

What's New in Release 3.2

ENVI LiDAR includes the following new features in release 3.2. See [What's New in Release 3.1](#) below for information on other recent new features.

Rebranding

E3De has been rebranded as ENVI LiDAR.

ENVI LiDAR Programming

The new IDL-based API for ENVI LiDAR allows you to control, extend, and automate the application. For details on programming for ENVI LiDAR in IDL, see [Write and Deploy Toolbox Extensions](#) and [Programming with ENVI LiDAR](#). You can:

- Control the ENVI LiDAR application, such as open and close projects, add annotations, and so forth.
- Read LiDAR data (.las, .txt, .ntf, .bin) with spatial queries and attribute filtering.
- Write LiDAR data (.las).
- Read and write coordinate system information.
- Run automated feature extraction for DEM, DSM, contour lines, buildings, trees and power lines.
- Run ENVI LiDAR in batch mode with no user interaction.
- Write and deploy custom extensions through the ENVI LiDAR Toolbox.
- Manage errors.

User Interface

The ENVI LiDAR [user interface](#) includes the following changes:

- **Toolbox:** You can customize your ENVI LiDAR installation by [writing and adding your own tools](#) using IDL. To [view and select custom extensions](#) from the user interface, select **View > IDL Toolbox** from the menu bar.
- **Operations Log:** If you are running extensions from the Toolbox, the [Operations Log](#) shows output from IDL in blue text.
- **Context-Sensitive Help:** Context-sensitive help is available on most dialogs. Click the question mark available at the bottom of the dialog to open help specific to that dialog.

Processing

- The toolbar buttons for [processing](#) have changed. Setting parameters, previewing the results of parameter settings, and starting processing are all accessible by a

single button, the **Process Data** button .

- When processing is complete, the view will [automatically switch](#) to QA Mode by default. If desired, you can change the default [preference](#) to not automatically switch to QA Mode.
- Generated products can be exported to a [user-selected coordinate system](#). Output is no longer limited to UTM WGS84.

Annotations

- You can add [text or coordinate annotations](#) to mark places of interest, and you can easily add the current coordinate information for the annotation to that text. Annotations appear in both the Main window and (when open) the ENVI LiDAR 3D Viewer.
- When you use the Measurement Tool to measure the difference between two selected points, the result is added as an annotation in both the Main window and (when open) the ENVI LiDAR 3D Viewer.

Coordinate System Conversion

- When you create a project using a file that contains coordinate system information in its header, ENVI LiDAR [applies that information](#) to the project by default.
- [Additional dialogs](#) for selecting the default coordinate system when you create a new project are available if you need advanced projection system options.
- If you do not know the projection information for the file but wish to continue creating the project, a choice of "Arbitrary" is available in the [Convert Format dialog](#).

Launch Screen Captures in PowerPoint™

You can capture the contents of the Main window and [open the screen capture](#) in a new or current PowerPoint session.

What's New in Release 3.1

The following features were added in release 3.1.

User Interface

The ENVI LiDAR [user interface](#) includes the following changes:

- **Layer Manager:** The Layer Manager replaces the Display Configuration window of ENVI LiDAR 3.0. The Layer Manager lists the layers that were generated during processing, which you can choose to [show or hide](#) in the Main window when you review processing results.

- **Dockable Windows:** The Layer Manager, Navigate window, and Operations Log can be undocked and moved independently of the Main window. These windows are docked to the Main window by default. For example, if you are using dual monitors and want one monitor dedicated to the ENVI LiDAR Main window, you can undock the Layer Manager, Navigate window, and Operations Log and move them so that they appear on the second monitor.
- **Navigate Window Map:** The [Navigate window](#) has been enhanced to display a high-resolution, Digital Surface Model (DSM), which is colored by height. This allows you to easily identify locations and objects when navigating. Additionally, you can click and drag the mouse in the Navigate window to draw a bounding box around the extent you want to display in the Main window when you view point clouds and perform QA operations.

Point Coloring

- The new initial [display of the point cloud](#) can be by RGB, intensity, or height, based on the contents of the LAS file. New toggle buttons are available on the toolbar that allow you to toggle the color mode on or off.
- The [Height Palette Editor](#) is a new dialog that allows you to apply a predefined color palette to the point cloud, or to create a custom palette that you can apply. The palette editor provides three default palettes, and you can save the custom palettes you create to use on any of your projects.

Filter by Height

You can use the new [filter processed data by height](#) feature in QA Mode. Filtering by height enables you to specify "above" and "below" settings to filter out noise, look through tree canopies, and study trees or buildings at varying heights.

Coordinate System Conversion

You can [select the default coordinate system](#) to display in the user interface to show coordinates in MGRS, lat/lon degrees minutes seconds, lat/lon decimal degrees, or map coordinates.

Launch Products in ArcMap™

When running ENVI LiDAR in 32-bit mode, you can [launch ENVI LiDAR products](#) in ArcMap.

Platform and File Support

The following platform and file support has been added:

- Install for 64-bit version for Windows 7 and XP
- Read LAS 1.4 files

IDL Runtime

A runtime version of IDL, the Exelis Visual Information Solutions, Inc. scientific programming language, is now installed with ENVI LiDAR. Users familiar with IDL programming can use IDL to manipulate products created in ENVI LiDAR. For example, you could create movies in IDL using screen captures taken in ENVI LiDAR. See the [IDL pages](#) on the Exelis web site for more information.