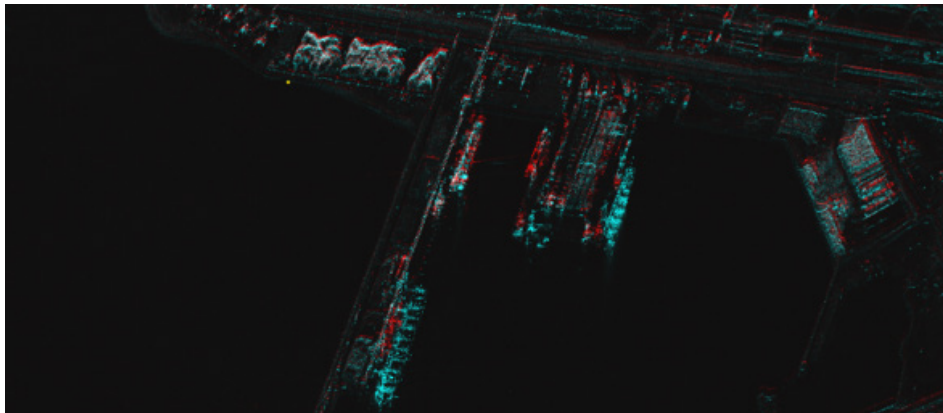
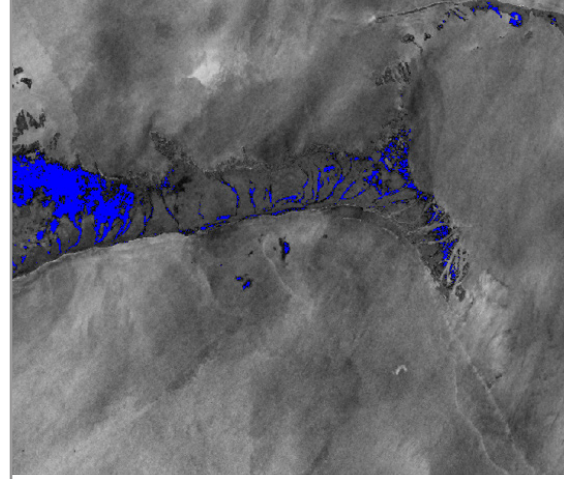


ENVI® SAR ESSENTIALS

Easily Tap Into the Power of SAR

Synthetic Aperture Radar (SAR) data offers unique advantages for defense & intelligence organizations, providing valuable insights that are not easily obtained with other data sources. The ability of SAR to penetrate clouds and haze allows for imaging in all weather conditions, day and night, which is crucial for time-sensitive applications. High-resolution SAR data includes detailed information on surface features, making it ideal for tasks such as detecting change, analyzing terrain, and monitoring infrastructure. However, processing and analyzing SAR data can be complex.



Amplitude change detection is run in ENVI SAR Essentials to monitor ship activity at a port in Turkey.

ENVI SAR Essentials – What’s Different?

ENVI SAR Essentials has changed the paradigm by streamlining SAR processing and analysis workflows to bring SAR science to non-SAR experts without the need for advanced education. It has been designed to provide users with the tools they need to create geospatial intelligence from SAR data quickly and easily.

Get to an Answer Fast

With ENVI SAR Essentials you can open SAR data, visualize it, and perform analysis in a matter of minutes. Oftentimes, your analysis doesn’t need to be perfect, but it does need to be close. Because speed is often a priority, ENVI SAR Essentials can be as thorough as you need it to be and generate results as accurate as required so you can get to an answer fast.

Make SAR a Part of Your Geospatial Analysis

Non-experts can tap into ENVI SAR Essentials to create elevation data out of SAR data pairs, conduct various types of change detection unique to SAR, and much more. Those results can easily be fused with other geospatial data in ENVI to create a more robust and accurate analysis.

KEY FEATURES

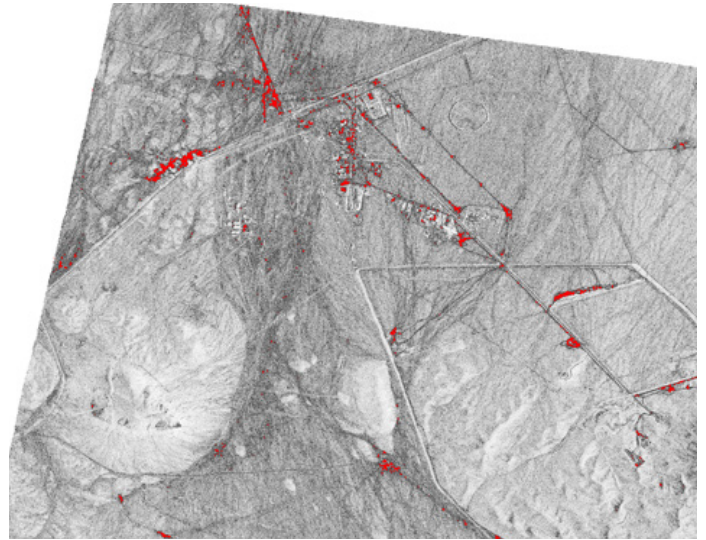
Change Detection	Includes Amplitude Difference, Amplitude Change Detection, and Coherent Change Detection.
Sub-Aperture Analysis	Offers Moving Target Detection and Colorized Sub-Aperture Image.
Velocity Estimation	Workflow for tracking moving targets.
Elevation Analysis	Facilitates DEM/DSM generation from SAR data.

AT A GLANCE

- Leverages ENVI's support of SICD, SIDD, and SLC file types and enables the import of other SAR formats.
- Automates geocoding and presents data visually for easy interpretation.
- Offers further processing through the data processing workflow for outputs like multi-looked intensity, precise geocoding, and more.
- SAR Amplitude Difference Tool: Generates an amplitude image difference raster between two images, enabling flexible change detection without strict geometry collection requirements.
- Workflow Format: All analytics are presented in a workflow format for seamless integration with other ENVI tasks.
- Final Report: When processing is completed, a final report summarizes the parameters used and provides metrics on data processing.

SAR in the ENVI Ecosystem

SAR data contains a wealth of information and enabling everyone across an organization to benefit from it has never been more important. Now with the ENVI Ecosystem, the barriers have been removed. The ENVI Ecosystem offers a suite of solutions that are easily tailored to diverse groups and users. Everyone from newcomers to SAR experts can simply choose the option that best fits their needs and preferred working environment.



ENVI SAR Essentials is used to identify possible vehicle traffic at a uranium enrichment facility in Qom Iraq. TerraSAR-X image courtesy of Airbus.

ENVI® SAR Essentials

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