

Naval Research Lab (NRL) Littoral Tools (ENVI Plug-ins)



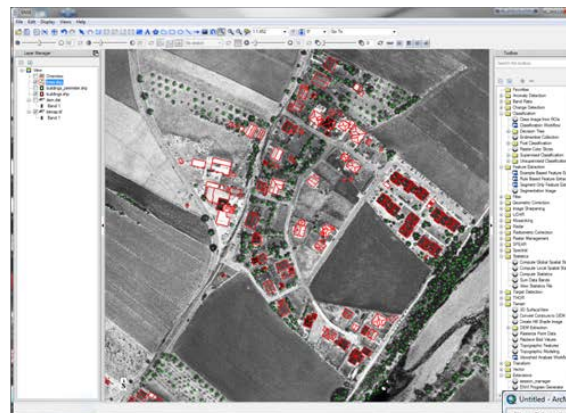
- GOS (Global Optimization Solution) determines water velocity, even in complex environments like rivers and coastal areas, from image pairs, by satisfying tracer conservation.
 - Trend analysis: coastal/river velocities from image pairs
- Coastal Water Spectral Toolkit (CWST) uses a look-up table based on world-wide measurements and radiative transfer models to determine water properties, bottom types and bathymetry from hyperspectral or multispectral imagery. PURSUIT and MCAW are two techniques for scene classification; MCAW is applicable to both land and water scenes.
 - Bathymetry
 - Also, water and bottom properties
- Hyperspectral Imagery Trafficability Toolkit (HITT) determines go/no-go conditions for beaches from remotely sensed data (such as airborne hyperspectral imagery). It uses a lookup table built from multi-angular hyperspectral measurements linked to ground-based geotechnical measurements.
 - Beach trafficability



ENVI/ESRI Integration

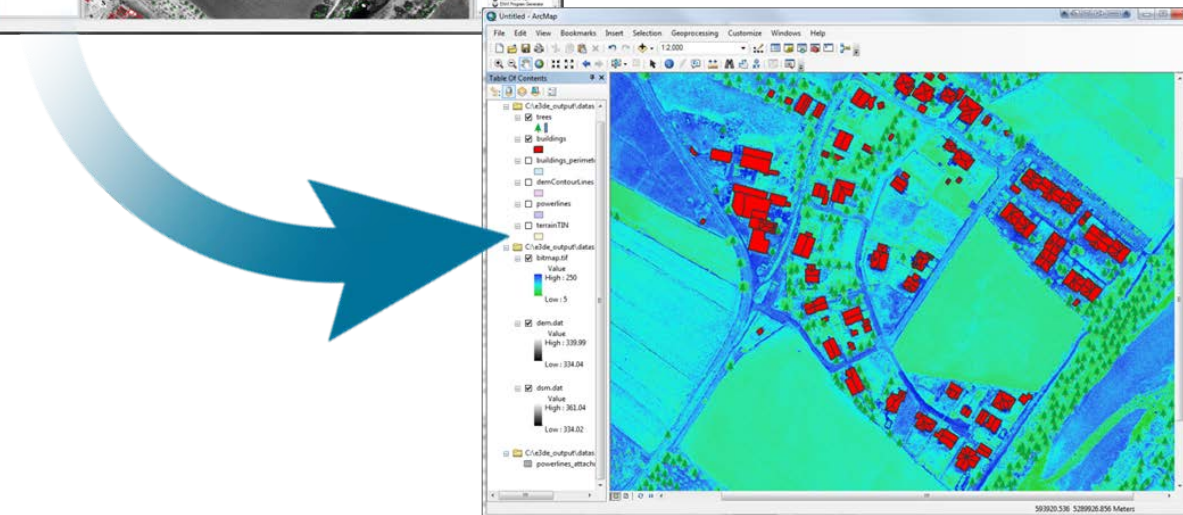


- Add information from imagery to your GIS
- Integrated analytics capabilities for most complete solution
- Embedded ENVI image analysis within Arc environment
- Streamlined workflows and superior product generation
- Cost savings by limiting the software baseline and eliminating redundancies



ENVI

ArcGIS®



All Imagery Exploitation Without Changing Existing Workflow



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ENVI Py 1.0-2 for ArcGIS Desktop / Pro



What is it?

A no cost windows installer to deploy our Python client libraries (envipy, envipyengine, envipyarc) to ArcGIS Pro to run ENVI analytics via python toolboxes (GPTools). In addition provides an ENVI Analytics toolbox in ArcGIS Pro.

Software Requirements

ENVI 5.3 SP1 or above

ArcGIS Pro 1.3 or above

Licensing

ENVI Engine (envi-te)

To development new tasks or models you need ENVI Desktop as well

ArcGIS Desktop / Pro license

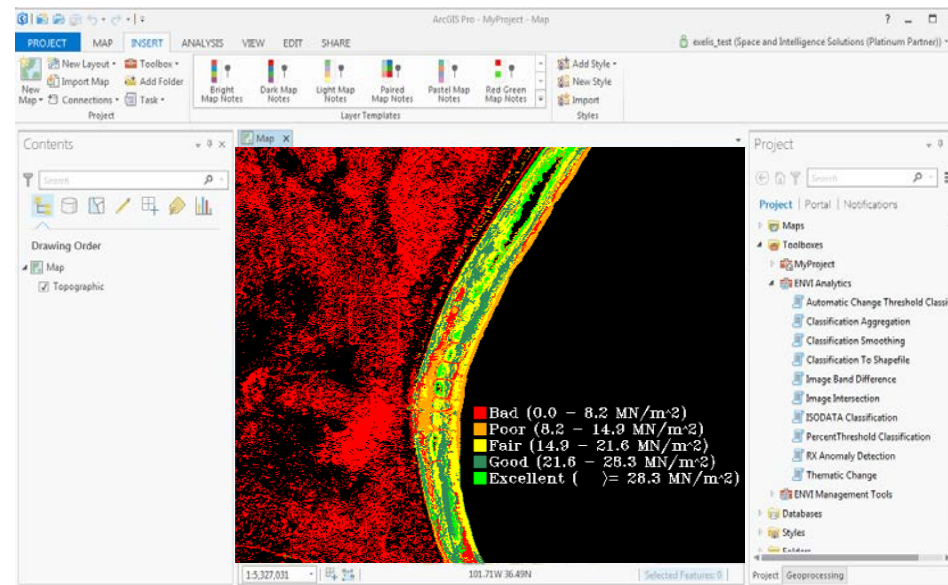
History – Released Feb 2018

Available through L3Harris Download and License Center under ENVI for Windows (5.5) or the ENVI 5.5 DVD

Conversion to ENVI Task



- Original tools only worked in ENVI classic which limited users
- L3Harris Geospatial assisted NRL with support converting old code to the newer task system
- Task make the tools accessible within ArcGIS Desktop or Pro
- Task future proof the tools to be supported in the enterprise or cloud
- ENVI processes run in the background minimizing learning curve for analyst familiar with ArcGIS



EX: HIIT Trafficability Product
Arc PRO