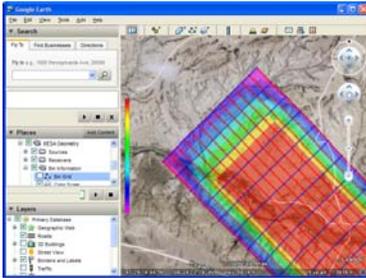
- Survey design and subsurface coverage analysis for 3D/3C and VSP surveys
- Geologic modeling, ray tracing, and illumination analysis
- Chronological project tracking and crew production statistics

The primary development focus of MESA 12 is the reorganization of the user interface to simplify the workflow. We have added a Project Tree, that now controls the display of data, and allows easier access to program functions. In addition to user interface improvements, MESA 12 includes several new features.

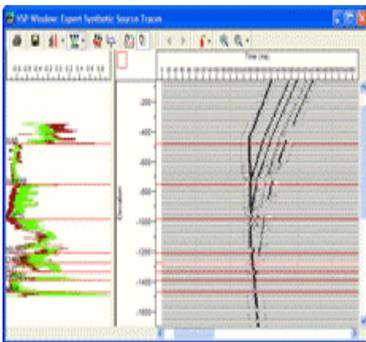
Highlights and New Features of MESA 12

User interface improvements include:

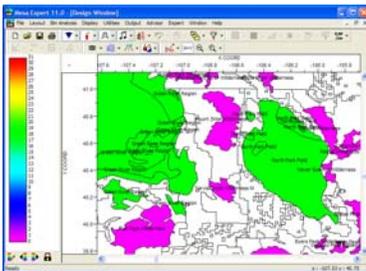
- Easier management of multiple projects, bin attribute calculations, and images, maps, and attributes
- Improved ergonomics
- Automatic loading of all auxiliary data files
- Web Mapping Service (WMS) for online access to maps and imagery
- Parallelized version of the enhanced raytracer
- Importing of latitude/longitude data
- Improved handling of GeoTiff and DXF data
- Improved gridding and importing of model horizons



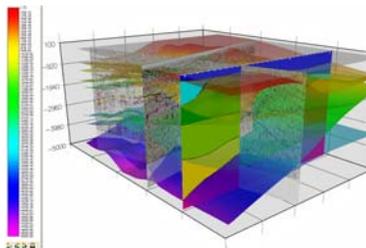
Google Earth Interface curves



Well log integration for VSP modeling



Shape file import/export



Model building

MESA's comprehensive suite of products includes:

MESA Field

MESA Field provides everything required to build, manipulate, and analyze designs. Designed to address the day-to-day needs of the field operation from a functionality perspective, MESA Field is ideal for users who want advanced 3D acquisition planning capability with a basic analysis package.

MESA Professional

MESA Professional provides a complete set of tools for 3D, full-wave and VSP design and analysis, including the MESA Advisor geophysical and array design calculator and MESA Marine for streamer survey design.

MESA Expert

The ultimate 3D survey design tool, MESA Expert incorporates all of the features of MESA Professional and adds geologic modeling and enhanced ray tracing to demonstrate how seismic energy behaves in the earth model. MESA Expert's forward modeling provides answers to questions regarding illumination and multicomponent acquisition, improving the 3D/3C design process, facilitating more informed decision-making, and creating confidence in the optimization of the survey design for the subsurface objectives.

The improved workflows and ergonomics of the latest releases make survey design more efficient, and the expansion of production tracking functionality further increases productivity.

To learn more about the MESA suite of products, contact your local GMG Sales Representative or visit our website at www.iongeo.com/Survey_Design/Software_Products/GMG_Software/