ENVI 4.8

Regardless of your industry, from forestry and agriculture to defense and intelligence, your reliance on geospatial imagery as a source of important geographic information continues to grow. ENVI is the premier software solution for extracting information from geospatial imagery. ENVI delivers innovative, time saving ways to get information from imagery, while making it easy to incorporate image processing and analysis into your existing workflow.

Now, the latest release of ENVI delivers features and functionality to further streamline your workflow and reduce the time you spend on image processing and analysis. ENVI 4.8 makes it seamless to update a GIS with current information from geospatial imagery by delivering image analysis tools directly from the ArcGIS environment. A new, high performance LiDAR viewer allows you to easily incorporate information from LiDAR data with your other geospatial data, and a new workflow for viewshed analysis automates and streamlines a multi-step process. And, because ENVI is built on a fully extensible platform, you can easily customize it to your specific imagery needs.

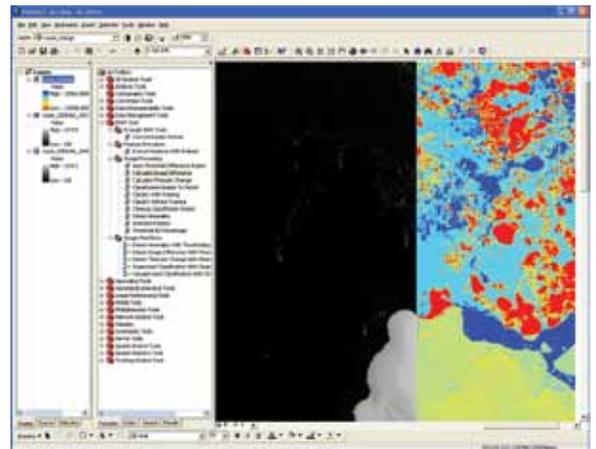## ENVI Image Analysis Tools Now Available in ArcGIS®

In the past, updating a GIS with valuable information obtained from geospatial imagery required multiple tools. With ENVI 4.8, image analysis capabilities are fully integrated with ArcGIS, eliminating the need to switch between software packages.

ENVI 4.8 completes the integration with ArcGIS from Esri – delivering for the first time, advanced image processing and analysis tools directly from the ArcGIS desktop and ArcGIS® Server environments. Because ENVI 4.8 is completely compatible with ArcGIS 10 and 9.3, you can now include imagery in your workflow while taking advantage of the latest technology that Esri has to offer.

The new ENVI tools for ArcGIS are available in a familiar ArcGIS toolbox, exposing ENVI functionality through geoprocessing scripts that operate in both desktop and server environments. ENVI provides you with nearly 20 pre-built tools to easily perform a variety of advanced image processing and analysis tasks without leaving ArcGIS, allowing you to:

- Detect change over time

- Find and extract features of interest

- Classify features or land cover

- Identify anomalies

- Much more

For ArcGIS® Server users, ENVI tools can also be delivered to your entire organization using the newest addition to the ENVI product line, ENVI for ArcGIS® Server.
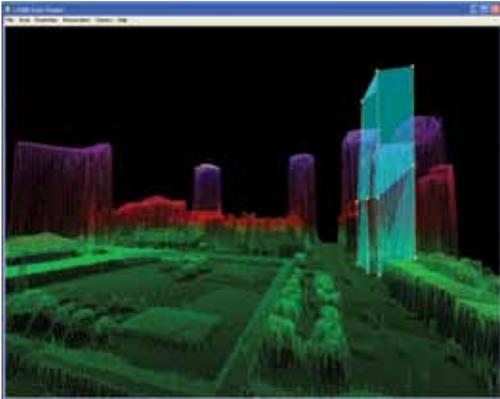

Above you can see the ENVI tools within the ArcToolbox. The image in this scene is the result of running an ENVI image analysis tool designed to calculate the differences between images.

ENVI

Easily Add LiDAR Data to Your Workflow

Geospatial information comes in a variety of formats, all of which help to build a complete picture about a geographic area. With ENVI 4.8, you'll have the tools you need to combine different data sources and the information they provide to piece together a complete picture of an area of interest.

ENVI 4.8 introduces the LiDAR viewer, extending the existing ENVI LiDAR functionality by adding a high performance, 3-dimensional viewer that efficiently works with very large LiDAR data sets. And, with the ability to quickly and easily display point clouds in a variety of colors and ranges, the new LiDAR viewer will help you visually interpret your data and give you a more complete understanding of a particular area of interest.

The new ENVI LiDAR viewer allows you to display point clouds in a variety of colors and ranges.
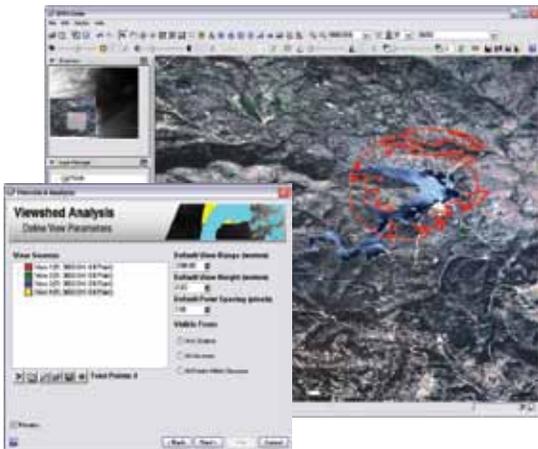
Use the ENVI LiDAR viewer to:

- Filter by return, elevation, or point classification

- Display your data with a variety of surface types

- Measure height or volume of any structure

- Add custom color palettes

And, with the high performance ENVI LiDAR viewer, you can easily underlay a satellite or airborne image with your LiDAR display to create important situational awareness.

New Automated Workflow for Viewshed Analysis

In recent releases, ENVI introduced automated workflows to make a variety of tasks less labor intensive. ENVI workflows deliver scientifically proven methods for processing and analyzing imagery in step-by-step, wizard-like processes that make advanced functionality available to users of any experience level.

A new ENVI workflow guides you through the multi-step process to perform a viewshed analysis.

The new viewshed analysis workflow in ENVI 4.8 guides you through the multi-step process of viewshed analysis, providing you with the information you need to make important tactical decisions, such as where to strategically place a cell tower for maximum coverage, determining the safest path for troop movement, or identifying out-of-site locations for concealing landfills and wastewater treatment centers. The ENVI viewshed workflow allows you to easily exploit a DEM and determine visible areas from a variety of view sources, including points, lines, or polygons, so you can easily:

- Export results directly to raster, vector, or an ArcGIS geodatabase

- Define multiple, simultaneous viewshed points, polylines, or polygons

- Determine viewshed and view range independently

EXELIS

Visual Information Solutions

See the other ways ENVI 4.8 can help streamline your image analysis workflow. Learn more today at **www.exelisvis.com/ENVI**, or call your ENVI representative at **303.786.9900**.