

# MESA SOFTWARE – VERSION 13.2 RELEASE NOTES

## Features

1. Polygonal exclusion zones can now contain multiple interior polygons for making "cutout" regions.
2. There is a new layout feature that allows users to create new source/receiver lines that follow polyline exclusion zones.
3. There is a new line editing function that allows users to click on a source/receiver line and snap it to a polyline exclusion zone.
4. Screenshots can now be saved to PNG format.
5. PNG files can be loaded as background images.
6. The area for partial fold calculations can now be selected by defining a polygon or by selecting an exclusion zone.
7. There is a new menu option for altering the internal method for drawing bin attribute diagrams. This fixes drawing artifacts that can appear on some systems when drawing bin attribute diagrams for narrow azimuth projects.
8. There were minor updates to the survey statistics. The number of fired sources and the number of unused receivers have been added.
9. The SPS, SEGP1 and P190 export dialogs have been redesigned. It is easier to enter the file names and the options have been reorganized. There is a new option for handling six digit channel numbers for large patch sizes.
10. The source and receiver import will now import all the fields in an SPS data record and store the data as source/receiver attributes. We have added static correction, point depth, seismic datum, water depth, day of year and time to the standard import. These new data items do not have to be defined. However, you can now import SPS files, modify the design and then export a new set of SPS files while preserving all of the other data fields from the original import.
11. When using the mouse wheel to zoom, the zoom region is now biased toward the location of the mouse pointer. This allows the user to point at a spot on the map and have the zoom rectangle shift towards that spot.
12. The user can now specify a take-off and terminating horizon for Smart Aperture rays.
13. The user can now specify a take-off horizon for image rays.
14. The user can now specify a terminating horizon for normal rays.
15. Shapefiles can output measure from any attribute.

## Fixes

1. Configuration files for formatted source and receiver output are now working.
2. Fixed the position of added H26 cards in the SPS header.
3. Fixed an issue with the polyline Z shapefile output.
4. Fixed an issue detecting if an SPS file is version 2.0 or version 2.1.
5. WMS interface is now active after switching from an existing project to a new project.
6. Fixed a Model Builder crash generating model bounds from the survey.
7. Fixed an issue with live and excluded flags getting out of sync.
8. Fixed a drawing issue and a true vertical depth calculation issue with deviated wells.
9. Fixed a CRP fold calculation issue where the CRP fold area is larger than the current bin grid.
10. Fixed an issue with undoing source edits when the sources are not fired.
11. Fixed a format issue with the sidebar statistics for hardcopy.
12. Fixed a crash saving a contour file from a model horizon.
13. Fixed a curve display problem in the Well Log Manager after using the impedance tool.
14. The incorrect bin label number was being displayed in the bin information dialog.
15. Fixed a problem updating the display in the 3D window after changing the color scale.
16. Fixed a toggle problem applying filters when the filter state is "off."
17. Fixed the default name for exclusions if it is not defined in the imported shapefile.
18. Fixed a problem using elevations in fold calculations.
19. Modified the size of the FireFly/Hawk templates when exporting script files.
20. Fixed an SPS import crash caused by blank lines in the file.
21. The import window preserves the current working directory after selecting a configuration file.
22. Fixed a problem reading too many digits for the Z-value during P190 import.
23. Improved the method for calculating the bounds of the bin grid for marine geometries.
24. 32-bit version was crashing during graphical receiver layout.
25. Fixed a bug displaying panel edges in Model Builder.
26. Fixed a problem with the error logs generated while importing 64-bit record numbers.
27. Fixed an edit templates mode crash with imported marine geometries.

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28. Escape was not working during fold calculations.
  29. Added ability to escape from midpoint exclusion calculations.
  30. Midpoint exclusion zones no longer belong to bin attribute diagrams. The display of midpoint exclusion zones is now accessed from the Views node of the Project Tree.
  31. Fixed a bin numbering issue with partial bin grids.
  32. Shift-clicking on a source or receiver would crash MESA if there were no shooting configurations.
  33. Date attributes were not being displayed properly.
  34. The screen now properly refreshes after doing grid-based renumbering.
  35. Fixed a drawing problem with FireFly/Hawk templates.
  36. The bin grid contribution tool had a problem with the selection area.
  37. Fixed a cosmetic problem in the hardcopy sidebar related to the minimum maximum offset.
  38. Fixed an issue with a warning message when importing data with index numbers.
  39. Fixed an issue with the survey statistics menu item being disabled incorrectly.
  40. Fixed an issue with graphical bin grid definition.
  41. Bin grid auto-fit now ignores filtered records.
  42. Fixed a crash exiting Mesa in Reader mode.
  43. Fixed a problem with incorrect units being displayed on the hardcopy scale.
  44. Fixed an issue with defining well locations with the mouse in Model Builder.
  45. Improved the performance of unshooting a survey when a filter is applied.
  46. Fixed a problem with survey statistics when filters are applied.
  47. Fixed a problem in the raytracer for surveys with multiple shooting configurations.
  48. Fixed an incorrect count issue in the raytracer for surveys with duplicate source points.
  49. Fixed a data display issue and a bin limits issues in the bin attribute graph for certain attributes.
  50. Fixed a color issue when importing KMZ files. Polygons are now light gray.
  51. Changed the behavior of SEGP1 output to better handle 10 digit coordinates. The interface disables the implied decimal or full precision options if coordinates are greater than 10,000,000.
  52. Improved the performance of Shapefile importing when the file contains a large number of interior polygons.
  53. Updated some of the statistics in the hardcopy legend.

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54. Fixed a problem with the format of receiver SEGP1 files.
  55. Fixed a drawing problem in the bin attribute graph when midpoint exclusion zones are defined.
  56. Fixed a crash in the 3D window when a user pressed the <CR> key.
  57. Fixed some drawing errors while editing exclusion zones. We changed the drawing of control points on exclusion zones while in edit mode.
  58. Fixed an issue calculating the extents of the drawing area when using the WMS feature.
  59. Fixed an issue getting the geodetic information into the header cards for SEGP1 output.
  60. Fixed a problem with the bin contribution tool while a partial fold calculation is active.
  61. Better use of native ellipsoids in several program features.
  62. Shapefiles containing latitudes and longitudes can now be read if a map projection has been defined.
  63. Fixed a crash in template animation when reading in multiple P190 files.