

# ENVI<sup>®</sup> Pocket Guide Volume 1 Basic



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In association with the U.S. Army TWI Program.

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## CONTENTS

Basic Interface	6, 7
Getting Started	8 - 11
Section 1: Mosaic	12 - 16
Section 2: Quick Mosaic	17 - 20
Section 3: Subset	.21 - 23
Section 4: Orthorectify	24 - 28
Section 5: Panchromatic Sharpen	29 - 38
Section 6: Change Detection	39 - 46
Section 7: Anomaly Detection	47 - 51
Section 8: Terrain Categorization TERCAT	52 - 58
Section 9: Export to RPF	59 - 64
Section 10: ENVI Modeler	65 - 73

The ENVI® Pocket Guide is a quick reference booklet not intended to be read from cover to cover although it can be. The intent is to provide users with succinct steps on how to accomplish common tasks in ENVI.

If you need or desire comprehensive explanations of tasks from this guide refer to the following resources:

**ENVI Documentation Center** nv5geospatialsoftware.com/docs

#### **ENVI Tutorials**

nv5geospatialsoftware.com/docs/tutorials.html

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## **ENVI® INTERFACE KEY**

Some numbers represent GUI groups separated by commas from left to right.

- 1. Open file, Data Manager, Chip to PowerPoint (Report Generation)
- 2. Scroll View, Cursor Value, Select, Pan, Fly, Rotate
- 3. Zoom, Fixed Zoom In/Out, Full Extent, Percent/Ratio
- 4. North Up, Type or Preset Angle
- 5. Arbitrary/Spectral Profile, Scatter Plot, ROI, Feature Count
- 6. Digitizing, Vectors, Enhanced Annotations
- 7. Go To Coordinate

- 8. Brightness
- 9. Contrast
- 10. Histogram Stretch
- 11. Sharpen
- 12. Transparency, Mensuration Portal, Blend, Flicker, Swipe
- 13. Layer Manager
- 14. Data Viewer/Image Window
- **15**. Toolbox
- 16. Cursor Value, Status Bar



## **GETTING STARTED**

### **OPENING ENVI**

- 1. On Windows, click Start > All Programs > ENVI 5.x > ENVI for ArcGIS<sup>®</sup> > ENVI 5.x (32-Bit). This method allows you to interface with ArcMap.
- 2. To open ENVI in 64-bit mode, click Start > All Programs > ENVI 5.x > 64-Bit > ENVI 5.x (64-Bit). This method does not allow you to interface with ArcMap.
- 3. To open ENVI programmatically via IDL, click Start > All Programs > IDL 8.x > IDL 8.x. The IDL window appears. In the IDL Console, type the following code: IDL> E = ENVI(). Then press the Enter key and ENVI will soon launch.

This is an introduction to familiarize users with common methods for opening ENVI, loading data, navigating, and performing stretches.

#### LOADING & REMOVING DATA

- To load data, click the Open File icon . An explorer window will open. Navigate to the disk location of the file you wish to open.
- Select the file and click Open. ENVI's native file format is .dat, but ENVI recognizes and reads most common formats such as: .img, .ntf, rpf, .tiff, .las, .dt, dppdb, .sid, .shp, .evf, .jp2, and many more.
- Another method is to click the Data Manager icon . The Data Manager appears, as seen on the previous page:



Windows Data Drag & Drop Functionality is fully supported in ENVI.

- 7. Load additional layers by clicking in the Data Manager. Explore different band combinations within the current view or a new view by clicking Load Data.
- 8. If wavelength information is available for the bands of an image, right-click on an image layer in the Layer Manager to load true-color or color-infrared (CIR) band combinations; for example:
- 9. The Data Manager provides other data-management options:





#### NAVIGATING WITHIN A VIEW

10. Use ENVI's intuitive navigation tools to perform the following within a view:



11. Use ENVI's intuitive image display tools to perform the following within a view:



## MOSAIC

## SEAMLESS MOSAIC

- From the Toolbox, select Mosaicking
   > Seamless Mosaic. The Seamless Mosaic panel appears. You will set all mosaic options within this single panel. Click the Help button in the lower-left corner of the panel if you have further questions.
- 2. Click the Add Scenes button 🛨.



Before beginning, some imagery requires preparation such as cropping to remove distorted edges to ensure optimal output results.

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## Thank you for your interest in ENVI®

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#### nv5geospatialsoftware.com

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