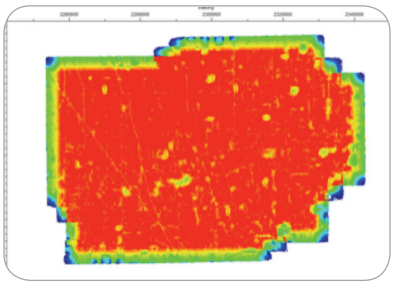
MESA® 15 | Seismic Survey Design Software

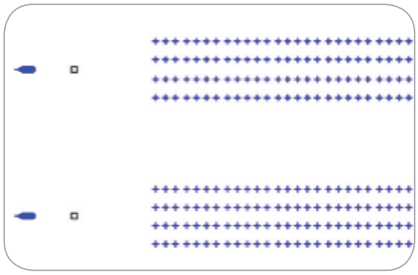
ACQUISITION SURVEY DESIGN AND 3D MODELING SOFTWARE



As seismic acquisition projects continue to increase in both size and complexity, ION's MESA survey design package has evolved to meet the challenge. The latest MESA 15 release incorporates a number of new features and enhancements specifically aimed at streamlining the whole survey design process.

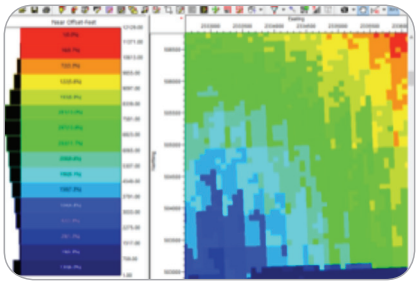
The development focus for MESA 15 has been on adding marine and seabed functionality, easier report generation, various MESA Expert upgrades, and a number of utility enhancements.

As part of the enhancements aimed at OBS surveys, MESA 15 allows the down-going surface ghost to be modeled as part of the fold calculation process (mirror-imaging) – it also provides support for simultaneous shooting in both towed-streamer and OBS scenarios.



Simultaneous Shooting

The ability to efficiently compare the characteristics of different design concepts or to create a standard set of diagnostic plots is a critical part of any design project. MESA 15 has added a set of tools that aids this with changes to the color scale to include a histogram showing percentages of data within each color range plus a configurable screen capture utility.

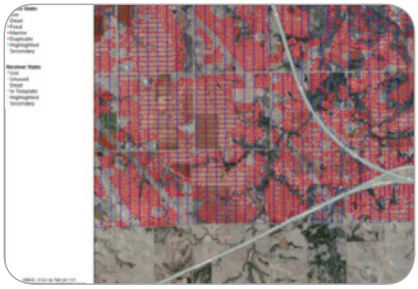


Histograms and Fold Values View

MESA 15 NEW FEATURES AND ENHANCEMENTS:

Window Geometry and View Retention

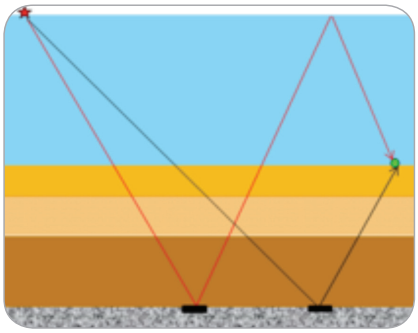
- Saving and restoration of window size and shape
- Saving and restoration of current zoom level
- Management of saved 'views' for recreating screen captures and hardcopy
- Configurable screen capture utility for quickly saving PNG files or copying images to the Windows Clipboard



Restored Zoom View

Marine and Seabed Enhancements

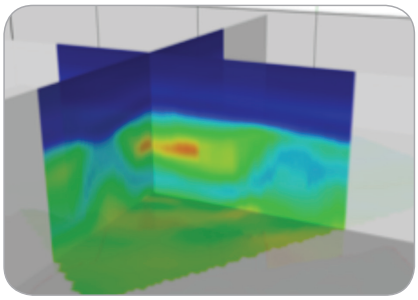
- Support for simultaneous shooting
- Source and streamer depth parameterization including slanted streamer layout
- Flip flop layout of OBS source points
- Modeling of downgoing sea-air multiples in bin attribute calculations
- Support for larger projects



Sea-air Multiple Calculation

MESA Expert Upgrades

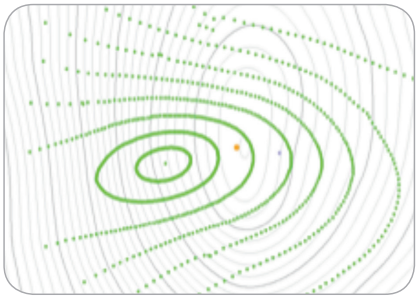
- Raytracing attribute calculations limited by take-off angle at the source, emergence angle at the receiver, and incidence angle at the reflecting horizon
- 3D window support for viewing the velocity model as slices in the inline, crossline, and depth directions
- Velocity slices can be displayed as contour maps in the Design Window
- Exploding reflector tool for all points on a target horizon
- Maximum offset calculation for all points on a horizon
- Interactive raytracing tool to model raypath emergence points for a given source location
- Export tool for all MESA Expert attributes
- Import capability for models and results generated from MESA Illumination service projects



Velocity Slices in 3D Window

Color Scale Improvements

- Color scales can show percentages of data in each color range
- Histogram of data in each color range
- Color scales can dynamically change based on zoom level of data visible in the active window



Emerging Cones in MESA Expert

Utility Enhancements

- Consolidation of co-located source points into a single source point with a merged template.
- New statistics for calculating equipment requirements for roll-on and roll-off
- Improved storage of user settings and preferences

ION has been delivering solutions to the oil and gas industry for over 40 years, and is the leading provider of real-time, multi-vessel positioning and control systems. For further information contact gmgsupport@iongeo.com