

ENVI® FEATURE EXTRACTION (FX) MODULE

Quickly extract objects from geospatial imagery and LiDAR data

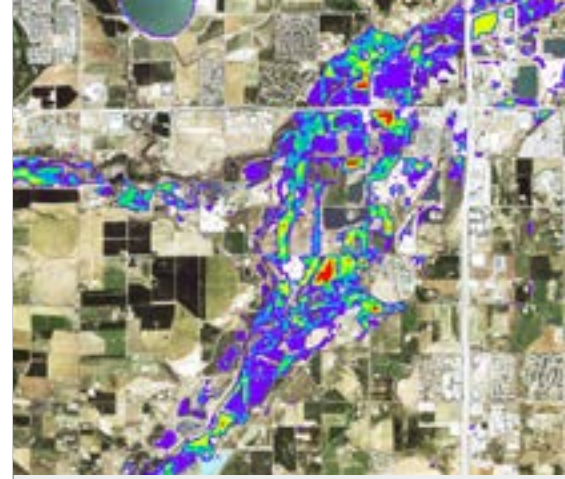
The ENVI Feature Extraction module (ENVI FX) makes it easy to isolate and extract specific objects of interest from all types of imagery and LiDAR data. The module's advanced approach to feature extraction saves time and effort, while providing the accurate results you need.

ENVI FX provides user-friendly tools to extract features based on spatial, spectral and textural characteristics. It is used to identify objects like vehicles, buildings, roads, coastlines, rivers, lakes and fields. Feature extraction also applies to point clouds to quickly provide automated extraction of trees, buildings, utility infrastructure and more.

ENVI FX includes unique step-by-step workflows that walk users through previously complex image analysis tasks. The inherent flexibility of ENVI FX lets users preview and modify parameters and data at any stage of the process.



An intuitive dialog box at the beginning of the ENVI FX workflow prompts you to import a base image, ancillary data and a mask file.



BENEFITS:

- > Quick and easy automated workflows
- > Intuitive interface and fast processing
- > Preview and modify parameters and data at any stage of the process
- > Get fast and accurate results regardless of experience level

SAVE, REPEAT OR SHARE THE OUTCOME

ENVI FX allows you to share results at all stages of the workflow. Easily use the results for further analysis, for reports or to share with colleagues.

- > Easily save vector results to a geodatabase for use in subsequent analyses in ENVI or for use with other products
- > Combine multiple types of data, such as LiDAR or elevation data, with your input data source for increased accuracy
- > Save training data, classifications and rules sets to create a library for use in subsequent workflows or to share with colleagues
- > Employ a programmatic method for batch processing so you can automatically extract features from multiple datasets simply by setting parameters and specifying an output directory

INDUSTRY SOLUTIONS WITH ENVI FX

GIS professionals and image analysts in virtually every industry, including urban planning, defense and intelligence, agriculture and forestry, increasingly use geospatial imagery to find important information about geographic areas of interest.

The ability to find and extract features from imagery is a particularly useful capability. ENVI FX combines an intuitive interface with automated workflows and fast processing to make feature extraction accessible to users of any experience level.

Disaster Management

- > Measure flood extent
- > Assess damage
- > Find fire boundaries
- > Map geomorphology

Environment and Conservation

- > Monitor coastal conditions
- > Identify zones of de-vegetation
- > Detect ice boundaries
- > Manage assets
- > Explore remote areas
- > Assess environmental impact

Defense and Intelligence

- > Find tanks, aircraft and other military vehicles
- > Find roads and coastlines for mission planning
- > Identify landing strips
- > Locate buildings

Regional and Urban Planning

- > Measure encroachment
- > Inventory urban landscape features like buildings and roads
- > Identify large land cover classes to generate a vegetation map

Forestry

- > Monitor forest health
- > Identify invasive species
- > Track and enforce logging restrictions
- > Assess fire damage
- > Classify land cover